

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.956
ANSWERED ON 27.07.2026

**POWER DEMAND PROJECTIONS, GRID INFRASTRUCTURE AND CAPACITY
EXPANSION**

956 DR. SANTRUPT MISRA:

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

- (a) the projected year-on-year growth in peak power demand, including the additional load anticipated from artificial-intelligence data centres, and whether captive or renewable capacity serving such centres will be connected to the grid;
- (b) whether investment in grid modernisation and transmission is keeping pace with investment in generation capacity, the details thereof;
- (c) whether investment in coal- and gas-based capacity is presently growing faster than renewable capacity; and
- (d) the steps being taken to ensure inter-ministerial coherence in the country's power strategy?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Electric Power Survey (EPS) of the country is conducted by Central Electricity Authority (CEA) every five years for estimating the electricity demand of the country, as obligated under Section 73(a) of the Electricity Act-2003. As per midterm review of 20th Electric Power Survey (EPS), the detail of peak demand along with year-on-year growth up to FY 2031-32 in view of increasing industrialisation, urbanisation and electrification is given at **Annexure**. Further, an additional load of 26.3 GW from Artificial Intelligence (AI) Data Centres is projected by 2031-32, which is expected to be integrated into the grid and primarily served by renewable energy capacity.

(b): Development of transmission infrastructure is being undertaken in a phased manner, commensurate with the growing electricity demand and planned generation capacity addition, including renewable energy. The National Electricity Plan envisages development of the transmission system with an estimated investment of about ₹9,16,142 crore during the plan period (2022-32).

Grid modernization measures, including deployment of Static Synchronous Compensator (STATCOMs), Battery Energy Storage Systems (BESS), Synchronous Condensers and other advanced grid support technologies are also being planned to enhance grid reliability, flexibility and facilitate integration of renewable energy.

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Further, currently, 154 Inter-State Transmission System (ISTS) projects are under construction in the country consisting of 39,792 ckm of transmission lines and 4,01,510 MVA of transformation capacity. Similarly, Intra State Transmission System (InSTS) projects (220 KV & above) comprising of 30,387 ckm of transmission lines and 1,18,194 MVA of transformation capacity are under construction in the country.

(c): As per Section 7 of Electricity Act, 2003 setting up of a power plant is a de-licensed activity in the country. Any generating company may establish, operate and maintain a generating station without requiring a license under Electricity Act, 2003 if it complies with the technical standards relating to connectivity with the grid.

Total thermal coal-based capacity addition from FY 2023-24 to 2026-27 (till June 2026) is about 21,080 MW. During the same period, Renewable Energy (RE) capacity addition including Large Hydro is 1,16,487 MW comprising of 5,130 of Large Hydro, 95,372 MW of Solar, 14,810 MW of wind, 229 MW of small Hydro and 946 MW of Biomass & others. The share of Non-Fossil Fuel sources has increased from 43.0 % to 54.2% in this period.

(d): India, at the 26th Conference of Parties (COP) to the UNFCCC in November 2021, announced its target to achieve 'Net Zero' by 2070. India is committed to achieve this goal, by keeping in view, energy security, affordability and accessibility as critical inalienable priorities to ensure growth and development alongside Energy transition of the economy towards 'Net Zero'.

India has reached a major milestone in its energy transition by achieving the NDC goal of 50% of its installed electric power capacity from non-fossil fuel sources; five years ahead of the committed timeline of 2030. The share of non-fossil fuel installed capacity in the total installed capacity of the country as on 30.06.2026 is about 54.2%. This is an outcome of a coherent whole of government approach.

ANNEXURE

**ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 956
ANSWERED IN THE RAJYA SABHA ON 27.07.2026**

Detail of estimated growth in peak demand of the country (All-India) from the FY 2026-27 to 2031-32 is given as under:

FY	Peak Demand [Giga Watt (GW)]	% Growth
2026-27	289	17.96
2027-28	305	5.54
2028-29	325	6.55
2029-30	345	6.15
2030-31	364	5.51
2031-32	388	6.59
