GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.150
ANSWERED ON 03.02.2025

POWER DEFICIT SITUATION IN THE COUNTRY

150 SHRI PARIMAL NATHWANI:

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

(a) the details of power deficit situation in the country during the last five years, State-wise;

(b) the details of the key issues leading to power deficit situation in the country; and

(c) the details of steps taken or to be taken by Government to reduce/remove power deficit in the country?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): There is adequate availability of power in the country. Present installed generation capacity of the country is 4,62,065 MW. Government of India has addressed the critical issue of power deficiency by adding 2,30,050 MW of generation capacity since April, 2014 transforming the country from power deficit to power sufficient. The details of power supply position in the country during the last five years and current year (upto December, 2024) in terms of Energy are given at **Annexure-I**. The State/ UT-wise details of power supply position during the last five years and current year (upto December, 2024) are given at **Annexure-II**.

Energy Supplied has been by and large commensurate to the Energy Requirement. Marginal gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network.

(c): Following steps have been taken by the Government to reduce the power deficit and to meet the increasing power demand in the country:

1. **Generation Planning:**

(i) Installed generation capacity in 2031-32 is likely to be 900 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).

(ii) 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 include power generation as well as power procurement planning.

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(iii) All the States were advised to initiate process for creation of generation capacities; from all generation sources, as per their Resource Adequacy Plans.

(iv) In order to augment the power generation capacity, the Government of India has initiated following capacity addition programme:

(a) 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, 28,020 MW Thermal Capacity is already under construction and contracts for 19,200 MW thermal capacity have been awarded in FY 2024-25. Further, 36,320 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 8,000 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.

(c) 7,300 MW of Nuclear Capacity is under construction and targeted to be completed by 2029-30. 7,000 MW is under various stages of planning and approval.

2. **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.

3. Distribution System Planning:

(i) 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. 2.78 lakh crore for distribution infrastructure works and smart metering works have been sanctioned at National level.

(ii) 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.

4. Promotion of Renewable Energy Generation:

(i) Ministry of New & Renewable Energy (MNRE) has issued Bidding Trajectory for issuance of RE power procurement bids of 50 GW/annum by Renewable Energy Implementing Agencies from FY 2023-24 to FY 2027-28.

(ii) Foreign Direct Investment (FDI) has been permitted up to 100 percent under the automatic route.

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(iii) Inter State Transmission System (ISTS) charges have been waived for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025, for Green Hydrogen Projects till December 2030 and for offshore wind projects till December 2032.

(iv) To boost RE consumption, Renewable Purchase Obligation (RPO) followed by Renewable Consumption Obligation (RCO) trajectory has been notified till 2029-30. The RCO which is applicable to all designated consumers under the Energy Conservation Act 2001 will attract penalties for non-compliance.

(v) Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar, Wind, Wind-Solar Hybrid and Firm & Dispatchable RE (FDRE) projects have been issued.

(vi) Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, National Green Hydrogen Mission, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects have been launched.

(vii) Scheme for setting up of Ultra Mega Renewable Energy Parks is being implemented to provide land and transmission to RE developers for installation of RE projects at large scale.

(viii) Laying of new transmission lines and creating new sub-station capacity has been funded under the Green Energy Corridor Scheme for evacuation of renewable power.

(ix) "Strategy for Establishments of Offshore Wind Energy Projects" has been issued indicating a bidding trajectory of 37 GW by 2030 and various business models for project development.

(x) The Offshore Wind Energy Lease Rules, 2023 have been notified vide Ministry of External Affairs notification dated 19th December 2023, to regulate the grant of lease of offshore areas for development of offshore wind energy projects.

(xi) To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2030.

(xii) Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, has been notified on 06th June 2022 with objective of ensuring access to affordable, reliable, and sustainable green energy for all. Green Energy Open Access is allowed to any consumer with contract demand of 100 kW or above through single or multiple single connection aggregating Hundred kW or more located in same electricity division of a distribution licensee.

(xiii) Green Term Ahead Market (GTAM) has been launched to facilitate sale of Renewable Energy Power through exchanges.

(xiv) To achieve the objective of increased domestic production of Solar PV Modules, the Govt. of India is implementing the Production Linked Incentive (PLI) scheme for High Efficiency Solar PV Modules. This will enable manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Module

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 150 ANSWERED IN THE RAJYA SABHA ON 03.02.2025

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Details of power supply position in the country during the last five years and current year (upto December, 2024) in terms of Energy:

Year	Energy			
	Energy Requirement	Energy Supplied	Energy Not Supplied	
	(MU)	(MU)	(MU)	(%)
2019-20	12,91,010	12,84,444	6,566	0.5
2020-21	12,75,534	12,70,663	4,871	0.4
2021-22	13,79,812	13,74,024	5,787	0.4
2022-23	15,13,497	15,05,914	7,583	0.5
2023-24	16,26,132	16,22,020	4,112	0.3
2024-25 (upto December, 2024)	12,80,037	12,78,565	1,472	0.1

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 150 ANSWERED IN THE RAJYA SABHA ON 03.02.2025

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The State/ UT-wise details of power supply position during the last five years and current year (upto December, 2024)

	April, 2019 -March, 2020				**April, 2020 - March, 2021**			
State/UT	**Energy Requirement**	**Energy Supplied**	**Energy not Supplied**		**Energy Requirement**	**Energy Supplied**	**Energy not Supplied**	
	(MU)	**(MU)**	**(MU)**	**(%)**	**(MU)**	**(MU)**	**(MU)**	**(%)**
Chandigarh	1,732	1,732	0	0	1,523	1,523	0	0
Delhi	33,086	33,077	9	0	29,560	29,555	4	0
Haryana	54,505	54,492	13	0	53,161	53,108	53	0.1
Himachal Pradesh	10,424	10,353	71	0.7	10,186	10,130	56	0.5
Jammu & Kashmir	20,025	16,259	3,767	18.8	19,773	17,222	2,551	12.9
Punjab	56,776	56,770	6	0	58,445	58,377	67	0.1
Rajasthan	81,281	81,222	58	0.1	85,311	85,205	106	0.1
Uttar Pradesh	1,22,549	1,21,004	1,545	1.3	1,24,367	1,23,383	984	0.8
Uttarakhand	14,472	14,376	96	0.7	13,827	13,818	8	0.1
Chhattisgarh	30,111	30,107	4	0	30,472	30,449	22	0.1
Gujarat	1,13,940	1,13,939	1	0	1,11,622	1,11,622	0	0
Madhya Pradesh	76,172	76,172	0	0	83,437	83,437	0	0
Maharashtra	1,55,167	1,55,166	0	0	1,50,679	1,50,663	16	0
Daman & Diu	2,574	2,574	0	0	2,223	2,223	0	0
Dadra & Nagar Haveli	6,528	6,528	0	0	5,497	5,497	0	0
Goa	4,350	4,350	0	0	4,083	4,083	0	0
Andhra Pradesh	65,452	65,414	38	0.1	62,080	62,076	4	0
Telangana	68,306	68,303	3	0	66,998	66,994	4	0
Karnataka	72,799	72,796	3	0	68,851	68,831	19	0
Kerala	26,315	26,265	50	0.2	25,118	25,102	16	0.1
Tamil Nadu	1,08,816	1,08,812	4	0	1,01,194	1,01,189	5	0
Puducherry	2,847	2,846	1	0	2,644	2,644	0	0
Lakshadweep	46	46	0	0	56	56	0	0
Bihar	31,627	31,533	94	0.3	34,171	34,018	153	0.4
DVC	22,429	22,427	2	0	21,368	21,368	0	0
Jharkhand	8,941	8,872	69	0.8	9,953	9,675	278	2.8
Odisha	29,692	29,692	0	0	29,848	29,848	0	0
West Bengal	52,948	52,824	124	0.2	51,644	51,543	100	0.2
Sikkim	554	554	0	0	546	546	0	0
Andaman-Nicobar	346	323	23	6.7	346	323	23	6.7
Arunachal Pradesh	753	749	4	0.5	719	714	5	0.7
Assam	9,804	9,288	516	5.3	10,192	9,815	377	3.7
Manipur	924	917	6	0.7	974	969	5	0.5
Meghalaya	2,112	2,064	48	2.3	2,031	2,005	26	1.3
Mizoram	647	643	4	0.7	728	723	4	0.6
Nagaland	814	809	5	0.7	826	822	4	0.5
Tripura	1,538	1,515	23	1.5	1,484	1,481	3	0.2
All India	12,91,010	12,84,444	6,566	0.5	12,75,534	12,70,663	4,871	0.4

The details of State / UT wise Energy Requirement and Energy Supplied in the country from FY 2021-22 and FY 2022-23:

	April, 2021 - March, 2022				April, 2022 - March, 2023			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
State/UT	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	1,606	1,606	0	0	1,788	1,788	0	0
Delhi	31,128	31,122	6	0	35,143	35,133	10	0
Haryana	55,499	55,209	290	0.5	61,451	60,945	506	0.8
Himachal Pradesh	12,115	12,088	27	0.2	12,649	12,542	107	0.8
Jammu & Kashmir	19,957	18,434	1,524	7.6	19,639	19,322	317	1.6
Punjab	62,846	62,411	436	0.7	69,522	69,220	302	0.4
Rajasthan	89,814	89,310	504	0.6	1,01,801	1,00,057	1,745	1.7
Uttar Pradesh	1,29,448	1,28,310	1,138	0.9	1,44,251	1,43,050	1,201	0.8
Uttarakhand	15,521	15,426	94	0.6	15,647	15,386	261	1.7
Chhattisgarh	31,908	31,872	35	0.1	37,446	37,374	72	0.2
Gujarat	1,23,953	1,23,666	287	0.2	1,39,043	1,38,999	44	0
Madhya Pradesh	86,501	86,455	46	0.1	92,683	92,325	358	0.4
Maharashtra	1,72,823	1,72,809	14	0	1,87,309	1,87,197	111	0.1
Dadra & Nagar Haveli and Daman & Diu	9,433	9,433	0	0	10,018	10,018	0	0
Goa	4,448	4,448	0	0	4,669	4,669	0	0
Andhra Pradesh	68,413	68,219	194	0.3	72,302	71,893	410	0.6
Telangana	70,539	70,523	16	0	77,832	77,799	34	0
Karnataka	72,437	72,417	20	0	75,688	75,663	26	0
Kerala	26,579	26,570	9	0	27,747	27,726	21	0.1
Tamil Nadu	1,09,816	1,09,798	18	0	1,14,798	1,14,722	77	0.1
Puducherry	2,894	2,893	1	0	3,051	3,050	1	0
Lakshadweep	56	56	0	0	64	64	0	0
Bihar	36,216	35,761	455	1.3	39,545	38,762	783	2
DVC	23,741	23,736	4	0	26,339	26,330	9	0
Jharkhand	11,148	10,590	558	5	13,278	12,288	990	7.5
Odisha	38,339	38,332	7	0	42,631	42,584	47	0.1
West Bengal	54,001	53,945	57	0.1	60,348	60,274	74	0.1
Sikkim	610	609	0	0	587	587	0	0
Andaman-Nicobar	335	327	8	2.29199	348	348	0	0.1
Arunachal Pradesh	875	874	1	0.1	915	892	24	2.6
Assam	10,844	10,825	19	0.2	11,465	11,465	0	0
Manipur	1,019	1,018	1	0.1	1,014	1,014	0	0
Meghalaya	2,256	2,243	13	0.6	2,237	2,237	0	0
Mizoram	656	644	12	1.8	645	645	0	0
Nagaland	852	851	1	0.1	926	873	54	5.8
Tripura	1,578	1,578	0	0	1,547	1,547	0	0
All India	13,79,812	13,74,024	5,787	0.4	15,13,497	15,05,914	7,583	0.5

The details of State / UT wise Energy Requirement and Energy Supplied in the country from FY 2023-24 and current year (upto December, 2024)

State / UT	April, 2023 - March, 2024				April, 2024 - December, 2024			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	1,789	1,789	0	0	1,597	1,597	0	0.0
Delhi	35,501	35,496	5	0	31,308	31,297	11	0.0
Haryana	63,983	63,636	348	0.5	56,486	56,457	29	0.1
Himachal Pradesh	12,805	12,767	38	0.3	10,254	10,219	34	0.3
UT of J&K and Ladakh	20,040	19,763	277	1.4	14,717	14,636	81	0.6
Punjab	69,533	69,528	5	0	63,536	63,536	0	0.0
Rajasthan	1,07,422	1,06,806	616	0.6	84,779	84,476	304	0.4
Uttar Pradesh	1,48,791	1,48,287	504	0.3	1,32,357	1,32,058	299	0.2
Uttarakhand	15,644	15,532	112	0.7	13,016	12,974	42	0.3
Chhattisgarh	39,930	39,872	58	0.1	31,494	31,478	17	0.1
Gujarat	1,45,768	1,45,740	28	0	1,13,697	1,13,697	0	0.0
Madhya Pradesh	99,301	99,150	151	0.2	75,449	75,354	95	0.1
Maharashtra	2,07,108	2,06,931	176	0.1	1,47,892	1,47,834	58	0.0
Dadra & Nagar Haveli and Daman & Diu	10,164	10,164	0	0	8,153	8,153	0	0.0
Goa	5,111	5,111	0	0	4,035	4,035	0	0.0
Andhra Pradesh	80,209	80,151	57	0.1	58,558	58,555	3	0.0
Telangana	84,623	84,613	9	0	61,859	61,855	3	0.0
Karnataka	94,088	93,934	154	0.2	64,447	64,443	4	0.0
Kerala	30,943	30,938	5	0	23,478	23,470	8	0.0
Tamil Nadu	1,26,163	1,26,151	12	0	98,577	98,572	5	0.0
Puducherry	3,456	3,455	1	0	2,735	2,735	0	0.0
Lakshadweep	64	64	0	0	50	50	0	0.0
Bihar	41,514	40,918	596	1.4	35,400	35,246	154	0.4
DVC	26,560	26,552	8	0	19,606	19,603	3	0.0
Jharkhand	14,408	13,858	550	3.8	11,647	11,573	74	0.6
Odisha	41,358	41,333	25	0.1	33,046	33,023	24	0.1
West Bengal	67,576	67,490	86	0.1	55,769	55,681	88	0.2
Sikkim	544	543	0	0	401	401	0	0.0
Andaman-Nicobar	386	374	12	3.2	316	307	9	3.0
Arunachal Pradesh	1,014	1,014	0	0	767	767	0	0.0
Assam	12,445	12,341	104	0.8	10,250	10,244	6	0.1
Manipur	1,023	1,008	15	1.5	771	770	0	0.0
Meghalaya	2,236	2,066	170	7.6	1,514	1,514	0	0.0
Mizoram	684	684	0	0	516	516	0	0.0
Nagaland	921	921	0	0	721	721	0	0.0
Tripura	1,691	1,691	0	0	1,527	1,527	0	0.0
All India	16,26,132	16,22,020	4,112	0.3	12,80,037	12,78,565	1,472	0.1

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