GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.479
ANSWERED ON 06.02.2024

GAP BETWEEN THE DEMAND AND SUPPLY OF ELECTRICITY

479 DR. M. THAMBIDURAI:

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

(a) whether it is a fact that there is a huge gap between the demand and supply of electricity;

(b) if so, the details of the gap between the demand and supply of electricity at present;

(c) the measures being taken by Government to bridge the said gap;

(d) whether Government has recently conducted any study to assess the demand of electricity in the next few years, if so, the details thereof; and

(e) whether Government has taken any measures to meet the excess demand and if so, the details thereof and if not, the reasons therefor?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c): There is adequate availability of power in the country. We have addressed the critical issue of power deficiency by adding 196558 MW of generation capacity since April 2014 transforming our country from power deficit to power sufficient. We have increased the generation capacity by 72.3% from 248554 MW in March 2014 to 428299 MW in December 2023.

We have added 189052 ckt kilometre of transmission lines in the past nine years (09) connecting the whole country into one grid running on one frequency. This has enabled us to transfer 116540 MW from one corner of the country to another. We strengthened the distribution system by implementing projects of 1.85 lac crores under DDUGJY/IPDS/SAUBHAGYA. Under the above distribution sector schemes, 2927 new sub-stations have been added, upgradation of 3965 existing sub-stations has been carried out, 6,92,200 Distribution Transformers have been installed, Feeder separation of 1,13,938 Circuit Kilometer (CKm) has been done and 8.5 Lakh Circuit Kilometer (CKm) of HT and LT lines have been added/changed across the States. As a result of these measures, the availability of power supply in rural areas has increased from 12.5 Hours in 2015 to 20.6 Hours in 2023. The power supply in urban areas has increased to 23.78 Hours in 2023. The gap between Energy Requirement and Energy Supplied has come down from 4.2% in 2013-14 to 0.3 % in 2023-24. Even this gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network and financial constraints of DISCOMs etc.

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(d) : Central Electricity Authority (CEA) conducts Electric Power Survey (EPS) of the country every five years for estimating the electricity demand of the country on medium and long term basis as obligated under Section 73(a) of the Electricity Act-2003.

The 20th Electric Power Survey (EPS) report published in November 2022, covers electricity demand projection for the year 2021-22 to 2031-32 as well as perspective electricity demand projection for the year 2036-37 and 2041-42 for the country. The details are given at **Annexure**.

(e) : We have taken following steps to meet the increased demand for power in the country: -

(i) In order to ensure an uninterrupted power supply for the nation's growth, the anticipated capacity addition between 2023-32 is given below:

a) 26380 MW of Thermal Capacity is under construction, 11960 MW has been bid out and 19050 MW under clearances. The total anticipated Thermal capacity addition by 2031-32 will be 93380 MW.

b) 18033.5 MW of Hydro Capacity (including stalled projects) is under construction and the total anticipated Hydro capacity addition by 2031-2032 is likely to be 42014 MW.

c) 8000 MW of Nuclear Capacity is under construction and the total anticipated Nuclear capacity addition by 2031-2032 will be 12200 MW.

d) 103660 MW of Renewable Energy Capacity is also currently under construction and the anticipated RE capacity addition by 2031-32 will be 322000 MW.

Thus, total 156073.5 MW of Capacity is under construction and the total anticipated capacity addition by 2031-2032 will be 469594 MW.

(ii) India has committed to augment non fossil fuel based installed electricity generation capacity to over 500000 MW by 2030. Transmission plan for integration 500000 MW RE capacity by 2030 is being implemented in a phase manner commensurate with RE capacity addition.

(iii) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale.

(iv) Govt have constructed Green Energy Corridors and put in place 13 Renewable Energy Management Centres. Presently Renewable Energy Capacity is 180800 MW and 103660 MW is under installation.

(v) We have made the Power Sector viable. The AT&C losses have come down from 25.72% in 2014-15 to 15.40% in 2022-23. Since implementation of LPS Rules, legacy dues of Gencos have come down from Rs. 1,39,947 crore as on 03.06.2022 to Rs. 49,451 crore as on 31.01.2024. Further, Discoms are making payments for current overdues on time.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (d) OF UNSTARRED QUESTION NO.479 ANSWERED IN THE RAJYA SABHA ON 06.02.2024.

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Electricity demand projection for the year 2023-24 to 2031-32.

Year	Electrical energy requirement (in MU)	Peak Electricity Demand (in MW)
2023-24	1600214	230144
2024-25	1694634	244565
2025-26	1796627	260118
2026-27	1907835	277201
2027-28	2021072	294716
2028-29	2139125	313098
2029-30	2279676	334811
2030-31	2377646	350670
2031-32	2473776	366393

Perspective electricity demand projection for the year 2036-37 and 2041-42

Year	Electrical energy requirement (in MU)	Peak Electricity Demand (in MW)
2036-37	30,95,487	4,65,531
2041-42	37,76,321	5,74,689

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