GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.246
ANSWERED ON 12.12.2024

CSR FUNDS SPENT BY NTPC

†*246. SHRI LALJI VERMA:

Will the Minister of POWER
be pleased to state:

(a) the details of the funds for Rehabilitation and Resettlement (R&R) and Corporate Social Responsibility (CSR) utilised by the National Thermal Power Corporation (NTPC) located at Tanda in Ambedkar Nagar district of Uttar Pradesh from 1 November, 2022 to 31 October, 2024 on various works;

(b) whether NTPC distributed scooties using the said fund;

(c) if so, the list of the persons who received scooties; and

(d) the details of the works undertaken using the said funds in the areas affected due to the expansion of NTPC?

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. 246 FOR REPLY ON 12.12.2024 REGARDING CSR FUNDS SPENT BY NTPC ASKED BY SHRI LALJI VERMA.

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(a) : The details of the Rehabilitation and Resettlement (R&R) and Corporate Social Responsibility (CSR) funds spent by NTPC Ltd. at Tanda located in Ambedkar Nagar district of Uttar Pradesh from 1st November 2022 to 31st October 2024 is given as under:

Sl. No.	Particulars	Rs. (in Lakhs)
1.	Rehabilitation and Resettlement (R&R) funds	276.33
2.	Corporate Social Responsibility (CSR) funds	710.14

(b) & (c) : Yes. The List of Persons, recommended and selected by District Administration, Ambedkar Nagar who received the scooties is at Annexure-I.

(d) : The works undertaken by NTPC Tanda using the CSR and R&R funds are at Annexure-II and Annexure-III respectively.

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ANNEXURE-I

ANNEXURE REFERRED TO IN PARTS (b) & (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 246 ANSWERED IN THE LOK SABHA ON 12.12.2024 REGARDING CSR FUNDS SPENT BY NTPC

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List of Persons as selected on the recommendation of District Administration, Ambedkar Nagar

Sl. No.	Beneficiary Name	Beneficiary Address
1	Janak Nandini	Village Chitwai, Ambedkar Nagar, Iltfatganj, Uttar Pradesh
2	Amrita	Village Salarpur naipura, Iltifat bazar, Ambedkar nagar, Iltifatganj, Uttar Pradesh
3	Renu Devi	Village Picchwara saya, Ambedkar Nagar, Ambedkar nagar, Uttar Pradesh
4	Rama Devi	Village Adhnapur, Madharbhari Bhiti, Ambedkar nagar, Uttar Pradesh
5	Kiran	Village Ban Gaon, Ambedkar nagar, Uttar Pradesh
6	Prema Devi	Village Pure Darbar, Seetaram ka pura, Dahema, Ambedkar nagar, Uttar Pradesh
7	Renu Gaud	Village Saya,Ambedkar nagar, Uttar Pradesh
8	Alka	Village Arjunpur, Ambedkar nagar, Uttar Pradesh
9	Archna Kumari	310, Vill. Mijghaoda, Ambedkar nagar, Uttar Pradesh
10	Aneeta	Village Rohanpura, Bharpurwa, Roshanpara, Ambedkar nagar, Uttar Pradesh
11	Chandrika Devi	9, Bhupatpur, Ambedkar nagar, Uttar Pradesh
12	Mamta Devi	198, Meeramau, Darwan, Ambedkar nagar, Uttar Pradesh
13	Uma Devi	Village Rampur Nonshila, Matane, Mathani, Ambedkar nagar, Uttar Pradesh
14	Sumitra Devi	Village Majgawan, Yarke, Ambedkar nagar, Uttar Pradesh
15	Malti Nishad	Village Jalapur Sahara, Ambedkar nagar, Uttar Pradesh
16	Gunja	201, Hede pakariya, Ambedkar nagar, Uttar Pradesh
17	Savitri Devi	Village Kalesar, Chandpur, Ambedkar nagar, Uttar Pradesh
18	Sangam	Village Harinathpur, Ainwa, Dasrathpur, Ambedkar nagar, Uttar Pradesh
19	Reena Devi	111B, Jatipur nidhiyawan, Jatipur, Ambedkar nagar, Uttar Pradesh
20	Sadhna	Village Jagnnathpur, Baridiha, Khajava, Ambedkar nagar, Uttar Pradesh
21	Bittan	Village Shahpur Maniyari patti, Asgavan, Ambedkar nagar, Uttar Pradesh
22	Manju	Village Rampur Vanayu, Rampur banethu, Ambedkar nagar, Uttar Pradesh
23	Poonam	Village Khaira, Mahboobganj, Ambedkar nagar, Uttar Pradesh
24	Suneeta	18, Village Nandapur, Ambedkar nagar, Uttar Pradesh
25	Seema Devi	56, Village Kolhuva Mukundpur, Shadipur, Ambedkar nagar, Uttar Pradesh

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ANNEXURE REFERRED TO IN PART (d) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 246 ANSWERED IN THE LOK SABHA ON 12.12.2024 REGARDING CSR FUNDS SPENT BY NTPC

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Details of works undertaken using the CSR funds by NTPC Tanda

YEAR	CSR Activities
2021-22	1. Conducting One-month Girl Empowerment Mission residential workshop for girls from nearby villages along with one-week winter follow-up. 2. Distribution of furniture and equipment in nearby government schools (Hussainpur Sudhana, Fatehpur, Hasimpur, Kakrahi, Fareedpur Kala, Raipur, Hakimpur, Samharia, Mahripur, and government schools in Ambedkar Nagar district). 3. Provided weekly services of a homeopathic doctor in three nearby villages: Maharipur, Hakimpur, and Hussainpur Sudhana. 4. Distribution of hand-wash soap, face masks, and sanitizer for the prevention of the third wave of COVID-19 in Hasimpur, Kakrahi, Jot Jina, Raipur, and Asopur. 5. Installation of 40 solar street lights in nearby villages: Hussainpur Sudhana, Fatehpur, Hasimpur, Kakrahi, Fareedpur Kala, Raipur, Hakimpur, Samharia, Mahripur, Meeranpur Sadar Ali, Fareedpur Kala, Katariya, and Khairpur. 6. Vocational training for Assistant Electricians. 7. Film-based teaching in three nearby government schools: Katariya, Mahripur, and Makhdoom Nagar. 8. Conducting Social impact Evaluation (SIE) of CSR activities undertaken by NTPC Tanda.
2022-23	1. Conducting One-month Girl Empowerment Mission residential workshop for girls from nearby villages along with one-week winter follow-up. 2. Construction of school sheds for mid-day meals at two government schools. 3. Distribution of Ten computers to a nearby government school in Fatehpur. 4. Distributed school bags and stationery kits at various government schools. 5. Provided Maternal and Child Health Clinic (MMU) services in six nearby villages of NTPC Tanda. 6. Provided weekly services of a homeopathic doctor in three nearby villages.Maharipur, Hakimpur & HusainpurSudhan 7. Health ATMs distributed to nearby Community Health Centres (CHCs) and Public Health Centres (PHCs). 8. Conducted four health camps at an old age home in Akbarpur, a blind school in Ayodhya, Jagriti Vikas Kendra in Pichwara, and Raipur village. 9. Provided one ventilator to the hospital in Akbarpur. 10. Distributed blankets in nearby Project Affected Villages (PAVs). 11. Installed 500 solar streetlights in Ambedkar Nagar, Lok Sabha constituency. 12. Conducted the district-level sports competition in Ambedkar Nagar. 13. Conducted the MP/Sansad Green Marathon in Akbarpur. 14. Provided sports materials to Fatehpur Gram Panchayat and nearby government schools. 15. Conducted fashion designing training for women. 16. Conducted farmer training in nearby villages. 17. Conducted vocational training for Air Conditioner (AC) repair in nearby villages.

YEAR	CSR Activities
	18. Conducted animal health camps in nearby villages. 19. Provided assistance to Jila Prashashan Protshahan Samiti, Ambedkar Nagar, for organizing Ambedkar Nagar Mahotsava (Ambedkar Nagar foundation day festival). 20. Provided scholarships to marginalized students of SC/ST/Persons with Disability(PwD) categories. 21. Provided assistance for organizing Shravan Kshetra Mahotsava.
2023-24	1. Conducting One-month Girl Empowerment Mission residential workshop for girls from nearby villages along with one-week winter follow-up. 2. Smart Class (Film-Based Teaching Methodology - FBTM) in six schools in nearby villages. 3. Scholarships for ST/SC and physically challenged persons studying at Vivekananda Shishukunj Vidyalaya School in NTPC Colony. 4. Maternal and Child Health Clinic (MMU) in PAVs (Asopur, Mehripur, Hakeempur, Jot Jaina, Fatterpur, Katariya). 5. Fifteen condom dispensing machines installed. 6. Distribution of school bags to government schools. 7. Rejuvenation of the pond at Haroon Raseed Baba Sthal in Asopur village under CSR work. 8. Installation of 100 solar streetlights in nearby villages. 9. Two high mast lights installed in Dilasiganj Gram Panchayat. 10. Organized district-level sports events. 11. Supported the Clean Air Marathon. 12. Provided vocational training to 21 youth through Central Institute of Petrochemicals Engineering & Technology (CIPET). 13. Purchased wax for making candles at NTPC Foundation NILD (National Institute for Locomotor Disabilities) Disability Rehabilitation Centres (NFNDRC) Tanda. 14. Supported Lok Jagriti Vikas Kendra for mentally challenged and physically challenged school children. 15. Conducted animal health camps in nearby villages. 16. Completed painting work in the Blind School in Ayodhya and provided and fixed Reinforce Cement Concrete (RCC) precast slabs in Miranpur Sadar Ali. 17. Supplied one water cooler with Reverse Osmosis (RO) to the Additional District Magistrate (ADM) office in Ambedkar Nagar. 18. Assisted the district administration for Kanwar and Urs. 19. Support to Industrial Training Institute (ITI) Akbarpur Ambedkar nagar 20. Provided assistance in organizing Ambedkar Nagar Mahotsava. 21. Supported beneficiaries and motivators for the National Family Welfare Programme 2023-2024. 22. Distribution of blankets. 23. Provided six Apache motorcycles for women's safety to the district police Administration in Ambedkar Nagar. 24. Construction of mid-day meal sheds in two schools. 25. Installed 30 hand pumps in nearby villages. 26. Rejuvenation of Darwan lake, Ambedkar Nagar.

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ANNEXURE-III

ANNEXURE REFERRED TO IN PART (d) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 246 ANSWERED IN THE LOK SABHA ON 12.12.2024 REGARDING CSR FUNDS SPENT BY NTPC

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Details of works undertaken using the Rehabilitation and Resettlement (R&R) funds by NTPC Tanda

Sl. No.	Year	Activities
1.	FY 2013-14	1. Conducted AC/Refrigerator Training to 22 PAP wards of Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur Pachpokhra.
2.	FY 2014-15	1. Conducted Electrical Training to 15 PAP wards of Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur pachpokhra 2. Conducted Welding Training to 22 PAP wards of Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur pachpokhra
3.	FY2015-16	1. Construction of Toilets in village- Salahpur Rajour & Hasimpur. 2. Conducted Plumbing Training in Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur pachpokhra.
4.	FY 2016-17	1. Construction of Primary school at Salahpur Rajour 2. Construction of Junior High School at Salahpur Rajour 3. Construction of Primary School (Toilets & Boundary wall) in Salahpur Rajour. 4. Construction of Toilets in village- Salahpur Rajour
5.	FY 2017-18	1. Drinking water facility for School at Salahpur Rajour and Hasimpur. 2. Construction of Verandah sheds for Primary and Junior High School at Salahpur Rajour 3. Distribution of furniture to Primary and Junior High School at Salahpur Rajour 4. Providing of White board & Misc. Stationary for newly constructed School at Salahpur Rajour. 5. Provided play Equipment to Primary and Junior High School at Salahpur Rajour. 6. Construction of Roads & drains Husainpur Sudhana village 7. Repairing of road from Main Road to Gate no.6 and from Yadav Dhaba to new School building at NTPC-Tanda. 8. Electrification of Primary & Junior high School at Salahpur Rajour. 9. Provide scholarship to Rukhsar Fatima of Husainpur Sudhana.

6.	FY 2018-19	1. Installation of 25 nos India Marka hand pumps in the constituency of MP, Ambedkar Nagar in Husainpur Sudhana 2. Construction of Primary School at Husainpur Sudhana Part-I 3. Construction of Primary School at Husainpur Sudhana Part-II 4. Construction of Junior High School at Husainpur Sudhana. 5. Construction of 300-meter road & drains in Kakrahi village. 6. Construction of Toilets & Boundary wall at Primary School. 7. Construction of 10-seater toilet at Tehsil- Tanda. 8. Construction of 08 nos. Dustbins along the north side of road from village Kateria to village Vazidpur . 9. Construction of 07 nos dustbin in nearby villages of NTPC-Tanda. 10. Installation of 60 nos. 12 W Light Emitting Diode (LED) Solar Street light in project affected villages Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur Pachpokhra.
7.	FY 2019-20	1. Installation of solar LED streetlight in Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur pachpokhra 2. Conducted Electrical Mechanic Training in Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur Pachpokhra 3. Construction of A.N.M. Center in Kutubpur. 4. Construction of 10-seater Sulabh Toilets in Akbarpur (DM office) 5. Construction of Panchayat Bhawan/Barat Ghar in Mahripur Keshavpur Pachpkhara) 6. Construction of Panchayat Bhawan in Samhariya 7. Construction of sheds at Cemetery at Asopur 8. Construction of 77 nos. individual toilets in Kataria village. 9. Constructions of common facilities (toilets, boundary wall & gate) for School Complex at Husainpur Sudhana. 10. Electrical Connection (one time) of Primary & Junior High School in Husainpur Sudhana 11. Interlocking tile work in primary school in Asopur 12. Dismantling & Construction of roof on courtyard and installation of submersible pump with water tank for toilet at Primary School Mahripur. 13. Construction of boundary wall for Anganwadi center in Khairpur 14. Construction of cement concrete road in Khairpur. 15. Widening & strengthening of the connecting road (running adjacent to NTPC Tanda boundary wall) 1km length in village Hasimpur (Salahpur Gram sabha) 16. Construction of 05 seater toilet complex each at villages Mahripur , Kakrahi Jotjaina/ Samhariya , Miranpur Sadarali , Faridpurkala. 17. Renovation of Ramlila and Shiv Mandir at Kakrahi. 18. Installation of 12-watt LED streetlight in nearby area. 19. Distribution of Furniture of Primary & Junior High School at Husainpur Sudhana.

8.	FY 2020-21	1. Construction of Cement Concrete (CC) road 350-meter length (From Tanda-Maya Road to Keshavraj Yadav house) at Asopur. 2. Construction of CC road from Keotahiya Gopal's shop to River side. Part-I (From Channel - 0 m to Channel - 500m) at Mahirpur. 3. Construction of Drain 225-meter length (near primary school to Pokhra via Kali chaura) in Hakimpur. 4. Providing and laying Interlocking tiles in primary in Samhariya. 5. Construction of CC road 1100 meter from Ramchandra House to Mithai lal House in Mahirpur. 6. Construction of CC road from Baruajalaki to primary school Chauraha Part-1 (From Channel - 0 m to Channel - 400 m) in Hakimpur. 7. Providing and laying Kota stone in floors and replacement of door shutters in primary school at Purabaxrai. 8. Construction of CC road from Kesavpur Pachpokhara Minor Canal to Highway Part-I (From Channel - 0 m to Channel - 500 m) in Mahirpur. 9. Construction of culvert over Nalah at Samhariya. 10. Construction of Boundary Wall in Primary School and Junior High school in Kakrahi. 11. Construction of toilet in Primary school at Hakimpur. 12. Construction of CC road (from Ladanpur-Muzibullah's Shop to Abu Mohammad House) at Kakrahi. 13. Construction of CC road 120-meter length from Kali Chauraha to Pokhara at Hakimpur. Construction of CC road from Baruajalaki to primary school Chauraha Part-III (From Channel - 801 14. Construction of CC road 350 -meter length (From Tanda-Maya Road to Keshavraj Yadav house) at Asopur. 15. Construction of CC road from Keotahiya Gopal's shop to River side. Part-I (From Channel - 0 m to Channel - 500m) at Mahirpur. 16. Construction of Drain 225-meter length (near primary school to Pokhra via Kali chaura) in Hakimpur. 17. Providing and laying Interlocking tiles in primary in Samhariya. 18. Construction of CC road 1100 meter from Ramchandra House to Mithai lal House in Mahirpur. 19. Construction of CC road from Baruajalaki to primary school Chauraha Part-1 (From Channel - 0 m to Channel - 400 m) in Hakimpur. 20. Providing and laying Kota stone in floors and replacement of door shutters in primary school at Purabaxrai. 21. Construction of CC road from Kesavpur Pachpokhara Minor Canal to Highway Part-I (From Channel - 0 m to Channel - 500 m) in Mahirpur. 22. Construction of culvert over Nalah at Samhariya. 23. Construction of Boundary Wall in Primary School and Junior High school in Kakrahi. 24. Construction of toilet in Primary school at Hakimpur. 25. Construction of CC road (from Ladanpur-Muzibullah's Shop to Abu Mohammad House) at Kakrahi.

9.	FY 2021-22	1. Repair and painting work of Junior High School & Primary -I & II at Husainpur sudhana. 2. Construction of Auxiliary Nurse and Midwife (ANM) Center at Mahirpur & Makhdoom nagar. 3. Provided one Ambulance and Two Mortuary Van at Basti & Ambedkar Nagar. 4. Procurement, Installation & Commissioning of 01 (one) no. Pressure Swing Adsorption(PSA) Oxygen Plant of 5 Nm3/hr capacity & 01 (one) no. of PSA oxygen plant of 36 Nm^3/hr capacity at District hospital Ambedkar Nagar. 5. Widening of main road between NTPC-Tanda Township to Main Plant (2 km length) on deposit work basis by M/s PWD Ambedkarnagar at Kateriya & Bahadarpur. 6. Construction of CC road from Keotahiya Gopal's shop to River side. Part-I (From Channel - 0 m to Channel - 500m) at Mahirpur-Keotahiya. 7. Construction of CC road from Keotahiya Gopal's shop to River side. Part-II (From Channel - 501m to Channel - 1000m) at Mahirpur-Keotahiya. 8. Construction of Nalah drain (from Pannalal's house to Dr. Furkhan shop at Makhdoomnagar) at Samhariya. 9. Repair and painting work of Junior High School & Primary -I & II at Husainpur sudhana. 10. Construction of Auxiliary Nurse and Midwife (ANM) Center at Mahirpur & Makhdoom nagar. 11. Provided one Ambulance and Two Mortuary Van at Basti & Ambedkar Nagar. 12. Procurement, Installation & Commissioning of 01 (one) no. PSA Oxygen Plant of 5 Nm3/hr capacity & 01 (one) no. of PSA oxygen plant of 36Nm3/hr capacity at District hospital Ambedkar Nagar. 13. Widening of main road between NTPC-Tanda Township to Main Plant (2 km length) on deposit work basis by M/s PWD Ambedkarnagar at Kateriya & Bahadarpur. 14. Construction of CC road from Keotahiya Gopal's shop to River side. Part-I (From Channel – 0m to Channel - 500m) at Mahirpur-Keotahiya. 15. Construction of CC road from Keotahiya Gopal's shop to River side. Part-II (From Channel - 501m to Channel - 1000m) at Mahirpur-Keotahiya. 16. Construction of Nalah drain (from Pannalal's house to Dr. Furkhan shop at Makhdoomnagar) at Samhariya. 17. Construction of 500-meter length CC road from Ramneval's house to Canal and from Gangaram's house to Govind Ram house at Hussainpur sudhana. 18. Construction of CC 890-meter length road from Sadanand house to Western side Railway line and from Railway colony to Nandlal's house at Hussainpur Sudhana. 19. Construction of CC road from Kesavpur Pachpokhara Minor Canal to Highway Part-II (From Channel - 500m to Channel - 900m) at Mahirpur. 20. Construction of Ghat on river front at Kateriya. 21. Construction of 05-seater toilet complex at Jyotjaina/Samhariya.

		22. Construction of Meeting Room and Toilet Thana Aliganj campus at Asopur.
10.	FY 2022-23	1. Construction of Mosque at Hussainpur Sudhana. 2. Construction of CC Road at Kakrahi. 3. Construction of boundary wall, installation of gate and Graveyard development works at Kakrahi. 4. Construction of ANM Centre at Samhariya
11.	FY 2023-24	1. Construction of 650-meter CC road and drain for village Bahadurpur Gram Panchayat Fatehpur. 2. Cleaning of Nala /drain from Canal siphon to Saryu River at Samhariya, Asopur & Kakrahi. 3. Supply & installation of Solar Lights (123 Nos.) in Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur pachpokhra 4. Installation of Hand pump (60 Nos.) in Project Affected Villages at Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur Pachpokhra. 5. Distribution of 96 Nos. Hand Sewing Machine to PAPs at Salahpur Rajor, Hasimpur, Husainpur Sudhana, Sarifpur, Asopur, Kakrahi, Samhariya, Ladanpur & Kesavpur Pachpokhra
12.	FY 2024-25	1. Installation of India-Marka-II Handpumps (60 Nos.) in nearby villages Asopur, Hakeempur, Sharifpur, Jot Jaina, Samhariya, Kakrahi, Ladanpur, Meharipur, Keshavpur pachpokhara, Salahpur,Rajour, Hasimpur, Husainpur Sudhana 2. Construction of the boundary wall, Gate and interlocking for Panchayat Bhawan Makhdoom Nagar in Gram Panchyat Jot Jaina. 3. Construction of the CC road and drain for Rambadal house to river side in Gram Panchayat Mahripur 4. Construction of the 06 Toilet and 06 Bathroom near Haroon Raseed Baba Sthal at Asopur village near Thana Aliganj 5. Construction of the Ramleela Manch along with 02 room with staircase and mumty in Mahripur Village. 6. Construction of boundary wall, Other repairing works in Junior High School Hasimpur village. 7. Construction of CC Road with drain from near Murli House to Ramauta House in Gram Panchay at Mahripur Village 8. Repair works of Masjid in Husainpur Sudhana. 9. Construction of Primary school at Hakimpur

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.254
ANSWERED ON 12.12.2024

INSTALLATION OF EV CHARGING INFRASTRUCTURE

***254. SHRI JAGADISH SHETTAR:**
SHRI BIBHU PRASAD TARAI:

Will the Minister of POWER be pleased to state:

(a) whether the Government proposes to standardize the charging infrastructure, vehicle charging and battery swapping for Electric Vehicle (EV) across the country and if so, the details thereof;

(b) the details of the guidelines issued regarding "Installation and Operation of EV charging Infrastructure-2024" to support nationwide connected EV charging infrastructure;

(c) the number of charging stations proposed to be set up in the country during the coming years, State/UT-wise; and

(d) whether the Government has any plans to include private sector for installation and operation of EV charging infrastructure and if so, the details thereof?

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. 254 FOR REPLY ON 12.12.2024 REGARDING INSTALLATION OF EV CHARGING INFRASTRUCTURE ASKED BY SHRI JAGADISH SHETTAR AND SHRI BIBHU PRASAD TARAI

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(a) & (b) : Development of standards for electric mobility is an ongoing process. So far, Bureau of Indian Standards (BIS) has published 21 standards for charging Infrastructure and 9 standards for Electric Vehicles (EVs) and battery. These standards also include safety standards. The details are at Annexure.

Ministry of Power has issued "Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure-2024" on 17th September 2024 to facilitate the EV charging infrastructure network in the country. The salient features of the above mentioned guidelines are as follows:

i. **To facilitate electricity connection for EV charging stations, timelines have been specified. Owners of EV charging stations may opt for Low Tension (LT) connection for loads up to 150 kW.**

ii. **To provide land at affordable prices to government / public entities and through revenue sharing model to any entity for setting up of public EV charging stations.**

iii. **Tariff for supply of electricity to EV charging stations has been simplified. It has been advised to make tariff single part and limited to "Average Cost of Supply" till 31st March 2028.**

iv. **Residential owners may use existing electricity connections for EV charging or may opt for a separate metered connection from Distribution Licensee with a dedicated EV charging tariff.**

v. **To promote charging through solar energy, charging during solar hours (9 a.m. to 4 p.m.) has been incentivized.**

vi. **Service fee charged by a public and community EV charging station from a customer has been rationalized.**

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vii. **Use of open communication protocols like Open Charge Point Protocol (OCPP), Open Charge Point Interface (OCPI) and Unified Energy Interface (UEI) to create connected and interoperable EV charging infrastructure has been encouraged.**

(c) : Installation and operationalization of Charging Infrastructure is a focus area of PM e-DRIVE (Electric Drive Revolution in Innovative Vehicle Enhancement). With the allocation of Rs. 2,000 Cr (18% of total allocation), it proposes to support 72,300 public charging stations (48,400 for e-2W & 3W, 22,100 for e-4W and 1800 e-buses) and instil confidence among EV users. The scheme will be implemented through involvement of Central Ministries/authorities, State Govts, Central Public Sector Enterprises (CPSEs), etc. In addition to setting up of EV charging infrastructure within city limits, the scheme also envisages selected inter-city/inter-state highways to be made EV ready.

(d) : As per the aforementioned guidelines, all entities, including private entities are allowed to install and operate EV charging stations. As on 30.11.2024, a total number of 25,202 Public Charging Stations have been installed by public and private entities.

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ANNEXURE REFERRED TO IN PARTS (a) & (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 254 ANSWERED IN THE LOK SABHA ON 12.12.2024 REGARDING INSTALLATION OF EV CHARGING INFRASTRUCTURE

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Published standards for charging infrastructure (21)

S. no.	IS Number	Title
1	IS/ISO 15118-1 : 2013	Road vehicles - Vehicle to grid communication interface: Part 1 general information and use - Case definition
2	IS/ISO 15118-2 : 2014	Road vehicles - Vehicle - To - Grid communication interface: Part 2 network and application protocol requirements
3	IS/ISO 15118-3 : 2015	Road vehicles - Vehicle to grid communication interface: Part 3 physical and data link layer requirements
4	IS/ISO 15118-5 : 2018	Road vehicles - Vehicle to grid communication interface: Part 4 network and application protocol conformance test
5	IS/ISO 15118-2 : 2014	Road vehicles - Vehicle to grid communication interface: Part 5 physical layer and data link layer conformance test
6	IS/ISO 15118-8 : 2020 ISO 5400:1984 ISO 5400:1984 (First Revision)	Road Vehicles - Vehicle to Grid Communication Interface Part 8: Physical Layer and Data Link Layer Requirements for Wireless Communication (First Revision)
7	IS 17017 (Part 1) : 2018	Electric Vehicle Conductive Charging System Part 1 General Requirements
8	IS 17017 (Part 2/Sec 1) : 2020	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket-Outlets, Vehicle Connectors, and Vehicle Inlets Section 1 General requirements
9	IS 17017 (Part 2/Sec 2) : 2020	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket - Outlets, Vehicle Connectors and Vehicle Inlets Section 2 Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories
10	IS 17017 (Part 2/Sec 3) : 2020	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket - Outlets, Vehicle Connectors and Vehicle Inlets Section 3 Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. pin and contact-tube vehicle couplers
11	IS 17017 (Part 2/Sec 6) : 2021 ISO 622 : 2016 ISO 622 : 2016	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket-Outlets, Vehicle Connectors and Vehicle Inlets Section 6 Dimensional compatibility requirements for DC pin and contact-tube vehicle couplers intended to be used for DC EV supply equipment where protection relies on electrical separation

12	IS 17017 (Part 2/Sec 7) : 2023	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket-Outlets, Vehicle Connectors and Vehicle Inlets Section 7 Dimensional Compatibility and Interchange Ability Requirements for a.c., d.c. and a.c./d.c. Pin and Contact-Tube Vehicle Couplers Intended to be used for a.c./d.c. EV Supply Equipment where Protection Relies on Electrical Separation
13	IS 17017 (Part 21/Sec 1) : 2019 IEC 61851-21-1 : 2017 IEC 61851-21-1 : 2017	Electric Vehicle Conductive Charging System Part 21 Electromagnetic Compatibility (EMC) Requirements Section 1 On-board chargers
14	IS 17017 (Part 21/Sec 2) : 2019 IEC 61851-21-2 : 2018 IEC 61851-21-2 : 2018	Electric Vehicle Conductive Charging System Part 21 Electromagnetic Compatibility (EMC) Requirements Section 2 Off-board chargers
15	IS 17017 (Part 22/Sec 1) : 2021 ISO 21084 : 2019 ISO 21084 : 2019	Electric Vehicle Conductive Charging Systems Part 22 AC Charging Configurations Section 1 - AC Charge Point for Light Electric Vehicle
16	IS 17017 (Part 23) : 2021 ISO/IEC 11160-1:1996 ISO/IEC 11160-1:1996	Electric Vehicle Conductive Charging Systems Part 23 dc Electric Vehicle Supply Equipment
17	IS 17017 (Part 24) : 2021 ISO/IEC 18000-64:201	Electric Vehicle Conductive Charging System Part 24 : Digital Communication between a DC Electric Vehicle Supply Equipment and an Electric Vehicle for control of DC Charging
18	IS 17017 (Part 25) : 2021 ISO 6658:2017 ISO 6658:2017	ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM Part 25: DC EV supply equipment where protection relies on electrical separation
19	IS 17017 (Part 31) : 2024	ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM Part 31: ac or dc EV supply equipment for where protection relies on electrical separation
20	IS 17896 (Part 1) : 2022 62751-2:2014+AMD1:2019CSV 62751-2:2014+AMD1:2019CSV	Electric vehicle battery swap system - Part 1: General and Guidance
21	IS 17896 (Part 2) : 2022 62823-:2015+AMD1:2019CSV 62823-:2019+AMD1:2019CSV	Electric vehicle battery swap system - Part 2: Safety requirements
	ETD 51 Standard under development (1)	
	ETD/51/21658	Electric Vehicle Conductive Charging System Part 30 Dual Gun DC EVSE

Standards for Electric Vehicle and Battery (9)

S. no.	IS Number	Title
1	IS 15886 : 2010 Revised In : 2017	Road Vehicles â€" Battery Operated--Vehicles â€" Code Of Practice
2	IS 17191 (Part 1) : 2019 Revised In : 2024	Electric Power Train Vehicles Part 1 Measurement of Electrical Energy Consumption
3	IS 17191 (Part 2) : 2019 Revised In : 2024	Electric Power Train Vehicles Part 2 Method of Measuring the Range
4	IS 17191 (Part 3) : 2019	Electric Power Train Vehicles Part 3 Measurement of Net Power and the Maximum 30 Minute Power
5	IS 17855 : 2022 TR 63262 : 2019 TR 63262 : 2019	Electrically propelled road vehicles - Test specification for lithium-ion traction battery packs and systems - Part 4: Performance testing
6	IS 18073 : 2023	Electric Traction Motor - Performance and Functional Requirements
7	IS 18294 : 2023	Electric Rickshaw E-Kart Construction and Functional Safety Requirements Specification
8	IS 18590 : 2024	Electric Power Train of L Category Vehicles Specific Requirements
9	IS 18606 : 2024	Electric Power Train of M and N Category Vehicles Specific Requirements

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2764
ANSWERED ON 12.12.2024

COAL FIRED ELECTRICITY OUTPUT AND EMISSION

2764. SHRI YADUVEER WADIYAR:

Will the Minister of POWER
be pleased to state:

(a) the data on India's coal-fired electricity output and emissions during the last five years and the current year;

(b) whether the Government has any data on the effectiveness of current technologies and practices in reducing emissions from coal-fired power plants including any recent advancements or pilot projects and if so, the details thereof; and

(c) the measures taken/being taken by the Government to abide by the international conventions during the process of coal-fired electricity output?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) The details of India's coal-fired electricity generation and CO_2 emissions during the last five years and the current year are at Annexure.

(b): In order to reduce emissions, the Government is presently adopting various technologies and practices as mentioned below:

(i) Ministry of Power is promoting installation of efficient Supercritical/ Ultra Supercritical units over Subcritical Thermal Units as these units are more efficient and their CO2 emission per unit of electricity generation is less than subcritical units. Further, GoI has also planned to set up a highly efficient 800 MW Advance Ultra Supercritical (AUSC) thermal power plant.

(ii) To improve the energy efficiency, the Perform Achieve and Trade (PAT) scheme has been implemented in various thermal power plants. Improvement in energy efficiency reduces carbon dioxide emission in thermal power generation.

(iii) Carbon Capture Utilization and Storage (CCUS) project are under implementation in few thermal power plants on pilot basis to reduce carbon dioxide in the flue gases.

(iv) Ministry of Power has issued a policy on Bio-mass Utilization for Power Generation through Co-firing in Coal based Power Plants to use 5-10 % blend of biomass pellets made, primarily of agro-residue along with coal after assessing the technical feasibility.

.....2.

(c): As per updated Nationally Determined Contribution (NDC) submissions to United Nations Framework Convention on Climate Change (UNFCCC) in August 2022, India has committed to achieve 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030, with the help of transfer of technology and low-cost international finance including from Green Climate Fund (GCF). India has achieved non-fossil installed capacity of 211.40 GW (46.52 % of total installed Capacity of 454.45 GW) as on 31.10.2024.

The Government has taken following capacity addition programme in non-fossil sectors to reduce dependence on coal based generation:

i. **13,997.5 MW of Hydro Electric Projects and 6,050 MW of Pumped Storage Projects are under construction and 24,225.5 MW of Hydro Electric Projects and 50,760 MW of PSP are under various stage of planning.**

ii. **7,300 MW of Nuclear Capacity is under construction and 7,000 MW is under various stages of planning/approval.**

iii. **1,27,050 MW of Renewable Capacity is under construction and 89,690 MW is under various stages of tendering.**

Further, Government has undertaken the following steps to promote uptake of Renewable Energy :

i. **Transmission plan for integration of 5,00,000 MW RE capacity is being implemented in a phased manner commensurate with RE capacity**

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

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

iv. **Construction of Green Energy Corridors and putting in place 13 Renewable Energy Management Centres.**

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

vi. **Production Linked Incentive (PLI) Scheme: The Government of India is implementing the Production Linked Incentive (PLI) Scheme for High Efficiency Solar PV Modules, for achieving domestic manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV modules, with an outlay of Rs. 24,000 crore.**

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2764 ANSWERED IN THE LOK SABHA ON 12.12.2024

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Details of coal-fired electricity generation and CO_2 emissions during the last five years and the current year:

Year	Coal fired Electricity Generation (BUs)	CO2 emission (Million Tonne) from Coal Based Generating stations
2019-20	961.21	867.92
2020-21	950.93	853.82
2021-22	1041.48	943.04
2022-23	1145.90	1039.55
2023-24	1260.9	1135.32*
2024-25 (upto Oct. 2024)	760.67	684.91**

*** Provisional Figures**

**** CO_2 baseline data report for emission is prepared only year wise, hence tentative figures for 2024-25(upto October 2024) is calculated based on previous year data on pro-rata basis indicated.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2765
ANSWERED ON 12.12.2024

HYDROPOWER DEVELOPMENT IN NORTH-EASTERN REGION

†2765. SHRI HARENDRA SINGH MALIK:

Will the Minister of POWER be pleased to state:

(a) the steps taken/being taken by the Government to harness the hydroelectric potential of the North-Eastern Region of the country;

(b) the manner in which these initiatives aim to address the challenges associated with hydropower development in the region; and

(c) the details of financial assistance provided for it?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The Government has taken several policy initiatives, for development of hydropower in the country including the North Eastern Region (NER) which are as under:-

1. **A number of measures were approved on 08.03.2019 for promoting hydro power viz., (i) Declaring Large Hydro Power (projects with capacity more than 25 MW) as Renewable Energy source (ii) Hydro Purchase Obligation (HPO) as a separate entity within Non-solar Renewable Purchase Obligation (RPO) (iii) Tariff rationalization measures for bringing down hydro power tariff (iv) Budgetary support for Flood Moderation/Storage Hydro Electric Projects (HEPs) (v) Budgetary support for Cost of Enabling Infrastructure, i.e. roads/bridges. The budgetary support has been widened to include the cost incurred for the construction of: (i) transmission line from power house to the nearest pooling point including upgradation of pooling substation of State /Central Transmission Utility (ii) ropeways (iii) railway siding, and (iv) communication infrastructure.**

.....2.

2. **Scheme of Central Financial Assistance (CFA) to fund the equity portion of the State Governments of NER for development of HEPs, capped at 24% of the total project equity subject to a maximum of ₹750 crore per project with provision to revisit the limit of ₹750 crore on a case-to-case basis.**

3. **Ministry of Power vide orders dated 22.12.2021 and 11.05.2023 has indicated 58 HEPs with installed capacity of 44.7 GW in Arunachal Pradesh for implementation by hydro CPSUs. Memorandum of Agreement for 13 projects, totaling 12.7 GW, were signed between the Government of Arunachal Pradesh and CPSUs.**

4. **Waiver of ISTS charges on transmission of power from new Hydro Electric Projects as well as Pumped Storage Projects.**

5. **A number of hydro projects which were stuck up for a long time have been revived during last few years, due to persistent efforts and policies of the Government. These include Teesta VI (500 MW) and Rangit IV (120 MW) in Sikkim and Lower Subansiri (2000 MW) and Dibang project (2880 MW) in Arunachal Pradesh.**

(b) : These measures are envisaged to be beneficial for development of hydro projects in NER, which are located in remote and far-flung areas and requires development of extensive associated infrastructure such as roads, bridges for transportation of heavy, large sized equipment & machinery to the project site. Further, Central Financial Assistance to fund the equity portion of the State Governments of NER for development of HEPs would encourage state governments to resolve the issues of delay in land acquisition, rehabilitation & resettlement and local law & order.

(c) : The details of Central assistance provided for the development of hydropower in the North Eastern States are as under:

1. **An amount of ₹164.70 crore towards cost of Downstream protection works for Subansiri Lower HEP (2000 MW) has been released.**

2. **An amount of ₹109 crores has been reimbursed against expenditure incurred towards Flood Moderation component of Dibang Multi Purpose Project (2880 MW).**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2766
ANSWERED ON 12.12.2024

ENERGY CONSERVATION PROGRAMMES

2766. DR. NISHIKANT DUBEY:

Will the Minister of POWER
be pleased to state:

(a) whether the performance of the country with regard to energy conservation is satisfactory as compared to other countries of the world;

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

(c) the details of energy conservation programmes being implemented by the Government; and

(d) the extent to which success has been achieved in meeting the set targets?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : The performance of the country with regard to energy conservation is one of the best when compared to other countries of the world. As per the estimates of International Energy Agency, the improvement of global energy intensity during the period from 2010-19 was 2% whereas same for India was 2.5%. During the period from 2021-24, the global energy intensity improved by 1.3% whereas, India's energy intensity improved by 1.6%. It is estimated that in 2024 itself the global energy intensity is expected to improve by around 1% in 2024 whereas, India's energy intensity is expected to improve by 2.5%. (Energy intensity has been measured in terms of Mega Joule/USD at 2015 Purchasing Power Parity in the above estimations.)

.....2.

(c) to (d) : The major Energy Conservation programmes being implemented by Government include Perform, Achieve and Trade for industries, Standards and Labelling scheme for appliances, Unnat Jyoti by Affordable LEDs for All (UJALA) scheme, Energy Conservation Building Code and adoption of electric mobility.

As per the report of Bureau of Energy Efficiency, a statutory body under Ministry of Power, the implementation of various energy efficiency schemes/ programmes have led to an overall energy savings of 53.60 Million tonnes of Oil equivalent (MTOE) which is about 5.89% of the total primary energy supply of the country for the year 2023-24.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2770
ANSWERED ON 12.12.2024

POWER PROJECTS IN MAHARASHTRA

2770. SHRI NILESH DNYANDEV LANKE:
SHRI BAJRANG MANOHAR SONWANE:
SHRI MOHITE PATIL DHAIRYASHEEL RAJSINH:
DR. AMOL RAMSING KOLHE:
PROF. VARSHA EKNATH GAIKWAD:
SMT. SUPRIYA SULE:
SHRI BHASKAR MURLIDHAR BHAGARE:
SHRI AMAR SHARADRAO KALE:
SHRI SANJAY DINA PATIL:

Will the Minister of POWER
be pleased to state:

(a) the details on new power projects proposed to be constructed and under construction to meet the rising demand of electricity across the country, State/UT-wise;

(b) the timeline for completion of power projects currently under development in the State of Maharashtra along with the estimated additional capacity of their contribution so far;

(c) the estimated costs of the new power projects in the pipeline;

(d) whether there is a provision for foreign direct investment or public-private partnerships in the new power projects to ensure timely completion and cost-effectiveness and if so, the details thereof;

(e) whether the Government is coordinating with State Governments to address the regional disparities in power supply by prioritizing the projects in underserved areas and if so, the details thereof;

(f) whether the Government has taken steps to ensure that new power projects are sufficient to meet the projected future electricity demand, particularly in urban and industrial areas;

(g) the data on the expected impact of new power projects on energy scarcity, employment and economic growth during the next five years; and

(h) the key challenges faced in the development of new power projects and manner in which Government proposes to overcome them?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (c): According to the information available with Central Electricity Authority (CEA), the details of new power projects in the pipeline are as follows:

Fuel	Stage	No. of Projects	Capacity (In GW)	Cost (Rs Cr.)
Coal & Lignite	Under Construction	22	29.2	2,81,450
	Under Bidding	10	12.2	1,01,784
	Under Planning	30	39.3	3,27,929

Hydro	Under Construction	33	20	1,75,097
	Under Bidding	01	.09	900
	Under Planning	15	10.14	101400
Nuclear	Under Construction	4	7.3	1,29,908*
	Accorded Approval	-	7.0	
Solar/Wind	Under Construction	-	140.5	6,32,520
	Under Bidding	-	84.2	3,79,305

* Under revision

The state-wise details are in Annexure-I.

(b) : Two Pumped Storage Projects (PSPs) in Maharashtra—Bhivpuri (1,000 MW) and Bhavali (1,500 MW)—have received concurrence from the Central Electricity Authority (CEA). Additionally, nine PSPs are currently undergoing Survey & Investigation (S&I) for the preparation of Detailed Project Reports (DPRs) in the state.

As of 31-10-2024, one thermal power project at Bhusawal, Unit-6 (660 MW), is under implementation and is expected to be commissioned by January 2025. Furthermore, two coal-based power plants—Koradi (2×660 MW) and Chandrapur (800 MW)—are under planning.

(d) : Government of India vide their Gazette Notification No. 237 dated 22nd October 1991 have permitted foreign investment upto 100% through automatic route in power sector (except atomic energy).

(e) to (g) : In December 2022, the Central Government notified the Electricity Rules, requiring Distribution Licensees to prepare Resource Adequacy Plans to ensure 24x7 power supply. State Commissions are mandated to issue regulations aligned with the Central Government guidelines on Resource Adequacy and to review compliance, imposing penalties for non-compliance as necessary. As part of this, CEA has been supporting States in the preparation of Resource Adequacy Plans.

CEA has a robust mechanism of capturing data regarding power requirement in various regions of the country and accordingly power projects are planned. Further, there are five Regional Power Committees (RPCs) which deliberate upon power requirements of the constituent states.

As per CEA, the country's peak power demand is projected to reach approximately 345 GW by 2030. To meet this demand, the installed capacity is set to increase from the current 442 GW (as of FY 2024) to 777 GW by 2030. This expansion includes 500 GW of non-fossil energy capacity. The installed capacity includes capacities from nuclear, hydro, solar, wind, coal and lignite sources besides storage.

As per the National Electricity Plan (NEP), a capacity addition of 211 GW during 2022-27 will require an estimated manpower of 1,50,970, comprising 1,15,480 technical personnel and 35,490 non-technical personnel. Similarly, for a capacity addition of 291 GW during 2027-32, the estimated manpower requirement will be 2,27,400, including 1,74,210 technical and 53,190 non-technical personnel.

These new power projects are expected to meet the country's electricity demand and significantly boost India's economy by driving increased industrial production, creating jobs, and fostering overall economic growth.

(h) : The development of new power projects faces the following general challenges:

(i) land acquisition and rehabilitation & resettlement issues

(ii) delays in environment and forest clearances

(iii) Law & Order issues

(iv) Contractual issues and litigation, and

(v) Availability of skilled workforce.

Additionally, geological surprises, natural calamities, and inter-state disputes are major challenges for hydroelectric projects. Delays in securing adequate coal linkages, along with constraints in railway lines and sidings, create hurdles for coal-based power projects.For nuclear projects, major challenges include the high upfront cost of reactors, regulatory hurdles, the availability of suitable land, and the dependency on imported nuclear fuel.

To ensure timely completion of projects, the Government has implemented a robust monitoring mechanism. The CEA monitors the progress of under-construction projects through site visits and regular meetings with developers to resolve critical issues. The Ministry of Power conducts regular reviews with state agencies to address inter-ministerial constraints and facilitate the resolution of outstanding matters. Additionally, project milestones are incorporated into the annual MoU between CPSUs and the Ministry of Power, with progress reviewed during Quarterly Performance Review meetings. The Project Monitoring Group (PMG) portal enables monthly project reviews for proactive governance. The PMG portal highlights pending issues, allowing developers to raise concerns for resolution via the PMG Portal. These mechanisms aim to ensure the timely completion of power projects and overcome the challenges involved.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (c) OF UNSTARRED QUESTION NO. 2770 ANSWERED IN THE LOK SABHA ON 12.12.2024

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Details of Under Construction Thermal Projects

State/UT	Thermal		
	No. of Projects	Capacity (In MW)	Cost (Rs. Crore)
Bihar	2	1980	17901
Chhattisgarh	2	2400	25321
Haryana	1	800	6900
Jharkhand	2	3060	24082
Madhya Pradesh	2	3200	29634
Maharashtra	1	660	6350
Odisha	2	3720	39057
Tamil Nadu	3	3440	39679
Telangana	1	4000	34543
Uttar Pradesh	5	5280	53416
West Bengal	1	660	4567
Total	22	29200	281450

Details of Hydro Projects Including PSPs

State/UT	Under Construction			DPRs Concurred			Survey & Investigation*	
	No. of Projects	Capacity	Cost	No. of Projects	Capacity	Cost	No. of Projects	Capacity
Andhra Pradesh	4.0	3740.0	24639.5				14.0	15850.0
Arunachal Pradesh	2.0	4880.0	53123.9	14.0	13798.0	116300.0	7.0	17606.0
Assam	1.0	120.0	2450.5					
Chhattisgarh							2.0	1800.0
Gujarat							6.0	3940.0
Himachal Pradesh	9.0	2446.0	28352.5	4.0	937.0	8291.6		
Jammu and Kashmir	5.0	3051.5	22848.6	4.0	3119.0	29800.1	2.0	1060.0
Karnataka	1.0	2000.0	6709.6				2.0	1900.0
Kerala	2.0	100.0	1150.0				1.0	800.0
Ladakh							1.0	95.0
Madhya Pradesh				1.0	1920.0	11834.5	1.0	640.0
Maharashtra				2.0	2500.0	15410.3	9.0	16700.0
Meghalaya				1.0	85.0	965.4	2.0	270.0
Nagaland				1.0	186.0	1994.7		
Odisha				1.0	600.0	3394.5	1.0	500.0
Punjab	1.0	206.0	3929.9					
Rajasthan							4.0	6160.0
Sikkim	2.0	620.0	6686.3	1.0	520.0	3594.7		

Tamil Nadu	**1.0**	**500.0**	**3523.4**					
Uttar Pradesh							**7.0**	**13020.0**
Uttarakhand	**4.0**	**2264.0**	**20300.5**	**3.0**	**815.0**	**4318.2**	**1.0**	**660.0**
West Bengal	**1.0**	**120.0**	**1381.8**	**1.0**	**1000.0**	**4234.9**	**1.0**	**90.0**
Total	**33.0**	**20047.5**	**175096.6**	**33.0**	**25480.0**	**200138.8**	**61.0**	**81091.0**

***The timelines and cost for commissioning of the projects are determined upon the completion of the Detailed Project Report.**

Details of Under Construction Nuclear Power Projects

State	Location	Project	Capacity (MW)	Sanctioned Cost (Rs crore)
Rajasthan	**Rawatbhata**	**RAPP-7&8**	**2x700 MW**	**12,320***
Tamil Nadu	**Kundankulam**	**KKNPP-3&4**	**2x1000 MW**	**39,849****
		KKNPP-5&6	**2x1000 MW**	**49,621**
	Kalapakkam	**PFBR#**	**1x500 MW**	**7,524@**
Haryana	**Gorakhpur**	**GHAVP-1&2**	**2x700 MW**	**20,594**

*** under revision to Rs. 22924 crore ** under revision to Rs68893 crore**

@ In addition to sanctioned cost of Rs. 6840 crore, Atomic Energy Commission approved Rs. 684 crore towards interim expenditure

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2772
ANSWERED ON 12.12.2024

CAPACITY OF POWER PLANTS

2772. SHRI ARVIND DHARMAPURI:

Will the Minister of POWER be pleased to state:

(a) the details of total number and capacity of power plants in the country supplying electricity to neighbouring countries, public and private ownership-wise;

(b) the data on power plants operated and owned by Indian PSUs and private companies in foreign countries, including their capacity and location; and

(c) the revenue generated from cross-border electricity trade and power plant operations abroad during the last five years and the current year?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The details of power plants in India supplying Electricity to neighboring countries are given at Annexure.

(b) to (c) : Presently, No power plant is being operated and owned by Indian PSUs and private companies in foreign countries. However, Rampal Maitree Power Project (2x660 MW) in Bangladesh has been established by Bangladesh India Friendship Power Company (BIFPCL) [(50:50 JV between NTPC & Bangladesh Power Development Board (BPDB)]. Tata Power also had 26% stake in Dagachhu Hydro power plant (126 MW) in Bhutan.

Import/Export of Electricity is done either through power exchange or through bilateral agreement between buying and selling entities on commercial terms as per PPA.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2772 ANSWERED IN THE LOK SABHA ON 12.12.2024

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Details of power plants in India supplying Electricity to Bangladesh:

Sl. No.	Project with installed capacity	Company Name	Ownership	Quantum Exported (MW)
1.	Singrauli (2000 MW)	NTPC	Public	250 MW
2.	Rihand-I (1000 MW)			
3.	Rihand-II (1000 MW)			
4.	National Capital Thermal Power Station Dadri-II (980 MW)			
5.	Farakka STPS STAGE-I&II, 1600 MW (3x200+2x500)			
6.	Kahalgaon STPS STAGE-I, 840 MW (4x210)			
7.	Kahalgaon STPS STAGE-II, 1500 MW (3x500)			
8.	Talchar STPS STAGE-I, 1000 MW (2x500)			
9.	Korba STPS-I (2100 MW)			
10.	Vindhyachal STPS-I (1260 MW)			
11.	Vindhyachal -II (1000 MW)			
12.	Vindhyachal -III (1000 MW)			
13.	Sipat-II (1000 MW)			
14.	Adani Power Jharkhand Ltd., Godda (1600 MW)	Adani Power Jharkhand Limited (APJL)	Private	1,600 MW
15.	Sembcorp Energy India Limited Project2, Andhra Pradesh (1320 MW)	Sembcorp Gayatri Pvt. Ltd (SGPL)	Private	450 MW

In addition, Power is being exported from DVC (300 MW) & Tripura State Electricity Corporation (TSECL) (160 MW) to Bangladesh. Power is also exported from Manipur State Power Distribution Company Limited (MSPDCL) (3 MW) to Myanmar. Further, Nepal and Bhutan import electricity from Indian power exchange(s).

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2777
ANSWERED ON 12.12.2024

NTPC DOUBLE PIPELINE FROM UJANI DAM

2777. MS. PRANITI SUSHILKUMAR SHINDE:

Will the Minister of POWER
be pleased to state:

(a) whether the proposal sent by the Solapur Municipal Corporation to use one of the double pipelines of National Thermal Power Corporation (NTPC) from Ujani Dam for supply of drinking water to Solapur city on the lines of the Nagpur Municipal Corporation was rejected by the Solapur NTPC; and

(b) if so, the details thereof and the reasons therefor?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (b) : Thermal Power Plant of NTPC Ltd., Solapur has designed and built 2 pipelines of 72 MLD capacity each from Ujani reservoir to NTPC-Solapur to meet water requirements for its 2 X 660 MW capacity power plant for power generation. A request from District Administration, Solapur has been received for sparing one among the two pipelines for supplying water to Solapur Municipal Corporation(SMC). Non-availability of one pipeline will impact the reliable generation of power from NTPC Solapur as both pipelines are required to meet the normative water requirement of the plant. Further, in case of single long-distance pipeline, outage of the same will lead to complete stoppage of water supply to the plant.

However, for supply of drinking water to Solapur city and neighbouring project affected villages (PAVs), an agreement was made with Solapur Municipal Corporation (SMC) on 28.09.2016. As per agreement, NTPC committed to pay Rs. 250 Crores in phased manner for augmentation of water supply infrastructure including pipeline from Ujani Dam. NTPC has already paid Rs. 240.07 Cr. till date.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2804
ANSWERED ON 12.12.2024

GREEN HYDROGEN HUB

2804. SHRI GADDIGOUDAR PARVATAGOUDA CHANDANAGOUDA:

Will the Minister of POWER
be pleased to state:

(a) whether the National Thermal Power Corporation Limited (NTPC) has recently set up country's largest Green Hydrogen Production Facility – 'Green Hydrogen Hub' in the country;

(b) if so, the details along with its features thereof;

(c) whether the Government has any plan to set up more such facility hubs in various States in the country particularly in Karnataka; and

(d) if so, the details thereof and the time by which those are likely to be set up?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : NTPC Green Energy Limited (NGEL), a wholly owned subsidiary of NTPC Ltd., is in the process of setting up a Green Hydrogen Hub in Pudimadaka, Anakapalli District in the state of Andhra Pradesh, for which 1200 acres of land have been registered and is in its possession. The Hub is proposed to be developed in phases and after completion, it is planned to produce Green Hydrogen for production of Green Chemicals (Ammonia, Methanol, Sustainable Aviation Fuel/Green Urea).

(c) & (d) : The Ministry of New and Renewable Energy is implementing the National Green Hydrogen Mission, approved by the Union Cabinet in January, 2023, to make India a global hub of production, usage and export of Green Hydrogen and its derivatives. Under the Mission, it is proposed to be set up at least two Green Hydrogen hubs by FY 2025-26. Further, the Govt. of Karnataka has planned to notify "Karnataka Green Hydrogen Policy 2024-2029" to facilitate development of Green Hydrogen production in the state of Karnataka.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2807
ANSWERED ON 12.12.2024

SETTING UP OF THERMAL POWER PLANT IN KHAJURAHO

2807. SHRI VISHNU DATT SHARMA:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has any proposal or plan to set up thermal power plant in Khajuraho in Chhattarpur district of Madhya Pradesh considering the requirement of energy in the Bundelkhand region;

(b) if so, the details regarding the status of the project along with the timelines of execution of the said project; and

(c) 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 (c) : Power generation is a de-licensed activity under Section-7 of Electricity Act, 2003 and any generating company may establish, operate and maintain a generating station without obtaining license under this Act if it complies with the technical standards related to connectivity with the grid. However, at present there is no proposal or plan to set up a thermal power plant in Khajuraho of Chhatarpur district of Madhya Pradesh by the Government.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2836
ANSWERED ON 12.12.2024

LED BULBS UNDER UJALA

2836. DR. K SUDHAKAR:

Will the Minister of POWER be pleased to state:

(a) the details of the number of LED bulbs distributed by the Government under the UJALA scheme across the country, State-wise;

(b) the data regarding distribution of LED bulbs in Chikkaballapur Parliamentary Constituency under the scheme;

(c) whether 100% electrification of all households have been done in Karnataka and if so, the details thereof, district-wise;

(d) the details of the steps taken/being taken by the Government to ensure that power supply remains accessible to the farmers regularly across the State of Karnataka; and

(e) the details of comparison of power tariffs given to farmers across the country?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Energy Efficiency Services Limited (EESL), a joint venture of CPSEs under the Ministry of Power is the implementing agency for distribution of LED bulbs under UJALA scheme. The state wise details of LED bulbs distribution under the UJALA scheme are at Annexure-I.

(b) : A total of approximately 97.84 lakh LED bulbs have been distributed in the Chikkaballapur Parliamentary Constituency to date.

(c) : Government of India launched the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) to electrify all willing households in rural areas and poor households in urban areas across the country. During this scheme, 1,82,856 households were electrified in Karnataka. The state has reported that all eligible households identified as on 10.10.2017 were electrified by 31.01.2019. (District-wise details are provided in Annexure-II.)

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Government of India is supporting states in electrifying identified households of Particularly Vulnerable Tribal Groups (PVTGs) under the Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM-JANMAN) and tribal households under the Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DA-JGUA).

As on now, based on requests from the State of Karnataka, projects worth ₹3.77 crore have been sanctioned for the electrification of 1,615 PVTG households under PM-JANMAN (details provided in Annexure-III).

Additionally, under the New Solar Power Scheme, off-grid solar-based electrification works have been approved for 179 PVTG households in Karnataka, including 108 in Kodagu and 71 in Mysuru districts.

(d) : The Government of India has been supporting State Governments through various schemes such as Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), SAUBHAGYA, and the Revamped Distribution Sector Scheme (RDSS) to ensure reliable power supply for all consumers, including farmers.

Under DDUGJY, projects for separating mixed-load feeders with high agricultural load were undertaken to enable judicious rostering of power supply for agricultural and non-agricultural consumers in rural areas. In Karnataka, feeder segregation projects worth ₹865 crore have been implemented, covering 11,783 ckm of 11kV lines.

(e) : According to data compiled and published by the Central Electricity Authority, state-wise details of agricultural power tariffs across the country for the financial year 2022-23 are provided in Annexure–IV.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2836 ANSWERED IN THE LOK SABHA ON 12.12.2024

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S. No.	States and UTs	Number of LED bulbs Distributed
1	Andaman Nicobar	400,000
2	Andhra Pradesh	2,20,40,227
3	Arunachal Pradesh	4,99,498
4	Assam	71,92,072
5	Bihar	1,96,08,609
6	Chandigarh	5,54,283
7	Chhattisgarh	1,08,22,335
8	Dadra & Nagar Haveli	1,63,808
9	Daman & Diu	1,42,623
10	Delhi	1,34,31273
11	Goa	10,05,890
12	Gujarat	4,14,48,713
13	Haryana	1,56,08,119
14	Himachal Pradesh	86,48,483
15	Jammu and Kashmir	84,86,579
16	Jharkhand	1,36,45,874
17	Karnataka	2,42,64,486
18	Kerala	1,54,29,919
19	Ladakh	2,30,630
20	Lakshadweep	2,00,000
21	Madhya Pradesh	1,75,74,110
22	Maharashtra	2,19,86,569
23	Manipur	2,99,934
24	Meghalaya	4,33,789
25	Mizoram	6,15,332
26	Nagaland	10,99,038
27	Odisha	5,22,70,570
28	Puducherry	6,09,251
29	Punjab	30,16,739
30	Rajasthan	1,73,21,034
31	Sikkim	1,64,000
32	Tamil Nadu	43,63,183
33	Telangana	28,75,082
34	Tripura	10,54,437
35	Uttar Pradesh	2,62,95,772
36	Uttarakhand	56,73,850
37	West Bengal #	92,29,228
Total		36,87,05,340

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 2836 ANSWERED IN THE LOK SABHA ON 12.12.2024

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District-wise details of Households electrified in the SAUBHAGYA scheme in State of Karnataka

District	Total
Bagalkot	11404
Belgaum	28211
Belgaum-Hukeri	8720
Bellary	15425
Bidar	17174
Bijapur	4682
Chikmagalur	1052
Dakshina Kannada	1069
Dharwad	7389
Gadag	7871
Gulbarga	13604
Haveri	12938
Kodagu	4138
Koppal	8120
Raichur	13704
Shimoga	12
Udupi	3537
Uttara Kannada	7516
Yadgir	16290
All District	182856

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ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 2836 ANSWERED IN THE LOK SABHA ON 12.12.2024

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PVTG household electrification works sanctioned under RDSS for the State of Karnataka

Name of Districts	No. of households sanctioned	No. of households electrified till date
Chamarajanagar	197	176
Kodagu	604	266
Mysuru	805	470
Dakshin Kannada	1	1
Udupi	8	8
Total	1,615	921

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ANNEXURE-IV

ANNEXURE REFERRED IN REPLY TO PART (e) OF UNSTARRED QUESTION NO.2836 ANSWERED IN THE LOK SABHA ON 12.12.2024

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AGRICULTURE 10 HP (2000 Units/Month)				
क्रमांक Sr. No.	Name of Utility	Av. Rate (P/KWh)	Duty/Tax (P/KWh)	Total (P/KWh)
1	Andaman & Nicobar Island	196	0	196
2	Andhra Pradesh			
	With Demand Side Management Measures (DSM)	350	0	350
	Without Demand Side Management Measures (DSM)	450	0	450
3	Arunachal Pradesh	310	0	310
4	Assam	486	24	510
5	Bihar	570	4	574
6	Chandigarh	260	0	260
7	Chhattisgarh	555	0	555
8	Dadra & Nagar Haveli	90	0	90
9	Daman & Diu	90	0	90
10	Delhi-(BYPL/BRPL/TPDDL)	197	8	205
11	Delhi-(NDMC)	197	8	205
12	Goa	159	20	179
13	Gujarat	90	0	90
14	Gujarat-(Torrent Power Ltd., Ahmedabad)	340	0	340
15	Gujarat-(Torrent Power Ltd., Surat)	70	0	70
16	Haryana	667	0	667
17	Himachal Pradesh	395	39	434
18	Jammu & Kashmir	90	12	102
19	Jharkhand	510	0	510
20	Karnataka	0	0	0
21	Kerala	236	23	259
22	Ladakh	120	15	135
23	Madhya Pradesh	625	0	625
24	Maharashtra	352	0	352
25	Maharashtra - Mumbai-(B.E.S.T)	387	0	387
26	Maharashtra - Mumbai-(Adani Electricity)	547	0	547
27	Maharashtra - Mumbai-(TATA's)	389	0	389
28	Manipur	479	0	479
29	Mizoram	399	0	399
30	Meghalaya	341	6	347
31	Nagaland	320	0	320
32	Odisha	155	3	158
33	Puducherry With Govt. Subsidy	0	0	0
34	Punjab With Govt. Subsidy	0	0	0
	Without Govt. Subsidy	566	0	566
35	Rajasthan	570	4	574
36	Tamil Nadu	0	0	0
37	Telangana			
	Corporate Farmers	252	0	252
	Other than Corporate Farmers	2	0	2
38	Tripura	477	36	513
39	Uttarakhand	215	0	215
40	Uttar Pradesh (URBAN)	665	0	665
	(RURAL)	235	0	235
41	West Bengal	510	0	510
42	D.V.C. (Jharkhand Area)	315	0	315

AGRICULTURE 5 HP (1000 Units/Month)				
क्रमांक Sr. No.	Name of Utility	Av. Rate (P/KWh)	Duty/Tax (P/KWh)	Total (P/KWh)
1	Andaman & Nicobar Island	196	0	196
2	Andhra Pradesh			
	With Demand Side Management Measures (DSM)	350	0	350
	Without Demand Side Management Measures (DSM)	450	0	450
3	Arunachal Pradesh	310	0	310
4	Assam	486	24	510
5	Bihar	570	4	574
6	Chandigarh	260	0	260
7	Chhattisgarh	555	0	555
8	Dadra & Nagar Haveli	90	0	90
9	Daman & Diu	90	0	90
10	Delhi-(BYPL/BRPL/TPDDL)	197	8	205
11	Delhi-(NDMC)	197	8	205
12	Goa	159	20	179
13	Gujarat	90	0	90
14	Gujarat-(Torrent Power Ltd., Ahmedabad)	340	0	340
15	Gujarat-(Torrent Power Ltd., Surat)	70	0	70
16	Haryana	667	0	667
17	Himachal Pradesh	401	39	440
18	Jammu & Kashmir	90	12	102
19	Jharkhand	510	0	510
20	Karnataka	0	0	0
21	Kerala	236	23	259
22	Ladakh	120	15	135
23	Madhya Pradesh	599	0	599
24	Maharashtra	352	0	352
25	Maharashtra - Mumbai-(B.E.S.T)	387	0	387
26	Maharashtra - Mumbai-(Adani Electricity)	547	0	547
27	Maharashtra - Mumbai-(TATA's)	389	0	389
28	Manipur	479	0	479
29	Mizoram	399	0	399
30	Meghalaya	341	6	347
31	Nagaland	320	0	320
32	Odisha	155	3	158
33	Puducherry With Govt. Subsidy	0	0	0
34	Punjab With Govt. Subsidy	0	0	0
	Without Govt. Subsidy	566	0	566
35	Rajasthan	570	4	574
36	Tamil Nadu	0	0	0
37	Telangana			
	Corporate Farmers	253	0	253
	Other than Corporate Farmers	3	0	3
38	Tripura	366	27	393
39	Uttarakhand	215	0	215
40	Uttar Pradesh (URBAN)	665	0	665
	(RURAL)	235	0	235
41	West Bengal	510	0	510
42	D.V.C. (Jharkhand Area)	315	0	315

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2841
ANSWERED ON 12.12.2024

ELECTRICITY ACT 2003

2841. SHRI KONDA VISHWESHWAR REDDY:

Will the Minister of POWER be pleased to state:

(a) whether the "Works of Licensees Rules", issued in 2006 under the Electricity Act, 2003, are applicable to transmission companies empowered under Section 164 of the Act and operating under the provisions of the Telegraph Act, 1885;

(b) if so, the details thereof; and

(c) whether any transmission company has adopted these rules since the Act was passed in 2003 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) to (c) : Under Section 164 of the Act, the Appropriate Government may grant Telegraph Authority powers to licensees, electricity suppliers, or public officers for placing electric lines.

Further, under provisions of Section 67 of the Act, transmission and distribution licensees may lay down or place electric supply lines and carry out necessary works which may include breaking or altering existing infrastructure. The Works of Licensees Rules, 2006, issued under Section 67(2) of the Act, prescribe the procedures, inter-alia, for obtaining permission, determining and paying compensation, and restoring affected property. However, the provisions under these rules shall not affect the powers conferred upon any licensee under Section 164 of the Act.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2849
ANSWERED ON 12.12.2024

UNIFORM PROTECTION PROTOCOL

2849. DR. M P ABDUSSAMAD SAMADANI:

Will the Minister of POWER
be pleased to state:

(a) the details of the Uniform Protection Protocol (UPP) prepared by the National Power Committee (NPC) including its key objectives and timelines for implementation;

(b) the specific measures outlined in the UPP to ensure grid stability and security in light of the target to integrate 450 GW renewable energy into the National Grid by 2030 and 2100 GW by 2047; and

(c) the current status and timeline for the transition to Five-Minute Interface Energy Meters and the deployment of the Advanced Metering Infrastructure (AMR) system across the country?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Uniform Protection Protocol (UPP), prepared by National Power Committee (NPC), was approved in the 15th meeting of NPC held on 14.11.2024. The key objectives of UPP include proper co-ordination of protection system in order to protect the equipment/system from abnormal operating conditions, isolate the faulty equipment and avoid unintended operation of protection system.

The UPP is applicable to all Regional entities, State/Central/Private Generating Companies/ Generating Stations, State Load Dispatch Centers (SLDCs), Regional Load Dispatch Centers (RLDCs), Central Transmission Utility (CTU), State Transmission Utilities (STUs), Transmission Licensees and Regional Power Committees (RPCs), connected at 220 kV (132 kV for North Eastern Region) and above.

.....2.

During 15th NPC meeting deliberations, all RPCs informed that they have already adopted the Uniform Protection Protocol and same is under implementation.

(b) : The Uniform Protection Protocol addresses the protection requirements for thermal and hydro generating units, renewable energy generations (REGs), battery energy storage system (BESS), substations, transmission lines, and HVDC terminals and also envisage the General Philosophy of Protection System which covers the Objective, Design Criterion fault clearance time, reliability, sensitivity and other details, which will be implemented uniformly and ensure grid stability and security in light of the target to integrate 450 GW renewable energy into the National Grid by 2030 and 2100 GW by 2047.

(c) : The Technical Specifications (TS) of Five Minutes Interface Energy Meters (IEMs) with Automatic Meter Reading (AMR) and Meter Data Processing (MDP) for the Interstate Transmission System (ISTS) has already been finalized. Action has been initiated for preparation of Detail Project Report (DPR) for deployment of Five Minutes IEMs with Advance Metering Infrastructure system at ISTS (Inter State Transmission System) level.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2851
ANSWERED ON 12.12.2024

ADDITIONAL DEMAND OF POWER

2851. SHRI V K SREEKANDAN:

Will the Minister of POWER be pleased to state:

(a) whether it is a fact that the peak power demand in the country would grow at a higher rate of 15GW per annum during the next six years compared with 11GW per annum during the last one decade;

(b) if so, the details thereof;

(c) whether it is true that about 85 GW of additional power demand would be added during the solar hours and more than 90 GW would be added to the peak demand by 2030 during the non-solar hours; and

(d) 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) : The details of all India peak electricity demand during the last ten years from 2014-15 to 2023-24, showing an average annual growth of 11 GW, are as given Annexure-I.

Further, as per projections of Central Electricity Authority (CEA), the peak power demand from 2024-25 to 2029-30 is projected to increase at an average annual growth of 18 GW during Solar hours and 16 GW during Non-Solar hours. The details are given at Annexure-II.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 2851 ANSWERED IN THE LOK SABHA ON 12.12.2024

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Details of all India peak electricity demand during the last ten years from 2014-15 to 2023-24:

FY	Peak Demand (GW)
2014-15	148
2015-16	153
2016-17	160
2017-18	164
2018-19	177
2019-20	184
2020-21	190
2021-22	203
2022-23	216
2023-24	243
Average annual growth = 11 GW	

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 2851 ANSWERED IN THE LOK SABHA ON 12.12.2024

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Details of Peak demand projection from 2024-25 to 2029-30:

FY	Peak Demand (GW) Solar hours	Peak Demand (GW) Non-Solar hours
2024-25	253*	235*
2026-27	289	265
2029-30	345	317
Average annual growth	18 GW	16 GW

***During 2024-25 (till October 2024), maximum peak demand is 250 GW during Solar hours and 236 GW during Non-Solar hours.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2872
ANSWERED ON 12.12.2024

ESTABLISHMENT OF EV CHARGING STATIONS

2872. MS. S JOTHIMANI:

Will the Minister of POWER
be pleased to state:

(a) the details of the number of Electric Vehicle (EV) Charging Stations currently operational in the country, State/UT-wise;

(b) whether the Government has any plan to establish EV charging stations at a frequent distance and if so, the details thereof;

(c) whether the Government has had any consultations with State Governments on the same; and

(d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : As per data available with Bureau of Energy Efficiency (BEE), 25,202 nos. of public EV charging stations are deployed in the country. Details of State-wise Public Charging Stations deployed are at Annexure.

(b) : Ministry of Power's "Guidelines for Installation and Operation of Electric Vehicle Charging Infrastructure – 2024", dated 17th September 2024, suggests the following deployment density for EV charging infrastructure:

- **At least one charging station may be located within a 1 km x 1 km grid in urban areas as notified by respective state governments.**
- **EV Charging Stations may be located every 20 km on both sides of highways, expressways, and major roads.**
- **For long range and heavy duty EVs, 1 fast-charging station (with at least two EV chargers of minimum 240 kW capacity each) at every 100 km on each side of the designated expressways, highways and major roads may be located. Cities / Urban Development Authorities / States may locate these facilities in urban regions within areas such as transport hubs or bus depots.**

(c) to (d) : Ministry of Power consulted relevant stakeholders including State agencies while finalizing these guidelines.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2872 ANSWERED IN THE LOK SABHA ON 12.12.2024

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State / UT wise deployed Public EV charging stations (PCS)

S. No.	State Name	No. of PCS
1.	Andaman & Nicobar	4
2.	Andhra Pradesh	601
3.	Arunachal Pradesh	41
4.	Assam	276
5.	Bihar	347
6.	Chandigarh	13
7.	Chhattisgarh	271
8.	Delhi	1941
9.	Goa	137
10.	Gujarat	992
11.	Haryana	709
12.	Himachal Pradesh	106
13.	Jammu & Kashmir	159
14.	Jharkhand	256
15.	Karnataka	5765
16.	Kerala	1212
17.	Lakshadweep	1
18.	Ladakh	1
19.	Madhya Pradesh	903
20.	Maharashtra	3728
21.	Manipur	46
22.	Meghalaya	43
23.	Mizoram	12
24.	Nagaland	28
25.	Odisha	488
26.	Puducherry	41
27.	Punjab	593
28.	Rajasthan	1129
29.	Sikkim	5
30.	Tamil Nadu	1413
31.	Telangana	956
32.	Tripura	50
33.	Uttar Pradesh	1989
34.	Uttarakhand	177
35.	UT of D&NH and D&D	6
36.	West Bengal	763
Total PCS (nos.)		25,202

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2882
ANSWERED ON 12.12.2024

INTER-STATE POWER TRANSMISSION

2882. SHRI KARTI P CHIDAMBARAM:

Will the Minister of POWER
be pleased to state:

(a) the data on power generation, power utilization and net power export/import, including details of conventional and renewable sources of energy during the last five years and the current year, State-wise;

(b) the name of net power exporters/importers States along with the annual figures for power exported/imported;

(c) the steps taken/being taken by the Government to help power deficits in meeting the demand through inter-State power trade or enhanced local generation capacity; and

(d) the efforts made/being made to improve inter-State power transmission and regional grid integration along with ensuring better distribution and reduced power shortages?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : State/UT wise details of power generation from the conventional and renewable energy sources during the last five (5) years and current year (upto October, 2024) are given at Annexure-I. State/UT wise details of Energy Requirement and Energy Supplied in the country during the last five (5) years and current year upto October, 2024 are given at Annexure-II.

State/UT wise details of Net power Import/ Export, through Inter-State Transmission network, during the last five (5) years and current year (till October, 2024) are given at Annexure-III.

.....2.

(c) : Government of India has taken the following steps to meet the Power demand in the country:

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

(a) Ministry of Power, in consultation with States, has envisaged a plan to add thermal capacity of a minimum 80,000 MW by 2031-32. Against this target, 29,200 MW Thermal Capacity is already under construction while 51,520 MW is at various stages of planning & development.

(b) 13,997.5 MW of Hydro Electric Projects and 6,050 MW Pumped Storage Projects (PSP) are under construction. 24,225.5 MW of hydro electric projects and 50,760 MW of PSP are under various stage of planning and targeted to be completed by 2031-32.

(c) 7,300 MW of Nuclear Capacity is under construction and 7,000 MW is under various stages of planning and approval.

(d) Present installed Renewable Energy (RE) capacity of the country is 2,03,215 MW. Further, 1,27,050 MW of RE is under construction and 89,690 MW is under various stages of tendering. India has committed to augment non fossil fuel based installed electricity generation capacity to over 5,00,000 MW by 2030.

(ii) Directions under Section 11 of Electricity Act have been issued to imported coal based plants to operate and generate power to their full capacity.

(iii) Gas based power plants of NTPC as well as gas-based generation procured through NVVN were scheduled during high power demand period.

(iv) Steady supply of coal to all the thermal power plants is being ensured to prevent fuel shortages.

(v) All the GENCOs including IPPs and Central generating stations have been advised to generate and maintain full availability on daily basis excluding the period of planned maintenance or forced outage.

(vi) Hydro based generation is being scheduled in a manner so as to conserve water for meeting demand during peak period.

(vii) Planned maintenance of generating units is being minimized during period of high demand.

(viii) To meet the growing electricity demand, new power generation capacity was monitored closely for timely addition.

.....3.

(ix) Government has facilitated power trading through regulatory framework whereby states with surplus generation can sell power to states which are in deficit through three (3) power exchanges viz. Indian Energy Exchange (IEX), Power Exchange India Ltd (PXIL) and Hindustan Power Exchange Ltd. These exchanges are being utilized for Inter-state trading of power by the States.

(x) Electricity market has been reformed by adding the Real Time Market (RTM), Green Day Ahead Market (GDAM), Green Term Ahead Market (GTAM), High Price Day Ahead Market (HPDAM) in Power exchange. Also, there is DEEP portal (Discovery of Efficiency Electricity Price) for e-bidding and e-Reverse for procurement of short-Term power by DISCOMs.

(d) : To improve interstate power transmission, a robust national grid has been established to facilitate the transfer of power from power surplus regions to power deficit regions. The inter-regional transmission capacity has been increased from 75.050 GW during 2016-17 to 118.740 GW as on October 2024 which is planned to increase to 143 GW by the year 2027 and further to 168 GW by the year 2032. The capacity of National Grid is being expanded on a continuous basis commensurate with the growth in electricity generation and electricity demand.

As per Electricity Act 2003, distribution of electricity is a licensed activity and it is the duty of the respective distribution licensee to develop and maintain an efficient, co-ordinated and economical distribution system in its area of supply to provide reliable power supply to the consumers. However, Government of India supplements the efforts of the states by launching various schemes from time to time to enable states to improve and augment their Sub-transmission and Distribution Infrastructure for providing 24x7 reliable and quality power to all the consumers.

Distribution system has been strengthened by implementing projects of 1.85 lac crores under DDUGJY (Deen Dayal Upadhyaya Gram Jyoti Yojana)/ IPDS (Integrated Power Development Scheme)/SAUBHAGYA (Pradhan Mantri Sahaj Bijli Har Ghar Yojana). Under the above distribution sector schemes, 2927 new sub-stations have been added, upgradation of 3965 existing sub-stations has been carried out, 6,92,200 Distribution Transformers have been installed, Feeder separation of 1,13,938 ckm has been done and 8.5 Lakh ckm of HT and LT lines have been added/upgraded across the States.

Government of India launched Revamped Distribution Sector Scheme (RDSS) in July 2021, with the objective of improving the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient distribution Sector. The scheme has an outlay of Rs. 3,03,758 Crore with an estimated Government Budgetary Support (GBS) of Rs. 97,631 Crore. Under RDSS, projects worth Rs. 2.77 lakh crore for distribution infrastructure works and smart metering works have been sanctioned at National level.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2882 ANSWERED IN THE LOK SABHA ON 12.12.2024

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The details of power generation from the conventional and renewable energy sourcesfrom 2019-20, 2020-21 and 2021-22:-

(All figures in MUs)

State	2019-20		2020-21		2021-22	
	Conventional Source	Renewable Source	Conventional Source	Renewable Source	Conventional Source	Renewable Source
Andaman & Nicobar Islands		17	118	40	117	35
Andhra Pradesh	62,943	13,993	52,749	14,134	58,535	15,663
Arunachal Pradesh	1,786	2	3,451	2	4,161	2
Assam	8,030	59	5,969	52	8,277	122
Bihar	35,361	359	33,866	227	43,940	240
Chhattisgarh	1,18,229	1,108	1,35,034	1,634	1,41,275	1,938
Delhi	6,015	424	5,304	427	4,949	459
Goa	0	1	0	1	0	17
Gujarat	1,06,949	17,717	1,03,882	17,977	63,047	24,840
Haryana	17,317	734	14,896	761	22,968	1,135
Himachal Pradesh	40,835	2,167	37,473	2,160	36,460	2,044
Jammu and Kashmir	18,094	443	17,003	439	17,074	416
Jharkhand	26,223	24	27,443	26	28,887	29
Karnataka	45,129	25,648	39,543	27,850	51,934	28,634
Kerala	5,466	805	6,738	1,092	9,317	1,615
Ladakh	270	0	376	0	406	0
Lakshadweep		1		0		0
Madhya Pradesh	1,21,100	8,298	1,29,567	8,518	1,34,321	8,717
Maharashtra	1,31,418	13,986	1,17,572	14,233	1,37,220	15,846
Manipur	367	4	622	8	455	7
Meghalaya	1,018	63	1,152	57	842	45
Mizoram	177	50	159	34	137	28
Nagaland	181	76	204	70	101	63
Odisha	48,254	783	62,066	878	65,392	1,081
Puducherry	256	4	232	6	251	12
Punjab	26,025	2,723	22,742	2,864	27,886	3,242
Rajasthan	55,942	14,349	54,091	16,516	59,898	24,099
Sikkim	11,027	61	10,880	56	11,494	12
Tamil Nadu	83,498	19,764	70,077	21,659	82,020	24,061
Telangana	51,855	6,794	48,406	6,933	57,177	7,346
Tripura	6,093	28	7,043	16	6,332	8
Uttar Pradesh	1,24,180	5,143	1,26,921	5,748	1,36,830	6,329
Uttarakhand	16,541	1,194	14,314	1,237	15,344	872
West Bengal	74,312	1,475	75,947	1,531	86,407	1,845
Dadra and Nagar Haveli and Daman and Diu	-	28	-	52	-	97
Chandigarh	-	13	-	10	-	14
Total	12,44,990	1,38,337	12,25,842	1,47,248	13,13,454	1,70,912
Grand Total (Conventional + Renewable)	13,83,327		13,73,090		14,84,366	

Note: Conventional Sources includes Coal, Diesel, Lignite, Naptha, Natural Gas, Nuclear and Large Hydro (more than 25 MW) and Renewable sources includes Solar, Wind, Biomass, Bagasse and Small Hydro.

The details of power generation from the conventional and renewable energy sources from 2022-23, 2023-24 and current year (upto October, 2024)

(All figures in MUs)

State	2022-23		2023-24		2024-25 (Upto Oct 2024)	
	Conventional Source	Renewable Source	Conventional Source	Renewable Source	Conventional Source	Renewable Source
Andaman & Nicobar Islands	215	38	336	39	216	23
Andhra Pradesh	65,290	16,412	72,617	17,464	44,219	10,406
Arunachal Pradesh	4,821	25	4,278	3	3,219	1
Assam	8,875	279	9,048	381	5,718	333
Bihar	55,200	289	58,362	342	35,958	204
Chhattisgarh	1,42,837	2,003	1,62,710	2,477	95,482	1,808
Delhi	3,784	530	3,755	729	3,213	449
Goa	0	20	0	68	0	38
Gujarat	65,255	29,763	96,916	38,483	69,648	26,651
Haryana	32,139	1,420	28,197	1,652	19,505	1,264
Himachal Pradesh	38,667	2,913	36,366	2,587	32,559	2,612
Jammu and Kashmir	16,777	393	15,874	409	12,680	325
Jharkhand	30,778	22	35,962	23	23,546	11
Karnataka	55,615	29,574	60,942	30,527	36,499	20,327
Kerala	7,989	1,946	5,156	2,204	4,591	1,683
Ladakh	403	0	388	0	337	0
Lakshadweep	15	0	65	0	39	0
Madhya Pradesh	1,43,148	8,873	1,55,125	9,655	88,775	6,992
Maharashtra	1,41,787	17,207	1,50,273	18,765	88,418	11,123
Manipur	478	9	298	9	426	5
Meghalaya	980	72	809	67	753	92
Mizoram	204	62	119	99	195	49
Nagaland	177	112	165	81	189	66
Odisha	70,337	1,192	72,182	1,262	42,934	809
Puducherry	233	12	224	12	123	7
Punjab	35,906	4,170	37,139	4,122	24,397	1,883
Rajasthan	64,973	40,990	69,696	47,149	42,551	33,287
Sikkim	11,697	12	8,610	12	1,641	7
Tamil Nadu	89,062	27,626	93,708	29,603	57,825	23,199
Telangana	56,748	7,430	58,157	7,509	36,860	4,284
Tripura	7,079	7	6,353	7	2,962	3
Uttar Pradesh	1,56,230	7,217	1,57,850	7,202	1,02,437	3,329
Uttarakhand	15,436	932	14,529	931	12,016	545
West Bengal	91,036	1,959	92,330	1,920	56,474	1,123
Dadra and Nagar Haveli and Daman and Diu	-	31	-	29	-	16
Chandigarh	-	13	-	12	-	6
Total	14,14,171	2,03,553	15,08,540	2,25,835	9,46,409	1,52,961
Grand Total (Conventional + Renewable)	16,17,724		17,34,375		10,99,370	

Note: Conventional Sources includes Coal, Diesel, Lignite, Naptha, Natural Gas, Nuclear and Large Hydro (more than 25 MW) and Renewable sources includes Solar, Wind, Biomass, Bagasse and Small Hydro.

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2882 ANSWERED IN THE LOK SABHA ON 12.12.2024

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The details of State / UT wise Energy Requirement and Energy Supplied in the country from FY 2019-20 and FY 2020-21:-

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

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

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

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

State / UT	April, 2023 - March, 2024				April, 2024 - October, 2024			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	1,789	1,789	0	0	1,360	1,360	0	0
Delhi	35,501	35,496	5	0	26,704	26,693	11	0
Haryana	63,983	63,636	348	0.5	47,519	47,490	29	0.1
Himachal Pradesh	12,805	12,767	38	0.3	7,989	7,964	25	0.3
UT of J&K and Ladakh	20,040	19,763	277	1.4	11,097	11,042	55	0.5
Punjab	69,533	69,528	5	0	54,610	54,610	0	0
Rajasthan	1,07,422	1,06,806	616	0.6	65,163	64,860	304	0.5
Uttar Pradesh	1,48,791	1,48,287	504	0.3	1,11,484	1,11,188	296	0.3
Uttarakhand	15,644	15,532	112	0.7	10,520	10,479	41	0.4
Chhattisgarh	39,930	39,872	58	0.1	25,656	25,640	17	0.1
Gujarat	1,45,768	1,45,740	28	0	89,842	89,842	0	0
Madhya Pradesh	99,301	99,150	151	0.2	55,921	55,841	80	0.1
Maharashtra	2,07,108	2,06,931	176	0.1	1,14,835	1,14,777	58	0.1
Dadra & Nagar Haveli and Daman & Diu	10,164	10,164	0	0	6,351	6,351	0	0
Goa	5,111	5,111	0	0	3,157	3,157	0	0
Andhra Pradesh	80,209	80,151	57	0.1	46,477	46,475	1	0
Telangana	84,623	84,613	9	0	48,387	48,385	2	0
Karnataka	94,088	93,934	154	0.2	50,019	50,018	2	0
Kerala	30,943	30,938	5	0	18,414	18,407	8	0
Tamil Nadu	1,26,163	1,26,151	12	0	79,602	79,600	2	0
Puducherry	3,456	3,455	1	0	2,206	2,205	0	0
Lakshadweep	64	64	0	0	39	39	0	0
Bihar	41,514	40,918	596	1.4	29,804	29,656	148	0.5
DVC	26,560	26,552	8	0	15,539	15,536	3	0
Jharkhand	14,408	13,858	550	3.8	9,355	9,286	69	0.7
Odisha	41,358	41,333	25	0.1	27,015	26,991	24	0.1
West Bengal	67,576	67,490	86	0.1	46,772	46,687	84	0.2
Sikkim	544	543	0	0	297	297	0	0
Andaman-Nicobar	386	374	12	3.2	248	240	8	3.4
Arunachal Pradesh	1,014	1,014	0	0	601	601	0	0
Assam	12,445	12,341	104	0.8	8,538	8,533	6	0.1
Manipur	1,023	1,008	15	1.5	580	579	0	0.1
Meghalaya	2,236	2,066	170	7.6	1,128	1,128	0	0
Mizoram	684	684	0	0	391	391	0	0
Nagaland	921	921	0	0	570	570	0	0
Tripura	1,691	1,691	0	0	1,235	1,235	0	0
All India	16,26,132	16,22,020	4,112	0.3	10,26,642	10,25,379	1,263	0.1

ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2882 ANSWERED IN THE LOK SABHA ON 12.12.2024

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Details of all India Net Inter State Power Transmission from FY 2020-21 to FY 2024-25 (till September, 2024)

All figures in MUs

State/ ISTS connected consumer	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25 (till Oct)
Punjab	29869	34688	34296	33606	33147	30496
Haryana	41013	41967	39422	37507	44276	33862
Rajasthan	23192	28915	25613	30456	33159	20888
Delhi	26941	24119	25894	30948	31103	23316
UP	53920	51811	50138	53411	57574	50223
Uttarakhand	6365	7301	7705	9467	9629	5772
HP	3908	3901	3968	4472	5712	1511
J&K(UT) and Ladakh(UT)	10992	12156	13370	14278	14639	6687
Chandigarh	1639	1513	1609	1789	1789	1365
Chhattisgarh	11624	11590	14661	18928	18234	14144
Gujarat	31547	32735	62685	75476	62321	33672
MP	38610	47491	50785	48727	53679	28819
Maharashtra	48600	53366	54917	62516	71294	39349
Goa	3966	3343	4179	4566	4890	3066
DD&DNH	9072	7692	9427	9955	10472	6354
Andhra Pradesh	20119	26022	27985	24914	29112	12347
Telangana	28505	30227	25946	29931	41075	23614
Karnataka	19682	23856	19101	23124	36456	14275
Kerala	20179	17585	16139	18261	24382	12784
Tamil Nadu	55289	56679	60386	60825	66250	40026
Puducherry	2803	2616	2887	3045	3252	2087
Bihar	30390	32145	33009	34971	37748	27545
Jharkhand	5853	6612	7661	7821	9266	6682
Odisha	7794	3371	14062	16090	13806	9267
West Bengal	17729	12919	8888	12056	18655	16906
Sikkim	464	488	529	576	529	282
Arunachal Pradesh	762	723	791	799	940	532
Assam	8009	8367	8803	9081	9976	7014
Manipur	913	958	1013	1007	992	594
Meghalaya	994	793	1347	1199	1185	277
Mizoram	501	488	489	450	501	176
Nagaland	731	750	805	769	847	536
Tripura	1167	1435	1257	1390	1695	1161

Note: Import(+ve)/Export(-ve)

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2902
ANSWERED ON 12.12.2024

SELF SUFFICIENCY IN ENERGY DEMAND

2902. SHRI ANIL YESHWANT DESAI:

Will the Minister of POWER be pleased to state:

(a) whether India is self sufficient in the field of energy demands and supply and if so, the details thereof;

(b) the different conventional and non-conventional sources of energy and their share to meet the energy demand; and

(c) the details of the steps taken/being taken by the Government to increase the green energy availability?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : There is adequate availability of power in the country. Present installed generation capacity of the country is 4,54,452 MW. Government of India has addressed the critical issue of power deficiency by adding 2,22,500 MW of generation capacity since April, 2014 transforming the country from power deficit to power sufficient.

1,98,970 ckm of transmission lines have been added since April 2014 connecting the whole country into one grid running on one frequency. This has enabled to transfer 1,18,740 MW from one corner of the country to another. Distribution system has been strengthened by implementing projects of 1.85 lac crores under DDUGJY (Deen Dayal Upadhyaya Gram Jyoti Yojana) /IPDS (Integrated Power Development Scheme)/SAUBHAGYA (Pradhan Mantri Sahaj Bijli Har Ghar Yojana). Under the above distribution sector schemes, 2927 new sub-stations have been added, upgradation of 3965 existing sub-stations has been carried out, 6,92,200 Distribution Transformers have been installed, Feeder separation of 1,13,938 ckm has been done and 8.5 Lakh ckm of HT and LT lines have been added/upgraded across the States.

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Under RDSS, projects worth Rs. 2.77 lakh crore for distribution infrastructure works and smart metering works have been sanctioned at National level.

As a result of these measures, the hours of supply for rural areas has improved from 12.5 hrs in FY 2014 to 21.9 hrs in FY 2024 and for urban areas it has improved from 22.1 hrs in FY 2014 to 23.4 hrs in FY 2024. The gap between Energy Requirement and Energy Supplied has come down from 4.2% in 2013-14 to 0.1% in FY 2024-25 (till October, 2024). Marginal gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network.

The details of power supply position in the country in terms of Energy for the last ten years and the current year till October-2024 are given at Annexure-I.

(b) : The details of the different conventional and non-conventional sources of energy as on 31.10.2024 and their share to meet energy demand in the country are given at Annexure-II.

(c): India has committed to augment non fossil fuel based installed electricity generation capacity to over 5,00,000 MW by 2030. The Government has taken the following steps to increase the green energy production in the country:

(i) 1,27,050 MW of Renewable Capacity is under construction and 89,690 MW is under various stages of tendering.

(ii) Permitting Foreign Direct Investment (FDI) in Renewable energy sector up to 100 percent under the automatic route.

(iii) Waiver of Inter State Transmission System (ISTS) charges for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025.

(iv) Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2029- 30.

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

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(vi) Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, National Green Hydrogen Mission, Development of 1 GW Offshore Wind Energy Projects, etc.

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

(viii) To achieve the objective of increased domestic production of Solar PV Modules, the Govt. of India is implementing the Production Linked Incentive (PLI) scheme for High Efficiency Solar PV Modules with an outlay of Rs. 24,000 crore. This will enable manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Module.

(ix) Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects.

(x) Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.

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

(xii) National Green Hydrogen Mission launched with an aim to make India a global hub for production, utilization and export of Green Hydrogen and its derivatives.

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

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2902 ANSWERED IN THE LOK SABHA ON 12.12.2024

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The details of power supply position in the country in terms of Energy for the last ten years and the current year till October-2024

Years	Energy [in Million Units (MU)]			
	Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)
2014-15	10,68,923	10,30,785	38,138	3.6
2015-16	11,14,408	10,90,850	23,558	2.1
2016-17	11,42,928	11,35,332	7,596	0.7
2017-18	12,13,326	12,04,697	8,629	0.7
2018-19	12,74,595	12,67,526	7,070	0.6
2019-20	12,91,010	12,84,444	6,566	0.5
2020-21	12,75,534	12,70,663	4,871	0.4
2021-22	13,79,812	13,74,024	5,787	0.4
2022-23	15,13,497	15,05,914	7,583	0.5
2023-24	16,26,132	16,22,020	4,112	0.3
2024-25 (upto October, 2024)	10,28,850	10,27,589	1,261	0.1

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2902 ANSWERED IN THE LOK SABHA ON 12.12.2024

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The details of the different conventional and non-conventional sources of energy as on 31.10.2024 and their share to meet energy demand in the country

Sources		Installed Capacity (MW)	% age share of Total
Conventional Sources :			
Thermal	Coal	2,11,030	46.44
	Lignite	6,620	1.46
	Gas	24,818	5.46
	Diesel	589	0.13
	Total Thermal	2,43,057	53.48
Nuclear		8,180	1.80
Large Hydro		46,968	10.34
Sub-total (Conventional Sources)		2,98,205	65.62
Non-Conventional :			
Renewable Energy Sources (RES) (Including small Hydro)	Solar Power	92,119	20.27
	Wind Power	47,717	10.50
	Bio Power	10,728	2.36
	Small Hydro Power	5,077	1.12
	Waste to Energy	606	0.13
Sub-total (Non-Conventional Sources)		1,56,247	34.38
Total Installed Capacity		4,54,452	100.00

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2906
ANSWERED ON 12.12.2024

ELECTRICITY DISTRIBUTION COMPANIES

2906. SMT. ANITA SUBHADARSHINI:

Will the Minister of POWER
be pleased to state:

(a) whether it is a fact that the State Electricity Distribution Companies in the country have an outstanding dues of about 1.40 lakh crores of the Power Generation companies at present;

(b) if so, the details thereof, State-wise;

(c) whether the Government has any proposal to initiate Liquidation Scheme for State Electricity distribution companies for paying their outstanding dues to the Power Generation companies; and

(d) 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) : Government of India has notified the Electricity (Late Payment Surcharge and Related Matters) Rules, 2022 (LPS Rules, 2022) on 3rd June, 2022. The Rules provides that all the dues, including late payments surcharges, upto 3rd June 2022 were considered as arrears which were to be rescheduled and the distribution licensee shall pay such dues in equated monthly instalments (EMIs) as per LPS Rules, starting from August 2022. 13 States reported arrears amounting to Rs. 1,39,947 Cr. as on 03.06.2022 and rescheduled them into EMIs.

As a result, after payment of 29 EMIs by the distribution utilities, including pre-payment of legacy dues by some utilities, the outstanding dues have reduced to Rs. 24,684 Cr. as on 06.12.2024. State-wise details placed at Annexure.

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ANNEXURE

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 2906 ANSWERED IN THE LOK SABHA ON 12.12.2024

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Details of State-wise outstanding dues as on 03.06.2022 and balance outstanding dues as on 06.12.2024

Sl. No.	State	Name of Discom	Total Overdue Amount as on 03.06.2022 as communicated by Discoms	Total Legacy Dues Paid/ Settled as on 06.12.2024	Balance Legacy Dues as on 06.12.2024
1	Andhra Pradesh	Andhra Pradesh Central Power Distribution Company Limited	2,224		
		Andhra Pradesh Eastern Power Distribution Company Limited	3,252		-
		Andhra Pradesh Southern Power Distribution Company Limited	12,834	18,310	
2	Rajasthan	Ajmer Vidyut Vitran Nigam Ltd.	4,096	4,096	-
		Jodhpur Vidyut Vitran Nigam Ltd.	8,874	8,733	141
		Jaipur Vidyut Vitran Nigam Ltd.	9,264	9,076	188
3	Telangana	Telangana State Northern Power Distribution Company	2,977	2,787	190
		Telangana State Southern Power Distribution Company	6,973	6,119	854

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4	Jammu and Kashmir	Jammu And Kashmir Power Distribution Department	14,164	12,720	1,444
5	Manipur	Manipur State Power Distribution Company Ltd.	161	161	-
6	Chhattisgarh	Chhattisgarh State Power Distribution Company Limited	4,162	3,017	1,145
7	Jharkhand	Jharkhand Bijli Vitran Nigam Limited	6,000	5,413	587
8	Tamil Nadu	Tamil Nadu Generation & Distribution Corporation Limited	17,734	11,274	6,460
9	Maharashtra	Maharashtra State Electricity Distribution Co. Ltd	17,320	11,350	5,970
10	Karnataka	Chamundeshwari Electricity Supply Corporation Limited	1,247	812	435
		Bangalore Electricity Supply Company Ltd.	7,529	4,642	2,887
		Hubli Electricity Supply Company Ltd.	2,528	2,163	365
		Gulbarga Electricity Supply Company Ltd.	2,129	1,565	564
		Mangalore Electricity Supply Company Ltd.	125	76	50
11	Madhya Pradesh	Madhya Pradesh Power Management Co Ltd	8,500	6,206	2,294
12	Bihar	North Bihar Power Distribution Company Ltd.	430	430	-
		South Bihar Power Distribution Company Ltd.	662	662	-
13	Uttar Pradesh	Uttar Pradesh Power Corporation Ltd	6,762	5,651	1,111
Total			1,39,947	1,15,263	24,684

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2917
ANSWERED ON 12.12.2024

DATA ON AMOUNT OF CARBON CREDITS

2917. SHRI RAO RAJENDRA SINGH:

Will the Minister of POWER be pleased to state:

(a) whether the Government has any data on the total amount of carbon credits entailed within its ambit since 2019 and if so, the details thereof;

(b) whether the Government has an adequate outreach mechanism of the entire procedure of availing carbon credits and if so, the details thereof;

(c) if so, the details thereof along with the incentives associated with various stakeholders and such initiatives; and

(d) whether the Government has any other mechanisms for providing monetary incentives to private firms and individuals to become carbon neutral 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 carbon credits have been generated so far, under Carbon Credit Trading Scheme (CCTS) notified by Ministry of Power in 2023.

(b) to (d) : Carbon Credit Trading Scheme (CCTS) has been notified by Ministry of Power in 2023. Ministry of Power has formulated a detailed procedure for the compliance mechanism for obligated entities to comply with the prescribed GHG emission reduction norms in each compliance cycle of CCTS. The scheme also prescribes offset mechanism wherein the non-obligated entities can register their projects for GHG emission reduction or removal or avoidance for issuance of Carbon Credits Certificates.

Bureau of Energy Efficiency (BEE), under Ministry of Power is actively conducting regional consultation workshops and online webinars across the country to raise awareness about the CCTS.

Non-obligated entities such as private firms and individuals, under the offset mechanism of CCTS, can register their projects for GHG emission reduction or removal or avoidance for issuance of Carbon Credit Certificates. These credits can be traded and thus provide market based incentive to reduce carbon emissions.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2927
ANSWERED ON 12.12.2024

ELECTRIFICATION OF PARTICULARLY VULNERABLE TRIBAL GROUPS HOUSEHOLDS

2927. SHRI TAPIR GAO:
DR. RAJESH MISHRA:

Will the Minister of POWER be pleased to state:

(a) the number of households so far belonging to Particularly Vulnerable Tribal Groups (PVTGs) located in remote and far flung areas provided with electricity connections;

(b) the impact of electrification on the lives of general public and the opportunities it offers; and

(c) the measures taken/being taken to overcome the obstacles in supplying electricity to PVTGs residing in the forest areas?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Under Revamped Distribution Sector Scheme (RDSS), Government of India is supporting States for grid electrification of all identified households belonging to Particularly Vulnerable Tribal Group (PVTG) under PM-JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) as per the scheme guidelines. Works amounting to Rs. 516 Cr. have been sanctioned for electrification of 1,29,269 left out PVTG households (State wise details enclosed as Annexure-I). Till date, 91,194 PVTG households have been electrified under PM-JANMAN. Further, under New Solar Power Scheme, works worth Rs. 49 Cr. have been sanctioned for off-grid solar based electrification for 9,863 PVTG households (State wise details enclosed as Annexure-II).

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(b) : Electrification has a significant impact on the general population in several ways. Electrification of households particularly those in remote and tribal areas has positive impact on business and employment opportunities, educational achievements and agricultural production. Further, electrification of villages including remote areas contributes towards increase in per capita consumption of a State, signifying improved living standards.

(c) : Government of India is taking all necessary steps to support States for electrification of all PVTG households. Since most of the left-out areas were in remote, hilly and forest areas, hence the norms for electrification under RDSS were relaxed and the ceiling limit for cost of electrification was enhanced. Intensive survey has been carried out by distribution utilities to identify unelectrified PVTG households and electrification works have been sanctioned in mission mode under RDSS for these households. Grid based electrification works have been sanctioned under RDSS wherever found feasible as per the revised norms and for remaining areas off-grid solar based electrification works have been sanctioned. Further, for the sanctioned works, regular monitoring is being done so as to resolve issues, if any, and expedite the implementation.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2927 ANSWERED IN THE LOK SABHA ON 12.12.2024

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PVTG household electrification under RDSS

S. No.	Name of the States	Sanctioned Outlay (Rs. Crores)	No. of households Sanctioned	No. of households electrified till date
	Sanctioned under RDSS			
1	Andhra Pradesh	89	25,054	24,327
2	Bihar	0.28	51	0
3	Chhattisgarh	38	7,077	4,323
4	Jharkhand	74	12,442	62
5	Madhya Pradesh	143	29,290	9,445
6	Maharashtra	27	8,556	9,216
7	Rajasthan	40	17,633	15,667
8	Karnataka	4	1,615	921
9	Kerala	1	345	309
10	Tamil Nadu	30	10,673	4,851
11	Telangana	7	3,884	3,884
12	Tripura	62	11,664	6,001
13	Uttarakhand	1	669	669
14	Uttar Pradesh	1	316	195
	Sub Total	516	1,29,269	79,870
	Under State Plan			
1	Gujarat	0	0	6,626
2	Odisha	0	0	1,326
3	West Bengal	0	0	3,372
	Sub Total	0	0	11,324
	Total	516	1,29,269	91,194

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2927 ANSWERED IN THE LOK SABHA ON 12.12.2024

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

Sl. No.	Name of the States	No. of households
1	Andhra Pradesh	1,675
2	Chhattisgarh	1,578
3	Jharkhand	2,342
4	Karnataka	179
5	Madhya Pradesh	2,060
6	Telangana	326
7	Tripura	1,703
Total		9,863

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2952
ANSWERED ON 12.12.2024

FREQUENCY OF POWER OUTAGES IN HOUSEHOLDS

2952. SHRI NARESH GANPAT MHASKE:
DR. SHRIKANT EKNATH SHINDE:
SHRI RAJESH VERMA:
SMT. SHAMBHAVI:

Will the Minister of POWER
be pleased to state:

(a) whether the Government maintains the data with regard to the frequency of power outages in the households of both rural and urban area after the implementation of the Saubhagya Yojana, if so, the details thereof, State/UT-wise;

(b) the data of the power supply being given to the rural household along with the details of any incentives/exemptions given to the vulnerable and rural households;

(c) whether the power produced from the renewable resources is being supplied to the households under the Saubhagya Yojana and if so, the details thereof; and

(d) the steps taken by the Government to address the challenges faced in Saubhagya Yojana and the remedial action taken thereon to prevent the same in the implementation of Revamped Distribution Sector Scheme (RDSS)?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) & (b) : Government of India has always supplemented the efforts of the States through schemes like Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) and Revamped Distribution Sector Scheme (RDSS), to help them achieve the objective of providing quality and reliable supply of power to all households.

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As per Rule (10) of the Electricity (Rights of Consumers) Rules, 2020, the distribution licensee shall supply 24x7 power to all consumers. However, the Commission may specify lower hours of supply for some categories of consumers like agriculture. The Rules are applicable for all States and for all areas including urban and rural areas. State-wise average daily hours of power supply data post SAUBHAGYA period are placed at Annexure-I.

It is the State Government which provides subsidy including incentives/exemptions support to DISCOMs for various category of consumers. Further, as per the provisions of the Electricity Act, 2003, the State Electricity Regulatory Commission determines the electricity tariff for retail sale of electricity to end consumers. Section 61 of the Electricity Act, 2003 and the Tariff Policy provide the guiding principles for determination of tariff.

(c) : Government of India launched SAUBHAGYA in October, 2017 with the objective to achieve universal household electrification for providing electricity connections to all willing un-electrified households in rural areas and all willing poor households in urban areas in the country. A total of 2.86 crore households were electrified during SAUBHAGYA period, out of which, 4.17 lakh households were provided electricity through Solar Photo Voltaic (SPV) based standalone systems. State-wise details of households electrified through off-grid systems under SAUBHAGYA are placed at Annexure-II.

(d) : The challenges faced for implementation of SAUBHAGYA included working in difficult topography like remote hilly regions and forests, extreme weather conditions and availability of skilled manpower for execution of the project. The steps taken to address the challenges include engineering solutions like portable substations and pre-fabricated structures, technologies including Geographical Information System (GIS), drones and remote supervision tools enhanced project execution. Specialized training programs were conducted which equipped workers and contractors to work effectively and safely in hilly and forested areas.

Government of India is taking all necessary steps to support States for electrification of all households. Since most of the left-out households are in remote, hilly and forest areas, hence the norms for electrification under RDSS have been relaxed and the ceiling limit for cost of electrification has been enhanced. Survey has been carried out by distribution utilities to identify un-electrified households. Grid based electrification works have been sanctioned under RDSS wherever found feasible as per the revised norms and for remaining areas off-grid solar based electrification works have been sanctioned under New Solar Power Scheme. Further, for the sanctioned works, regular monitoring is being done so as to resolve issues, if any, and expedite the implementation.

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ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2952 ANSWERED IN THE LOK SABHA ON 12.12.2024

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State/UT-wise hours of supply in rural and urban areas

State Name	2022-23 (Rural)	2023-24 (Rural)	2022-23 (Urban)	2023- 24 (Urban)
A&N Island	22.2	22.2	22.6	22.4
Andhra Pradesh	23.5	23.6	23.9	23.9
Arunachal Pradesh	18.3	20.1	19.4	22.1
Assam	22.5	22.5	23.7	23.8
Bihar	20.1	22.2	23.6	23.6
Chandigarh	*	*	22.5	23.8
Chhattisgarh	21.6	21.6	23.8	23.8
Delhi	*	*	24	24
Goa	23.8	23.8	23.9	23.9
Gujarat	23.8	23.7	23.8	23.9
Haryana	19.4	19.4	23.6	23.8
Himachal Pradesh	23	23	23.9	23.9
Jammu and Kashmir	17.7	19	22.5	21.7
Jharkhand	21.2	22.1	22.8	23.1
Karnataka	22.2	21.4	23.5	23.7
Kerala	23.5	22.4	24	24
Ladakh	22.2	22.2	23.4	23.3
Madhya Pradesh	20.7	22.6	23.6	23.8
Maharashtra	23.8	23.8	23.9	23.9
Manipur	22	22	23.8	23.9
Meghalaya	21.9	21.8	22.8	23.1
Mizoram	23.4	22.3	23.7	23.6
Nagaland	19	18	21	20
Odisha	23.4	23.4	23.5	23.7
Puducherry	22.4	22.7	23.8	23.7
Punjab	21.8	22.8	23.6	23.7
Rajasthan	21	21.7	23.6	23.9
Sikkim	21.4	21.5	22.5	22.6
Tamil Nadu	23.9	23.5	24	24
Telangana	21.8	21.9	23.9	24
Tripura	19.7	22.3	23.9	23.7
Uttar Pradesh	17.4	18.1	23.3	23.4
Uttarakhand	21.4	21.4	23.6	23.7
West Bengal	23.4	23.4	23.8	23.9
National Average	21.7	21.9	23.3	23.4

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ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 2952 ANSWERED IN THE LOK SABHA ON 12.12.2024

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Off-grid households electrified under SAUBHAGYA Scheme

Sl No	State	Number of households
1	ARUNACHAL PRADESH	5,398
2	ASSAM	50,754
3	BIHAR	39,100
4	CHHATTISGARH	65,373
5	JHARKHAND	7,740
6	KARNATAKA	207
7	LADAKH	168
8	MADHYA PRADESH	12,651
9	MAHARASHTRA	30,538
10	MANIPUR	3,387
11	MEGHALAYA	598
12	MIZORAM	1,466
13	ODISHA	13,735
14	PUNJAB	0
15	RAJASTHAN	1,23,682
16	TRIPURA	3,601
17	UTTAR PRADESH	53,234
18	UTTARAKHAND	4,837
19	WEST BENGAL	0
Total		4,16,469

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2958
ANSWERED ON 12.12.2024

INSTALLATION OF SMART METERS IN TRIPURA

2958. SHRI BIPLAB KUMAR DEB:

Will the Minister of POWER be pleased to state:

(a) the funds approved by the Union Government for installation of smart meters in Tripura;

(b) whether there is a proposal to recharge electricity facility in future on the lines of mobile phones; and

(c) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : Under Revamped Distribution Sector Scheme (RDSS), project worth Rs 319 Cr with a Gross Budgetary Support (GBS) of Rs 80 Cr have been sanctioned for installation of meters as detailed below:

i. **Smart pre-paid consumer meter: 4,47,489**
ii. **Pre-paid consumer meter in rural areas having communication issues: 1,00,000**
iii. **Smart Distribution Transformer meter: 14,908**
iv. **Smart feeder meter: 473**

(b) & (c) : Under RDSS, consumer meter roll out is planned in prepayment mode on the lines similar to the prepaid recharge facility being offered in mobile phones usage. Like mobile phones, smart meter provides several benefits to

.....2.

consumers which enhances the experience of electricity usage as illustrated below:

i. **Prepaid feature helps consumers to**

   - **Pay for electricity as per usage through advance recharges.**
   - **Allows for budgeting of usage through small recharges.**

ii. **Helps in tracking of consumption of electricity.**

iii. **Rebate on electricity bills provided to prepaid smart meter consumer.**

iv. **Increases accuracy of meter reading by eliminating errors associated with manual meter reading.**

v. **Smart app features help in understanding consumption pattern.**

vi. **Facilitates net-metering for roof-top solar installation.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2959
ANSWERED ON 12.12.2024

DEVELOPMENT OF HYDRO POWER CAPACITY IN NORTH-EASTERN STATES

†2959. SHRI DILIP SAIKIA:

Will the Minister of POWER be pleased to state:

(a) the details of the schemes being implemented for the development of hydropower capacity in the North-Eastern States;

(b) the details of the Central assistance being provided for the same along with the total cost involved under the said schemes; and

(c) whether the said schemes would ease the investment and create the opportunities of direct employment of the local people 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) : The details of schemes being implemented for development of hydropower in the country including in North Eastern Region (NER) are as under:-

1. **Budgetary Support for Flood Moderation/Storage Hydro Electric Projects (HEPs)**

2. **Budgetary Support for cost of Enabling Infrastructure for the construction of roads/bridges. The scheme has been widened to include the cost incurred for the construction of: (i) transmission line from power house to the nearest pooling point including upgradation of pooling substation of State /Central Transmission Utility (ii) ropeways (iii) railway siding, and (iv) communication infrastructure. The strengthening of existing roads / bridges leading to the project is also eligible for central assistance under this scheme.**

3. **Scheme of Central Financial Assistance (CFA) to fund the equity portion of the State Governments of NER for development of Hydro Electric Projects, capped at 24% of the total project equity subject to a maximum of ₹750 crore per project with provision to revisit the limit of ₹750 crores on a case-to-case basis.**

.....2.

(b): The details of Central assistance being provided for the development of hydropower in the North Eastern States are as under:

i. **The Government of India has approved a grant of ₹6159.40 crore for Flood Moderation component of Dibang MPP (2880 MW) in Arunachal Pradesh. An amount of ₹109 crores has been reimbursed towards Flood Moderation works of the project till date.**

ii. **The Government of India has approved the scheme of Budgetary Support for cost of Enabling Infrastructure for HEPs including Pumped Storage Projects (PSPs) in the country with a total outlay of ₹12,461 crores for the period of FY 2024-25 to FY 2031-32. Grant of ₹556.15 crore for Dibang MPP (2880 MW), ₹77.37 crore for Tato-I HEP (186 MW) and ₹127.28 crore for Heo HEP (240 MW) located in NE Region has been approved against Enabling Infrastructure.**

iii. **The Government of India has approved the scheme of CFA to fund the equity participation by the State Governments of NE Region with a total financial outlay of ₹4136 crores for the period of FY 2024-25 to FY 2031-32. An amount of ₹120.43 crore for Tato-I (186 MW) and ₹130.43 crore for Heo (240 MW) HEPs has been approved as CFA under the scheme.**

iv. **An amount of ₹164.70 crore has been released against earmarked amount of ₹ 188.24 crore towards cost of Downstream protection works in respect of Subansiri Lower HEP (2000 MW).**

(c) : The hydro projects are capital intensive and require higher upfront costs resulting in higher tariff. With the budgetary support through the above schemes, it is envisaged to ease the investment burden of the developer. Further, these measures are also envisaged to bring huge investment in the NE Region and provide large number of direct employment opportunities to the local population along with indirect employment / entrepreneurial opportunities in sectors such as transportation, tourism, small-scale business and the increased economic activities leading to increase in GDP of NER in future.

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