

GOVERNMENT OF INDIA  
MINISTRY OF POWER

**RAJYA SABHA**  
**UNSTARRED QUESTION NO.956**  
ANSWERED ON 28.07.2025

**GROWTH IN BATTERY ENERGY STORAGE SYSTEMS**

956 SMT. SUMITRA BALMIK:

Will the Minister of **POWER** be pleased to state:

- (a) the present installed capacity of battery based energy storage systems in the country, details of major project;
- (b) the extent to which indigenous technology is being used in these Battery Energy Storage Systems (BESS);
- (c) whether CEA has issued any guidelines for standardization of rates, technology parameters, performance; and
- (d) the present cost of different sources of power as per Power Purchase Agreements (PPA) and the present cost of BESS systems?

**A N S W E R**

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

**(a) :** The present installed capacity of Battery Energy Storage Systems (BESS) projects (more than 1 MWh capacity) in the country is 204.5 MW (505.6 MWh). The details are at **Annexure-I**.

**(b) :** Major components of BESS like Cells and Battery Management System are currently based on imported technology.

**(c) :** Central Electricity Authority (CEA) has not issued any guidelines in respect of BESS for standardization of rates, technology parameters, or performance. However, CEA has issued draft Central Electricity Authority (Measures relating to Safety and Electric Supply) (First Amendment) Regulations, 2025 for stakeholders' comments, which includes provisions related to safety requirements for BESS.

**(d) :** As per the CEA's report on the Weighted Average Rate of Sale of Power for 2023–24, the all-India weighted average electricity price was ₹4.52 per unit for coal-based power plants, ₹3.27 per unit for hydro, and ₹3.82 per unit for nuclear sources.

The cost of electricity from new power plants varies depending on, *inter-alia*, the generation source, raw material and fuel costs, and capital investment. The estimated generation cost is ₹5 to 6 per unit for coal-based power, ₹2.50 to 3.00 per unit for solar, ₹3 to 4 per unit for wind, ₹5 to 6 per unit for hydro, and ₹6 to 7 per unit for nuclear. Tariffs discovered for BESS in recent bids are given at **Annexure-II**.

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# ANNEXURE-I

## ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 956 ANSWERED IN THE RAJYA SABHA ON 28.07.2025

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Details of Battery Energy Storage Systems (more than 1 MWh capacity) in the country

<u>S.No</u>	Name and Address of the Project	State	Capacity	
			MW	MWh
1.	10MW/10MWh BESS project at Tata Power-DDL sub-station in Rohini, Delhi	Delhi	10	10
2.	20MW solar power project integrated with an 16MW/8MWh BESS at Dollygunj and AttamPahad in South Andaman	Andaman & Nicobar	16	8
3.	Modhera Sun Temple Solar with BESS	Gujarat	6	19.2
4.	1.7 MW Solar PV Power Plant with 0.5 MW/ 1.4 MWh BESS (at Kavaratti) in Lakshadweep	Lakshadweep	0.5	1.4
5.	BESS project at Rajnandgaon, Chhattisgarh - 100 MW(AC) Solar PV Project with 40 MW/120 MWh Battery Energy Storage System	Chhattisgarh	40	120
6.	GSECL Gujarat Solar plus Storage Hybrid - 35MW Solar PV with 57 MWh BESS at Kutch Lignite Thermal Power Station (KLTPS)	Gujarat	12	57
7.	SECI 1200 MW Renewable With 75 MW/150 MWh BESS	Karnataka	75	150
8.	SECI RTC 400 MW Renewable with 25MW/100MWh BESS	Rajasthan	25	100
9.	20 MW/ 40 MWh BESS in Delhi under Tariff-Based Competitive Bidding	Delhi	20	40

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**ANNEXURE-II****ANNEXURE REFERRED IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 956  
ANSWERED IN THE RAJYA SABHA ON 28.07.2025**

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Tariffs discovered for BESS in recent bids concluded in F.Y. 2025-26 for a contract period of 12 years, with Viability Gap Funding support of Rs. 27 lakh/MWh is given below:

Sl. No.	State	BESS capacity (MW/MWh) and (number of cycles/ day)	Discovered L-1 Tariff (Rs. Lakh/MW/Month)
1	Karnataka	350/700 (2 cycles)	2.49
2	Gujarat*	500/1000 (2 cycles)	2.80
3	Kerala	125/500 (1 cycle)	4.34
4	Rajasthan	500/1000 (2 cycles)	2.16
5	Andhra Pradesh	500/1000 (2 cycles)	2.08
			2.10
			2.22
6	Uttar Pradesh**	375/1500 (1 cycle)	3.60

(\*Tender is without VGF and \*\*UP tender is for 15 years contract)

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