GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.1749 ANSWERED ON 15.12.2025

ECONOMICS OF BATTERY ENERGY STORAGE

1749 SHRI YERRAM VENKATA SUBBA REDDY:

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

- (a) whether it is not a fact that cost of battery storage is \ge 10 per unit and the average energy rate is around \ge 2.30 per unit;
- (b) efforts being made to bring down cost of battery storage from the present rate of about ₹ 10 per unit;
- (c) whether Government is in the process of launching Production Linked Incentive Scheme (PLI) for grid-scale battery energy storage;
- (d) if so, the details thereof; and
- (e) the extent to which (c) above will help to bring down the battery storage rate?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) The cost of Battery Energy Storage System (BESS) discovered through tariff based competitive bidding during 2022-23 was about ₹ 10.18 / kWh, if the storage is used for 2 cycles daily. The cost of BESS discovered through competitive bidding in the recent past has substantially reduced to about ₹ 2.1 / kWh without VGF, if the storage is used for 2 cycles daily. However, based on the market trend, it is expected that BESS will be utilised for 1.5 cycles per day which corresponds to storage cost of ₹ 2.8 / kWh.

Based on the recent tenders, average rate of electricity from solar projects is in the range of $\stackrel{?}{\underset{?}{?}}$ 2.5 / kWh.

(b) In order to make battery storage affordable, the Ministry of Power is administering a VGF Scheme for setting up 13,220 MWh of BESS capacity with budgetary support of ₹3,760 Cr. Additionally, Ministry of Power, in June, 2025, has launched another VGF scheme for development of 30 GWh of BESS capacity, with a financial support of 5,400Cr, through Power System Development Fund (PSDF).

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Also, waiver of Inter-State Transmission System (ISTS) charges is provided for 12 years for co-located BESS projects to be commissioned by June 2028. For non-co-located BESS projects, ISTS charges waiver is granted for projects which will be commissioned before June 2025 and thereafter, waiver will be reduced annually in graded steps of 25%.

(c) to (e): Ministry of Heavy Industries is implementing the Production Linked Incentive (PLI) scheme namely "National Programme on Advanced Chemistry Cell (ACC) Battery Storage", to establish 50 GWh of domestic Advanced Chemistry Cell manufacturing capacity, out of which 10 GWh is earmarked for Grid Scale Stationary Storage (GSSS) applications. The scheme was approved in May 2021 with a total outlay of ₹18,100 crore.

The PLI scheme would encourage investment in the domestic manufacturing of cells for gridscale applications, reduce dependency on imports and eventually reduce the cost of BESS in future.
