## THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

## LUCKNOW

## Petition No. 2380 of 2026

**QUORUM**

Hon'ble Shri Arvind Kumar, Chairman

Hon'ble Shri Sanjay Kumar Singh, Member

**IN THE MATTER OF**

Petition under Section 63 read with Section 86(1)(b) and Section 86(1)(e) of the Electricity Act, 2003 read with Regulation 15 of the UPERC (Conduct of Business) Regulations, 2019, seeking the approval for the long-term joint procurement of 1130 MWh energy through competitive bidding for Battery Energy Storage System by Uttar Pradesh Power Corporation Ltd. and Madhya Pradesh Power Management Corporation Ltd. for a period of 15 years.

**AND**

**IN THE MATTER OF**

**Uttar Pradesh Power Corporation Limited (UPPCL),**

*Through its Superintending Engineer,*

Shakti Bhawan Extension, 14-Ashok Marg, Lucknow ....... Petitioner

**FOLLOWING WERE PRESENT**

1. Sh. Divyanshu Bhatt, Advocate, UPPCL
2. Sh. Shashwat Singh, Advocate, UPPCL
3. Sh. Abhayaditya Singh, Advocate, UPPCL
4. Sh. Manish Dwivedi, CE (PPA), UPPCL
5. Sh. Vikas Gupta, EE (PPA), UPPCL

## ORDER
## (DATE OF HEARING: 02.06.2026)

1. The Petitioner, UPPCL filed this Petition for seeking approval for the procurement of 1130 MWh Battery Energy Storage System (BESS) energy jointly with Madhya Pradesh Power Management Corporation Ltd. (MPPMCL) through competitive bidding process for a period of 15 years. The prayers of the Petitioner are as follows:

   a) Admit the instant Petition.

   b) Approve the overall joint procurement of 1130 MWh energy through competitive bidding for Battery Energy Storage System by the Uttar Pradesh Power Corporation Limited and Madhya Pradesh Power Management Corporation Limited for a period of 15 years; and

   c) Pass any such other and further order(s) as this Commission may deem fit and necessary in the facts and circumstances of the present case.

**Background of the case**

2. The Petitioner has mainly submitted the following in the Petition:

a) As part of its intended Nationally Determined Contributions under the framework of the Paris Agreement, the Republic of India is committed to achieving a target of 50% of its installed capacity of electric power generation from non-fossil fuel sources by the year 2030. Under the aegis of the National Solar Mission, the Ministry of New and Renewable Energy (i.e., MNRE), Government of India, has set an ambitious target of achieving 500 GW of installed Renewable Energy capacity by the year 2030. While significant progress is being made through the installation of Renewable Energy-based projects, a parallel policy focus has been directed towards the development of decentralized solar and other renewable energy-based generation and storage systems, particularly in the rural and agricultural sectors.

b) The Ministry of Power (i.e., MoP), Government of India had issued a notification dated 27.09.2025 vide which, it had mandated the power distribution companies to prepare an RPO roadmap with target for FY 2026-27 at 35.95% further increasing to 43.33%

in FY 2029-30. The new RPO trajectory vide said notification dated 27.09.2025 is given below:

| FY | Wind | Hydro | Distributed RE | Other RE | Total |
|---|---|---|---|---|---|
| 2024-25 | 0.67% | 0.38% | 1.50% | 27.36% | 29.91% |
| 2025-26 | 1.45% | 1.22% | 2.10% | 28.24% | 33.01% |
| 2026-27 | 1.97% | 1.34% | 2.70% | 29.94% | 35.95% |
| 2027-28 | 2.45% | 1.42% | 3.30% | 31.64% | 38.81% |
| 2028-29 | 2.95% | 1.42% | 3.90% | 33.09% | 41.36% |
| 2029-30 | 3.48% | 1.33% | 4.50% | 34.02% | 43.33% |

c) The MoP, through the aforesaid notification dated 27.09.2025, provided the criteria to meet the obligation against each category. However, 100% fungibility has been provided between Wind, Hydro and Other Renewable sources under the notification. Distributed RE is to be treated as non-fungible for its shortfall, but its surplus may be utilized to offset other components. The RPO criteria are outlined below:

i. Wind: shall be met from the Wind Power Projects commissioned after 31.03.2024.

ii. Hydro: shall be met from Hydro Power Projects commissioned after 31.03.2024, including through the free power being provided to States or Discoms by such Projects, and also from Central Government-approved Projects located outside India.

iii. Distributed RE: shall be met only from energy generated by RE projects that are less than 10 MW in size, including all solar configurations and other RE sources notified by the Central Government.

iv. Other RE: may be met by energy produced from any RE projects other than specified under Wind, Hydro, and Distributed RE hereinabove and shall comprise energy from all Wind Power Projects, Hydro Power Projects commissioned before 01.04.2024, and co-firing of biomass pellets and charcoal produced from Municipal Solid Waste.

d) The aforementioned notification dated 27.09.2025 also provides that any shortfall in RPO targets will be treated as non-compliance and that a penalty may be imposed as per the amended Energy Conservation Act, 2001 (EC Act) and the rules made thereunder. The MNRE, vide its letter dated 01.02.2024, had earlier notified that additional penalty shall also be levied to the tune Rs.3.72/unit for each unit of shortfall in meeting RE consumption norms as per the provisions of the EC Act. As on November 2025, the fuel-wise contracted capacity of UPPCL is as below:

| Source | Contracted Capacity (MW) | Percentage (%) |
|---|---|---|
| Coal | 25,137 | 69.80% |
| Gas | 549 | 1.50% |
| Nuclear | 370 | 1.00% |
| Biomass+Bagasse+Slop+MSW | 1,498 | 4.20% |
| Hydro + Small Hydro | 3,948 | 11.00% |
| Wind | 1,556 | 4.30% |
| Solar | 2,937 | 8.20% |
| **Total** | **35,995** | **100%** |

e) The Central Electricity Authority (CEA) furnished its Report on Resource Adequacy Plan (Generation) for UPPCL (FY 2026-27 to FY 2035-36) (Version 2.0), as per the Resource Adequacy Guidelines dated 28.06.2023 issued by the MoP, in April 2026. The Report noted that total projected contracted capacity for the year 2035-36 shall be approximately 1,34,749 MW. Of this, 13,938 MW would be procured from Energy Storage System (ESS), comprising of 887 MW of 2-hour ESS and 13051 MW of 4-hour ESS. The Report further noted that additional energy storage requirements could be met from power tie up from Pumped Hydro Storage Plants (PSP) or a combination of PSP and BESS.

f) Considering of technological advancements, Renewable Energy has emerged as a cost-effective and sustainable source. While initial capacities have been successfully integrated into the grid, increased penetration of renewable energy is likely to give rise to operational challenges, particularly on account of supply-demand mismatches, as such generation is inherently intermittent and largely coincides with periods of low demand, thereby necessitating curtailment in certain instances. To address such constraints, integration of ESS with Renewable capacity is essential. Given the limited availability and long gestation period of pumped hydro projects, BESS constitutes a critical solution for ensuring resource adequacy, meeting peak demand, enabling firm and dispatchable RE, and enhancing grid resilience and operational efficiency.

g) On 25.04.2025, a joint meeting was called between UPPCL and MPPMCL wherein it was noted that energy demands of UPPCL and MPPMCL were of a complementary nature. Accordingly, on 09.06.2025, MPPMCL extended a proposal to UPPCL for setting up a BESS Project.

h) UPPCL found the joint complementary bid proposed by MPPMCL to be prudent. The projected savings for UPPCL ranged from Rs.1.34/kWh to Rs.2.39/kWh in such a joint bidding scenario. At the same time, it was found that for a solo bid by UPPCL, tentative savings would range from Rs 0.70/unit to loss of Rs.0.11/unit.

i) To implement the proposed joint bid, UPPCL requested the MoP to extend VGF applicability to cover complementary/shared BESS Projects. The MoP granted its approval to UPPCL and MPPMCL, subject to the prior approval of the respective State Electricity Regulatory Commissions. The said approval has enabled both States to advance the process of structuring a coordinated procurement mechanism in alignment with the national objectives of grid stability, optimal utilization of resources, and reduction in overall project cost.

j) Subsequently, UPPCL and MPPMCL commenced the formulation of tender framework for the combined procurement of BESS energy for both States through a single or complementary bidding process. Such a framework is intended to secure economies of scale, ensure discovery of more competitive tariffs, and facilitate enhanced utilisation of energy storage assets. It would further provide greater operational flexibility during peak demand periods and strengthen the reliability of grid support across the region.

k) On 03.03.2026, the MoP conveyed its willingness to extend VGF support at the rate of Rs.12 Lakhs/MWh or 30% of the Capital Cost of the project, whichever is lower, for the development of 1130 MWh of BESS capacity under the proposed joint procurement, with the total VGF amounting to Rs.135.60 crore, to be disbursed in five tranches.

l) As per the MoP's letter dated 03.03.2026, timelines for intimation to the CEA and the BESS Implementation Agencies, as well as for execution of the Battery Energy Storage System Procurement Agreements (BESSPAs) for the allocated capacity shall commence from the date 03.03.2026, in substitution of the date of issuance of the Operational Guidelines for State Component under the VGF Scheme for development of BESS. The Operational Guidelines were issued on 09.10.2024, which constitute the governing framework for implementation of the jointly allocated BESS capacity.

m) UPPCL and MPPMCL shall ensure a minimum local content of 50% of the total project cost in the BESS procurement, which shall include, inter alia, indigenously developed Energy Management System application software, as a condition precedent for disbursement of funds under the State Component. The awarded project shall be required to achieve financial closure within six months from the date of execution of the BESSPA. The salient features of the bidding process shall be as follows:

(i) **Tender:** MPPMCL to prepare draft bid documents in consultation with UPPCL.

(ii) **Supply Allocation:**

a. May to October: UPPCL

b. November to April: MPPMCL

(iii) **PPA Tenure:** 15 years from the date of signing of the BESSPA.

(iv) **Cycle duration:** 4-hour BESS configuration aligned with system requirements.

(v) **Cycle Utilisation:** Provision for ~6300 cycles over the contract period.

(vi) **Location of the Project:** Location agnostic with ISTS Connectivity.

(vii) **Project Configuration:** Co-located BESS project proposed to avail 100% waiver of ISTS charges, considering COD of the project by 30.06.*2028 (MOP notification dated 10.06.2025 for ISTS charges waiver for co-located BESS project)*

(viii) **Tentative timeline for issuance of LOAs:** 03.06.2026

(ix) **Tentative timeline for financial closure:** within six months from the date of signing of the BESSPA(s).

(x) **Battery Degradation:** Maximum 2% per annum, with minimum 70% capacity retention at end of term.

n) In the interest of operational efficiency and the timely implementation of the proposed Project, MPPMCL and UPPCL have sought to undertake a joint bidding process, not through an intermediary procurer as provided vide the BESS Guidelines. Deviations therefrom are subject to the prior approval of the Appropriate Government. Accordingly, as agreed between the two parties, MPPMCL shall obtain the requisite approvals from the MoP in terms of Section 2(5)(a)(ii) of the Act.

o) Accordingly, UPPCL has prayed before the Commission to approve the proposed joint procurement of 1130 MWh energy through competitive bidding for BESS for a period of 15 years.

**Records of Proceedings**

3. During the hearing, Sh. Divyanshu Bhatt, Counsel for UPPCL, submitted that instant matter pertained to approval of long-term jointly procurement of 1130 MWh BESS energy by UPPCL and MPPMCL under competitive bidding process. On specific query of the Commission regarding timeline of 03.06.2026, Sh. Bhatt responded that MPPMCL has sought time extension of three months from the MoP for completing the bidding process. He further added that proposed bidding process shall be conducted by MPPMCL and in case of any deviation from the prescribed bidding guidelines, necessary approval shall be obtained from the MoP being the Appropriate Government.

4. In response to the Commission query about daily discharge cycle, Sh. Manish Dwivedi on behalf of UPPCL submitted that it is a four-hour discharge cycle under Composite tariff model. He further added that MPERC, in a similar Petition filed by MPPMCL, has already reserved the Order. Sh. Bhatt further requested the Commission for reserving the Order in the matter.

**Commission's View**

5. UPPCL by way of this Petition is seeking quantum approval for 1130 MWh BESS energy in association with MPPMCL for a period of 15 years under the MoP's Viability Gap Funding Scheme through TBCB process.

6. The Commission observes that the proposed procurement is to be undertaken through competitive bidding in accordance with MoP BESS Guidelines dated 10.03.2022 and Operational Guidelines dated 09.10.2024. Further, in the present case, Madhya Pradesh Power Management Corporation Ltd., has been authorized by UPPCL to conduct bidding process for this 1130 MWh BESS energy procurement under Section 63 of the Electricity Act, 2003. The Bidder/(s) selected by the MPPMCL based on the Bidding documents shall provide BESS energy to UPPCL (during May to October) and MPPMCL (during November to April) of the calendar year.

7. **In view of above, the Commission accords its approval for procurement of 1130MWh BESS energy from ISTS connected BESS project by UPPCL in joint arrangement with MPPMCL for a period of 15 years under the Viability Gap Funding Scheme. UPPCL is directed to expedite the process within the time**

**limits to avail VGF benefits extended by the MoP. Further, UPPCL is also directed to approach the Commission for approval of BESSPA.**

The Petition stands disposed of in terms of above.

Sanjay

**(Sanjay Kumar Singh)**
**Member**

**(Arvind Kumar)**
**Chairman**

Place: Lucknow
Dated: 16.06.2026