GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.1927 ANSWERED ON 14.12.2023

DEMAND AND SUPPLY OF ELECTRICITY

†1927. SHRI RAHUL KASWAN:

Will the Minister of POWER

be pleased to state:

(a) the gap between the demand and supply of electricity at present;

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

(c) whether the Government has recently conducted any study to assess the demand of electricity in near future;

(d) if so, the details thereof; and

(e) whether the Government has taken any measures to meet the excess demand of electricity in future and if so, the details thereof?

ANSWER

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : There is adequate availability of power in the country. We have addressed the critical issue of power deficiency by adding 193794 MW of generation capacity in the past nine (09) years transforming our country from power deficit to power surplus. We have increased the generation capacity by 70% from 248554 MW in March 2014 to 425536 MW in October 2023.

We have added 187849 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 and constructing 2927 sub-stations, upgrade 3964 sub-stations and adding 8.86 lac circuit kilometres of HT/LT lines. As a result, the availability of power in rural areas has gone up from 12 hours in 2015 to 20.6 hours in 2023. In urban areas, power available is 23.6 hours. 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.

(c) & (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.

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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) 27180 MW of Thermal Capacity is under construction, 12000 MW has been bid out and 19000 MW under clearances. The total anticipated Thermal capacity addition by 2031-2032 will be 87910 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) 78935 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 132148.5 MW of Capacity is under construction and the total anticipated capacity addition by 2031-2032 is likely to be 464124 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. At present about 179000 MW of non fossil fuel generation capacity is already integrated.
- (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 178000 MW and 78935 MW is under installation.
- (v) We have made the Power Sector viable. The AT&C losses have come down from 22.62% in 2013-14 to 15.41% in 2022-23. All current payment of Gencos are upto-date and the legacy dues of Gencos have come down from Rs. 1.35 lakh crore to Rs. 6000 Crore. The subsidy payment to DISCOMS on account of subsidies announced by State Government are up-to-date.

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ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 1927 ANSWERED IN THE LOK SABHA ON 14.12.2023

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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
