

To

The Secretary

Telangana Electricity Regulatory Commission

Sy.No.145-P, Vidyut Niyantran Bhavan

Kalyan Nagar, GTS Colony, Hyderabad

June 17, 2026

Respected sir,

Sub : Final submissions in OP Nos. 10 and 13 of 2026 filed by TGDISCOMs and TGGENCO, respectively, seeking consent of the Hon'ble Commission for procurement by the DISCOMs and adoption of tariff discovered through competitive bidding for 1500 MWh through BESS by TGGENCO to be supplied to TGDISCOMs

Further to our submissions dated 2.6.2027, 8.6.2026 and 13.6.2026 and in response to the replies given by TGDISCOMs and TGGENCO yesterday, we are submitting the following points for the consideration of the Hon'ble Commission in the subject issue:

- 1. The DISCOMs have clarified that, instead of a trading margin of 7 paise per unit, they have proposed "a trading margin of 0.5% of the applicable tariff" to be paid to the intermediary procurer, that is, TGGENCO. Such payment is unwarranted, because TGGENCO also is an instrumentality of the state government, unlike HPCL Ltd., an instrumentality of the government of India. The observation made by APERC in its order in OP No.65 of 2025 is noteworthy - Because NHPC assumes absolute zero financial risk, its role is limited to purely administrative accounting. Further, NHPC collected from the Selected Bidders amounts at Rs.1,00,000/MWh + 18% GST towards administrative overheads, Project monitoring activities, coordination with State Authorities and others, DISCOM/STU, pre-commissioning and commissioning expenses, etc. This applies to TGGENCO also. The terms of agreements may be modified to the effect that developers of BESS projects should send their monthly bills directly and in the name of TGDISCOMs and the latter shall pay them, after verifying their veracity and permissibility. There is no need for any intermediary role for TGGENCO and no need to pay any trading margin to it. What is the expenditure incurred by TGGENCO for conducting the bidding process and selecting the bidders? As the DISCOMs themselves have done, following the clarification given by the MoP, GoI, they can seek consent of the state government to modify the terms of bidding and resultant agreements, leaving no scope for payment of trade margin whatsoever and allowing the DISCOMs themselves or TGTRANSCO to conduct competitive biddings for BESS accordingly. The guidelines of MoP, GoI, are not binding on the Commission. It can exercise its discretion within the limitations of law to direct the DISCOMs and GENCO to make necessary changes in the agreements.**

2. Regarding storage of power, we reiterate that RE available under PPAs in force cannot be treated as surplus power for the reasons already explained in our earlier submissions. Treating such RE as surplus goes against the must-run status bestowed on RE units, principle of merit order dispatch and average cost of power purchase being determined by the Commission in RSTO. Just as average cost of power purchase, among other factors, is considered for determining tariffs, the same principle should be followed for considering the cost of surplus power stored in BESS. Even then, when surplus power is to be stored, the DISCOMs, through SLDC, have to direct the power plant concerned, whose power is treated as surplus under the principle of merit order, to generate and supply power and pay applicable tariffs. In other words, the average cost of surplus power or the tariff of the power plant concerned has to be considered for comparison with market prices and estimating benefit or otherwise of it.
3. Since the purpose of BESS is to store surplus power and use it as and when required, as agreed in the agreements, average cost of surplus power needs to be taken into account for any meaningful comparison with prices in the market and exchanges. There is no basis, as well as justification, for taking arbitrarily the price of a specific plant among the plants from whom the DISCOMs are getting power under PPAs in force for making a comparison with prices in the market and exchanges and show the savings hypothetically.
4. APERC has given a piece of advice to APDISCOMs to prefer double cycle, instead of single cycle, under the arrangement of BESS. Expert engineers whom I talked to also asserted the same view. I request the Hon'ble Commission to examine the same and take an appropriate decision and give a piece of advice to TGDISCOMs based on deficit for power to meet demand during peak hours, both morning and evening.
5. In the petition of TGGENCO dated 25.4.2026, it is incorporated, inter alia, that -
“vii. Further, as per RfS clause no.42.4 (a.b), the opening price i.e., start price for E-Reverse Auction and minimum bid document value i.e., INR 1000 per MW/Month shall be intimated to qualified bidders at the time of E-Reverse Auction. Viii. In view the above, the committee decided to keep the base prices discovered in the first round tariffs for both the locations with decremental value @ Rs.1000/MW/Month at each location against TGGNECO's subject RfS are as follows:

Maheswaram @ Rs.3,06,000/- of L1 discovered price
Choutuppal @ Rs.3,25,000/- of L1 discovered price”

In the E-reverse auction, the tariffs (excluding GST) of Rs.2,98,000/- and Rs.3,14,000/- per MW per month (187.5 MW) for both the companies, respectively, are determined.

In this connection, it may be noted that, in a press note dated 15.6.2026 issued by the government of Telangana, it is stated, inter alia, that

Telangana's Wind Energy Potential

“As per assessments by the National Institute of Wind Energy (NIWE), Telangana possesses a significant untapped wind energy potential of 4,240 MW at 100 m hub height, 24,835 MW at 120 m, and 54,717 MW at 150 m hub height. High wind-density zones have been identified across the erstwhile districts of Nalgonda, Mahabubnagar, Rangareddy, Medak, Hyderabad and Nizamabad. TGREDCO has, with NIWE's support, installed 139 wind monitoring masts across these districts, with private developers installing a further 25 masts, building a robust wind resource dataset for future development. Against this potential, Telangana has commissioned 128.8 MW of wind capacity to date, presenting a major opportunity for accelerated capacity addition through a transparent, tariff-based competitive bidding framework, backed by pre-cleared land and assured evacuation infrastructure.”

What are the constraints to the TGDISCOMs to opt for double cycle and storing surplus power available and cost-benefit analysis of the same need to be explained.

TGGENCO has explained that by 2027-28, the Telangana State Power System shall be dominated by RE Power particularly Solar Generation with peak output concentrated between 10:00-15:00 Hrs daily. This will lead to sustained mid-day surplus which cannot be directly absorbed by demand. Telangana demand varied in Two-Cycles in a year during Khariff and Rabi due to high intensive Agriculture and Lift Loads. Telangana Peak demand incident between 07:00 to 08:00 Hrs Projected Peak Demand curve with 24 Hrs supply during 2027-28 and 2029-30 is indicated below.

The availabilities are considered as per Resource Adequacy Plan issued by CEA. However, the availability may vary depending on the planned capacity additions.

From the above demand and availability, Telangana State having huge surplus power of 6000-7000 MW during Solar hours between 09:00 to 16:00 Hrs which can be used for charging of batteries continuously. The same can be utilized during morning peak hours between 05:00 to 09:00 Hrs also the State Peak demand is incident and there is a need for huge quantum of power.

By observing the previous year trends, the availability of power during peak hours is very less and even prices are very high in power market segments as they are reaching ceiling prices.

In view of the above, to meet Telangana demand effectively during Morning/Evening peak hours and during shortage period, 4-Hour-One Cycle is mandatorily also required along with 2-Hours Two-Cycle Operation for utilizing huge surplus power during solar hours.” **In their future initiatives for BESS, the DISCOMs are expected to opt for two cycles.**

- 6. The difference of tariff for BESS between the two bidders selected is Rs.16,000/- per MW per month. For a period of 15 years this difference for 187.5 MW per month works out to Rs.30 lakh and for a period of 15 years it works out to Rs.54 crore. It underlines the need for bridging such avoidable gaps in prices. Change of location for establishment of BESS unit may not warrant such variation in charges for BESS. During E-reverse auction necessary diligence needs to be made to persuade the developers to reduce such gap.**
- 7. We request the Hon’ble Commission to direct the DISCOMs to make a comprehensive study of peak deficits, need for single or double cycle under BESS, opportunity for storing surplus power, especially during night hours, need and scope for setting up BESS units nearer to existing generating stations where surplus power is available, need and scope for reducing availability of surplus power and purchase of power in the market and exchanges through BESS - all based on cost-benefit analysis. Based on such factors, the DISCOMs may take appropriate decisions while going in for BESS hereafter, with permission of the state government and the consent of the Hon’ble Commission.**
- 8. The G.Os enclosed with the petition of TGGENCO show that the state government permitted the former to act as intermediary procurer in response to the proposals sent by the CMD of GENCO. Whether the state government permitted TGGENCO to act as intermediary procurer for setting up BESS units suo moto or on the proposal of GENCO is secondary. What is objectionable is TGGENCO acting as intermediary procurer for BESS units on payment of trading margin from the DISCOMs. State government, TGGENCO and TGDISCOMs may agree to such an arrangement, because the burden of avoidable trading margin would be imposed on the consumers of power. Such an approach of all of them agreeing to impose avoidable burden on the consumers, taking undue advantage of such bizarre guidelines of MoP, GoI, is objectionable. Giving consent to such questionable consensus among the said entities goes against the interests of the consumers at large and defeats the purpose of regulatory process. TGGENCO is not setting up BESS units. If it participates in competitive biddings to be floated by the DISCOMs and emerges as L1, it is most welcome.**

9. We also request the Hon'ble Commission to direct the DISCOMs to conduct competitive biddings, as and when required, for BESS themselves or through TGTRANSCO, without any trading margin whatsoever, and give a piece of advice to the state government also accordingly to give necessary directions on these lines.
10. **The DISCOMs have stated that** “TGDISCOMs respectfully submit that the proposed BESS arrangement has been developed after careful assessment of state's energy requirements, demand pattern, and increasing renewable integration, with a view to maintaining an optimal power mix. Cost benefit analysis has also been carried out, which shows that BESS enables use of low-cost power during solar hours and its supply during peak periods, thereby reducing overall power purchase cost. Accordingly, the proposal is appropriate and in the interest of consumers, while ensuring reliable and efficient power supply.” **TGGENCO has stated that** “during grid surplus conditions, even RE is technically curtailed due to grid stability, voltage, and frequency constraints. BESS can absorb RE that would otherwise be curtailed - directly preventing payment obligations for curtailed RE under must-run basis. This creates a direct, quantifiable cost saving for TGDISCOMs.” **In their petitions, or replies given to submissions of objectors, or during the submissions made before the Hon'ble Commission, at no point of time TGDISCOMs have stated that RE is backed down for technical reasons and tariff paid for the RE backed down. Nor are the DISCOMs giving details pertaining to backing down of thermal power plant-wise and time-wise and fixed charges being paid for such backing down, despite repeated requests made by objectors. Nor is the Hon'ble Commission directing the DISCOMs to provide such information. Such information is also not found in the RSTOs and other orders being issued by the Commission. Referring to the estimates made by the CEA and projections made by the DISCOMs in their resource plans, etc., and trying to justify availability of abnormal quantum of surplus power based on general theory, without substantiating factual position with facts and figures is an exercise in evasiveness. There are technical limitations for backing down surplus thermal power not exceeding a certain percentage of PLF. If the turn of thermal plants is over, next comes the turn of RE for backing down. If RE is also being backed down on technical grounds, as contended by the DISCOMs and GENCO, it is beneficial to store the RE to be backed down under BESS and supply it as and when it is required to meet peak demand. But a situation wherein both thermal power and RE have to be backed down is highly serious and detrimental to larger consumer interest for which imprudent decisions taken by the government, and at its behest by the DISCOMs, to enter into long-term PPAs with thermal and RE projects indiscriminately, thereby intensifying imbalance between fluctuating demand curve and power mix and availability of unwarranted surplus power at abnormal levels are responsible. If, under the present position of availability of abnormal quantum of surplus power, when RE also has to be backed down, addition of RE capacities under various schemes, green energy policy of the**

state government, and targets of renewable power purchase obligation fixed by the MoP, GoI, under Energy Conservation Act would further precipitate the situation. Increasing availability of unwarranted surplus power and its backing down, on the one hand, and addition of RE capacities to the extent of its becoming surplus and storing it under BESS to meet peak demand are like creating the problem of availability of avoidable surplus power and in the name of resolving it to some extent, imposing additional burdens under BESS are ironical. It is like saying that surplus RE is required to store it under BESS and use it as and when required. How much RE was backed down during the last financial year? How much RE is likely to be backed down during FY 2026-27? How much thermal power has been, and to be, backed down in order to purchase must-run RE accordingly? General theory cannot justify availability of any quantum of surplus power. There should be a reasonable limit, say 5%, as is generally agreed, for availability of surplus power/capacity for generation for spinning reserve or reserve margin.

11. **The DISCOMs should clarify and substantiate with facts and figures about surplus power from which plants is proposed to be stored under BESS and when and benefits or otherwise thereof. The generalized contention of the DISCOMs that “TGDISCOMs submits that the proposal for BESS is based on system requirements and detailed cost benefit analysis, considering the renewable additions planned in the State. With increasing solar penetration, there are surplus conditions during solar hours and deficits during peak hours, and BESS facilitates time shifting of energy, thereby contributing to grid stability” evades to give factual position of what they have claimed to have done. In the light of projected requirement of market purchases to the tune of 11,641 MU against projected availability of the projected availability of surplus power of 18,286 MU (19.31%) for the current financial, how much power under BESS is required to avoid market purchases?**
12. **DISCOMs have explained that “it is further submitted that solar power, being must-run, will be fully utilized. The proposed approach is to charge BESS during solar hours through low-cost power (₹1.79/unit), including market purchases when prices are low or surplus solar availability exceeds demand, and discharge during peak hours when prices are higher. The effective delivered cost of ₹4.87–₹5.03/unit is significantly lower than the average market price during peak hours (₹6.51/unit), resulting in savings of about ₹1.48–₹1.64/unit, thereby reducing overall power purchase cost. Further, as per MoP guidelines on Energy Storage Obligation, at least 85% of the energy stored in BESS is to be sourced from RE on an annual basis, ensuring increased renewable energy utilization. Accordingly, BESS is not intended to store power indiscriminately, but to optimize power procurement costs, enhance RE utilization, and ensure reliable supply through an**

optimal power mix.” We request the Hon’ble Commission to examine the following points, among others:

- a) **This approach does not deal with the problem of availability of unwarranted surplus power at abnormal levels.**
 - b) **Even if it is presumed or true that RE also is becoming surplus, going by the spirit of the principle of merit order dispatch, high-cost RE only needs to be treated as surplus. In other words, RE with lesser cost needs to be supplied to the consumers first. Whether the calculations of the DISCOMs in taking into account the projected prices of RE and benefits under BESS are based on average cost or lower cost of RE available is not clear. As far as storing surplus power is concerned, average price of surplus power needs to be taken into account for a fair estimate of benefits under BESS.**
 - c) **With whimsical and even mutually contradictory guidelines and directions, MoP, GoI, is playing havoc. Its guideline that at least 85% of the energy stored in BESS is to be sourced from RE on an annual basis, ensuring increased renewable energy utilization, ignores the ground reality of continued availability of abnormal quantum of surplus thermal power and how to use it.**
 - d) **The contention of the DISCOMs that “BESS is not intended to store power indiscriminately, but to optimize power procurement costs, enhance RE utilization, and ensure reliable supply through an optimal power mix” reflects their helplessness to deal with the problem of availability of abnormal quantum of surplus power – a problem of their own creation, with the kind of decisions and directions of the central and state governments.**
 - e) **TGGENCO has pointed out that “the MoP Guidelines (Section1, Clause 1.3) acknowledge that thermal plants back down during solar hours but are essential during evening peaks. BESS installed near thermal plants, as the guidelines suggest, would be a more efficient arrangement. The submission’s point that TGGENCO’s own plants face merit order issues is a governance matter for TGERC to consider in the overall power procurement planning context.” All that the Hon’ble Commission can consider is to direct the DISCOMs to adhere to the principle of merit order dispatch.**
13. **GENCO has explained that “TGGENCO’s proposed BESS locations (Maheshwaam and Choutuppal) are at major EHT substations of TGTRANSCO – the highest voltage level of the grid. Power stored in BESS and discharged at EHT substation level directly**

feeds into the HT network with minimal transmission distance. T&D losses at EHT level are minimal (0.5-1%) and are already factored into the benefit calculations. The objector's concern about T&D losses is valid at LT consumer level but is operationally irrelevant at EHT substation level.” **Does it mean that the selected BESS units are intended to meet peak demand of HT consumers only? During the same peak hours, how do the DISCOMs meet demand of LT consumers? The explanation of GENCO avoids to respond to our queries** - Since the proposed BESS units are to be set up near sub-stations of TGTRANSCO, the power to be stored under BESS needs to be supplied to those units from the source of its generation, using transmission and distribution networks of TRANSCO and DISCOMs, causing transmission and distribution losses. If surplus power is to be stored under BESS, and if BESS units are set up near power stations whose power becomes surplus under merit order dispatch, it would contribute to avoidance of substantial transmission and distribution losses. Since no such arrangement is proposed to be made, the benefit of avoidance of transmission and distribution losses to the extent possible is missing.

14. **.GENCO has pointed out that trading margin of 0,5% of capacity charges works out to Rs.10.32 cre for the period of 15 years. Apart from the amount, provision for payment of trading margin and engaging intermediary procurer even for playing the role of a post office to receive bills from the BESS developers and forward them to the DISCOMs, as also payments to be made by the DISCOMs to the BESS developers through GENCO, are objectionable, as a matter of principle and propriety. Moreover, in the face of the ground reality of accumulation of dues of more than Rs.30,000 crores to be paid by the DISCOMs to GENCO for the power supplied by the latter, if DISCOMs continue to fail to pay BESS bills, what would be the consequences is anybody's guess.**
15. **Had the DISCOMs and TGGENCO given the summary in their petitions, as explained in their replies, it would have facilitated understanding of the issues and implications better. In the face of inadequacy of time to study the voluminous petitions and annexures, the hurry in which we are constrained to go through the documents partly and understand and analyse the issues has led to the kind of views expressed in our submissions and even miscalculation of treating millions as crores inadvertently. To that extent we stand corrected and request the Hon'ble Commission to permit us to withdraw the comment of “fraud”.**
16. **We request the Hon'ble Commission to take a holistic view of power situation in the state and implications of the proposed arrangement of BESS and issue an appropriate order, with necessary guidelines to the DISCOMs on how they themselves should take up competitive bidding process and how arrangements of**

BESS should be made in a prudent way and timely to reap maximum possible benefit in their future initiatives.

Thanking you,

Yours sincerely,

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