GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.1905
ANSWERED ON 17.03.2025

DEMAND FOR POWER SUPPLY DURING SUMMERS

1905 SHRI AKHILESH PRASAD SINGH:

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

(a) the details regarding the increase in demand for power during summers during the last three years, year-wise;

(b) the details regarding the areas most affected by power shortage, year-wise;

(c) whether Government has undertaken any steps to escalate power generation keeping the ongoing heatwave in mind, if so, the details thereof;

(d) whether Government is planning to provide electricity subsidies in areas affected by the heatwave;

(e) if so, the details thereof, if not, the reasons therefor; and

(f) the steps taken to improve power supply during the ongoing heatwave?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): The year-wise details of All India demand and supply of electricity in terms of Energy Requirement and Energy Supplied in the country during the summer months i.e April to June for the last three years, are given at **Annexure**.

These details indicate consistent growth in Energy Requirement in summer months during the last three years. However, with the consistent efforts of Government and the power utilities, the Energy Availability has improved significantly and the gap between Energy Requirement and Energy Supplied has declined to a marginal level of 0.1% during the summer months of 2024-25. Even this marginal gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network.

(c) to (f): Government of India has taken the following steps to improve power generation and to ensure uninterrupted and reliable power supply in the country :

(i) Present installed generation capacity of the country is 466 GW. Government of India has addressed the critical issue of power deficiency by adding 234 GW of generation capacity since April, 2014 transforming the country from power deficit to power sufficient. In order to augment the power generation capacity, the Government of India has initiated following capacity addition programme:

…….2.

(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 and about 8,000 MW Pumped Storage Projects (PSPs) are under construction. Further, 24,225.5 MW of Hydro Electric Projects and 50,760 MW of PSPs 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) 13,389 MW/ 56,457 MWh of energy storage system (3,180 MW/19,080 MWh Pumped Storage Projects and 10,209 MW/37,377 MWh Battery Energy Storage System) 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.

……3.

(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 (Discovery of Efficiency Electricity Price) for e-bidding and e-Reverse for procurement of short-Term power by DISCOMs.

Further, electricity being a concurrent subject, the supply and distribution of electricity to the various categories of consumers/areas in a State/UT is within the purview of the respective State Government/Power Utility. The Central Government supplements the efforts of the State Governments by establishing power plants in Central Sector through Central Public Sector Undertakings (CPSUs) and allocating power from them to the various States / UTs.

As per the Electricity Act, 2003, the retail tariff for supply of electricity to various categories of consumers in the States/UTs is determined by the respective State Electricity Regulatory Commissions (SERCs)/ Joint Electricity Regulatory Commissions (JERCs). However, the respective State Government / UT Administration can provide subsidy on the electricity tariff for any category of consumers for which the necessary monetary support is to be provided to the distribution utility concerned.

****

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1905 ANSWERED IN THE RAJYA SABHA ON 17.03.2025

****

The year-wise details of All India demand and supply of electricity in terms of Energy Requirement and Energy Supplied in the country during the summer months i.e. April to June for the last three years:

Summer Months	Year	Energy Requirement	Energy Supplied	Energy Not Supplied	
		(MU)	(MU)	(MU)	%
April to June	2022	4,04,605	4,00,448	4,158	1.0
	2023	4,07,780	4,06,862	919	0.2
	2024	4,52,399	4,51,811	588	0.1

****