GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.3365 ANSWERED ON 20.03.2025

SHORTAGE OF ELECTRICITY

†3365. SMT. MANJU SHARMA:

Will the Minister of POWER be pleased to state:

(a) whether there is acute shortage of electricity in the country;

(b) if so, the details thereof and the steps taken by the Government to restore normal demand and supply of electricity; and

(c) the strategy adopted by the Government to eliminate the gap between the unit cost of electricity supply and price/revenue realisation?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : There is adequate availability of power in the country. Present installed generation capacity of the country is 470 GW. Government of India has addressed the critical issue of power deficiency by adding 238 GW of generation capacity since April, 2014 transforming the country from power deficit to power sufficient. Further, addition of 2,01,088 circuit kilometer (ckm) of Transmission lines, 7,78,017 MVA of Transformation capacity and 82,790 MW of Inter-Regional capacity has been done since 2014 with capability of transferring 1,18,740 MW from one corner of the country to another.

The details of All India Power Supply Position of the country during the last three years and current year 2024-25(upto February 2025) are given at Annexure. This indicates that the gap between Energy Requirement and Energy Supplied has declined to marginal level of 0.1% only during current year 2024-25 (upto February, 2025). Even this marginal gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network.

Further, Government of India has taken the following steps to ensure adequate availability of power in the country:

(i) In order to augment the power generation capacity, the Government of India has initiated following capacity addition programme:

(A) Government of India has proposed in November 2023 for setting up of an additional minimum 80,000 MW coal based capacity by 2031-32. Against this target, coal based capacity of 9,350 MW has already been commissioned in 2023-24 & 2024-25. 29,900 MW Thermal Capacity is under construction and contracts for 22,640 MW thermal capacity have been awarded in FY 2024-25. Further, 33,580 MW of coal and lignite based candidate capacity has been identified which is at various stages of planning in the country.

(B) 13,997.5 MW of Hydro Electric Projects are under construction. Further, 24,225.5 MW of Hydro Electric Projects are under various stage of planning and targeted to be completed by 2031-32.

(C) 7,300 MW of Nuclear Capacity is under construction and targeted to be completed by 2029-30. 7,000 MW of Nuclear Capacity is under various stages of planning and approval.

(D) 1,53,920 MW Renewable Capacity including 84,310 MW of Solar, 28,280 MW of Wind and 40,890 MW Hybrid power is under construction while 70,210 MW of Renewable Capacity including 46,670 MW of Solar, 600 MW of Wind and 22,940 MW Hybrid Power is at various stages of planning and targeted to be completed by 2029-30.

(E) In energy storage systems, 13,050 MW/78,300 MWh Pumped Storage Projects (PSPs) are under construction/concurred and 14,970 MW/54,803 MWh Battery Energy Storage System (BESS) are currently under various stages of construction/bidding.

- (ii) A robust national grid has been established to facilitate the transfer of power from power surplus regions to power deficit regions. Addition of 2,01,088 circuit kilometer (ckm) of Transmission lines, 7,78,017 MVA of Transformation capacity and 82,790 MW of Inter-Regional capacity has been done since 2014 with capability of transferring 1,18,740 MW from one corner of the country to another. The capacity of National Grid is being expanded on a continuous basis commensurate with the growth in electricity generation and electricity demand.
- (iii) Directions under Section 11 of Electricity Act have been issued to imported coal based plants to operate and generate power to their full capacity.
- (iv) Steady supply of coal to all the thermal power plants is being ensured to prevent fuel shortages.
- (v) Gas-based power plants of NTPC as well as other generators are being scheduled during high power demand period.
- (vi) All the GENCOs including IPPs and Central generating stations have been advised to generate and maintain full availability on daily basis excluding the period of planned maintenance or forced outage.
- (vii) Hydro based generation is being scheduled in a manner so as to conserve water for meeting demand during peak period.
- (viii) Planned maintenance of generating units is being minimized during period of high demand.
- (ix) New power generation capacity is being monitored closely for timely addition.
- (x) Government has facilitated power trading through regulatory framework whereby states with surplus generation can sell power to states which are in deficit through three (3) power exchanges viz. Indian Energy Exchange (IEX), Power Exchange India Ltd (PXIL) and Hindustan Power Exchange Ltd.

(xi) Electricity market has been reformed by adding the Real Time Market (RTM), Green Day Ahead Market (GDAM), Green Term Ahead Market (GTAM), High Price Day Ahead Market (HPDAM) in Power exchange. Also, there is DEEP portal for e-bidding and e-Reverse for procurement of short-Term power by DISCOMs.

(c) : In order to reduce the gap between unit cost of supply and unit rate of realization, the Government of India has taken number of measures / initiatives including the following:

- (i) Revamped Distribution Sector Scheme (RDSS) has been launched with the objective of improving the quality and reliability of power through a financially sustainable and operationally efficient Distribution Sector. The release of funds under the scheme is linked to States/ Distribution Utilities taking necessary measures for improving their financial performance including the improvements made in parameters of Aggregate Technical & Commercial (AT&C) losses and the Gap between Average Cost of Supply (ACoS) and Average Revenue Realised (ARR).
- (ii) Timely issuance of tariff and true up orders through regular follow up.
- (iii) Timely payment of GENCO dues have been ensured through Late Payment Surcharge (LPS) Rules.
- (iv) Additional Prudential Norms have been mandated for providing loans to State Power utilities.
- (v) Scheme for allowing Additional borrowing space of 0.5% of Gross State Domestic Product (GSDP) linked to reforms adopted and performance achieved against various parameters.
- (vi) Rules and Standard Operating Procedure have been framed for timely payment of subsidies declared by the State Governments.
- (vii) Rules have also been framed for implementation of Fuel and Power Purchase Cost Adjustment (FPPCA) and cost reflective tariff so as to ensure that all prudent cost for supply of electricity are passed through.

With the collective efforts of Centre and State/UTs, the Gap between Average Cost of Supply (ACS) and Average Revenue Realized (ARR) has been reduced from Rs. 0.71/kWh to Rs.0.19/kWh in the period FY 21 to FY 24

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3365 ANSWERED IN THE LOK SABHA ON 20.03.2025

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The details of All India power supply position during the last three years and current year (upto February 2025):

Year	ENERGY			
	Energy Requirement	Energy Supplied	Energy Not Supplied	
	(MU)	(MU)	(MU)	%
2021-22	1,379,812	1,374,024	5,787	0.4
2022-23	1,513,497	1,505,914	7,583	0.5
2023-24	1,626,132	1,622,020	4,112	0.3
2024-25* (upto	1,547,785	1,546,229	1,555	0.1
February, 2025)				

*Data for February, 2025, is Provisional.
