#### GOVERNMENT OF INDIA MINISTRY OF POWER

## RAJYA SABHA UNSTARRED QUESTION NO.790 ANSWERED ON 02.12.2024

#### POWER DEMAND LEADING TO POWER-CUT

#### 790 DR. ASHOK KUMAR MITTAL:

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

- (a) whether it is a fact that average demand of power 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 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 STATE IN THE MINISTRY OF POWER

#### (SHRI SHRIPAD NAIK)

(a) to (c): The Country has successfully met Peak demand of 249.854 GW during May, 2024. The month-wise details of All India Peak demand, Peak met and shortage during 2023-24 and current year (till October, 2024) are given at **Annexure-I**.

The details of All India Power Supply Position in terms of Energy and Peak during the last five years i.e., 2019-20 to 2023-24 and the current year 2024-25 (upto October, 2024) are given at **Annexure-II**.

As per midterm review of 20<sup>th</sup> Electric Power Survey (EPS), the country's peak electricity demand in 2029-30 is projected to be 344.797 GW. To meet this power demand, Government has undertaken the following steps:

## (i) Generation Planning:

- a) Installed generation capacity in 2029-30 is likely to be 777.14 GW. This includes capacity from conventional sources- Coal, Lignite etc., renewable sources- Solar, Wind, Hydro, Pump Storage project (PSP) and Battery Energy Storage System (BESS).
- b) With a view to ensure generation capacity remains ahead of projected peak demand, all the States, in consultation with CEA, have prepared their "Resource Adequacy Plans (RAPs)", which are dynamic 10 year rolling plans and includes power generation as well as power procurement planning.

- c) All the States were advised to initiate process for creation of generation capacities; from all generation sources, as per their Resource Adequacy Plans.
- (d) Ministry of Power, in consultation with States, has envisaged a plan to add thermal capacity of a minimum 80,000 MW by 2031-32. Against this target, 29,200 MW Thermal Capacity is already under construction while 51,520 MW is at various stages of planning & development. In addition, 13,997.5 MW of Hydro Electric Projects and 6,050 MW Pumped Storage Projects (PSP) are under construction. 24,225.5 MW of hydro electric projects and 50,760 MW of PSP are under various stage of planning and targeted to be completed by 2031-32. Also, 7,300 MW of Nuclear Capacity is under construction and 7,000 MW is under various stages of planning and approval.
- (ii) **Transmission Planning:** Inter and Intra-state transmission system has been planned and implementation of the same is taken up in matching time frame of generation capacity addition. As per the National Electricity Plan, about 1,91,474 ckm of transmission lines and 1274 GVA of transformation capacity is planned to be added (at 220 kV and above voltage level) during the ten year period from 2022-23 to 2031-32.

## (iii) Distribution System Planning:

- a) An expenditure of approx Rs. 1.85 lakh crore was incurred for strengthening the distribution system of the country through the schemes of Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS) and Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA). The Government of India has now launched "Revamped Distribution Sector Scheme (RDSS) on 20th July 2021 with the objective of improving the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient distribution sector. The Scheme has an outlay of Rs. 3,03,758 crore and a Gross Budgetary Support of Rs. 97,631 crore from Government of India over a period of five years from 2021-22 to FY 2025-26. Under RDSS, projects worth Rs. 2.77 lakh crore for distribution infrastructure works and smart metering works have been sanctioned at National level.
- b) Realizing the importance of the requirement of Distribution infrastructure for meeting the projected demand up to 2030, Distribution Perspective Plan upto 2029-30 has been prepared by CEA and has been shared with the States/ UTs

## (iv) Promotion of Renewable Energy Generation:

- a) India has committed to augment non fossil fuel based installed electricity generation capacity to over 5,00,000 MW by 2031-32. Transmission plan for integration of 5,00,000 MW RE capacity is being implemented in a phased manner commensurate with RE capacity
- b) Waiver of ISTS charges on transmission of electricity generated from Solar, Wind, Pumped Storage Plants and Battery Energy Storage Systems.
- c) Renewable Purchase Obligations (RPOs) and Energy Storage obligations Trajectory till 2029-30.
- d) Construction of Green Energy Corridors and putting in place 13 Renewable Energy Management Centres.
- e) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale.

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# ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 790 ANSWERED IN THE RAJYA SABHA ON 02.12.2024

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The month-wise details of All India Peak demand, Peak met and shortage during 2023-24 and current year (till October, 2024):

All figures in Gigawatt (GW)

	2023-24					
Month	Peak Demand	Peak Met	Surplus / Deficit (-)			
	GW	GW	GW	%		
April-2023	216.142	215.972	-0.170	-0.1		
May-2023	221.718	221.423	-0.295	-0.1		
June-2023	224.106	223.292	-0.814	-0.4		
July-2023	209.039	208.952	-0.087	0.0		
August-2023	238.824	236.295	-2.528	-1.1		
Septenber-2023	243.271	239.931	-3.340	-1.4		
October-2023	222.160	221.539	-0.620	-0.3		
November-2023	204.777	204.568	-0.209	-0.1		
December-2023	213.793	213.620	-0.173	-0.1		
January-2024	223.516	222.327	-1.189	-0.5		
February-2024	222.166	222.003	-0.163	-0.1		
March-2024	221.823	221.684	-0.139	-0.1		

	<b>2024-25</b> (Upto October-2024)					
Month	Peak Demand	Peak Met	Surplus /	Deficit (-)		
	GW	GW	GW	%		
April-2024	224.181	224.052	-0.129	-0.1		
May-2024	249.856	249.854	-0.002	-0.001		
June-2024	244.529	244.520	-0.009	0.0		
July-2024	226.786	226.630	-0.156	-0.07		
August-2024	216.486	216.470	-0.016	-0.01		
September-2024	230.613	230.458	-0.155	-0.07		
October-2024	219.254	219.222	-0.032	-0.01		

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#### **ANNEXURE-II**

## ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 790 ANSWERED IN THE RAJYA SABHA ON 02.12.2024

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All India Power Supply Position in terms of Energy (in Million Unit) and Peak (in Mega Watt) during the last five years i.e. 2019-20 to 2023-24 and the current year 2024-25 (upto October, 2024)

FY	Energy Require- ment	Energy Supplied	Energy not Supplied		Peak Demand	Peak Met	<b>Demand not Met</b>	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
2019-20	12,91,010	12,84,444	6,566	0.5	1,83,804	1,82,533	1,271	0.7
2020-21	12,75,534	12,70,663	4,871	0.4	1,90,198	1,89,395	802	0.4
2021-22	13,79,812	13,74,024	5,787	0.4	2,03,014	2,00,539	2,475	1.2
2022-23	15,13,497	15,05,914	7,583	0.5	2,15,888	2,07,231	8,657	4.0
2023-24	16,26,132	16,22,020	4,112	0.3	2,43,271	2,39,931	3,340	1.4
2024-25 (upto October, 2024)	10,28,85	10,27,58	1,261	0.1	2,49,856	2,49,854	2	0.001

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