To,	From,
The Secretary, T.S. Electricity Regulatory Commission, 5th Floor, Singareni Bhavan, Red Hills, Lakdi ka pool, Hyderabad – 500 008	M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation, H.No. 3-4-107/1, (Plot No. 39), Radha Krishna Nagar, Hyderguda Village, Attapur, Hyderabad – 500 048

Date: 24-06-2021

Dear Sir;

Sub: - Comments on PPA between TSGENCO and TSDISCOMs related to Bhadradri Thermal Power Station (BTPS).

Ref: - Public Notice dated 02-06-2021 with respect to O.P. No. 17 of 2021.

1.1 In response to the above-mentioned Public Notice calling for comments on PPA between TSGENCO and TSDISCOMs related to Bhadradri Thermal Power Station (BTPS) (4 X 270 MW) we submitting the following comments for consideration of the Commission.

2.1 The Telangana State Electricity Regulatory Commission (TSERC) through the Regulation 1 of 2014 adopted all regulations, decisions, directions or orders, all licences and practice directions issued by the erstwhile Andhra Pradesh Electricity Regulatory Commission (APERC) as in existence on the date of the constitution of TSERC. APERC has adopted Guidelines for Load Forecasts, Resource Plans and Power Procurement in December 2006. According to Clause 2.1 of these Guidelines load forecasts to be submitted to the Commission by Licensees shall contain a forecast of future energy (in megawatt-hour, or MWh) and demand (in megawatt, or MW) in the respective areas of supply of each Licensee for 2 (two) Control Periods (Control Period means a multi-year period fixed by the Commission from time to time, usually 5 years). Licensees have to plan power procurement based on these load forecasts. According to Clause 4.1.1 of these Guidelines the power procurement of the Licensee shall be consistent with the detailed power procurement plan submitted by the Licensee to the Commission. The Licensee shall not enter into a power purchase agreement as purchaser or solicit offers for supply of power until 60 days after it has notified the Commission of its proposed purchase. Power Purchase Agreements need to be assessed against the load forecasts submitted by the Licensees and approved by the Commission. Until now TSDISCOMs have not prepared any load forecasts according to these Guidelines. As such, power procurement through the PPA on BTPS appears to be arbitrary.

2.2 According to Clause 4.1.2 of these Guidelines the Licensee shall follow the 'Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees' (for short the Competitive Bidding Guidelines or CBG) issued by Ministry of Power on 19.01.2005 in respect of procurement of power for a period of more than one year. If the Licensee proposes to procure the power by a process other than that specified by the Competitive Bidding Guidelines, it shall, in its filing with the Commission, seek the consent of the Commission and demonstrate to the Commission's satisfaction that the proposed procurement is the preferred least-cost option, with reference to the economic, technical, system and environmental aspects of commercially viable alternatives, including arrangements for reducing the level of demand. The Licensee shall describe the procurement procedure, proposed to be adopted, including the steps to be taken to ensure that the purchase is made on the best possible terms. According to National Policies from January 2011 onwards power GENCOs also to be procured through competitive bidding process. Power procurement from BTPS through the present PPA is being done without any bidding process. To that extent this power procurement is to be considered arbitrary.

2.3 The PPA for procurement of power from BTPS between TSGENCO and TSDISCOMs is dated 17th September, 2019. Original scheduled COD was March 2017. This shows that PPA was signed two and half years after original scheduled COD. The PPA has come before the Commission for approval after power generation has commenced at the plant. Power procurement from BTPS is being done in violation of policies and guidelines designed for transparent and competitive power procurement. In such circumstances the Commission has to subject the PPA, particularly capital cost part of it, to critical prudence check.

3.1 Articles 1.11 and 1.12 defined commercial operation date (COD) and COD of the project. But COD related to the individual units of BTPS or the BTPS project as such is not mentioned in the PPA. This is important because calculation of interest during construction (IDC) depends on COD.

3.2 Article 1.15 defined Declared Capacity (DC). This article shall include the statement "Declared capacity shall be within the range of + or – 10% of the contracted capacity." Clause 1.3 of Annexure – II deals with Installed Capacity Test. If declared capacity after the Installed Capacity Test is lower than the contracted capacity the capital cost of the project shall be reduced to that extent.

4.1 According to Article 3.2.2 of the PPA capital cost of BTPS is Rs. 8,536.98 Crore (details of capital are provided in Annexure I of the PPA) Per MW capital cost is Rs. 7.90 Crore. This capital cost is higher than YTPS capital cost which stands at Rs. 7.49 Crore Per MW. Through the Orde dated 04—06 – 2012 the Central Electricity Regulatory Commission (CERC) set the benchmark capital cost for thermal power stations with coal as fuel. The per MW benchmark capital cost was in the range of Rs. 4.01 Crore to Rs. 5.08 Crore with December 2011 price as base. Taking the price rise in the meantime into account per MW capital cost in 2017-18 (the period of original COD) should be in the range of Rs. 4.61 Crore to Rs. 5.84 Crore. Compared to this per MW capital cost of BTPS proposed by TSGENCO is higher by 71.37% to 35.28%. The Punjab State Electricity Regulatory Commission (PSERC) in its Order dated 17-01-2020 in Petition No. 54 of 2017 set the capital cost of Goindwal Saheb Thermal Power Plant (2X270 MW) set up by GVK Power at Rs. 3,058.37 Crore. Per MW capital cost of this plant comes to Rs. 5.66 Crore. Compared to this per MW capital cost of BTPS as proposed by TSGENCO is higher by 39.58%. This Punjab plant is comparable to BTPS both in terms of capacity of the power plant units (270 M) and also in terms of period of erection/operation. This significantly higher capital cost of BTPS demands a closure scrutiny of TSGENCO's claims.

4.2 EPC accounts for 73.41% of the capital cost of the BTPS. This cost includes cost of boiler, turbine and generator (BTG) and balance of plant (BoP) works. It has to be seen that the provider/contractor for supply and erection of BTG and BoP is selected in a transparent and open competitive process for costs to be optimal. But contractors for these were not selected through competitive bidding process. As contractors for BTG and BoP were not selected through transparent process these costs need to be subjected to stringent prudence check. Newspaper reports indicate that there were issues in selecting the contractor for BTPS. It was reported that machinery meant for a thermal plant in north India was redirected to BTPS plant by BHEL as original procurer decided not to go ahead with the power plant in the background of the Supreme Court's judgement in coal allocation. In such circumstances the BTG machinery supplied by BHEL may have to be treated as supplied under distress conditions. As this BTG machinery was supplied under distressed circumstances (in a way conditions of over supply) 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 and there were no takers for this machinery. TSGENCO went against these trends and somehow obtained permission to utilise them as a last chance. All these circumstances indicate that these BTG machinery should have been obtained at a considerably lower price. But exorbitant cost of BTPS raises doubts on procurement of this machinery. We request the Commission to subject EPC cost of BTPS to prudence check.

4.3 Rs. 110 Crore were claimed under start up power and start up fuel. In the case of YTPS with an installed capacity of 4,000 MW Rs. 50 Crore were claimed towards start up fuel. Compared to YTPS start up fuel claimed for BTPS is nearly ten times higher. Also, according to Clause 8 of Regulation 1 of 2019 related to terms and conditions of generation tariff "… any revenue earned by the Generating Entity from supply of Infirm Power after accounting for the fuel expenses shall be adjusted towards reduction in the capital cost…" Article 3.9 of the PPA also provided, "… any revenue earned by the Generating Entity from supply of Infirm Power after accounting for the fuel expenses shall be adjusted towards reduction in the capital cost…" Given these facts and provisions we request the Commission to subject start up fuel cost of BTPS to prudence check.

4.4 Rs. 1,167 Crore were claimed towards non-EPC civil works. This accounts for nearly 14% of the plant's capital cost. No further information or justification is available on this expenditure. Given this huge expenditure we request the Commission to subject cost related to non-EPC civil works to prudence check.

4.5.1 Rs. 792.85 Crore were claimed towards interest during construction (IDC). This accounts for nearly 10% of the plant's capital cost. 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. Original COD of the first unit of BTPS was March 2017. Despite these strictures COD of the first unit of BTPS was declared on 05-06-2020 and that of second unit on 07-12-2020. These delays stand for inefficient execution of the plant. Costs due to these delays resulting from inefficient execution of the plant in the form of higher IDC shall not be allowed.

4.5.2 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. The following Table highlights this delay in commissioning of the units as per CEA's Broad Status Report for December 2020.

Table. Delay in commissioning of BTPS

BTPS Unit	Capacity (MW)	Original CoD	Actual/Expected CoD	Delay in months
Unit 1	270	Mar 17	Jun 20	39
Unit 2	270	May 17	Dec 20	43
Unit 3	270	Jul 17	Feb 21	43
Unit 4	270	Sep 17	Mar 21	42

As is evident from the above there have been significant delays in 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 scrutinised. IDC beyond the scheduled CoD should not be allowed.

4.5.3 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:

"7.4. The delay in execution of a generating project could occur due to following reasons:

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.

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.

iii) situation not covered by (i) & (ii) above.

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."

4.5.4 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.

4.5.5 Further, according to the Clause 7.22.4 of Regulation 1 of 2019, "The Commission shall be guided by the following principles for the purpose of determining cost due to time over run: (a) The entire cost due to time over 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 contacts, delay in providing inputs like making land available to the contractors, delay in payments to the contactors / suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper coordination between various contractors, etc., (b) The Commission shall examine on a case to case basis of the additional cost incurred due to time over run on account of factors beyond the control of the Generating Entity e.g., delay caused due to Force Majeure like natural calamity. The Generating Entity shall clearly establish beyond any doubt that there has been no imprudence on the part of the Generating Entity in executing the project."

4.5.6 No Force Majeure instance like natural calamity has impacted the project site of BTPS since the initiation of executing of the project. Delay in execution of the project is entirely due to mismanagement of the project by TSGENCO including in awarding the project to BHEL without any competitive bidding. As such following the above Regulation also the entire cost due to time over run has to be borne by the Generating Entity – TSGENCO in the present context.

4.6.1 Liquidated damages to be paid by the Generating Entity of projects to the DISCOMs for delay in execution of the projects beyond COD. Due to delay in execution of the projects, if the Generating Entity fails to generate and supply power to the DISCOMs according to the schedule, the DISCOMs would be forced to purchase power from the open market at higher price leading to imposition of additional burden on electricity consumers in the state. Because of this DISCOMs should be compensated for the additional burdens arising out of the failure of the Generating Entity to execute projects in time, generate and supply power. It is in this context that liquidated damages have to recovered from the Generating Entity.

4.6.2 According to the Clause 7.22.4 of Regulation 1 of 2019 "… the consumers should get full benefit of the Liquidated Damages (LDs) recovered from contractors / suppliers of the Generating Entity and the insurance proceeds, if any, to reduce the capital cost." As there was inordinate delay in execution of the project we request the Commission to impose liquidated damages on the Generating Entity and use the proceeds to reduce the capital cost of the plant.

5.1 According to Article 3.7 of the PPA, "Incentive shall be payable @ 50 paisa per every unit (kwh) for the normative generation over and above the target Plant Load Factor …" This shall be replaced with "Incentive shall be payable @ 25 paisa per every unit (kwh) for actual generation over and above the target Plant Load Factor". PPA for KTPS VII unit provided incentive at the rate of 25 paise per unit for power generated over and above target PLF.

6.1 Article 8 of the PPA provide that all differences and disputes between the parties, if not solved through negotiations, shall be settled through arbitration. Article 9 provided that if parties were unable to arrive at a settlement, the matter should be referred to arbitration in accordance with Article 8 and decision of the arbitrator should be final and binding on all parties. As this PPA is being approved by the Commission any changes to it in future shall have its approval. The Commission may refer the differences or disputes if any between the parties to arbitration under Section 158 of the Electricity Act, 2003. Parties on their own shall not refer the issues to arbitration.

7.1 According to Annexure VI to the PPA, "To provide additional security to the TSGENCO for the TSDISCOMs' obligation hereunder, TSDISCOMs shall also open an escrow account …" Article 3.13 of the PPA has already provided for a revolving Letter of Credit (LC). As PPA has already provided for LC towards payment mechanism provision for additional security in the form of escrow account will only add to the expenditure of TSDISCOMs. To avoid this additional expenditure provisions related to escrow account shall be deleted from the PPA.

8.1 We request the Commission to take our above submission on record.

Thanking you.

Sincerely yours,

M. Thimma Reddy,

Convenor.