GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.178
ANSWERED ON 31.07.2025

POWER GENERATION CAPACITY IN TAMIL NADU

***178. THIRU D M KATHIR ANAND:**

Will the Minister of POWER
be pleased to state:

(a) whether the Union Government has taken steps to increase the power generation capacity and load flow through the Southern Grid in Tamil Nadu to match increasing power demand in the State during the next three years and if so, the details thereof;

(b) the present status of power generation capacity in Tamil Nadu and the expected increase in its power generation capacity during the next three years; and

(c) whether the Government has taken adequate steps to encourage and accommodate new private players in power generation especially in Tamil Nadu and if so, the details thereof?

A N S W E R

THE MINISTER OF POWER

(SHRI MANOHAR LAL)

(a) to (c) : A Statement is laid on the Table of the House.

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STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) IN RESPECT OF LOK SABHA STARRED QUESTION NO.178 FOR REPLY ON 31.07.2025 REGARDING POWER GENERATION CAPACITY IN TAMIL NADU ASKED BY THIRU D M KATHIR ANAND.

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(a) & (b) : The installed generation capacity in the State of Tamil Nadu is 43,107 MW. The following measures have been taken to increase the power generation capacity in the State in next three years:

(i) 3,440 MW of thermal capacity and 500 MW of pumped storage capacity in the state sector are scheduled to be commissioned in the next three years.

(ii) Tamil Nadu will get share of about 2,151.8 MW from the Nuclear projects scheduled to be commissioned in the next three years.

(iii) About 6,000 MW of renewable capacity is scheduled to be commissioned in the state in the next three years.

(iv) Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects have been launched.

Tamil Nadu is well connected with the National Grid through high capacity transmission corridors comprising of 765 kV and 400 kV Extra High Voltage (EHV) AC lines as well as +/-800 kV High Voltage (HV) DC System which facilitates smooth transfer of power through Inter State Transmission System (ISTS) network between Tamil Nadu and other Southern Region States/ National Grid.

Various Inter-Regional links viz. Narendra (SR) – Pune (WR) 765 kV D/c line, Angul (ER) – Srikakulam (SR) 765 kV 2nd D/c line and Bidar (SR) – Parli (WR) 765kV D/c line are in different stages of implementation. These Inter-Regional links shall facilitate in meeting the import requirements of Southern Region including Tamil Nadu during peak demand season of Southern region. The links will also facilitate export of surplus power from Southern Region.

(c): As per the Electricity Act 2003, generation of electricity is a delicensed activity.

.....2.

The Government of India has taken several steps to encourage investment by the private players in the power generation in the country, including Tamil Nadu, particularly in renewable sector. These, inter-alia, include the following:

(i) **Resource Adequacy Plan indicating the capacity to be tied up by DISCOMs has been prepared for the next ten years. This gives visibility to the generation developers including private players to set up generation capacity in the country including Tamil Nadu.**

(ii) **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 (REIAs) from FY 2023-24 to FY 2027-28.**

(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) **In order to facilitate the integration of large scale renewable generation capacity addition in the country, the Transmission plan i.e. "Transmission System for Integration of over 500 GW RE Capacity by 2030" has been prepared by CEA. This includes the transmission system for evacuation of 8 GW of RE (including 5 GW of off shore wind) in Tamil Nadu, out of which, for 1.5 GW RE capacity, transmission system (ISTS) is already commissioned; for 1 GW (including 0.5 GW offshore wind) RE capacity, transmission system (ISTS) is under implementation and transmission system (ISTS) for evacuation of 5.0 GW RE capacity has been identified and would be taken up for implementation in a phased manner commensurate with the RE capacity addition.**

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

(vi) **Project Development Cell for attracting and facilitating investments in renewable energy sector has been set up in Ministry of New & Renewable Energy.**

(vii) **Scheme for setting up of Solar parks and Ultra Mega Solar power projects is being implemented to provide land and transmission to RE developers for installation of RE projects at large scale.**

(viii) **"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.**

.....3.

(ix) **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.**

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

(xi) **The government has approved the Viability Gap Funding (VGF) scheme at a total outlay of Rs. 7,453 Cr for the implementation of Offshore Wind Energy Projects, for the installation of 1 GW of offshore wind energy projects, out of which 500 MW is to be installed off the coast of Tamil Nadu.**

Further, the Government of Tamil Nadu has taken following steps to encourage participation of private sector in power generation in the state:

(i) Policies for establishment of Pumped Storage Projects and Small Hydel Projects (from 100 KW to 10 MW) to encourage participation of private developers have been issued by the Government of Tamil Nadu.

(ii) Pumped Storage Projects totaling to 13,500 MW have been envisaged in various locations of Tamil Nadu and are to be established under Public Private Partnership Mode.

(iii) For development of self-identified Pumped Storage Projects and small Hydro Projects, developers have been identified by calling Expression of Interest and is in the process of allotment.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1857
ANSWERED ON 31.07.2025

UNINTERRUPTED ELECTRICITY SUPPLY IN VILLAGES OF LADAKH

1857. SHRI MOHMAD HANEEFA:

Will the Minister of POWER be pleased to state:

(a) whether all villages in the Union Territory of Ladakh have access to 24x7 electricity during winter months when solar output drops significantly;

(b) if so, the details thereof and if not, the timeline by which uninterrupted electricity supply in remote villages of Ladakh would be ensured and the steps being taken by the Government in this regard;

(c) the details of development made regarding the 220 kilo-volt Srinagar-Leh electricity line project to connect the border areas of Ladakh with the National Electricity Grid and its timeline for completion;

(d) whether any partnership with public sector or private energy companies is being explored for next-generation energy storage in Ladakh and if so, the details thereof; and

(e) whether carbon-neutral energy audits have been conducted for Government buildings and defence establishments in the region and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : As per Rule (10) of 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. The Rules are applicable for all States and UTs.

Government of India has supported the UT of Ladakh under the scheme of Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) and is currently supporting under Revamped Distribution Sector Scheme (RDSS), to help it achieve the objective of providing quality and reliable supply of power to all households.

.....2.

As reported by the UT of Ladakh, Nubra, Zanskar and Changthang regions are presently electrified through off-grid mode by small Hydro Electric projects, solar PV Plants, Diesel generators. In order to provide grid connectivity to these areas, 220 kV Nubra & Zanskar transmission line and 66 kV line from Himya to Nyoma and from Kharu to Durbuk is under construction. Under RDSS, works amounting to Rs. 687 Cr have been sanctioned which include infrastructure works worth Rs 567 Cr for providing grid connectivity to Changthang Region. The works once executed would help in improving the quality and reliability of supply of power in the UT.

(c) : As per information received from the UT, 335 KM, 220 kV Srinagar- Leh Transmission line is already completed and commissioned in 2019. In order to further connect border areas with the national grid, following works are under progress:

i. **220 kV Phyang-Disket (Nubra) transmission line: Out of 265 total towers, 90 towers have been erected and 224 tower foundations are ready. 17.67 KM stringing completed.**

ii. **220 kV Drass-Padum (Zanskar) transmission Line: Out of 675 total towers, 339 towers have been erected and 577 tower foundations are ready. 27.77 KM stringing completed.**

Above projects are expected to be completed by October 2026.

(d) : UT of Ladakh has reported following projects for development of Renewable Energy/ Storage Projects in the UT:

- **Development of 25 MW AC, 50 MWp Solar Power Plant with 40 MWh Battery Energy Storage System (BESS) at Taru with Solar Energy Corporation of India (SECI). The work has been awarded and is under progress.**

- **7 MW Solar Project with 9 MWh BESS at Stakna Hydel Project site has been identified and bid is under process on RESCO model.**

- **1.5 MW (AC), 4.5 MW DC Solar Power project with 12 MWh BESS site in Nubra and 6 MW AC, with 12 MWh BESS Solar Power project in Zanskar on RESCO Model.**

(e) : Carbon-Neutral Energy Audits have not been conducted for Government Buildings and Defence establishments in the UT of Ladakh.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1867
ANSWERED ON 31.07.2025

NATIONAL ELECTRICITY PLAN

†1867. SHRI DULU MAHATO:
SHRI BIDYUT BARAN MAHATO:
SMT. SHOBHANABEN MAHENDRASINH BARAIYA:
SHRI DILIP SAIKIA:
SHRI ANURAG SHARMA:
SHRI CHHATRAPAL SINGH GANGWAR:
SHRI DINESHBHAI MAKWANA:
SHRI BHARTRUHARI MAHTAB:
SHRI MUKESH RAJPUT:
SHRI CHAVDA VINOD LAKHAMSHI:
DR. HEMANT VISHNU SAVARA:
SHRI JAGDAMBIKA PAL:
SHRI MAHENDRA SINGH SOLANKY:
SHRI RAVINDRA SHUKLA ALIAS RAVI KISHAN:

Will the Minister of POWER
be pleased to state:

(a) the estimated peak electricity demand targeted to be addressed/met by the year 2032 under the National Electricity Plan;

(b) the estimated augmentation in Central and State transmission systems to meet the above demand by the year 2032 under the said plan;

(c) the estimated increase in inter-regional transfer capacity by the year 2032;

(d) whether there are any provisions under the Plan to supply electricity to green hydrogen or green ammonia manufacturing potential hubs and if so, the details thereof;

(e) the details of demand and supply of power during the last five years, State-wise specially in the State of Maharashtra; and

(f) the manner in which the initiatives of the Government regarding the National Electric Plan 2032 is likely to help in boosting development in Madhya Pradesh especially in Dewas-Shajapur Lok Sabha Constituency?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): As per National Electricity Plan (Transmission), for the period 2022-32, All India peak electricity demand is projected to be 388 GW by 2031-32. The Government of India is confident of meeting this projected power demand without any shortages.

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(b) : The details of the transmission system (220 kV and above) planned till 2031-32 under Inter-State Transmission System (ISTS) and Intra-State Transmission System (InSTS) are given at Annexure-I.

(c) : The inter-regional transmission capacity is planned to be increased from around 120 GW as on June 2025 to 168 GW by the year 2031-32.

(d): As per initial estimates, the additional electricity demand on account of green hydrogen/green ammonia production is around 70 GW by the year 2031-32. Transmission system has been planned for delivery of power to green hydrogen/green ammonia manufacturing hubs in the coastal areas of Gujarat, Odisha, West Bengal, Andhra Pradesh, Tamil Nadu and Karnataka. The planned transmission system would be taken up for implementation in a phased manner commensurate with the progress of establishment of green hydrogen/green ammonia manufacturing hubs. The details of the transmission system planned for delivery of power to green hydrogen/green ammonia manufacturing hubs are given at Annexure-II.

(e) : The details of power supply position of the country in terms of Energy for the last five year and the current year (upto June 2025) including the state of Maharashtra are given at Annexure-III.

(f) : As per National Electricity Plan (Volume-II Transmission), in Madhya Pradesh, about, 2030 ckm of transmission lines and 27.5 GVA of transformation capacity (220 kV and above voltage levels) are planned to be added in ISTS during 2022-32. In addition, about 4,292 ckm of transmission lines and 16.54 GVA of transformation capacity in the substations (220 kV and above voltage levels) are planned to be added in Intra-State Transmission System (InSTS) during 2022-32.

In the vicinity of Dewas-Shajapur constituency, following new substations/ ICT augmentations at existing substation have been planned under Inter-State Transmission System (ISTS) and InSTS by 2032 which would help in meeting the electricity demand of the constituency.

(i) New 220/132 kV, 160 MVA Super Corridor (Indore) Substation(InSTS)

(ii) ICT augmentation at 220/132 kV, 160 MVA Mangliya Substation (InSTS)

(iii) ICT augmentation at 765/400 kV Indore Substation (ISTS)

(iv) ICT augmentation at 400/200 kV Pachora SEZ PP (ISTS)

(v) ICT augmentation at 400/220 kV Shujalpur (PG) Substation (ISTS)

(vi) ICT augmentation at 400/220 kV Rajgarh Substation (ISTS)

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1867 ANSWERED IN THE LOK SABHA ON 31.07.2025

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The details of the transmission system (220 kV and above) planned till 2031-32 under Inter-State Transmission System (ISTS) and Intra-State Transmission System (InSTS):

		As on 30.06.2025	Planned addition during July 2025 to March 2032	At the end of 2031-32 (31.03.2032)	Total
Transmission lines (ckm)	ISTS	2,14,677	79,868	2,94,545	6,48,190
	Intra-State	2,80,728	72,917	3,53,645	
Transformation Capacity (MVA)	ISTS	5,68,205	7,13,150	12,81,355	24,11,885
	Intra-State	7,91,498	3,39,032	11,30,530	

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 1867 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Details of the transmission system planned for delivery of power to green hydrogen/green ammonia manufacturing hubs:

(i) Network Expansion Scheme in Navinal (Mundra) area of Gujarat for drawal of power (under Phase-I Part A)

(ii) Transmission System for supply of power to Green Hydrogen/Green Ammonia manufacturing hub potential in Mundra area of Gujarat under Phase-I: Part B scheme

(iii) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub in Mundra, Gujarat, Phase-II

(iv) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub in Mundra, Gujarat, under Phase-III

(v) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub in Mundra, Gujarat, under Phase-IV

(vi) Transmission System for supply of power to Green Hydrogen/Green Ammonia manufacturing hub in Kandla area of Gujarat (Phase-I)

(vii) Transmission System for supply of power to Green Hydrogen/ Ammonia potential in Kandla area of Gujarat (Phase-II)

(viii) Transmission System for supply of power to Green Hydrogen/ Ammonia potential in Kandla area of Gujarat (Phase-III)

(ix) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Kakinada

(x) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Pudimadka (Vizag)

(xi) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Ramayapatnam

(xii) Transmission system for meeting electricity demand of Green Hydrogen/Green Ammonia manufacturing hub at Tuticorin

(xiii) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Mangalore

(xiv) Eastern Region Expansion Scheme-XXXIV (ERES- XXXIV): for supply of power to Green Hydrogen/Green Ammonia manufacturing hub at Paradeep

(xv) Eastern Region Expansion Scheme-XXXIX (ERES- XXXIX): for supply of power to Green Hydrogen/Green Ammonia manufacturing hub at Gopalpur

(xvi) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Goplapur

(xvii) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Paradeep and Kendrapada

(xviii) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Malkangiri

(xix) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Rayagada

(xx) Transmission System for supply of power to Green Hydrogen/ Green Ammonia manufacturing hub at Shyama Prasad Mukherjee Port

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ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 1867 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Details of States/UTs/Regions-wise Power Supply Position of the Country including the Maharashtra in terms of Energy for the period from FY 2019-2020 to FY 2020-2021:

State/ System / Region	April, 2019 -March, 2020				April, 2020 - March, 2021			
	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
Northern Region	3,94,851	3,89,285	5,566	1.4	3,96,151	3,92,323	3,829	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
Western Region	3,88,841	3,88,836	5	0	3,88,013	3,87,975	38	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
Southern Region	3,44,535	3,44,436	99	0	3,26,885	3,26,836	48	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
Eastern Region	1,46,191	1,45,902	289	0.2	1,47,530	1,46,999	531	0.4
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
North-Eastern Region	16,591	15,984	607	3.7	16,955	16,531	424	2.5
All India	12,91,010	12,84,444	6,566	0.5	12,75,534	12,70,663	4,871	0.4

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

(*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments. The MU figures has been rounded off to nearest unit place.

Details of States/UTs/Regions-wise Power Supply Position of the country including the Maharashtra in terms of Energy for the period of FY 2021-22:

State/ System / Region	April, 2021 - March, 2022			
	Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)
Chandigarh	1,606	1,606	0	0
Delhi	31,128	31,122	6	0
Haryana	55,499	55,209	290	0.5
Himachal Pradesh	12,115	12,088	27	0.2
Jammu & Kashmir	19,957	18,434	1,524	7.6
Punjab	62,846	62,411	436	0.7
Rajasthan	89,814	89,310	504	0.6
Uttar Pradesh	1,29,448	1,28,310	1,138	0.9
Uttarakhand	15,521	15,426	94	0.6
Northern Region	4,17,934	4,13,915	4,019	1
Chhattisgarh	31,908	31,872	35	0.1
Gujarat	1,23,953	1,23,666	287	0.2
Madhya Pradesh	86,501	86,455	46	0.1
Maharashtra	1,72,823	1,72,809	14	0
Daman & Diu	2,594	2,594	0	0
Dadra & Nagar Haveli	6,839	6,839	0	0
Goa	4,448	4,448	0	0
Western Region	4,29,065	4,28,683	383	0.1
Andhra Pradesh	68,413	68,219	194	0.3
Telangana	70,539	70,523	16	0
Karnataka	72,437	72,417	20	0
Kerala	26,579	26,570	9	0
Tamil Nadu	1,09,816	1,09,798	18	0
Puducherry	2,894	2,893	1	0
Lakshadweep (#)	56	56	0	0
Southern Region	3,50,678	3,50,421	258	0.1
Bihar	36,216	35,761	455	1.3
DVC	23,741	23,736	4	0
Jharkhand	11,148	10,590	558	5
Odisha	38,339	38,332	7	0
West Bengal	54,001	53,945	57	0.1
Sikkim	610	609	0	0
Andaman- Nicobar (#)	335	327	8	2.3
Eastern Region	1,64,054	1,62,973	1,081	0.7
Arunachal Pradesh	875	874	1	0.1
Assam	10,844	10,825	19	0.2
Manipur	1,019	1,018	1	0.1
Meghalaya	2,256	2,243	13	0.6
Mizoram	656	644	12	1.8
Nagaland	852	851	1	0.1
Tripura (*)	1,578	1,578	0	0
North-Eastern Region	18,079	18,033	47	0.3
All India	13,79,812	13,74,024	5,787	0.4

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

(*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments. The MU figures have been rounded off to nearest unit place.

Details of States/UTs/Regions-wise Power Supply Position of the country including Maharashtra in terms of Energy for the period from FY 2022-23 to FY 2023-24:

State/ System / Region	April, 2022 - March, 2023				April, 2023 - March, 2024			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	1,788	1,788	0	0	1,789	1,789	0	0
Delhi	35,143	35,133	10	0	35,501	35,496	5	0
Haryana	61,451	60,945	506	0.8	63,983	63,636	348	0.5
Himachal Pradesh	12,649	12,542	107	0.8	12,805	12,767	38	0.3
Jammu & Kashmir	19,639	19,322	317	1.6	20,040	19,763	277	1.4
Punjab	69,522	69,220	302	0.4	69,533	69,528	5	0
Rajasthan	1,01,801	1,00,057	1,745	1.7	1,07,422	1,06,806	616	0.6
Uttar Pradesh	1,44,251	1,43,050	1,201	0.8	1,48,791	1,48,287	504	0.3
Uttarakhand	15,647	15,386	261	1.7	15,644	15,532	112	0.7
Northern Region	4,63,088	4,58,640	4,449	1	4,76,852	4,74,946	1,906	0.4
Chhattisgarh	37,446	37,374	72	0.2	39,930	39,872	58	0.1
Gujarat	1,39,043	1,38,999	44	0	1,45,768	1,45,740	28	0
Madhya Pradesh	92,683	92,325	358	0.4	99,301	99,150	151	0.2
Maharashtra	1,87,309	1,87,197	111	0.1	2,07,108	2,06,931	176	0.1
Dadra & Nagar Haveli and Daman & Diu	10,018	10,018	0	0	10,164	10,164	0	0
Goa	4,669	4,669	0	0	5,111	5,111	0	0
Western Region	4,77,393	4,76,808	586	0.1	5,17,714	5,17,301	413	0.1
Andhra Pradesh	72,302	71,893	410	0.6	80,209	80,151	57	0.1
Telangana	77,832	77,799	34	0	84,623	84,613	9	0
Karnataka	75,688	75,663	26	0	94,088	93,934	154	0.2
Kerala	27,747	27,726	21	0.1	30,943	30,938	5	0
Tamil Nadu	1,14,798	1,14,722	77	0.1	1,26,163	1,26,151	12	0
Puducherry	3,051	3,050	1	0	3,456	3,455	1	0
Lakshadweep (#)	64	64	0	0	64	64	0	0
Southern Region	3,71,467	3,70,900	567	0.2	4,19,531	4,19,293	238	0.1
Bihar	39,545	38,762	783	2	41,514	40,918	596	1.4
DVC	26,339	26,330	9	0	26,560	26,552	8	0
Jharkhand	13,278	12,288	990	7.5	14,408	13,858	550	3.8
Odisha	42,631	42,584	47	0.1	41,358	41,333	25	0.1
West Bengal	60,348	60,274	74	0.1	67,576	67,490	86	0.1
Sikkim	587	587	0	0	544	543	0	0
Andaman- Nicobar (#)	348	348	0	0.12914	386	374	12	3.18562
Eastern Region	1,82,791	1,80,888	1,903	1	1,92,013	1,90,747	1,266	0.7
Arunachal Pradesh	915	892	24	2.6	1,014	1,014	0	0
Assam	11,465	11,465	0	0	12,445	12,341	104	0.8
Manipur	1,014	1,014	0	0	1,023	1,008	15	1.5
Meghalaya	2,237	2,237	0	0	2,236	2,066	170	7.6
Mizoram	645	645	0	0	684	684	0	0
Nagaland	926	873	54	5.8	921	921	0	0
Tripura (*)	1,547	1,547	0	0	1,691	1,691	0	0
North-Eastern Region	18,758	18,680	78	0.4	20,022	19,733	289	1.4
All India	15,13,497	15,05,914	7,583	0.5	16,26,132	16,22,020	4,112	0.3

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

(*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments. The MU figures has been rounded off to nearest unit place.

Details of States/UTs/Regions-wise All India Power Supply Position of the country including Maharashtra in terms of Energy for the period from FY 2024-25 to FY 2025-26 (upto June, 2025)

State/ System / Region	April, 2024 - March, 2025				April, 2025 - June, 2025			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	1,952	1,952	0	0	555	555	0	0
Delhi	38,255	38,243	12	0	11,303	11,299	4	0
Haryana	70,149	70,120	30	0	18,816	18,757	59	0.3
Himachal Pradesh	13,566	13,526	40	0.3	3,387	3,375	11	0.3
Jammu & Kashmir	20,374	20,283	90	0.4	4,853	4,847	6	0.1
Punjab	77,423	77,423	0	0	20,885	20,860	25	0.1
Rajasthan	1,13,833	1,13,529	304	0.3	28,036	28,036	0	0
Uttar Pradesh	1,65,090	1,64,786	304	0.2	46,028	46,022	6	0
Uttarakhand	16,770	16,727	43	0.3	4,426	4,417	10	0.2
Northern Region	5,18,869	5,17,917	952	0.2	1,38,697	1,38,576	121	0.1
Chhattisgarh	43,208	43,180	28	0.1	11,474	11,472	2	0
Gujarat	1,51,878	1,51,875	3	0	41,752	41,752	0	0
Madhya Pradesh	1,04,445	1,04,312	133	0.1	25,168	25,166	2	0
Maharashtra	2,01,816	2,01,757	59	0	52,395	52,393	1	0
Dadra & Nagar Haveli and Daman & Diu	10,852	10,852	0	0	2,845	2,845	0	0
Goa	5,411	5,411	0	0	1,486	1,486	0	0
Western Region	5,28,924	5,28,701	223	0	1,38,472	1,38,466	6	0
Andhra Pradesh	79,028	79,025	3	0	20,471	20,471	0	0
Telangana	88,262	88,258	4	0	19,690	19,690	0	0
Karnataka	92,450	92,446	4	0	22,945	22,945	0	0
Kerala	31,624	31,616	8	0	8,015	8,015	0	0
Tamil Nadu	1,30,413	1,30,408	5	0	34,817	34,817	0	0
Puducherry	3,549	3,549	0	0	948	946	2	0.2
Lakshadweep (#)	68	68	0	0	20	20	0	0
Southern Region	4,25,373	4,25,349	24	0	1,06,899	1,06,897	2	0
Bihar	44,393	44,217	176	0.4	12,716	12,713	4	0
DVC	25,891	25,888	3	0	6,368	6,367	1	0
Jharkhand	15,203	15,126	77	0.5	3,931	3,930	1	0
Odisha	42,882	42,858	24	0.1	11,830	11,828	2	0
West Bengal	71,180	71,085	95	0.1	20,645	20,626	18	0.1
Sikkim	574	574	0	0	128	128	0	0
Andaman- Nicobar (#)	425	413	12	2.9	107	104	3	2.8
Eastern Region	2,00,180	1,99,806	374	0.2	55,637	55,611	26	0
Arunachal Pradesh	1,050	1,050	0	0	283	283	0	0
Assam	12,843	12,837	6	0	3,506	3,506	0	0
Manipur	1,079	1,068	10	0.9	274	272	2	0.9
Meghalaya	2,046	2,046	0	0	494	494	0	0
Mizoram	709	709	0	0	177	177	0	0
Nagaland	938	938	0	0	243	243	0	0
Tripura (*)	1,939	1,939	0	0	512	512	0	0
North-Eastern Region	20,613	20,596	16	0.1	5,492	5,490	2	0
All India	16,93,959	16,92,369	1,590	0.1	4,45,197	4,45,040	157	0

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

(*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments. The MU figures has been rounded off to nearest unit place.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1877
ANSWERED ON 31.07.2025

PER DAY ELECTRICITY REQUIREMENT AND PRODUCTION

†1877. SHRI BHAUSAHEB RAJARAM WAKCHAURE:
SHRI BAJRANG MANOHAR SONWANE:

Will the Minister of POWER
be pleased to state:

(a) the requirement of electricity units and its production in units per day in the country;

(b) whether the country is currently self-reliant in the energy sector, if so, the details thereof and if not, the reasons therefor;

(c) whether the Government proposes to stop energy production from coal and start producing electricity only as per the requirement and if so, the details thereof; and

(d) the time by which the said proposal is likely to be implemented in full?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The details of average electricity requirement and generation per day (MU/day) for the last three years and the current year (till June, 2025) are given at Annexure-I.

(b) : There is adequate availability of power in the country. Present installed generation capacity of the country is 484.819 GW. Government of India has addressed the critical issue of power deficiency by adding 260.784 GW of fresh generation capacity since April, 2014 transforming the country from power deficit to power sufficient.

.....2.

The details of Power Supply Position in terms of Energy during the last three years and current year 2025-26 (upto June 2025) are given at Annexure-II.

These details indicate that with improved availability of power in the country, the gap between Energy Requirement and Energy Supplied has declined to marginal level of 0.1% only during FY 2024-25 and further declined to almost NIL during current financial year 2025-26 (upto June 2025).

(c) & (d): The Government of India has accorded high priority to the capacity addition from non-fossil sources. As per National Electricity Plan (Generation), notified in May, 2023, the share of coal based installed capacity, which is about 46% in June, 2025, is likely to reduce to about 30% in the year 2031-32. However, there is no proposal to stop energy production from coal.

In order to meet the projected Thermal (coal and lignite) capacity requirement by the year 2034-35, Ministry of Power has envisaged to set up an additional minimum 97,000 MW coal and lignite based thermal capacity. Thermal capacities of around 11,680 MW have already been commissioned since April, 2023 till June, 2025. In addition, 38,935 MW (including 5,695 MW of stressed thermal power projects) of thermal capacity is currently under construction. Further, contracts for 15,440 MW thermal capacity have been awarded in FY 2024-25. Further, 35,460 MW of coal and lignite based candidate capacity has been identified, which is at various stages of planning in the country.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1877 ANSWERED IN THE LOK SABHA ON 31.07.2025

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The details of average electricity requirement and generation per day (MU/day) for the last three years and the current year till June, 2025

Financial Year	Energy Requirement	Gross Generation
	(MU/day)	(MU/day)
2022-23	4147	4,450.59
2023-24	4443	4,751.62
2024-25	4641	5,012.87
2025-26 (upto June, 2025)	4892	5,230.25

Note: The Per Day MU figure is calculated by dividing the total Energy Requirement/ Generation during the year by the number of days in that year.

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1877 ANSWERED IN THE LOK SABHA ON 31.07.2025

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The details of Power Supply Position in terms of Energy during the last three years and current year 2025-26(upto June 2025)

Year	Energy Requirement	Energy Supplied	Energy Not Supplied	
	(MU)	(MU)	(MU)	%
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	16,93,959	16,92,369	1,590	0.1
2025-26 (upto June 2025)	4,45,197	4,45,040	157	0

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1896
ANSWERED ON 31.07.2025

SMART METERS SANCTIONED UNDER RDSS IN UP

1896. SHRI PUSHPENDRA SAROJ:

Will the Minister of POWER
be pleased to state:

(a) the total number of smart meters sanctioned and installed under the Revamped Distribution Sector Scheme (RDSS) till date, State and year-wise including district-wise for Uttar Pradesh;

(b) the details of funds sanctioned, released and utilised for smart metering under RDSS, State and year-wise;

(c) the number of households electrified under RDSS in Uttar Pradesh, if so, the details thereof, district-wise and social category-wise; and

(d) whether the Government has undertaken any assessment to evaluate the impact of smart meter installation and if so, the key findings thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : State-wise details of smart meters sanctioned and installed till date under Revamped Distribution Sector Scheme (RDSS) are placed at Annexure-I. District-wise details of smart meters sanctioned and installed till date in Uttar Pradesh under RDSS are placed at Annexure-II.

(b) : State-wise details of funds sanctioned and released for smart metering works under RDSS are placed at Annexure-III.

(c) : The district-wise details of households sanctioned and electrified till date in Uttar Pradesh under RDSS are placed at Annexure-IV.

.....2.

(d) : The smart meter installation is currently in its initial implementation phase. The impact of smart meter installation can be assessed once significant numbers have been installed. In states like Bihar and Assam, where substantial numbers have been installed, the impact of smart meter installation may be seen as below:

i. Aggregate Technical and Commercial (AT&C) Losses:

State	FY21	FY24
Assam	18.73%	14.03%
Bihar	35.33%	20.32%

ii. Gap between Average Cost of Supply and Average Revenue Realised in Rs/kWh:

State	FY21	FY24
Assam	0.1	(0.22)
Bihar	0.72	(0.18)

iii. Annual PAT/ (Loss) in Rs. Crore:

State	FY21	FY24
Assam	(292)	384
Bihar	(1,942)	1,411

As can be seen from above tables, both the States have shown substantial improvement both in terms of operational and financial parameters. It is expected that after large scale deployment of smart meters, similar impact will be seen in other States also.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1896 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Smart Meters details under RDSS

Sl. No.	State/ UT	Sanctioned (Nos.)	Installed (Nos.)
1	Andaman and Nicobar	84,835	0
2	Andhra Pradesh	59,19,344	16,82,446
3	Arunachal Pradesh	2,98,250	17,086
4	Assam	64,45,127	37,47,655
5	Bihar	26,07,153	20,47,465
6	Chhattisgarh	61,79,479	22,82,766
7	Delhi	3,521	0
8	Goa	7,50,356	0
9	Gujarat	1,67,87,587	20,94,432
10	Himachal Pradesh	28,41,908	4,59,945
11	Jammu and Kashmir	14,97,690	2,00,224
12	Jharkhand	13,62,044	2,90,516
13	Kerala	1,33,83,001	0
14	Madhya Pradesh	1,34,29,206	22,43,063
15	Maharashtra	2,40,04,866	49,30,410
16	Manipur	1,66,208	8,867
17	Meghalaya	4,72,743	0
18	Mizoram	2,92,081	1,768
19	Nagaland	3,23,878	7,361
20	Puducherry	4,07,052	0
21	Punjab	89,81,414	0
22	Rajasthan	1,47,36,692	3,59,848
23	Sikkim	1,48,542	42,985
24	Tamil Nadu	3,04,90,774	0
25	Tripura	5,62,870	92,108
26	Uttar Pradesh	2,85,26,731	32,78,563
27	Uttarakhand	16,49,684	2,10,679
28	West Bengal	2,10,35,262	5,13,457
	All India Total	20,33,88,298	2,45,11,644

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ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1896 ANSWERED IN THE LOK SABHA ON 31.07.2025

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District-wise details of smart meters in Uttar Pradesh under RDSS

S No.	DISCOM	District	Sanctioned (Nos.)	Installed (Nos.)
1	PuVVNL	AZAMGARH	6,05,284	36,656
		BALLIA	3,14,303	59,449
		BASTI	3,52,686	32,353
		CHANDAULI	2,48,363	55,761
		DEORIA	3,75,784	32,555
		FATEHPUR	3,63,972	62,527
		GHAZIPUR	4,28,537	74,194
		GORAKHPUR	7,04,224	1,41,385
		JAUNPUR	5,98,440	47,925
		KAUSHAMBI	2,05,140	40,409
		KUSHI NAGAR	3,97,196	33,023
		MAHARAJGANJ	3,56,007	43,655
		MAU	3,29,096	47,540
		MIRZAPUR	3,20,250	56,626
		PRATAPGARH	4,62,404	82,476
		PRAYAGRAJ	4,74,649	47,048
		SANT KABEER NAGAR	2,32,630	24,015
		SANT RAVIDAS NAGAR	1,91,035	50,112
		SIDDHARTH NAGAR	3,14,808	23,668
		SONBHADRA	2,69,044	38,349
		VARANASI	2,06,684	61,259
	PuVVNL Total		77,50,536	10,90,985
2	MVVNL	AMBEDKAR NAGAR	3,41,290	15,942
		AMETHI	3,41,291	12,650
		AYODHYA	3,41,296	36,907
		BADAUN	3,80,772	27,462
		BAHRAICH	4,38,521	27,507
		BALRAMPUR	2,14,742	19,628
		BARABANKI	3,41,293	18,323
		BAREILLY	6,04,657	62,448
		GONDA	4,61,487	37,318
		HARDOI	3,32,350	30,832
		LAKHIMPUR KHERI	5,74,612	57,784
		LUCKNOW	10,93,296	1,09,294
		PILIBHIT	3,19,480	78,218
		RAE BARELI	5,59,826	53,194
		SHAHJAHANPUR	3,69,663	38,135
		SHRAVASTI	1,98,944	4,723
		SITAPUR	2,88,288	39,554
		SULTANPUR	3,41,290	21,811
		UNNAO	3,70,542	43,167

	MVVNL Total		**79,13,640**	**7,34,897**
3	**DVVNL**	**AGRA**	**4,46,572**	**81,835**
		ALIGARH	**4,28,888**	**1,19,116**
		AURAIYA	**2,16,861**	**9,302**
		BANDA	**3,04,858**	**19,105**
		CHITRAKOOT	**1,72,598**	**3,904**
		ETAH	**2,38,445**	**21,721**
		ETAWAH	**1,82,576**	**6,244**
		FARRUKHABAD	**2,18,538**	**26,033**
		FIROZABAD	**3,16,422**	**56,306**
		HAMIRPUR	**2,04,373**	**15,825**
		HATHRAS	**2,68,056**	**60,095**
		JALAUN	**2,70,335**	**26,743**
		JHANSI	**3,34,800**	**77,035**
		KANNAUJ	**2,37,939**	**34,812**
		KANPUR DEHAT	**2,71,912**	**8,234**
		KANPUR NAGAR	**2,62,502**	**15,864**
		KASGANJ	**2,12,302**	**27,660**
		LALITPUR	**1,62,424**	**17,827**
		MAHOBA	**1,54,548**	**15,450**
		MAINPURI	**2,84,021**	**58,434**
		MATHURA	**3,57,402**	**42,438**
	DVVNL Total		**55,46,372**	**7,43,983**
4	**PVVNL**	**AMROHA**	**3,17,708**	**25,048**
		BAGHPAT	**2,54,249**	**4,351**
		BIJNOR	**6,64,248**	**49,174**
		BULANDSHAHR	**5,97,338**	**50,646**
		GAUTAM BUDDHA NAGAR	**3,56,425**	**16,737**
		GHAZIABAD	**9,89,348**	**59,931**
		HAPUR	**2,76,747**	**14,063**
		MEERUT	**6,14,850**	**1,17,131**
		MORADABAD	**5,68,818**	**84,108**
		MUZAFFARNAGAR	**5,30,974**	**53,584**
		RAMPUR	**3,76,461**	**36,674**
		SAHARANPUR	**5,95,716**	**58,475**
		SAMBHAL	**2,89,211**	**24,677**
		SHAMLI	**2,51,681**	**80,821**
	PVVNL Total		**66,83,774**	**6,75,420**
5	**KESCO**	**KANPUR CITY**	**6,32,408**	**33,278**
UP- Total			**2,85,26,731**	**32,78,563**

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ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1896 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Funds details for Smart Metering Works under RDSS

(Amount in Rs. Cr.)

Sl. No.	State/UTs	Sanctioned GBS	Funds Released		
			FY24	FY25	FY26
1	Andaman & Nicobar Islands	12	-	-	-
2	Andhra Pradesh	815	-	-	-
3	Arunachal Pradesh	54	-	-	-
4	Assam	1,052	56	191	111
5	Bihar	412	169	17	-
6	Chhattisgarh	804	-	-	-
7	Delhi	2	-	-	-
8	Goa	95	-	-	-
9	Gujarat	1,885	-	-	-
10	Himachal Pradesh	466	-	-	-
11	Jammu & Kashmir	272	-	-	-
12	Jharkhand	191	-	-	-
13	Kerala	1,413	-	-	-
14	Madhya Pradesh	1,504	-	-	-
15	Maharashtra	2,840	-	-	-
16	Manipur	38	-	-	-
17	Meghalaya	86	-	-	-
18	Mizoram	61	-	-	-
19	Nagaland	60	-	-	-
20	Puducherry	56	-	-	-
21	Punjab	960	-	-	-
22	Rajasthan	1,686	-	-	-
23	Sikkim	30	-	-	4
24	Tamil Nadu	3,398	-	-	-
25	Tripura	80	-	-	-
26	Uttar Pradesh	3,501	-	-	-
27	Uttarakhand	310	-	-	-
28	West Bengal	2,089	-	-	31
	Total	24,173	225	208	145

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ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 1896 ANSWERED IN THE LOK SABHA ON 31.07.2025

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District-wise household electrification works in Uttar Pradesh under RDSS

Sl. No.	District	Sanctioned Households	Households Electrified till date
1	AGRA	1,173	0
2	ALIGARH	1,795	0
3	AURAIYA	3,428	0
4	BANDA	16,697	0
5	CHITRAKOOT	3,977	0
6	ETAH	4,618	0
7	ETAWAH	625	0
8	FARRUKHABAD	1,240	0
9	Firozabad	1,445	0
10	HAMIRPUR	1,452	0
11	HATHRAS	461	0
12	JALAUN	955	0
13	JHANSI	3,976	0
14	KANNAUJ	2,639	0
15	KANPUR DEHAT	3,749	0
16	KANPUR NAGAR	1,681	0
17	KASGANJ	2,162	0
18	LALITPUR	2,341	0
19	Mahoba	1,235	0
20	MAINPURI	490	0
21	MATHURA	1,350	0
22	Ambedkar Nagar	2,853	0
23	Amethi	1,945	0
24	Ayodhya	3,705	0
25	BAHRAICH	5,382	0
26	Balrampur	9,384	0
27	BARABANKI	4,697	0
28	Bareilly	2,052	0
29	Budaun	2,325	0
30	Gonda	44,217	0
31	Hardoi	3,928	0
32	KHERI	228	0
33	Lakhimpur	1,174	0
34	Lucknow	943	0
35	PILIBHIT	1,200	0
36	Raebareli	842	0
37	Shahjahanpur	2,924	0
38	Shrawasti	4,735	0
39	SITAPUR	4,301	0

40	Sultanpur	2,961	0
41	Unnao	2,820	0
42	Azamgarh	2,304	33
43	BALLIA	1,942	04
44	BASTI	145	0
45	BHADOHI	514	0
46	CHANDAULI	934	0
47	DEORIA	3,829	0
48	Fatehpur	3,920	0
49	GHAZIPUR	143	0
50	GORAKHPUR	1,995	0
51	JAUNPUR	9,897	0
52	Kaushambi	3,750	0
53	KUSHI NAGAR	119	0
54	Kushinagar	16,189	0
55	MAHARAJGANJ	76	0
56	Mahrajganj	3,291	0
57	Mau	177	0
58	MIRZAPUR	6,669	0
59	PRATAPGARH	15,540	0
60	PRAYAGRAJ	21,071	25
61	SANT KABEER NAGAR	13	0
62	SantKabir Nagar	65	0
63	SIDDHARTH NAGAR	327	03
64	SONBHADRA	5,135	0
65	Varanasi	158	03
66	Bijnor	392	195
	Total	2,58,700	263

Of the total above:

i. **316 belong to Particularly Vulnerable Tribal Group (PVTG) households identified under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan)**

ii. **6,897 are tribal households identified under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan).**

iii. **For the balance households the social category has not been captured.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1908
ANSWERED ON 31.07.2025

STRENGTHENING OF POWER DISTRIBUTION INFRASTRUCTURE IN JAMUI

1908. SHRI ARUN BHARTI:

Will the Minister of POWER be pleased to state:

(a) the progress made in strengthening the power distribution infrastructure in the Jamui Lok Sabha Constituency under the Revamped Distribution Sector Scheme (RDSS);

(b) the current status of feeder separation for agricultural and domestic consumers in the rural areas of Jamui and the timeline for its completion;

(c) whether there is any plan to establish new Power Sub-Stations or to augment the capacity of existing ones in the regions like Chakai, Sono and Khaira to address low voltage issues and if so, the details thereof; and

(d) the steps being taken by the Government to ensure uninterrupted and quality power supply across the Constituency and reduce Aggregate Technical & Commercial (AT&C) losses?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The progress of distribution infrastructure works sanctioned under Revamped Distribution Sector Scheme (RDSS) in Jamui Lok Sabha Constituency are at Annexure-I.

(b): Under RDSS, the Government of India has actively pursued feeder segregation in rural areas where agricultural load exceeds 30%, including in districts like Munger, Sheikhpura and Jamui. The status of feeder segregation works is as under:

Sl. No.	Districts	Sanctioned	Segregated
1	Munger	25	25
2	Sheikhpura	29	25
3	Jamui	27	21
Total		81	71

The sanctioned works are expected to complete by March 2026.

.....2.

(c) : Under the RDSS, a new 33/11 kV 2x10 MVA power substation has been approved at Batiya in the Sono block of Jamui district to mitigate low voltage concerns. In addition to this, the following new 33/11 kV 2x10 MVA substations have also been sanctioned under RDSS across the three districts of the Jamui Lok Sabha Constituency:

i. **Indpe Substation in Jamui district**
ii. **Garhirampur (Rishikund) Substation in Munger district**
iii. **Matokhar Substation in Sheikhpura district**
iv. **Gangti Substation in Sheikhpura district**

(d) : Government of India has undertaken number of reform measures to improve distribution infrastructure and to bring down AT&C losses in the Country, including Jamui Constituency. These include:

i. **Electricity (Second Amendment) Rules, 2023 mandating timely reconciliation and payment of subsidies declared by State Governments.**
ii. **Ensuring that the tariff and true-up orders are issued in time.**
iii. **Mandating proper Energy Accounting and Audit based on machine based data.**
iv. **Allowing additional borrowing space of 0.5% of GSDP to State Governments linked with power sector reforms.**
v. **Corporate Governance Guidelines to enable mechanisms for performance improvement and accountability in DISCOMs.**
vi. **RDSS is also one such key initiative, which aims at bringing down the AT&C losses to pan-India level of 12-15% and ACS-ARR gap to zero. Under the Scheme, projects worth Rs. 2.82 lakh crore have been sanctioned. These involve distribution infrastructure works worth Rs. 1.51 lakh crore which include replacement of bare conductors with covered conductors, laying Low Tension Aerial Bunched (LT AB) cables, and upgradation/augmentation of Distribution Transformers (DT)/Sub-stations, etc. The fund release under the scheme has been linked to performance of Distribution Utilities against various financial parameters, the prominent among them being Aggregate Technical and Commercial (AT&C) losses and ACS-ARR Gap. Execution of these works would also help improve quality of supply of power. Prepaid smart metering is also one of the critical interventions envisaged under RDSS, which would help in improving AT&C losses.**

As a result of the concerted efforts made by the Centre and the States, the AT&C Losses have reduced from 21.91% in FY2021 to 16.12% in FY2024 at pan India level.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1908 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Details of distribution infrastructure works sanctioned under RDSS in Jamui Constituency (Districts: Munger, Sheikhpura & Jamui) as on 24.07.2025								
Sl. No.	Description	UoM	Munger		Sheikhpura		Jamui	
			Sanctioned quantity	Achievement	Sanctioned quantity	Achievement	Sanctioned quantity	Achievement
Smart Metering Works								
1	Consumer meter	Nos.	55287	31280	21205	13329	24869	18382
2	Feeder meter	Nos.	109	106	57	71	96	103
3	DT meter	Nos.	3848	2779	1996	949	4166	3242
Distribution Infrastructure Works								
4	New Power Substation (2 x 10 MVA)	Nos.	1	0	2	0	2	0
5	33 kV HT Line	ckm	15.5	0	14	0	45	0
6	11 kV HT Line	ckm	629.77	450.09	668.91	463.11	789.28	626.1
7	LT line	ckm	1246.91	1164.39	1041.27	965.32	1436.21	1426.36
8	Distribution Transformer	Nos.	811	946	924	840	1265	1184
9	Feeder Segregation	Nos.	25	25	29	25	27	21
10	Addl. Households	Nos.	206	0	0	0	1182	0

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1912
ANSWERED ON 31.07.2025

PER UNIT COST OF POWER GENERATION

†1912. SHRI IMRAN MASOOD:

Will the Minister of POWER be pleased to state:

(a) the total power generation capacity across the country since 2015, year-wise;

(b) the steps taken by the Union Government to increase power generation capacity since 2014;

(c) whether the per unit cost of power generation has increased due to coal imports during the last few years and if so, the details thereof; and

(d) the steps taken by the Government to reduce the per unit cost of power generation?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The year wise details of total power generation capacity in the country from 2014-15 to 2025-26 (upto June, 2025) are given at Annexure.

(b) : Government of India has taken following steps to increase the power generation capacity in the country since 2014:

(i) Increase in installed capacity from 2,48,554 MW in March 2014 to 4,84,819 MW in June 2025 including increase in installed capacity of coal based thermal power plants from 1,39,663 MW to 2,42,040 MW and Renewable Energy (RE) (including Large Hydro) from 75,519 MW to 2,33,999 MW during this period.

(ii) Addition of 2,01,088 circuit kilometer (ckm) of transmission lines, 7,78,017 MVA of Transformation capacity and 82,790 MW of Inter-Regional capacity with capability of transferring 1,18,740 MW from one corner of the country to another.

(iii) Waiver of ISTS charges on transmission of electricity generated from Solar, Wind, Pumped Storage Plants and Battery Energy Storage Systems.

.....2.

(iv) Renewable Purchase Obligations (RPOs) and Energy Storage obligations Trajectory till 2029-30.

(v) Construction of Green Energy Corridors and putting in place 13 Renewable Energy Management Centres.

(vi) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale.

(vii) Reduction of AT&C losses from 22.62% in 2013-14 to 16.28 % in 2023-24. All current payment of GENCOs are up-to-date and the legacy dues of GENCOs have come down from Rs. 1,39,947 crore to Rs. 18,857 Crore.

(viii) In 2019, Government announced measures to promote Hydro Power Sector such as Declaring Large Hydro Projects (> 25 MW) as Renewable Energy source, Tariff rationalization measures for bringing down hydropower tariff, Budgetary Support for Flood moderation / Storage Hydro Electric Projects (HEPs), Budgetary Support towards Cost of Enabling Infrastructure i.e., roads / bridges, etc. The scope of Budgetary support towards cost of enabling infrastructure has been subsequently expanded on 08.10.2024 to include : (a) Transmission line upto nearest pooling point including upgradation of pooling sub-stations, (b) Railway sidings, (c) Communication infrastructure, and (d) Rope ways.

(ix) Introduction of SHAKTI policy for transparent allocation of coal to Thermal Power plants. This enabled efficient domestic coal allocation to Thermal Power Plants and also ensured revival of various stressed Thermal Power Projects.

(x) Construction of the Inter-State transmission system ahead of the generation capacity.

(c): The cost of generation of electricity from coal based power plant is dependent upon the price of coal and cost of freights and in case of blending also the price of the blended imported coal. The price of imported coal is linked with International Indices, source of origin and factors like ocean freight, insurance etc. which vary with international demand supply scenario. Further, every generating company consumes imported coal as per its requirement.

With sustained supplies of domestic coal to Domestic Coal Based (DCB) plants, the advisory for blending of imported coal has been withdrawn from 16th October, 2024.

Average Power purchase cost has decreased by 5 Paisa between FY 2022-23 and FY 2023-24.

.....3.

(d): Government of India have taken following steps to reduce the cost of power generation in the county:

(i) Setting up of Power Exchanges to ensure fair, neutral, efficient and robust electricity price discovery.

(ii) Introduction of flexibility in utilization of domestic coal by State/Central Generation Companies (GENCOs).

(iii) Rationalization of linkage sources of State/Central Generating Companies (GENCOs) and Independent Power Producers (IPPs) with a view to optimize transportation cost.

(iv) Issuance of guidelines for tariff based bidding process for procurement of electricity under Section 63 of Electricity Act, 2003 to promote competitive procurement of electricity by distribution licensees.

(v) Reduction of Aggregate Technical & Commercial (AT&C) losses under RDSS will improve the finances of the utilities, which will enable them to better maintain the system and buy power as per requirements; benefitting the consumers.

(vi) The operationalisation of National Merit Order Dispatch with the objective of lowering the cost of electricity to consumers.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1912 ANSWERED IN THE LOK SABHA ON 31.07.2025

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The year wise details of total power generation capacity in the country from 2014-15 to 2025-26 (upto June 2025):

Year (as on 31st March)	Installed Capacity (in MW)
2014-15	2,75,895
2015-16	3,06,330
2016-17	3,28,146
2017-18	3,45,631
2018-19	3,57,871
2019-20	3,71,334
2020-21	3,83,521
2021-22	3,99,497
2022-23	4,16,059
2023-24	4,41,970
2024-25	4,75,212
2025-26 (upto June, 2025)	4,84,819

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1914
ANSWERED ON 31.07.2025

SCALING UP OF BATTERY ENERGY STORAGE SYSTEM

1914. MS. S JOTHIMANI:

Will the Minister of POWER
be pleased to state:

(a) the roadmap of the Government for the deployment and scaling up of Battery Energy Storage Systems (BESS) to support grid stability and facilitate the integration of variable renewable energy;

(b) the anticipated role of energy storage infrastructure in enabling India to achieve its target of 500GW of non-fossil fuel-based capacity by 2030 particularly in high renewable potential States like Tamil Nadu;

(c) whether the Government is undertaking efforts to modernize grid infrastructure and streamline Power Purchase Agreements (PPAs) with Distribution Companies (DISCOMs) to address delays and risks in renewable energy procurement especially in the southern grid and if so, the key initiatives underway; and

(d) the steps being taken by the Government to strengthen decentralized renewable energy sources such as rooftop solar, small wind and hybrid systems in rural and peri-urban areas of Tamil Nadu and other southern States including integration with ongoing DISCOM reform measures?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Central Electricity Authority (CEA) has estimated 41.6 GW / 208 GWh Battery Energy Storage System (BESS) capacity up to FY 2029-30. To support the development of BESS, Government has undertaken several key policy initiatives:

i) **A Viability Gap Funding (VGF) scheme, approved in 2023, initially aimed to support 4,000 MWh of BESS capacity by FY 2030-31 with a budgetary allocation of ₹3,760 crore. With falling battery costs, the target capacity has now been increased to 13,220 MWh while remaining within the same budget.**

ii) **A second VGF scheme has been approved by the Ministry of Power to develop 30 GWh of BESS capacity, with a financial support of ₹5,400 crore from the Power System Development Fund (PSDF).**

iii) **Full waiver of Inter-State Transmission System (ISTS) charges has been granted for co-located BESS projects commissioned up to 30th June, 2028.**

.....2.

(b) : Energy Storage Systems (ESS), including BESS and Pumped Storage Projects (PSPs), will play a critical role in achieving India's target of 500 GW of non-fossil fuel-based capacity by 2030, especially in renewable-rich states like Tamil Nadu. ESS enables storage of surplus power generated during periods of high wind and solar output, which can then be dispatched during peak demand. ESS can be deployed across the generation, transmission, and distribution segments of the power system. This improves grid flexibility, enhances the utilisation of transmission infrastructure, and reduces renewable energy curtailment. Furthermore, ESS supports Load Dispatch Centres (LDCs) in delivering ancillary services, such as frequency regulation and voltage control, thereby strengthening overall grid reliability.

(c) : To modernise the transmission system, the Ministry of Power constituted a Task Force, which recommended a comprehensive roadmap for creating a smart and future-ready grid. Key measures include re-powering of existing transmission lines, deployment of Flexible AC Transmission Systems (FACTS), and adoption of Dynamic Line Loading (DLL) to optimise power flow based on real-time conditions. The Task Force also proposed installation of energy storage systems to improve transmission system utilisation and resilience, upgradation of protection and control systems, and conversion of aging substations into Gas Insulated Switchgear (GIS) or hybrid substations. Implementation of several recommendations is already in progress.

The Ministry has issued Standard Bidding Guidelines for procurement of power from grid-connected renewable energy projects to promote transparency, enhance competition, and accelerate the deployment of clean energy. Letters of Award (LoAs) issued by REIAs to successful bidders will remain valid for only one year. If Distribution Licensees do not enter into PPAs with the Renewable Energy Implementation Agency (REIA) within this period, the corresponding LoAs will be deemed cancelled. To fast-track the signing of Power Purchase Agreements (PPAs), REIAs have been advised to aggregate demand from Distribution Licensees before inviting bids.

(d) : Under the PM Surya Ghar Muft Bijli Yojana DISCOMS are promoting roof top solar. The feeder-level integration of small Renewable Energy (RE) plants is being implemented under the PM-KUSUM scheme.

To further streamline rooftop solar deployment, the Electricity (Rights of Consumers) Rules, 2020 were amended in February 2024 to simplify procedures and improve ease of installation for prosumers. Key amendments include:

- **Exemption from technical feasibility study for systems up to 10 kW capacity.**
- **The technical feasibility study shall be completed within a period of fifteen days and the outcome of the study shall be intimated to the applicant, failing which it shall be presumed that the proposal is technically feasible.**
- **The cost of distribution system strengthening for rooftop systems up to 5 kW will be borne by the distribution licensee.**
- **The timeline for commissioning rooftop solar PV systems by DISCOMs has been reduced from 30 days to 15 days.**

These measures are expected to accelerate rooftop solar adoption and enhance consumer participation in decentralized renewable energy generation in rural and peri-urban areas of Tamil Nadu and other southern States.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1925
ANSWERED ON 31.07.2025

ELECTRIFICATION OF TRIBAL-DOMINATED VILLAGES

1925. SHRI S JAGATHRATCHAKAN:

Will the Minister of POWER
be pleased to state:

(a) the total number of tribal-dominated villages electrified under the Pradhan Mantri Janjatiya Adivasi Nyaya Maha Abhiyan (PM-JANMAN) and the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) during the last five years, State/UT-wise; and

(b) whether the Government has assessed the functionality and reliability of solar-based electrification systems in tribal areas and if so, the findings thereof and the remedial measures taken in this regard?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Government of India launched the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) in October, 2017 with the objective of providing electricity connections to all willing un-electrified households in rural areas and all willing poor households in urban areas in the country. All works sanctioned under SAUBHAGYA have been successfully completed and the scheme stands closed as on 31.03.2022. As reported by the States, a total of 2.86 Cr households were electrified during the SAUBHAGYA period (State wise details are enclosed as Annexure- I).

.....2.

Further, Government of India launched Revamped Distribution Sector Scheme (RDSS) with the objective of improving the quality and reliability of supply of power to consumers through a financially sustainable and operationally efficient Distribution Sector. This includes electrification of left out households under SAUBHAGYA and all identified households under PM-JANMAN as per the scheme guidelines. Under RDSS, works for electrification of 1,27,061 Particularly Vulnerable Tribal Groups (PVTG) households identified under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN), amounting to Rs. 516 Cr. have been sanctioned. Further, electrification of PVTG households in the States of Gujarat, Odisha and West Bengal are being covered under respective State plan. As on 14.07.2025, 1,23,446 no. of PVTG households have been electrified (State wise details are enclosed as Annexure- II).

In addition, under New Solar Power Scheme, works worth Rs. 49.8 Cr. have been sanctioned for 9961 households for off-grid solar based electrification (State wise details are enclosed as Annexure- III).

(b): For areas where grid connectivity is not technically/ economically feasible, the households are being electrified through off-grid solutions, specifically solar-based systems, as per details submitted by the States.

As per the guidelines of the New Solar Power Scheme, the off-grid system being provided to the tribal/ PVTG household includes 5 years of comprehensive maintenance services. There is also provision for a third-party inspection after completion of two years by the implementing agency, as per the scheme guidelines.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1925 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Number of Households electrified since the launch of SAUBHAGYA scheme including Additional Households achievement under DDUGJY

Sl. No.	Name of the States	No. of Households electrified
1	Andhra Pradesh*	1,81,930
2	Arunachal Pradesh	47,089
3	Assam	23,26,656
4	Bihar	32,59,041
5	Chhattisgarh	7,92,368
6	Gujarat*	41,317
7	Haryana	54,681
8	Himachal Pradesh	12,891
9	Jammu & Kashmir	3,77,045
10	Jharkhand	17,30,708
11	Karnataka	3,83,798
12	Ladakh	10,456
13	Madhya Pradesh	19,84,264
14	Maharashtra	15,17,922
15	Manipur	1,08,115
16	Meghalaya	2,00,240
17	Mizoram	27,970
18	Nagaland	1,39,516
19	Odisha	24,52,444
20	Puducherry*	912
21	Punjab	3,477
22	Rajasthan	21,27,728
23	Sikkim	14,900
24	Tamil Nadu*	2,170
25	Telangana	5,15,084
26	Tripura	1,39,090
27	Uttar Pradesh	91,80,571
28	Uttarakhand	2,48,751
29	West Bengal	7,32,290
Total		2,86,13,424

*Not funded under SAUBHAGYA Scheme

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1925 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Electrification of PVTG Households identified under PM-JANMAN (as on 14/07/2025)

S. No.	Name of State	Sanctioned Outlay (Rs. Crores)	Sanctioned GBS (Rs. Crores)	Total Households Sanctioned	Households Electrified
A					
1	Andhra Pradesh	88.71	53.23	24,967	24,925
2	Chhattisgarh	38.17	22.90	7,077	7,144
3	Jharkhand	74.13	44.47	12,442	5,341
4	Karnataka	3.77	2.26	1,615	1,546
5	Kerala	0.86	0.52	345	313
6	Madhya Pradesh	143.39	86.02	29,290	24,036
7	Maharashtra	26.61	15.96	8,556	9,216
8	Rajasthan	40.34	24.20	17,633	16,023
9	Tamil Nadu	29.89	17.94	8,603	6,235
10	Telangana	6.79	4.07	3,884	3,884
11	Tripura	61.52	55.37	11,664	11,692
12	Uttar Pradesh	1.10	0.66	316	195
13	Uttarakhand	0.60	0.54	669	669
Sub Total (A)		516	328	1,27,061	1,11,219
B					
14	Gujarat				6,626
15	Odisha				2,229
16	West Bengal				3,372
Sub Total (B)					12,227
Grand Total (A+B)		516	328	1,27,061	1,23,446

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ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1925 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Off-grid solar based household electrification sanctioned under New Solar Power Scheme

S. No.	States	No. of households Sanctioned
1.	Andhra Pradesh	1,675
2.	Chhattisgarh	1,578
3.	Jharkhand	2,342
4.	Madhya Pradesh	2,060
5.	Karnataka	179
6.	Kerala	98
7.	Telangana	326
8.	Tripura	1,703
Total		9,961

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1935
ANSWERED ON 31.07.2025

SHORTAGE OF POWER IN DADRA AND NAGAR HAVELI

†1935. SMT. DELKAR KALABEN MOHANBHAI:

Will the Minister of POWER
be pleased to state:

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

(b) the major issues responsible for such a situation in the country particularly in the Union Territory of Dadra and Nagar Haveli; and

(c) the steps taken or proposed to be taken by the Government to reduce or eliminate power shortage in the country particularly in the Union Territory of Dadra and Nagar Haveli?

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 484.819 GW. Government of India has addressed the critical issue of power deficiency by adding 260.784 GW of fresh generation capacity since April, 2014 transforming the country from power deficit to power sufficient.

The details of States/UTs/Regions-wise Power Supply Position of the country including the Union Territory of Dadra and Nagar Haveli in terms of Energy for the period from FY 2019-20 to FY 2024-25 and current FY 2025–26 (upto June, 2025) are given at Annexure.

These details indicate that the Energy Supplied in the country has been commensurate to the Energy Requirement and the gap between the two has decreased from 0.5% in FY2019-20 to 0.1% in FY 2024-25 and almost 0.0% in current FY 2025-26 (upto June, 2025).

Further, no shortage of electricity has been reported in the Union Territory of Dadra and Nagar Haveli from FY 2019-20 to FY 2025-26 (upto June, 2025).

(c): For supplementing the power requirement, the Government of India has allocated 526.4 MW of Firm Power and 1,208.7 MW of power from unallocated quota of Central Generating Stations to Union Territory of Dadra & Nagar Haveli and Daman & Diu.

Further, Government of India has taken following measures to improve the availability of power and to eliminate power shortages in the country:

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.

.....2.

(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) The projected thermal (coal and lignite) capacity requirement by the year 2034–35 is estimated at approximately 3,07,000 MW as against the 2,11,855 MW installed capacity as on 31.03.2023. To meet this requirement, Ministry of Power has envisaged to set up an additional minimum 97,000 MW coal and lignite based thermal capacity.

Several initiatives have already been undertaken. Thermal capacities of around 11,680 MW have already been commissioned since April 2023 till June 2025. In addition, 38,935 MW (including 5,695 MW of stressed thermal power projects) of thermal capacity is currently under construction. Further, contracts for 15,440 MW thermal capacity have been awarded in FY 2024-25 and is due for construction. To meet the projected demand in the country, 35,460 MW of coal and lignite based candidate capacity has been identified, which is at various stages of planning in the country.

(B) 13,463.5 MW of Hydro Electric Projects are under construction. Further, 9802 MW of Hydro Electric Projects are under various stage of planning and targeted to be completed by 2031-32.

(C) 6,600 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) 1,58,450 MW Renewable Capacity including 74,150 MW of Solar, 30,080 MW of Wind and 53,750 MW Hybrid power is under construction while 62,000 MW of Renewable Capacity including 46,010 MW of Solar and 15,990 MW Hybrid Power is at various stages of planning and targeted to be completed by 2029-30.

(E) In energy storage systems, 8250 MW/49500MWh Pumped Storage Projects (PSPs) are under construction. Further, a total of 5780 MW/34680 MWh capacity of Pumped Storage Projects (PSPs) are concurred and yet to be taken up for construction. Out of these, 3500 MW/21000 MWh capacity of Pumped Storage Projects (PSPs) are under bidding and 15,829 MW/51,106 MWh Battery Energy Storage System (BESS) are currently under various stages of construction/bidding

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.

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. 2.82 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 RDSS. In addition, all Particularly Vulnerable Tribal Group (PVTG) households identified under PM-JANMAN (Pradhan Mantri Janjati AdivasiNyaya Maha Abhiyan), tribal households under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan),Scheduled Caste households under Pradhan MantriAnusuchit Jaati Abhyuday Yojna (PM-AJAY) and remote & border households under Vibrant Villlage Program (VVP) are being sanctioned for on-grid electrification under RDSS as per the scheme guidelines. Till date, works amounting to Rs. 6,486 Cr. have been sanctioned for electrification of 13.59 lakh households under RDSS.

(iv) With collective efforts of Centre and States/UTs, the average hours of supply in rural and urban areas have improved to 22.6 hrs and 23.4 hrs, respectively, in FY 2025.

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 (REIAs) 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.

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(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 on non-compliance. RCO also includes specified quantum of consumption from Decentralized Renewable Energy sources.

(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, New Solar Power Scheme (for Tribal and PVTG Habitations/Villages) under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) and Dharti Aabha Janjatiya Gram Utkarsh Abhiyan (DA JGUA), National Green Hydrogen Mission, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects have been launched.

(vii) Scheme for setting up of Solar Parks and Ultra Mega Solar Power projects 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.

(x) To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2032.

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

(xii) 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

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1935 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Details of States/UTs/Regions-wise Power Supply Position of the Country including the Union Territory of Dadra and Nagar Haveli in terms of Energy for the period from FY 2019-2020 to FY 2020-2021:

State/ System / Region	April, 2019 -March, 2020				April, 2020 - March, 2021			
	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
Northern Region	3,94,851	3,89,285	5,566	1.4	3,96,151	3,92,323	3,829	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
Western Region	3,88,841	3,88,836	5	0	3,88,013	3,87,975	38	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
Southern Region	3,44,535	3,44,436	99	0	3,26,885	3,26,836	48	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
Eastern Region	1,46,191	1,45,902	289	0.2	1,47,530	1,46,999	531	0.4
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
North-Eastern Region	16,591	15,984	607	3.7	16,955	16,531	424	2.5
All India	12,91,010	12,84,444	6,566	0.5	12,75,534	12,70,663	4,871	0.4

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

(*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments. The MU figures has been rounded off to nearest unit place.

Details of States/UTs/Regions-wise Power Supply Position of the Country including the Union Territory of Dadra and Nagar Haveli in terms of Energy for the period of FY 2021-22:

State/ System / Region	April, 2021 - March, 2022			
	Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)
Chandigarh	1,606	1,606	0	0
Delhi	31,128	31,122	6	0
Haryana	55,499	55,209	290	0.5
Himachal Pradesh	12,115	12,088	27	0.2
Jammu & Kashmir	19,957	18,434	1,524	7.6
Punjab	62,846	62,411	436	0.7
Rajasthan	89,814	89,310	504	0.6
Uttar Pradesh	1,29,448	1,28,310	1,138	0.9
Uttarakhand	15,521	15,426	94	0.6
Northern Region	4,17,934	4,13,915	4,019	1
Chhattisgarh	31,908	31,872	35	0.1
Gujarat	1,23,953	1,23,666	287	0.2
Madhya Pradesh	86,501	86,455	46	0.1
Maharashtra	1,72,823	1,72,809	14	0
Daman & Diu	2,594	2,594	0	0
Dadra & Nagar Haveli	6,839	6,839	0	0
Goa	4,448	4,448	0	0
Western Region	4,29,065	4,28,683	383	0.1
Andhra Pradesh	68,413	68,219	194	0.3
Telangana	70,539	70,523	16	0
Karnataka	72,437	72,417	20	0
Kerala	26,579	26,570	9	0
Tamil Nadu	1,09,816	1,09,798	18	0
Puducherry	2,894	2,893	1	0
Lakshadweep (#)	56	56	0	0
Southern Region	3,50,678	3,50,421	258	0.1
Bihar	36,216	35,761	455	1.3
DVC	23,741	23,736	4	0
Jharkhand	11,148	10,590	558	5
Odisha	38,339	38,332	7	0
West Bengal	54,001	53,945	57	0.1
Sikkim	610	609	0	0
Andaman- Nicobar (#)	335	327	8	2.3
Eastern Region	1,64,054	1,62,973	1,081	0.7
Arunachal Pradesh	875	874	1	0.1
Assam	10,844	10,825	19	0.2
Manipur	1,019	1,018	1	0.1
Meghalaya	2,256	2,243	13	0.6
Mizoram	656	644	12	1.8
Nagaland	852	851	1	0.1
Tripura (*)	1,578	1,578	0	0
North-Eastern Region	18,079	18,033	47	0.3
All India	13,79,812	13,74,024	5,787	0.4

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

(*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments. The MU figures have been rounded off to nearest unit place.

Details of States/UTs/Regions-wise Power Supply Position of the Country including the Union Territory of Dadra and Nagar Haveli in terms of Energy for the period from FY 2022-23 to FY 2023-24:

State/ System / Region	April, 2022 - March, 2023				April, 2023 - March, 2024			
	Energy Requirement (MU)	Energy Supplied (MU)	Energy not Supplied (MU)	Energy not Supplied (%)	Energy Requirement (MU)	Energy Supplied (MU)	Energy not Supplied (MU)	Energy not Supplied (%)
Chandigarh	1,788	1,788	0	0	1,789	1,789	0	0
Delhi	35,143	35,133	10	0	35,501	35,496	5	0
Haryana	61,451	60,945	506	0.8	63,983	63,636	348	0.5
Himachal Pradesh	12,649	12,542	107	0.8	12,805	12,767	38	0.3
Jammu & Kashmir	19,639	19,322	317	1.6	20,040	19,763	277	1.4
Punjab	69,522	69,220	302	0.4	69,533	69,528	5	0
Rajasthan	1,01,801	1,00,057	1,745	1.7	1,07,422	1,06,806	616	0.6
Uttar Pradesh	1,44,251	1,43,050	1,201	0.8	1,48,791	1,48,287	504	0.3
Uttarakhand	15,647	15,386	261	1.7	15,644	15,532	112	0.7
Northern Region	4,63,088	4,58,640	4,449	1	4,76,852	4,74,946	1,906	0.4
Chhattisgarh	37,446	37,374	72	0.2	39,930	39,872	58	0.1
Gujarat	1,39,043	1,38,999	44	0	1,45,768	1,45,740	28	0
Madhya Pradesh	92,683	92,325	358	0.4	99,301	99,150	151	0.2
Maharashtra	1,87,309	1,87,197	111	0.1	2,07,108	2,06,931	176	0.1
Dadra & Nagar Haveli and Daman & Diu	10,018	10,018	0	0	10,164	10,164	0	0
Goa	4,669	4,669	0	0	5,111	5,111	0	0
Western Region	4,77,393	4,76,808	586	0.1	5,17,714	5,17,301	413	0.1
Andhra Pradesh	72,302	71,893	410	0.6	80,209	80,151	57	0.1
Telangana	77,832	77,799	34	0	84,623	84,613	9	0
Karnataka	75,688	75,663	26	0	94,088	93,934	154	0.2
Kerala	27,747	27,726	21	0.1	30,943	30,938	5	0
Tamil Nadu	1,14,798	1,14,722	77	0.1	1,26,163	1,26,151	12	0
Puducherry	3,051	3,050	1	0	3,456	3,455	1	0
Lakshadweep (#)	64	64	0	0	64	64	0	0
Southern Region	3,71,467	3,70,900	567	0.2	4,19,531	4,19,293	238	0.1
Bihar	39,545	38,762	783	2	41,514	40,918	596	1.4
DVC	26,339	26,330	9	0	26,560	26,552	8	0
Jharkhand	13,278	12,288	990	7.5	14,408	13,858	550	3.8
Odisha	42,631	42,584	47	0.1	41,358	41,333	25	0.1
West Bengal	60,348	60,274	74	0.1	67,576	67,490	86	0.1
Sikkim	587	587	0	0	544	543	0	0
Andaman- Nicobar (#)	348	348	0	0.12914	386	374	12	3.18562
Eastern Region	1,82,791	1,80,888	1,903	1	1,92,013	1,90,747	1,266	0.7
Arunachal Pradesh	915	892	24	2.6	1,014	1,014	0	0
Assam	11,465	11,465	0	0	12,445	12,341	104	0.8
Manipur	1,014	1,014	0	0	1,023	1,008	15	1.5
Meghalaya	2,237	2,237	0	0	2,236	2,066	170	7.6
Mizoram	645	645	0	0	684	684	0	0
Nagaland	926	873	54	5.8	921	921	0	0
Tripura (*)	1,547	1,547	0	0	1,691	1,691	0	0
North-Eastern Region	18,758	18,680	78	0.4	20,022	19,733	289	1.4
All India	15,13,497	15,05,914	7,583	0.5	16,26,132	16,22,020	4,112	0.3

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

(*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments. The MU figures has been rounded off to nearest unit place.

Details of States/UTs/Regions-wise All India Power Supply Position of the Country including the Union Territory of Dadra and Nagar Haveli in terms of Energy for the period from FY 2024-25 to FY 2025-26 (upto June, 2025):

State/ System / Region	April, 2024 - March, 2025				April, 2025 - June, 2025			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	1,952	1,952	0	0	555	555	0	0
Delhi	38,255	38,243	12	0	11,303	11,299	4	0
Haryana	70,149	70,120	30	0	18,816	18,757	59	0.3
Himachal Pradesh	13,566	13,526	40	0.3	3,387	3,375	11	0.3
Jammu & Kashmir	20,374	20,283	90	0.4	4,853	4,847	6	0.1
Punjab	77,423	77,423	0	0	20,885	20,860	25	0.1
Rajasthan	1,13,833	1,13,529	304	0.3	28,036	28,036	0	0
Uttar Pradesh	1,65,090	1,64,786	304	0.2	46,028	46,022	6	0
Uttarakhand	16,770	16,727	43	0.3	4,426	4,417	10	0.2
Northern Region	5,18,869	5,17,917	952	0.2	1,38,697	1,38,576	121	0.1
Chhattisgarh	43,208	43,180	28	0.1	11,474	11,472	2	0
Gujarat	1,51,878	1,51,875	3	0	41,752	41,752	0	0
Madhya Pradesh	1,04,445	1,04,312	133	0.1	25,168	25,166	2	0
Maharashtra	2,01,816	2,01,757	59	0	52,395	52,393	1	0
Dadra & Nagar Haveli and Daman & Diu	10,852	10,852	0	0	2,845	2,845	0	0
Goa	5,411	5,411	0	0	1,486	1,486	0	0
Western Region	5,28,924	5,28,701	223	0	1,38,472	1,38,466	6	0
Andhra Pradesh	79,028	79,025	3	0	20,471	20,471	0	0
Telangana	88,262	88,258	4	0	19,690	19,690	0	0
Karnataka	92,450	92,446	4	0	22,945	22,945	0	0
Kerala	31,624	31,616	8	0	8,015	8,015	0	0
Tamil Nadu	1,30,413	1,30,408	5	0	34,817	34,817	0	0
Puducherry	3,549	3,549	0	0	948	946	2	0.2
Lakshadweep (#)	68	68	0	0	20	20	0	0
Southern Region	4,25,373	4,25,349	24	0	1,06,899	1,06,897	2	0
Bihar	44,393	44,217	176	0.4	12,716	12,713	4	0
DVC	25,891	25,888	3	0	6,368	6,367	1	0
Jharkhand	15,203	15,126	77	0.5	3,931	3,930	1	0
Odisha	42,882	42,858	24	0.1	11,830	11,828	2	0
West Bengal	71,180	71,085	95	0.1	20,645	20,626	18	0.1
Sikkim	574	574	0	0	128	128	0	0
Andaman- Nicobar (#)	425	413	12	2.9	107	104	3	2.8
Eastern Region	2,00,180	1,99,806	374	0.2	55,637	55,611	26	0
Arunachal Pradesh	1,050	1,050	0	0	283	283	0	0
Assam	12,843	12,837	6	0	3,506	3,506	0	0
Manipur	1,079	1,068	10	0.9	274	272	2	0.9
Meghalaya	2,046	2,046	0	0	494	494	0	0
Mizoram	709	709	0	0	177	177	0	0
Nagaland	938	938	0	0	243	243	0	0
Tripura (*)	1,939	1,939	0	0	512	512	0	0
North-Eastern Region	20,613	20,596	16	0.1	5,492	5,490	2	0
All India	16,93,959	16,92,369	1,590	0.1	4,45,197	4,45,040	157	0

(#) Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.

(*) Excludes energy exported to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments. The MU figures has been rounded off to nearest unit place.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1940
ANSWERED ON 31.07.2025

POWER GENERATION CAPACITY OF NTPC

†1940. SHRI ARUN KUMAR SAGAR:

Will the Minister of POWER be pleased to state:

(a) the existing power generation capacity of National Thermal Power Corporation (NTPC);

(b) whether the NTPC proposes to increase its power generation capacity by three times;

(c) if so, the specific plan chalked out by NTPC in this regard; and

(d) the time by which it is likely to be implemented?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Currently, the installed capacity of NTPC group (including JVs and subsidiaries) is about 82,895 Megawatt (MW).

(b) to (d) : NTPC Ltd. formulates a 15-years corporate Plan which envisages its power generation portfolio. As per the present Corporate Plan, NTPC has set a target of achieving 1,30,000 MW installed capacity by 2032, leveraging a diversified fuel mix, integrating fossil fuels, hydro, nuclear, and renewable sources to expand its portfolio.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1951
ANSWERED ON 31.07.2025

TARGETS FOR INSTALLATION OF SMART METERS

1951. SHRI VISHNU DAYAL RAM:
SHRI DARSHAN SINGH CHOUDHARY:

Will the Minister of POWER
be pleased to state:

(a) the total outlay and estimated Government budgetary support during the last five years under the scheme meant for the purpose of smart meters;

(b) the number of smart meters installed and sanctioned till June 2025;

(c) the targeted number of smart meters to be installed by 2025; and

(d) whether any steps have been taken to reduce Aggregate Technical and Commercial (AT&C) losses and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Under Revamped Distribution Sector Scheme (RDSS) smart metering works worth Rs. 1,30,671 Cr with Gross Budgetary Support (GBS) of Rs. 24,173 Cr from Government of India have been sanctioned.

(b) & (c) : Till date, a total of 20.33 crore smart meters have been sanctioned under RDSS, out of which 2.45 crore smart meters have been installed. The installation of sanctioned smart meters is to be completed by the end of the scheme period (March' 2028).

(d) : Government of India (GoI) has been supporting the power distribution utilities to improve their Aggregate Technical and Commercial (AT&C) losses through various initiatives. Some of the key initiatives taken are as under:

.....2.

i. **Revamped Distribution Sector Scheme (RDSS) launched with the objective of improving the quality and reliability of power through a financially sustainable and operationally efficient Distribution Sector. The scheme aims at bringing down the AT&C losses to pan-India level of 12-15% and ACS-ARR gap to zero. Under the Scheme, projects worth Rs. 2.82 lakh crore have been sanctioned. These involve distribution infrastructure works worth Rs. 1.51 lakh crore which include replacement of bare conductors with covered conductors, laying Low Tension Aerial Bunched (LT AB) cables, and upgradation/ augmentation of Distribution Transformers (DT)/ Sub-stations, etc. The fund release under the scheme has been linked to performance of distribution utilities against various financial parameters, the prominent among them being AT&C losses and ACS-ARR Gap. Execution of these works would also help improve quality of supply of power. Prepaid smart metering is also one of the critical interventions envisaged under RDSS, which would help in improving AT&C losses.**

ii. **Additional Borrowing space of 0.5% of GSDP to State Governments, which is conditional on them undertaking specific reforms in the power sector.**

iii. **Additional Prudential Norms for sanctioning of loans to State owned power utilities which would be contingent to the performance of power distribution utilities against prescribed conditions.**

iv. **Rules for implementation of FPPCA and cost reflective tariff so as to ensure that all prudent cost for supply of electricity are passed through.**

v. **Rules and Standard Operating Procedure issued for proper subsidy accounting and their timely payment.**

With collective effort of Centre & States/ UTs and the reform measures undertaken, the AT&C loss of distribution utilities at the national level has reduced from 21.91% in FY21 to 16.12% in FY24.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1955
ANSWERED ON 31.07.2025

PERFORMANCE OF DISCOMS IN RAJASTHAN

1955. SHRI DUSHYANT SINGH:

Will the Minister of POWER be pleased to state:

(a) the location of the major power plants situated in Rajasthan and their role in ensuring a stable power supply in the State;

(b) the manner in which the performance of DISCOMs has improved in Rajasthan particularly in meeting renewable energy obligations and reducing power losses;

(c) the measures taken by the Government to ensure reliable agricultural power supply in regions like Jhalawar-Baran, Kota-Bundi and other rural areas of Rajasthan; and

(d) the status of power cuts in Rajasthan particularly in rural and agricultural regions along with the steps being taken by the Government to minimize disruptions for farmers?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The details of major power plants situated in Rajasthan are given at Annexure-I. These Power plants (State, Central and Private Owned) cater to the base load demand (24x7) of the State.

(b) : Rajasthan DISCOMs have promoted diverse array of projects ranging from Utility/Grid Scale Solar parks to Distributed Generation and Solar Rooftop & Solar Pump installation under various schemes of Government of India to achieve its RPO target. This includes implementation of component-A of PM-KUSUM wherein 489 no. of Power Purchase Agreements (PPAs) of 602 MW capacity have been signed and 457 MW capacity has been commissioned till date. Further, under Component-C of PM-KUSUM scheme, Rajasthan DISCOMs signed 1696 no. of PPAs of 4,300 MW. Generation has commenced from 850 MW projects under this scheme. Along with this, tenders are being issued for setting up solar projects of 4,700 MW under PM-KUSUM A in the state.

PM-KUSUM scheme facilitated Rajasthan DISCOMs in meeting the Agriculture demand and reducing the CAPEX on Transmission/Distribution system and Transmission losses. This has resulted in lower tariff discovered under the scheme ultimately reducing the average power purchase cost of DISCOMs.

.....2.

Further, Government of India, in July 2021, launched the Revamped Distribution Sector Scheme (RDSS) with the objective of improving the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector in the country. Under RDSS, projects worth Rs. 18,693 Cr. and Rs. 9,715 Cr. for distribution infrastructure and smart metering works respectively have been sanctioned for the State of Rajasthan. These works are under various stages of implementation. In addition, various other initiatives have also been undertaken by Government of India to improve the performance of distribution utilities. As a result of implementation of various reform measures, the AT&C losses of Utilities of Rajasthan have declined from 26.23% in FY21 to 22.08% in FY24.

(c) : Government of India has continuously laid emphasis on segregation of mixed load feeders with more than 30% agricultural load into agriculture and non-agricultural feeders. It would help in efficient load management, facilitate judicious roistering of supply for agricultural consumption and enable solarization of agricultural feeders which would help in day-time supply to farmers while reducing the cost of supply. Under RDSS, segregation of 12,835 Agriculture feeders at an estimated cost of Rs. 10,201 Cr. has been sanctioned for the State of Rajasthan out of which 248 feeders have already been segregated and segregation works in 12,587 feeders is in progress which is expected to be completed within the scheme period (March, 2028). Implementation of sanctioned works would help in providing reliable and quality supply to agricultural and non-agricultural consumers in rural areas of the State.

(d) : Electricity being a concurrent subject, the supply and distribution of electricity to the various categories of consumers including rural and agricultural regions in a State/UT is responsibility of the respective State Government/Power Utility. As per Rule (10) of 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. The Rules are applicable for all States and UTs.

State Government has reported that there have been no power cuts during the last nine months and uninterrupted power supply has been provided in rural area except few interruptions due to technical fault. In rural areas, Rajasthan DISCOMs provided on an average 21 to 23 hours of single-phase power supply to domestic consumers and 6 hours of three-phase block supply to agricultural consumers. To minimize disruptions in power supply to farmers, steps such as timely rectification of faults, regular maintenance of power lines, replacement of burnt transformers without undue delay etc. are being undertaken by the State Government.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1955 ANSWERED IN THE LOK SABHA ON 31.07.2025

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The details of major power plants situated in Rajasthan :

	Power Plant	District	Installed Capacity (in MW)
State Owned	Suratgarh Thermal Power Plant	Suratgarh, Sri Ganganagar	2,820
	Kota Thermal Power Plant	Kota	1,240
	Dholpur CCPP	Dholpur	330
	Chhabra Thermal Power Station	Baran	2,320
	Ramgarh Gas Thermal Power Station	Ramgarh	270
	Kalisindh Thermal Power Station	Jhalawar	1,200
Private IPP	Rajwest Thermal Power Plant	Barmer	1,080
	Adani Power Limited	Kawai, Baran	1,200
Central Sector	Rajasthan Atomic Power Plant	Kota	1,780
	NLC Thermal Power Plant	Bikaner	250

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1957
ANSWERED ON 31.07.2025

OPERATIONAL POWER PROJECTS

†1957. SHRI UMMEDA RAM BENIWAL:

Will the Minister of POWER
be pleased to state:

(a) the number, objectives and key features of the currently operational power projects in the country and their contribution in rural electrification;

(b) the present status of electricity coverage during the last ten years in the State of Rajasthan including Barmer-Jaisalmer Lok Sabha Constituency along with the number of electrified villages and households;

(c) the number of electricity connections provided to BPL and other families thereunder;

(d) whether there is any special provision to provide free or subsidised electricity connections to BPL and other families and if so, the details thereof;

(e) the time of the last survey conducted for deprived households and the number of pending applications in the districts of Barmer, Jaisalmer and Balotra;

(f) whether any budget has been allocated for household connections in these districts and if so, the details thereof and the proposed hamlets, district-wise; and

(g) the steps being taken to ensure the quality and reliability of electricity supply in remote areas?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Presently, there is adequate availability of power in the country. The installed generation capacity in the country is 484.81 GW and 4.95 lakh circuit kilometer (ckm) of transmission lines (220KV and above) with transformation capacity of 13.59 lakh MVA has been operational.

Electricity being a concurrent subject, the supply and distribution of electricity to the consumers including rural areas is the responsibility of respective State Government/ power distribution utility.However, Government of India (GoI) has supplemented the efforts of the States to help them strengthen power distribution infrastructure and achieve rural electrification.

.....2.

(b) & (c) : Under DDUGJY, a total of 427 villages were electrified and electricity connections were provided to 1,49,854 nos. of Below Poverty Line (BPL) households in the State of Rajasthan (including Barmer-Jaisalmer Lok Sabha Constituency). Further, a total of 21,27,728 households were electrified during SAUBHAGYA period in the State of Rajasthan (including Barmer-Jaisalmer Lok Sabha Constituency). As reported by the State, all the inhabited un-electrified census villages were electrified under DDUGJY and all willing households were electrified during SAUBHAGYA.

Government of India is further supporting the State for grid electrification of households left-out during SAUBHAGYA, under the ongoing scheme of Revamped Distribution Sector Scheme (RDSS). This includes electrification of all Particularly Vulnerable Tribal Group (PVTG) households identified under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) and all tribal households identified under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan). Under the scheme, works amounting to Rs 1,764 Cr have been sanctioned for electrification of 4,39,177 households for the State of Rajasthan of which 95,986 households have been electrified till date.

(d) & (e) : Providing subsidy support to various categories of consumers comes within the purview of State Government. As reported by the State, the last survey to identify balance household to be electrified was conducted in FY 2024-25. Further, the list of pending applications is a dynamic data which is maintained by the respective distribution utilities.

(f) : The details of pending households identified by the State to be electrified in the districts of Barmer, Jaisalmer and Balotra are as below:

SN	District	Proposed habitations (nos)	Sanctioned households	Sanctioned cost (Rs Cr)
1	Barmer	3593	71,864	186.37
2	Balotra	1219	18,999	132.57
3	Jaisalmer	5076	34,455	141.03

(g) : As per Rule (10) of 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. The Rules are applicable for all States and for all areas including urban and rural areas.

As reported in part (a) above, GoI has supported States to help them strengthen distribution infrastructure works so as to achieve the objective of providing quality and reliable supply of power to all households. Further, since most of the left-out households are in remote, hilly and forest areas, the norms for electrification under RDSS were relaxed and the ceiling limit for cost of electrification has been enhanced. Grid based electrification works have been sanctioned under RDSS wherever found feasible as per the revised norms. Till date, works amounting to Rs. 6,486 Cr. have been sanctioned for electrification of 13.59 lakh households under RDSS including households located in remote areas.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1983
ANSWERED ON 31.07.2025

USE OF STELLAR IN POWER DISTRIBUTION COMPANIES

†1983. SHRI TRIVENDRA SINGH RAWAT:
SMT. HIMADRI SINGH:

Will the Minister of POWER be pleased to state:

(a) whether the state-of-the-art fully indigenous resource adequacy model called STELLAR has been distributed to all States and power distribution companies (DISCOMs);

(b) if so, the details of the State utilities and DISCOMs that have adopted or operationalized this tool;

(c) the top three States that have shown the highest deviation between their previous resource planning models and projections made by STELLAR and the changes ushered in their policies or infrastructure as a result of the same; and

(d) the estimated cost savings due to the use of STELLAR in optimizing generation, distribution, storage and ancillary services?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d): Resource Adequacy Model (STELLAR) developed by CEA is a long term capacity expansion model with demand response. The Monitoring Committee of Power System Development Fund (PSDF) in its meeting held on 13.06.2025, approved the proposal for purchase of 31 GAMS software licenses for CEA STELLAR tool with PSDF grant of ₹5.35 Cr. The tool will be made available to the States shortly.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1987
ANSWERED ON 31.07.2025

EXPANSION OF THERMAL POWER CAPACITY

1987. SHRI SUDHAKAR SINGH:

Will the Minister of POWER be pleased to state:

(a) whether the Government proposes for expansion of thermal power capacity from 800 to 1600 MW in Chausa thermal power plant;

(b) if so, the details and the total estimated cost thereof including capacity for expansion; and

(c) the time by which it is likely to be done and completed?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c) : Buxar Thermal Power Project (BTPP) located at Chausa Village in Buxar District of Bihar is being developed by SJVN Thermal Power Limited (STPL), a wholly owned subsidiary of SJVN Limited under the Ministry of Power. The Project is currently under construction and have two (02) Units of 660 MW each with total capacity of 1,320 MW.

As per Section 7 of Electricity Act, 2003 setting up of a power plant including expansion of capacity of an existing Thermal Power Plant is a de-licensed activity in the country. Any generating company on the basis of the techno-commercial requirement and feasibility, may establish, operate and maintain a generating station without requiring a license under Electricity Act, 2003 if it complies with the technical standards relating to connectivity with the grid.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1997
ANSWERED ON 31.07.2025

ENERGY CONSERVATION (AMENDMENT) BILL, 2022

1997. SHRI ADITYA YADAV:

Will the Minister of POWER
be pleased to state:

(a) whether it has been brought to the notice of the Government that the Energy Conservation (Amendment) Bill, 2022 does not clearly specify the responsibility for the carbon credit certificate and its regulation; and

(b) if so, the remedial steps proposed to be taken by the Government in this regard?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : The Central Government has already notified the Carbon Credit Trading Scheme (CCTS) in June 2023, under the provisions of Section 14 of the Energy Conservation Act, 2001, thereby establishing the institutional framework for its implementation.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2019
ANSWERED ON 31.07.2025

NUCLEAR ENERGY GENERATION CAPACITY

†2019. SHRI BRIJMOHAN AGRAWAL:

Will the Minister of POWER
be pleased to state:

(a) the annual electricity generation in the country and the annual electricity generated during the last three years in each State and Union Territory of the country including Chhattisgarh;

(b) the present annual capacity of nuclear energy generation in the country and the details of all operational nuclear energy reactors along with their annual capacity;

(c) the steps being taken by the Ministry to promote the nuclear energy sector;

(d) the total energy deficit and peak energy deficit in the country during the Financial Year 2024-25; and

(e) the manner in which the nuclear energy sector is likely to help in reducing this deficit?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The State/UT-wise details of annual electricity generated in the country during the last three years and current year (till May-2025) including Chhattisgarh are given at Annexure-I.

(b) : The present Installed Capacity of Nuclear Generation in India is 8,780 MW (excluding 100 MW of Rajasthan Atomic Power Station-I (RAPS-I), which is under extended shutdown). The list of all operational Nuclear power reactors along with their rated capacity is given at Annexure-II.

.....2.

(c) : The Government has announced an ambitious Nuclear Energy Mission with a target of reaching a nuclear power capacity of 100 GW by 2047. To facilitate this mission, necessary amendments will be brought in the Atomic Energy Act and Civil Liability for Nuclear Damage Act to enable private investment in nuclear power sector. The Government has also announced measures for enabling R&D in Small Module Reactors (SMRs) and new advanced technologies.

(d) : Power supply position of the country during the year 2024-25 in terms of Energy and Peak is given at Annexure-III. This indicates that the energy deficit and peak deficit in the country during the year 2024-25 was almost Nil.

(e) : Nuclear power is a clean base load source of electricity which is available 24x7. The Greenhouse gas emissions during the total lifecycle of Nuclear power plant is comparable to renewables like Hydro and Wind. The nuclear energy mission announced in the Budget-2025 envisages deployment of 100 GW of nuclear energy by 2047. This initiative will increase the share of nuclear energy in India's energy mix for long term energy transition strategy for Viksit Bharat.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2019 ANSWERED IN THE LOK SABHA ON 31.07.2025

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The State/UT-wise details of annual electricity generated in the country during the last three years and current year (till May-2025) including Chhattisgarh

(All figures in MUs)

Name of State/UT	Electricity Generated 2022-23	Electricity Generated 2023-24	Electricity Generated 2024-25	Electricity Generated 2025-26 (Upto May 2025)
Andaman & Nicobar	252.45	375.29	413.18	71.38
Andhra Pradesh	81,701.42	90,081.32	92,072.29	16,442.46
Arunachal Pradesh	4,845.79	4,280.73	4,207.04	577.73
Assam	9,153.69	9,429.34	9,708.30	1,420.07
Bhutan	6,742.40	4,716.10	5,484.18	731.51
Bihar	55,489.06	58,703.88	61,202.85	10,076.56
Chandigarh	12.61	11.70	8.79	1.06
Chhattisgarh	1,44,839.62	1,65,187.83	1,70,076.73	28,823.08
Dadra and Nagar Haveli & Daman and Diu	30.62	28.86	28.63	5.42
Delhi	4,314.50	4,483.95	4,626.96	840.80
Goa	19.96	67.95	65.24	10.87
Gujarat	95,017.30	1,35,398.90	1,57,731.34	30,152.00
Haryana	33,559.00	29,848.93	32,681.55	5,035.18
Himachal Pradesh	41,579.81	38,952.37	42,534.43	8,029.20
Jammu and Kashmir	17,170.62	16,282.93	15,595.82	3,780.96
Jharkhand	30,800.35	35,984.77	39,105.22	5,874.21
Karnataka	85,189.36	91,468.95	1,00,182.18	16,907.17
Kerala	9,935.38	7,359.96	9,458.66	1,735.62
Ladakh	402.78	388.48	413.06	84.86
Lakshadweep	15.12	64.88	67.03	12.26
Madhya Pradesh	1,52,020.26	1,64,779.83	1,66,290.81	27,634.41
Maharashtra	1,58,993.39	1,69,037.91	1,70,242.07	30,463.61
Manipur	486.77	307.14	715.05	30.82
Meghalaya	1,052.41	875.13	1,022.23	189.06
Mizoram	266.40	217.74	317.79	18.89
Nagaland	289.32	246.61	313.64	11.10
Odisha	71,529.15	73,443.73	76,221.89	13,617.23
Puducherry	245.31	236.34	217.19	10.29
Punjab	40,075.39	41,261.67	40,848.23	6,595.28
Rajasthan	1,05,963.47	1,16,845.30	1,30,771.79	24,665.97
Sikkim	11,709.14	8,622.20	2,025.02	314.25
Tamil Nadu	1,16,688.02	1,23,311.63	1,30,124.92	20,675.49
Telangana	64,178.16	65,666.12	69,881.68	11,925.68
Tripura	7,086.06	6,360.32	5,105.62	871.18
Uttar Pradesh	1,63,447.06	1,65,051.58	1,75,196.84	31,096.57
Uttarakhand	16,368.16	15,459.95	16,955.30	2,410.80
West Bengal	92,995.30	94,250.84	97,784.38	16,176.99
Grand Total	16,24,465.61	17,39,091.19	18,29,697.94	3,17,320.01

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2019 ANSWERED IN THE LOK SABHA ON 31.07.2025

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List of all operational Nuclear power reactors along with their rated capacity

Sr. No	Reactor and Location	Capacity (MW)
1	RAPS-2, Rawatbhata, Rajasthan	200
2	TAPS-1, Tarapur, Maharashtra	160
3	TAPS-2, Tarapur, Maharashtra	160
4	MAPS-1, Kalpakkam, Tamil Nadu	220
5	MAPS-2, Kalpakkam, Tamil Nadu	220
6	NAPS-1, Narora, Uttar Pradesh	220
7	NAPS-2, Narora, Uttar Pradesh	220
8	KAPS-1, Kakrapar, Gujarat	220
9	KAPS-2, Kakrapar, Gujarat	220
10	RAPS-3, Rawatbhata, Rajasthan	220
11	RAPS-4, Rawatbhata, Rajasthan	220
12	RAPS-5, Rawatbhata, Rajasthan	220
13	RAPS-6, Rawatbhata, Rajasthan	220
14	KAIGA-1, Kaiga, Karnataka	220
15	KAIGA-2, Kaiga, Karnataka	220
16	KAIGA-3, Kaiga, Karnataka	220
17	KAIGA-4, Kaiga, Karnataka	220
18	TAPS-3, Tarapur, Maharashtra	540
19	TAPS-4, Tarapur, Maharashtra	540
20	KAPS-3, Kakrapar, Gujarat	700
21	KAPS-3, Kakrapar, Gujarat	700
22	KKNPP-1, Kudankulam, Tamil Nadu	1,000
23	KKNPP-2, Kudankulam, Tamil Nadu	1,000
24	RAPS-7, Rawatbhata, Rajasthan,	700

RAPS: Rajasthan Atomic Power Station
TAPS: Tarapur Atomic Power Station
MAPS: Madras Atomic Power Station
NAPS: Narora Atomic Power Station
KAPS: Kakrapar Atomic Power Station
KKNPP: Kudankulam Nuclear Power Plant

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ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 2019 ANSWERED IN THE LOK SABHA ON 31.07.2025

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The total energy deficit and peak energy deficit in the country during the financial year 2024-25

Years	Energy				Peak			
	Energy Requirement	Energy Supplied	Energy not Supplied		Peak Demand	Peak Met	Demand not Met	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
2024-25	16,93,959	16,92,369	1,590	0.1	2,49,856	2,49,854	2	0.0

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2021
ANSWERED ON 31.07.2025

GUIDELINES FOR OPERATION OF VOLUNTARY CARBON MARKETS

2021. SHRI B K PARTHASARATHI:
SHRI MOHIBBULLAH:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has issued/established any legal framework or guidelines for the operation of voluntary carbon markets in the country;

(b) if so, the details thereof and if not, the reasons therefor;

(c) whether the Government has set up a unified set of rules, accounting protocols and verification mechanisms applicable across all sectors under the Indian Carbon Market framework;

(d) if so, the details thereof and if not, the reasons therefor;

(e) whether the Government has specified critical components such as the baseline year, emission factors and the types of eligible projects under various sectors for the issuance of carbon credits;

(f) if so, the details thereof and if not, the reasons therefor;

(g) whether the Government has formulated or is considering any plans to align India's carbon market with international standards or global carbon markets to ensure compatibility and enable cross-border credit transfer or trading; and

(h) if so, the details thereof and 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) : The Central Government in consultation with Bureau of Energy Efficiency (BEE) notified Carbon Credit Trading Scheme (CCTS) which defines two mechanism namely – compliance mechanism and offset mechanism.

.....2.

Under the compliance mechanism, emission-intensive industries designated as 'Obligated Entities' are required to comply with the assigned Greenhouse Gas Emission Intensity (GEI) targets. Under the offset mechanism, non-obligated entities may register their projects aimed at greenhouse gas emission reduction, removal, or avoidance for the purpose of seeking issuance of Carbon Credit Certificates. The detailed procedures for both the mechanism have already been published which cover Measurement, Reporting, and Verification (MRV) framework to ensure accurate, transparent, and credible compliance.

(e) & (f): The Government of India has already specified the baseline year, emission factors and various sectors for the issuance of carbon credits. Draft notifications specifying GEI targets for obligated entities across eight different sectors namely - Pulp & Paper, Aluminium, Cement and Chlor-Alkali, Iron & Steel, Petroleum Refinery, Petrochemicals and Textile have been published. Further, eight methodologies for different project activities under offset mechanism have also been published.

(g) & (h): The aforesaid procedures, published for implementation of CCTS, are in alignment with global standards. However, decisions regarding the cross-border transfer or trading of Carbon Credit Certificates shall be taken by the National Designated Authority for Implementation of Article 6 of Paris Agreement (NDAIAPA), as per emerging requirements.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2029
ANSWERED ON 31.07.2025

DISPOSAL OF SLAG EMITTED FROM POWER PLANTS

†2029. SMT. KAMLESH JANGDE:

Will the Minister of POWER be pleased to state:

(a) whether Prakash Industries Limited Champa in Janjgir-Champa district of Chhattisgarh is operating a power plant of 500 MW with two units of 100 MW and two units of 150 MW each;

(b) if so, the arrangements made for the disposal of slag emitted from the coal used in the said power plant and the place/location where this slag is being dumped;

(c) the total quantity of slag emitted since the year 2024-25 till date; and

(d) the details of the land used/to be used for construction of slag dam by indicating total area, location, the names of affected villages, the present status of slag dam etc.?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : No. M/s Prakash Industries Limited, Champa, District Janjgir-Champa is operating a 75 MW Co-generation power plant based on Waste Heat Recovery Boiler and 162.5 MW Coal Based Captive Power Plant (1x12.5 MW + 6x25 MW).

(b) & (c) : Slag is not generated from Coal Based Power Plant. The slag is generated from Induction furnaces and submerged arc furnaces. As reported by Chhattisgarh Environment Conservation Board, the quantity of slag generated from the industry since 2024-25 till date is 3,90,402 Tonnes.

(d) : No slag dam has been constructed by M/s Prakash Industries Limited, Champa, District Janjgir-Champa and there is no proposal for construction of slag dam.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2044
ANSWERED ON 31.07.2025

ELECTRIFICATION IN RURAL AREAS OF ODISHA

2044. SHRI SUKANTA KUMAR PANIGRAHI:

Will the Minister of POWER
be pleased to state:

(a) the total renewable energy capacity added in Odisha during the Financial Year 2024-25 and its contribution to the State's power supply;

(b) the number and cumulative duration of unscheduled power outages reported in the State during the last six months particularly in power-deficit and Aspirational Districts like Kandhamal;

(c) the extent of reduction in Aggregate Technical and Commercial (AT&C) losses achieved in Odisha under the Ujwal DISCOM Assurance Yojana (UDAY) and the support extended by the Union Government; and

(d) the current status of 100 per cent household electrification in rural areas of Odisha and the measures taken to ensure reliable and quality power supply including the deployment of solar-based dual pump systems in remote and tribal regions especially in Aspirational Districts such as Kandhamal?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : 125.83 MW Renewable Energy capacity was added in Odisha during FY 2024-25. This capacity addition has supplied around 220.61 MU of Renewable power in FY 2024-25 increasing total consumption from RE sources to 10,370.11 MU.

(b) : The DISCOM-wise data on cumulative number and duration of unscheduled power outages during the last six months (Jan – Jun' 2025), as reported by the state, are given at Annexure.

.....2.

(c) : Odisha is not covered under UDAY scheme. However, the AT&C Loss in the State for FY 2024-25 was 16.55%.

(d) : All the revenue villages of the State have been electrified. The remaining left-out households identified in survey are being electrified under State Government schemes.

To ensure uninterrupted power supply to various consumers, several steps such as setting up of new 33/11 kV Primary Substations (PSSs), strengthening of existing 33/11 kV PSSs, installation of new 11kV Lines and transformers and strengthening of existing 11 kV lines etc. are being taken up under *Odisha Distribution System Strengthening Programme* (ODSSP) Ph – IV and V Schemes of the State Government. Apart from this, DISCOMs are carrying out system strengthening works under their own CAPEX.

All the Solar based dual pump projects, including those in aspirational districts such as Kandhamal, are maintained regularly.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2044 ANSWERED IN THE LOK SABHA ON 31.07.2025

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The DISCOM-wise data on cumulative number and duration of unscheduled power outages reported in the state during the last six months (Jan – June' 2025)

DISCOMs	Number of cumulative unscheduled outage	Cumulative duration of unscheduled outage (in Hours)
TPCODL	94	56
TPSODL	128	102
TPNODL	237	121.01
TPWODL	176	144

Note: (in Kandhamal: Number of cumulative unscheduled outage was 53 and Cumulative duration of unscheduled outage was 47 Hrs.)

TPCODL: Tata Power Central Odisha Distribution Limited.

TPSODL: Tata Power Southern Odisha Distribution Limited.

TPNODL: Tata Power Northern Odisha Distribution Limited.

TPWODL: Tata Power Western Odisha Distribution Limited.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2050
ANSWERED ON 31.07.2025

AIR QUALITY AT NTPC THERMAL POWER PLANTS

2050. SHRI VAMSI KRISHNA GADDAM:

Will the Minister of POWER
be pleased to state:

(a) the air quality monitoring data recorded at the NTPC Thermal Power plants operating in Peddapalli Lok Sabha Constituency during the past twelve months including particulate matter and sulfur dioxide emission levels;

(b) the timeline for carbon capture technology deployment at NTPC facilities in the district following the successful pilot project at Vindhyachal that captures twenty tonnes of carbon dioxide daily;

(c) whether the Union Government has conducted health impact assessment studies on communities residing within ten kilometers of thermal power plants in Peddapalli Lok Sabha Constituency and if so, the outcomes thereof;

(d) the compensation fund allocation for affected farmers whose agricultural productivity has declined due to fly ash deposition from thermal power generation activities; and

(e) the renewable energy transition roadmap for phasing out coal-fired units older than 25 years in the constituency as per the Union Government's pollution reduction policy?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : NTPC Ltd is currently operating its two-coal based thermal power plant (TPPs) in Peddapalli Lok Sabha Constituency, in the Peddapalli district of Telangana namely Ramagundam (2,600 MW) and Telangana (1,600 MW) Thermal Power Plants located adjacent to each other.

The ambient air quality monitoring data for emission levels including Particulate Matters and Sulfur Dioxide recorded, and monitored through Central Pollution Control Board (CPCB) recognized laboratory, for the past twelve months at various locations nearby TPPs are given at Annexure.

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(b) : NTPC Ltd has taken up the following small-scale pilot/R&D projects for flue gas CO_2 capture and utilization:

(i) A 10 tons per day flue gas CO_2-to-Methanol project at NTPC Vindhyachal, Madhya Pradesh.

(ii) A 10 tons per day flue gas CO_2-to-Gen-4 Ethanol project at NTPC Lara, Chhattisgarh.

The projects are in demonstration stage. As of now, there is no plan for carbon capture technology deployment at NTPC thermal power plants in the Peddapalli district, Telangana.

(c) : No such study has been conducted by Government of India to study the health impact on communities residing within ten Kms of thermal power plants in Peddapalli Lok Sabha constituency. However, NTPC Ramagundam thermal power plant has independently carried out "Occupational Health and Epidemic Health Disorder Survey" including human health risk, epidemiological study and ecological risk for addition of 2x800 MW Telangana Super Thermal Power Plants in 2017-18 and as per the study, no negative health effects were reported in the areas surrounding the thermal power plant.

(d) : No such incidences have been reported to NTPC thermal power plants for compensation in Peddapalli district. Further, these plants of NTPC Ltd. are disposing off their fly ash in an eco-friendly manner as per MoEF&CC ash Notification dated 31.12.2021 and its subsequent amendments.

(e) : As part of its commitment to renewable energy, NTPC Ltd. has commissioned a 100 MW floating solar power plant and a 10 MW ground-mounted solar plant in Peddapalli district.

The Central Electricity Authority(CEA) has issued an advisory dated 20.01.2023 and 07.07.2023 to all Thermal Power Utilities not to retire or repurpose their coal-based power stations before 2030 and to ensure the availability of thermal units after carrying out Renovation and Modernization(R&M) activities, if required, considering the expected energy demand scenario in future.

Further, electricity generation is a de-licensed activity as per Section-7 of the Electricity Act, 2003 and phasing out/retirement of units are decided by Power Generating Utilities/Companies based on their own techno-economic, energy demand and environmental reasons.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2050 ANSWERED IN THE LOK SABHA ON 31.07.2025

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Ambient Air Quality Data near NTPC Thermal Power Plants, Peddapali-District

Sl. No.	Months / Parameters	Location-1: Balancing Reservoir				Location-2: Ramagundam Pump House				Location-3: Permanent Township			
		PM-10 (µg/m3), Limit: 100	PM-2.5 (µg/m3), Limit:60	SO_2 (µg/m3) Limit:80	NO_2 (µg/m3), Limit:80	PM-10 (µg/m3), Limit: 100	PM-2.5 (µg/m3), Limit:60	SO_2 (µg/m3), Limit:80	NO_2 (µg/m3), Limit:80	PM-10 (µg/m3), Limit: 100	PM-2.5 (µg/m3), Limit:60	SO_2 (µg/m3), Limit:80	NO_2 (µg/m Limit:
1	JUNE 2024	38.26	21.60	15.60	24.80	59.15	42.24	12.52	20.79	54.26	37.47	9.51	16.8
2	JULY 2024	37.62	21.93	15.68	23.12	44.35	33.28	13.03	20.69	45.63	33.64	9.51	17.9
3	AUGUST 2024	37.46	19.19	17.55	24.26	39.22	19.14	13.45	21.81	39.24	19.86	9.81	17.9
4	SEPTEMBER 2024	38.29	18.42	18.48	25.43	40.17	19.10	13.37	20.59	38.79	20.58	9.99	18.2
5	OCTOBER 2024	39.94	20.14	20.25	25.02	41.25	20.93	13.66	21.24	40.78	21.32	10.26	19.4
6	NOVEMBER 2024	43.99	22.17	21.89	25.68	43.61	22.35	13.80	23.01	43.55	24.13	11.56	20.6
7	DECEMBER 2024	48.84	24.47	23.73	25.63	48.37	22.87	15.29	24.97	46.76	26.76	13.36	21.7
8	JANUARY 2025	52.60	26.66	24.13	25.96	51.28	25.66	17.08	26.03	50.75	28.33	16.49	22.7
9	FEBRUARY 2025	53.59	26.41	25.36	26.48	51.64	26.03	17.81	24.72	52.70	27.77	17.47	23.9
10	MARCH 2025	54.68	26.30	16.05	28.05	53.00	26.50	14.16	25.57	54.66	28.17	14.68	23.1
11	APRIL 2025	56.78	27.36	10.82	18.27	55.47	26.19	11.13	16.83	56.12	28.86	11.87	20.8
12	MAY 2025	45.51	23.44	11.44	18.79	44.59	24.58	11.37	18.10	45.16	25.67	12.79	19.7

Note: The data is based on the monthly average of bi-weekly 24-hourly monitoring conducted by a CPCB-recognized laboratory.

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