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

April 23, 2025

Respected sir,

Sub: Submission of objections, suggestions and views in OP No.30 of 2025 seeking the Hon'ble Commission's consent for procurement of 800 MW from stage II of Singareni Thermal Power Project 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 from 3rd unit of stage II of Singareni Thermal Power Project for a period of 25 years. 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:
- 3. Under phase I of STPP, the DISCOMs are procuring power from two units of 600 MW each. The tariff claimed by SCCL for the FY 2024-25 is Rs.6.782 per unit. COD of the two units were declared on 25.9.16 and 2.12.2016, respectively.
- 4. For the 3rd unit of STPP, the capital cost as per the original detailed project report was shown as Rs.5879.62 crore. The DISCOMs have submitted that the state government approved a capital cost of Rs.6789.96 crore on 22.6.2022 as per the revised DPR. While coal to this unit is allocated from Naini mines in Odisha, TGTRANSCO accorded grid connectivity to the unit on 29.12.2022. COD of the unit is expected in April, 2029. Terms of draft PPA were discussed on 5.8.2023 by SCCL and the DISCOMs.
- 5. The revised capital cost of the subject unit works out to Rs.8.49 crore per MW which is very high. Since COD is expected to be declared in the year 2029, what would be the final capital cost SCCL would claim is in the realm of uncertainty. Apart from higher fixed charges, supply of coal from Naini mines would lead to higher transportation charges and higher variable costs. In other words, the final tariff would turn out to be very high and depending on the variable charges, the capacity

of the unit is likely to be backed down as per the principle of merit order dispatch and in view of availability of substantial surplus power even from 2029-30 onwards, as per the projections of the DISCOMs on addition of generation capacities shown in the subject petition and additional information.

- 6. In his letter dated 23.10.2024, CMD of SCCL informed the DISCOMs that single EPC package mode tender was floated for selecting bidder for execution of the unit, that the tender was opened on 7.8.2024 and that negotiations on price were in progress. In the additional information submitted by the DISCOMs, it is informed that EPC package is awarded to BHEL on 28.2.2025. However, what were the offers received from different bidders in response to the tender floated by SCCL, how BHEL is selected, details of the cost of EPC package and indicative tariff, both fixed and variable charges, are not submitted by the DISCOMs. Having initiated all these measures, the DISCOMs have filed the subject petition, seeking consent of the proposed procurement of power from the subject unit, without submitting PPA and required information for determination of capital cost and tariff and consent to the PPA. The reasons for the same are not explained.
- 7. Though the subject unit will be set up under stage II, with the benefit of common infrastructural facilities for stage I and the subject unit, projecting higher capital cost for the unit of stage II leads to the question whether the state government and the DISCOMs thoroughly examined desirability and justifiability of deciding to procure power from the unit and the scope for procuring power through other sources through real competitive bidding and at relatively cheaper rates. Instead of the DISCOMs floating competitive bidding for procurement of 800 MW, the subject unit is selected, with SCCL claiming to have floated tender for single EPC package. In other words, there is no competitive bidding for selecting developer offering the lowest tariff by the DISCOMs. Awarding the EPC contract as a single package to BHEL by SCCL has to be seen in the light of the circumstances under which the state government ordered for an inquiry into execution of BTPS by TGGENCO by awarding it to BHEL and the kind of allegations that have been made, questioning the kind of consequences that have arisen detrimental to the interests of the state and consumers of the DISCOMs.
- 8. For justifying the decision for procurement of 800 MW from the subject unit, the DISCOMs are relying on the consideration of this unit by TGERC in the resource plan approved for the 5th and 6th control periods, revised resource adequacy report of the Central Electricity Authority and examination of various options for procuring power from thermal units, solar, wind, pumped storage projects, RE round-the-clock, Firm Dispatchable Renewal Energy (FDRE), BESS, etc. We request the Hon'ble Commission to examine the following points, among others:
 - a) When the claimed tariff for two units of stage I of STPP per unit for FY 2024-25 is Rs.6.782 per unit, and when even the tentative tariff for the unit of stage II is not indicated, whether it is desirable to give consent to the DISCOMs for procurement of power from this unit is a moot point.

- b) Hon'ble TGERC drastically disallowed the capital cost claimed by SCCL for its stage I of STPP and reduced the claimed tariff. Appeal filed by SCCL against the order of the Commission is pending before APTEL. What is the latest position?
- 9. To justify procurement of power from the subject unit, the DISCOMs have relied on the projections in the resource plan for the 5th and 6th control periods approved by the Commission, 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 5th 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, the DISCOMs have claimed. We request the Hon'ble Commission to examine the following points, among others:
- 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 5th 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. 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.

- 10. 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.
- 11. 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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