

To  
The Secretary  
Telangana Electricity Regulatory Commission  
Sy.No.145-P, Vidyut Niyantran Bhavan  
Kalyan Nagar, GTS Colony, Hyderabad

April 22, 2025

Respected sir,

**Sub : Submission of objections, suggestions and views in OP No.31 of 2025 seeking Commission's consent for procurement of 800 MW from stage II of Telangana Super Thermal Power Station of NTPC by TGDISCOMs for a period of 25 years**

With reference to the public notice dated 29.3.2025, we are submitting the following points for the consideration of the Hon'ble Commission in the subject petition:

1. I thank the Hon'ble Commission for permitting me to file my objections before the scheduled date of public hearing, in response to my requests made in my letter dated 7.4.2025.
2. TGDISCOMs have sought consent of the Hon'ble Commission for procurement of 800 MW out of the three units of 800 MW each of stage II of Telangana Super Thermal Power Station of NTPC being set up in Telangana in terms of A.P. Reorganization Act, 2014. We have been repeatedly requesting the Hon'ble Commission to take up need for power from any project, PPA and tariff when TGDISCOMs propose to enter into an agreement for the same so as to take a holistic view of all relevant factors. Giving consent to proposal to procure power, PPA and tariff of the project concerned separately is not a desirable practice. We request the Hon'ble Commission to examine the following points, among others:
  - a) Under stage I of TSTPS (2x800 MW), TGDISCOMs are getting a share of 86.9%, instead of 100%. COD of stage I was declared on 1.3.2024. Provisional tariff is shown to be ranging between Rs.4.88 to 5.98 per unit, while it is Rs.5.865 per unit for FY 2024-25. Though the PPA was signed on 18.1.2016, final tariff is yet to be determined by the Central Electricity Regulatory Commission. The reasons for such an abnormal delay are inexplicable and what would be the final tariff to be determined by CERC continues to be in the realm of uncertainty.
  - b) It is submitted by the DISCOMs that the 800 MW unit of stage II, if completed as per schedule, would be available by FY 2029-30. Indicative tariff for this unit is shown as Rs.4.12 per unit and a levelized tariff of Rs.3.81 per unit. Though limited LOI was issued on 7.11.2024 to BHEL for execution of the unit, the estimated capital cost of this unit as per detailed project report, if prepared, as well as the basis for the indicative tariff shown, is not given. Going by the experience with stage I of TSTPS, when will the final tariff be determined by CERC is also uncertain.

- c) When tentative tariff for stage I is Rs.5.865 per unit, and when the basis for tentative tariff for 800 MW unit of stage II of TSTPS is not explained, whether it is desirable to give consent to the DISCOMs for procurement of power from this unit is a moot point.
  - d) Regarding stage I of TSTPS, when the issue came up for public hearing before the Hon'ble Commission, we made elaborate submissions, as incorporated in the order dated 25.8.2021 in OP No.10 of 2016. Considering our suggestions, the Hon'ble Commission, in its interim order dated 30.7.2016, directed the TGDISCOMs to get the draft PPA amended incorporating the provisions as given in the interim order. However, in the order dated 25.8.2021, the Hon'ble Commission accepted the submissions of the DISCOMs not to incorporate the amendments as directed in the interim order. Since it is a matter of record, we are not repeating the said points. The result is that, even after three and a half years from the date of the order of the Commission, final tariff is not yet determined by CERC. Therefore, it is not desirable to give consent to the DISCOMs to procure power from the 800 MW unit of stage II of TSTPS, without knowing the estimated capital cost and basis for the tentative tariff indicated and relying on or replicating the terms and conditions of the PPA of stage I of TSTPS for the subject unit. In this connection, the kind of adverse consequences that have arisen and the kind allegations made as a result of giving order for implementation of BTPS to BHEL, without going in for competitive bidding, also needs to be taken note of. If necessary, the report of the inquiry commission appointed by the state government on implementation of BTPS and YTPC also may be sought and got and examined. There is no explanation as to why the route of real competitive bidding is not being adopted for execution of the subject unit.
3. To justify procurement of power from the subject unit, the DISCOMs have relied on the projections in the resource plan for the 5<sup>th</sup> and 6<sup>th</sup> control periods, with a deficit of 11,340 MU by FY 2029-30 and a deficit of 40,082 MU by FY 2033-24. For the first four years of the 5<sup>th</sup> control period, substantial surplus is projected, with a deficit of 157.77 MU for 2028-29. The DISCOMs also have relied on the revised resource adequacy report of the Central Electricity Authority wherein it is recommended that Telangana requires thermal contracted capacity of 15,893 MW by 2029-30 and 16,966 MW by 2034-35. The DISCOMs have submitted that they have at present a contracted thermal capacity of 9,791 MW and are adding another 4000 MW from Yadadri Thermal Power Station, another 800 MW from Singareni TPP stage II and another 800 MW from TSTPS of NTPC. With these additions, there will be a shortfall of 1302 MW by 2029-30 and 2374 MW by 2034-35. We request the Hon'ble Commission to examine the following points, among others:
- a) Experience has been confirming that the estimates being made by the CEA under electricity requirement surveys and in resource adequacy reports tend to be inflated. As per the resource adequacy report of the CEA, availability of surplus power during the 5<sup>th</sup> control period is very much lesser than what is determined by the Commission for the same period. But the factual position for the FY 2024-25 confirms that the projections of the CEA have turned out to be unrealistic. It confirms the need for

reviewing and revising the projections periodically based on changing factual position.

- b) The DISCOMs have already sought consent of the Hon'ble Commission for procurement of 4000 MW solar power under PM KUSUM scheme.
- c) For Telangana, the annual growth rate of energy requirement projected from 2030-31 to 2034-35 is 5.43% to 5.38% and of peak demand 4.58% to 5.83%.
- d) The DISCOMs have shown proposed addition of solar power to the tune of 15,015 MW from 2025-26 to 2029-30 and of 7112 MW from 2030-31 to 2034-35, i.e., a total of 22,127 MW. They have pointed out that capacity utilisation factor for existing solar power projects is 21% and for planned projects 23%. 44,581.5 MU can be generated per annum with an installed capacity of the proposed 22,127 MW of solar units with a CUF of 23%.
- e) The DISCOMs have also proposed pumped storage units and 250 MW/500 MW battery energy storage system by TGGENCO. Pumped storage units can generate additional power to meet peak demand, while BESS is intended for storing the power generated, i.e., surplus power, both RE and thermal. During the public hearing on procurement of 4000 MW solar power under PM KUSUM scheme, CMD of TGSPDCL has stated that the storage cost as of now is Rs.2.5 per unit. As proposed by the DISCOMs, BESS gives 250 MW, 2-hour storage and delivers 2 cycles a day. In other words, BESS can store and deliver 500 MW a day in two cycles of two hours each. With the proposed additions of solar power, need for BESS capacity would increase. The DISCOMs have shown the cost for setting up BESS of 250 MW/500 MW for 2 hours a day as Rs.5.13 crore to Rs.3.13 crore and for 6 hours a day a cost ranging from Rs.11.31 crore to 6.30 crore. The DISCOMs also have projected that the capital cost for setting up solar power units is expected to reduce from Rs.4.5 crore in 2021-22 to Rs.4.1 crore per MW by 2029-30. With technological developments, costs for generation of solar power and storage may come down. As pointed out by the DISCOMs, solar power plants can be set up within a relatively shorter period vis a vis thermal power plants.
- f) That generation capacity additions should be gradual in tune with the growing demand for power is obvious. The moot point that deserves examination is how much generation capacity, both thermal and RE, needs to be added and when. With the proposed addition of 22127 MW solar power capacity over the years, 44,581.5 MU can be generated per annum with a CUF of 23%. Similarly, with the addition of 1600 MW thermal capacity of the units of SCCL and NTPC (800 MW each), with a plant load factor of 85%, 11,913.6 MU can be generated per annum. Generation from the proposed pumped storage capacities will be additional. With the expected generation of 56,495 MU of thermal and solar power, in addition to the potential for availability of surplus power to the tune of 28,504 MU projected by the DISCOMs for the FY 2025-26, i.e., a total of 84,999 MU, how to balance load curve and power mix, even with the proposed 250/500 MW BESS, needs to be explained and examined.

- g) The very fact that the DISCOMs have proposed addition of both thermal and solar power capacities from 2029-30 indicates that thermal power cannot be dispensed with in the years to come, despite addition of solar power, BESS and pumped storage units. It also indicates the limitations and constraints in expanding BESS. Pumped storage capacities, too, have multifarious problems in terms of capital costs, impact on environment, requirement and availability of water, adverse impact on the lives and livelihood of the local people, especially tribal people, depending on the locations where such units are proposed to be set up, etc.
- h) Once consents are given by the Hon'ble Commission to PPAs, etc., of the proposed projects, neither the government, nor the DISCOMs, nor the Commission can do anything to correct the adverse consequences that may arise as a result of addition of unwarranted generation capacities, with the kind of legally binding obligations in terms of the PPAs that would come into force. Therefore, a cautious and gradual approach is imperative to determine the periodical requirements of addition of generation capacities, both thermal and RE, to meet the fluctuating and growing demand for power in the state.
4. I request the Hon'ble Commission to examine the above-stated points, among others, and take appropriate decisions to protect interests of the state and its power consumers.
5. I also request the Hon'ble Commission to provide me an opportunity to make further submissions during the public hearings, after receiving and studying responses of the DISCOMs.

Thanking you,

Yours sincerely,

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