**TELANGANA STATE POWER GENERATION CORPORATION LIMITED**
Vidyut Soudha, Hyderabad-500082
Phone :040-23499849

TSERC HYDERABAD
INWARD
16 MAR 2021
No. Signature

From
The Chief Engineer
Coal & Commercial,
TSGENCO, Vidyut Soudha
Hyderabas-82.

To
The Commission Secretary,
TSERC, 5TH Floor,
#11-4-660, Singareni Bhavan,
Red Hills, Lakdi-ka-pul,
Hyderabad - 500004.

**Lr.No.CE/Coal & Comml/ SE(C&C)/DE(C) /MYT19-24/D.No.306 /21, Dt.15.03.2021**

**Sir,**

Sub: TSGENCO – Objections/suggestions received from Objectors on True up FY 2014-19 (OP.No.5 of 2021), Multi Year Tariff FY 2019-24 (OP.No.6 of 2021) and I.A. 1 of 2021 – TSGENCO Reply- furnished -Reg.

Ref: Lr.No.TSERC/Secy/JD(TE)/F-GMYT/21/D.No.163 Dt:26.02.2021.

* * *

Hon'ble Commission vide ref cited above directed TSGENCO to furnish the responses to the objections on or before 15.03.2021. In this connection, it is to submit that, the following objectors sought clarifications on the MYT filings and related True Up filed by TSGENCO.

1. Sri.M.Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies on True Up 2014-19 Dt:19.02.2021, on MYT 2019-24 Dt:24.02.2021 and True-up 2014-19 Dt:12.03.2021.
2. Sri. M.Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation on True up 2014-19 Dt:25.02.2021 and MYT 2019-24 DT:25.02.2021

The responses of TSGENCO are herewith furnished as per the enclosures and the responses are also sent to the above objectors through E-mail.

Encl: As above.

Yours faithfully,

15/3/2021

**CHIEF ENGINEER**
**COAL & COMMERCIAL**

**Reply to the Objections/suggestions on True up (2014-19) raised by Sri M.Venugopala rao, Senior Journalist & Convener, dt: 19.02.2021**

| SI.No. | **Objections/suggestions** | TSGENCO REPLY |
|---|---|---|
| 1 | OP No.5 and OP No.6 of 2021 are two different petitions. Whatever be the reasons for filing of true-up petition claiming revised fixed charges for the 3rd control period and petition and capital cost and tariff for KTPS stage VII; and determination of capital cost for new stations and generation tariff for existing stations and new stations for the 4th control period (2019-2024) simultaneously by TSGENCO and the Hon'ble Commission taking up the same for public hearing simultaneously, it does not provide sufficient time to interested objectors to study the voluminous filings of TSGENCO, analyze the same and make detailed submissions. There is no inter-connection between the two petitions and the same should have been filed and taken up for public hearing separately the petition for 3rd control period should have been filed during 2019 and the petition for 4th control period during 2018. At least, sufficient time gap should have been provided for inviting suggestions and objections on the two petitions by taking up the same separately for public hearing. Moreover, the information submitted by TSGENCO is found wanting in meeting requirements of the regulatory process and public hearings. Submissions of the respondents also should be made public and sufficient time be given to interested objectors to study the same and submit their views during the scheduled public hearings. | Relevant information has been submitted to the Hon'ble Commission as per Regulatory requirements. |
| 2. | Among the reasons for delay in filing the subject petitions, TSGENCO has stated that final comments from C&AG were received on 26th September, 2019, and that the 5th general body meeting of TSGENCO held on 10.12.2019 adopted the annual accounts. However, TSGENCO has not attached the final comments of C&AG along with the petition concerned. Moreover, based on the abstract data given by | The detailed information relating to the expenditure incurred during the control period is available in the Annual Accounts Report Submitted to the Hon'ble TSERC. The copy will also be mailed to the Objectors. |

Chief Engineer
Coal & Commercial
TSGENCO V.S. Hyd...
15/3/2021

| | | |
|---|---|---|
| | TSGENCO, it is not possible to understand justifiability and permissibility of various expenditures it claimed to have incurred during the 3rd control period or otherwise, in the absence of detailed information pertaining thereto. Therefore, we request the Hon'ble Commission to direct TSGENCO to submit the final comments of C&AG and detailed information relating to the expenditures it incurred during the third control period and make the same available to us to study the same and make submissions thereon. | |
| 3 | TSGENCO has claimed true up of Rs.19374.96crore for the third control period against Rs.20645.98crore after adjustments of Rs.1271.02crore for the reasons given in its petition towards fixed charges. Going by the commercial operation dates (COD), most of the stations are old ones. For power being supplied to the Discoms, TSGENCO must have billed and collected the fixed and variable charges applicable from time to time as per terms and conditions in the respective power purchase agreements approved by the Hon'ble Commission. On the face of it, claiming a hefty sum of Rs.19374.96crore under true-up for the past period of five years of the third control period is abnormal and found wanting in observing prudence in the operations of the power stations of TSGENCO. If such claims of TSGENCO (and of TSTRANSCO and Discoms) are allowed by the Hon'ble Commission, it will lead to a disaster. Whether such abnormal burdens can be imposed on consumers of power of the Discoms even in a phased manner by treating the same as regulatory assets one shudders to think. | In True up petition, TSGENCO is claiming the difference between the approved fixed charges by the Hon'ble TSERC and actual trued up fixed charges of Rs.1169.04Crs. The details are provided in the Annexure A7, A8, and A9 of True up petition.<br><br>Therefore, the contention of the Objectors that TSGENCO is claiming hefty some of Rs.19374.96Crs as true up is incorrect. |
| 4 | The standard practice of ERCs as per regulations applicable is to determine permissible capital cost of the power project concerned with | For the New projects capital cost shall be considered as per the Article 10 of Regulation No. 1 of 2008 and the claim has been |

| | | |
|---|---|---|
| | which the distribution licensee/licensees enter into PPA, give consent to PPA and determine tariff. The terms and conditions in the PPA continue to be binding on parties thereto till its expiry. This regulatory process is within the jurisdiction of ERCs for regulating purchase of power by the distribution licensees. Revision of capital cost and fixed charges by the Commission on the basis of the claims of a developer of the power project for a control period is contrary to the standard practice. Developers of power plants are not licensees of the Commissions. Unless the Discoms enter into an agreement with a power plant and come before the Commission, the latter cannot entertain any petition for revision of capital cost filed by the developer of power plant. Contrary to the standard practice of determining capital cost of a power project with whom the Discoms enter into a PPA, TSERC had brought about sweeping amendments to tariff determination with Regulation No.1 of 2019, making provision for claiming true-up by power plants, submission of capital investment plan and business plan seeking revision of capital cost approved by the Commission. This is one of the regulatory aberrations that had taken place when TSERC acted as a one-man Commission heavily dependent as it was at that point of time on the services of private consultants. Since purchase of power by the Discoms from the power project concerned is governed by the terms and conditions of the PPA between them as consented by the Commission, there is no need for allowing claims of true-up by the developer of the project. Once the Commission determines permissible capital cost of the project, as a part and parcel of its regulatory process, the need for revision of the determined capital cost for a control period does not arise. The developers are expected to execute their power project as per the terms and conditions of the agreement between them and the Discoms and applicable regulations of the Commission. This is intended to ensure that the benefit of completing the project as per agreed time schedule accrues to the | raised in terms of this Regulation.<br><br>The additional capitalization was claimed for pending works which are in the original scope of the Project.<br><br>Regarding the additional capitalization of Old Stations, the works were carried out due to aging and wear & tear of the equipment and to improve the efficiency of operation and the same is allowed as per the guidelines of Regulatory commission. |

| | | |
|---|---|---|
| | developers and the consumers. When Discoms are permitted to claim true-up/true-down, it is due to uncontrollable factors. In the case of developers of power projects, for reasons other than the terms and conditions of the PPA, if they incur additional expenditure or loss, it should be treated as their business risk, which is projected as one of the reasons for seeking higher percentage of return on equity by the developers. Allowing claims of true-up and revision of capital cost after one year of declaration of COD of the last unit of the project as per the original agreed time schedule negates balanced approach and acts against the interest of the consumers of the Discoms. The very fact that the amendments brought about by TSERC have not been opposed by the developers confirms this. The true-up claim of TS Genco is the kind of adverse impact on the tariffs to be paid by the consumers, if approved by the Commission. The said regulation of TSERC would provide a cover of protection to developers of power projects with whom Discoms enter into PPAs, for the failures of commission and omission causing delay in execution of the projects concerned and the resultant avoidable increase in capital cost, including interest during construction, and additional expenditure after one year after declaration of COD of the project concerned. Allowing such additional costs through revision of capital cost and fixed charges is nothing but rewarding inefficiency of the developers of power plants and penalizing the Discoms and their consumers of power. In bringing about such irrational amendments detrimental to larger consumer interest and for undue benefit of developers, the role of the Commission, the authorities heading the power utilities of the Government of Telangana and developers is perplexing. Keeping in view the above-submitted points, among others, the Hon'ble Commission can deviate from the regulation by recording the reasons for the same in writing for determining and approving what is permissible and rejecting what is impermissible in the subject true-up claims of TSGENCO. | |

| | | |
|---|---|---|
| 5 | As a part and parcel of fixed charges, as approved by the Hon'ble Commission, when GENCO is collecting all the components thereof in the monthly bills being raised for supply of power to the Discoms from different stations, it is difficult to understand justifiability or otherwise of the fresh claims of TSGENCO under various heads for hefty additional amounts. | TSGENCO has filed True up petition before the Hon'ble Commission as per the TSERC Regulations 1 of 2019. The fixed charges claimed during 2014-19 are based on the Generation Tariff Order for the 3rd Control period 2014-19, I.A.No.33 of 2018, RTO 2018-19. The Actual fixed charges varied due to various reasons like balance depreciation due to phasing out of KTPS O&M, the additional pension liability over and above the schedule, Water Royalty charges, actual Income Tax paid. Further KTPS VII Stage capital cost and fixed charges are submitted to the Hon'ble Commission for approval. However, the difference between actual fixed charges submitted for approval to the Commission and the fixed charges allowed by the Commission in the Retail Tariff Order of TSDISCOMs 2018-19 has claimed in true up petition. |
| 6 | When interest rates are falling steeply, there is no justification in GENCO claiming return on equity @ 15.5% on net fixed asset for old plants and @ 16% for KTPS state VII. We request the Hon'ble Commission to reexamine the issue keeping in view the trend of falling interest rates and reduce the percentage of return on equity/net fixed asset appropriately. This is all the more necessary in view of the fact that income tax being paid by TSGENCO also is being allowed as pass-through, though it defies logic in the sense that income tax is to be paid on the profits earned by GENCO. | The Return on Equity and Income Tax in True up was claimed as per APERC Regulations 2008, CERC '2014 Regulations. Further 0.5% excess on normal return on Equity is applicable for KTPS-VII Stage as per CERC Regulations 2014, as the Station was Commissioned within the Timeline as Specified in the Regulation. |
| 7 | Against the claims of GENCO for depreciation charges, we request the Hon'ble Commission to consider rates of depreciation as per regulations of CERC, or of the Ministry of Power, GoI, whichever is lesser. | The proposed Depreciation in True up petition is considered as per the approved Depreciation in Generation Tariff Order Dt: 05.06.2017 and I.A.No.33 of 2018 order dated 03.01.2019 (NSHES Complex) issued by Hon'ble TSERC in respect of Existing stations except KTPS (O&M). The Depreciation is computed as per CERC'2014 Regulations @ 5.28% in |

| | | |
|---|---|---|
| | | respect of KTPS-VII. |
| 8 | GENCO has claimed an increase in operation and maintenance charges of Rs.877.03 crore for 2014-15 and Rs.1447.57 crore for 2018-19, i.e., an increase of 60.58 per cent during the 3rd control period. Moreover, it has not given break-up of different components of O&M expenditure, except claiming that enhancement of employee cost is 40% which translates to 20% increase in O&M expenses. We request the Hon'ble Commission to direct TSGENCO to give year-wise break-up of all the components of O&M expenditure. We also request the Hon'ble Commission to confine the claims of TSGENCO for O&M expenses, including pay and allowances, within the normative values specified in applicable regulations or decide and implement rational normative parameters for the same. The Commission has been allowing the financial impact of periodical wage revision for the employees of TSGENCO and other power utilities of the State Government, though the rates of revision tended to be higher, irrespective of permissible norms of O&M expenses. While pay revision for its employees is being decided and the impact of pay revision is being borne by GoTS, the impact of pay revision for employees of the power utilities is being passed on to the consumers of power as a part and parcel of the tariffs to be paid by them as determined by the Commission. As such, under this regulatory regime, the impact of pay revision on tariffs needs to be regulated as a part and parcel of determining total O&M expenditure as per applicable norms. In the case of private power projects with whom the DISCOMs had PPAs, the O&M costs, including pay and allowances of their employees, of those projects are being determined by the Commission as per applicable norms. The private power projects are not claiming the financial impact of revision of pay and allowances to their staff separately and the Commission also is determining O&M expenditure, which is inclusive of the requirement of pay and allowances, with annual escalation. The claims for administrative costs, including pay and allowances of employees, by power utilities should | O&M Expenditure claimed in the True up petition is as per the Generation Tariff Order for the 3rd Control period 2014-19, I.A.No.33 of 2018.<br>The Pay revision commitment is allowed by the Hon'ble Commission in the Generation Tariff Order.<br>The increase in O&M cost from Rs.877.03Crs in 2014-15 to Rs.1447.57Crs during 2018-19 is due to commissioning of new projects i.e. KTPP-II, Lower Jurala HES and Pulichinthala HES and regular escalation allowed by commission during the 5years period along with pay revision during 2018-19. |

| | | |
|---|---|---|
| | be subjected to applicable norms; they cannot claim the same as they like and the Commission should apply applicable regulations and norms for determining the same in order to ensure prudence in expenditure by power utilities and protect larger consumer interest. Allowing such expenditures as claimed by the power utilities arbitrarily would tantamount to failure of the Commission to apply applicable regulations and norms, giving its approvals mechanically, and shirking its regulatory responsibility. I would like to remind the Hon'ble Commission that, during a public hearing on MYT of TSGENCO, the then Hon'ble Member of TSERC, Sri Srinivasulu garu, had orally observed that the claims of TSGENCO for pay revision would not be allowed as they were for the purpose of determining O&M expenditure. Pay revision is not within the regulatory purview of the Hon'ble Commission, no doubt. Need for periodical revision of pay and allowances of the employees also cannot be denied. Seen in this background, it is difficult to agree with observations like the one that, "though the employee cost as part of O&M expenditure has been classified as a controllable item, these needs to be considered for true-up as part of the force majeure factors," for, this kind of strange logic implies that the decisions of those who determine and implement wage revision come under conditions of force majeure, as if they were a law unto themselves, and encourage them to continue to decide wage revision periodically as they want to, without any prudence check and accountability and unmindful of the cascading affect it will have on tariffs to be paid by the consumers. If the authorities concerned display unwarranted benevolence at the cost of consumers of power in fixing wage revision, even exceeding the demands made by the employees, as had happened in the past, it reflects an unhealthy tendency of monopoly in decision-making by the authorities concerned. But for this kind of unquestioning approval for passing on the expenditure on wage revision to the consumers, without any prudence check, no organization can compete in the market and will become bankrupt, if such tendencies continue to operate periodically. Whatever be the impact of pay revision effected periodically, we request the Hon'ble Commission | |

| | | |
|---|---|---|
| | to determine such an impact for the purpose of O & M expenditure based on prudent norms, not as it is. | |
| 9 | TSGENCO is claiming actual interest on pension bonds over and above the schedule interest. It is a standard practice that pension funds have to be maintained from the contributions of the Management and employees and used appropriately to earn interest thereon. Since the erstwhile APSEB used those funds for other purposes, without accounting for the same, as a part and parcel of the first transfer scheme, after revaluation of assets of all the power utilities of the then GoAP in the undivided Andhra Pradesh, the first APERC allowed the same to be collected from consumers and subsequent Commissions also have been following the same pattern and interest on pension bonds. This kind of unjustifiable arrangement detrimental to larger consumer interest, if allowed repeatedly, will continue for many more years to come. We request the Hon'ble Commission to give a piece of advice to the Government of Telangana State to take over liabilities of pension bonds of its power utilities to settle the issue once for all, without continuing to impose such unjust burdens on consumers of power. | At the time of filing, the regular petition for determination of Generation Tariff for the 3rd control period during 2016, the pensioners and family pensioners of combined APGENCO drawing pension at corporate office Vidyuth Soudha, Hyderabad, paid by residual APGENCO. Subsequently, these pensioners and family pensioners transferred to TSGENCO as per geographical location of Hyderabd as AP Reorganisation Act 2014 and residual APGENCO claimed reimbursement of Rs.233.91Crs from TSGENCO.<br>Hon'ble TSERC in its order dated 05.06.2017, has approved pension liability for FY 2014-15 to FY 2016-17 on actual basis and for FY 2017-18 to FY 2018-19 on estimated basis.<br>Now TSGENCO filed true up petition for the additional pension liability based on the actual pension payment during the year 2017-18 & 2018-19 along with reimbursement claim of residual APGENCO for the period 2014-15 to 2016-17. |
| 10 | Renovation and Modernisation should be based on cost-benefit analysis. TSGENCO claims that the gross fixed assets for the balance control period (2016-19) are projected based on actual R&M expenditure/additional capital expenditure as per the audited accounts. The comments of C&AG, along with details of expenditure and the procedure adopted for implementing R&M, need to be submitted by GENCO and examined by the Hon'ble Commission. I request the Commission to make the same available to us. Expenditures as per audited accounts, ipso facto, are not permissible mechanically or automatically; whether they are unavoidable and justifiable or not needs to be examined. | In respect of NSHES, the Hon'ble Commission vide I.A No. 33 of 2018 in O.P.No.26 of 2016 has approved the Capital cost of NSTPD Dam of Rs. 809.73 Cr towards the additional capitalization of NSHES.<br>For the new projects the capital cost shall be considered as per the Article 10.8 &10.9 of Regulation No.1 of 2008.<br>The existing stations require renovation and modernization due to ageing in certain areas of the respective plants. There is need for capital investment to improve the generation and efficiency of the plant. |
| 11 | I request the Hon'ble Commission to direct TSGENCO to submit details as requested above and its responses to our submissions, put responses of | Making further submission is under purview of Hon'ble |

| | | |
|---|---|---|
| | the respondents in its website and give us sufficient time to study the same and make further submissions, by extending time of public hearing, if necessary. I request the Hon'ble Commission to provide me an opportunity to make further submissions in person during the public hearing on the subject issue. | Commission. However TSGENCO has mailed the responses to the submissions of the Objectors. |

15/8/2021

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

**Reply to the Objections/suggestions on MYT (2019-24) (OP No.6 of 2021) raised by Sri M.Venugopala Rao, Senior Journalist & Convener, dt:24.02.2021.**

| SI.No. | Objections/ Suggestions | TSGENCO REPLY |
|---|---|---|
| 1. | The way TSGENCO has submitted its subject petition, without relevant information, gives scope for making the regulatory process and public hearing a mere formality, as far as new projects are concerned. Clubbing new projects like KTPS stage VII and BTPS with determination of station-wise tariff for the energy to be supplied to the DISCOMs during the 4th control period by old stations of TSGENCO is unwarranted. As per information furnished by GENCO, PPA with KTPS stage VII was signed on 19.3.2018 and with BTPS on 17.9.2019. While COD of KTPS stage VII was achieved on 26.12.2018, COD of BTPS (4x270 MW) stage I was achieved on 5.6.2020, of stage II was achieved on 7.12.2020, COD of stage III was proposed to be achieved in January, 2021 and of stage IV in March 21. For determination of tariff of new stations, their PPAs, original estimated cost, time schedule of implementation of the stations, source of coal, etc., need to be submitted and examined. This is imperative to meet requirements of regulatory process, as well as public hearing. While CODs of the new stations are achieved/to be achieved in March, 2021, TSGENCO has shown gross fixed assets of KTPS VII (800 MW) as Rs.4605 crore as on 1.4.2019 and an addition of GFA of Rs.1800 crore by the end of 2023-24. It works out to a total of Rs.6405 crore. Similarly, for BTPS, TSGENCO has projected a GFA of Rs.9959 crore by the end of 2023-24. While capital cost per MW of KTPS VII, as per the projections of GENCO, works out to Rs.8 crore per MW that of BTPS works out to Rs.9.22 crore per MW. How these two projects were taken up, to whom orders were given for implementing them and with what terms and conditions, whether there has been delay in implementing them, whether the abnormal and prohibitive capital cost is permissible or not, whether power from these plants is required, if so, from | TSGENCO has filed Multi Year Tariff petition with the Hon'ble TSERC for determination of Tariff for KTPS VII Stage and BTPS. All relevant documents in respect of KTPS Stage VII & BTPS were submitted before Hon'ble commission.<br>For Every Thermal Power Project, the gestation period and capital cost vary from time to time because of several factors. The capital cost of the new projects KTPS Stage-VII is inclusive of cost of installation of FGD. In respect of BTPS, the project cost is inclusive of construction of railway line and FGD. The Capital cost also inclusive of IDC.<br>It is to inform that all the works of the BTPS were suspended from 14.12.2015 to 30.03.2017 (15 ½ months) as per Hon'ble NGT directions.<br>The MoEF & CC Govt of India by notification dated 07.12.2015 has revised the norms. To comply the new norms additional works were necessitated and many of the drawings and plot plans are required to be revised. The constructions works also severely affected during rainy season from the year 2017 to 2020.<br>Further, the works of BTPS were adversely affected due to COVID-19 as lockdown was imposed by the Government. Further upon resumption of the site works also, the works could not progress at the required pace, due to acute shortage of man power as most of the available workers at site have left and other available workers were unwilling to work due to Covid-19.<br>Despite the above hurdles Unit-I & Unit-II of BTPS were commissioned in 05.06.2020 & 07.12.2020 respectively and |

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

| | | |
|---|---|---|
| | which period, whether COD, generation and supply of power from these projects is in consonance with growing demand and load forecast, if any, source of supply of coal, its cost, GCV, station heat rate, mode and costs of transportation, terms and conditions in the PPAs, etc., need to be examined thoroughly with due prudence for determining permissible capital cost, fixed charges, variable cost and tariff. The Hon'ble Commission should have directed TSGENCO to submit all the relevant information relating to KTPS VII and BTPS and got the same uploaded in its web site. Without examining the above-mentioned information, among others, with due diligence, how can the Hon'ble Commission determine permissible capital cost, fixed charges and tariff for these two projects? Certainly, it is not possible for objectors to analyze the relevant issues, make meaningful and purposeful submissions, if the said relevant information is not made available/accessible to them. Despite signing PPAs with the two projects already and the fact that CODs of the two new projects/plants are already declared/to be declared next month, the approach of TSGENCO in not submitting the relevant information to the Hon'ble Commission, but seeking determination of capital costs and interim tariff, and clubbing the same with issues of determination of tariff of its old plants, confirms beyond the shadow of a doubt, that it wants to conceal reality, and its questionable implementation of the two new projects and claims. It is strange that TSGENCO is requesting the Hon'ble Commission to provide legal basis for its claims and recovery of fixed, variable and other costs and amounts, pending final disposal of its application, without providing required information and without explaining the reasons, if any, for not submitting the same to the Hon'ble Commission. The way BTPS was purchased by TSGENCO from a private company was questioned and criticized seriously by knowledgeable quarters in the past. Therefore, I request the Hon'ble Commission to direct | Unit-III synchronized on 15.01.2021 and activities for COD are in progress. The Boiler light up activities for Unit-IV also are in progress.<br>It is also mentioned that per MW cost of the projects may vary project to project depending on the various factors involved during the execution of the works. The details of capital cost for the above projects have been provided to Hon'ble Commission for approval. |

| | | |
|---|---|---|
| | TSGENCO to submit all the relevant information, as explained above and as required for the regulatory process and public hearing, get the same uploaded in the web site of the Commission, and give sufficient time to interested public to study the same and make their submissions, and postpone public hearing on issues pertaining to KTPS VII and BTPS accordingly. We request the Hon'ble Commission to get responses of the respondent Discoms also uploaded in its web site and enable interested public to study the same and make further submissions. We request the Hon'ble Commission to take up PPAs of KTPS VII and BTPS, determination of their permissible capital costs and tariffs simultaneously station/project-wise for public hearing and its consideration. There is every need to direct the Discoms and generators of power projects with whom the former enters into PPAs, to submit the same, along with projected capital costs and tariffs, much before implementation of the projects concerned for its consideration and public hearing. If necessary, applicable regulations of the Hon'ble Commission may be amended or a new regulation be brought about accordingly. There is no justification in seeking determination of interim tariffs, even after signing PPAs and declaration of CODs of projects concerned and without submitting the same for the consideration of the Hon'ble Commission and public hearing. | |
| 2. | For some of its old plants - KTPS V, KTPP II, LJHES and PCHES, TSGENCO has claimed additional amounts under gross fixed assets. As a part and parcel of fixed charges, as approved by the Hon'ble Commission, when GENCO is collecting all the components thereof in the monthly bills being raised for supply of power to the DISCOMs from different stations, it is difficult to understand justifiability or otherwise | As per the clause 7.19 of TSERC Regulations 1 of 2019, the additional capitalization may be admitted by the Hon'ble commission subject to prudent check.<br>The Hon'ble commission provisionally approved the Capital cost of KTPP-II, Lower Jurala HES and PCHES stations in its generation tariff order dated: 05.06.2017 for control period 2014-19.Further, Hon'ble Commission treated some of the works as work in progress. In respect of KTPS Stage-V, the R&M works has been carried out as |

| | | |
|---|---|---|
| | of the claims of TSGENCO for additional amounts under addition of gross fixed assets during the 4th control period. We request the Hon'ble Commission to reject such claims. | per the Clause 7.21 of TSERC Regulations 1 of 2019. |
| 3. | GENCO has shown a claim for Rs.489.04 crore towards "provisions" during the 4th control period and included the same in proposed fixed charges. GENCO has to explain what it meant by "provisions" and their justifiability and permissibility. Otherwise, such claims should be rejected by the Hon'ble Commission. | As per the clause no. 19 of TSERC Regulations 1 of 2019 the following provisions were added separately to Operation and maintenance expenses :<br>i. Proposed Terminal Liabilities such as leave encashment, medical reimbursement in respect of pensioners for the control period 2019-24 claimed as per clause 19.12 TSERC Regulations 1 of 2019 for an amount of Rs.74.72 Crs & 31.44 Crs respectively.<br>ii. As per the clause 19.6 of TSERC Regulations 1 of 2019, the fee for determination of tariff is claimed for an amount of Rs.3.02Crs.<br>iii. Proposed Medical and other welfare expenditure of Rs.120.97Crs recorded separately excluded from O&M expenses.<br>iv. IT initiatives of Rs 27.2 Crs towards provisions in A&G expenses.<br><br>As per clause 2.59 of TSERC Regulations Water Charges & Water Cess of Rs 231.69 Crs were added separately to the fixed charges. |
| 4. | When interest rates are falling steeply, there is no justification in GENCO claiming return on equity @ 15.5% on net fixed asset for old plants. We request the Hon'ble Commission to reexamine the issue keeping in view the trend of falling interest rates and reduce | The Return on equity is considered as per the rates specified in the clause (11) of TSERC Regulations 1 of 2019. |

| | | |
|---|---|---|
| | the percentage of return on equity/net fixed asset appropriately. This is all the more necessary in view of the fact that income tax being paid by TSGENCO also is being allowed as pass-through, though it defies logic in the sense that income tax is to be paid on the profits earned by GENCO. The higher rate of interest on working capital shown by TSGENCO also needs to be pruned in tune with falling rates of interest on loans. | Further, As per clause (30) of CERC Regulations 2019, the Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage. |
| 5. | For the 4th control period, GENCO has claimed a hefty sum of Rs.6448.38 crore towards additional interest on pension bonds (over and above schedule) as a part and parcel of fixed charges. It is a standard practice that pension funds have to be maintained from the contributions of the Management and employees and used appropriately to earn interest thereon. Since the erstwhile APSEB used those funds for other purposes, without accounting for the same, as a part and parcel of the first transfer scheme, after revaluation of assets of all the power utilities of the then GoAP in the undivided Andhra Pradesh, the first APERC allowed the same to be collected from consumers and subsequent Commissions also have been following the same pattern and interest on pension bonds. This kind of unjustifiable arrangement detrimental to larger consumer interest, if allowed repeatedly, will continue for many more years to come. We request the Hon'ble Commission to give a piece of advice to the Government of Telangana State to take over liabilities of pension bonds of its power utilities to settle the issue once for all, without continuing to impose such unjust burdens on consumers of power. | The Pension liability was vested with erstwhile APGENCO at the time of bifurcation of the erstwhile APSEB in the year 1999. Erstwhile APGENCO has issued bonds to Master Trust repayable over 30 years with floating rate of interest duly matching with actual pension commitment.<br>The Additional pension liability was transferred to TSGENCO vide G.O.ms.No.29, dt: 31.05.2014 (Transfer scheme notified by the Erstwhile Govt of AP) based on the provisions of AP Re organization Act 2014. Hon'ble TSERC in Generation Tariff Order dt: 05.06.2017 discussed in detail in chapter 4 regarding the approval of Additional pension liability. |
| 6 | GENCO has claimed year-wise increase in operation and maintenance charges during the 4th control period totaling Rs.7560.89 crore, excluding KTPS VII and BTPS. The employee | TSGENCO computed Operation & Maintenance expenses (O&M) as per the clause 19 of TSERC |

| | | |
|---|---|---|
| | cost of Rs.6005.62 crore works out to 79.43% of the proposed total O&M expenditure for the 4th control period. This excludes the impact of pay revision that would take place during the 4th control period which would be claimed by GENCO under true-up later. We request the Hon'ble Commission to confine the claims of TSGENCO for O&M expenses, including pay and allowances, within the normative values specified in applicable regulations or decide and implement rational normative parameters for the same. The Commission has been allowing the financial impact of periodical wage revision for the employees of TSGENCO and other power utilities of the State Government, irrespective of permissible norms of O&M expenses. While pay revision for its employees is being decided and the impact of pay revision is being borne by GoTS, the impact of pay revision for employees of the power utilities is being passed on to the consumers of power as a part and parcel of the tariffs to be paid by them as determined by the Commission. As such, under this regulatory regime, the impact of pay revision on tariffs needs to be regulated as a part and parcel of determining total O&M expenditure. In the case of private power projects with whom the DISCOMs had PPAs, the O&M costs, including pay and allowances of their employees, of those projects are being determined by the Commission as per applicable norms. The private power projects are not claiming the financial impact of revision of pay and allowances to their staff separately and the Commission also is determining O&M expenditure, which is inclusive of the requirement of pay and allowances, with annual escalation. The claims for administrative costs, including pay and allowances of employees, by power utilities should be subjected to applicable norms; they cannot claim the same as they like and the Commission should apply | Regulations'2019.<br><br>As per clause 19 of TSERC Regulations Any increase in employee cost on account of pay revision etc. will be considered separately by the Commission. |

| | | |
|---|---|---|
| | applicable regulations and norms for determining the same in order to ensure prudence in expenditure by power utilities and protect larger consumer interest. I would like to remind the Hon'ble Commission that, during a public hearing on MYT of TSGENCO earlier, the then Hon'ble Member of TSERC, Sri Srinivasulu garu, had orally observed that the claims of TSGENCO for pay revision would not be allowed as they were for the purpose of determining O&M expenditure. Pay revision is not within the regulatory purview of the Hon'ble Commission, no doubt. Need for periodical revision of pay and allowances of the employees also cannot be denied. Seen in this background, it is difficult to agree with observations like the one that, "though the employee cost as part of O&M expenditure has been classified as a controllable item, these needs to be considered for true-up as part of the force majeure factors," for, this kind of strange logic implies that the decisions of those who determine and implement wage revision come under conditions of force majeure, as if they were a law unto themselves, and encourage them to continue to decide wage revision periodically as they want to, without any prudence check and accountability and unmindful of the cascading affect it will have on tariffs to be paid by the consumers. But for this kind of unquestioning approval for passing on the expenditure on wage revision to the consumers, without any prudence check, no organization can compete in the market and will become bankrupt, if such tendencies continue to operate periodically. Whatever be the impact of pay revision effected periodically, we request the Hon'ble Commission to determine such an impact for the purpose of O & M expenditure based on prudent norms, not as it is. | |

| | | |
|---|---|---|
| 7 | Against the claims of GENCO for depreciation charges, we request the Hon'ble Commission to consider rates of depreciation as per regulations of CERC, or of the Ministry of Power, GoI, whichever is lesser. | Depreciation is computed @5.28% on capital cost of the project as per the CERC 2019 Regulations Appendix I Depreciation Schedule.<br>The Depreciation is computed @5.28% on the capital cost of the respective stations which have not completed 12 years. In case the stations have completed 12 years, the remaining depreciable value spread over equally over the balance useful life of the project. |
| 8 | We request the Hon'ble Commission to postpone public hearing on issues relating to KTPS VII and BTPS and take up the same separately station-wise, after TSGENCO submits the PPAs and all other relevant information and giving sufficient time to interested public to submit their objections and suggestions. | It is under the purview of Hon'ble commission. |
| 9 | We request the Hon'ble Commission to direct TSGENCO to send their responses to our submissions on the subject issue well in advance to enable us to study the same and make further submissions during the public hearing in person | Required information submitted to Hon'ble Commission and the same will be shared to the Objector. |

15/3/2024

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

Final

**Reply to the Objections/suggestions on True up (2014-19) raised by Sri M.Venugopala rao, Senior Journalist & Convener, dt: 12.03.2021.**

| SI. No. | **Objections/suggestions** | TSGENCO REPLY |
|---|---|---|
| 1. | I thank the Hon'ble Commission for extending time for making submissions in the subject petition up to 12.3.2021 and rescheduling public hearing to 17.3.2021. The very fact that TS Genco has submitted voluminous additional information, which is much larger than the two petitions and annexures relating to true-up claims for 3rd control period and determination of tariff for 4th control period, etc., altogether running into nearly two thousand pages, confirms how deficient the original petitions and information submitted by TS Genco were in terms of meeting requirements of regulatory process and public hearings. Needless to say, a few weeks time is required for interested objectors to study, analyse and prepare additional submissions on the voluminous additional information uploaded in the web site of the Hon'ble Commission. It is gratifying to note that the Hon'ble Commission directed TS Genco to submit the required additional information in its letters dated 10.2.2021 and 26.2.2021. Even then, Genco has informed that some of the information sought by the Hon'ble Commission is still "pending" in O.P.Nos. 5 and 6 of 2021. It again shows need for submitting petitions relating to PPA, determination of capital cost and tariff project/station-wise separately for the purpose of regulatory process and public hearing as and when agreements are signed between TS Genco and Discoms. Though public hearing is scheduled on 17.3.2021, we have not received any responses from Genco to our earlier written submissions so far. Nor are the responses of the respondent Discoms, if already submitted, made public. I reiterate that all this is required for a meaningful articulation of issues during the public hearings. | As far as TSGENCO is concerned the information sought by Hon'ble Commission has been submitted. |

15/3/2021

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

| | | |
|---|---|---|
| 2 | As per the additional information submitted by TS Genco, the revised fixed charges claimed for the third control period are Rs.21118.15 crore, excluding BTPS, while the addition of gross fixed assets of its plants, including KTPS stage VII, are shown as Rs.8085.83 crore for the period 2016-19 and fixed charges of Rs.19374.96 crore for its stations, excluding BTPS, for the period 2014-19. The abstract data given by TS Genco does not provide any basis for justification and permissibility of its true-up claims. The following points, among others, need to be clarified by providing required information for the purpose of regulatory process and public hearing on the subject issue: | |
| | a) Since TS Genco has been billing and collecting fixed charges for power being supplied to the Discoms on monthly basis, justification for its claims for addition of GFA of Rs.8085.83 crore for its projects, including KTPS stage VII, and revised fixed charges under true-up needs to be substantiated with relevant information and explanation. | a) GFA addition for New stations (2014-19)<br>KTPS Stage-VII - Rs.4605.02Crs.<br>Lower Jurala HES - Rs.13.12Crs.<br>Pulichinthala - Rs.71.46Crs.<br>GFA addition for Old stations (2014-19) - Rs.976.15Crs.<br>Total GFA Addition is Rs.5665.75Crs which includes addition of 4605.02 Crs for KTPS VII Stage. |
| | b) For its existing old plants, when CODs were declared long-time back, the need for, and permissibility of, additional capital expenditure after one year from the COD of the plant/station concerned should be explained project-wise and station-wise. | b) The additional capitalization claimed towards the un discharged liabilities and pending works which are in the original scope of the Projects. Regarding the additional capitalization of Old Stations, the works were carried out due to aging and wear and tear of the equipment, and adopting latest technology for efficient operation of the Units. |
| | c) When operation and maintenance charges are covered under fixed charges, as permitted by the Hon'ble Commission in its MYT order for the third control period, TS Genco's true-up claims for an abnormal amount of Rs.21118.57 crore towards revised fixed charges for the third control period, on the face of it, lack justification. | c) TSGENCO submitted true up petition for revision of fixed charges for the control period 2014-19 against the approved fixed charges in GTO dated 05.06.2017. The proposed net claim after truing up is of Rs.1169.04Crs only as per Annexure A9, Page No.40 of True up petition. |
| | d) During the 3rd control period, were capacities of the thermal plants of TS Genco backed down, especially for purchasing variable renewable energy like solar and wind power? If so, what are the capacities backed down year-wise and plant- | d) The backing down of the units is under the purview of |

| | | |
|---|---|---|
| | wise, and the fixed charges claimed/paid for the same? For backing down thermal projects, whether variable charges, partly or fully, paid, if such provisions are included in the FSAs and PPAs concerned? | SLDC as per the Grid demand. TSGENCO has claimed fixed charges from DISCOMs as per the provisions of PPA. The variable charges claimed as per PPA for the actual generation. |
| 3 | TS Genco is seeking determination of capital cost and tariff of KTPS stage VII for the 3rd control period, without submitting PPA and related documents which are imperative for regulatory process and public hearing even now during the 4th control period. If the PPA was submitted, the Hon'ble Commission should make it public and hold public hearing on the same, along with claims for capital cost and tariff to be determined by it. | TSGENCO has submitted the PPA's signed with TSDISCOMs to Hon'ble Commission. |
| 4 | TS Genco has shown Rs.357 per MT of coal for 2018-19 and Rs.364 per MT of coal for 2019-20 towards other charges claimed by supplier for forest land adjustment charges, sampling charges, engine shunting charges, fuel surcharge, and pre-weigh bin charges. Whether such charges are permissible and payable as per terms and conditions of the fuel supply agreements needs to be examined. | SCCL has claimed forest land adjustment charges, sampling charges, engine shunting charges, fuel surcharge, and pre-weigh bin charges as per the terms and conditions of Fuel Supply Agreement and the same is part of the Fuel cost. |
| 5 | Inefficiency in implementing projects of TS Genco in terms of delays, increase in capital cost and interest during construction, etc., seems to be a permanent feature, with no discernible efforts to learn from past experience and follow prudent practices. And the practice of inflating capital costs of projects even after one year from their date of COD continues unabated, with claims being made by TS Genco repeatedly for successive control periods to impose those ever increasing burdens on consumers of power of the Discoms, and without the powers-that-be taking any | It is pertinent to mention that the 800MW unit of KTPS VII Stage has been commissioned by TSGENCO within the timeline as per the CERC Regulations. TSGENCO in its filings has claimed expenditure actually incurred and proposed to be within the original scope. |

18/3/2021

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

| | | |
|---|---|---|
| | responsibility and accountability for failures of commission and omission in implementing the projects in such a questionable and desultory manner. As a result, avoidable and impermissible expenditure has to be disallowed by the Hon'ble Commission, as has been the practice, from the claimed capital expenditure, etc., to protect larger consumer interest. What are the original time schedules of the projects, to PPAs of which the Hon'ble Commission has not given its consents yet, plant/station-wise for their completion, actual CODs and period of delay? | |
| 6 | Since it is not possible to study the voluminous additional information submitted by TS Genco, its replies to our earlier submissions and responses of the respondents as and when they are made public, within a few days, I once again request the Hon'ble Commission to permit me to make further submissions later in OP Nos. 5 & 6 of 2021. | It is under purview of Hon'ble Commission. |

15/4/2021

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

**Reply to the Objections/suggestions on True up (2014-19) raised by Sri M.Venugopala Rao, Senior Journalist & Convener, People Monitoring Group, dt:30.03.2021.**

| Sl.No. | Objections/ Suggestions | TSGENCO REPLY |
|---|---|---|
| 1. | TS Genco has maintained that the additional capitalization claimed towards un discharged liabilities and pending works which are in the original scope of the projects. When permissible capital costs of the projects are not approved by the Hon'ble Commission, additional capitalization cannot be taken for granted; it should be within the limits of capital costs to be approved by the Hon'ble Commission. | The Capital cost in respect of KTPP-II , LJHES, PCHES, NSTPD has been provisionally approved as some works were kept under capital works in progress by the Hon'ble Commission vide Generation Tariff Order for the 3rd Control period 2014-19 dt:05.06.2017, and I.A. No. 33/2018 dt: 03.01.2019. |
| 2. | Nowhere in the subject petition TS Genco has mentioned that the amount claimed under true-up for the third control period is Rs.1169.04 crore. The standard practice is that the amount claimed under true-up should be mentioned in the main petition itself. In the subject petition, the said amount is not shown either in the main petition, or even in the prayer. Annexures are intended to substantiate the points raised in the main petition by giving break-up of details, etc.; they are no substitute for what is shown in the main petition. Even while making reference to annexures relating to issues concerned in the petition, Genco has not made any reference to the annexures relating to the amount claimed under true-up, except showing a hefty sum of Rs.19374.96 crore. During my participation in the regulatory process of APERC and TSERC for more than two decades, I have not come across this kind of statistical jugglery performed by financial wizards. What is the purpose for which TS Genco has presented the subject petition in this questionable manner and why has it failed to show the actual amount claimed under true-up in the main petition and prayer, but shown a hefty sum which is several times more than the true-up claim, is inexplicable and intelligible. | The Hon'ble commission vide Generation Tariff of 3rd Control period 2014-19 dt: 05.06.2017, I.A.No 33/2018, Retail Tariff order 2018-19 has approved the fixed charges of Rs.19374.96 Cr. as detailed in Table 1. The Revised fixed charges (True up) pertaining to the existing & new stations for the 3rd control period (FY 2014-19) based on normative availability as per the Table. 5 of the petition is of Rs.21118.57 Crs.<br>The annexure- A9 in the volume–I of the petition detail the charges to be claimed on TSDISCOMs after considering the Actual Availability/ Capacity Index of Rs. 1169.04 Crs. Thermal and Hydel Generating Stations.<br>It is to inform that petition is filed before the Hon'ble TSERC for according the approval for the Revised Fixed Charges based on normative operating parameters which is required to claim the differential fixed charges.<br>Accordingly the True up petition for Revised Fixed Charges has been filed before the Hon'ble TSERC. The True-up for fixed charges is Rs. 1169.04 Cr as detailed in Annecure-A9. |

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

| | | |
|---|---|---|
| 3. | TS Genco contends that backing down of the units is under the purview of SLDC as per the grid demand. If thermal units of TS Genco were backed down during the third control period, as per directions of SLDC, the details must be available with the Genco. That fixed charges from the Discoms are claimed as per the provisions of PPA and variable charges for the actual generation, as stated in its replies by TS Genco, goes without saying. Why is TS Genco reluctant to provide information relating to backing down of its thermal projects, if any, and the fixed charges and variable charges claimed/received by it for the capacities of its plants backed down during the third control period? | The Backing down details of the thermal Units for the 3rd control period (2014-19) as requested is enclosed as Annexure-A.<br>Fixed charges are claimed as per actual availability of the Stations. Variable charges will be claimed as per the actual generation. |
| 4. | TS Genco has submitted that the PPAs signed with TS Discoms are submitted to the Hon'ble Commission. Did TS Genco submit any petitions, along with TS Discoms, seeking approvals of the Hon'ble Commission to the said PPAs? If not, why not? How can the Hon'ble Commission determine tariffs, especially fixed charges, for generation units without approving permissible capital costs and PPAs? How long TS Genco wants determination of provisional tariff for its generation stations, without determination of permissible capital costs and without approval of PPAs by the Hon'ble Commission? Regulation No.1 of 2019 of the Hon'ble Commission relating to terms and conditions of generation tariff stipulates, inter alia, that "the Generating Entity shall file the application for determination of final tariff for new Generating Station within one hundred and eighty Days (180) from the COD of Generating Unit or Stage or Generating Station as a whole, as the case may be, based on the audited capital expenditure and capitalisation as on the COD" (Clause 4.2.7). It | As per the clause No 4.3.2 of TSERC' 2019 regulations the petition for approval of PPA shall be filed by the Distribution Licensee with the Commission. However the PPAs of all the TSGENCO thermal and Hydel Stations have been submitted to the Hon'ble Commission.<br>The clause 4.3.1. of TSERC 1 of 2019 Regulations specifies that at any time prior to April 1 , 2019, if there is an approved power purchase agreement or arrangement between a Generating Entity and a distribution licensee or has adopted the Tariff contained therein for supply of electricity from an existing generating Unit/Station, then the Tariff for supply of electricity by such Generating Entity to the Distribution Licensee shall be in accordance with the Tariff mentioned in such power purchase agreement or arrangement for such power purchase agreement or arrangement for such period as so approved or adopted by the Commission.<br>PPA have been entered with TSDISCOMs in respect of |

| | | |
|---|---|---|
| | further says: "where there is no power purchase agreement or arrangement, the supply of electricity by such Generating Entity to the Distribution Licensee after April 1, 2019 shall be in accordance with a power purchase agreement approved by the Commission. Provided that the petition for approval of such power purchase agreement or arrangement shall be filed by the Distribution Licensee with the Commission within three months from the date of notification of these Regulations" (clause 4.3.2). The Hon'ble Commission is expected to enforce its applicable Regulations. | BTPS (4X270MW ).<br>Hon'ble TSERC has issued Generation Tariff order for supply of Electricity from TSGENCO to TSDISCOMs vide Generation Tariff Order dt:05.06.2017, I.A. No 33 dt.03.01.2019, Retail Tariff Oder 2018-19.<br>The clause No 25 of CERC (Terms and Conditions of Tariff) Regulations, 2019 provides for the additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check. |
| 5. | TS Genco has maintained that the 800 MW stage VII of KTPS has been commissioned within the timeline as per the CERC regulations and that in its filing it has claimed expenditure actually incurred and proposed to be within the original scope. Whatever be the "original scope," expenditure to be permissible should be within the scope of capital cost approved by the Hon'ble Commission. Claiming expenditure actually incurred and proposed to be incurred based on "original scope" cannot be taken for granted. Such claims may contain elements of impermissible arbitrariness. Moreover, fixed charges need to be worked out based on capital expenditure and other terms and conditions of PPAs approved by the Hon'ble Commission, and depreciation charges paid every year need to be deducted from capital cost for working out revised fixed charges year-wise. | The details of capital cost, DPR and other relevant details in respect of KTPS-VII Stage has been submitted to the Hon'ble Commission. The Hon'ble Commission will approve the capital cost after prudent check. The Fixed charges will be claimed based on the approved costs of Hon'ble TSERC.<br>The accumulated depreciation is deducted from the capital cost for computation of net assets and interest on working capital and Fixed charges. Interest on working capital etc., will be computed after deducting the accumulated depreciation. |
| 6 | There are questionable deficiencies in the terms and conditions of the PPAs of the power plants of TS Genco, as well as applicable Regulations of the Hon'ble Commission. When PPAs are taken up for public hearing, we can point them out and submit our suggestions. | The PPAs entered with the TSDISCOMs/ESCOMs are strictly in conformity TSERC regulations. |



Chief Engineer
Coal & Commercial

**Reply to the Objections/suggestions on MYT (2019-24) raised by Sri M.Venugopala Rao, Senior Journalist & Convener, People Monitoring Group, dt:30.03.2021.**

| SI.No. | Objections/ Suggestions | TSGENCO Reply |
|---|---|---|
| 1. | Need for new power projects, even if they are included in the long-term generation capacity for the 4th control period approved by the Hon'ble Commission in its order dated 2.3.2020 in O.P.No.2 of 2019, has to be reviewed in light of changing scenario for demand in the State of Telangana. While Bhadradri TPS (4 x 270 MW) and Yadadri TPS (5x800 MW) are included in the generation capacity approved by the Hon'ble Commission for the 4th control period, only the first phase of 1600 MW of Telangana State Thermal Power Project of NTPC is included therein. As per A.P. Reorganisation Act, 2014, TSTPP with a total capacity of 4000 MW has to be implemented by NTPC exclusively for the State of Telangana. However, the balance 2400 MW capacity of the project is not included in the generation capacity for the 4th control period. Even for the first phase of 1600 MW, it is not made public whether TS Discoms and NTPC have submitted the revised PPA as directed by the Hon'ble Commission in its interim order dated 30.7.2016 in O.P.No.10 of 2016. In light of the said direction of the Hon'ble Commission, the basis for taking into account only 1300 MW, instead of 1600 MW, in the order relating to generation capacity approved by the Hon'ble Commission is not explained. Since no public hearing is held on the PPA of first phase, if resubmitted as directed by the Hon'ble Commission, whether it is approved by the Hon'ble Commission is also not known. It is pertinent here to remind that the Hon'ble Commission, in the said order dated 30.7.2016, pointed out that "the Commission considers that the draft agreement after amendments will have to be placed before the stakeholders and after hearing all the persons a final order can only be passed" (Para 50). What is the agreement between NTPC and the TS Discoms relating to the remaining 2400 MW of TSTPP? Whether that capacity is required by the TS | TSGENCO has planned massive capacity additions to the tune of over 6000MW from conventional sources to ensure 24X7 quality , reliable and affordable power supply to all Domestic , Commercial , Agriculture and Industrial consumers in line with the policies of Govt. of Telangana. The Bhadradri TPS (4X270) and Yadadri TPS (5X800 MW) are part of capacity addition.<br><br>Further, Energy consumption is directly related to Economic growth and GDP of a country. TSGENCO is committed to meet the demand of Manufacturing Sector, Transportation, Households needs, State Government Schemes etc., by generating qualitative power at competitive prices.<br><br>The clause No 4.2.3 of TSERC Regulation 1 of 2019 specifies to file the application for determination of provisional tariff for new Generating Station, 180 days prior to the anticipated COD of Generating Unit or Stage or Generating Station as a whole, as the case may be. Accordingly it is proposed to file the Capital cost, provisional tariff filing before 180 days prior to the anticipated COD of YTPS. The Units of YTPS will be Commissioned during the 4th control period (2019-24). |



29/6/21
Chief Engineer
Coal & Commercial
CO, V.S., Hyderabad

| | | |
|---|---|---|
| | Discoms, and, if so, from which period is also not made public. Why are BTPS and YTPS given precedence, ignoring the balance capacity of 2400 MW from TSTPP? Though YTPS is included in the generation capacity approved by the Hon'ble Commission for the 4th control period, the same is not included in the subject petition for determination of capital cost, tariff and approval of PPA. Does it mean that power is not required during the 4th control period or that units of YTPS cannot, or need not, be commissioned during the 4th control period? | |
| 2. | As per the said order of the Hon'ble Commission, the generation capacity for the 4th control period includes the entire capacities of BTPS and YTPS. The total installed capacity available to TS Discoms, as approved by the Hon'ble Commission in the said order, ranges from 19487.31 MW for the financial year 2020-21 to 22893.73 MW for 2023-24. Since annual revenue requirement and tariff proposals for the years 2019-20, 2020-21 and 2021-22 have not been filed by the TS Discoms, information relating to actual demand growth, requirement of power and need for addition of generation capacity, balance in power mix, whether there has been availability of surplus power or shortage for power, etc., has not been in the public domain. TS Genco is seeking determination of capital costs of new projects and generation tariffs for old and new projects, without seeking approval for PPAs it had with the TS Discoms for supplying power from its new projects. It is the obligation of the TS Discoms to substantiate and justify need for power from the projects of TS Genco as proposed in the subject petition. Even the Hon'ble Commission has to review the factual position relating to demand growth, availability of generation capacity, energy, surplus or deficit and then determine whether power from the new projects of TS Genco, as proposed by it, is required, and, if so, to what extent, and then take an informed | The BTPS and YTPS thermal plants construction has taken up keeping in view the demand from upcoming irrigation schemes, industrial growth, and 24X7 power supplies in line with policies of Govt. of Telangana.<br><br>In the research reports published by DELOITTE on "The future of Global Power Sectors" it is projected that, Due to the higher levels of economic growth and anticipated increase in the quality of life over the next few years, developing countries will likely see a rapid increase power demand. India, for instance is poised to see annual power consumption increases of upto 3.2% between 2012 and 2040. In April, 2021 there is a growth rate of 35% in demand in the Telangana state compared to previous year. The PPAs of all the Stations were submitted to the Hon'ble Commission. The Generation capacity of BTPS and YTPS has been approved by the Hon'ble TSERC in the SLDC orders dt 02.3.2020 in O.P.No.2 of 2019. Other points are under purview of Hon'ble Commission. |

| | | |
|---|---|---|
| | decision whether to give approval to the pending PPAs, after holding public hearings on the same. The scope for availability of power from four new gas-based power projects - i.e., share of 783 MW to TS Discoms from Konaseema, GVK, Vemagiri & Gowthami projects - as and when natural gas is reallocated and supplied to them, also needs to be taken into account. What are the efforts being made by GoTS and GoAP to get supply of natural gas to these projects, especially in view of availability of natural gas in KG D6 basin as reported widely? | |
| 3. | Determination of capital costs and generation tariffs, especially for new projects included in the subject petition, would imply that power from them is required during the 4th control period. It would be a fait accompli, unrelated to requirement of power by the TS Discoms. It may even lead to imbalance in power mix and availability of unwarranted surplus power with resultant avoidable burdens on the consumers of power of the Discoms. Therefore, I request the Hon'ble Commission to direct the Discoms to submit information relating to demand growth, availability of power and generation capacity, whether they are saddled with surplus power, and if so, whether they are able to sell the same in the market profitably or backing down the same and paying fixed charges, etc., for the same, or whether they are purchasing additional power on short-term basis or through exchanges to meet peak deficit, if any. Whether there is equilibrium to the extent possible between fluctuating demand curve and power mix, especially in view of addition of new generation capacities, including solar and wind power capacities, already made and proposed to be made, needs to be examined. If there is imbalance, its financial impact and burdens on consumers need to be examined; it needs to be corrected to the extent possible. It is regulatory imperative for the Hon'ble Commission to examine factual position relating to all these issues, among | Solar generation is available in the day time in a ramp up/ramp down pattern with variation on hour to hour and day to day basis, which is mostly uncertain. The generation from solar has to be absorbed and it has to be treated as must run. Hydel generation is dependent on vagaries of nature. The balancing has to be carried out only by varying conventional thermal generation by way of backing down/recall and hydel if available. To meet the demand from upcoming irrigation schemes, industrial growth, and 24X7 power supplies in line with policies of Govt. of Telangana the power from the New power plants i.e., BTPS and YTPS are essential. |

| | | |
|---|---|---|
| | others, in order to determine actual requirement of addition of generation capacity and give or reject approvals to PPAs of new projects appropriately. Therefore, we once again request the Hon'ble Commission to direct the TS Discoms to submit their responses in the subject petition and the information as pointed out above, among others. For the 4th control period, TS Genco has proposed fixed charges for 16 projects/stations to the tune of Rs.40,116.71 crore. In view of Genco claiming such a huge amount towards fixed charges, it is all the more important to examine the above-mentioned issues and information, among others. | |
| 4. | In its additional information, TS Genco has referred to environmental clearances and need for implementing new norms relating to emissions from thermal power plants as per notification issued by the Ministry of Environment, Forests and Climate Change dated 7.12.2015. These norms mandate Flue gas desulfurization (FGD) to remove sulphur dioxide (SO2) from emissions of thermal power plants. When the works relating to FGD would be taken up and completed is not explained, though notification of MoEF&CC was issued more than five years back and CODs of units of BTPS are already declared. TS Genco has contended that on environmental clearance issue, due to direction of National Green Tribunal, works relating to BTPS were suspended for 15 and a half months. It shows how casually TS Genco proceeded with implementation of the project, without getting prior permissions/clearances required. Heavy rains every year, prevalence of covid pandemic, acute shortage for manpower are cited as other reasons by TS Genco for delay in execution of the project. Whatever be the reasons for delay and whether they are uncontrollable and justifiable or not, needless to say, delay in execution of projects is leading to escalation in capital cost, including IDC, and claims for higher generation tariffs, thereby imposing additional burdens on consumers of power. The | Ministry of Environment, Forest and Climate change vide Notification dated: 31st March, 2021 extended the timeline for compliance the limits based on location/Area and a task force shall be constituted to categorise thermal power plants. Within the timeline specified by the MoEF&CC, the Flue gas desulfurization (FGD) works will be carried out. The BTPS project cost revised due to implementation of GST by Government of India and new emission norms mandated by the MOEF&CC. |

| | | |
|---|---|---|
| | information submitted by TS Genco shows that capital costs of projects have been revised, re-revised repeatedly and will be revised again and again. | |
| 5. | Auditor's certificates for capitalisation of different projects, submitted in additional information by TS Genco, do not provide justification for delays in execution of the projects and escalation in capital costs and IDC. They simply certify that what has been spent and what has been shown in accounts of TS Genco tally - a simplistic formality. Relating to implementation of projects by TS Genco, relevant observations of the Comptroller and Auditor General of India, if any, need to be examined. | The justification for delays in execution of the projects, escalation in capital costs and IDC were furnished in the in the additional data II and is available in www.tserc.in and www.tsgenco.gov.in |
| 6 | TS Genco has also contended that per MW cost of the projects may vary project to project depending on the various factors involved during execution of the works. Such a sweeping claim does not provide any justification for delays in execution of projects and escalation in capital costs, including IDC. Time is the essence of any agreement, it is generally considered. It is not a question of variations in costs per MW of various projects. Whether the projects are executed as per applicable regulations and prudently are the moot point. Execution of projects as per agreed timelines is intended to ensure prudent expenditure, timely declaration of COD, starting generation and supply of power to the Discoms, thereby protecting interests of the generators and Discoms and their consumers of power. That is missing in the terms and conditions of the PPAs, both in letter and spirit, and the way in which projects are being executed. As and when PPAs are taken up for public hearing, we will point out those deficiencies and submit our suggestions. In this connection, it is necessary to re-examine Regulation No.1 of 2019 of the Hon'ble Commission to bring about required amendments. | BTPS being a Green Field Project, the capital cost of the project is within the CERC "**BENCHMARK HARD COST - Per MW with December 2011 Indices as Base", Order Dt.04.06.2012 and escalated there on. The BENCH HARD COST of CERC does not include expenditure towards MGR, Railway siding, unloading equipment at jetty, and Rolling stock, locomotive, Transmission line till tie point.**<br><br>TSGENCO making every effort to complete the projects as per the scheduled timeline. |

<table>
<tr><td></td><td></td><td></td></tr>
<tr><td>7.</td><td>
As per additional information submitted by TS Genco, commercial operation dates of various units/projects are declared as under:
As per additional information submitted by TS Genco, the following PPAs have been signed with TS Discoms:
<table>
<tr><th>S.No</th><th>Name of the Generating station</th><th>Installed capacity (MW)</th><th>PPA Date</th><th>Valid Upto</th></tr>
<tr><td>1</td><td>KTPS- ABC</td><td>420(3X60+ 2X120)</td><td>17.09.2019</td><td>31.03.2020</td></tr>
<tr><td>2</td><td>KTPS Stage -V</td><td>500(2X250)</td><td>17.09.2019</td><td>31.03.2024</td></tr>
<tr><td>3</td><td>KTPS- Stage-VI</td><td>1X500</td><td>22.12.2009</td><td>22.10.2036</td></tr>
<tr><td>4</td><td>RTS -B</td><td>1X62.5</td><td>17.09.2019</td><td>31.03.2024</td></tr>
<tr><td>5</td><td>KTPP Stage – I</td><td>1X500</td><td>22.12.2009</td><td>13.09.2035</td></tr>
<tr><td>6</td><td>KTPP Stage II</td><td>1X600</td><td>27.01.2016</td><td>23.03.2041</td></tr>
<tr><td></td><td>Hydel Stations</td><td></td><td></td><td></td></tr>
<tr><td>7</td><td>N' Sagar HES(Main power house &left canal)</td><td>875.6(1X110+ 7X100.8 & 2X30)</td><td>17.09.2019</td><td>31.03.2029</td></tr>
</table>
</td><td>As per the clause No 4.3.2 of TSERC' 2019 regulations the petition for approval of PPA shall be filed by the Distribution Licensee with the Commission. However the PPAs of all the TSGENCO thermal and Hydel Stations have been submitted to the Hon'ble Commission.</td></tr>
</table>

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| 15 | KTPS Stage VII | 1X800 | 19.03.2018 | 25.12.2043 | 26.12.2018 |

| | | |
|---|---|---|
| | Even after declaration of CODs of various projects/units, why TS Genco is still seeking determination of provisional tariffs for its projects concerned, without seeking approval, along with TS Discoms, to the PPAs relating thereto, remains inexplicable. This kind of ad hocism reflects on the regulatory process as well. It also indicates implied apprehensions of the powers-that-be of TS Genco that the Hon'ble Commission may disallow substantial expenditure while determining permissible capital expenditure, after considering PPAs concerned, as happened earlier. | |
| 8. | Regulation No.1 of 2019 of the Hon'ble Commission relating to terms and conditions of generation tariff stipulates, inter alia, that "the Generating Entity shall file the application for determination of final tariff for new Generating Station within one hundred and eighty Days (180) from the COD of Generating Unit or Stage or Generating Station as a whole, as the case may be, based on the audited capital expenditure and capitalisation as on the COD" Clause 4.2.7).<br>It further says: "where there is no power purchase agreement or arrangement, the supply of electricity by such Generating Entity to the Distribution Licensee after April 1, 2019 shall be in accordance with a power purchase agreement approved by the Commission. Provided that the petition for approval of such power purchase agreement or arrangement shall be filed by the | The Hon'ble Commission will approve the capital cost after taking into consideration the reasons for cost over run time over run, financing prudence etc.<br>Further as per Clause No. 7.19 (j) of TSERC Regulations '2019 Any liability for works admitted by the Commission after the Cut-Off Date to the extent of discharge of such liabilities by actual payments.<br>7.19 (k). Any additional capital expenditure which has become necessary for efficient operation.<br>Provided that the claim shall be substantiated with technical justification duly supported by documentary evidence like test results carried out by an independent agency in of deterioration of assets, damage caused by |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 8 | SLBHES | 900(6X150) | 17.09.2019 | 31.03.2029 | 26.01.2001 to 04.09.2003 | |
| | | 9 | Small Hydel (Singur, Pochampad,Nizam sagar& Palair HES) | 54(2X7.5+ 3X9+2X5 & 1X2) | 17.09.2019 | 31.03.2029 | 07.03.1978 to 31.03.2000 | |
| | | 10 | Mini hydel (Peddapalli HES) | 9.16(6X0.22+3 X0.23+ 2X0.325+ 10X0.5+ 2X0.75) | 17.09.2019 | 31.03.2029 | 31.03.1986 to 29.01.2004 | |
| | | 11 | Pochampad -II | 1X9 | 22.12.2009 | 11.10.2045 | 12.10.2010 | |
| | | 12 | Priyadharshini Jurala HES | 234(6X39) | 19.05.2014 | 03.08.2046 | 31.08.2008 to 04.08.2011 | |
| | | 13 | Lower Jurala HES | 240(6X40) | 30.12.2010 | 30.09.2051 | 19.10.2015 to 01.10.2016 | |
| | | 14 | Pulichinthala HES | 120(4x30) | 30.12.2010 | 07.09.2053 | 29.09.2016 To 08.09.2018 | |

| | | |
|---|---|---|
| | run has to be borne by the Generating Entity in case the causes for over-run are entirely attributable to the Generating Entity. For example, imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in providing inputs like making land available to the contractors, delay in payments to contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper coordination between the various contractors, etc." Further it says: (b)….. "Provided that the consumers should get full benefit of the Liquidated Damages (LDs) recovered from the contractors/suppliers of the Generating Entity and the insurance proceeds, if any, to reduce the capital cost." | |
| 9. | Being the distribution licensees, TS Discoms have the obligation to establish need for power from the plants with which they had entered into PPAs and submit the same to the Hon'ble Commission for its consideration and approval, as per the said Regulation. They have to protect their interests and those of their consumers of power. They cannot shirk their responsibility; they cannot act like disinterested and silent spectators. The Hon'ble Commission should not allow the Distribution Licensees to shirk their responsibility to adhere to and meet regulatory requirements. | Based on the requirement of power to the State of TELNGANA the TSGENCO has taken up the new power projects and the TSDISCOMs had entered into PPAs for providing 24X7 power to the Industrial, Agriculture and Households. The PPAs has been submitted by the TSDISCOMs to the Hon'ble TSERC. |
| 10. | For determining permissible capital expenditure, it is imperative to disallow impermissible expenditure, as the Hon'ble Commission did earlier in the case of some of the projects of TS Genco itself and thermal power project of Singareni Collieries Co. Ltd. Determination of permissible capital expenditure of generating entities is invariably interlinked with PPAs and terms | The PPA provides for a general clause for determination of final capital cost by the Commission after prudence check.<br><br>The clause No 25 of CERC (Terms and Conditions of Tariff) Regulations, 2019 provides for the additional capital expenditure incurred or projected to be incurred in respect of |

| | | |
|---|---|---|
| | Distribution Licensee with the Commission within three months from the date of notification of these Regulations" (clause 4.3.2).<br><br>The Regulation stipulates that "The Commission shall, within one hundred and twenty (120) days from receipt of a complete petition, and after considering all suggestions and objections received from the public:- (a) Issue a Tariff Order accepting the Petition with such modifications or conditions as may be stipulated in that Order" (clause 4.5.1)<br><br>Several clauses of the Regulation underline need for financial prudence. It emphasises that "variations in capitalisation on account of time or cost overruns or inefficiencies in the implementation of a capital expenditure scheme not attributable to an approved change in its scope, change in statutory levies or Force Majeure Events," "Variation in Operation And Maintenance Expenses" and "variation in coal transit losses, among others, may be attributed by the Commission to controllable factors (clause 6.7) have to be subjected to prudence check. "Prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan including the choice and manner of funding, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff" (clause 7.10).<br><br>Clause 7.19.1 says: "Any additional capitalization after COD needs prior approval of the Commission."<br><br>Clause 7.22.4 emphasises that "(a) The entire cost due to time over | natural calamities , obsolescence of technology , up-gradation of capacity for the technical reason such as increase in fault level. |

| | | |
|---|---|---|
| | and conditions therein. Even for the Hon'ble Commission, consideration of PPAs is imperative for determination of permissible capital cost and tariff for generation. The regulatory process should ensure transparency, responsibility, accountability and public participation. Standard practice and experience of this Hon'ble Commission and other Regulatory Commissions, Electricity Act, 2003 and Regulations of the Hon'ble Commission, among others, underline need for holding public hearings on all issues, including determination of capital costs of, and tariffs for, generation projects, with whom the distribution licensees enter into PPAs, consideration and decision on PPAs, etc., which have a bearing on the tariffs to be paid by the consumers of power. | an existing project or a new project within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check. |

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

**Reply to the Objections/suggestions on True Up 2014-19 raised by Sri M.Thimmareddy, Convener, People's Monitoring group in Electricity Regulations, dt: 25.02.2021.**

| Sl.No. | Objections/ Suggestions | TSGENCO REPLY |
|---|---|---|
| 2. | Going by contents of Para7 of the present application this application should have been termed "Application for truing down the Generation tariff" rather than "Application for truing up the Generation tariff". According to Para 7, "TSGENCO has claimed the fixed charges for the 3rd Control Period (2014-19) of Rs. 19,374.96 Crs against Rs. 20,645.98 Crs after adjustment of Rs. 1,271.02 Crs…". But in Annexure A9 "Fixed charges to be claimed after True up (FY 2014-19)" Rs. 1,169.96 Crs is mentioned. But this figure is not mentioned anywhere in the explanatory note. These conflicting figures raise doubts whether TSGENCO is petitioning for truing down or truing up. TSGENCO needs to clarify the same. | In True up petition, TSGENCO is claiming the difference between the approved fixed charges by the Hon'ble TSERC and actual trued up fixed charges of Rs.1169.04Crs. The details are provided in the Annexure A7, A8, and A9 of True up petition. |
| 3. | Para 7 a. of the application mentions about the stations which have achieved below normative Availability. The Annexure A7 is titled "Adjusted True up Fixed charges based on Availability (FY 2014-19)". But this application does not provide any information on performance of the TSGENCO units. Without this information TSGENCO's statement on trued up fixed charges based on availability cannot be verified. We request the Commission to direct TSGENCO to provide information on performance of its units during the control period FY2014-19. | Considering the actual availability of each station against the normative availability approved by the Hon'ble Commission pro rata fixed charges have been arrived. The details of fixed charges claimed under true up are provided in the Annexure A7, A8 and A9.<br><br>The information in respect of performance of TSGENCO power stations has been submitted to the Hon'ble Commission and the same is also mailed to the objector. |
| 4. | In Para 14 of the present application TSGENCO provided station wise variable cost for computation of working capital. In the following table these figures are compared with variable cost information available from TSDISCOM's ARR and Tariff Proposal filings for the FY 2018-19. | The variable cost for computation of working capital is based on the yearly weighted average cost of FCA FY2014-15 to 2018-19. |

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

| Year | Source | KTPS O&M | KTPS V | KTPS VI | RTS – B | KTPP I | KTPP II | KTPS VII |
|---|---|---|---|---|---|---|---|---|
| 2014-15 | DISCOM | 2.57 | 2.08 | 3.01 | 3.11 | 2.28 | -- | -- |
| | GENCO | 2.67 | 2.19 | 3.39 | 2.63 | 2.47 | -- | -- |
| 2015-16 | DISCOM | 2.52 | 2.07 | 2.63 | 2.70 | 2.46 | NA | -- |
| | GENCO | 2.57 | 2.21 | 2.89 | 3.03 | 2.68 | 2.48 | -- |
| 2016-17 | DISCOM | 2.11 | 2.22 | 2.67 | 3.05 | 2.56 | 2.49 | -- |
| | GENCO | 2.72 | 2.32 | 2.93 | 3.15 | 2.76 | 2.44 | -- |
| 2017-18 | DISCOM | 2.61 | 2.37 | 2.77 | 2.68 | 2.55 | 2.44 | -- |
| | GENCO | 2.74 | 2.66 | 3.04 | 2.96 | 2.77 | 2.49 | -- |
| 2018-19 | DISCOM | 2.38 | 2.21 | 2.70 | 2.60 | 2.55 | 2.36 | 2.36 |
| | GENCO | 3.20 | 2.82 | 3.13 | 2.94 | 3.34 | 2.92 | 2.92 |

From the above table it is clear that variable cost claimed by TSGENCO is much higher than that shown by TSDISCOMs in their ARR filings for the same period. As It has implications on computation of working capital and on interest on working capital and finally on fixed charges the same needs to be thoroughly scrutinized.

The variable cost available in TSDISCOMs ARR is provisional and TSGENCO has claimed the variable cost at actuals after Fuel cost adjustments.

15/3/2024

Chief Engineer
Coal & Commercial
TSGENCO, VS, Hyderabad-82

**Reply to the Objections/suggestions on MYT 2019-24 raised by Sri M.Timma Reddy, Convener, People's monitoring group in Electricity Regulations, dt: 25.02.2021**

| SI.No. | Objections/ Suggestions | TSGENCO REPLY |
|---|---|---|
| 2.1 | **Lack of data on capacity additions and retirement**<br><br>As per several reports, such as Telangana's Power for All report, CEA's Broad Status Report, and TSERC's order on annual fee and operating charges for SLDC for 4th control period from FY20 to FY24, several coal-based plants are expected to come online in the time period considered. These include both central capacity such as NTPC's Telangana STPS, and state capacity such as some units of Yadadri TPS and the remaining units of Bhadradri TPS (BTPS). | No Comments |
| 2.2 | Similarly, as per correspondence with CEA's Power Data Management Division, 300 MW of TSGENCO's Kothagudem Thermal Power Station (KTPS) has been decommissioned by FY19. This leaves 420 MW of KTPS, as reflected in the current tariff filings. However, generation from this capacity, and TSGENCO's Ramagundem TPS B, is not claimed beyond FY20, as per the SLDC MYT order for FY19-FY24. It is unclear whether such treatment is due to retirement of this capacity owing to their advanced age or for some other reason. | The 8 Units of KTPS O&M have been phased out by 31.03.2020. (300MW during 3rd control period 2014-19 and 420 MW during 2019-20, 4th control period.)<br>The Generation from 420MW KTPS Old plant was considered for the FY 2019-20. In respect of RTS-B Generation was considered for the control period 2019-24. |
| 2.3 | TSGENCO's tariff filing for FY19 to FY24 only includes details on plants that have already been commissioned and is operational. It does not include details about capacity in the pipe line or capacity likely to be retired in the control period considered. Yadadri TPS does not figure in the present application of TSGENCO while it finds place in the Commission' SLDC MYT Order for the period 2019-24. Given that such change in capacity will have significant impact on supply ability and finances of TSGENCO as well as DISCOMs, cost details and timelines in this regard must be a part of TSGENCO's tariff filing process. | The 8 Units of KTPS O&M have been phased out by 31.03.2020. (300MW during 3rd control period 2014-19 and 420 MW during 2019-20, 4th control period.)<br>The clause No 4.2.3 of TSERC Regulation 1 of 2019 specifies to file the application for determination of provisional tariff for new Generating Station, 180 days prior to the anticipated COD of Generating Unit or Stage or Generating Station as a whole, as the case may be.<br>Accordingly it is proposed to file the Capital cost, |

Chief Engineer 15/3/2021
Coal & Commercial
TSGENCO, VS, Hyderabad

| | | |
|---|---|---|
| | | provisional tariff filing before 180 days prior to the anticipated COD of YTPS. |
| 3.1 | **Need for better resource planning and load forecast**<br><br>Currently, the power sector is undergoing a lot of changes, and decisions regarding capacity additions need to include these dynamic parameters. The prevalent capacity addition plan being followed in Telangana is dated, and does not account for the changes that have occurred in the last few years. If capacity addition continues as is, without accounting for alternative RE generation and changes in load, the state's power sector will be burdened with long-term lock-ins and stranded assets. | |
| 3.2 | Table 1 illustrates a conservative power procurement scenario for FY24, based on SLDC MYT order for FY 19-FY24. It assumes no increase in RE and does not include the impact of market purchases. A realistic scenario, where only one unit of Yadadri and all units of Bhadradri come online is termed Scenario 1. Scenario 2 includes all likely capacity additions as per the SLDC MYT order for FY19-FY24.Even in Scenario1,TSGENCO's total generation is in excess of projections of energy requirement as per the 19$^{th}$ EPS. Further, as per the 19$^{th}$ EPS, the growth in energy requirement between FY20 and FY24 happens at a rate of 5%. But this growth rate is much higher when accounting for capacity additions in the pipeline. In Scenario 1, the total power purchase growth rate between FY20 and FY24 is 7%, and the same in Scenario 2 is14%. | |
| 3.3 | The capacity additions considered are high cost and coal-based, and will likely remain in the generation mix of the state for a long time, resulting in high costly base load surplus. In order to prevent stranded assets and sunk costs, a proper | |

| | | |
|---|---|---|
| | evaluation of demand owing RE, changing load patterns, environmental concerns, etc. Based on this, the thermal capacity addition needs to be reviewed.<br>Table 1: Conservative power purchase mix of TS in FY24 | |

| Station | FY20 | | FY24 | |
|---|---|---|---|---|
| | MW | MU | MW | MU |
| Kothagudem A | 180 | 986.88 | 0 | 0 |
| Kothagudem B | 120 | 659.43 | 0 | 0 |
| Kothagudem C | 120 | 610.44 | 0 | 0 |
| Ramagundam B | 62.5 | 389.65 | 0 | 0 |
| Kothagudem V | 500 | 3475.39 | 500 | 3475.39 |
| Kothagudem VI | 500 | 3415.67 | 500 | 3415.67 |
| Kothagudem VII | 800 | 3561.57 | 800 | 3561.57 |
| Kakatiya I | 500 | 2947.85 | 500 | 2947.85 |
| Kakatiya II | 600 | 4290.91 | 600 | 4290.91 |
| Bhadradri TPS I | 270 | 0 | 270 | 0 |
| Bhadradri 2-4 | | | 810 | 6031.26 |
| Yadadri 1 | | | 800 | 5956.8 |
| *TSGENCO Thermal* | *3652.5* | *20337.8* | *4780* | *29679.5* |
| *TSGENCO Hydro* | *2430.6* | *4494.89* | *2430.6* | *4494.89* |
| *Total TSGENCO* | *6083.1* | *24832.7* | *7210.6* | *34174.3* |
| Central | | 26320.94 | | 26320.94 |
| Private | | 18433.48 | | 18433.48 |
| Others | | 416.1 | | 416.1 |
| RE | | 6451.13 | | 6451.13 |
| NLC 2nd Expansion | | | | 2226.428 |
| Telangana TPP | | | | 11913.6 |
| *Total Power Purchase (Scenario 1)* | | *76454.3* | | *99936* |
| Energy Requirement as per 19th EPS | | 75164 | | 91836 |

TSGENCO has taken up capacity addition of Thermal Power considering the demand from upcoming irrigation schemes, industrial growth, and 24X7 power supplies in line with policies of Govt of Telangana.

| | | | | |
|---|---|---|---|---|
| Surplus compared to EPS | | 1290.333 | | 8100.022 |
| *If all of Yadadri and Singaneri StageII comes online as per SLDC MYT* | | | | 29784 |
| *Total Power Purchase (Scenario 2)* | | 76454.3 | | 129720 |
| Surplus compared to EPS | | 1290.333 | | 37884.02 |

| | | |
|---|---|---|
| 4.1 | **Capital cost of new projects.**<br><br>According to Para 8 of the TSGENCO's petition, "This application is for the Determination of capital cost for new projects and station wise Tariff for the entire electricity Generated by TSGENCO at its Generating stations situated in Telangana State and supplied to the Distribution licensees of Telangana State." | No Comments |
| 4.2 | Para5 of the TSGENCO's petition mentioned that TSGENCO entered Power Purchase Agreements with TSDISCOMs in respect of KTPP Stage II, KTPS Stage VII and BTPS<br>(Bhadradri Thermal Power Station). 'Table 1: Particulars of the PPAs' following the above Para 5 mentioned KTPS Stage VII (800 MW) and BTPS (1080 MW) as New Stations (Rows 15 and 16). Capital cost of KTPS Stage VII is projected as Rs.5,865Crore. Its capital cost per MW is Rs.7.33Crore. Capitalcost of BTPS is projected as Rs.9,959.43Crore. Its capital cost per MW is Rs.9.22Crore. TSGENCO in its petition did not explain the basis for the projected capital costs of these two new plants. The Commission in its TSGENCO Generation Tariff Order for the control period 2014-19 in O.P. No. 26 0f 2016 dated 5th June, 2017 determined the capital cost of KTPP Stage II (600 MW) as Rs. 3,470.62 Crore. Its per MW capital cost amounts toRs.5.78Crore.Compared to per MW capital cost of KTPP Stage II per MW capital cost of **KTPS Stage VII is higher by 26.82%** | For Every Thermal Power Project, the gestation period and capital cost vary from time to time because of several factors. The capital cost of the new projects KTPS Stage-VII is inclusive of cost of installation of FGD. In respect of BTPS, the project cost is inclusive of construction of railway line and FGD.<br>It is also mentioned that per MW cost of the projects may vary project to project depending on the various factors involved during the execution of the works. The details of capital cost for the above projects have been provided to Hon'ble Commission for approval. |

| | | |
|---|---|---|
| | and that of BTPS is higher by 59.52%. Such exorbitantly high capital costs of the new power plants of TSGENCO demands thorough scrutiny of the claims by TSGENCO. We request the Commission to subject TSGENCO's claims on capital costs of its new power plants to thorough scrutiny. | |
| 4.3 | The proper way to scrutinize the claims of TSGENCO regarding capital costs of its new power plants is to subject the PPAs related to these new plants that TSGENCO has entered in to with TSDISCOMs to public process. In this regard we request the Commission to direct the TSGENCO to make the PPAs of these new power plants publicly available, the way it did with present applications for determination of generation tariff for the control period 2019-24 and true up of the control period 2014-19. | TSGENCO has submitted PPA's signed with DISCOMs to Hon'ble Commission. |
| 4.4 | According to Para 3.2 of Regulation 1 of 2019, "The Commission shall be guided by the Regulations contained herein for determining the tariff for supply of electricity by a Generating Entity to a Distribution Licensee in the following cases:`<br><br>where such tariff is pursuant to a power purchase agreement or arrangement entered into subsequent to the date of effectiveness of these Regulations; or<br><br>where such tariff is pursuant to a power purchase agreement or arrangement entered into prior to the date of effectiveness of this Regulation and either the Commission has not previously approved such agreement/arrangement or the agreement/arrangement envisages that the tariff shall be based on this TSERC Generation Tariff Regulations, 2019;"<br><br>PPA related to KTPS Stage VII is dated 19-03-2018, and PPA related to BTPS is dated 17-09- 2019. These PPAs have not yet | It is under purview of Hon'ble commission. |

| | | |
|---|---|---|
| | been approved by the Commission. These PPAs have to be approved according to Terms and Conditions of Generation Tariff Regulation, 2019 (Regulation 1 of 2019). As a part of the process to approve these PPAs we request the Commission to direct the TSGENCO to make PPAs related to these two new power plants publicly available. | |
| 4.5 | In this context we would like to draw the attention of the Commission to its Orders dated31-03-2017 inO.P.No.93 of 2015 related to consent to PPA between TSDISCOMs and Chhattisgarh State DISCOM and TSDISCOMs for purchase of 1,000 MW of power on long term; dated 30-07-2016 in O.P. No 10 of 2016 related to approval of PPA between NTPC and TSDISCOMs on Telangana Super Thermal Power Project (Phase I) (2 X 800 MW); and dated 19-06-2017 in O.P. No. 9 of 2016 related to approval of PPA between Singareni Collieries Company Ltd (SCCL) and TSIDSCOMs (2 X 600 MW). In keeping with this tradition of scrutinizing PPAs entered into by TSDISCOMs with power generators through public process.<br>We request the Commission to subject the PPAs related to KTPS Stage VII and BTPS of TSGENCO also to public process by making these PPAs available to public and holding public hearing on the same. To facilitate this process, we request the Commission to extend time to file comments and suggestions on the present petition of TSGENCO. | It is under purview of Hon'ble commission. |
| 4.6 | Also, in this context it will not be out of place to draw attention of the Commission to Section 86 (3) of the Electricity Act, 2003: "The State Commission shall ensure transparency while exercising its powers and discharging its functions." To ensure transparency the | It is under purview of Hon'ble commission. |

| | | |
|---|---|---|
| | information that is accessible to the Commission shall also be accessible to all the stakeholders including the public/consumers of electricity. Hence, to ensure transparency while exercising its powers and discharging its functions the Commission is requested to direct the TSGENCO to make PPAs related to KTPS Stage VII and BTPS public and hold public hearing on the same. | |
| 4.7 | Cost of boiler, turbine and generator (BTG) constitutes most important part of the power plant's capital cost. It has to be seen that the provider/contractor for supply and erection of BTG is selected in a transparent and open competitive process for costs to be optimal. So BTG costs of both the power plants needs to be subjected to prudent check. News paper reports indicate that there were problems in selecting BTG contractor. This is particularly the case with BTPS plant. It was reported that machinery meant for a thermal plant in north India was redirected to BTPS plant by BHEL. In such circumstances the BTG machinery supplied by BHEL may have to be treated as a second hand. Also, as this BTG machinery was supplied under distressed circumstances (in a way conditions of oversupply) its price should have been lower. It is also to be noted that this machinery was of sub-critical technology which had already been treated as obsolete technology and central government agencies issued strictures against its deployment. TSGENCO went against these trends and somehow obtained permission to utilize them as a last chance. All these circumstances indicate that this BTG machinery should have been obtained at a considerably lower price .But exorbitant capital cost of BTPS raises doubts on procurement of this machinery. We request the Commission to subject BTG costs of both the new plants to prudent check. | BHEL is a Maharathna Central PSU and has expertise in establishment of Thermal power stations across the Country and also is the sole manufacturer of BTG in the Govt sector.<br>TSGENCO has entered MOU with M/s BHEL for construction of KTPS Stage-VII and Bhadradri Thermal Power station on EPC basis (both BTG & BOP) including design, engineering, manufacture, supply, erection, testing & commissioning.<br>Further, KTPS VII Stage 800MW super critical unit has been commissioned within the timeline prescribed by the CERC. |
| 4.8 | Balance of Plant (BOP) package is the next important part of the capital cost of the power plant. While KTPS Stage VII is a | BOP works also under the scope of M/s BHEL.<br>BHEL is a central PSU and is guided by CVC and other |

| | | |
|---|---|---|
| | brown field project BTPS is a green field project. Contractors of BOP package shall also be selected through transparent and competitive process and the same works shall be executed efficiently. Given its importance the Commission is expected to closely scrutinize BOP package costs of both the plants. | central guidelines and follows transparent tendering process in selection of BOP Contractors. |
| 4.9 | Costs related to land development where these plants are located is also important. News paper reports indicate that National Green Tribunal (NGT) had to intervene several times in issues related to land where BTPS is located. This also indicates less than efficient way of locating a power plant. The Commission has to see that costs resulting from such inefficiencies are not allowed as a part of capital costs of these new plants. | Ministry of Environment and forest & climate change have granted environmental clearance for BTPS considering location, geography and the other aspects. |
| 4.10 | If coal transport and coal handling are taken up as separate activities apart from BOP package the same needs to be subjected to prudent check. | It is under purview of Hon'ble commission. |
| 4.11 | All other works/overheads taken up as a part of setting up the plants shall also be subjected to prudent checks. | It is under purview of Hon'ble commission. |
| 4.12.1 | Depending on the duration during which power plant is erected Interest During Construction (IDC) also becomes an important part of capital cost of these new power plants of TSGENCO. IDC shall be limited to scheduled commercial operation date only. Delay beyond this date shall not be reckoned while allowing IDC. BTPS units were supposed to be in operation by FY 2017, following the strictures of the central government agencies for adopting sub-critical technology. Despite these strictures COD of the first unit of BTPS is declared on 05-06-2020 and that of second unit on 07-12- | It is to inform that all the works of the BTPS were suspended from 14.12.2015 to 30.03.2017 (15 ½ months) as per Hon'ble NGT directions.<br>The MoEF & CC Govt of India by notification dated 07.12.2015 has revised the norms. To comply the new norms additional works were necessitated in many of the drawings and plot plans are required to be revised. The constructions works also severely affected during rainy season from the year 2017 to 2020. |

<table>
<tr><td></td><td>2020. The fourth unit was expected to come on stream by March 2021. But there is no sign of COD of the third unit until now which was projected to be in January 2021, as mentioned in the present filing of TSGENCO. A news report in The Hindu (Hyderabad Edition) on 31 December, 2019 reported that the light- up of the boiler of third unit of BTPS was done and that unit would be operationalised commercially by March-end, 2020. These delays stand for inefficient execution of the plant. Costs due to these delays resulting from in efficient execution of the plant in the form of higher IDC shall not be allowed.</td><td>Further, the works of BTPS were adversely affected due to COVID-19 as lockdown was imposed by the Government. Further upon resumption of the site works also, the works could not progress at the required pace, due to acute shortage of man power as most of the available workers at site have left and other available workers were unwilling to work due to Covid-19.<br>Despite the above hurdles Unit-I & Unit-II of BTPS were commissioned in 05.06.2020 & 07.12.2020 respectively and Unit-III synchronized on 15.01.2021 and activities for COD are in progress.<br>The Boiler light up activities for Unit-IV also are in progress.</td></tr>
<tr><td>4.12.2</td><td>BTPS has been partially commissioned in FY20, and generation from the same has been accounted for in the control period considered. However, there was considerable delay in the commissioning of these units. Table 2 highlights this delay in commissioning of the units as per CEA's Broad Status Report for December'2020.<br><br>Table 2. Delay in commissioning of BTPS<br><br><table><tr><td>BTPS Unit</td><td>Capacity (MW)</td><td>Original CoD</td><td>Actual/Expected CoD</td><td>Delay in months</td></tr><tr><td>Unit 1</td><td>270</td><td>Mar 17</td><td>Jun 20</td><td>39</td></tr><tr><td>Unit 2</td><td>270</td><td>May 17</td><td>Dec 20</td><td>43</td></tr><tr><td>Unit 3</td><td>270</td><td>Jul 17</td><td>Feb 21</td><td>43</td></tr><tr><td>Unit 4</td><td>270</td><td>Sep 17</td><td>Mar 21</td><td>42</td></tr></table><br>As is evident from the above there have been significant delays in</td><td>It is to inform that all the works of the BTPS were suspended from 14.12.2015 to 30.03.2017 (15 ½ months) as per Hon'ble NGT directions.<br>The MoEF & CC Govt of India by notification dated 07.12.2015 has revised the norms. To comply the new norms additional works were necessitated in many of the drawings and plot plans are required to be revised. The constructions works also severely affected during rainy season from the year 2017 to 2020.<br>Further, the works of BTPS were adversely affected due to COVID-19 as lockdown was imposed by the Government. Further upon resumption of the site works also, the works could not progress at the required pace, due to acute shortage of man power as most of the available workers at site have left and other available workers were unwilling to work due to Covid-19.<br>Despite the above hurdles Unit-I & Unit-II of BTPS were commissioned in 05.06.2020 & 07.12.2020 respectively and</td></tr>
</table>

| | | |
|---|---|---|
| | its construction. Additionally, the FGD for the station is also likely to be delayed as no agency has been finalized yet (according to CEA Broad Status Report Dec 2020). Delays in FGD construction may further delay operations of the unit. Due to such delays, the impact of Interest During Construction (IDC) on costs must be appropriately reported and scrutinized. IDC beyond the scheduled COD should not be allowed. | Unit-III synchronized on 15.01.2021 and activities for COD are in progress.<br>The Boiler light up activities for Unit-IV also are in progress. |
| 4.12.3 | There was also significant delay in executing KTPS Stage VII plant. | The 800MW Unit of KTPS Stage-VII has been commissioned within the time line prescribed by CERC. |
| 4.12.4 | In this context it is highly relevant to note Hon'ble ATE's Judgment in Appeal No. 72 of 2010 as pointed out by TSERC in its Order dated 19-06-2017 in O.P. No. 9 of 2016 (Para 3.13.5). The ATE in its above Order at para 7.4 provided as under:<br>*"7.4. The delay in execution of a generating project could occur due to following reasons:*<br>*i) due to factors entirely attributable to the generating company, e.g., imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in providing inputs like making land available to the contractors, delay in payments to contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper co- ordination between the various contractors, etc.*<br>*ii) due to factors beyond the control of the generating company e.g. delay caused due to force majeure like natural calamity or any other reasons which clearly establish, beyond any doubt, that there has been no imprudence on the part of the generating company in executing the project.*<br>*iii) Situation not covered by (i) & (ii) above.* | It is under purview of Hon'ble commission. |

| | | |
|---|---|---|
| | *In our opinion in the first case the entire cost due to time over run has to be borne by the generating company. However, the Liquidated Damages (LDs) and insurance proceeds on account of delay, if any, received by the generating company could be retained by the generating company. In the second case the generating company could be given benefit of the additional cost incurred due to time over-run. However, the consumers should get full benefit of the LDs recovered from the contractors/suppliers of the generating company and the insurance proceeds, if any, to reduce the capital cost. In the third case the additional cost due to time overrun including the LDs and insurance proceeds could be shared between the generating company and the consumer. It would also be prudent to consider the delay with respect to some benchmarks rather than depending on the provisions of the contract between the generating company and its contractors/suppliers. If the time schedule is taken as per the terms of the contract, this may result in imprudent time schedule not in accordance with good industry practices."* | |
| 4.12.5 | Following the above order of ATE as the delay in execution of the plant was due to inefficiencies of the Generator, TSGENCO in the present context and contactors chosen by it all costs due to time over run has to be borne by the Generator and the same shall not be passed on to the TSDICOMs and in turn on electricity consumers in the state. | It is to inform that the 800 MW unit of KTPS VII Stage has been commissioned by TSGENCO within the timeline as per the CERC Regulations.<br>In respect of BTPS all the works were suspended from 14.12.2015 to 30.03.2017 (15 ½ months) as per Hon'ble NGT directions.<br>Further, the MoEF & CC Govt of India by notification dated 07.12.2015 has revised the norms. To comply the new norms additional works were necessitated in many of the drawings and plot plans are required to be revised. |

| | | |
|---|---|---|
| | | The constructions works also severely affected during rainy season from the year 2017 to 2020.<br>Further, the works of BTPS were adversely affected due to COVID-19 as locked down was imposed by the Government. Further upon resumption of the site works also, the works could not progress at the required pace, due to acute shortage of man power as most of the available workers at site have left and other available workers were unwilling to work due to Covid-19.<br>Despite the above hurdles Unit-I & Unit-II of BTPS were commissioned in 05.06.2020 & 07.12.2020 respectively and Unit-III synchronized on 15.01.2021 and activities for COD are in progress.<br>The Boiler light up activities for Unit-IV also are in progress. |
| 4.13 | According to Section 7.19.1 of Regulation 1 of 2019 "The capital expenditure actually incurred ... after the COD and up to the Cut-off date may be admitted by the Commission subject to prudent check..." According to the present filing of TSGENCO, COD of KTPS Stage VII is 26-12-2018. Cut-off date is two years from this date. According to the present filing of TSGENCO Rs. 884.50 Crore is projected to spent on KTPS Stage VII during FYs 2022, 23 and 24. As this expenditure is beyond the cut-off date the same shall not be allowed. | It is to inform that the amount of Rs.4604.92 Crs is capitalized as on date of COD as against the total capital cost of Rs.6405.36Crs. The balance works of KTPS-VII are under progress as on date of COD and the details of balance capital expenditure already incurred after COD and to be incurred were submitted to the Hon'ble Commission for approval during the 4th control period 2019-24. |
| 5.1 | As per the revised Environmental Norms 2015, all plants commissioned after 2017 are required to be compliant with the norms from start of operation. However, this is not clear with regard to the new capacity that has recently come online, Kothagudem TPS VII and BTPS. | TSGENCO will comply revised environmental norms 2015 with regard to KTPS Stage-VII and BTPS. |

| | | |
|---|---|---|
| 5.2 | In the case of Kothagudem TPS VII, the unit achieved COD in December 2018, but there was marked delay in FGD installation. As of CEA Broad Status Report Oct 2020, construction was yet to begin on FGD for the unit. However, post that, there are no updates on the status of the FGD or on compliance to the norms. The unit has been generating as early as April2019. | The establishment of FGD is in advance stage of installation. |
| 5.3 | As mentioned earlier, the FGD for BTPS is also likely to be delayed as per CEA Broad Status Report Dec2020. The two units that have achieved COD last year have already started operating, and in this case as well, there is no reporting regarding FGD status or compliance to the norms. | The establishment of FGD is in advance stage of installation. |
| 5.4 | Given the environmental implications and socio-economic impact, detailed status, cost impact, and proposed timelines for FGD installation and any other measure of compliance with the revised environmental norms must be provided. | The establishment of FGD is in advance stage of installation. |
| 6.1 | The present filing of TSGENCO shows that during the control period 2019-24 Rs.680.74 Crore is going to be spent on KTPP Stage II, over and above the capital cost already approved by the Commission. This is about 20% of the capital cost already approved by the Commission. No explanation is provided for this expenditure. As this expenditure is beyond the cut-off period the same shall not be allowed. | It is to inform that the Hon'ble Commission approved the capital cost of Rs.3470.62Crs in its order dated 05.06.2017. The balance works of KTPP II are under progress and the details submitted to Hon'ble Commission for approval. |
| 6.2 | The present filing of TSGENCO shows that during the control period 2019-24 Rs.120.41 Crore is going to be spent on Lower Jurala HES and Rs. 55.55 Crore is going to be spent on Pulichintala | It is to inform that the Hon'ble Commission approved the capital cost of Rs.1542.78Crs for Lower Juarala HES and Rs.433.85Crs for Pulichinthala HES in its order dated |

| | | |
|---|---|---|
| | HES.No explanation is provided or this expenditure. As this expenditure is beyond the cut-off date the same shall not be allowed. | 05.06.2017. The balance works of Lower Jurala HES and Pulichinthala HES are under progress and the details submitted to Hon'ble Commission for approval. |
| 7.1 | The TSGENCO proposed adopting higher rate of interest and return on equity while calculating fixed charges. It adopted 12.05% as rate of interest and 15.5 to 16.5% as return on equity. As rate of interest has come down considerably in the financial markets in the country in the background of economic reforms, we request the Commission to adopt 10% as rate of interest. TSGENCO in its true up petition for 2014-19 (O.P. No. 5 of 2021) on page No. 30 provided a table with actual rates of interest. This Table shows that during the year 2018-19 out of 15 stations only 3 generation stations have shown rate of interest of 12.50%. In the case of 7 of these stations rate of interest was less than 10%. Given this declining trend in rate of interest we request the Commission to adopt 10% as rate of interest while computing fixed charges. | The interest on loan is computed as per the weighted average rate of interest for actual loan portfolio of respective stations as per TSERC Regulations.<br><br>Rate of Pre tax Return on the Equity is computed in the range from 18.78% to 19.99% based on the Minimum Alternate Rax (MAT) (17.42%) and base rate of RoE from 15.5% to 16.5% (the base of RoE for the thermal and run-of-river stations is considered as 15.5% and for hydel stations with pondage is 16.5%) as per TSERC Regulations 1 of 2019 The RoE is considered as 16% in respect of KTPS Stage VII since it has been constructed within the time line ( The additional return of 0.5% is allowed) as per CERC 2014 Regulations). |
| 7.2 | Usually, 2% is added to rate of interest to arrive at return on equity. 2% margin is allowed to account for risk taken by the investors. Accordingly, 12%may be adopted as return on equity. | TSGENCO has claimed the Return on equity as per the rates specified in the clause (11) of TSERC Regulations 1 of 2019.<br>Further, As per clause (30) of CERC Regulations 2019, the Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage. |

| | | |
|---|---|---|
| 7.3 | In Para 12.4 of the present application of TSGENCO it is mentioned, "The RoE is considered as 16% in respect of KTPS Stage VII since it has been constructed within the time line..." But in Para 7. d. (p.3) of the true up petition it was mentioned that fixed charges of KTPS Stage VII were reduced due to differed COD of the unit. While at one place TSGENCO is claiming that KTPS Stage VII was constructed within the timeline at another place it is stating that its COD was differed. Given these contradictory statements the Commissions needs to ascertain the actual position. | As per clause (24) CERC2014 regulations, the projects commissioned on or after 1st April, 2014, an additional return of **0.50 %** shall be allowed, if such projects are completed within the timeline.<br>Timeline for 800 MW units :<br>(a) 52 months for green field projects. Subsequent units at an interval of 6 months each.<br>(b) 50 months for extension projects. Subsequent units at an interval of 6 months each.<br>Hence, TSGENCO has considered rate of 16.00% for RoE in respect of KTPS VII as per clause (24) of CERC 2014 since the project is completed within timeline **(48 Months).** |
| 8.1 | The Ministry of Coal has sanctioned 4.2 MTPA for BTPS in February 2018. The current tariff filings do not report the impact of this fuel source, fuel transportation cost, and other related parameters on the variable cost of the plant. Since the variable cost directly impacts consumer tariffs, such details must be transparently reported. | The variable cost (Fuel cost) will be claimed as per the terms & conditions of PPA and the Hon'ble Commission Regulations. |

15/6/2024

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

**TELANGANA STATE POWER GENERATION CORPORATION LIMITED**
Vidyut Soudha, Hyderabad-500082
Phone :040-23499849

From
The Chief Engineer/Coal & Commercial,
TSGENCO, Vidyuth Soudha,
Hyderabad-82.

To
The Commission Secretary,
TSERC, 5TH FLOOR,
#11-4-660, Singareni Bhavan,
Red Hills, Lakdi-ka-pul,
Hyderabad-500004.

Lr.No.CE/Coal & Comml/SE(C&C)/DE(C)/MYT19-24/D.No. 11/21, dt/19-04-2021.

Sir,

Sub: TSGENCO-Objections/ Suggestions received from M/s.Federation of Telangana Chambers of Commerce and Industry on Multi Year Tariff (2019-24)-TSGENCO Reply-Furnished-Reg.

Ref: Lr.No.TSERC/Secy/JD(TE)/F-GMYT/21/D.No.163, Dt.26.02.2021.

***

Hon'ble Commission vide ref cited issued timeline upto 12.03.2021 for receipt of objections/suggestions on Multi Year Tariff (2019-24), True up (2014-19) and I.A No.01/2021 filed by TSGENCO and furnish the replies by 15.03.2021. In this connection, the objections from M/s.Federation of Telangana Chambers of Commerce and Industry on Multi Year Tariff (2019-24) received on 15.03.2021 to this office.

The responses of TSGENCO are herewith furnished as per the enclosures and the responses are also sent to the M/s.Federation of Telangana Chambers of Commerce and Industry through E-mail.

Encl: As above

Yours faithfully,

19/4/21

**Chief Engineer**
**(Coal & Commercial)**

Reply to the Objections/suggestions raised by M/s The Federation of Telangana Chambers of Commerce and Industry on Multi Year Tariff (2019-24)

| Sl.No | Objections/suggestions | TSGENCO REPLY |
|---|---|---|
| 1.1 | Out of the 4462 MW Thermal of GENCO 420 MW capacity (KTPS – ABC) is to be treated as vintage plants and we are unable to understand as to why consumers of electricity should be asked to suffer excessive costs of these units at Rs.3.32 per KWH. | It is to inform that, all the units of KTPS O&M were commissioned by 1978; since then, the station is generating power to meet the requirement of the State.<br>• As per MoEF&CC directives the 8 Units of KTPS O&M have been phased out w.e.f. 31.03.2020 (300MW during 3rd control period 2014-19 and 420 MW during 2019-20, 4th control period). The Generation from 420MW KTPS ABC was considered for the FY 2019-20. |
| 1.2 | While the latest regulation 1 2019 terms & conditions of generation tariff has allowed these plants with a normative annual plant availability factor of 70%, SHR of 3000 Kcal. Per KWH and a generous auxiliary consumption of 10%, we request this Hon'ble Commission to direct TS GENCO to give the availability factors for the last 3 years month-wise along with the SHRs. This data we submit is essential for we consumers to understand and object if necessary this as a source of energy itself. It would not be out of place to mention, that, the variable cost of this station is at Rs.3.32 Ps is higher than the total cost of power purchase at the IEX. As we understand there are plants that have been commissioned between 1966 and 1978, we wonder if the plants as old as 50 years are safe and economical to run? | • CERC'2019 specifies "the Gross station heat rate and Auxiliary Energy Consumption for the Unit capacity of less than 200 MW sets shall be dealt on case to case basis". Also the Normative Availability is relaxed in respect of Bokaro TPS-75%, Chandrapur TPS-75%, Durgapur TPS-74%.<br>• The Auxiliary Energy Consumption were allowed more than 10% in respect of Bokaro TPS – 10.25%, Talcher TPS & Durgapur TPS – 10.50%, Tanda TPS - 12% (in 2014) & 11.5% (in 2019).<br>• The Station Heat Rate in respect of Chandrapur TPS was allowed up to 3100 kCal/Kwh (in 2014) & 3000 kCal/Kwh (in 2019).<br>• Similarly, KTPS O&M which also belongs to the same time period, the operating norms were issued by Hon' ble TSERC.<br>It is to reiterate that, w.e.f. 31st March 2020, KTPS O&M is completely decommissioned, as per MoEF&CC directives.<br>The availability factor of KTPS-ABC for the last three years month wise along with SHR is enclosed as Annexure-A. |

9/4/21
Chief Engineer
Coal & Commercial

| | | |
|---|---|---|
| 1.3 | We also note RTS-B commissioned in 1971 is also operating at a high variable cost of Rs.3.04, we request this Hon'ble Commission to examine the financial prudence of running these units at all. | The variable charges of Rs.3.04 per Kwh are pertaining normative weighted average for the FY 2019-20. As per TSERC Regulations, Clause No.6.7.3 & Clause No.6.9, TSGENCO has passed on the savings in variable charges to the TSDISCOMs for the FY 2019–20, consequently the actual variable charges are about Rs. 2.81 per Kwh. |
| 2. | We wish to point out that KTPP stage 1 even though it was commissioned in the year 2010 its variable cost at Rs.3.02 is too high and we request this Hon'ble Commission to examine the financial basis of such a high variable cost. We are staring at the comparison between KTPS V at a variable cost of @ Rs.2.76. In comparison to KTPP 1 at a variable cost of Rs.3.02 and commissioned around the same time. We request this Hon'ble Commission to direct TS GENCO to explain why there is such a significant difference in the costs.<br><br>19/4/19<br>Chief Engineer<br>Coal & Commercial<br>... V.S., Hyderabad-82 | KTPS V is commissioned in the year 1997 & 1998, whereas KTPP Stage - 1 is commissioned in 2010. Hence, the comparison between the stations which are incomparable considering technology, period, location etc., may not be appropriate.<br><br>However, following are some of the factors effecting the Variable Charges differences:<br>• Operating Parameters of<br><br>Parameter / KTPS V / KTPP – I<br>Station Heat Rate (Kcal/Kwh): 2500 / 2450<br>Auxiliary Consumption: 9% / 7.5%<br><br>• KTPS V is designed for the use of lower grade coal (GCV – 3000 to 3500 Kcal/kwh) whereas KTPP – I is designed for (GCV – 4400 Kcal/Kwh).<br><br>• The basic price of G10 & G11 grade coal procured from M/s. SCCL for utilization at KTPP is Rs.2,610/- as against KTPS – V G13 & G14 grade coal price of Rs.1,590/-. It can be noted that, for a marginal variation in quality of coal by 26% (GCV 3400 Kcal to 4300 Kcal), the basic price is higher by 64% and is the major factor for higher Variable Cost at KTPP compared to KTPS V. Further, the Coal cost includes Statutory payments towards Royalty (14%), GST (5%), DMFT (30% of Royalty), NMET (2% of Royalty) etc., approximately 25% of Basic price. |

<table>
<tr><td></td><td></td><td><ul><li>The Specific Coal Consumption per unit of energy sent out at KTPS V is 0.90 Kg/Kwh as against KTPP–I is 0.59 Kg/Kwh.</li></ul></td></tr>
<tr><td>3</td><td><u>NEW STATIONS</u><br><br>KTPS stage VII was commissioned on 23-12-2018 we request the actual availability and SHRs during the last 2 years of its operations. It does appear that in comparison to few other plants the variable cost does seem high for an availability factor of 85% and an expected SHR of a little less than 2300 Kcal.</td><td>The KTPS Stage-VII was commissioned on 26.12.2018. The actual availability and station heat rate of KTPS-VII Stage from COD to Feb 2021 is as below.<br>
<table>
<tr><th>FY</th><th>Availability (%)</th><th>Station Heat rate (Kcal/kwh) (Actual)</th></tr>
<tr><td>2018-19</td><td>92.67</td><td>2213.52</td></tr>
<tr><td>2019-20</td><td>53.35*</td><td>2223.82</td></tr>
<tr><td>2020-21<br>(upto Feb'21)</td><td>94.3</td><td>2015</td></tr>
</table>
*The Availability for the FY 2019-20 is less due to Unit tripped on high turbine vibrations and converted to annual overhaul for the period 28.11.2019 to 28.03.2020.</td></tr>
<tr><td>4</td><td>Two of the BTPS plants have been commissioned during the year 2020 and other 2 are expected to be commissioned by end March this year. We request this Hon'ble Commission to direct TS GENCO to provide a performance review note of the new plants</td><td>Performance of BTPS (upto Feb-21) units is as below:<br>
<table>
<tr><th>FY</th><th>Availability (%)</th><th>Station Heat Rate (Actual) (Kcal/kwh)</th><th>Auxiliary Consumption (%)</th></tr>
<tr><td>2020-21</td><td>81.87</td><td>2487</td><td>9.82</td></tr>
</table></td></tr>
<tr><td>5</td><td>It will be relevant to mention that less than 50% of the 4462 MW Thermal is part of the 21st Century. In fact, almost 2000 MW thermal capacity is close to 50 years old. Electric Energy supplies are an index of economic growth of the State. Manufacturing SECTOR expansion, specifically in the employment creating</td><td><ul><li>Total Installed Capacity of TSGENCO as on 30.03.2021 is 3772.5 MW, Except RTS – B Station of 62.5 MW the balance capacity of thermal station i.e., 3710 MW; KTPS V (500MW) is of 23 Years old and Balance capacity of 3210 MW is below 12 years. This means, more than 85% of the TSGENCO</li></ul></td></tr>
</table>

Chief Engineer
Coal & Commercial

| | | |
|---|---|---|
| | energy intensive sectors demand continuous and reliable& viable cost wise, power supply. We consumers wonder if we are strategically attuned to growth in terms of electrical energy. On one hand Hydro Electric Energy is dependent on the elements and not specifically reliable. The State does not enjoy ample Wind energy resources and in any case Solar energy has not gained enough acceptances from the Distribution Companies for reasons not acceptable altogether. | Thermal Installed capacity is embedded with new stations.<br>• The chamber is well aware that, the renewable energy with latest development cannot be compared with the Thermal plants commissioned 15 years back and completed a decade back.<br>• In the research reports published by DELOITTE on "The future of Global Power Sectors" it is projected that, Due to the higher levels of economic growth and anticipated increase in the quality of life over the next few years, developing countries will likely see a rapid increase power demand. India, for instance is poised to see annual power consumption increases of upto 3.2% between 2012 and 2040.<br>• Over the Last few years, utilities have increasingly relied on renewable energies to generate power for two main reasons.<br>○ Governments in several areas around the world have established incentives to promote the installation of these facilities to guarantee their power supply and reduce the emission of polluting gases.<br>○ At the same time, the improvement of renewable energy technologies and their associated monitoring and control processes are enabling more rapid adoption.<br>• **However the energy from Renewable Sources can create midday jolts, on a windless or a cloudy day.** In order to mitigate the uncertainty of the energy from Renewable sources, **"Thermal Power Plants"** are the most effective source, reliable & viable cost wise, for **uninterrupted** power supply. |

Chief Engineer
Coal & Commercial

| | | | |
|---|---|---|---|
| | | | • Keeping the demand in view, TSGENCO is also making massive capacity addition of another 4000 MW at Damarcherla, Nalagonda Dist., Telangana, by 2024, to meet the demand of the state.<br>• Further, Energy consumption is directly related to Economic growth and GDP of a country. TSGENCO is committed to meet the demand of Manufacturing Sector, Transportation, Households needs, State Government Schemes etc., by generating qualitative power at competitive prices. |
| 6 | We request this Hon'ble Commission to direct TS GENCO to give a summary of all the thermal plants of TS GENCO performance parameters during the last 2 or 3 years in terms of norms of operation as stipulated in Para 17 of Regulation 1 of 2019– Terms and conditions of generation tariff. A summary of this we believe will be an eye opener for the consumers as well as this Hon'ble Commission so as to take technically and financially prudent decisions for arriving at generation tariff and also deciding on stations that probably needs to be shut down.<br><br>We are examining volume 2 of the tariff filing for the control (2019-2024) period but are handicap as the data provided not in excel format and analysis is getting delayed and in fact challenging.<br><br>Further we wish to point out that on any tariff proposal for meaningful objections - Company's 2 years Balance Sheet' details are required. However, no information is available on this.<br><br>We request this Hon'ble Commission to direct TS GENCO to provide us the data in excel sheets which can be used for | | Performance parameters of TSGENCO thermal power plants during the last 2 years in terms of norms of operation as per para 17 of Regulation 1 of 2019 is enclosed herewith as Annexure- B for FY- 2019-20 & FY 2020-21.<br><br>The 2 Years balance sheet of TSGENCO and Tariff filing in Excel format has been submitted to the Hon'ble Commission and also available in www.tsgenco.co.in web site. Further, the tariff filings for the control period (2019-24) in Excel format is also mailed to the objector.<br><br>19/4/21<br>Chief Engineer<br>Coal & Commercial<br>TSGENCO, V.S., Hyderabad-82 |

| | | |
|---|---|---|
| | calculating and thus make meaningful suggestion or objections. We would like to present additional points and therefore request this Hon'ble Commission to permit us to do so and also allow us to present either in person or on virtual mode as the Hon'ble Commission may deem fit. | |
| 7 | FIXED CHARGES CLAIMS (Table 3 Page 13) | |
| 7.1 | As given in the table the proposed fixed charges are about Rs.5.81 Crore for 1 MW for the period 2019-24. This works out to an average of 1.2 Crore per year. This appears to be excessive and we request this Hon'ble Commission to do the necessary due diligence, For example, RTS-B is projected to have an abnormally high fixed cost of Rs.10.28 in 5 years i.e., roughly a little more than Rs.2.00 Crore per year for a 62.5 MW plant commissioned in 1971, further strengthening our view point that this plant has a high fixed cost with the SHR of 3000 Kcal and the stated availability factor of 75%. Even the energy cost for this plant at the BUS will be in excess of Rs.3/- per Kwh. We are unable to understand why this plant, a 50 years vintage plant, needs to be run. We request this Hon'ble Commission to direct TS GENCO to explain as to why this plant should not be de-commissioned, when there are enough number of alternative and economical options.<br><br>Pull 19/4/21<br>Chief Engineer<br>Coal & Commercial<br>TSGENCO, V.S., Hyderabad-82 | 1. The major components of Fixed Cost like Depreciation, Interest on Debt and Return on Equity are sunk costs. Once the project envisaged and completed, these costs become un-controllable.<br><br>2. Further, the above costs used to be on higher side in the initial years. As the chamber is aware that post formation of Telangana State TSGENCO, completed the COD of KTPP - II, LSHES, PCHES, KTPP VII and BTPS 3 Units resulted higher fixed cost component. Whereas the old station KTPS V&VI and KTPP - I and Hydel stations the Fixed cost per MW is only Rs.71 Lakhs Per MW.<br><br>3. In addition to the above, as per the Transfer Scheme of APSEB and Tripartite agreement, TSGENCO is vested with the Pension liability of erst While APSEB (Andhra Pradesh State Electricity Board), accordingly TSGENCO claim includes the Pension liability of TSTRANSCO, TSGENCO and TSDISCOMS.<br><br>4. It may also be noted that Irrespective of the size, a Thermal Power station has to maintain all the Auxiliaries which are required for generation of power and also the man power to maintain the Plant. Hence, it may not be appropriate to compare the Per MW cost of RTS - B and comparing it with |

| | | |
|---|---|---|
| | | a plants higher capacity.<br><br>5. Further, the operating parameters of RTS – B are as determined by the Regulatory, which are in line with Stations in Peer Group.<br><br>6. Regarding the Variable Charges of RTS–B, information is already furnished against Point No.1.3. |
| 7.2 | Reference is drawn to the fixed charges of the most recently commissioned Plant VTPS (COD 2020 and January-March 2021). The fixed cost projected for the years 2021 & 2022 onwards is of the order of Rs.2200 Crores per year. This for a new plant appears to be high. We request AP GENCO to explain the need for such a high expense for a new plant with probably the latest technology. In fact, KTPS-VII commissioned during December, 2018 is projected to have an expenditure of Rs.1.42 Crores per MW, a figure lower than BTPS commissioned more recently. We request this Hon'ble Commission to direct TS GENCO to explain this seemingly anomalous expenditure.<br><br>Chief Engineer<br>Coal & Commercial<br>TSGENCO, V.S., Hyderabad-82 | Fixed Charges of a Station depends mostly on the Gross Fixed Assets of the station i.e, capital cost of the project.<br><br>1. KTPS VII Commissioned in December 2018 is of 800 MW Capacity and has a lower Capital Cost in comparison with BTPS of 4X270 MW total 1080 MW, Three of the units 270 MW each were commissioned in June 2020, December 2020 & March 21.<br><br>2. BTPS is a "Green Field Project". Architects start completely from scratch. Whereas KTPS VII certain facilities for construction of the project are readily available, resulting in reduced capital cost and no fresh acquisition of land was also need for KTPS VII.<br><br>3. BTPS being a Green Field Project, the capital cost of the project is within the CERC "**BENCHMARK HARD COST - Per MW with December 2011 Indices as Base", Order Dt.04.06.2012 and escalated there on. The BENCH HARD COST of CERC does not include expenditure towards MGR, Railway siding, unloading equipment at jetty, and Rolling stock, locomotive, Transmission line till tie point.**<br><br>4. Further, the capital cost in respect of KTPS VII & |

| | | |
|---|---|---|
| | | BTPS includes cost towards FGD "Flue-gas desulfurization", which is mandatory as per MOEF Directives/Guidelines. Regulation, allows this cost additionally to the existing/ approved capital costs.<br>5. In view of the above, it is not prudent to compare the Capital Costs or Cost Per MW of BPTS (4X270 MW= 1080 MW) with KTPS VIII (800 MW).<br>6. However, Capital Costs in respect of both the projects are within the Norms.<br>7. As the years progress the Fixed Charges will reduces on account of reduction in "Interest on Financial Charges", as evident in KTPP-I & RTS-B & "Return on Equity" decreases as Net Fixed Assets declines Year On Year due to depreciation. |
| 7.3 | <u>PROPOSED WEIGHTED AVERAGE INTEREST RATES (Ref Page 41 Annexure B1)</u><br>It is disappointing to see interest rates at 10.63% and above for all the generating plants (TS GENCO). For the new BTPS the interest rates on term loans are as high as 11.72% and even the working capital interest is estimated to be 12.05%. We request this Hon'ble Commission to examine if these costs are inevitable and whether there are any other alternatives to reduce the costs.<br>19/4/19<br>Chief Engineer<br>Coal & Commercial<br>TSGENCO, V.S., Hyderabad-82 | 1. The rates claimed are provisional and subject to revision based on actual in True up.<br>2. Based on the risk involved in the Power Sector due to failure of many Independent Power Producers (IPPs), Accumulated losses of the DISCOMs and stringent guidelines of RBI for lending Capital Loans; Nationalized Banks are unwilling to lend Capital Loans to the Power Generators.<br>3. Due to which TSGENCO and all the State owned Generators are relying on obtaining funds from Financial Institutions viz., PFC & REC which are meant for funding power projects charging higher rate of interests. These institutions are lending loans based on their cost of funds.<br>4. PFC & REC rated TSGENCO as "A+" & BRICK WORK RATINGS INDIA PVT. LTD (Credit Rating |

Agency) rated TSGENCO as "BWR-A", for the term loans/limits sanctioned. Based on the ratings, interest rates offered to TSGENCO have been determined.

5. However, TSGENCO negotiates with Banks & Financial Institution's at the time of proposals for loan to sanction loan @ base rate/floor rate/MCLR of the lenders. Further, as and when there is a change in rate of Interest in the market, TSGENCO requests the lenders for reduction of Rate of Interest (ROI). On many occasions TSGENCO requests were considered.

   For instance,

   a) During demonetization, TSGENCO requested the Banks & FI's to reduce the ROI; PFC & REC have favorably considered and reduced the ROI.

   b) Banks has reduced the ROI during reset/review, at the request of TSGENCO.

6. In the order on MYT for the 3rd Control Period F/Y 2014-19 order dated 05.06.2017, the rate of interests considered were ranging @ 12.5%, but based on actuals TSGENCO has passed on credits to DISCOMS from time to time.

7. Further, in the Multi Year Tariff filings for the Control Period F/Y 2019 - 2024, the interest rates are starting from 10.10%.

8. Higher rate of interests appear where there are Notional Loans, claimed based on the Clause

19.4.19

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

| | | |
|---|---|---|
| | | No.12.5 of TSERC Regulations 2019.<br>9. Only for comparison purpose, the interest rates factored by TSGENCO are lesser than that of WACC allowed by APERC in tariff determination of APGENCO, for the same control period.<br>10. However, the claims of TSGENCO are in line with TSERC Regulations 2019. |
| 8 | <u>MEDICAL AND OTHER WELFARE EXPENDITURE (2019-24 Ref Page 43 Annexure B3)</u><br>The estimate is Rs.120.97 Crores for 5 years. We request TS GENCO to intimate the number of beneficiary and expenditure in terms of Rupees per MW or preferably Rupees for 1 million units. | The estimated Medical & Other Welfare Expenditure for F/Y 2019-24 is for welfare of the Employees those who are working in Thermal Stations, Hydel Stations & Head Quarters of TSGENCO and Pensioners of TSGENCO.<br>If computed Per one Million Units, works out to Rs.10,084/- per Million Units (Considering actual Generation during F/Y 2019-20 - 23,993 Million Units.) and per unit Rs.0.01 Per Kwh. |
| 9 | R&M (FY 2014-19 ref. Annexure A5)<br>The O&M expenditure of KTPS @ 5.37% and RTS-B @ 7.27% is far too high and the figures in the chart need to be explained (Table marked as VII) is not self explanatory. | KTPS O&M and RTS-B are old Stations of more than 40 years. The R&M cost will be higher for old stations due to wear and tear of equipment.<br>The Annexure A5 (VII) is for computation of "Repairs & Maintenance" based on Average R&M cost and GFA in the control period 2014-19.<br>The clause No. 19.3 of TSERC 1 of 2019 Regulation specifies to compute the Repairs and Maintenance (R&Mn) expenditure as percentage of Opening Gross Fixed Assets for the Year Governed by the following formula:<br>R&Mn= Kn X GFAn X WPI Inflation,<br>Where:<br>R&Mn: Repairs & Maintenance expense for nth Year<br>GFAn: opening Gross Fixed Assets for nth Year<br>Kn : 'K' is the immediate preceding Control period average expressed in %) governing the relationship between R&M and Gross Fixed Assets (GFA)<br>WPI Inflation: Point to point change in Wholesale Price |

9/4/19
Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

| | | |
|---|---|---|
| | | Index (WPI) for immediately preceding year. |
| 10 | FIXED CHARGES (Annexure A6 page 34)<br>We request TS GENCO to confirm if these fixed costs are proposed to be levied at the regulation stated availability percentage and PLF. We presume that the fixed charges would be strictly as per regulation 1 of 2019 terms and conditions of generation tariff. | It is to confirm that the fixed charges claim proposed in the Multi Year Tariff petition 2019-24 is as per TSERC Regulation 1 of 2019 and CERC' 2019 Regulations. |
| 11 | SPARES EXPENDITURE (ANNEXURE IV)<br>We note that for BTPS 1080 MW plant commissioned very recently, the spares expenditure is of the order of Rs.5.86 lakhs per MW per year. We also note that for much older plants the spares expenditure reported is much lower. We request TS GENCO to re-confirm these estimates. | As per clause No. 13 of TSERC Regulations 1 of 2019, "Interest on Working Capital" includes Maintenance spares, in respect of Coal Based generating stations @ 20% of the O&M expenses (specified in clause 19) and in respect of Hydro electric generating stations @ 15% of the O&M expenses".<br><br>The O&M Charges claim for BTPS Project is Rs.1,583.61 Crores as per CERC regulations. As per Working Capital norms of 20% of the above regulations is worked out to Rs.316.72 Crores. The 5.86 lakh per MW arrived by the chamber is investment in spares for Working Capital. Accordingly it cannot be treated as O&M Cost claim towards spares. Further, in respect of old plant the Average investment in spares working capital is less due to less O&M Charges in other stations as per regulations.<br><br>In view of the above, it is to confirm that the calculation of "Maintenance Spares" estimated in Annexure IV, are purely in line with TSERC regulations towards working capital norms for spares and there is no under or over estimation of the figures. |

9/4/21
Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

| Annexure -A | | | | | | | |
|---|---|---|---|---|---|---|---|
| KTPS O&M | | | | | | | |
| S.No | Month | FY 2017-18 | | FY 2018-19 | | FY 2019-20 | |
| | | Availability (%) | Gross Station Heat Rate (Kcal/kwh) | Availability (%) | Gross Station Heat Rate (Kcal/kwh) | Availability (%) | Gross Station Heat Rate (Kcal/kwh) |
| 1 | April | 82.48 | 2739 | 75.87 | 2995 | 74.45 | 2476 |
| 2 | May | 77.83 | 2689 | 72.67 | 3024 | 68.55 | 2535 |
| 3 | June | 67.36 | 3046 | 67.12 | 3098 | 63.5 | 2639 |
| 4 | July | 65.97 | 3289 | 64.09 | 3123 | 76.46 | 2693 |
| 5 | August | 61.92 | 3326 | 62.16 | 2819 | 76.55 | 2825 |
| 6 | September | 66.38 | 3209 | 69.54 | 2893 | 74.1 | 2900 |
| 7 | October | 57.87 | 3332 | 72.37 | 2806 | 74.47 | 2825 |
| 8 | November | 66.3 | 3116 | 72.62 | 2727 | 75.48 | 2690 |
| 9 | December | 65.39 | 3054 | 64.69 | 2813 | 74.72 | 2228 |
| 10 | January | 69.97 | 2746 | 63.94 | 2707 | 71.78 | 2987 |
| 11 | February | 69.39 | 2736 | 71.49 | 2666 | 69.41 | 2819 |
| 12 | March | 76.23 | 2670 | 72.35 | 2580 | 62.02 | 2928 |

19/4/21

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82

## Annexure-B

### FY 2019-20

| | Normative Availabilty (%) | Actual Availabilty (%) | Normative PLF(%) | Actual PLF(%) | Normative Station Heat Rate | Actual Station Heat Rate | Normative Auxiliary Consumption (%) | Actual Auxiliary Consumption (%) | Normative secondary fuel oil consumption (ml/kwh) | Actual secondary fuel oil consumption (ml/kwh) |
|---|---|---|---|---|---|---|---|---|---|---|
| KTPP-I | 80 | 78.1 | 80 | 70.37 | 2450 | 2269 | 7.5 | 5.78 | 2 | 0.724 |
| KTPP-II | 80 | 92.87 | 80 | 84.7 | 2400 | 2217 | 7 | 4.94 | 2 | 0.519 |
| KTPS-ABC | 70 | 71.8 | 70 | 64.73 | 3000 | 2698 | 10 | 11.21 | 2 | 1226 |
| KTPS-VII | 85 | 53.35 | 85 | 50.92 | 2258.55 | 2224 | 5.25 | 5.26 | 0.5 | 1.415 |
| KTPS-V | 80 | 87.81 | 80 | 82.17 | 2500 | 2387 | 9 | 11.02 | 2 | 0.501 |
| KTPS-VI | 80 | 85.8 | 80 | 81.03 | 2450 | 2255 | 7.5 | 4.65 | 2 | 0.358 |
| RTS-B | 75 | 68.61 | 75 | 72.5 | 3000 | 2712 | 10 | 11.87 | 2 | 0.785 |

### FY 2020-21 (upto Feb 2021)

| | Normative Availabilty (%) | Actual Availabilty (%) | Normative PLF(%) | Actual PLF(%) | Normative Station Heat Rate (Kcal/kwh) | Actual Station Heat Rate (Kcal/kwh) | Normative Auxiliary Consumption (%) | Actual Auxiliary Consumption (%) | Normative secondary fuel oil consumption (ml/kwh) | Actual secondary fuel oil consumption (ml/kwh) |
|---|---|---|---|---|---|---|---|---|---|---|
| KTPP-I | 80 | 100.07 | 80 | 54.09 | 2450 | 2241 | 7.5 | 6.48 | 2 | 0.78 |
| KTPP-II | 80 | 92.32 | 80 | 72.4 | 2400 | 2237 | 7 | 5.48 | 2 | 0.44 |
| KTPS-VII | 85 | 94.3 | 85 | 86.26 | 2259 | 2015 | 5.25 | 4.52 | 0.5 | 0.61 |
| KTPS-V | 80 | 75.57 | 80 | 60.06 | 2500.00 | 2345 | 9.00 | 11.46 | 2 | 1.83 |
| KTPS-VI | 80 | 97.77 | 80 | 79.96 | 2450 | 2305 | 7.5 | 4.78 | 2 | 0.19 |
| RTS-B | 75 | 70.55 | 75 | 50.33 | 3000 | 2697 | 10 | 12.40 | 2 | 2.79 |
| BTPS | 85 | 81.87 | 85 | 57.05 | 2375 | 2487 | 8.5 | 9.80 | 0.5 | 5.01 |

19/4/21

Chief Engineer
Coal & Commercial
TSGENCO, V.S., Hyderabad-82