GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.68 ANSWERED ON 01.12.2025

THE PROGRESS OF BATTERY STORAGE MANUFACTURING IN HARYANA

68 SHRI KARTIKEYA SHARMA:

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

- (a) the details of the 10 MWh Battery Energy Storage Systems (four projects of 2.5 MW/5 MWh each) being procured by DHBVNL under Viability Gap Funding (VGF) support, including expected commissioning timelines and cost-benefit analysis for grid reliability;
- (b) the progress of battery storage manufacturing in Haryana, including the Prostarm facility (1.2 GWh capacity) in Jhajjar and other BESS manufacturing projects, and their alignment with India's 2032 energy storage target of 66 GW; and
- (c) the mechanisms for integrating these BESS systems with variable renewable energy sources (solar and wind) to stabilize the grid and enable round-the-clock power supply in Haryana?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

- (a): Ministry of Power, under the Viability Gap Funding (VGF) Scheme for development of Battery Energy Storage Systems (BESS), has allocated a capacity of 20 MWh to the State of Haryana with a VGF amount of Rs. 27 lakh/MWh or 30% of capital cost, whichever is lower. Dakshin Haryana Bijli Vitran Nigam Limited has been designated as the BESS Implementing Agency (BIA) for the allocated 20 MWh capacity. 10 MWh each has been allocated to Dakshin Haryana Bijli Vitran Nigam (DHBVNL) and Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) for setting up at four 33 kV substations. This capacity is expected to be commissioned by July, 2027. The project will facilitate storing cheap power during off peak hours and provide power during the peak power demand periods. Further, with increase in share of Renewable Energy (RE) in the grid, system stress would become more pronounced during evening and morning peak hours when RE generation is low, requiring additional power dispatch. BESS would be critical for enabling the smooth integration of RE and for providing peak power at reasonable cost.
- **(b):** The implementation and monitoring of the manufacturing facilities in Haryana is not under the purview of the Ministry of Power.
- (c): The mechanisms for integrating BESS systems with Variable Renewable Energy sources (solar and wind) to stabilize the grid and enable round-the-clock power supply are as under:
 - i. **Energy Shifting:** BESS enables shifting of electricity generation or consumption from one period to another. Generating companies and distribution licensees can use this capability to optimize demand or manage consumption patterns.

- ii. **Black-Start Capability:** BESS can play a critical role in Black-start operations as part of emergency preparedness, thereby enhancing the resilience and robustness of power system operations.
- iii. **Ancillary Services:** BESS can provide ancillary services such as voltage regulation and frequency control supporting the system operator in maintaining grid stability.
- iv. **Energy Arbitrage:** BESS can be used for energy arbitrage by purchasing electricity during periods of low prices or low system marginal costs, storing it, and then using or selling the stored energy during periods of high prices or high system marginal costs.
