GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.172
ANSWERED ON 11.12.2025

HYDROPOWER PROJECTS OPERATIONAL UNDER NHPC

***172. SHRI MIAN ALTAF AHMAD:**

Will the Minister of POWER
be pleased to state:

(a) the total number of hydropower projects presently operational under National Hydroelectric Power Corporation (NHPC) Limited and the combined power generated by these projects;

(b) the number and names of hydropower projects currently under construction by NHPC along with their proposed generation capacities and expected dates of commissioning;

(c) the estimated total cost of these under-construction projects and the projected power output upon completion; and

(d) whether it is a fact that local residents affected by these projects are not being provided adequate employment opportunities and if so, the details thereof and the measures taken by the Government to address their grievances?

A N S W E R

THE MINISTER OF POWER

(SHRI MANOHAR LAL)

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

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STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) IN RESPECT OF LOK SABHA STARRED QUESTION NO.172 FOR REPLY ON 11.12.2025 REGARDING HYDROPOWER PROJECTS OPERATIONAL UNDER NHPC ASKED BY SHRI MIAN ALTAF AHMAD.

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(a) : Total 23 hydropower projects have been commissioned by NHPC Limited and its JV/Subsidiary companies till October, 2025 with a total installed capacity of 7,771 MW. Total generation from these projects during the last 3 years and current year is as under:

Year	Generation (Million Units)
2022-23	29,894
2023-24	26,056
2024-25	25,194
2025-26 (Apr-Oct)	23,015

(b) & (c) : 8 hydropower projects are currently under construction by NHPC Limited and its JV/Subsidiary companies with a total generation capacity of 8,514 MW. The details regarding the name of projects, proposed generation capacities, projected power output/ design energy, estimated total cost and expected date of commissioning of these under-construction hydropower projects are at Annexure.

(d): NHPC Limited provides job opportunities to local people, including Project Affected Families (PAFs), through contractors, which generate local income and improve their living standards. Moreover, bidding opportunities are also provided to local residents and PAFs to promote local entrepreneurship and support local businesses.

Further, for redressal of any grievances, Govt. of India has launched a "Centralized Public Grievance Redress and Monitoring System – CPGRAMS" portal. The grievances received through this portal are examined and disposed of in a time-bound manner.

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ANNEXURE

ANNEXURE REFERRED TO IN PARTS (b) and (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 172 ANSWERED IN THE LOK SABHA ON 11.12.2025 REGARDING HYDROPOWER PROJECTS OPERATIONAL UNDER NHPC

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Details regarding name of projects, proposed generation capacities, projected power output, estimated total cost and expected date of commissioning of under-construction hydroelectric projects of NHPC Limited & its JV/Subsidiary companies

Sl. No.	Project	State	Capacity (MW)	Design Energy (MU)	Anticipated cost (Rs. in crore)	Anticipated Commissioning Date
A	NHPC					
1.	Subansiri Lower Hydroelectric Project	Arunachal Pradesh	2000	7422	27948	Dec-26
2.	Dibang Multipurpose Project	Arunachal Pradesh	2880	11223	31876	Feb-32
3.	Teesta-VI Hydroelectric Project	Sikkim	500	2400	8449	Sept-29
Sub Total			5380	21045	68273	
B	JV/Subsidiaries					
4.	Rangit-IV Hydroelectric Project (being implemented by JPCL*)	Sikkim	120	508	1889	Apr-26
5.	Ratle Hydroelectric Project (being implemented by RHPCL**)	UT of Jammu & Kashmir	850	3137	5282	Nov-28
6.	Pakal Dul Hydroelectric Project (being implemented by CVPPL***)	UT of Jammu & Kashmir	1000	3230	12728	Dec-26
7.	Kiru Hydroelectric Project (being implemented by CVPPL)	UT of Jammu & Kashmir	624	2272	5409	Dec-26
8.	Kwar Hydroelectric Project (being implemented by CVPPL)	UT of Jammu & Kashmir	540	1975	4526	Mar-28
Sub Total			3134	11122	29834	
GRAND TOTAL			8514	32167	98107	

* JPCL: Jal Power Corporation Limited

** RHPCL: Ratle Hydro Power Corporation Limited

*** CVPPL: Chenab Valley Power Projects Limited

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.178
ANSWERED ON 11.12.2025

IMPACT OF INSTALLATION OF SMART PREPAID METERS

†*178. MRS RUCHI VIRA:

Will the Minister of POWER
be pleased to state:

(a) whether the decision of the Government to install smart prepaid meters is affecting every household;

(b) if so, the details thereof along with the corrective steps proposed to be taken by the Government to solve the practical difficulties faced by consumers; and

(c) whether the Government proposes to offer postpaid services in the best interests of consumers 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 REFERRED TO IN REPLY TO PARTS (a) TO (c) IN RESPECT OF LOK SABHA STARRED QUESTION NO. 178 FOR REPLY ON 11.12.2025 REGARDING IMPACT OF INSTALLATION OF SMART PREPAID METERS

(a) to (c):

I. A total of 4.93 Cr smart meters have been installed across the country with 1.6 Cr smart meters functioning in prepaid mode. Under the Revamped Distribution Sector Scheme (RDSS), smart metering works for 19.79 cr consumers in prepaid mode, 2.11 lakh feeders and 52.53 lakh DTs, totaling 20.33 Cr smart meters, have been sanctioned based on the proposal submitted by the States/distribution utilities and 3.58 Cr smart meters have been installed. The balance smart meters have been installed by States under their State plans/ other schemes.

II. Post paid service has traditionally been the default mode. However, considering the benefits offered to both consumers and distribution utilities, deployment of smart prepaid meters has been undertaken under the Revamped Distribution Sector Scheme (RDSS). The installation of prepaid smart meters is being prioritised for Government establishments, commercial, industrial and high-load consumers and subsequently for other consumers based on demonstration of benefits.

The following benefits have been envisaged for consumers:

i. **Convenience of recharge with small recharges**
ii. **Emergency credit in meter to avoid disconnection on zero balance**
iii. **Tracking of consumption**
iv. **Error free billing**

Besides the consumers, prepaid smart metering helps improve the billing and collection efficiency of the Distribution Utility while providing benefits like Automatic Energy accounting, improved Load forecasting, use of data analytics for demand side management and facilitate an enabling ecosystem for energy transition. The benefits, accruing to the distribution utilities, eventually gets passed on to the consumers in the form of better services and lower costs.

III. Initially, there were some challenges in the implementation of smart metering works due to inadequate consumer awareness regarding the benefits of smart meters. To improve consumer engagement and enhance confidence, the Ministry has issued various advisories/Standard operating Procedures (SoPs). These include:

- **Incentivising consumers for prepaid meter installation through rebate in bill;**
- **No penalty on consumer based on maximum demand recorded by smart meter;**
- **Mechanism for recovery of past arrears in easy instalments;**
- **Installation of check meters for enhancing confidence in accuracy of smart meters.**
- **Smart meter mobile apps are being made available to allow for regular tracking of consumption of electricity and for easy recharge;**
- **Advance alerts for balance and emergency credit to consumers**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1850
ANSWERED ON 11.12.2025

USE OF STUBBLE IN TPPS

†1850. SHRI BHUMARE SANDIPANRAO ASARAM:
SHRI NILESH DNYANDEV LANKE:

Will the Minister of POWER
be pleased to state:

(a) the quantity of biogas from crop residue stubble (in tonnes) being utilized by various Thermal Power Plants (TPPs) in the country, thermal power plant-wise and tonnage-wise;

(b) whether the Government proposes to encourage farmers who are not burning stubble and are processing it to send it to biogas/thermal power plants;

(c) if so, the details thereof in Maharashtra and if not, the reasons therefor;

(d) whether the Government proposes to encourage stubble processing plants; and

(e) 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): Biogas from crop residue stubble is not being utilized in Thermal Power Plants (TPPs) in the country. However, biomass pellets made from crop residue are being co-fired along with coal in TPPs.

(b) & (c): Yes, the Government has been encouraging farmers, who are not burning stubble and are instead processing it, to supply it to biogas and thermal power plants. The Ministry of New and Renewable Energy (MNRE) is implementing the Biomass Programme under Phase-I of the National Bio-Energy Programme, notified on 02.11.2022, to support the establishment of Compressed Biogas (CBG) projects and biomass-based briquette/ pellet manufacturing units across the country, including Maharashtra. The scheme provides financial assistance as:

A. Biomass Programme:

I. **For Briquette manufacturing plants: Rs. 09.00 Lakh per Metric Ton per Hour (MTPH) production capacity (subject to maximum Rs. 45 Lakh per project).**

II. **For Non-Torrefied Pellet manufacturing plant:**
Rs. 21 Lakhs per MTPH production capacity or 30% of the capital cost, whichever is lower (subject to maximum Rs. 105 Lakhs per project).

III. **For Torrefied Pellet manufacturing plant:**
Rs. 42 lakhs/ MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 TPH plant, whichever is lower (Maximum Rs. 210 lakhs per project)

B. Waste to Energy Programme:

I. **Biogas generation: Rs 0.25 Crore per 12000 cum/ day (subject to maximum of Rs. 5.00 Crores per project).**

II. **Bio-CNG generation:**
- **Rs 4.0 Crore per 4800 kg/day (for BioCNG generation from new biogas plant)**
- **Rs 3.0 Crore per 4800 kg/day (for BioCNG generation from existing Biogas plant) (subject to maximum of Rs. 10.00 Crores per project)**

- **Power generation based on Biogas:**
- **Rs 0.75 Crore per MW (for power generation from new biogas plant)**
- **Rs 0.5 Crore per MW (for power generation from existing Biogas plant)**
[Maximum of Rs. 5.00 Crores per project].

(d) & (e): The efforts being made by Government of India to encourage stubble processing plants by implementing the following schemes/ programmes.

- **The Ministry of New and Renewable Energy (MNRE) supports installation of small, medium and large size biogas plants and biomass-based briquette/ pellet under National Bioenergy Programme (NBP).**

- **Ministry of Jal Shakti, Department of Drinking Water and Sanitation launched Galvanizing Organic Bio-Resources Dhan (GOBARdhan) under Swachh Bharat Mission Grameen Scheme (SBM(G)) to ensure cleanliness in villages by converting biodegradable waste into biogas and organic manure.**

- **Ministry of Petroleum and Natural Gas (MoPNG) has launched a scheme to provide financial assistance to Compressed Bio-gas producers for procurement of Biomass Aggregation Machinery (BAM).**

- **Central Pollution Control Board (CPCB) has framed Guidelines for grant of one-time financial support under Environment Protection Charge funds for establishment of palletization and Torrefaction plants to promote utilization of paddy straw generated in the NCT of Delhi, States of Punjab & Haryana, and NCR districts of Rajasthan & Uttar Pradesh.**

- **Ministry of Agriculture & Farmers Welfare (MoA&FW) in 2018 launched scheme for providing subsidy for purchase of crop residue management machinery and establishment of custom hiring centres (CHCs) in NCT of Delhi and the States of Punjab, Haryana and Uttar Pradesh for in-situ management of paddy straw. MoA&FW in 2023 revised guidelines under the scheme to support establishment of crop residue/ paddy straw supply chain, by providing financial assistance on the capital cost of machinery and equipment.**

- **Ministry of Power issued a comprehensive policy for co-firing of biomass pellets (including Torrefied Charcoal made from Municipal Solid Wastes) in coal based Thermal Power Plants. This policy facilitates the utilization of crop residue (biomass) for power generation and creates significant demand for biomass pellets, thereby encouraging the establishment of palletisation and torrefaction plants across the country.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1851
ANSWERED ON 11.12.2025

POWERHOUSE INFRASTRUCTURE IN LAKSHADWEEP

1851. SHRI MUHAMMED HAMDULLAH SAYEED:

Will the Minister of POWER
be pleased to state:

(a) whether the Government is aware of the inadequate and outdated powerhouse infrastructure in various islands of the Union Territory of Lakshadweep which is causing frequent breakdowns and service interruptions and if so, the details thereof;

(b) whether any proposals have been received from the Lakshadweep Administration for modernization, upgradation or reconstruction of power houses across the islands;

(c) if so, the details and current status of such proposals;

(d) whether the Government is aware of the long-pending demand to shift the existing powerhouse at Amini Island from its current densely populated central location to the eastern side of the island to avoid water pollution and related environmental concerns and if so, the details thereof;

(e) whether the Government proposes to approve and support the relocation of the Amini powerhouse in the interest of public safety and environmental protection; and

(f) if so, the time frame proposed for the upgradation of power infrastructure in Lakshadweep including the shifting of the Amini powerhouse?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (f) : As per the information furnished by Department of Electricity, Lakshadweep, the present installed capacity of UT of Lakshadweep is 26.26 MW comprising of 24.56 MW of Diesel Generator (DG) sets and 1.7 MW of Solar Power Plants, whereas a peak demand of 12.76 MW was recorded in Lakshadweep.

Therefore, there is adequate availability of generation capacity in Lakshadweep to meet its power demand.

As informed by the UT of Lakshadweep, action has been initiated by the Department of Electricity, Lakshadweep, to acquire the required land for the installation of Solar Power Plants to meet the power demand of the islands through renewable energy sources. Further, the land area has been identified to shift the existing Amini Power House to a site adjacent to the proposed Solar Power Plant. The upgradation of the power infrastructure in the Lakshadweep islands, including the shifting of the Amini Power House, is likely to be completed in two years from the award of works and date of land acquisition.

Under the ongoing RDSS scheme, financial assistance is being provided to the eligible DISCOMs i.e DISCOMs/Power Departments (excluding Private Sector DISCOMs) for upgradation of distribution infrastructure & system modernization including SCADA and communicable system metering along with smart pre-paid metering in the country. A Detailed Project Report (DPR) for augmentation and modernization of the distribution infrastructure of the UT of Lakshadweep is envisaged by the Department of Electricity, Lakshadweep, in consultation with PFC, the nodal agency for RDSS, for appropriate funding.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO. 1853
ANSWERED ON 11.12.2025

STANDARDISED COOLING RANGE FOR AIR CONDITIONERS

1853. THIRU DAYANIDHI MARAN:

Will the Minister of POWER be pleased to state:

(a) whether the Government has examined the manner in which a standardised cooling range would affect consumer comfort, energy consumption, industrial productivity and appliance performance in regions with high humidity or severe heat, if so, the details thereof;

(b) whether any consultations have been held with AC manufacturers, energy-efficiency bodies, consumer groups and State Governments before recommending a uniform cooling range, if so, the details thereof;

(c) whether the Government has assessed potential impacts on health outcomes, especially for infants, the elderly and patients in healthcare facilities, if ACs are prevented from cooling below a standardised threshold, if so, the findings thereof and if not, the reasons therefor; and

(d) the present status of the June 2025 proposal mandating air conditioners to operate within the 20°C–28°C range and whether a timeline has been fixed for its implementation, 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) : The Ministry of Power has specified a default temperature settings of 24^0 C under the minimum energy performance standards for air conditioners, which users may change as required. No uniform or standardised cooling range has been notified, and therefore no detailed assessments or consultations on such a range have been undertaken.

(c) & (d) : A user survey was conducted for 20^0 C to 28^0 C operating range in air conditioners. Based on the feedback received, no temperature range has been mandated. Consequently, no separate health impact assessment has been undertaken and no implementation timeline has been fixed.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1854
ANSWERED ON 11.12.2025

CYBER SECURITY MEASURES TO SAFEGUARD THE COUNTRY'S POWER GRIDS

1854. SHRI PARSHOTTAMBHAI RUPALA:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has carried out any research or study on cyber security measures to safeguard the country's power grids from potential cyber threats and attacks, if so, the details thereof including the infrastructure and security upgrades implemented in power grids across the country during the last five years particularly in the State of Gujarat;

(b) whether the cyber security audits were conducted on the country's power grids during the last five years and if so, the details thereof, year-wise; and

(c) whether there have been any instances of cyber security breaches or attempted cyber attacks on the country's power grids during this period and if so, the details thereof along with the remedial and preventive measures taken by the Government?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a)& (c) : The POWERGRID Centre of Excellence (CoE) in Cybersecurity at the Indian Institute of Science (IISc), Bengaluru has been established to promote research and development in cybersecurity, particularly for power grid operations and transmission systems.

Central Electricity Authority (CEA) issued the *Cyber Security in Power Sector Guidelines, 2021* to ensure a cyber-secure power ecosystem. These guidelines provide a comprehensive cyber assurance framework and strengthen the cybersecurity governance structure across all entities in the power sector. Further, the Draft Central Electricity Authority (Cyber Security in Power Sector) Regulations, 2025 are under finalization to establish a detailed cybersecurity framework for the power sector.

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Ministry of Power (MoP) established the Computer Security Incident Response Team – Power (CSIRT-Power) at CEA on 5th April, 2023 as an extended arm of CERT-In. CSIRT-Power supports utilities in detecting, responding to, managing cyber incidents, and in improving overall cybersecurity preparedness. In addition, MoP has constituted six sub-sectoral Computer Emergency Response Teams (CERTs): (Thermal, Hydro, Transmission, Grid Operation, Renewable Energy, and Distribution). Each sub-sectoral CERT has been mandated to prepare a sub-sector-specific model Cyber Crisis Management Plan (C-CMP) for coordinated response and mitigation in the event of cyber-attacks.

As per the information submitted by Gujarat Energy Transmission Corporation Limited (GETCO), in the State of Gujarat, a comprehensive cybersecurity framework has been implemented, including stricter access controls, endpoint protection, reduced system exposure, secure encrypted communication, deployment of next-generation firewalls between Remote Control Centres and the State Load Despatch Centre (SLDC), and installation of required antivirus solutions for malware protection.

In the past five years, no cybersecurity breaches or successful cyber-attacks have been reported in the operational systems of the National Load Despatch Centre.

(b) : Cybersecurity audits are conducted periodically across the power sector in accordance with the Central Electricity Authority (Cyber Security in Power Sector) Guidelines, 2021. These audits are carried out by third-party cybersecurity auditors empaneled by CERT-In. In the past five years, 9 assessments of the Information Technology infrastructure (IT) and 5 assessments of the Operational Technology (OT) infrastructure have been carried out at the National Load Despatch Centre. Details are enclosed at Annexure.

Similarly, cybersecurity audits are periodically conducted by CERT-In empaneled auditors across all SLDCs, covering both IT and OT infrastructure, including Supervisory Control and Data Acquisition (SCADA) systems, the Unified Real-Time Dynamic State Measurement (URTDSM) system, and other critical assets.

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Annexure

ANNEXURE REFERRED IN REPLY TO PARTS (b) OF UNSTARRED QUESTION NO. 1854 ANSWERED IN THE LOK SABHA ON 11.12.2025

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National Load Despatch Centre

Financial Year (FY)	IT (Month & Year)	Supervisory Control and Data Acquisition System (Month & Year)
F.Y. 2025–26	September-25 (Cycle-1)	June-25
F.Y. 2024–25	April-24 (Cycle-1), January-25 (Cycle-2)	June-24
F.Y. 2023–24	August-23 (Cycle-1), March-24 (Cycle-2)	May-23
F.Y. 2022–23	July-22 (Cycle-1), January-23 (Cycle-2)	September-22
F.Y. 2021–22	August-21 (Cycle-1), February-22 (Cycle-2)	Project Under Upgradation

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1877
ANSWERED ON 11.12.2025

IMPLEMENTATION OF RDSS

1877. SMT. SUPRIYA SULE:
SHRI BHASKAR MURLIDHAR BHAGARE:
DR. AMOL RAMSING KOLHE:
PROF. VARSHA EKNATH GAIKWAD:
SHRI MOHITE PATIL DHAIRYASHEEL RAJSINH:
SHRI SANJAY DINA PATIL:

Will the Minister of POWER
be pleased to state:

(a) the current status of implementation of the Revamped Distribution Sector Scheme (RDSS) in the State of Maharashtra;

(b) the total number of projects sanctioned under the scheme in Maharashtra;

(c) the details of initiatives taken by the Government under RDSS in Maharashtra for improving infrastructure of DISCOMs including upgradation of sub-stations, transformers and feeders;

(d) the number of urban and rural towns covered under RDSS in Maharashtra;

(e) the expected outcomes of these initiatives in terms of reduction in AT&C losses and improvement in power supply quality;

(f) the steps taken by the Government to ensure private sector participation in implementation of RDSS in Maharashtra;

(g) whether any technology partners or turnkey contractors have been engaged in the State under this scheme and if so, the details thereof;

(h) whether any delays, cost escalations or logistical issues have been encountered and if so, the details thereof; and

(i) the remedial measures undertaken by the Government to resolve such issues?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER
(SHRI SHRIPAD NAIK)

(a): The progress of Loss reduction works and smart metering works under RDSS for the State of Maharashtra as on 03.12.2025 is tabulated below:

Sl. No.	DISCOM	Loss Reduction Works	Smart Metering Works
1	MSEDCL	35.74%	31.07%
2	BEST	29.85%	43.52%
State		35.41%	31.63%

(b) to (e): Electricity, being a concurrent subject, the supply of electricity in a reliable manner to all consumers, including upkeep, maintenance and augmentation of distribution infrastructure, in rural and urban areas, is the responsibility of the respective State Governments/ distribution utilities.

Government of India is supplementing the efforts of the State through Revamped Distribution Sector Scheme (RDSS) under which Loss reduction works amounting to Rs 17,238 Cr and Smart metering works amounting to Rs 15,215 Cr have been sanctioned for the State of Maharashtra. Loss reduction works include works for new substations and Distribution Transformers, upgradation of substations and Distribution Transformers (DTs), replacement and augmentation of HT and LT lines, agricultural feeder separation, feeder bifurcation, HVDS (High Voltage Distribution System), disaster resilient works, household electrification works etc. Further, Smart metering works for 2.36 Cr consumers, 4.11 lakh DTs and 29,214 Feeders have been sanctioned. The above works have been sanctioned for 34 districts in Maharashtra, including the urban and rural areas, based on the project proposal submitted by the State.

The completion of the above works will result in improving the operational efficiency of the DISCOMs including reduction in AT&C losses and improvement of power supply. The targeted outcomes under the scheme based on the action plan submitted by the State for the parameters of AT&C loss and power supply is enclosed at Annexure.

(f) & (g): Under RDSS, Smart Metering is being carried out through Public Private Partnership (PPP). The Advanced Metering Infrastructure Service Provider (AMISP) will provide smart metering services in DBFOOT (Design Build Fund Own Operate & Transfer) mode.
Further, for loss reduction works, distribution utilities are the Project Implementing Agencies and works are being carried out through the Turnkey contractors of the respective distribution utilities as per the scheme guidelines.

(h) to (i): Initially there were some challenges in the implementation of sanctioned works under the scheme due to delay in administrative approvals such as technical/ financial evaluation, State Government approval, signing of agreements, approval of General Technical Particulars (GTP), etc. Other factors which affect the progress of works include extreme weather conditions such as intense rainfall, flooding etc. Ministry of Power and the Nodal Agencies are regularly following up with the States and distribution utilities on the progress of tendering, award and physical progress of sanctioned works and are handholding the utilities in resolving issues, if any. As a result, the works have now picked up pace. Further, as per the scheme guidelines, cost escalation over and above the sanctioned cost has to be borne by the respective State/ distribution utility.

ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (b) TO (e) OF UNSTARRED QUESTION NO. 1877 ANSWERED IN THE LOK SABHA ON 11.12.2025

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DISCOM	Parameter	Unit	FY26 Target
MSEDCL	AT&C losses	%	13%
MSEDCL	Hours of supply (Rural)	Avg. Hours/ Day	23:00
MSEDCL	Hours of supply (Urban)	Avg. Hours/ Day	23:42
BEST	AT&C losses	%	7.50%
BEST	Hours of supply (Urban)	Avg. Hours/ Day	23:57

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1878
ANSWERED ON 11.12.2025

NATIONWIDE ROLLOUT OF IES

1878. SHRI KRISHNA PRASAD TENNETI:

Will the Minister of POWER be pleased to state:

(a) the components, design architecture and functional layers of the India Energy Stack (IES) initiative envisaged by the Government along with the key outcomes expected;

(b) whether the Government has selected pilot utilities for the proof-of-concept implementation of the IES, if so, the details thereof including the names of such utilities and the criteria adopted for their selection;

(c) the proposed timeline and key milestones for the nationwide rollout of the IES;

(d) the budget allocated and the expenditure incurred to date for the development, testing and rollout of the IES; and

(e) the steps being taken to integrate the existing Operational Technology and Information Technology systems of GENCOs, TRANSCOs and DISCOMs with the IES to ensure interoperability and avoid duplication, fragmentation or technological isolation?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (e): India Energy Stack (IES) is envisioned to create a universal digital blueprint for the power sector as a whole so that the disparate parts of the power system can connect and communicate securely through standard protocols. The Ministry has constituted a task force comprising domain experts and various stakeholders including representatives from Ministries, State utilities, Regulators, Gencos, Transcos, etc for roadmap of IES including its component and design. IES aims to create a standardised platform that will enable data, services and systems to work together seamlessly across the power sector value chain.

Distribution utilities of Delhi, Gujarat, Andhra Pradesh, Uttar Pradesh and Mumbai have been identified for pilot implementation and timeline for demonstration of the same is FY 2026-27. Fund allocated for the development of IES is Rs. 51.3 Cr, of which Rs. 3.88 Cr has been released.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1884
ANSWERED ON 11.12.2025

PROGRESS UNDER RDSS

1884. SHRI ABHISHEK BANERJEE:

Will the Minister of POWER
be pleased to state:

(a) the progress under the Revamped Distribution Sector Scheme (RDSS) till September 2025, State-wise;

(b) the reduction in AT&C losses achieved during the period;

(c) the progress of smart meter installation vis-a-vis target; and

(d) the details of the financial health indicators of State DISCOMs under the scheme?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d): Government of India launched 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. Under the Scheme, projects worth Rs. 2.83 lakh Cr. have been sanctioned for loss reduction and smart metering works. Till date, physical progress of ~34.01% and ~17.29% has been achieved till date under loss reduction and smart metering works, respectively.

Smart Metering works sanctioned under the scheme cover 19.79 Cr. Consumers, 2.11 lakh Feeders and 52.53 lakh Distribution Transformers (DT), totaling 20.33 crore. Till date, around 3.58 Cr. smart meters have been installed under RDSS. Smart meters have also been installed by distribution utilities under their own schemes in addition to RDSS. Overall, 4.93 Cr. smart meters have been installed across the country. Works under RDSS are to be completed by March 31, 2028.

With collective effort of Centre & States/ UTs and the reform measures taken under various schemes, the Aggregate Technical & Commercial (AT&C) Loss of distribution utilities has reduced from 21.91% in FY21 to 16.16% in FY25 and the gap between Average Cost of Supply (ACS) and Average Revenue Realised (ARR) has reduced from Rs. 0.69/kWh in FY2021 to Rs. 0.11/kWh in FY2025.

The State-wise details of funds sanctioned and works sanctioned, progress of works financial health indicators i.e. AT&C loss & ACS-ARR Gap, are enclosed at Annexure (I to VI).

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 1884 ANSWERED IN THE LOK SABHA ON 11.12.2025

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Details of funds sanctioned under RDSS

State/UT	Sanctioned cost (Rs. In Cr.)		
	Smart metering	Loss Reduction	Total
Andaman and Nicobar Islands	54	462	516
Andhra Pradesh	4,128	10,708	14,836
Arunachal Pradesh	184	1,042	1,226
Assam	4,050	3,395	7,444
Bihar	2,021	10,559	12,581

Chhattisgarh	**4,105**	**4,021**	**8,126**
Delhi	**13**	**324**	**337**
Goa	**469**	**247**	**716**
Gujarat	**10,642**	**6,089**	**16,731**
Haryana	**0**	**6,794**	**6,794**
Himachal Pradesh	**1,788**	**2,327**	**4,116**
Jammu & Kashmir	**1,064**	**5,034**	**6,098**
Jharkhand	**858**	**3,468**	**4,326**
Karnataka	**0**	**45**	**45**
Kerala	**8,231**	**3,108**	**11,339**
Ladakh	**0**	**876**	**876**
Madhya Pradesh	**8,911**	**9,738**	**18,649**
Maharashtra	**15,215**	**17,238**	**32,453**
Manipur	**121**	**627**	**748**
Meghalaya	**310**	**1,232**	**1,542**
Mizoram	**182**	**322**	**503**
Nagaland	**208**	**466**	**674**
Puducherry	**251**	**84**	**335**
Punjab	**5,769**	**3,873**	**9,642**
Rajasthan	**9,715**	**18,693**	**28,408**
Sikkim	**97**	**420**	**518**
Tamil Nadu	**19,235**	**9,568**	**28,803**
Telangana	**0**	**120**	**120**
Tripura	**319**	**598**	**917**
Uttar Pradesh	**18,956**	**21,782**	**40,739**
Uttarakhand	**1,106**	**2,371**	**3,477**
West Bengal	**12,670**	**7,223**	**19,893**
Grand Total	**1,30,671**	**1,52,854**	**2,83,525**

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 1884 ANSWERED IN THE LOK SABHA ON 11.12.2025

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Smart metering works sanctioned under RDSS

State/ UT	Consumer Meters	DT Meters (Nos.)	Feeder meters	Total
Andaman & Nicobar Islands (A&NI)	83,573	1,148	114	84,835
Andhra Pradesh	56,08,846	2,93,140	17,358	59,19,344
Arunachal Pradesh	2,87,446	10,116	688	2,98,250
Assam	63,64,798	77,547	2,782	64,45,127
Bihar	23,50,000	2,50,726	6,427	26,07153
Chhattisgarh	59,62,115	2,10,644	6,720	61,79,479
Delhi	-	766	2,755	3,521
Goa	7,41,160	8,369	827	7,50,356
Gujarat	1,64,87,100	3,00,487	-	1,67,87,587

Himachal Pradesh	**28,00,945**	**39,012**	**1,951**	**28,41,908**
Jammu & Kashmir	**14,07,045**	**88,037**	**2,608**	**14,97,690**
Jharkhand	**13,41,306**	**19,512**	**1,226**	**13,62,044**
Kerala	**1,32,89,361**	**87,615**	**6,025**	**1,33,83,001**
Madhya Pradesh	**1,29,80,102**	**4,19,396**	**29,708**	**1,34,29,206**
Maharashtra	**2,35,64,747**	**4,10,905**	**29,214**	**2,40,04,866**
Manipur	**1,54,400**	**11,451**	**357**	**1,66,208**
Meghalaya	**4,60,000**	**11,419**	**1,324**	**4,72,743**
Mizoram	**2,89,383**	**2,300**	**398**	**2,92,081**
Nagaland	**3,17,210**	**6,276**	**392**	**3,23,878**
Puducherry	**4,03,767**	**3,105**	**180**	**4,07,052**
Punjab	**87,84,807**	**1,84,044**	**12,563**	**89,81,414**
Rajasthan	**1,42,74,956**	**4,34,608**	**27,128**	**1,47,36,692**
Sikkim	**1,44,680**	**3,229**	**633**	**1,48,542**
Tamil Nadu	**3,00,00,000**	**4,72,500**	**18,274**	**3,04,90,774**
Tripura	**5,47,489**	**14,908**	**473**	**5,62,870**
Uttar Pradesh	**2,69,79,056**	**15,26,801**	**20,874**	**2,85,26,730**
Uttarakhand	**15,87,870**	**59,212**	**2,602**	**16,49,684**
West Bengal	**2,07,17,969**	**3,05,419**	**11,874**	**2,10,35,262**
Grand Total	**19,79,30,131**	**52,52,692**	**2,05,475**	**20,33,88,297**

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ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 1884 ANSWERED IN THE LOK SABHA ON 11.12.2025

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Physical progress of loss reduction works under RDSS

State	Physical Progress
Andaman and Nicobar Islands	0%
Andhra Pradesh	25%
Arunachal Pradesh	20%
Assam	51%
Bihar	49%
Chhattisgarh	50%
Delhi	0%
Goa	77%
Gujarat	49%
Haryana	14%
Himachal Pradesh	3%
Jammu and Kashmir	34%
Jharkhand	40%
Karnataka	35%
Kerala	25%
Ladakh	8%
Madhya Pradesh	48%
Maharashtra	35%
Manipur	14%
Meghalaya	18%
Mizoram	47%
Nagaland	12%
Puducherry	25%
Punjab	17%
Rajasthan	15%
Sikkim	15%
Tamil Nadu	11%
Telangana	49%
Tripura	49%
Uttar Pradesh	43%
Uttarakhand	19%
West Bengal	53%
Total	34%

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ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 1884 ANSWERED IN THE LOK SABHA ON 11.12.2025

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State/ UT-wise details of smart meters installed under various schemes

State/ UT	Consumer	DT	Feeder	Total
Andaman & Nicobar	75,200	-	-	75,200
Andhra Pradesh	20,06,648	55,707	7,944	20,70,299
Arunachal Pradesh	43,919	286	263	44,468
Assam	50,36,639	70,265	2,879	51,09,783
Bihar	81,07,884	1,77,402	5,710	82,90,996
Chandigarh	24,214	-	-	24,214
Chhattisgarh	30,65,464	59,473	5,911	31,30,848
Delhi	2,60,000	-	-	2,60,000
Gujarat	31,55,589	1,17,780	-	32,73,369
Haryana	8,47,467	-	-	8,47,467
Himachal Pradesh	7,79,155	24,417	1,285	8,04,857
Jammu and Kashmir	10,20,502	26,275	1,424	10,48,201
Jharkhand	9,85,482	14,885	1,912	10,02,279
Kerala	1,43,156	-	2,904	1,46,060
Ladakh	55,580	1,850	79	57,509
Madhya Pradesh	31,35,946	1,10,475	22,734	32,69,155
Maharashtra	75,08,749	2,27,725	30,549	77,67,023
Manipur	21,835	432	205	22,472
Mizoram	19,940	331	286	20,557
Nagaland	28,239	845	101	29,185
Odisha	4,500	-	-	4,500
Puducherry	1,380	-	-	1,380
Punjab	18,31,098	-	-	18,31,098
Rajasthan	19,91,928	13,293	25,335	20,30,556
Sikkim	78,177	1,469	471	80,117
Tamil Nadu	1,29,641	1,220	4,340	1,35,201
Telangana	8,882	-	-	8,882
Tripura	1,19,985	4,470	473	1,24,928
Uttar Pradesh	65,65,018	2,19,948	25,014	68,09,980
Uttarakhand	3,78,023	6,503	2,474	3,87,000
West Bengal	5,37,346	35,235	6,295	5,78,876
Grand Total	4,79,67,586	11,70,286	1,48,588	4,92,86,460

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ANNEXURE-V

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 1884 ANSWERED IN THE LOK SABHA ON 11.12.2025

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AT&C Loss

State/ UT	2020-21	2021-22	2022-23	2023-24	2024-25
A&N Islands	25.30	19.80	19.77	20.76	-
Andhra Pradesh	20.42	10.56	7.74	12.05	13.57
Arunachal Pradesh	51.82	47.83	51.70	44.56	46.20
Assam	18.73	16.95	16.22	14.03	15.44
Bihar	34.40	33.94	23.45	20.32	15.51
Chandigarh	13.81	-	-	-	-
Chhattisgarh	18.05	18.13	16.14	15.88	19.69
DNH&DD	4.97	3.77	3.17	-	-
Delhi	9.43	7.88	6.99	6.86	6.67
Goa	12.89	12.79	17.09	8.30	-
Gujarat	11.08	9.17	10.01	9.12	8.04
Haryana	17.46	14.06	12.01	11.30	10.49
Himachal Pradesh	14.02	12.90	10.57	10.98	19.56
Jammu & Kashmir	59.28	-	-	-	-
Jharkhand	43.09	30.85	27.46	31.17	28.19
Karnataka	15.97	11.51	14.19	12.01	14.53
Kerala	7.83	8.08	6.87	8.82	6.61
Ladakh	-	48.29	38.61	42.46	-
Lakshadweep	11.63	-	-	-	-
Madhya Pradesh	41.72	21.36	20.45	23.28	22.77
Maharashtra	26.60	14.73	16.35	22.80	19.93
Manipur	24.56	24.28	13.82	13.41	12.90
Meghalaya	23.37	29.75	17.75	17.51	16.60
Mizoram	29.05	36.45	26.53	34.85	-
Nagaland	47.08	43.26	47.28	47.11	-
Odisha	27.41	31.45	21.67	19.53	18.13
Puducherry	20.12	14.20	21.83	17.75	-
Punjab	18.54	11.67	11.26	10.96	19.33
Rajasthan	26.18	17.49	15.44	22.08	15.18
Sikkim	25.92	30.77	36.10	27.84	45.20
Tamil Nadu	11.78	10.53	10.92	11.39	10.11
Telangana	13.33	10.65	18.65	19.17	23.38
Tripura	37.36	24.97	24.91	24.22	-
Uttar Pradesh	26.78	30.62	21.86	16.18	19.25
Uttarakhand	15.39	14.15	15.34	14.65	14.73
West Bengal	19.54	14.69	15.37	16.86	17.32
Total	21.91	16.12	15.11	16.12	16.16

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ANNEXURE-VI

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 1884 ANSWERED IN THE LOK SABHA ON 11.12.2025

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ACS-ARR Gap (Rs per kWh)

	2020-21	2021-22	2022-23	2023-24	2024-25
A&N Islands	5.09	2.61	1.31	2.70	-
Andhra Pradesh	1.01	0.34	0.29	0.34	0.36
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00
Assam	0.10	(0.30)	0.62	(0.22)	(0.26)
Bihar	0.87	0.62	0.04	(0.18)	(0.41)
Chandigarh	(0.42)	-	-	-	-
Chhattisgarh	0.20	0.21	0.26	(0.20)	(0.19)
DNH&DD	(0.35)	(0.16)	(0.14)	-	-
Delhi	(0.64)	(0.21)	(0.01)	(0.59)	(1.16)
Goa	(0.18)	0.54	0.46	1.04	-
Gujarat	(0.12)	(0.09)	(0.07)	(0.56)	(0.40)
Haryana	(0.12)	(0.15)	(0.15)	(0.04)	0.07
Himachal Pradesh	0.11	0.10	0.78	0.36	0.23
Jammu & Kashmir	1.81	-	-	-	-
Jharkhand	1.92	1.20	2.52	1.65	0.95
Karnataka	0.83	(0.64)	0.32	1.08	0.90
Kerala	0.19	(0.03)	0.32	(0.07)	(0.17)
Ladakh	-	0.42	2.05	0.89	-
Lakshadweep	19.44	-	-	-	-
Madhya Pradesh	1.23	0.28	(0.22)	0.17	(0.04)
Maharashtra	0.53	0.05	1.17	0.21	0.60
Manipur	0.07	0.16	1.16	(0.45)	(0.20)
Meghalaya	0.40	0.56	0.73	1.14	0.01
Mizoram	1.58	0.76	1.70	1.14	-
Nagaland	0.19	(0.26)	(0.31)	(0.40)	-
Odisha	0.35	(0.37)	(0.24)	0.10	0.18
Puducherry	0.08	(0.25)	0.51	(0.18)	-
Punjab	(0.01)	(0.27)	0.19	(0.20)	(0.31)
Rajasthan	0.69	(0.31)	0.20	0.31	(0.04)
Sikkim	0.27	(0.00)	(0.72)	0.18	0.38
Tamil Nadu	1.48	0.93	0.89	0.11	(0.19)
Telangana	1.06	0.08	1.40	0.75	0.28
Tripura	(0.01)	0.40	0.80	1.03	-
Uttar Pradesh	0.89	0.52	1.28	0.50	0.71
Uttarakhand	0.10	(0.00)	0.72	0.10	(0.10)
West Bengal	0.86	(0.21)	0.22	0.17	(0.03)
Grand Total	0.69	0.10	0.50	0.19	0.11

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1897
ANSWERED ON 11.12.2025

REVISED PROMOTION POLICY IN POWER SECTOR

1897. DR. MALLU RAVI:

Will the Minister of POWER be pleased to state:

(a) whether the revised promotion policy introduced in PSUs including Power Finance Corporation (PFC) prescribed disproportionately high cut-off marks for SC/ST officers and whether a majority of the dropouts across levels belong to SC/ST categories, if so, the details thereof;

(b) whether instances have been reported where the policy was subsequently altered to accommodate junior favoured officers, selectively promoting a small number of SC/ST officers while denying promotions to a large number of senior SC/ST officers and if so, the details thereof;

(c) whether there are cases where junior General Category officers were promoted in their first attempt while senior SC/ST officers were rejected and if so, the details of such cases; and

(d) whether the Ministry intends to investigate these issues and review or recall the revised promotion policy in the interest of fairness, transparency and adherence to reservation norms 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): No.

(b) & (c): No. The promotions in the Central Public Sector Enterprises (CPSEs) under Ministry of Power, are being made on merit-cum-seniority basis and in adherence to reservation guidelines issued by Government of India from time to time for upholding the principles of fairness, equality and non-discrimination.

(d): In view of above, the question does not arise.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO. 1899
ANSWERED ON 11.12.2025
STATUS OF POWER-GENERATION CAPACITY

1899. SHRI TANGELLA UDAY SRINIVAS:

Will the Minister of POWER
be pleased to state:

(a) the details of approved proposals for setting up coal-based power plants by the Government and private entities during the last five years along with installed power-generation capacity, year-wise and State-wise;
(b) whether the Government proposes to reduce coal-based power plants to achieve internationally committed Net-Zero emission targets;
(c) if so, details thereof along with examples of steps taken in this regard;
(d) whether the Government has worked towards increasing installed power-generation capacity through renewable-energy sources during the last five years;
(e) if so, the details thereof along with the status of projects as ongoing or completed and installed capacity, year-wise, State-wise and source-wise;
(f) whether Indian power-generating companies exported power to other countries during the last five years; and
(g) if so, the details thereof including quantity and value of power exported, major importing countries, year-wise, company-wise and country-wise?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): As per Section 7 of Electricity Act, 2003 setting up of a power plant is a de-licensed activity in the country. Any generating company 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.

The State wise and Year wise details of projects initiated with award of contracts for main plant is given at Annexure-I.
The installed power generation capacity for the last five years &current year (up to 31.10.2025) is given at Annexure-II.

(b) to (e): India, at the 26th Conference of Parties (COP) to the UNFCCC in November 2021, announced its target to achieve 'Net Zero' by 2070. India is committed to achieve this goal, by keeping in view, energy security, affordability and accessibility as critical inalienable priorities to ensure growth and development alongside Energy transition of the economy towards 'Net Zero'.

India has reached a major milestone in its energy transition by achieving the NDC goal of 50% of its installed electric power capacity from non-fossil fuel sources; five years ahead of the committed timeline of 2030. The share of non-fossil fuel installed capacity in the total installed capacity of the country as on 31.10.2025 is about 51.37%.

The Government of India have taken several measures to decarbonizes the energy sector like increasing the share of installed RE capacity & its uptake and promoting energy efficiency in all sphere of life and to make energy transition from Fossil Fuel to Non-Fossil Fuel. In order to push the share of Renewable Power in the energy mix of the country, Government has taken various steps, as outlined in Annexure-III.

Further, the details of the year wise, Source wise and State/UTwise status of cumulative installed capacity from renewable energy during last five years (i.e. from 2020-21 to 2024-25) and current year 2025-26 (up to October, 2025) are given at Annexure-IV. Source wise break-up of 182.23 GW ongoing RE projects is given at Annexure-V.

(f) & (g): Yes, Indian power generating companies have exported power to other countries during last five years. The details of the power plants in India exporting power to other countries are mentioned below:

Sl. No.	Project with installed capacity	Company Name	Exporting to	Quantum Allocated for Export (MW)
1.	Singrauli (2,000 MW)	NTPC	Bangladesh	50
2.	Rihand-I (1,000 MW)			25
3.	Rihand-II (1,000 MW)			15
4.	National Capital Thermal Power Station Dadri-II (980 MW)			10
5.	Korba STPS-I (2,100 MW)			40
6.	Vindhyachal STPS-I (1,260 MW)			10
7.	Vindhyachal -II (1,000 MW)			15
8.	Vindhyachal -III (1,000			15

Sl. No.	Project with installed capacity	Company Name	Exporting to	Quantum Allocated for Export (MW)
	MW)			
9.	SIPAT-II (1,000 MW)			20
10.	Farakka STPS STAGE-I&II, 1,600 MW (3x200+2x500)			5
11.	Kahalgaon STPS STAGE-I, 840 MW (4x210)			10
12.	Kahalgaon STPS STAGE-II, 1,500 MW (3x500)			20
13.	Talchar STPS STAGE-I, 1,000 MW (2x500)			15
14.	Sembcorp Energy India Limited Project2, Andhra Pradesh (1,320 MW)	Sembcorp Gayatri Pvt. Ltd (SGPL)		450
15.	APJL, Godda (1,600 MW)	Adani Power Jharkhand Limited (APJL)		1,600
16.	Juniper Green Cosmic Pvt Limited, Solar plant (100 MW)	Juniper Green Cosmic Pvt Limited	Bhutan	50

In addition to above, power is also being exported from DVC (300 MW) and Tripura (160 MW) to Bangladesh and from Manipur (3 MW) to Myanmar. NHPC (Tanakpur Power Station) also exports about 70 Million Units (MUs) per annum to Nepal, as per 'Mahakali Treaty'.

Export of electricity is done purely on commercial terms by buying and selling entities. Therefore, no information is available on value of power exported.

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Annexure-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1899 ANSWERED IN THE LOK SABHA ON 11.12.2025

DETAILS OF THERMAL POWER PROJECTS FOR WHICH CONTRACTS AWARDED FOR MAIN PLANTS IN LAST 5 YEARS

Sl. No.	Project Name	State	Sector	Implementing Agency	Date of award of Contracts for Main Plant	Capacity (MW)
Contracts awarded in the Financial year 2020-21 and 2021-22 is NIL.						
Contracts awarded in FY 2022-23						
1	Talcher TPP St-III	Odisha	Central	NTPC	Sep-22	1,320
Contracts awarded in FY 2023-24						
1	Lara STPP St-II	Chhattisgarh	Central	NTPC	Aug-23	1,600
2	NLC Talabira TPP	Odisha	Central	NLC	Jan-24	2,400
3	Singrauli STPP, St-III	Uttar Pradesh	Central	NTPC	Mar-24	1,600
4	DCRTPP Extn.	Haryana	State	HPGCL	Feb-24	800
5	Mahan STPP, Ph-II	Madhya Pradesh	Private	Mahan Energen Ltd	Aug-23	1,600
					Total	8,000
Contracts awarded in FY 2024-25						
1	Sipat STPP St-III	Chhattisgarh	Central	NTPC	Sep-24	800
2	Gadarwara STPP St-II	Madhya Pradesh	Central	NTPC	Mar-25	1,600
3	Koderma TPS, Ph-II	Jharkhand	Central	DVC	Nov-24	1,600
4	Nabinagar STPP, St-II	Bihar	Central	NTPC	Mar-25	2,400
5	Raghunathpur TPS, Ph-II	West Bengal	Central	DVC	Feb-25	1,320
6	Singareni TPP,Ph-II	Telangana	Central	SCCL	Feb-25	800
7	Ukai TPP	Gujarat	State	GSECL	Mar-25	800
8	Koradi TPS St V	Maharashtra	State	MSPGCL	Feb-25	1,320

Sl. No.	Project Name	State	Sector	Implementing Agency	Date of award of Contracts for Main Plant	Capacity (MW)
9	Korba (West) SCTPP	Chhattisgarh	State	CSPGCL	Mar-25	1,320
10	Raipur Ext TPP Ph-II	Chhattisgarh	Private	Adani Power	Jun-24	1,600
11	Raigarh USCTPP, St-II	Chhattisgarh	Private	Adani Power	Oct-24	1,600
12	Mahan STPP, Ph-III	Madhya Pradesh	Private	Mahan Energen Ltd	Nov-24	1,600
13	Darlipalli-II	Odisha	Central	NTPC	Sep-24	800
14	Telangana Stage II	Telangana	Central	NTPC	Nov-24	2,400
15	Mirzapur TPS	Uttar Pradesh	Private	ADANI POWER	Jun-24	1,600
16	Kawai Ph II	Rajasthan	Private	ADANI POWER	Aug-24	3,200
17	Salboni STPP	West Bengal	Private	JSW	Feb-25	1,600
					Total	26,360
Contracts awarded in FY 2025-26						
1	Meja-II	Uttar Pradesh	CENTRAL	NTPC-UP-JV	Sep-25	2,400
2	Amarkantak TPS	Madhya Pradesh	STATE	MPPGCL	Sep-25	660
3	Satpura TPP (Sarni) U#12	Madhya Pradesh	STATE	MPPGCL	Sep-25	660
4	Pirpainti TPS	Bihar	Private	Adani Power	Aug-25	2,400
5	Anuppur TPP Th-II	Madhya Pradesh	Private	M B Power	Aug-25	800
6	Adani Power Ltd. Anuppur TPP	Madhya Pradesh	Private	Adani Power	Aug-25	1,600
7	Torent Power	Madhya Pradesh	Private	Torent Power	Aug-25	1,600
8	Adani Power Ltd. Assam TPP	Assam	Private	ADANI POWER	Nov-25	3,200
					Total	13,320
					Grand Total	49,000

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Annexure-II

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1899 ANSWERED IN THE LOK SABHA ON 11.12.2025

Installed Capacity (Coal & Lignite Based) State Wise & Year Wise for Last 5 Years & Current Year upto 31.10.2025

A . Installed Capacity (Coal & Lignite Based) as on 31.03.2021, 31.03.2022 & 31.03.2023

S No	State	Installed Capacity on 31.03.2021 (MW)		Installed Capacity on 31.03.2022(MW)		Installed Capacity on 31.03.2023 (MW)	
		Coal	Lignite	Coal	Lignite	Coal	Lignite
1.	Andhra Pradesh	11,590	0	11,590	0	12,390	0
2.	Assam	750	0	750	0	750	0
3.	Bihar	7,050	0	8,400	0	8,400	0
4.	Chhattisgarh	23,688	0	23,688	0	23,688	0
5.	Gujarat	14,692	1,400	14,692	1,400	14,692	1,400
6.	Haryana	5,330	0	5,330	0	5,330	0
7.	Jharkhand	4,460	0	4,250	0	4,910	0
8.	Karnataka	9,480	0	9,480	0	9,480	0
9.	Madhya Pradesh	21,950	0	21,950	0	21,950	0
10.	Maharashtra	24,966	0	23,856	0	23,856	0
11.	Odisha	9,800	0	9,540	0	9,540	0
12.	Punjab	5,680	0	5,680	0	5,680	0
13.	Rajasthan	8,240	1,580	8,900	1,580	8,900	1,580
14.	Tamil Nadu	9,520	3,640	10,045	3,640	10,045	3,640
15.	Telangana	7,573	0	7,843	0	7,843	0
16.	Uttar Pradesh	23,729	0	24,389	0	24,295	0
17.	West Bengal	14,177	0	13,697	0	13,487	0
Total (MW)		2,02,675	6,620	2,04,080	6,620	2,05,236	6,620
Total [Coal+Lignite] (MW)		2,09,295		2,10,700		2,11,856	

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Annexure-II(contd...)

B. Installed Capacity (Coal & Lignite Based) as on 31.03.2024, 31.03.2025&current year up to 31.10.2025

S No	State	Installed Capacity on 31.03.2024 (MW)		Installed Capacity on 31.03.2025 (MW)		Installed Capacity on 31.10.2025 (MW)	
		Coal	Lignite	Coal	Lignite	Coal	Lignite
1.	Andhra Pradesh	13,190	0	13,190	0	13,890	0
2.	Assam	750	0	750	0	750	0
3.	Bihar	9,060	0	9,060	0	9,510	0
4.	Chhattisgarh	23,688	0	23,688	0	24,093	0
5.	Gujarat	14,692	1,400	14,692	1,400	14,692	1,400
6.	Haryana	5,330	0	5,330	0	5,330	0
7.	Jharkhand	5,570	0	5,570	0	7,030	0
8.	Karnataka	9,480	0	9,480	0	9,480	0
9.	Madhya Pradesh	22,000	0	22,000	0	21,170	0
10.	Maharashtra	24,006	0	24,666	0	23,316	0
11.	Odisha	9,540	0	9,600	0	9,950	0
12.	Punjab	5,680	0	5,680	0	5,680	0
13.	Rajasthan	9,200	1,580	9,200	1,580	9,200	1,580
14.	Tamil Nadu	10,459	3,640	10,523	3,640	10,523	3,640
15.	Telangana	9,443	0	10,243	0	11,043	0
16.	Uttar Pradesh	25,395	0	28,035	0	29,355	0
17.	West Bengal	13,487	0	13,487	0	13,247	0
Total (MW)		2,10,970	6,620	2,15,193	6,620	2,18,258	6,620
Total [Coal+Lignite] (MW)		2,17,590		2,21,813		2,24,878	

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Annexure-III

ANNEXURE REFERRED TO IN REPLY TO PART (b) to (e) OF UNSTARRED QUESTION NO. 1899 ANSWERED IN THE LOK SABHA ON 11.12.2025

Steps taken by the Government in order to push the share of Non-Fossil in the energy mix of the country are detailed as under:

i. **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.**

ii. **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.**

iii. **Renewable Energy Implementing Agencies (REIAs) are regularly inviting bids for procurement of RE power.**

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

v. **To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2032.**

vi. **Laying of new intrastate transmission lines and creating new sub-station capacity has been supported under the Green Energy Corridor Scheme for evacuation of renewable power.**

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. **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**

ix. **To encourage 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.**

x. **"Strategy for Establishment of Offshore Wind Energy Projects" has been issued.**

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

xii. **Production Linked Incentive (PLI) scheme has been launched to achieve the objective of localisation of supply chain for solar PV Modules.**

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Annexure-IV

ANNEXURE REFERRED TO IN REPLY TO PART (b) to(e) OF UNSTARRED QUESTION NO. 1899 ANSWERED IN THE LOK SABHA ON 11.12.2025

DETAILS OF SOURCE-WISE AND STATE-WISE CUMULATIVE INSTALLED CAPACITY OF RENEWABLE ENERGY AS ON 31.03.2021

S. No.	STATES / UTs	Large Hydro	Small Hydro Power	Wind Power	Bio Power	Solar Power	Total RE
		(MW)	(MW)	(MW)	(MW)	(MW)	MW
1	Andhra Pradesh	1,610	162.11	4,096.7	536.04	4,291.34	10,696
2	Arunachal Pradesh	1,115	131.11	0	0	10.16	1,256.3
3	Assam	350	34.11	0	2	51.56	437.67
4	Bihar	0	70.7	0	125.7	180.23	376.63
5	Chhattisgarh	120	76	0	245.31	445.21	886.52
6	Goa	0	0.05	0	0.34	7.56	7.95
7	Gujarat	1,990	82.69	8,561.8	99.87	4,469.87	15,204
8	Haryana	0	73.5	0	216.75	472.26	762.51
9	Himachal Pradesh	9,920.02	936.11	0	10.2	50.28	10,917
10	Jammu & Kashmir	3449	185.98	0	0	42.13	3677.1
11	Jharkhand	210	4.05	0	4.3	69.86	288.21
12	Karnataka	3,644.2	1,280.7	4,938.6	1,901.9	7,383.88	19,149
13	Kerala	1,856.5	230.02	62.5	2.5	277.4	2,428.9
14	Madhya Pradesh	2,235	99.71	2,519.9	127.66	2,544.71	7,527
15	Maharashtra	3,047	379.58	5,000.3	2,632.2	2,323.79	13,383
16	Manipur	105	5.45	0	0	11.39	121.84
17	Meghalaya	322	32.53	0	13.8	3.85	372.18
18	Mizoram	60	36.47	0	0	6.98	103.45
19	Nagaland	75	30.67	0	0	2.91	108.58
20	Odisha	2,142.25	88.63	0	59.22	425.53	2,715.6
21	Punjab	1,096.3	173.55	0	491.65	982.3	2,743.8
22	Rajasthan	411	23.85	4,326.8	125.08	5,925.6	10,812
23	Sikkim	2,169	52.11	0	0	1.94	2,223.1
24	Tamil Nadu	2,178.2	123.05	9,608	1,039.9	4,527.47	17,477
25	Telangana	2,405.6	90.87	128.1	210.48	3,961.54	6,796.6
26	Tripura	0	16.01	0	0	13.56	29.57
27	Uttar Pradesh	501.6	49.1	0	2,176.1	1,836.27	4,563.1
28	Uttarakhand	3,855.35	214.32	0	139.44	380.13	4,589.2
29	West Bengal	1,341.2	98.5	0	321.09	162.65	1,923.4
30	Andaman & Nicobar Islands	0	5.25	0	0	29.46	34.71
31	Chandigarh	0	0	0	0	45.97	45.97
32	Dadra & Nagar Haveli	0	0	0	0	5.46	5.46
33	Daman & Diu	0	0	0	0	40.55	40.55
34	Delhi	0	0	0	52	194.43	246.43
35	Lakshwadeep	0	0	0	0	3.27	3.27
36	Puducherry	0	0	0	0	9.51	9.51
37	Others	0	0	4.3	0	45.01	49.31
	Total (MW)	46,209.22	4,786.8	39,247	10,534	41,236	1,42,013

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Annexure-IV(contd..)

DETAILS OF SOURCE-WISE AND STATE-WISE CUMULATIVE INSTALLED CAPACITY OF RENEWABLE ENERGY AS ON 31.03.2022

S. No.	STATES / UTs	Large Hydro	Small Hydro Power	Wind Power	Bio Power	Solar Power	Total RE
		MW	(MW)	(MW)	(MW)	(MW)	MW
1	Andhra Pradesh	1,610	162.11	4,096.65	566.04	4,386.8	10,821.56
2	Arunachal Pradesh	1,115	131.11	0	0	11.23	1,257.34
3	Assam	350	34.11	0	2	117.94	504.05
4	Bihar	0	70.7	0	126.02	190.63	387.35
5	Chhattisgarh	120	76	0	275	518.08	989.08
6	Goa	0	0.05	0	0.34	19.95	20.34
7	Gujarat	1,990	89.39	9,209.22	109.26	7,180	18,577.9
8	Haryana	0	73.5	0	258	910.63	1,242.13
9	Himachal Pradesh	10,263.02	954.11	0	10.2	76.16	11,303.49
10	Jammu & Kashmir	3,449	144.68	0	0	46.93	3,640.61
11	Jharkhand	210	4.05	0	4.3	88.79	307.14
12	Karnataka	3,689.2	1,280.73	5,130.9	1,902.2	7,590.8	19,593.79
13	Kerala	1,856.5	242.52	62.5	2.5	363.18	2,527.2
14	Ladakh	0	39.64	0	0	7.8	47.44
15	Madhya Pradesh	2,235	99.71	2,519.89	131.33	2,718	7,703.88
16	Maharashtra	3,047	381.08	5,012.83	2,632.2	2,631	13,704.08
17	Manipur	105	5.45	0	0	12.25	122.7
18	Meghalaya	322	32.53	0	13.8	4.15	372.48
19	Mizoram	60	36.47	0	0	7.9	104.37
20	Nagaland	75	30.67	0	0	3.04	108.71
21	Odisha	2,154.55	106.63	0	59.22	451.24	2,771.64
22	Punjab	1,096.3	176.1	0	491.65	1,100.1	2,864.12
23	Rajasthan	411	23.85	4,326.82	125.08	12,565	17,451.62
24	Sikkim	2,282	52.11	0	0	4.68	2,338.79
25	Tamil Nadu	2,178.2	123.05	9,866.37	1,042.7	5,067.2	18,277.5
26	Telangana	2,405.6	90.87	128.1	219.74	4,520.5	7,364.79
27	Tripura	0	16.01	0	0	14.89	30.9
28	Uttar Pradesh	501.6	49.1	0	2,190	2,244.4	4,985.12
29	Uttarakhand	3,855.35	218.82	0	139.44	573.54	4,787.15
30	West Bengal	1,341.2	98.5	0	322.45	166	1,928.15
31	Andaman & Nicobar Islands	0	5.25	0	0	29.49	34.74
32	Chandigarh	0	0	0	0	55.17	55.17
33	Dadra & Nagar Haveli	0	0	0	0	5.46	5.46
34	Daman & Diu	0	0	0	0	40.72	40.72
35	Delhi	0	0	0	59	211.12	270.12
36	Lakshwadeep	0	0	0	0	3.27	3.27
37	Puducherry	0	0	0	0	13.69	13.69
38	Others	0	0	4.3	0	45.01	49.31
	Total (MW)	46,722.52	4,848.9	40,357.58	10,682	53,997	1,56,607.9

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Annexure-IV(contd..)

DETAILS OF SOURCE-WISE AND STATE-WISE CUMULATIVE INSTALLED CAPACITY OF RENEWABLE ENERGY AS ON 31.03.2023

S. No.	STATES / UTs	Large Hydro	Small Hydro Power	Wind Power	Bio Power	Solar Power	Total RE
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	1,610	163.31	4,096.7	566.03	4,534.2	10,970.18
2	Arunachal Pradesh	1,115	133.11	0	0	11.64	1,259.75
3	Assam	350	34.11	0	2	147.92	534.03
4	Bihar	0	70.7	0	126.02	192.89	389.61
5	Chhatisgarh	120	76	0	275	948.82	1,419.82
6	Goa	0	0.05	0	0.34	26.49	26.88
7	Gujarat	1,990	91.64	9,978.9	110.73	9,254.6	21,425.86
8	Haryana	0	73.5	0	259.43	1,029.2	1,362.09
9	Himachal Pradesh	10,263.02	969.71	0	10.2	87.49	11,330.42
10	Jammu & Kashmir	3,449	146.68	0	0	49.44	3,645.12
11	Jharkhand	210	4.05	0	4.3	105.84	324.19
12	Karnataka	3,689.2	1,280.73	5,295	1,902.2	8,241.4	20,408.44
13	Kerala	1,864.15	266.52	62.5	2.5	761.44	2,957.11
14	Ladakh	0	40.99	0	0	7.8	48.79
15	Madhya Pradesh	2,235	123.71	2,844.3	134.94	2,802.1	8,140.08
16	Maharashtra	3,047	381.08	5,012.8	2,640.7	4,722.9	15,804.5
17	Manipur	105	5.45	0	0	12.28	122.73
18	Meghalaya	322	32.53	0	13.8	4.15	372.48
19	Mizoram	60	45.47	0	0	28.01	133.48
20	Nagaland	75	32.67	0	0	3.04	110.71
21	Odisha	2,154.55	115.63	0	59.22	453.17	2,782.57
22	Punjab	1,096.3	176.1	0	522.27	1,167.3	2,961.93
23	Rajasthan	411	23.85	5,193.4	125.08	17,056	22,809.05
24	Sikkim	2,282	55.11	0	0	4.68	2,341.79
25	Tamil Nadu	2,178.2	123.05	10,017	1,043.7	6,736.4	20,098.55
26	Telangana	2,405.6	90.87	128.1	220.37	4,666	7,510.97
27	Tripura	0	16.01	0	0	17.6	33.61
28	Uttar Pradesh	501.6	49.1	0	2,216.7	2,515.2	5,282.65
29	Uttarakhand	3,975.35	218.82	0	139.44	575.53	4,909.14
30	West Bengal	1,341.2	98.5	0	343.1	179.98	1,962.78
31	Andaman & Nicobar Islands	0	5.25	0	0	29.91	35.16
32	Chandigarh	0	0	0	0	58.69	58.69
33	Dadra & Nagar Haveli	0	0	0	0	5.46	5.46
34	Daman & Diu	0	0	0	0	41.01	41.01
35	Delhi	0	0	0	84	218.26	302.26
36	Lakshadweep	0	0	0	0	3.27	3.27
37	Puducherry	0	0	0	0	35.53	35.53
38	Others	0	0	4.3	0	45.01	49.31
	Total (MW)	46,850.17	4,944.3	42,633	10,802	66,780	1,72,010

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Annexure-IV(contd..)

DETAILS OF SOURCE-WISE AND STATE-WISE CUMULATIVE INSTALLED CAPACITY OF RENEWABLE ENERGY AS ON 31.03.2024

S. No.	STATES / UTs	Large Hydro	Small Hydro Power	Wind Power	Bio Power	Solar Power	Total RE
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	1,610	163.31	4,096.7	574.39	4,585	11,029.3
2	Arunachal Pradesh	1,115	133.11	0	0	11.79	1,259.9
3	Assam	350	34.11	0	2	156.18	542.29
4	Bihar	0	70.7	0	140.22	239.23	450.15
5	Chhattisgarh	120	76	0	275	1,212.4	1,683.39
6	Goa	0	0.05	0	1.94	43.48	45.47
7	Gujarat	1,990	91.64	11,723	112.48	13,545	27,461.7
8	Haryana	0	73.5	0	283.7	1,475.7	1,832.92
9	Himachal Pradesh	10,281.02	969.71	0	10.2	95.23	11,356.2
10	Jammu & Kashmir	3,449	169.93	0	0	65.44	3,684.37
11	Jharkhand	210	4.05	0	19.1	162.4	395.55
12	Karnataka	3,689.2	1,280.73	6,019.6	1,907.7	8,544.7	21,441.9
13	Kerala	1,864.15	276.52	63.5	2.5	1,022.8	3,229.46
14	Ladakh	0	42.99	0	0	7.8	50.79
15	Madhya Pradesh	2,235	123.71	2,844.3	134.94	3,995.4	9,333.37
16	Maharashtra	3,047	382.28	5,208	2,643.2	6,249.7	17,530.1
17	Manipur	105	5.45	0	0	13.04	123.49
18	Meghalaya	322	55.03	0	13.8	4.24	395.07
19	Mizoram	60	45.47	0	0	30.31	135.78
20	Nagaland	75	32.67	0	0	3.17	110.84
21	Odisha	2,154.55	115.63	0	59.22	495.63	2,825.03
22	Punjab	1,096.3	176.1	0	567.25	1,324.3	3,163.92
23	Rajasthan	411	23.85	5,195.8	125.64	21,348	27,103.9
24	Sikkim	2,282	55.11	0	0	7.04	2,344.15
25	Tamil Nadu	2,178.2	123.05	10,604	1,045.5	8,211.4	22,161.6
26	Telangana	2,405.6	90.87	128.1	221.67	4,758.2	7,604.4
27	Tripura	0	16.01	0	0	18.46	34.47
28	Uttar Pradesh	501.6	49.1	0	2,226.1	2,920.3	5,697.17
29	Uttarakhand	4,035.35	218.82	0	142.24	575.53	4,971.94
30	West Bengal	1,341.2	98.5	0	348.36	194.07	1,982.13
31	Andaman & Nicobar Islands	0	5.25	0	0	29.91	35.16
32	Chandigarh	0	0	0	0	65.52	65.52
33	Dadra & Nagar Haveli and Daman & Diu	0	0	0	0	46.47	46.47
34	Delhi	0	0	0	84	256.51	340.51
35	Lakshadweep	0	0	0	0	4.97	4.97
36	Puducherry	0	0	0	0	49.91	49.91
37	Others	0	0	4.3	0	45.01	49.31
	Total (MW)	46,928.17	5,003.25	45,887	10,941	81,814	1,90,573

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Annexure-IV(contd..)

DETAILS OF SOURCE-WISE AND STATE-WISE CUMULATIVE INSTALLED CAPACITY OF RENEWABLE ENERGY AS ON 31.03.2025

S. No.	STATES / UTs	Large Hydro	Small Hydro Power	Wind Power	Bio Power	Solar Power	Total RE
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	1,610	163.31	4,377.2	594.02	5,370	12,114
2	Arunachal Pradesh	1,115	140.61	0	0	14.85	1,270.5
3	Assam	350	34.11	0	2	196.54	582.65
4	Bihar	0	70.7	0	140.22	328.34	539.26
5	Chhattisgarh	120	76	0	285.42	1,347	1,828.5
6	Goa	0	0.05	0	1.94	56.44	58.43
7	Gujarat	1,990	106.64	12,677	122.25	18,497	33,393
8	Haryana	0	73.5	0	311.47	2,065	2,449.9
9	Himachal Pradesh	10,981.01	1,000.7	0	10.2	204.26	12,196
10	Jammu & Kashmir	3,360	189.93	0	0	74.49	3,624.4
11	Jharkhand	210	4.05	0	20.14	199.87	434.06
12	Karnataka	3,689.2	1,284.7	7,351.1	1,913	9,679.7	23,918
13	Kerala	1,964.15	276.52	71.27	2.5	1,538.9	3,853.4
14	Ladakh	89	45.79	0	0	7.8	142.59
15	Madhya Pradesh	2,235	123.71	3,195.2	155.46	5,118.4	10,828
16	Maharashtra	3,047	384.28	5,284.6	2,998.3	10,687	22,401
17	Manipur	105	5.45	0	0	13.79	124.24
18	Meghalaya	322	55.03	0	13.8	4.28	395.11
19	Mizoram	60	45.47	0	0	30.39	135.86
20	Nagaland	75	32.67	0	0	3.17	110.84
21	Odisha	2,154.55	115.63	0	64.22	624.44	2,958.8
22	Punjab	1,096.3	176.1	0	576.59	1,421.4	3,270.4
23	Rajasthan	411	23.85	5,208.8	206.27	28,286	34,136
24	Sikkim	2,282	55.11	0	0	7.56	2,344.7
25	Tamil Nadu	2,178.2	123.05	11,740	1,046.6	10,154	25,241
26	Telangana	2,405.6	90.87	128.1	221.67	4,842.1	7,688.3
27	Tripura	0	16.01	0	0	21.24	37.25
28	Uttar Pradesh	501.6	49.1	0	2,309.1	3,364.1	6,223.9
29	Uttarakhand	4,035.35	233.82	0	148.53	593.07	5,010.8
30	West Bengal	1,341.2	98.5	0	351.86	320.62	2,112.2
31	Andaman & Nicobar Islands	0	5.25	0	0	29.91	35.16
32	Chandigarh	0	0	0	0	78.85	78.85
33	Dadra & Nagar Haveli and Daman & Diu	0	0	0	3.75	48.12	51.87
34	Delhi	0	0	0	84	313.4	397.4
35	Lakshadweep	0	0	0	0	4.97	4.97
36	Puducherry	0	0	0	0	54.51	54.51
37	Others	0	0	4.3	0	45.01	49.31
	Total (MW)	47,728.16	5,100.6	50,038	11,583	1,05,646	2,20,096

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Annexure-IV(contd..)

DETAILS OF SOURCE-WISE AND STATE-WISE CUMULATIVE INSTALLED CAPACITY OF RENEWABLE ENERGY OF CURRENT FY 2025-26 (UPTO 31.10.2025)

S. No.	States/ UTs	Large Hydro	Small Hydro Power	Wind Power	Bio Power	Solar Power	Total RE
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	3,290	163.31	4,397.78	594.02	5,925.6	14,371
2	Arunachal Pradesh	1,115	140.61	0	0	15.42	1,271
3	Assam	350	34.11	0	2	319.81	705.92
4	Bihar	0	70.7	0	140.22	411.14	622.06
5	Chhattisgarh	120	100.9	0	285.42	1,621.7	2,128
6	Goa	0	0.05	0	1.94	69.54	71.53
7	Gujarat	1,990	113.3	14,493.38	129.85	24,143	40,870
8	Haryana	0	73.5	0	325.67	2,434.4	2,833.6
9	Himachal Pradesh	11,421.01	1,000.71	0	10.2	310.28	12,742
10	Jammu & Kashmir	3,360	189.93	0	0	79.41	3,629.3
11	Jharkhand	210	4.05	0	20.14	230.74	464.93
12	Karnataka	3,689.2	1,284.73	8,193.29	1,916.1	10,592	25,675
13	Kerala	1,964.15	276.52	71.52	2.5	1,973.8	4,288.5
14	Ladakh	89	45.79	0	0	11.4	146.19
15	Madhya Pradesh	2,235	123.71	3,448.15	155.46	5,723.8	11,686
16	Maharashtra	3,047	384.28	5,716.31	2,998.3	16,137	28,283
17	Manipur	105	5.45	0	0	17.52	127.97
18	Meghalaya	322	55.03	0	13.8	4.28	395.11
19	Mizoram	60	45.47	0	0	31.69	137.16
20	Nagaland	75	32.67	0	0	3.17	110.84
21	Odisha	2,154.55	140.63	0	64.22	748.38	3,107.8
22	Punjab	1,096.3	176.1	0	576.59	1,539.9	3,388.8
23	Rajasthan	411	23.85	5,208.75	207.52	35,338	41,189
24	Sikkim	2,282	55.11	0	0	7.56	2,344.7
25	Tamil Nadu	2,178.2	123.05	11,938.34	1,046.6	11,472	26,758
26	Telangana	2,405.6	90.87	128.1	221.67	5,033.5	7,879.7
27	Tripura	0	16.01	0	0	34.22	50.23
28	Uttar Pradesh	501.6	50.6	0	2,310.4	3,798	6,660.6
29	Uttarakhand	4,535.35	233.82	0	149.57	837.7	5,756.4
30	West Bengal	1,341.2	98.5	0	351.86	320.62	2,112.2
31	Andaman & Nicobar Islands	0	5.25	0	0	31.42	36.67
32	Chandigarh	0	0	0	0	78.85	78.85
33	Dadra & Nagar Haveli and Daman & Diu	0	0	0	3.75	129.4	133.15
34	Delhi	0	0	0	85.17	373.3	458.47
35	Lakshadweep	0	0	0	0	6.57	6.57
36	Puducherry	0	0	0	0	73.41	73.41
37	Others	0	0	4.3	0	45.01	49.31
	Total (MW)	50,348	5,158.61	53,599.92	11,613	1,29,924	2,50,643

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Annexure-V

ANNEXURE REFERRED TO IN REPLY TO PART (b) to(e) OF UNSTARRED QUESTION NO. 1899 ANSWERED IN THE LOK SABHA ON 11.12.2025

Details of ongoing Renewable Energy Projects :

SN	Sector	Ongoing Renewable Capacity (GW)
1	Solar Power	69.18
2	Wind Power	29.65
3	Bio Energy	---
4	Small Hydro	0.44
5	Hybrid/ Round the Clock (RTC)/ Peaking Power/ Thermal + RE Bundling	57.63
Sub-Total		156.90
6	Large Hydro	25.33
Total RE		182.23

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1904
ANSWERED ON 11.12.2025

NEW POWER PROJECTS TO INCREASE ELECTRICITY PRODUCTION

†1904. SHRI ASHOK KUMAR RAWAT:

Will the Minister of POWER be pleased to state:

(a) the details and names of the projects for which funds have been given to increase the production and provide 24X7 supply of electricity in the country;

(b) whether new projects have been announced and works on those is under progress;

(c) if so, the time by which the targets are likely to be achieved under the projects;

(d) whether the demand for electricity in megawatt is increasing in rural and urban areas of the country every year; and

(e) if so, the details thereof and the steps taken by the Government to meet the said demand?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c): As per the Electricity Act 2003, the generation of electricity is a delicensed activity. Any Generating Company can establish Power Plant taking into account its techno-economic and commercial requirement. The Government of India do not provide funds for establishment of any Generating Station.

The present installed generation capacity of the country is 505.023 GW. In order to further augment the generation capacity to meet the future power demand in the country, Thermal Projects of total capacity of 40,345 MW, Hydro Projects of total capacity of 13,224 MW, Pumped Hydro Storage Projects with capacity of 11,870 MW, Battery Energy Storage System (BESS) with capacity of 8,498.95 MW/24,582.20 MWh and Nuclear Projects with capacity of 6,600 MW are under construction. In addition, 1,56,900 MW Renewable Capacity including 69,180 MW of Solar, 29,650 MW of Wind and 57,630 MW Hybrid power is also under construction.

..... 2

Electricity being a concurrent subject, the supply and distribution of electricity to the various categories of consumers in a State/UT is within the jurisdiction of the respective State Government/Power Utility. Government of India (GoI) has been supplementing the efforts of States/ distribution utilities through various reform measures/schemes with the objective of improving the financial health of the DISCOMs and to reduce AT&C losses. Government of India (GoI) 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 schemes, projects worth Rs. 1.85 lakh Cr. were executed for strengthening of power distribution infrastructure. These schemes have been closed as on 31.03.2022.

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. The scheme has an outlay of Rs. 3,03,758 Crore with an estimated Government Budgetary Support (GBS) of Rs. 97,631 Crore. The scheme aims to reduce the Aggregate Technical and Commercial (AT&C) losses to pan-India levels of 12-15% and the Average Cost of Supply and Average Revenue Realized (ACS-ARR) Gap to zero. Under the scheme, projects worth Rs. 1.53 lakh crore and Rs 1.31 lakh crores for distribution infrastructure and smart metering works respectively have been sanctioned which will facilitate to improve the reliability of power supply in the country. These works are under various stages of implementation and would be completed before the timeline of RDSS i.e. March 2028.

(d) & (e): There has been consistent growth in peak demand in the country. The peak demand in the country during the last five years is given at Annexure. Despite consistent growth in power demand over the past years, the gap between the power demand and availability has declined due to significant increase in the generation capacity in the country.

Government of India has taken following steps to meet the future increasing demand of the country:

1. **Generation Planning:**

(i) As per National Electricity Plan (NEP), installed generation capacity in 2031-32 is likely to be 874 GW. This includes capacity from conventional sources- Coal, Lignite etc., renewable sources- Solar, Wind and Hydro.

(ii) With a view to ensure generation capacity remains ahead of projected peak demand, all the States, in consultation with CEA, have prepared their " Resource Adequacy Plans (RAPs)", which are dynamic 10 year rolling plans and includes power generation as well as power procurement planning.

(iii) All the States were advised to initiate process for creating/ contracting 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.

To meet this requirement, several initiatives have already been undertaken. Thermal capacities of around 16,560 MW have already been commissioned since April 2023 till November 2025. In addition, 40,345 MW of thermal capacity (including 4,845 MW of stressed thermal power projects) is currently under construction. The contracts of 22,920 MW have been awarded and is due for construction. Further, 24,020 MW of coal and lignite-based candidate capacity has been identified which is at various stages of planning in the country.

(B) 13,223.5 MW of Hydro Electric Projects are under construction. Further, 4,274 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) 1,56,900 MW Renewable Capacity including 69,180 MW of Solar, 29,650 MW of Wind and 57,630 MW Hybrid power is under construction while 51,420 MW of Renewable Capacity including 36,530 MW of Solar and 13,090 MW Hybrid Power is at various stages of planning and targeted to be completed by 2029-30.

(E) In energy storage systems, 11870 MW/71220 MWh Pumped Storage Projects (PSPs) are under construction. Further, a total of 6580 MW/39480 MWh capacity of Pumped Storage Projects (PSPs) are concurred and yet to be taken up for construction. 25,407.54 MW/77,092.52 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 1,274 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. Promotion of Renewable Energy Generation:

- **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.**
- **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.**

- **Renewable Energy Implementing Agencies (REIAs) are regularly inviting bids for procurement of RE power.**
- **Foreign Direct Investment (FDI) has been permitted up to 100 percent under the automatic route.**
- **To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2032.**
- **Laying of new intrastate transmission lines and creating new sub-station capacity has been funded under the Green Energy Corridor Scheme for evacuation of renewable power.**
- **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**
- **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**
- **To encourage 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.**
- **"Strategy for Establishment of Offshore Wind Energy Projects" has been issued.**
- **Green Term Ahead Market (GTAM) has been launched to facilitate sale of Renewable Energy Power through exchanges.**
- **Production Linked Incentive (PLI) scheme has been launched to achieve the objective of localisation of supply chain for solar PV Modules.**

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTs (d) & (e) OF UNSTARRED QUESTION NO. -1904 TO BE ANSWERED IN THE LOK SABHA ON 11.12.2025.

The details of growth in peak demand of the country for the last five years:

Year	Peak Demand		Peak Met		Demand not Met	
	(MW)	% Growth	(MW)	% Growth	(MW	(%)
2020-21	1,90,198	3.5	1,89,395	3.8	802	0.4
2021-22	2,03,014	6.7	2,00,539	5.9	2,475	1.2
2022-23	2,15,888	6.3	2,07,231	3.3	8,657	4.0

2023-24	**2,43,271**	**12.7**	**2,39,931**	**15.8**	**3,340**	**1.4**
2024-25	**2,49,856**	**2.7**	**2,49,854**	**4.1**	**2**	**0.001**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO. 1926
ANSWERED ON 11.12.2025

CHALLENGES IN POWER SECTOR

1926. PROF. SOUGATA RAY:
SHRI BIPLAB KUMAR DEB:

Will the Minister of POWER
be pleased to state:

(a) whether the Indian power sector faces significant challenges including high transmission and distribution losses, inadequate cost recovery, operational inefficiencies and financial instability of Power Distribution Companies (DISCOMs) and if so, the details thereof;

(b) whether many DISCOMs, especially State-owned ones, are burdened with high debt and accumulated losses impacting their ability to invest in infrastructure and improve service quality, if so, the details thereof, State-wise;

(c) whether high aggregate technical and commercial losses including power theft and inefficient billing and collection systems further exacerbate their financial strain, if so, the details thereof;

(d) whether lack of investment in upgrading infrastructure including smart grids and advanced metering systems hinders modernization efforts and if so, the details thereof; and

(e) whether the Government has taken steps to address these issues through policy reforms and financial support mechanisms, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (e): The losses in State owned distribution utilities (operational and financial) are a result of various parameters, some of which are highlighted below:

- **Non cost reflective tariff due to regulatory disallowance of expenses and delays in tariff revisions;**
- **Gap between Average Cost of Supply (ACS) and Average Revenue Realised (ARR);**
- **Delayed payment of tariff subsidy and Government Departments dues; and**
- **Reliance on short-term and non-capex borrowing to manage cash gaps.**

As a result, the distribution utilities have high accumulated losses and outstanding debt (Details at Annexure) which impacts their ability to investment in infrastructure works.

Electricity being a concurrent subject, the supply and distribution of electricity to the all consumers, including improvement in electricity supply and grid strengthening in rural and urban areas, is the responsibility of respective State Government/ power distribution utility. Government of India (GoI) supplements the efforts of the States/ distribution utilities for improving the financial viability of the distribution sector.

GoI has facilitated the creation of distribution infrastructure through allocation of funds under various schemes such as (a) DDUGJY, where central assistance was provided to ensure electrification of all villages and strengthening of distribution infrastructure in rural areas; (b) IPDS, where the strengthening of distribution network in urban areas was taken up as a key measure in power distribution and (c) SAUBHAGYA for electrification of households. Under the above three schemes, works amounting to Rs. 1.85 lakh crore were executed for strengthening the distribution system of the country. Further, under ongoing Revamped Distribution Sector Scheme (RDSS), projects worth Rs. 2.83 lakh crore for distribution infrastructure works including smart metering works have been sanctioned. The scheme emphasizes technological interventions, including smart metering, SCADA (Supervisory Control and Data Acquisition), Distribution Management System, etc.

Some of the key initiatives taken for improving the viability of the distribution utilities, are as under:

- **Funds release under the RDSS is linked to performance of distribution utilities against key financial parameters.**
- **Performance linked additional borrowing space of 0.5% of GSDP allowed to State Governments.**
- **Additional Prudential Norms mandated for sanctioning of loans to State owned power utilities.**
- **Rules have been put in place for implementation of Fuel and Power Purchase Costs Adjustment (FPPCA) and cost reflective tariff so as to ensure that all prudent expenses for supply of electricity are passed through.**
- **Rules and Standard Operating Procedure issued for proper subsidy accounting and release.**

The States/ distribution utilities are implementing the reforms and with the concerted efforts of Central and State Governments/ distribution utilities, AT&C losses at national level have reduced from 21.9% in FY21 to 16.16% in FY25 and ACS-ARR gap has reduced from Rs 0.69/kWh in FY21 to Rs. 0.11/kWh in FY25. While the reform measures have shown some positive results in reducing overall AT&C losses and narrowing the revenue gap, consistent and robust implementation by States is required to ensure sustained financial viability and operational efficiency of distribution utilities.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO. 1926 ANSWERED IN THE LOK SABHA ON 11.12.2025

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State wise Accumulated (Loss)/ Surplus in Rs. Cr.

(Amount in Rs. Cr.)

States/ UTs	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25(P)
Andhra	(29,143)	(28,707)	(31,195)	(29,218)	(29,210)	(19,722)
Assam	(959)	(1,229)	(893)	(1,699)	(1,324)	(1,028)
Bihar	(14,673)	(17,160)	(19,537)	(19,777)	(18,503)	(16,526)
Chhattisgar	(7,290)	(7,710)	(8,924)	(10,057)	(10,016)	(10,423)
Gujarat	79	436	798	935	5,165	7,355
Haryana	(28,978)	(28,341)	(28,404)	(28,165)	(28,001)	(27,915)
Himachal	(1,521)	(1,706)	(1,810)	(3,126)	(3,754)	(3,391)
Jharkhand	(6,261)	(9,183)	(11,556)	(15,848)	(18,469)	(20,512)
Karnataka	(5,645)	(9,821)	(14,413)	(17,559)	(26,109)	(34,996)
Kerala	(12,104)	(18,970)	(33,722)	(34,668)	(35,978)	(38,647)
Madhya	(52,981)	(56,880)	(61,010)	(65,291)	(69,301)	(71,394)
Maharashtr	(23,428)	(26,251)	(26,070)	(31,275)	(36,226)	(35,671)
Manipur	(131)	(146)	(157)	(286)	(295)	(290)
Meghalaya	(2,413)	(2,475)	(2,636)	(4,259)	(4,634)	(4,962)
Punjab	(8,159)	(6,713)	(5,644)	(10,420)	(9,620)	(3,404)
Rajasthan	(86,868)	(89,084)	(89,556)	(92,070)	(91,565)	(90,303)
Tamil Nadu	(99,860)	(1,38,643	(1,51,639	(1,62,507	(1,66,944	(1,67,520)
Telangana	(42,293)	(48,982)	(49,816)	(60,922)	(67,276)	(69,741)
Tripura	(391)	(382)	(514)	(854)	(1,171)	
Uttar	(85,069)	(70,661)	(78,004)	(82,556)	(89,662)	(1,00,858)
Uttarakhan	(3,699)	(3,851)	(3,872)	(5,096)	(5,435)	(3,458)
West	3	34	83	119	158	174
Private	6,424	21,008	24,963	28,871	15,900	25,214
Grand Total	(5,05,361	(5,45,418	(5,93,528	(6,45,728	(6,92,269	(6,88,016)

Source: PFC Report on Performance of State Power Utilities 2024-25 (Prov.)

***: data also includes last year figures for TANGEDCo (Tamil Nadu) which was recently unbundled into 3 companies one of which is TNPDCL (distribution company of Tamil Nadu). Considering, Accumulated Losses of only TNPDCL i.e. Rs (1,19,153) Cr, total accumulated losses at National level would be: Rs (6,39,649) Cr.**

State wise Accumulated Outstanding Debt in Rs. Cr.

(Amount in Rs. Cr.)

States/ UTs	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25(P)
Andhra Pradesh	24,463	31,375	36,364	51,465	65,710	77,600
Assam	1,916	2,011	908	1,072	1,105	1,131
Bihar	6,726	11,387	12,616	13,885	14,009	14,002
Chhattisgarh	4,102	4,139	3,539	6,198	5,398	5,428
Gujarat	636	626	393	333	271	258
Haryana	6,864	6,926	8,324	11,886	17,156	20,311
Himachal Pradesh	5,722	6,254	6,267	6,682	6,776	7,024
Jharkhand	11,475	15,656	16,732	20,284	18,592	22,381
Karnataka	22,769	29,795	29,564	32,211	39,485	47,993
Kerala	20,310	19,874	18,867	18,560	18,293	17,638
Madhya Pradesh	49,112	50,702	52,473	49,145	50,844	49,239
Maharashtra	38,092	38,254	44,075	58,325	84,171	90,659
Manipur	370	474	455	619	730	745
Meghalaya	624	1,335	1,812	1,728	1,650	1,474
Punjab	16,258	15,590	16,643	17,813	20,164	17,411
Rajasthan	48,934	53,030	65,945	79,611	92,226	98,488
Tamil Nadu	1,24,413	1,37,632	1,47,716	1,59,431	1,73,521	1,88,411*
Telangana	22,202	31,032	30,137	35,239	46,127	59,230
Tripura	413	431	663	607	730	0
Uttar Pradesh	58,326	81,952	82,047	78,306	67,937	61,395
Uttarakhand	1,818	1,785	1,447	1,562	1,964	1,729
West Bengal	14,222	15,425	16,616	16,751	15,604	15,279
Private Sector	20,544	20,426	22,126	23,122	10,216	7,595
Grand Total	5,00,310	5,76,112	6,15,729	6,84,836	7,52,677	8,05,422

Source: PFC Report on Performance of State Power Utilities 2024-25 (Prov.)

***: data also includes last year figures for TANGEDCo (Tamil Nadu) which was recently unbundled into 3 companies one of which is TNPDCL (distribution company of Tamil Nadu). Considering, Outstanding Debt of only TNPDCL i.e. Rs. 1,01,782 Cr, total Outstanding Debt at National level would be: Rs. 7,18,793 Cr.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1933
ANSWERED ON 11.12.2025

MODERNIZATION OF ELECTRICITY DISTRIBUTION

1933. SHRI SHASHANK MANI:

Will the Minister of POWER be pleased to state:

(a) whether the Government has set a target of installing 250 million smart meters across the country by 2025–26 to modernize electricity distribution, improve billing efficiency and reduce aggregate technical and commercial (AT&C) losses;

(b) if so, the details of progress achieved so far under this initiative including the number of smart meters sanctioned, installed and made operational;

(c) whether around 222 million smart meters have been sanctioned and approximately 22 million installed till date and if so, the reasons for the gap between sanctioning and installation of smart meters; and

(d) the major factors affecting the pace of implementation such as financial, technical, logistical or administrative challenges?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d) : Government of India launched the scheme of Revamped Distribution Sector Scheme (RDSS) in July 2021 to support the States/ UTs to improve the operational efficiencies and financial sustainability of distribution utilities so as to provide quality and reliable supply of power. One of the key initiatives under the scheme is smart metering of consumers, distribution transformers and feeders. Under the scheme, 20.33 crore smart meters have been sanctioned based on the project proposals submitted by the States. In addition, many States have installed smart meters under their State plan. Till date 4.93 crore smart meters have been installed in the country under various schemes. Sanctioned works are expected to be completed by the scheme sunset date i.e. 31.03.2028.

.....2.

Smart metering helps improve the billing and collection efficiency of the DISCOMs and thus would help in reducing losses.

Initially, there were some challenges in the implementation of smart metering works due to the following reasons:

1) **Inadequate consumer awareness regarding the benefits of smart meters.**

2) **Delay in tendering and awarding of works. Few utilities required longer time period for obtaining board approval issuance of tender documents etc.**

3) **Delay in signing of Contract agreement and Direct Debit Facility (DDF) agreement by utilities.**

4) **Initial delays in issuing Request for Proposal (RFP) as Smart Metering being new technological initiative.**

5) **Challenges in implementation in Total Expenditure (TOTEX) mode as per the scheme guidelines in some utilities.**

To improve pace of installation, the Ministry has taken various steps including regular follow up with States to enhance the consumer confidence and awareness. Various advisories and Standard Operating Procedures (SoPs) have been isssued which include:

- **Prioritisation of installation of prepaid smart meters for Government establishments, commercial, industrial and high-load consumers;**
- **Incentivising consumers for prepaid meter installation through rebates in bill;**
- **No penalty on consumer based on maximum demand recorded by smart meter;**
- **Mechanism for recovery of past arrears in easy instalments;**
- **Installation of check meters for enhancing confidence in accuracy of smart meters;**
- **Smart meter mobile apps are being made available to allow for regular tracking of consumption of electricity and for easy recharge;**
- **Advance alerts for balance and emergency credit to consumers before disconnection.**

Consequently, the works have picked up pace.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1949
ANSWERED ON 11.12.2025

DATA ON POWER GENERATION

1949. DR. THIRUMAAVALAVAN THOLKAPPIYAN:

Will the Minister of POWER be pleased to state:

(a) whether the Government has any data on power generated by the Government, public sector and private sector during the last three years;

(b) if so, the details thereof; and

(c) whether the Government has any data on power generated through hydro-electric power, thermal power, atomic power, solar power, wind power, sea wave power and any other mode 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): The sector-wise generation data from Conventional sources (Thermal, Nuclear and Large Hydro) and the consolidated generation from Renewable Energy Sources (excluding Large Hydro), for last three years and current year (Upto Oct, 2025) is given at Annexure-I.

(c): The fuel-wise generation data from Conventional sources (Thermal, Nuclear and Large Hydro) and the consolidated generation from Renewable Energy Sources (excluding Large Hydro), for last three years and current year (Upto Oct, 2025) is given at Annexure-II.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTs (a) & (b) OF UNSTARRED QUESTION NO. -1949 TO BE ANSWERED IN THE LOK SABHA ON 11.12.2025.

Sector-wise generation data for last three years and current year (Upto Oct, 2025):

(All fig in Million Units (MU)

Financial Year	Conventional Source				Renewable Energy Sources (excl. Large Hydro)	TOTAL
	CENTRAL SECTOR	STATE SECTOR	PVT SECTOR	Bhutan Import		
FY 2022-23	5,64,955.55	4,62,522.95	3,86,692.03	6,742.40	2,03,552.17	16,24,465.10
FY 2023-24	5,78,610.75	4,65,597.34	4,64,332.17	4,716.10	2,25,834.83	17,39,091.19
FY 2024-25	6,02,112.42	4,83,384.19	4,83,707.96	5,484.18	2,55,009.19	18,29,697.94
FY 2025-26 (Upto Oct)	3,47,060.58	2,81,689.79	2,79,518.20	7,367.76	1,88,351.53	11,03,987.86

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. - 1949 TO BE ANSWERED IN THE LOK SABHA ON 11.12.2025.

The fuel-wise generation data for last three years and current year (Upto Oct, 2025) is given

(All fig in Million Units (MU)

Fuel		TOTAL 2022-23	TOTAL 2023-24	TOTAL 2024-25	TOTAL 2025-26 (Upto October)
THERMAL	COAL	11,45,907.58	12,60,902.62	12,98,872.29	7,18,088.71
	DIESEL/HSD	229.71	400.58	442.65	251.86
	LIGNITE	36,188.34	33,949.79	32,994.77	16,960.50
	NAPTHA	0.83	0.03	0	0
	NATURAL GAS	23,884.21	31,295.91	31,580.05	17,282.19
THERMAL Total		12,06,210.67	13,26,548.93	13,63,889.76	7,52,583.26
NUCLEAR		45,861.09	47,937.41	56,680.83	32,082.42
HYDRO		1,62,098.77	1,34,053.92	1,48,633.98	1,23,602.89
Bhutan Import		6742.40	4716.10	5,484.18	7,367.76
TOTAL [Conventional]:		14,20,912.93	15,13,256.36	15,74,688.75	9,15,636.33
RENEWABLE	Wind	71,814.16	83385.35	83,347.21	79,150.35
	Solar	1,02,014.25	1,15,975.11	1,44,150.23	94,399.47
	Biomass	3,161.32	3,417.19	3,738.67	2,268.75
	Bagasse	12,863.16	10,825.59	9,335.30	2,201.4
	Small Hydro	11,170.10	9,485.04	11,568.05	8,628.98
	Others	2,529.18	2,746.55	2,869.72	1,702.58
	Total Renewable Energy Sources:	2,03,552.17	2,25,834.83	255009.19	1,88,351.53
GRAND TOTAL		16,24,465.10	17,39,091.19	18,29,697.94	11,03,987.86

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GOVERNMENT OF INDIA

MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1954
ANSWERED ON 11.12.2025

PRODUCTION AND CONSUMPTION OF ELECTRICITY IN TELANGANA

1954. SHRI MADHAVANENI RAGHUNANDAN RAO:

Will the Minister of POWER be pleased to state:

(a) the details of electricity production and consumption in Telangana including the current installed capacity and peak demand;

(b) whether the grids and DISCOMs in Telangana are facing financial difficulties, if so, the details thereof including the total debt burden;

(c) whether Telangana is part of the Ujala Scheme, if so, the details thereof including the benefits and implementation of the scheme in the State;

(d) the measures being taken by the Government to improve the financial health of the DISCOMs and address the issue of power theft; and

(e) whether the Government proposes to increase electricity generation and reduce dependence on external sources, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Current installed capacity in the State of Telangana is 18,922.24 MW. The source-wise details of electricity production in the State of Telangana for the last three years and current year 2025-26 (upto October, 2025) are given at Annexure- I.

During 2025-26, peak demand of 16,613 MW in Telangana was met successfully. Power Supply Position of Telangana, in terms of Energy and Peak, for the last three year and current year 2025-26 (upto October, 2025) is given at Annexure- II.

(b): The accumulated losses of the DISCOMs in Telangana have significantly increased from Rs 42,293 crore in FY 2019-20 to Rs 69,741 crore (Provisional) in

FY 2024-25 and their outstanding debt has surged from Rs 22,202 crore in FY 2019-20 to Rs 59,230 cr. (Provisional) in FY 2024-25.

(c): Yes. Under UJALA (Unnat Jyoti by Affordable LEDs for All) Scheme, a total of 28,75,082 LED bulbs have been sold in the Telangana State. In addition, 3,13, 793 LED Tube Lights and 48,310 Energy Efficient Ceiling Fans have also been sold under the UJALA scheme.

The implementation of the UJALA Scheme has contributed to improved energy efficiency in the State of Telangana and has helped reduce electricity consumption and household electricity expenses. The details of benefits in terms of Annual Energy Savings, Annual Cost Savings, Peak Demand Reduction and Annual Green House Gases reduction accrued due to the scheme are given at Annexure-III.

(d): Electricity being a concurrent subject, the supply and distribution of electricity to the various categories of consumers in a State/UT is within the jurisdiction of the respective State Government/Power Utility. Hence, it is the responsibility of respective State/Distribution Utility to take necessary measures for improving the financial health of the DISCOMs and addressing the issue of power theft.

Government of India (GoI) has been supplementing the efforts of States/ distribution utilities through various reform measures/schemes with the objective of improving the financial health of the DISCOMs and reduction of Aggregated Technical and Commercial (AT&C) losses.

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. The scheme has an outlay of Rs.3,03,758 Crore with an estimated Government Budgetary Support (GBS) of Rs.97,631 Crore. The scheme aims to reduce the Aggregate Technical and Commercial (AT&C) losses to pan-India levels of 12-15% and the Average Cost of Supply and Average Revenue Realized (ACS-ARR) Gap to zero.

Under the scheme, financial assistance is being provided to the eligible Distribution Utilities for loss reduction works including upgradation/ augmentation of sub-stations and distribution transformers, upgrading of conductors, laying of ABC/covered conductors/ HVDS system in theft prone areas, segregation of mixed-load feeder etc, along with system metering with communication features, & installation of smart meters for enhancing the efficiency of the distribution network. Under the Scheme, around 20.33 Cr. smart meters have been sanctioned with total sanctioned cost of Rs 1.31 lakh crores. Further, for distribution infrastructure/loss reduction works Rs 1.53 lakh crores have also been sanctioned under RDSS which are under various stages of implementation.

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.

Further, Government of India has taken following measures to tackle financial and operational issues of the distribution utilities for improving the financial health of DISCOMs:

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

(ii) **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.**

(iii) **Rules for implementation of Fuel and Power Purchase Cost Adjustment (FPPCA) and Cost reflective tariff so as to ensure that all prudent cost for supply of electricity are passed through.**

(iv) **Rules and Standard Operating Procedure issued for proper Subsidy Accounting and their timely payment.**

(v) **Advisory to SERCs (State Electricity Regulatory Commission) & JERCs (Joint Electricity Regulatory Commission) for timely issuance of tariff and true up orders.**

So far as Telangana in concerned, in order to address the issue of power theft, State DISCOMs have taken several measures including special inspections in theft prone areas, circle wise intensive inspection in high loss feeders, booking & filing of cases against the offenders in appropriate court, sealing of meter box etc.

(e): There is adequate availability of power in the country. Present (as on 31.10.2025) installed generation capacity of the country is 505.023 GW.

As per Mid-term Review of 20th Electric Power Survey (EPS) report, published
by the Central Electricity Authority, the estimated peak demand of Country is estimated to be 388 GW by FY 2031-32. In order to meet the rising power demand in the country the Government of India has initiated following capacity addition programme:

(A) The projected coal and lignite based 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.

To meet this requirement, several initiatives have already been undertaken. Thermal capacities of around 16,560 MW have already been

commissioned since April 2023 till November 2025. In addition, 40,345 MW of thermal capacity (including 4,845 MW of stressed thermal power projects) is currently under construction. Further, contracts of 22,920 MW have been awarded and is due for construction. To meet the projected demand in the

country, 24,020 MW of coal and lignite-based candidate capacity has been identified which is at various stages of planning in the country.

(B) 13,223.5 MW of Hydro Electric Projects are under construction. Further, 4,274 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) 1,56,900 MW Renewable Capacity including 69,180 MW of Solar, 29,650 MW of Wind and 57,630 MW Hybrid power is under construction while 51,420 MW of Renewable Capacity including 36,530 MW of Solar and 13,090 MW Hybrid Power is at various stages of planning and targeted to be completed by 2029-30.

(E) In energy storage systems, 11870 MW/71220 MWh Pumped Storage Projects (PSPs) are under construction. Further, a total of 6580 MW/39480 MWh capacity of Pumped Storage Projects (PSPs) are concurred and yet to be taken up for construction. 25,407.54 MW/77,092.52 MWh Battery Energy Storage System (BESS) are currently under various stages of construction/bidding,

The details of capacity addition envisaged in the State of Telangana are given at Annexure-IV.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. -1954 TO BE ANSWERED IN THE LOK SABHA ON 11.12.2025.

The Source-wise details of electricity production in the State of Telangana for the last three years and current year 2025-26 (upto October, 2025) :

Financial Year (FY)	Actual Generation (MUs)				
	Conventional			Renewable (excluding Large Hydro)	Total
	Coal	Large Hydro	Total		
2022-23	50,738	6,010	56,748	7,430	64,178
2023-24	56,914	1,243	58,157	7,509	65,666
2024-25	56,969	5,271	62,240	7,642	69,882
2025-26 (Upto Oct, 2025)	32,304	5,514	37,818	9,701	47,519

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. -1954 TO BE ANSWERED IN THE LOK SABHA ON 11.12.2025.

Power Supply Position of Telangana in terms of Energy and Peak for the last three year and current year 2025-26 (upto October, 2025) :

Financial Year (FY)	Energy				Peak			
	Energy Requirement	Energy Supplied	Energy not Supplied		Peak Demand	Peak Met	Demand not Met	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
2022-23	77,832	77,799	34	0.0	15,497	15,497	0	0.0
2023-24	84,623	84,613	9	0.0	15,622	15,622	0	0.0
2024-25	88,262	88,258	4	0.0	17,162	17,162	0	0.0
2025-26 (upto October, 2025)	48,320	48,317	4	0.0	16,613	16,613	0	0.0

ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. -1954 TO BE ANSWERED IN THE LOK SABHA ON 11.12.2025.

The details of benefits in terms of Annual Energy Savings, Annual Cost Savings, Peak Demand Reduction and Annual Green House Gases reduction accrued due to UJALA scheme: -

Item	Quantity Sold	Annual Energy Savings (MWh) Cumulative	Annual Cost Savings (in crore) Cumulative	Peak Demand Reduction (MW) Cumulative	Annual GHG (t-CO_2) Reduction Cumulative
LED Bulbs	28,75,082	387.14	154.14	82.24	3,13,721.94
LED Tube Lights	3,13,793				
Energy Efficient Ceiling Fans	48,310				

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. -1954 TO BE ANSWERED IN THE LOK SABHA ON 11.12.2025.

The details of capacity addition envisaged in the State of Telangana

Scheme	Implementing Agency	Capacity
Yadadri TPS	TGGENCO	4000 MW (5 x 800 MW)
Singareni TPP, Ph-II	SCCL	800 MW
Telangana STPP, Stage-II	NTPC	2400 MW (3 x 800 MW)
	Total	7200 MW

TGGENCO: Telangana Power Generation Corporation
SCCL: Singareni Collieries Company Limited
STPP: Super Thermal Power Project

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MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO. 1959
ANSWERED ON 11.12.2025

VACANCIES IN MINISTRY OF POWER

1959. DR. SHARMILA SARKAR:

Will the Minister of POWER be pleased to state:

(a) the number of sanctioned posts in position and the number of vacancies including reserved posts across categories in the Government;

(b) the number of vacancies in the Ministry/Department including reserved posts since 2014, year-wise and category-wise; and

(c) the number of contractual employees hired since 2014, year-wise and category-wise?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): The Ministry of Power is manned by officials/officers belonging to All India, Other organised and General Civil Services etc. The Ministry implements posting, transfer & promotion orders of the cadre controlling authorities of these services. As on 30.11.2025, against a sanctioned strength of 356 in Ministry of Power (secretariat), 300 posts are filled up.

Ministry of Power is the cadre controlling authority in respect of Despatch Rider, Staff Car Driver etc., which are currently filled up on Deputation or Re-employment basis for which Reservation policy is not applicable. Further, Ministry of Power is also the cadre controlling authority in respect of Multi Tasking Staff (MTS), for which recruitment is done through Staff Selection Commission on Direct Recruitment basis and hence category wise breakup of vacancies in MTS grade is available in the Ministry.

The details of year-wise and category-wise vacancies since 2014, are Annexed.

(c): The details of contractual employees hired since 2014 in Ministry of Power and their year wise details are as under:

Sr. no.	Hired in Year	No. of contractual employees appointed	Category
1.	2014-2020	00	Reservation policy is not applicable for Contractual employees.
2.	2021	01	
3.	2022	04	
4.	2023	05	
5.	2024	07	
6.	2025 (as on 30.11.2025)	03	

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Annexure

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1959 ANSWERED IN THE LOK SABHA ON 11.12.2025 REGARDING "VACANCIES IN MINISTRY OF POWER".

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Sl. No.	Year (as on 31st December of that year)	Sanctio-ned Posts	In Position	Vacancies including reserved posts	Vacancies in MTS Grade	Category Wise breakup of vacancies in MTS Grade
A	B	C	D	E (C-D)	F (out of E)	G
1.	2014	343	280	63	03	UR-14 OBC-13 SC-0*(25 excess) ST-01
2.	2015	343	297	46	04	UR-14 OBC-13 SC-0*(24 excess) ST-01
3.	2016	318	292	26	07	UR-15 OBC-13 SC-0*(22 excess) ST-01
4.	2017	321	277	44	12	UR-17 OBC-13 SC-0*(19 excess) ST-01
5.	2018	320	275	45	06	UR-15 OBC-11 SC-0*(20 excess) ST-00
6.	2019	335	271	64	6	UR-9 OBC-10 EWS-6** SC-0*(20 excess) ST-01
7.	2020	335	265	70	08	UR-09 OBC-10 EWS-6** SC-0*(18 excess) ST-1
8.	2021	331	276	55	11	UR-09 OBC-10 EWS-6** SC-0*(16 excess) ST-2
9.	2022	324	277	47	16	UR-13 OBC-09 EWS-6** SC-0*(15 excess) ST-3
10.	2023	356	301	55	17	UR-14 OBC-05

						EWS-6** SC-0*(11 excess) ST-3
11.	2024	356	304	52	21	UR-15 OBC-7 EWS-6** SC-0*(10 excess) ST-3
12.	2025 (as on 30.11.2025)	356	300	56	29	UR-17 OBC-8 EWS-6** SC-0*(5 excess) ST-3

*** Erstwhile Group D posts were re-designated as 'Multi Tasking Staff (MTS)' due to which SC Category staff became in excess as compared to seats reserved for them.**

****EWS Reservation was implemented in year 2019**

UR (Un-Reserved), Other Backward Class (OBC), Economically Weaker Section (EWS), Scheduled Caste (SC), Scheduled Tribe (ST)

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1961
ANSWERED ON 11.12.2025

OBJECTIVES OF INDIA ENERGY STACK

†1961. SHRI AMAR SHARADRAO KALE:

Will the Minister of POWER be pleased to state:

(a) the objectives of developing the India Energy Stack (IES) and its proposed contribution to strengthen the digital infrastructure for the power sector;

(b) the manner in which IES fosters the data interoperability, transparency and innovation between utilities and technology partners;

(c) the stakeholders identified in the ongoing survey and the expected outcomes from their participation; and

(d) whether a phased implementation plan has been prepared to operationalize the IES and ensure seamless integration with existing utility systems, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d) : India Energy Stack (IES) is envisioned with the objective to create a universal digital blueprint for the power sector as a whole so that the disparate parts of the power system can connect and communicate securely through standard protocols. The Ministry has constituted a task force comprising domain experts and various stakeholders including representatives from Ministries, State utilities, Regulators, technology solution providers, etc to chart a roadmap for the IES so as to bring interoprability.

The rollout of the IES will be done in a phased manner with the timeline for the demonstration of the Proof of Concept in FY 2026-27.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1975
ANSWERED ON 11.12.2025

INTEGRATION OF COAL-FIRED POWER PLANTS WITH RENEWABLE ENERGY

1975. SHRI DUSHYANT SINGH:

Will the Minister of POWER be pleased to state:

(a) whether any studies have been carried out on the long-term impact of reduced technical minimum load requirements on the lifespan and efficiency of the existing coal-fired power plants in light of the commendable Government initiatives to enhance the share of renewable energy in the India's total energy generation, if so, the details thereof;

(b) whether remedial measures are being considered by the Government to address such potential impacts, if so, the details thereof; and

(c) whether the Government has any plans to introduce or promote hybrid technologies that can integrate the existing coal-fired power plants with renewable energy sources to ensure optimum efficiency and consistent power supply, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): The Central Electricity Authority (CEA) has carried out various flexibility studies on the long-term impact of reduced technical minimum load requirement of the existing coal-fired Thermal Power Plants (TPPs), in association with Original Equipment Manufacturers

(OEMs) / National & International partners. These studies indicate that 40% Minimum Technical Load (MTL) operation result in accelerate wear of components (particularly rotating components) and also reduces life of key pressure-part along with their efficiency. This impacts the lifespan and efficiency in long-term as:

- **Efficiency degradation;**
- **Increase in creep–fatigue;**
- **Accelerated corrosion and erosion;**
- **Higher risk of fatigue-related failures;**
- **Increase in Equivalent Forced Outage Rate (EFOR);**
- **Increase in Gross Heat Rate;**
- **Higher auxiliary power consumption;**
- **Reduced combustion efficiency at low loads.**

(b): The CEA has prepared several remedial & mitigation measures to address such potential impacts on existing coal-fired plants from reduced technical minimum load (TML) / flexible operation. These measures aim to ensure operational safety, maintain flame stability & combustion quality, and minimize stress on boiler and turbine systems, thereby reducing equipment damage and efficiency losses at low load. The key measures include retrofits in the existing system as below:

- **Implementation of Automation**
- **Optimization of control systems**
- **Installation of scanner for proper flame detection**
- **Installation/ use of steam coil air-preheaters (APH)**
- **Improved condition monitoring of boiler, turbine etc.**
- **Optimisation of Auxiliaries**

Further, Generating Companies (GENCOs) have been advised to adopt unit-specific retrofits rather than a 'one-size-fits-all', taking into account plant age, design parameters, coal quality and vintage so as to limit undue stress on plant equipment during flexible operation.

(c): Ministry of Power has issued a comprehensive policy on 07.11.2025 for co-firing of 5-7% blend of bio-mass pellets [including torrefied charcoal made from Municipal Solid Waste (MSW)] in Coal

Based Power Plants along with coal, after assessing the technical feasibility.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO. 1977
ANSWERED ON 11.12.2025

SEGREGATION OF FEEDERS UNDER DDUGJY AND RDSS

1977. MS IQRA CHOUDHARY:
SHRI PUSHPENDRA SAROJ:

Will the Minister of POWER
be pleased to state:

(a) the number of agricultural and non-agricultural feeders segregated and yet to be segregated in Uttar Pradesh under the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and the Revamped Distribution Sector Scheme (RDSS), district-wise;

(b) the rural feeder-wise average hours of power supply available for agricultural consumers in Uttar Pradesh during the last three years especially in respect of the Saharanpur Parliamentary Constituency;

(c) the number of prolonged outage incidents over six hours reported on agricultural feeders, district-wise;

(d) whether audits under RDSS or feeder-monitoring systems have identified technical losses or maintenance gaps affecting farm power supply in the said State including Saharanpur Parliamentary Constituency, if so, the details thereof; and

(e) the measures undertaken by the Government to improve feeder-level reliability, reduce transformer failure rates and ensure uninterrupted power supply during peak agricultural demand periods?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Under the scheme of Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), a total of 2,212 agricultural feeders were segregated in the State of Uttar Pradesh. Under Revamped Distribution Sector Scheme (RDSS), a total of 1,799 feeders have been sanctioned for the State out of which 1,167 feeders have been segregated till date. District-wise details are enclosed at Annexure.

(b) & (c): Electricity being a concurrent subject, the supply and distribution of reliable electricity to the various categories of consumers including agricultural consumers is the responsibility of concerned State/ distribution utility. As reported by the State, average daily hours of supply for agriculture consumers is 10:00 hours, as per the schedule provided by UP State Load Dispatch Centre and number of prolonged outage incident over six hours reported in the agricultural feeders is Nil. Further, as reported by the State, circle-wise daily average hours of supply for agriculture consumers in Saharanpur Parliamentary Constituency are as under:

CIRCLE	FY23	FY24	FY25
EUDC	09:30 Hrs	09:40 Hrs	09:42 Hrs
EDC-1	09:30 Hrs	09:40 Hrs	09:42 Hrs
EDC-2	09:30 Hrs	09:40 Hrs	09:42 Hrs

(d) & (e): Under RDSS, loss reduction works have been sanctioned for States/ distribution utilities based on the action plan submitted by them on basis of analysis of losses and infrastructural requirements. Accordingly, infrastructure works worth Rs. 21,782 Cr. have been sanctioned for the State of UP. The infrastructure works sanctioned under the scheme include developing new substation, upgradation of existing substations & Distribution Transformers, re-conductoring / upgradation of cables, feeder segregation, etc. These works have helped improve reliability of supply of power and reduce transformer failures. As a result of efforts undertaken by the Centre and the State, the AT&C (Aggregate Technical and Commercial) losses of the State have reduced from 26.78 % in FY 2021 to 19.25% in FY 2025. Also, the average daily hours of supply in rural areas of the State have increased from 17:24 hrs in FY 2023 to 21:34 hrs in FY2025.

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Annexure

ANNEXURE REFERRED IN REPLY TO PARTS (a) OF UNSTARRED QUESTION NO. 1977 ANSWERED IN THE LOK SABHA ON 11.12.2025

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District-wise feeder segregation details

S.No.	District	Feeders segregated under DDUGJY	Feeders sanctioned under RDSS for segregation	Feeders segregated under RDSS
1	Azamgarh	49	0	0
2	Basti	23	0	0
3	Bhadohi	0	3	0
4	Fatehpur	0	170	148
5	Ghazipur	29	0	0
6	Jaunpur	0	5	0
7	Kaushambi	39	37	37
8	MAU	0	16	0
9	Mirzapur	0	3	1
10	Prayagraj	0	12	10
11	Siddharthnagar	23	0	0
12	Varanasi	35	2	2
13	Ayodhya	0	5	4
14	A-Nagar	0	0	0
15	Sultanpur	0	5	2
16	Amethi	0	5	3
17	Barabanki	0	10	10
18	Gonda	0	0	0
19	Baharaich	22	0	0
20	Balrampur	0	0	0
21	Shrawasti	0	0	0
22	Raebareilly	0	70	4
23	Unnao	0	17	2
24	Lucknow	24	0	0
25	Sitapur	0	28	4
26	Hardoi	0	33	33
27	Lakhmipur	0	12	10
28	Badaun	36	114	33
29	Bareilly	32	19	9
30	Pilibhit	16	10	0
31	Shahjahanpur	39	58	11

32	Agra	116	2	2
33	Aligagh	74	31	31
34	Auraiya	17	7	7
35	Banda	0	5	5
36	Chitrakoot	0	6	5
37	Etah	27	34	34
38	Etawah	28	12	12
39	Farrukhabad	53	1	1
40	Firozabad	89	19	19
41	Hamirpur	0	4	4
42	Hathras	103	9	9
43	Jalaun	0	16	16
44	Jhansi	0	2	2
45	Kannauj	25	1	1
46	Kanpur Dehat	23	8	8
47	Kanpur Nagar	14	23	23
48	Kasganj	0	25	23
49	Lalitpur	0	0	0
50	Mahoba	0	5	5
51	Mainpuri	66	1	1
52	Mathura	56	17	17
53	Meerut	166	73	56
54	Baghpat	124	33	33
55	Ghaziabad	40	2	2
56	Noida	4	0	0
57	Bulandshahr	95	200	119
58	Hapur	90	55	43
59	Moradabad	51	41	26
60	Bijnor	103	113	91
61	Rampur	36	36	30
62	Sambhal	30	66	56
63	Amroha	105	60	59
64	Saharanpur	130	141	19
65	Muzaffarnagar	125	76	50
66	Shamli	55	41	35
Total		2,212	1,799	1,167

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.1979
ANSWERED ON 11.12.2025

SCHEMES TO PROVIDE ELECTRICITY TO EVERY HOUSEHOLD

†1979. SMT. ANITA NAGARSINGH CHOUHAN:

Will the Minister of POWER
be pleased to state:

(a) the schemes and programmes implemented to provide electricity to every household in rural areas;

(b) the number of rural households which have been provided safe and regular electricity supply under these schemes so far;

(c) the steps taken by the Government to improve the reliability of power supply and to reduce power cuts in rural areas; and

(d) the details of the plans being formulated by the Government to ensure future improvement in electricity supply and grid strengthening in rural areas?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): Electricity being a concurrent subject, the supply and distribution of electricity to the all consumers, including improvement in electricity supply and grid strengthening in rural and urban areas, is the responsibility of respective State Government/ power distribution utility.

Government of India has supplemented the efforts of the States/ UTs through schemes like Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS) and Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA), to help them achieve the objective of providing quality and reliable power supply to all households in rural and urban areas.

.....2

As reported by the States/ UTs, all the inhabited un-electrified census villages in the country were electrified by 28th April, 2018. A total of 18,374 villages were electrified under DDUGJY. Further, under DDUGJY and thereafter under SAUBHAGYA, electrification of all willing households was completed by 31st March, 2019 as reported by the States/UTs. A total of 2.86 crore households were electrified during SAUBHAGYA period. Both the schemes stand closed as on 31.03.2022.

Government of India is further supporting States/ UTs for grid electrification of households left-out during SAUBHAGYA, wherever found feasible, under the ongoing scheme of Revamped Distribution Sector Scheme (RDSS), launched in July, 2021. In addition, all identified households belonging to Particularly Vulnerable Tribal Group (PVTG) under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) and tribal households under DA-JGUA (Dharti Aaba Janjatiya Gram Utkarsh Abhiyan) are being extended on-grid electricity connection under RDSS as per the scheme guidelines. Till date, works amounting to Rs. 6,521 Cr. have been sanctioned for electrification of 13.65 lakh households of which 2.68 lakh households have been electrified till date.

(c) & (d): Government of India has facilitated the upgradation and creation of distribution infrastructure by distribution utilities through allocation of funds under various schemes such as (a) DDUGJY, where central assistance was provided to ensure electrification of all villages and strengthening of distribution infrastructure in rural areas; (b) IPDS, where the strengthening of distribution network in urban areas was taken up as a key measure in power distribution and (c) SAUBHAGYA for electrification of households. Overall Rs. 1.85 lakh crore was spent on strengthening the distribution system of the country under the three schemes.

Under RDSS, the objective is to improve the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector. The scheme focuses on improving the technical and commercial losses in the distribution sector through result-oriented investments in upgradation of distribution network including network strengthening and system automation. Projects worth Rs. 2.83 lakh crore for distribution infrastructure works including smart metering works have been sanctioned under the scheme. The sanctioned works comprise of new/ upgradation of substations/ Distribution Transformers, agriculture feeder segregation, upgradation of conductors, household electrification works etc.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO. 1998
ANSWERED ON 11.12.2025

COMISSIONING OF PUMPED STORAGE PROJECTS

1998. SHRI PRADEEP KUMAR SINGH:

Will the Minister of POWER be pleased to state:

(a) the manner in which the Government is ensuring timely commissioning of Pumped Storage Projects (PSP) like in Pinnapuram and Tehri and coordinating land and water allocation issues with concerned States;

(b) the reasons behind States being urged to waive local charges for pumped storage projects and the expected financial impact of the same;

(c) the manner in which the Renewable Consumption Obligation (RCO) for energy storage would differ from previous voluntary obligations; and

(d) whether the tariff based competitive bidding guidelines for pumped storage project energy procurement have been finalised, if so, the details thereof and the manner in which these would ensure optimal pricing?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): The Government has adopted the following measures to ensure time-bound completion of Pumped Storage Projects (PSPs):

i. **The Ministry of Power in April, 2023 issued guidelines to promote development of PSPs. These guidelines provide various methods of allotment of PSP sites, exemption from free power obligation/Local Area Development Fund and utilization of exhausted coal mines etc.**
ii. **Central Electricity Authority (CEA) has revised Guidelines for formulation and concurrence of Detailed Project Reports (DPR) of PSPs. Under the revised guidelines, the timeline for concurrence of DPR has been reduced from 90 days to 50 days for all type of PSPs. Further, CEA has also stipulated that clearance of Inter-State Aspects is not required for PSPs.**

iii. **CEA has launched the "Jal Vidyut DPR" portal for monitoring Survey and Investigation (S&I) activities of HEPs and PSPs. The portal enables real-time tracking of workflows and pending tasks across appraising agencies and developers, helping to identify and address delays effectively.**

iv. **Ministry of Environment, Forest & Climate Change (MoEF&CC), on 18.05.2023, has notified to appraise PSPs under B2 category subject to certain conditions.**

v. **The MoEF&CC, on 14.08.2023, issued specific Terms of Reference (TOR) for the proposals involving off stream PSPs wherein collection of baseline data for one season (other than monsoon) is prescribed for off stream closed loop PSPs and collection of baseline data for two seasons (pre-monsoon & post-monsoon) is prescribed for off stream open loop PSPs.**

vi. **The MOEF&CC, in August 2024, has extended the provisions relating to survey in the forest areas for mining projects to other development projects including hydel/PSPs.**

vii. **MOEF&CC vide letter dated 10.09.2025 has enhanced the number of boreholes for undertaking survey and explorations in the forest area for mining and developmental projects including hydel.**

viii. **The Government of India, vide notification dated 01.08.2025, has revised the capital expenditure limit for schemes related to setting up hydro generating stations to ₹3,000 crore, requiring the concurrence of the CEA. Further, the Government has exempted off-stream closed-loop pumped storage schemes, irrespective of the quantum of capital expenditure, from the requirement of concurrence by the CEA. However, Developers may seek technical guidance from the CEA for projects under exempted category.**

The issues related to land and water allocation are taken up by the developers with the concerned State Government in accordance with the respective State policies.

(b): States have been urged to waive any local levies/charges, no duty on energy stored for PSPs keeping in view that PSPs do not generate energy but shift the time of energy availability. In fact, they consume more energy. PSPs are also important from the point of view of grid stability in terms of providing greater inertia and balancing power.

(c): The Renewable Consumption Obligation (RCO) notification dated 20.10.2023 was superseded by the revised RCO Gazette Notification dated 27.09.2025, issued by the Ministry of Power under the Energy Conservation Act, 2001.There is no obligation for energy storage under the Renewable Consumption Obligation notification dated 27.09.2025. It provides that Designated consumers may fulfil the specified Renewable Consumption Obligation through consumption of renewable electricity, either directly or through an energy storage system.

(d): Ministry of Power vide Resolution dated 06.02.2025, issued the "Tariff Based Competitive Bidding Guidelines for Procurement of Storage Capacity/ Stored Energy from Pumped Storage Plants" available at https://powermin.gov.in/sites/default/files/webform/notices/Guideline_for_procurement_of_storage_capacity_stored_energy_from_pumped_storage_plants_0.pdf

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2017
ANSWERED ON 11.12.2025

EMISSION FROM THERMAL POWER PLANTS

†2017. SHRI RAKESH RATHOR:
SHRI GAURAV GOGOI:
SHRI PRADYUT BORDOLOI:

Will the Minister of POWER be pleased to state:

(a) whether the Government has conducted any assessment to study the extent by which the emissions from Thermal Power Plants (TPPs) in neighbouring States are contributing to the air pollution in Delhi and if so, the details thereof;

(b) whether the Government has given exemption from installing pollution control systems like Flue Gas Desulfurization (FGD) to many coal-based power plants and if so, the number and details of such exempted units;

(c) whether it is a fact that such exemption are causing high emissions from neighbouring areas and thus the burden of pollution is being shifted, if so, the details thereof; and

(d) the measures being taken by the Government to ensure strict compliance with emission norms / standards to ensure that the pollution control systems remain fully operational and prevent inter-state displacement of air pollution?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c): No such assessment / study has been conducted by the Ministry of Power to evaluate the extent to which emissions from Thermal Power Plants (TPPs) located in neighbouring states contribute to air pollution in Delhi.

Ministry of Environment, Forest and Climate Change (MoEF&CC) notified emission standards [including Sulphur Dioxide (SO_2)] for coal / lignite based Thermal Power Plants (TPPs) vide its Notification dated 07.12.2015. Further,

MoEF&CC vide Notification dated 31.03.2021 prescribed for categorization of TPPs into three categories i.e. Category A, B and C for compliance of the emission standards. Accordingly, TPPs were classified as follows:

Sl. No.	Category	Location / Area	No. of TPPs	No. of Units	Capacity (MW)
1	Category A	Within 10 km radius of National Capital Region or cities having million plus population	17	66	20,577
2	Category B	Within 10 km radius of Critically Polluted Areas or Non-attainment cities	25	72	24,057
3	Category C	Other than those included in category A and B	149	462	1,66,885.5
		Total	191	600	2,11,519.5

Note: As per 2011 census of India

The SO_2 emission standards prescribed in MoEF&CC Notification dated 07.12.2015 have been reviewed by the Central Government taking into consideration the various representations received regarding exemption or relaxation in timelines of these standards due to limited availability of technology providers, its techno-economic feasibility, negative impact of COVID-19 pandemic on supply chain, price escalation due to high demand and low supplies, low SO_2 concentration in ambient air and heavy burden on consumers due to increase in electricity price etc.

Besides, the scientific studies conducted by independent research institutions regarding effectiveness & rationale behind these standards and its role in overall ambient air pollution of the region were also considered to evaluate the need of universal applicability and enforcement of these standards.

In view of above, MoEF&CC has issued a Notification on 11.07.2025 regarding the applicability of SO_2 emission standards notified vide Notification dated 07.12.2015. Accordingly, the applicability and timelines for compliance of SO_2 emission standards by TPPs are tabulated below:

Category	Applicability of SO_2 emission standards	Timelines for Compliance (Non-retiring units)	Last date for retirement of units for exemption from compliance

Category A	**Mandatory**	**31.12.2027**	**31.12.2030**
Category B	**To be decided on a case-to-case basis by the Central Government based upon the recommendations of the Expert Appraisal Committee (Thermal Projects).** **In case any TPP is considered for exemption from SO_2 emission standards, such TPP shall ensure meeting of stack height as per Notification no. G.S.R. 742 (E) dated 30.08.1990.**	**31.12.2028**	
Category C	**Not applicable subject to condition of meeting stack height as per Notification no. G.S.R. 742 (E) dated 30.08.1990.**	**31.12.2029**	

The category wise applicability of SO_2 emission standards in TPPs have been decided based on detailed scientific studies and analysis of ambient SO_2 concentrations across the country, including areas near TPPs. This approach applies the precautionary principle for controlling and abating air pollution in densely populated and other air pollution sensitive areas, while also emphasizing on resource conservation by avoiding additional consumption of water, auxiliary power, and limestone, and avoiding the increase in carbon footprint/CO_2 emissions resulting from the operation of deployed control measures, as well as mining and transportation of limestone required for these measures.

(d): The thermal power plants are mandated to install Online Continuous Emission & Effluent Monitoring System (OCEMS) for continuous emission and effluent monitoring.

Further, in case of non-compliance beyond the prescribed timelines, the following Environmental Compensation will be levied on non-compliant TPPs:

Non-Compliant operation beyond the Timeline	Environmental Compensations (Rs. Per unit electricity generated)
0-180 days	0.20
181-365 days	0.30
366 days and beyond	0.40

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2025
ANSWERED ON 11.12.2025

POWER SUPPLY FOR AGRICULTURAL ACTIVITIES

2025. SHRI ARVIND GANPAT SAWANT:
SHRI SANJAY HARIBHAU JADHAV:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has made efforts to separate agricultural feeders from domestic feeders in rural areas particularly where agricultural load is high to reduce the burden on domestic feeders and ensure uninterrupted power supply to farmers, if so, the details thereof;

(b) if not, the reasons therefor;

(c) the total number of agricultural feeders identified and separated so far in rural areas of the country;

(d) the number of such feeders separated in the State of Maharashtra, district-wise including Parbhani;

(e) the total cost of separating these feeders and the manner in which the Government plans to allocate resources for feeder separation in rural and remote areas to ensure reliable power supply for agricultural activities; and

(f) the number of families belonging to Particularly Vulnerable Tribal Groups (PVTGs) in such areas identified for the purpose?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (d) : Government of India has been laying 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 rostering of supply for agricultural consumption and enable solarization

of agricultural feeders which would help in day-time supply of quality power to farmers. It will also help in providing reliable and quality supply to non-agricultural consumers in the rural areas.

.....2.

Under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) launched in 2014 and thereafter under Revamped Distribution Sector Scheme (RDSS) launched in 2021, works have been sanctioned for segregation of feasible mixed-load feeders. The details of feeder segregation works are as under:

Sl No	Particulars	All India	Maharashtra
1	Total feeders with more than 30% agricultural load feasible for segregation	80,720	10,811
2	Feeders already segregated under various schemes including DDGUJY, State Plan etc.	49,601	6,099
3	Balance feeders sanctioned for segregation under RDSS	31,119	4,712
4	Feeders segregated under RDSS till date	7,846	2,295

The district-wise feeder segregation details under RDSS, including for the district Parbhani, are enclosed at Annexure.

(e) : Under RDSS, the funds have been allocated as per the balance number of feasible feeders which have been identified by the States for segregation. The details of project cost sanctioned for feeder segregation works is as under:

Rs Cr

Scheme	All India	Maharashtra
RDSS	40,525	7,010

(f) : Under RDSS, Government of India is supporting States for grid electrification of Particularly Vulnerable Tribal Groups (PVTG) households identified under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan). Works amounting to Rs. 521 Cr. have been sanctioned for providing on-grid connectivity to 1,27,987 households belonging to PVTG, including 8,556 households for the State of Maharashtra.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 2025 ANSWERED IN THE LOK SABHA ON 11.12.2025

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Sl. No.	District	Nos. of Feeder sanctioned under RDSS	Nos. of Feeder segregated under RDSS
1	Ahmednagar	136	235
2	Akola	107	48
3	Amravati	69	23
4	Aurangabad	327	130
5	Beed	367	227
6	Bhandara	40	14
7	Buldhana	56	41
8	Chandrapur	117	35
9	Dhule	50	23
10	Gadchiroli	104	24
11	Gondia	99	30
12	Hingoli	101	30
13	Jalgaon	171	64
14	Jalna	221	67
15	Kolhapur	7	6
16	Latur	393	174
17	Nagpur	217	71
18	Nanded	319	88
19	Nandurbar	33	9
20	Nashik	570	419
21	Osmanabad	223	44
22	Palghar	12	4
23	Parbhani	100	49
24	Pune	277	102
25	Raigarh	2	-
26	Ratnagiri	6	2
27	Sangli	10	30
28	Satara	54	18
29	Sindhudurg	16	3
30	Solapur	201	179
31	Thane	3	1
32	Wardha	96	63
33	Washim	49	6
34	Yavatmal	159	36
Total		4,712	2,295

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2035
ANSWERED ON 11.12.2025

COMPENSATION FOR INSTALLATION OF 765 KVA TRANSMISSION LINES

†2035. SHRI AMRA RAM:

Will the Minister of POWER be pleased to state:

(a) the details of the compensation being provided by the Government to the farmers against their land, trees, fruit-bearing plants, houses and tube wells due to installation of 765 KVA transmission lines in the country, State-wise;

(b) whether the Government proposes to increase the amount of compensation in view of inflation, if so, the details thereof;

(c) if not, the reasons therefor;

(d) the time by which this increase would be implemented; and

(e) whether the compensation is being provided as per the Right to Fair Compensation and Transparency in Land Acquisition Rehabilitation and Resettlement Act 2013, 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 compensation for any damage caused during the execution of transmission works is being provided by the Transmission Service Providers (TSPs) as per the guidelines of respective State Government.

Ministry of Power has issued guidelines for payment of Right of Way (RoW) compensation towards diminution of land value for laying Inter-State Transmission System (ISTS) lines. As per the extant guidelines, a

compensation of 200% of market value of land for tower base has been specified. The compensation amount for RoW corridor has been specified for ISTS lines as 30% of the market value of land in rural areas, 60% of the market value of land in municipal corporations & metropolitan areas notified by the State Government, and 45% of the market value of land for municipalities, nagar panchayats and all other urban planning areas notified by the State Government. Assessment of the market rate of land is determined by a Market Rate Committee (MRC) based on the valuation by independent land valuers.

Amount of RoW compensation varies from State to State as the States may adopt MoP's guidelines on RoW compensation in their entirety or issue their own modified guidelines.

(e): As per the provisions of the Electricity Act, 2003, land is not acquired for laying transmission line, and the ownership of land over which the transmission line passes continues to remain with the landowner.

Since The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013 is only for permanent acquisition of private land and assets, the provision of the said act is not applicable to the laying of transmission lines.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2036
ANSWERED ON 11.12.2025

WATER SCARCITY IN COAL-BASED POWER PROJECTS

2036. ADV. CHANDRA SHEKHAR:
SHRI HANUMAN BENIWAL:

Will the Minister of POWER be pleased to state:

(a) whether a significant number of coal-based power projects under construction or expansion are located in water-stressed districts, if so, the details thereof, State-wise;

(b) whether several of these plants are facing delays or reduced generation due to water shortages, if so, the details thereof including the names of such power plants and districts affected during the last three years;

(c) whether the Government has conducted or commissioned any cumulative water availability and use assessment for large thermal projects situated in semi-arid and drought-prone regions and if so, the details thereof; and

(d) whether any coal-linked thermal power plant projects have been stalled, scaled down or cancelled due to lack of assured water supply and if so, the details thereof along with the list of such projects, if any?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b): As per the National Compilation on Dynamic Ground Water Resources of India, 2025 of the Ministry of Jal Shakti, groundwater assessment units (districts, blocks etc) across the country are categorised as Safe (less or equal to 70%), Semi-critical (greater than 70% and less or equal to 90%), Critical (greater than 90% and less or equal to 100%) & Over Exploited (greater than 100%) based on ratio of annual groundwater extraction and replenishment phreatic aquifer. Accordingly, there are three (03) numbers of coal-based power projects under construction or expansion located in water-stressed districts and their details are given at Annexure.

These plants have not reported any delay on account of water shortages.

(c): No such study has been conducted by the Government. Allocation of water for Thermal Power Plants is done by Water Resources Department of the concerned State Government where the project is located and they assess all factors before allocation of water.

(d): Decision related to the size of coal-based thermal power plants are taken by the generating companies / project developers based on their techno-economic and commercial requirements and assessment of local conditions, which includes availability of water. Additionally, new coal-based thermal power plants are also adopting ACC (Air Cooled Condenser) based technology for water conservation, where required, resulting in 60% reduction in water consumption in respect to Cooling Tower system.

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Annexure

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 2036 TO BE ANSWERED IN THE LOK SABHA ON 11.12.2025

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Coal-based Thermal Power Plants (TPPs) under construction and awarded located in water-stressed districts

Sl No	State	District	Name of TPP	Utility	Sector	Status (Under Construction/ Awarded)	Category
1.	Uttar Pradesh	Kanpur Nagar	Ghatampur TPP	NUPPL	Central	Under Construction	Semi-critical
2.	Haryana	Yamunanagar	DCR TPP Ext	HPGCL	State	Under Construction	Over Exploited
3.	Rajasthan	Baran	Kawai TPP	Adani Power	Private	Awarded but due for construction	Over Exploited

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