

EnergyWatts

Monthly update on India's energy storage market

September 2026

1. ESS tendering trends

India tendered about 3.16 gigawatts (GW) of energy storage capacity in August 2026, an increase of around 85% both year-on-year (YoY) and month-on-month. The entire capacity comprised standalone battery energy storage system (BESS) projects.

1.1 ESS tendering in August 2026

- Tendering authorities issued 3,157 megawatts (MW)/11,859 megawatt-hours (MWh) of grid-scale energy storage capacity through build-own-operate (BOO)/build-own-operate-transfer (BOOT) tenders in August 2026. All tendered capacity was for standalone BESS projects (Table 1).
- In a notable departure from conventional grid-scale BESS deployments, Jaipur Vidyut Vitran Nigam Limited (JVVNL) issued a pilot tender for 2MW/4MWh of decentralised BESS. The project spans multiple distribution transformer locations on the low-tension (LT) side, split into 20 units of 0.1MW/0.2MWh each. The pilot could pave the way for wider deployment of decentralised BESS across India if it proves effective in managing reverse power flow during peak solar hours, providing a potential model for other states as distributed solar capacity expands under schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan (PM-KUSUM) and PM Surya Ghar: Muft Bijli Yojana (PMSGY).
- In a first-of-its-kind procurement, the Solar Energy Corporation of India (SECI) issued a tender for the short-term, on-demand utilisation of 50MW/100MWh of operational standalone energy storage system (ESS) connected to the inter-state transmission system (ISTS). The approach mirrors the capacity market-based procurement in other countries. The selected developer will make the capacity available to SECI for scheduled charging and discharging against a monthly capacity charge.
- Four-hour BESS configurations dominated tender issuance in August 2026, accounting for around 87% of the total power capacity, followed by two-hour systems at around 10% and 2.5-hour systems at around 3%.

Table 1: Major project development tenders¹ (BOO/BOOT) issued in August 2026

Tender name	Location	MW	MWh	Commissioning timeline (in months)	Classification	Per day cycles	Operating tenure (years)	Scope
RVUNL 1,500MW /6,000MWh BESS	Rajasthan	1,500	6,000	18	Standalone	1	15	- No viability gap funding (VGF) support - Developer must self-procure land or use designated space near RVPN/RVUNL substations
GUVNL 1,000MW/ 4,000MWh BESS	Gujarat	1,000	4,000	18	Standalone	1	15	- No VGF support - Developer must self-procure land near GETCO substations 2 cycles per day operation possible, up to 480 annual cycles
SJVN 265MW/ 530MWh BESS*	Haryana	265	530	15	Standalone	2	12	- VGF support of INR18 lakh/MWh (USD18,854/MWh)² - Procurer provides land near substations
RVUNL 250MW/ 1,000MWh BESS	Rajasthan	250	1,000	18	Standalone	1	15	- No VGF support - Developer must self-procure land or utilise designated space near RVPN/RVUNL substations

Source: Tendering authorities, JMK Research

Note: Only tenders with capacity ≥100MW have been included in the table.

*Tender has been re-issued by SJVN, earlier issued in December 2025.

1.1.1 Storage EPC tenders in August 2026

In August 2026, 192MW of storage engineering, procurement, and construction (EPC) capacity was tendered. Coal India Limited led with a 187.5MW/750MWh standalone BESS procurement, accounting for around 98% of the total. UPNEDA and MAHAPREIT issued smaller rooftop solar-plus-storage procurements of 2.5MW and 2MW, respectively

¹This report classifies BOO and BOOT tenders together under 'project-development tenders', in which the developer builds, owns and operates (BOO) the asset, or builds, owns and operates it for a fixed concession period before transferring it to the procurer (BOOT). Both structures require the developer to undertake full project development, distinguishing them from engineering, procurement, and construction (EPC) tenders, where the contractor holds no ownership stake, and delivers only construction services. Later chapters use 'project-development tenders' as shorthand for this combined BOO/BOOT category.

²USD1 = INR95.47

1.2 Capacity awarded in August 2026

In August 2026, 3,250MW of ESS capacity was awarded across four tenders, comprising 2,500MW of firm and dispatchable renewable energy (FDRE), and 750MW/2,100MWh of standalone BESS (Table 2).

Table 2: Tender-wise capacity awarded in August 2026

Tender name	Location	Classification	Capacity awarded (MW)	Lowest tariff	Winner details (winner name – capacity won – tariff)
SECI 1,500MW/ 6,000MWh FDRE*	Pan-India	FDRE (assured peak supply)	1,500	INR5.99/kilowatt-hour (kWh)	- Waaree Forever Energies – 700MW – INR5.99/kWh (USD0.063/kWh) - NTPC REL – 500MW – INR6.00/kWh (USD0.063/kWh) - ACME Solar Holdings – 300MW – INR6.00/kWh (USD0.063/kWh)
SECI 1,000MW round-the-clock thermal mimic (RTC-TM)	Pan-India	FDRE (RTC)	1,000	INR5.25/kWh	- EMIF II Holding V II Coöperatief (A.P. Moller Capital) – 100MW – INR5.25/kWh (USD0.055/kWh) - Hero Solar Energy Private Limited – 120MW – INR5.25/kWh (USD0.055/kWh) - Purvah Green Power Private Limited (CESC Ltd) – 70MW – INR5.25/kWh (USD0.055/kWh) - Resolven Four Energy Private Limited – 150MW – INR5.25/kWh (USD0.055/kWh) - Kengeri Prime Solar Power Private Limited (Rays Power Infra Limited) – 180MW – INR5.25/kWh (USD0.055/kWh) - Hexa Climate Solutions Private Limited – 150MW – INR5.26/kWh (USD0.055/kWh) - Juniper Green Energy Limited (JGEL) – 230MW – INR5.26/kWh (USD0.055/kWh)
WBSEDCL 500MW/ 2,000MWh BESS**	West Bengal	Standalone	300	INR4.35 lakh/MW/month	- NTPC Green Energy Limited (NGEL) – 200MW – INR4.35 lakh/MW/month (USD4,556/MW/month) - Jupiter Wagons Limited (JWL) – 100MW – NA
GUVNL 450MW/ 900MWh BESS	Gujarat	Standalone	450	INR2.32 lakh/MW/month	- NLC India Renewables Limited – 275MW – INR2.32 lakh/MW/month (USD2,430/MW/month) - Sun Drops Energia Limited – 175MW – INR2.32 lakh/MW/month (USD2,430/MW/month)

Source: Tendering authorities, JMK Research

NA: Not available

* Tender issued at 1,200MW/4,800MWh, awarded at 1,500MW/6,000MWh post amendments.

**Award information limited to 300MW of the total 500MW capacity tendered.

- WBSEDCL's 500MW/2,000MWh BESS tender, awarded in August 2026, discovered tariffs of INR4.35–4.39 lakh/MW/month (USD4,556–4,598/MW/month), about 25% higher than the INR3.47 lakh/MW/month (USD3,634/MW/month) discovered for its comparable 250MW/1,000MWh tender awarded in January 2026.
- GUVNL's 450MW/900MWh BESS tender, awarded in August 2026, discovered a tariff of INR2.32 lakh/MW/month (USD2,430/MW/month), about 10.5% higher than INR2.1 lakh/MW/month (USD2,199/MW/month) discovered for its comparable 335MW/670MWh tender awarded in February 2026.
- SECI's 1,500MW/6,000MWh assured-peak FDRE tender discovered a record-low tariff of INR5.99/kWh (USD0.063/kWh), about 11% below the INR6.74/kWh (USD0.071/kWh) discovered for SJVN's comparable 1,500MW/6,000MWh tender in October 2025.
- SECI concluded its 1,000MW RTC-TM auction, allocating the full capacity across seven developers at INR5.25–5.26/kWh. The tender combines renewable generation with mandatory storage to deliver firm, thermal-like power, with no exposure to fuel price volatility. It also sets stringent demand fulfilment ratio (DFR) requirements, including 90% availability during the daily six-hour peak window, 80% availability during off-peak periods, and 90% annual compliance, with shortfalls penalised at 1.5 times the power purchase agreement (PPA) tariff.

1.3 PPAs signed in August 2026

Following earlier capacity awards, three storage-linked utility projects totalling around 850MW progressed to the PPA signing stage in August 2026. Additionally, a commercial and industrial (C&I) solar-plus-BESS PPA of 5 megawatt-peak (MWp) + 4MWh capacity was also signed in August 2026. (Table 3).

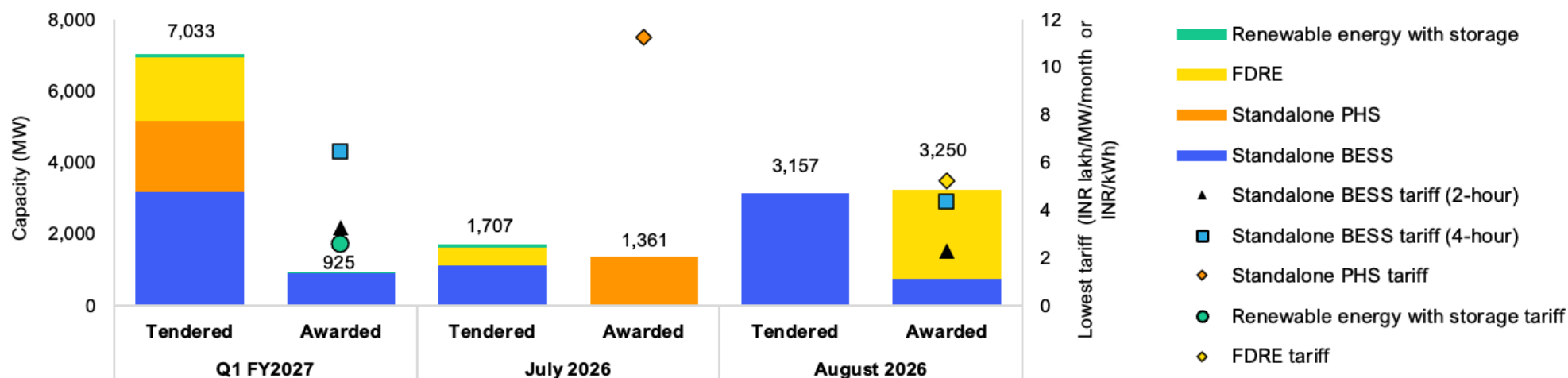
Table 3: Storage-linked PPAs signed in August 2026

Developer	Counter-party	Project type	Project capacity	Location	Other details
Evren	NTPC	Renewable energy with storage	750MW	Andhra Pradesh and Rajasthan	Evren signed a 750MW PPA with NTPC for a hybrid renewable energy project combining solar, wind, and BESS across Andhra Pradesh and Rajasthan.
JGEL	SJVN	FDRE	50MW	Rajasthan	JGEL, through its subsidiary Juniper Nirjara Energy, signed a 25-year PPA with SJVN for a 50MW FDRE project at INR4.25/kWh (USD0.045/kWh).
Not disclosed	CPDL (via SECI)	Renewable energy with storage	50MW	ISTS-connected; project location not disclosed	CPDL signed an agreement with SECI to procure 50MW of solar power with battery energy storage for Chandigarh.
Roofsol Energy	ACG World (C&I)	Renewable energy with storage	5MWp solar with 4MWh BESS	Maharashtra	Roofsol Energy signed a PPA with ACG for a 5MWp solar project paired with 4MWh of BESS in Maharashtra, marking its first C&I BESS order.

1.4 ESS tendering trends, FY2027 year-to-date 5M (until August)

- ESS tender issuance decreased by around 9.3% to 11.9GW in financial year (FY) 2027 year-to-date (YTD), compared with the corresponding period in FY2026. August accounted for around 3.16GW, or about 26.5% of the total capacity tendered so far in FY2027, while June recorded the highest monthly issuance at 4.5GW, contributing nearly 37.8% of the YTD total.
- ESS awarded capacity declined by around 14.5% to about 5.5GW in FY2027YTD, compared with the corresponding period in FY2026. August accounted for nearly 59% of the total capacity awarded so far in FY2027, marking the highest monthly volume in the current financial year.
- Standalone BESS remained the dominant storage procurement segment in the first five months (5M) of FY2027YTD, accounting for 7.5GW, or around 63% of total tendered capacity. FDRE accounted for 2.2GW (18.5%), followed by standalone pumped hydro storage (PHS) at 2GW (17%) and renewable energy with storage at 0.18GW (1.5%) (Figure 1).
- Four-hour storage configurations marginally overtook two-hour systems in FY2027YTD 5M, accounting for around 41% and 40% of tendered capacity, respectively. Six-hour systems accounted for around 18%, while 2.5-hour configurations made up less than 1%. The increasing share of four- and six-hour systems indicates a gradual shift towards longer-duration storage requirements.

Figure 1: ESS project development (BOO/BOOT) tenders and awards, FY2027YTD 5M



Source: Tendering authorities, JMK Research

Note: The figure includes only project development (BOO/BOOT) tenders. Standalone BESS and standalone PHS tariffs are reported in INR/MW/month, except for the Q1 FY2027 four-hour standalone BESS tender with a discovered tariff of INR6.45/kWh (USD0.068/kWh).

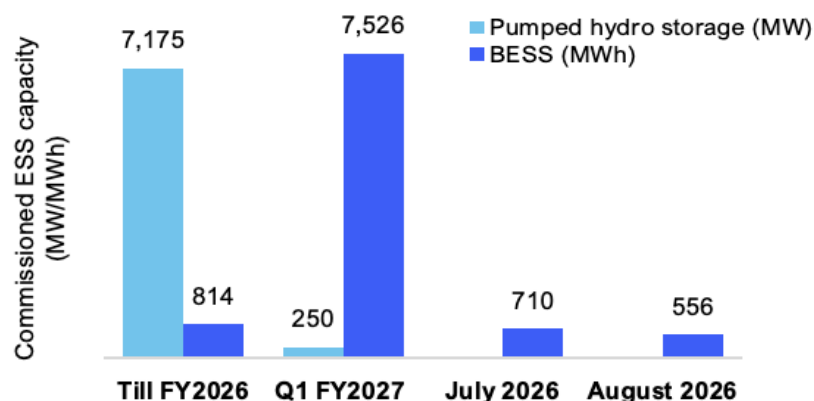
For standalone PHS tenders, annual fixed charges (AFCs) reported in INR lakh/MW/year have been converted to INR lakh/MW/month for comparability across tenders.

2. Capacity commissioned

India commissioned approximately 556MWh of ESS capacity in August 2026, comprising 315MWh of BESS under FDRE projects and around 241MWh of merchant standalone BESS.

- Two FDRE-linked projects in Rajasthan progressed to commissioning in August 2026 (Table 4). Tata Power Renewable Energy commissioned a 190.5MW solar plant integrated with 115MWh of BESS under SJVN's FDRE Tranche-I. Serentica Renewables commissioned 200MWh of BESS in Bikaner as the first phase of its planned 1GWh storage capacity, supporting time-block RTC³ renewable power supply to C&I consumers.
- ACME Solar Holdings added 241MWh of merchant BESS capacity through ACME Suryodaya's merchant BESS project in Rajasthan, taking the group's cumulative commissioned BESS capacity to around 3.83GWh.

Figure 2: ESS commissioned capacity trend, FY2027YTD 5M (till August)



Source: CEA, Stock Exchange filings, JMK Research

Table 4: ESS projects commissioned in August 2026

Developer/owner	Location (state)	Project type	MWh	Offtake model
Serentica Renewables	Rajasthan	FDRE	200MWh	Utility-contracted
Tata Power Renewable Energy	Rajasthan	FDRE	115MWh	Utility-contracted
ACME Solar Holdings	Rajasthan	Standalone BESS	241MWh	Merchant

Source: BSE/NSE filings, press releases, JMK Research

- BESS commissioning in August 2026 totalled approximately 556MWh, accounting for 6.3% of total capacity commissioned in FY2027 so far. Cumulative commissioned BESS capacity reached 9.6 gigawatt-hours (GWh), driven largely by merchant projects. By contrast, utility-contracted projects accounted for only 1.3% of the approximately 54GW awarded BESS pipeline, underscoring the widening gap between capacity awards and on-ground project realisation (Figure 2).

³Time-block RTC means supplying a guaranteed quantum of firm renewable energy in scheduled intervals of 15-minute blocks, rather than as continuous 24-hour baseload power.

3. ESS pricing trends

Lithium iron phosphate (LFP) cell prices fell marginally this month to around USD53.57/kWh (INR5,114/kWh) in China. In India, the landed costs of cells and containers remained around 14–23% above China after-tax prices.⁴

- The average price of 314 ampere-hour (Ah) LFP cells, widely used in utility-scale BESS applications, declined by 2.7% month-on-month to CNY0.360/watt-hour (USD0.05/Wh; INR4.77/Wh) in August 2026, equivalent to approximately USD53.57/kWh (CNY360/kWh; INR5,114/kWh) on a China after-tax price basis.
- Cell prices softened in August as the monthly average price of battery-grade lithium carbonate declined, easing cost pressure on manufacturers, although spot prices recovered in the second half of the month amid expectations of tighter near-term supply.
- Average prices for integrated two-hour alternating current (AC)-side container systems remained stable at CNY0.58/Wh (USD0.08/Wh) in August 2026. The USD-equivalent price increased to around USD86.3/kWh (INR8,239/kWh), primarily reflecting foreign-exchange movements.
- India's landed LFP cell price stood at USD61–66/kWh (INR5,824–6,301/kWh) in August 2026, around 14–23% above the China after-tax prices level, representing a premium of roughly USD8–USD13/kWh (INR764–INR1,241/kWh). A similar premium was also observed for assembled AC containers, reflecting freight, duties and other import-related costs.

4. BESS manufacturing updates

BESS manufacturing activity in August 2026 was led by 2.5GWh of capacity commissioning and the inauguration of a 3GWh facility, alongside further capacity expansion announcements.

Table 5: Key BESS manufacturing updates in August 2026

Entity	Type of update	Location	Manufacturing capacity (GWh)	Other details
Powertrac Group	Ground-breaking ceremony	Gujarat	10	Powertrac Group broke ground on a planned 10GWh BESS facility in Ahmedabad, covering cell-to-pack assembly and container integration.
Pratap Group	Manufacturing facility inaugurated	Madhya Pradesh	3	Pratap Group inaugurated a 3GWh BESS manufacturing facility under Voltters Technologies, along with an optical fibre manufacturing facility with a combined investment of INR8,500 crore (USD890 million).

⁴After-tax price refers to the average price observed across actual market transactions in China, based on InfoLink's China price benchmarks, which include value-added tax (VAT). A 2-hour AC container refers to a fully assembled grid-ready system comprising battery packs, power conversion system (PCS), battery management system (BMS), liquid cooling, enclosure and other balance-of-plant equipment, sized to discharge at rated power for two hours.

Entity	Type of update	Location	Manufacturing capacity (GWh)	Other details
PACE Digitek Ltd	Manufacturing facility commissioned	Karnataka	2.5	PACE Digitek doubled its Karnataka manufacturing line by 2.5GWh to reach 5GWh, with further expansion to 10GWh planned by the end of FY2027.
Fujiyama Power	Manufacturing capacity expansion approval	Uttar Pradesh and Madhya Pradesh	2	Fujiyama Power Systems approved 2GWh of additional battery manufacturing capacity, comprising 1GWh of lithium battery capacity at Ratlam, Madhya Pradesh, and a 1GWh tubular battery facility at Hathras, Uttar Pradesh.

Source: News articles, JMK Research

Note: 'Facility inaugurated' refers to a ceremonial opening event and does not itself confirm operational status. 'Facility commissioned' refers to the technical and regulatory milestone at which required testing and approvals are completed, and the facility is ready for operation.

5. Storage deals and partnerships in August 2026

August 2026 saw more than INR3,400 crore (USD356 million) of debt financing for storage-linked projects, alongside new BESS supply orders, agreements and strategic partnerships.

Table 6: Storage deals and partnerships in August 2026

Financing and investments				
Principal entity	Deal value	Counterparty	Investment type	Other details
AMPIN Energy Transition	INR1,861.67 crore (USD195 million)	SMBC and Rabobank	Debt	AMPIN Energy Transition secured INR1,861.67 crore (USD195 million) in debt financing for a 100MW contracted hybrid renewable energy project integrating solar, wind, and BESS in Andhra Pradesh.
ACME Solar Holdings Limited	INR1,571 crore (USD164.55 million)	IIFCL	Debt	ACME Solar Holdings secured INR1,571 crore (USD164.55 million) from IIFCL for its 300MW/1,350MWh storage-linked project in Rajasthan.
Project orders and contracts				
Principal entity	Deal value	Counterparty	Order type	Other details
PACE Digitek	INR92.9 crore (USD9.73 million)	Kalpa Power Private Limited	BESS supply and commissioning	PACE Digitek, through Lineage Power, received an order for supply and commissioning support for a 100MWh BESS project.

Strategic agreements, letters of award (LoAs), and partnerships

Principal entity	Counterparty	Agreement type	Other details
Ola Electric	Axis Energy	MoU	Ola Electric signed a memorandum of understanding (MoU) with Axis Energy to deploy up to 20GWh of BESS by 2032.
JSW Energy Partners	Rongjie Energy	MoU	JSW Energy signed an MoU with Rongjie Energy for the supply of 5GWh of ESS, covering 5MWh and 6.26MWh systems using 314Ah and 588Ah LFP cells.
Waaree Renewable Technologies Ltd	-	LoA	Waaree Renewable Technologies received a LoA for EPC works for a 291MWp ground-mounted solar photovoltaic (PV) project integrated with 280MWh of BESS, scheduled for completion in FY2027-28.

Source: News articles, JMK Research

6. Policy and regulatory updates

August 2026 saw key storage policy developments, including allowing co-located BESS to charge from temporary general network access (T-GNA) based curtailed renewable energy; easing pumped storage provisions in Odisha; and approving new storage-linked procurement tariffs.

Table 7: ESS policy and regulatory updates in August 2026

Policies and regulations	
Title	Key provisions
Power Ministry allows sale of T-GNA curtailed renewable power through co-located BESS	The Ministry of Power allowed renewable energy projects to use curtailed T-GNA power to charge additional co-located BESS, even where the storage is outside the existing PPA or power sale agreement (PSA). Developers may sell the stored electricity through power exchanges or bilateral arrangements, enabling monetisation of otherwise-curtailed renewable energy.
WRPC mandates automatic disconnection of BESS and pumped storage projects (PSP) at 49.50 hertz (Hz)	Western Regional Power Committee (WRPC) directed utilities to ensure that BESS in charging mode switch to discharging at 49.50Hz, or disconnect where this is not feasible, while PSPs in pumping mode disconnect before the first under-frequency relay (UFR) stage. The measure is aimed at improving grid response during low-frequency contingencies.
Odisha Pumped Storage Project Policy amendments	Odisha approved amendments to its Pumped Storage Project (PSP) Policy, extending the project-registration window from three weeks to three months to give developers more time to identify sites and submit applications. The amendments also revised the right of first refusal (RoFR) — which gives eligible consumers priority access to a specified share of power from the project — to 25% for captive users and up to 50% for independent power producers (IPPs).



Tariff approvals	
Title	Key provisions
<u>MERC approves BEST's procurement of 220MW solar power with 110MW/440MWh BESS</u>	MERC approved BEST's procurement of 220MW of solar power paired with 110MW/440MWh of BESS from SECI under its ISTS-connected Tranche-XX scheme. The discovered tariff ranged from INR2.86–2.87/kWh (USD0.030/kWh).
<u>UERC rejects UJVNL's review petition and retains trading margins for solar and standalone BESS projects</u>	UERC rejected UJVNL's review petition seeking restoration of the earlier benchmark capacity charge of INR3.97 lakh/MW/month (USD4,158/MW/month), which had subsequently been reduced to INR2.59 lakh/MW/month (USD2,713/MW/month), while retaining the prescribed trading margin of INR0.05/kWh (USD0.0005/kWh) for BESS.

Source: CERC, SERCs, APTEL, MNRE, JMK Research



Abbreviations

AC	Alternating current	JGEL	Juniper Green Energy Limited	RVUNL	Rajasthan Rajya Vidyut Utpadan Nigam Limited
ACG	Associated Capsules Group	JVVNL	Jaipur Vidyut Vitran Nigam Limited	SECI	Solar Energy Corporation of India
AFC	Annual fixed charge	JWL	Jupiter Wagons Limited	SERC	State Electricity Regulatory Commission
Ah	Ampere-hour	LFP	Lithium iron phosphate	SJVN	Satluj Jal Vidyut Nigam
APTEL	Appellate Tribunal for Electricity	LoA	Letter of award	SMBC	Sumitomo Mitsui Banking Corporation
BESS	Battery energy storage system	LT	Low tension	T-GNA	Temporary general network access
BEST	Brihanmumbai Electric Supply and Transport	MAHAP-REIT	Mahatma Phule Renewable Energy and Infrastructure Technology Limited	UERC	Uttarakhand Electricity Regulatory Commission
BOO	Build-own-operate	MERC	Maharashtra Electricity Regulatory Commission	UFR	Under-Frequency Relay
BOOT	Build-own-operate-transfer	MNRE	Ministry of New and Renewable Energy	UJVNL	Uttarakhand Jal Vidyut Nigam Limited
BSE	Bombay Stock Exchange	MoU	Memorandum of understanding	UPNEDA	Uttar Pradesh New and Renewable Energy Development Agency
C&I	Commercial and industrial	MW	Megawatts	VGf	Viability gap funding
CEA	Central Electricity Authority	MWh	Megawatt-hour	WBSEDCL	West Bengal State Electricity Distribution Company Limited
CERC	Central Electricity Regulatory Commission	MWp	Megawatt-peak	YTD	Year to date
CESC	Calcutta Electric Supply Corporation	NGEL	NTPC Green Energy Limited	Wh	Watt-hour
CPDL	Chandigarh Power Distribution Limited	NSE	National Stock Exchange	WRPC	Western Regional Power Committee
DFR	Demand fulfilment ratio	NTPC	National Thermal Power Corporation	YoY	Year-on-year
EPC	Engineering, procurement and construction	NTPC REL	NTPC Renewable Energy Limited	YTD	Year to date
ESS	Energy storage system	PHS	Pumped hydro storage		
FDRE	Firm and dispatchable renewable energy	PM-KUSUM	Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan		
FY	Financial year	PMSGY	PM Surya Ghar Muft Bijli Yojana		
GETCO	Gujarat Energy Transmission Corporation Limited	PPA	Power purchase agreement		
GUVNL	Gujarat Urja Vikas Nigam Limited	PSA	Power sale agreement		
GW	Gigawatts	PSP	Pumped storage project		
GWh	Gigawatt-hours	PV	Photovoltaic		
Hz	Hertz	RoFR	Right of first refusal		
IIFCL	India Infrastructure Finance Company Limited	RTC	Round-the-clock		
IPP	Independent power producer	RTC-TM	Round-the-clock thermal mimic		
ISTS	Inter-state transmission system	RVPN	Rajasthan Rajya Vidyut Prasaran Nigam Limited		



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Charith Konda,
Lead Energy Specialist
South Asia, IEEFA

Prabhakar Sharma,
Senior Consultant,
JMK Research & Analytics

Vasu Mor,
Research Associate,
JMK Research & Analytics

Vansh Kathuria,
Research Associate,
JMK Research & Analytics