

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.1426
ANSWERED ON 13.02.2025**

SCHEME TO ENSURE POWER SUPPLY IN RURAL AND REMOTE AREAS

†1426. SHRI ZIA UR REHMAN:

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

- (a) the details of the steps taken by the Government so far to improve power supply across the country, State/UT-wise;**
- (b) whether the Government is implementing any special scheme to ensure 24X7 power supply in rural and remote areas;**
- (c) if so, the salient features and objectives of the said scheme; and**
- (d) if not, the reasons therefor?**

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d) : There is adequate availability of power in the country. Present installed generation capacity of the country is 462 GW. Government of India has addressed the critical issue of power deficiency by adding 230 GW of generation capacity since April, 2014 transforming the country from power deficit to power sufficient. Further, addition of 2,00,168 circuit kilometer (ckm) of Transmission lines, 7,66,859 MVA of Transformation capacity and 82,790 MW of Inter-Regional capacity has been done since 2014 with capability of transferring 1,18,740 MW from one corner of the country to another.

The State/ UT-wise details of Power Supply Position during the last three years and current year 2024-25 (upto December 2024) are given at Annexure. 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.

Electricity being a concurrent subject, supply and distribution of electricity to the consumers is within the purview of the respective State Government/Power Utility. As per the Electricity (Rights of Consumers) Rules, 2020, the distribution licensee shall supply 24x7 power to all consumers. However, the Commission may specify lower hours of supply for some categories of consumers like agriculture

Government of India has taken several steps to improve the availability of power in the country. Further, several schemes have been / are being implemented with a view to ensure 24X7 power supply in the country including rural and remote areas. The details are indicated below:

1. Generation Planning:

- (i) Installed generation capacity in 2031-32 is likely to be 874 GW. This includes capacity from conventional sources- Coal, Lignite etc., renewable sources- Solar, Wind and Hydro.**
- (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 includes power generation as well as power procurement planning.**
- (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 about 8,000 MW Pumped Storage Projects (PSPs) are under construction. Further, 24,225.5 MW of Hydro Electric Projects and 50,760 MW of PSPs 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 of Nuclear Capacity is under various stages of planning and approval.**
 - (D) 147,160 MW Renewable Capacity including 84,190 MW of Solar, 26,200 MW of Wind and 36,330 MW Hybrid power is under construction while 79,270 MW of Renewable Capacity including 50,830 MW of Solar, 600 MW of Wind and 27,840 MW Hybrid Power is at various stages of planning and targeted to be completed by 2029-30.**
 - (E) Six (06) Battery Energy Storage System (BESS) projects of 522.60 MW capacity are under construction and 45 BESS projects of 14,242.29 MW capacity are at various stages of planning.**

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) Government of India has been supporting the States/ UTs through schemes like Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) to improve access and quality of power supply to all consumers. Under these scheme, projects worth Rs. 1.85 lakh Cr. were executed for strengthening of power distribution infrastructure. A total of 18,374 villages were electrified under the DDUGJY and 2.86 Cr households were electrified during SAUBHAGYA.

(ii) Further, Government of India launched Revamped Distribution Sector Scheme (RDSS) in 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. Under the scheme, infrastructure works worth Rs. 2.78 lakh Cr. have been sanctioned for the distribution utilities.

(iii) Government of India is further supporting States for grid electrification of left-out households during SAUBHAGYA, under the ongoing scheme of RDSS. In addition, all identified households belonging to Particularly Vulnerable Tribal Group (PVTG) under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) and tribal households under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan) are being sanctioned for on-grid electricity connection under RDSS, as per the Scheme guidelines. Till date, works amounting to Rs. 4,535 Cr. have been sanctioned for electrification of 9,97,680 households including PVTG households identified under PM-JANMAN and tribal households identified under DA-JGUA.

(iv) With collective efforts of Centre and States/UTs, the average hours of supply in rural and urban areas have improved to 21.9 hrs and 23.4 hrs, respectively, in FY 2024.

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.

- (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 Establishment 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 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**

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 1426 ANSWERED IN THE LOK SABHA ON 13.02.2025

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

(MU: Million Unit)

| | 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 | 2.29 | 348 | 348 | 0 | 0.1 |
| | | | 199 | | | | | |
| 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 during FY 2023-24 and current year (upto December, 2024)

(MU: Million Unit)

| 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 |
