GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

RAJYA SABHA UNSTARRED OUESTION NO. 302

ANSWERED ON 02.12.2025

PROMOTION OF GRID-SCALE BATTERY ENERGY STORAGE SYSTEMS FOR RENEWABLE ENERGY INTEGRATION

302. SHRI SUJEET KUMAR

Will the Minister of New and Renewable Energy be pleased to state:

- (a) whether Government has undertaken any initiatives to promote grid-scale battery energy storage systems, similar to Tesla Megapacks, to enhance renewable energy integration and ensure grid stability;
- (b) if so, the details of current or planned projects, including their capacities, locations and implementation timelines; and
- (c) whether Government is taking steps to support domestic manufacturing of such storage systems and to develop a regulatory framework to ensure their commercial viability?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

- (a) to (c) The Government has undertaken several initiatives to promote the development and deployment of grid-scale battery energy storage systems (BESS) in the country to enhance renewable energy integration and ensure grid stability. Additionally, Government has also taken steps to support domestic manufacturing of such storage systems and to develop a regulatory framework to ensure their commercial viability. The major initiatives and steps taken in this regard are given below:
- Notified Guidelines for Procurement and Utilization of BESS as part of Generation, Transmission and Distribution assets, along with Ancillary Services.
- Issued National Framework to promote Energy Storage Systems in the country.
- Granted 100% ISTS charges waiver for co-located BESS projects, commissioned on or before 30th June 2028, with certain conditions.
- Approved a Viability Gap Funding (VGF) Scheme for the development of large-scale BESS, with an outlay of ₹3,760 crore. Under the scheme, a BESS deployment capacity of 13,220 MWh has been envisaged.
- Approved another VGF scheme of 30 GWh, funded through ₹5,400 crore from the power system development fund (PSDF). The scheme aims to support 25 GWh of BESS projects

- across 15 States, and 5 GWh at an existing NTPC generating station for optimal utilization these plants.
- Earmarked 10 GWh capacity for Grid Scale Stationary Storage applications under the "National Programme on Advanced Chemistry Cell (ACC) Battery Storage".
- Issued an 'Advisory on co-locating Energy Storage Systems with Solar Power Projects to enhance grid stability and cost efficiency'.

Currently, a total of 10 BESS projects with aggregate capacity of 205.1 MW/508.6 MWh are in operation in the country. The details of these BESS projects are given below:

State	BESS Capacity	
	MW	MWh
Delhi	10	10
Andaman & Nicobar	16	8
Gujarat	6	19.2
Lakshadweep	0.5	1.4
Chhattisgarh	40	120
Gujarat	12	57
Karnataka	75	150
Rajasthan	25	100
Delhi	20	40
Uttar Pradesh	0.6	3
Total	205.1	508.6

In addition, around 25 GWh capacity BESS projects are at various stages of implementation in the country.
