# GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.3131 ANSWERED ON 21.12.2023

#### **POWER CONSUMPTION DEMAND**

### 3131. SHRI SISIR KUMAR ADHIKARI:

Will the Minister of POWER be pleased to state:

- (a) whether it is a fact that average demand ofpower consumption in the country is 215 Gigawatt and supply during peak time stood at 192 Gigawatt, which causes massive power-cut in different parts of the country;
- (b) if so, whether the Government proposes to enhance power supply as per the increasing demand of consumption and if so, the details thereof; and
- (c) the details of growth in demand and supply of Power during the last five years and the proposals to meet up the demand of power consumption by 2030 thereof?

#### ANSWER

## THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a): The Power sector has been transformed in the past few years. The demand has increased rapidly due to (i) rapid economic growth in recent years, (ii) providing new connections to 2.86 crore households and (iii) increase in hours of supply from 12.5 hrs (2014-15) to 20.6 hrs (2022-23) in rural areas & the supply in urban areas is 23.8 hrs and we have met the demand. The peak demand has gone up from 135918 MW in 2013-14 to 243271 MW in September 2023. This is a rise of almost 79% and the demand has been met. There has been 50.8% increase in energy requirement in the country as compared to 2014. A series of concerted measures have led to 70% increase in generation capacity from 248554 MW in March 2014 to 425536 MW in October 2023.

The details of All India Power Supply Position of the country during the months of April 2023 to November, 2023 are given at Annexure-I. The gap between Energy Requirement and Energy Supplied during the period from April, 2023 to November, 2023 is in the range of 0.1% to 0.6%. Even this gap between Energy Requirement and Energy Supplied was generally on account of factors, other than adequacy of power availability in the country e.g. constraints in state transmission network, distribution network, financial constraints of DISCOMs etc.

(b) & (c): The details of All India Power Supply Position in terms of Energy and Peak during last five (05) years are given at Annexure-II. 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 to

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power sufficiency. As a result, the gap between Peak demand and peak demand met has come down from 4.5% in 2013-14 to 1.4% in 2023-24 (upto November-23) and the gap between Energy Requirement and Energy Supplied has come down from 4.2% in 2013-14 to 0.3% in 2023-24 (up to November-23).

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. As per 20th Electric Power Survey (EPS) report published in November 2022, the peak electricity demand in the country in 2030-31 is expected to be 350670 MW.

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) 1,87,849 circuit kilometer (ckm) of transmission lines, 6,82,767 MVA of Transformation capacity and 80,590 MW of Inter-Regional capacity has been added connecting the whole country into one grid running on one frequency with the capability of transferring 1,16,540 MW from one corner of the country to another. India's grid has emerged as one of the largest unified grids in the world. Connecting the whole country into one grid has transformed the country into one unified power market. Distribution Companies can buy power at cheapest available rates from any generator in any corner of the country thereby enabling cheaper electricity tariffs for consumers.

- (iii) India has committed to augment non fossil fuel based installed electricity generation capacity to over 500000 MW by 2030. Transmission plan for integration of 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.
- (iv) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale.
- (v) We have reformed the Electricity market by adding the Real Time Market (RTM), Green Day Ahead Market (GDAM), Green Term Ahead Market (GTAM), High Price Day Ahead Market (HP-DAM) in Power Exchanges. Also, DEEP Portal (Discovery of Efficient Electricity Price) for e-Bidding and e-Reverse for procurement of short-term power by DISCOMs was introduced.
- (vi) 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.
- (vii) 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 up-to-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-I**

# ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3131 ANSWERED IN THE LOK SABHA ON 21.12.2023

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The details of All India Power Supply Position of the country during the months of April, 2023 to November, 2023

Months	Energy				Peak			
	Energy	Energy	Energy	not	Peak	Peak	Demand	not
	Requirement	Supplied	Supplied		Demand	Met	Met	
	( MU )	(MU)	(MU)	(%)	(MW)	(MW)	( MW )	(%)
April, 2023	1,30,414	1,30,082	332	0.3	2,16,142	2,15,972	170	0.1
May, 2023	1,36,846	1,36,504	342	0.2	2,21,718	2,21,423	295	0.1
June, 2023	1,40,520	1,40,276	244	0.2	2,24,106	2,23,292	814	0.4
July, 2023	1,40,618	1,40,419	199	0.1	2,09,039	2,08,952	87	0.0
August, 2023	1,52,176	1,51,324	852	0.6	2,38,824	2,36,295	2,529	1.1
September, 2023	1,41,827	1,41,299	528	0.4	2,43,271	2,39,931	3,340	1.4
October, 2023	1,39,832	1,39,441	391	0.3	2,22,160	2,21,539	621	0.3
November, 2023	1,20,653	1,20,562	91	0.1	2,04,861	2,04,605	256	0.1
April to November, 2023(*)	11,02,887	10,99,907	2,980	0.3	2,43,271	2,39,931	3,340	1.4

<sup>\*</sup>Provisional

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# ANNEXURE REFERRED TO IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO. 3131 ANSWERED IN THE LOK SABHA ON 21.12.2023

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The details of All India Power Supply Position in terms of Energy during last 5 years.

Year	Energy Req	uirement	Energy \$	Supplied	Energy Not Supplied	
	(MU)	% Growth	(MU)	% Growth	(MU)	(%)
2018-19	1,274,595	5.0	1,267,526	5.2	7,070	0.6
2019-20	1,291,010	1.3	1,284,444	1.3	6,566	0.5
2020-21	1,275,534	-1.2	1,270,663	-1.1	4,871	0.4
2021-22	1,379,812	8.2	1,374,024	8.1	5,787	0.4
2022-23	15,11,847	9.6	15,04,264	9.5	7,583	0.5
2022-23 (upto November, 2022)	10,15,908	-	10,10,203	-	5,705	0.6
2023-24 (upto November, 2023)	11,02,887	8.6	10,99,907	8.9	2,980	0.3

The details of All India Power Supply Position in terms of Peak during last 5 years.

Year	Peak Demand		Peak N	let	<b>Demand Not Met</b>	
	(MW)	% Growth	(MW)	% Growth	(MW)	%
2018-19	177,022	7.9	175,528	9.2	1,494	0.8
2019-20	183,804	3.8	182,533	4.0	1,271	0.7
2020-21	190,198	3.5	189,395	3.8	802	0.4
2021-22	203,014	6.7	200,539	5.9	2,475	1.2
2022-23	2,15,888	6.3	2,07,231	3.3	8,657	4.0
2022-23 (upto November, 2022)	2,15,888	-	2,07,231	-	8,657	4.0
2023-24 (upto November, 2023)	2,43,271	12.7	2,39,931	15.8	3,340	1.4

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