

Rajasthan Electricity Regulatory Commission

Petition no. 2372/2025

Petition filed under Section 63 and 86 (1)(b) of the Electricity Act, 2003 and all other powers enabling it in this behalf for Adoption of Tariff (Capacity Charges) for 1000 MW/2000MWh Standalone Battery Energy Systems in Rajasthan under Tariff Based Global Competitive Bidding with Viability Gap Funding Support under “BOO model”.

Coram:

Dr. Rajesh Sharma, Chairman

Sh. Hemant Kumar Jain, Member

Petitioner : Rajasthan Rajya Vidyut Utpadan Nigam Ltd.

Respondents :

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.
2. Jaipur Vidyut Vitran Nigam Ltd.
3. Ajmer Vidyut Vitran Nigam Ltd.
4. Jodhpur Vidyut Vitran Nigam Ltd.
5. Rajasthan Urja Vikas & IT Services Ltd.
6. State Load Dispatch Centre
7. Stockwell Solar Services Pvt. Ltd.
8. Oswal Cable Ltd.
9. Micromax Informatics Ltd.
10. Patanjali Renewable Energy Pvt. Ltd.
11. RCRS Innovations Ltd.
12. Viviana Power Tech Ltd.
13. Galaxy Mining and Royalties Ltd.
14. MANDA Projects Pvt. Ltd.
15. Mineralialmpex Private Ltd.
16. Onward Solar Power Pvt. Ltd.

17. S.T. Electricals Pvt. Ltd.

Date of hearing : 04.12.2025, 11.12.2025 and 19.12.2025

Present :

1. Sh. Kartik Seth, Advocate for Petitioner.
2. Sh. Ishan Kumawat, Advocate for Respondent RUVITL
3. Dr. Divya Swami, Representative for Patanjali Renewable Energy Pvt Ltd.
4. Ms Ritika Sharma, Representative for Stockwell Solar Services Pvt Ltd.
5. Sh. Mukesh Gupta, Representative for Micromax Informatics Ltd.

Date of Order:

12.01.2026

ORDER

1. Rajasthan Rajya Vidyut Utpadan Nigam Ltd. (hereinafter referred as 'RVUNL' or "Petitioner"), has filed the instant Petition under Section 63 and 86 (1)(b) of the Electricity Act, 2003 for Adoption of Tariff (Capacity Charges)for 1000 MW/2000 MWh Standalone Battery Energy Systems in Rajasthan under Tariff Based Global Competitive Bidding with Viability Gap Funding Support under "BOO model"..
2. Notices were issued to the Respondents to file their replies to the petition. Accordingly, Rajasthan Urja Vikas and IT Services Ltd. (RUVITL) submitted a common reply on 09.12.2025 on behalf of Respondent Nos. 2 to 5. RVPN filed its reply on 18.12.2025. The Petitioner filed rejoinder on 10.12.2025 and 18.12.2025 on the reply submitted by Rajasthan Urja Vikas Nigam Ltd. and RVPN respectively. All the successful bidders have submitted their consent via emails. RVUN also vide its submissions dated 17.12.2025 filed the compiled response of the successful bidders

3. During the hearing dated 04.12.2025 Commission directed the Petitioner to implead successful bidders as necessary parties and also provide the copy of the petition to them. Accordingly, Petitioner on 08.12.2025 impleaded the bidders who have participated in the bidding as necessary parties.
4. Thereafter, the matter was heard on 11.12.2025 wherein Counsel appearing for the Discoms submitted that they have filed their reply along with BESSA executed by them and requested that the same be taken on record. One of the successful bidders submitted that they received a copy of the petition yesterday and they may be granted time to respond. After hearing, the Commission directed the petitioner to ensure that copies of their petition are supplied to all the successful bidders, who may file their response within a week, if they wish to do so. The matter was finally heard on 19.12.2025.
5. Petitioner in its petition, additional submissions and during hearing has submitted as under:
 - 5.1 The Government of India, considering the variable nature of renewable energy and the associated challenges for grid stability, is promoting the development of Battery Energy Storage Systems (BESS). In this context, the Energy Department, Government of Rajasthan, vide its letter dated 25.10.2024, nominated RVUNL as the Battery Energy Storage System (BESS) Implementing Agency (BIA) and Intermediary Procurer for the implementation of 2000 MWh BESS projects in the State of Rajasthan under the Viability Gap Funding (VGF) Scheme, with roles and responsibilities as specified in the said letter.

5.2 Pursuant to that, The Ministry of Power (MOP), Government of India (GOI) vide email dated 28.03.2025/03.04.2025 proposed an allocation of 2000 MWh BESS capacity to Rajasthan with VGF support of Rs. 18 Lakh/MWh under the Power System Development fund (PSDF) scheme for installation within the financial year 2026-27.

5.3 A meeting was held under the chairmanship of Additional Secretary (P) on 03.04.2025 to review the implementation status of Scheme of viability Gap Funding (VGF) for development of BESS-reg. Thereafter, a review meeting chaired by the Hon'ble Chief Minister of Rajasthan on 12.05.2025 emphasized need of expediting the BESS implementation program. As per the Minutes of the meeting issued on 12.05.2025 by RREC, RVUNL was directed to initiate a fresh RfS/tender for 2000 MWh of BESS (with/without subsidy) by 15.06.2025.

5.4 RVUNL, vide its letter dated 14.05.2025, requested the Energy Department for nomination of RVUNL as the BESS Implementing Agency (BIA) for an enhanced capacity of 5000 MWh (with/without VGF support), in place of the earlier 2000 MWh capacity. Thereafter, the Energy Department, Government of Rajasthan, vide its letter dated 17.06.2025, nominated RVUNL as the BESS Implementing Agency for the extended capacity of 5000 MWh.

5.5 Ministry of Power GOI vide order dated 09.06.2025 introduced Viability Gap Funding (VGF) scheme for development of BESS supported through Power System Development Fund (PSDF) with following key feature:

S.N.	Entity	Details
1.	Eligible Entities	State Utilities or agencies authorized by State/Central Government
2.	Commissioning Period	18 months from BESPA signing

3.	VGF Disbursement	On Financial Closure, subject to submission of BG – 20%, On Commercial Operation Date (COD) – 50% Completion of 1 st year from COD– 30%.
4.	Storage Duration	2 hours, avg. 1.5 cycles/day (duration and cycles may vary) or may be varied by Eligible Entity/IAs.
5.	Model of Implementation	BOO/BOOT as per BESS TBCB Guidelines
6.	BESPA Period	12 to 15 years
7.	Bidding Parameter	Annualized fixed cost in ₹/MW/month or ₹/kWh (post VGF adjustment)
8.	BESPA Signing	Within 9 months of scheme notification (by 09.03.2026)
9.	Land and Grid Connectivity	To be provided by Eligible Entity (IA)

5.6 Under the above VGF scheme, the State of Rajasthan has been allocated VGF support for a BESS capacity of 4000 MWh. Accordingly, to avail the benefits of the VGF scheme and in line with the mandate issued to RVUNL for initiation of the tender for 2000 MWh BESS capacity, RVUNL, after discussions with RVPN (regarding suitable locations), RREC and RUVITL, has prepared the RfS document along with the BESPA and BESSA in accordance with the MoP Gazette Resolution dated 10.03.2022 and the provisions of the Viability Gap Funding (VGF) Scheme dated 09.06.2025.

5.7 The RfS/Tender was published on 16.06.2025 (Tender TN-04/2025-26) for "Setting up of 1000 MW/2000 MWh Standalone Battery Energy Systems under Tariff Based Global Competitive Bidding in Rajasthan with Viability Gap Funding Support under "BOO" model".

5.8 Board of Directors of RRVUNL passed Resolutions No.12/2025-26 on 04.09.2025, accorded its post-facto approval for the followings;

- Publishing tender for setting up 1000MW / 2000MWh BESS (2 hours Storage, 2 cycles per day) in Rajasthan under Viability Gap Funding (VGF) scheme for development of BESS supported through Power System Development Fund (PSDF) issued by Ministry of Power, GoI ;

- ii. PQR, Terms & Conditions of RFS Document, Battery Energy Storage Purchase Agreement (BESPA) and Battery Energy Storage Sales Agreement (BESSA); and
- iii. Amendments issued through corrigendum.

5.9 The technical bids were opened on 04.09.2025. A total of 50 bidders participated in the RfS process. Out of these, 48 bidders were found to be techno-commercially qualified. Accordingly, with the due approval of the Whole-Time Directors of RRVUNL, the price bids of the qualified bidders were opened on 01.10.2025.

5.10 Further, out of 48 bidders, 45 No. of Bidders considered qualified for e-Reverse Auction (e-RA) by removing H-1 & H-2 bidders and one bidder, i.e., M/s NNT Developers as the BG submitted by firm was not confirmed by the executing bankers hence not considered suitable to take further participation in E-Reverse Auction bidding process.

5.11 The E-RA committee conducted the E-reverse Auction after finalization of the opening-price, bid-decrement value as per terms & condition of RfS document. In E-Reverse Auction, following 11 Nos. successful bidders have quoted their prices (in INR/MW/Month) the summary of which are as under:

S. N.	Name of the Bidder	Capacity Allocation	Charges Quoted (INR/MW/Month)	Rank
1	Stockwell Solar Services Pvt. Ltd.	200 MW/400 MWh	1,77,500.00	L1
2	Oswal Cable Ltd.	100 MW/200 MWh	1,77,500.00	L2
3	Micromax Informatics Ltd.	50 MW/100 MWh	1,77,500.00	L3
4	Patanjali Renewable Energy Pvt. Ltd.	100 MW/200 MWh	1,77,500.00	L4
5	RCRS Innovations Ltd.	50 MW/100 MWh	1,77,500.00	L5
6	Viviana Power Tech Ltd.	100 MW/200 MWh	1,78,000.00	L6
7	Galaxy Mining and Royalties Pvt. Ltd.	100 MW/200 MWh	1,78,000.00	L7
8	MANDA Projects Pvt. Ltd.	100 MW/200 MWh	1,78,000.00	L8
9	Mineralia Impex Private Ltd.	50 MW/100 MWh	1,78,000.00	L9
10	Onward Solar Power Pvt. Ltd.	100 MW/200 MWh	1,78,500.00	L10
11	S.T. Electricals Pvt. Ltd.	50 MW/100 MWh	1,78,500.00	L11

5.12 Letter of Intent to the above successful bidders was issued on 21.10.2025 after approval of Whole Time Directors of RRVUNL. Bidders were allocated the locations for their projects in line with the Clause 5(d) and format 7.1 of the RfS document as under:

S.N.	Firm Name	Capacity Applied	Winners (INR/MW/Month)	Rank	Preferred GSS Locations	Final Allocation
1	Stockwell Solar Services Pvt. Ltd.	200 MW/400 MWh	1,77,500.00	L1	Chhattarghh/Badnu/Bhawad/Bhopalgarh/Badi Sid/Bap/Pugal/Palli	Chhattargh
2	Oswal Cable Ltd.	100 MW/200 MWh	1,77,500.00	L2	Badnu/Chhattargh/Bap	Badnu
3	Micromax Informatics Ltd.	50 MW/100 MWh	1,77,500.00	L3	Pugal	Pugal
4	Patanjali Renewable Energy Pvt. Ltd.	100 MW/200 MWh	1,77,500.00	L4	Badi Sid/Chhattargh	Badi Sid
5	RCRS Innovations Ltd.	50 MW/100 MWh	1,77,500.00	L5	Pugal/Palli/Bap/Bhopalgarh/Badi Sid/Badnu/Chhattargh/Bhawad	Palli
6	Viviana Power Tech Ltd.	100 MW/200 MWh	1,78,000.00	L6	Bhopalgarh/Badi Sid/Pugal/Palli/Bap	Bhopalgarh
7	Galaxy Mining and Royalties Ltd.	100 MW/200 MWh	1,78,000.00	L7	Pugal	Bhawad
8	MANDA Projects Pvt. Ltd.	100 MW/200 MWh	1,78,000.00	L8	Badnu/Chhattargh/Bap/Pugal/Bhawad/Palli/Bhopalgarh/Badi Sid	Badnu
9	Mineralalm pex Private Ltd.	50 MW/100 MWh	1,78,000.00	L9	Pugal	Bhawad
10	Onward Solar Power Pvt. Ltd.	100 MW/200 MWh	1,78,500.00	L10	Chhattargh//Badi Sid/Bhopalgarh/Bap/Badnu/Bhawad/Pugal/Palli	Bap
11	S.T. Electricals Pvt. Ltd.	50 MW/100 MWh	1,78,500.00	L11	Pugal	Bhawad

5.13 Further, as per the Clause 44 (a) of RfS document, Letter of Awards (LoAs) 31.10.2025 was issued to the above successful bidders. Approval of Board of Directors of RVUNL has also been obtained vide Resolution No. 15/2025-26 dated 30.10.2025. The Acceptance of all the successful bidders has been received.

5.14 Further, in-line with the clause 45.13 of the RfS, "Buying Entity" defined as 'RVUNL that utilizes the BESS for meeting the State Power on demand/merchant sale requirements to End Procurer i.e. RUVITL/DISCOMs'. Accordingly, to supply the BESS Power to End Procurer, i.e., RUVITL/DISCOMs, Battery Energy Storage Sale Agreement (BESSA) shall be signed between RVUNL and RUVITL.

5.15 Further, In line with the Clause 22 of the RfS "Battery Energy Storage Purchase Agreement (BESPA)" RVUNL shall enter into Battery Energy Storage Purchase Agreement (BESPA) with Bidders selected based on the RfS. This BESS Power shall further be supplied to the State DISCOMs. The BESPA with all the BESS Developers is under process.

5.16 The Certificate dated 18.11.2025 for Compliance with Guidelines for Procurement and Utilization of Battery Energy Storage Systems (BESS) has also been placed on record.

5.17 In respect of the above-mentioned points, RRVUNL has prayed for adoption of Tariffs (capacity charges) under section 63 of Electricity Act 2003 for NIT No: TN-04/2025-26 issued for "Setting up of 1000 MW/2000 MWh Standalone Battery Energy Systems under Tariff Based Global Competitive Bidding in Rajasthan with Viability Gap Funding Support under "BOO" model".

6. Respondents No. 2 to 5 vide their common reply have placed on record the copy of Battery Energy Storage Sale Agreement (BESSA) executed by RVUN and Respondent RUVITL on behalf of Discoms on 25.11.2025.
7. Respondent RVPNL, in its reply, submitted that the locations of the successful bidders are in accordance with the GSSs identified and provided by RVPN, and that RVPNL has agreed to the locations allocated to the successful bidders.
8. All the successful bidders as Respondent also submitted that they have no objection to the petition.

Commission's view

9. Commission has considered the submissions, reply and oral arguments made on behalf of the Petitioner and the Respondents.
10. Petitioner has prayed to adopt the Tariff (capacity charges) under section 63 of Electricity Act 2003 for NIT No: TN-04/2025-26 issued for "Setting up of 1000 MW/2000 MWh Standalone Battery Energy Systems under Tariff Based Global Competitive Bidding in Rajasthan with Viability Gap Funding Support under "BOO" model".
11. Petitioner submitted that this project aims to enhance grid stability, optimize renewable energy utilization, and support Rajasthan's transition to a sustainable energy future. Government of India also encouraging Battery Energy Storage System (BESS) as a crucial component of the national energy strategy for renewable energy integration and to enhance grid stability.
12. Respondent RUVITL submitted a copy of the Battery Energy Storage Sale Agreement (BESSA) executed between RVUN and Respondent RUVITL, on

behalf of the Discoms, on 25.11.2025. RUVITL further submitted that it has already signed the BESSA and has no objection to the prayer of the Petitioner

13. Commission observes that Petitioner has filed this petition seeking adoption of Tariff (Capacity Charges) for 1000 MW/2000 MWh Standalone Battery Energy Systems with Viability Gap Funding Support under "BOO model", as per MoP's guidelines issued vide notification dated 10.03.2022 and operational guidelines dated 09.10.2024, for procurement and utilization of Battery Energy Storage Systems.
14. The Commission observes that Section 63 of the Electricity Act, 2003 provides as under:

"Section 63 - Determination of tariff by bidding process
Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government."
15. Thus, the Act mandates the Appropriate Commission to adopt the tariff determined through a transparent competitive bidding process conducted in accordance with the guidelines issued by the Central Government.
16. Considering the above background and submissions on record, the Commission frames following issues for its consideration:
 - a. Whether a fair and transparent competitive bidding process has been conducted by RRVUNL?
 - b. Whether the tariff discovered through the competitive bidding process is in line with prevailing market conditions?

Issue A: Whether a fair and transparent competitive bidding process has been conducted by RRVUNL?

17. RRVUNL submitted that the bidding process conducted to discover the Tariff is based on the “Guidelines for procurement and utilization of battery Energy Storage Systems” dated 10.03.2022 issued by GOI.
18. It is noted that the RfS/Tender was published on 16.06.2025 (Tender TN-04/2025-26) for “Setting up of 1000 MW/2000 MWh Standalone Battery Energy Systems under Tariff Based Global Competitive Bidding in Rajasthan with Viability Gap Funding Support under “BOO” model”.
19. It is noted that the technical bids were opened on 04.09.2025. A total of 50 bidders participated in the RfS process, of which 48 bidders were found to be techno-commercially qualified. Accordingly, the price bids of the qualified bidders were opened on 01.10.2025.
20. Further, out of these 48 bidders, 45 bidders were considered eligible for participation in the e-Reverse Auction (e-RA) after removal of the H-1 and H-2 bidders. Further, one bidder, M/s NNT Developers, was excluded as the Bank Guarantee submitted by the firm could not be confirmed by the issuing bank and, therefore, was not considered suitable for further participation in the e-RA process.
21. The e-RA Committee conducted the e-Reverse Auction after finalising the opening price and bid-decrement value in accordance with the terms and conditions of the RfS document. In the e-Reverse Auction, the following 11 bidders emerged successful and quoted tariffs (in INR/MW/Month), the summary of which is as under:

S. N.	Name of the Bidder	Capacity Allocation	Charges Quoted (INR/MW/Month)	Rank
1	Stockwell Solar Services Pvt. Ltd.	200 MW/400 MWh	1,77,500.00	L1
2	Oswal Cable Ltd.	100 MW/200 MWh	1,77,500.00	L2
3	Micromax Informatics Ltd.	50 MW/100 MWh	1,77,500.00	L3
4	Patanjali Renewable Energy Pvt. Ltd.	100 MW/200 MWh	1,77,500.00	L4
5	RCRS Innovations Ltd.	50 MW/100 MWh	1,77,500.00	L5
6	Viviana Power Tech Ltd.	100 MW/200 MWh	1,78,000.00	L6
7	Galaxy Mining and Royalties Pvt. Ltd.	100 MW/200 MWh	1,78,000.00	L7
8	MANDA Projects Pvt. Ltd.	100 MW/200 MWh	1,78,000.00	L8
9	Mineralia Impex Private Ltd.	50 MW/100 MWh	1,78,000.00	L9
10	Onward Solar Power Pvt. Ltd.	100 MW/200 MWh	1,78,500.00	L10
11	S.T. Electricals Pvt. Ltd.	50 MW/100 MWh	1,78,500.00	L11

22. We observe that for NIT-TN: 04/2025-26, Petitioner has also filed a certificate certifying that; Bidding process, technical & financial evaluation and Award of Order has been done in conformity to the provisions of "Guidelines for Procurement and Utilization of Battery Energy Storage Systems (BESS) as part of Generation, Transmission, and Distribution Assets, including Ancillary Services" issued by the Ministry of Power, Government of India, vide notification dated 10.03.2022. Thus, the complete exercise has been done correctly.
23. In view of the certificate submitted by RVUNL, it is established that transparent process of bidding has been done in accordance with the guidelines notified by the Government of India. Respondents/ Stakeholders also not objected on the issues of transparency in the bidding process.
24. Accordingly, the Commission concludes that fair and transparent competitive bidding as per bidding guidelines issued by GoI under Section 63 of the Act has been followed by Petitioner.

Issue B: Whether the tariff discovered through the competitive bidding process is in line with prevailing market conditions?

25. RVUNL submitted that the tariff for the 1000 MW/2000 MWh Standalone Battery Energy Storage System (BESS) has been discovered through a transparent competitive bidding process. The tariff so discovered ranges between Rs.1,77,500/MW/month and Rs.1,78,500/MW/month.
26. The Commission observes that, in recent petitions filed for adoption of tariff in respect of Standalone Battery Energy Storage Systems (BESS), the tariffs discovered range between Rs.2,16,000/MW/month and Rs.2,24,000/MW/month.
27. In view of the above, the Commission observes that the tariff discovered in the present bidding process is among the lowest tariffs discovered in recent bids by other entities.
28. Considering the same, it can be concluded that the Tariff discovered in the present bidding process is reasonable and reflective of the current market trends. Thus the tariff discovered is found to be market aligned.
29. We further observe that Battery Energy Storage Systems (BESS) play a crucial role in integrating variable renewable energy by storing excess generation and supplying it during periods of shortfall. They enhance overall grid stability, resilience, and reliability. BESS also facilitates higher renewable penetration and reduces dependence on conventional generation.
30. Apart from above, the Commission notes that RERC (Renewable Purchase Obligation) Regulations, 2023 stipulates Energy Storage Obligation (ESO) trajectory till FY 2029-30. The notified trajectory is as below:

S. no.	Year	Storage (on Energy basis)
1.	2024-25	1.5%
2.	2025-26	2.0%
3.	2026-27	2.5%
4.	2027-28	3.0%
5.	2028-29	3.5%
6.	2029-30	4.0%

31. Thus, the requirement as per these Regulations also justifies the procurement of BESS capacity by Discoms/RUVITL. In view of above, the proposed quantum of 1000 MW/2000 MWh Standalone Battery Energy Systems seems to be justified.
32. It is further observed that the Board of Directors of RVUN has accorded approval vide Resolution dated 30.10.2025 for issuance of the Letter of Intent to the successful bidders for setting up of 1000 MW/2000 MWh Battery Energy Storage System (BESS) (2 hours storage, 2 cycles per day) in the State of Rajasthan under the Viability Gap Funding (VGF) scheme for development of BESS, supported through the Power System Development Fund (PSDF) issued by the Ministry of Power, Government of India, and also for award of contracts to the successful bidders.
33. It is also noted that none of the Respondents, namely RVPN, RUVITL, Discoms or the successful bidders, have raised any objection to the proposal and/or the tariff discovered through the competitive bidding process.
34. Accordingly, in line with the mandate under Section 63 of the Electricity Act 2003, the Commission considers it appropriate to adopt the tariff for Setting up of 1000 MW/2000 MWh Standalone Battery Energy Systems

(BESS) (2 hours storage, 2 cycles per day) in Rajasthan with Viability Gap Funding (VGF) under “BOO” model as under:

Firm Name	Capacity Applied	Charges Quoted (INR/MW/ Month)	Rank	Allocation
Stockwell Solar Services Pvt. Ltd.	200 MW/400 MWh	1,77,500.00	L1	Chhattargh
Oswal Cable Ltd.	100 MW/200 MWh	1,77,500.00	L2	Badnu
Micromax Informatics Ltd.	50 MW/100 MWh	1,77,500.00	L3	Pugal
Patanjali Renewable Energy Pvt. Ltd.	100 MW/200 MWh	1,77,500.00	L4	Badi Sid
RCRS Innovations Ltd.	50 MW/100 MWh	1,77,500.00	L5	Palli
Viviana Power Tech Ltd.	100 MW/200 MWh	1,78,000.00	L6	Bhopalgarh
Galaxy Mining and Royalties Ltd.	100 MW/200 MWh	1,78,000.00	L7	Bhawad
MANDA Projects Pvt. Ltd.	100 MW/200 MWh	1,78,000.00	L8	Badnu
Mineralialmpex Private Ltd.	50 MW/100 MWh	1,78,000.00	L9	Bhawad
Onward Solar Power Pvt. Ltd.	100 MW/200 MWh	1,78,500.00	L10	Bap
S.T. Electricals Pvt. Ltd.	50 MW/100 MWh	1,78,500.00	L11	Bhawad

35. We also direct the Petitioner that for the purpose of transparency after execution of the BESPA, to publicly disclose the name (s) of the successful bidder(s) and the tariff quoted by them, for a period of 30 days on its

website in terms of the bidding guidelines as amended for knowledge and information of the stakeholders.

36. Petitioner is further directed to submit the copy of duly executed Battery Energy Storage Purchase Agreement (BESPA) for records of the Commission.
37. The petition is disposed of accordingly.

(Hemant Kumar Jain)
Member

(Dr. Rajesh Sharma)
Chairman