

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA

UNSTARRED QUESTION NO. 4011

ANSWERED ON 12.08.2026

GREEN ENERGY CORRIDOR PROJECT PHASE-II

4011.SHRI DR. PRADEEP KUMAR PANIGRAHY

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the physical progress and total circuit-kilometres of transmission lines completed under Phase-II of the Green Energy Corridor (GEC) project in the target States;
- (b) the structural measures being deployed to ensure national grid stability and minimize transmission losses during peak injection hours of highly intermittent solar and wind energy resources; and
- (c) the details of financial incentives or Viability Gap Funding (VGF) earmarked to accelerate the setting up of standalone Battery Energy Storage Systems (BESS) near regional load dispatch centers?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) Under Green Energy Corridor (GEC) Phase-II, a total of 1,274 circuit-kilometres (ckm) of transmission lines and 7,100 MVA of substation capacity have been commissioned in the target States.

(b) The measures being deployed in this regard are placed at **Annexure I**.

(c) As per information received from the Ministry of Power, there are two Viability Gap Funding (VGF) schemes for the development of 43.8 GWh of Battery energy Storage Systems (BESS), the details of which are as under:

(i) The Government of India, on 6th September 2023, approved the VGF scheme for the development of 4 GWh of BESS capacity with a budgetary outlay of Rs 3,760 crore. Subsequently, due to a decline in prices of BESS, the capacity has been enhanced to 13.8 GWh within the sanctioned budget.

(ii) Ministry of Power, vide order dated 09.06.2025, launched VGF scheme for development of 30 GWh of BESS with financial support of ₹5,400 crore from the Power System

Development Fund. Under this scheme, 25 GWh has been allocated to 15 States for meeting their storage requirements, while 5 GWh has been allocated to NTPC Ltd. to support electricity demand during non-solar hours and optimize utilization of existing thermal and transmission infrastructure.

Annexure-I to Lok Sabha Unstarred Question No. 4011 regarding “GREEN ENERGY CORRIDOR PROJECT PHASE-II” to be replied on 12/08/2026

As per information received from Grid Controller of India Limited, measures being deployed to ensure national grid stability and minimize transmission losses during peak injection hours of solar and wind energy resources are as follows:

- i. Dedicated High-capacity transmission links with bi-directional power flow capability are being developed to enable efficient long-distance bulk transfer of renewable power and improve grid controllability. Key projects include:
 - ± 800 kV, 6,000 MW HVDC link between Bhadla (Rajasthan) and Fatehpur (Uttar Pradesh);
 - ± 500 kV, 2,500 MW HVDC link between Khavda-III and South Olpad;
 - ± 800 kV, 6,000 MW HVDC link between KPS-II and Nagpur.
- ii. The Central Electricity Authority's National Electricity Plan–Transmission envisage exploration of higher voltage levels such as 1150 kV AC, as part of the long-term transmission network planning to optimise system right-of-way, improve bulk power transfer efficiency and meet future inter-regional transfer requirements.
- iii. CEA issued an Advisory for implementation of 100% Grid Forming Invertors (GFMs) in all upcoming BESS projects.
