GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
STARRED QUESTION NO.273
ANSWERED ON 04.08.2022

VILLAGES ELECTRIFIED UNDER DDUGJY

†*273. SHRI SANJAY JADHAV:
SHRI OMPRAKASH BHUPALSINH ALIAS PAWAN RAJENIMBALKAR:

Will the Minister of POWER
be pleased to state:

(a) the number of villages electrified under the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), State-wise including districts of Maharashtra;

(b) the number of houses/households electrified under the said yojana, State-wise including districts of Maharashtra;

(c) the number of States which have adopted Ujwal DISCOM Assurance Yojana (UDAY) to help convert power distribution companies (DISCOMs) into profit making bodies;

(d) the current status of the implementation of UDAY in the country, State-wise; and

(e) the details of States and DISCOMs which have failed to perform their duties under the said yojana and the action taken thereon?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

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

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STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO. 273 ANSWERED IN THE LOK SABHA ON 04.08.2022 REGARDING VILLAGES ELECTRIFIED UNDER DDUGJY

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(a) : Government of India launched the Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in December, 2014 for rural electrification works across the country. As reported by the States, all the inhabited un-electrified villages as per census 2011 had been stand electrified by 28th April, 2018 across the country under DDUGJY. A total of 18,374 villages were electrified under the scheme. State-wise number of inhabited un-electrified census villages electrified across the country including Maharashtra State, are given in Annexure-I.

(b) : State wise details of BPL Households electrified under DDUGJY from 2015 to 31.03.2019 are enclosed at Annexure-II.

(c) to (e) : Ujwal DISCOM Assurance Yojana (UDAY), a scheme for financial turnaround of Power Distribution Companies (DISCOMs) was launched by the Government on 20-11-2015 with the objective of improving the operational and financial efficiency of the State DISCOMs.

A total of 32 states / UTs joined the UDAY Scheme out of which, the 16 states of Assam, Andhra Pradesh, Bihar, Chhattisgarh, Haryana, HP, J&K, Jharkhand, MP, Maharashtra, Meghalaya, Punjab, Rajasthan, Tamil Nadu, Telangana& UP signed UDAY MoUs for Operational as well as Financial turnaround while the rest of the States/ UTs joined for only operational turnaround. UTs of J&K and Ladakh have been counted as one state only as the signed UDAY MOU was for single state. States / UTs of Odisha, West Bengal, Delhi & Chandigarh did not join the scheme.

UDAY was launched with an overall aim of operational and financial turnaround of State owned Distribution Utilities (DISCOMs) through efficiency improvements and financial restructuring in Generation, Transmission and Distribution Sectors. As a result, State Power Distribution Utilities have reported an overall improvement which include (i) Reduction in Aggregate Technical & Commercial (AT&C) losses from 23.70% in FY 16 to 20.93% in FY 20 and (ii) Reduction of Average Cost of Supply (ACS) – Average Revenue Realised (ARR) gap from Re.0.48 per kWh in FY 16 to Re.0.30 per kWh in FY 20. The details of the performance of the States on AT&C loss and ACS-ARR gaps is enclosed as Annexure-III and Annexure-IV respectively.

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ANNEXURE-I

ANNEXURE REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 273 ANSWERED IN THE LOK SABHA ON 04.08.2022 REGARDING VILLAGES ELECTRIFIED UNDER DDUGJY

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STATE-WISE ELECTRIFICATION OF INHABITED CENSUS VILLAGES FROM 2014-15 TILL 28.04.2018

Sl. No.	Name of the States	Number of villages electrified
1	Arunachal Pradesh	1,483
2	Assam	2,732
3	Bihar	2,906
4	Chhattisgarh	1,078
5	Himachal Pradesh	28
6	J & K	129
7	Jharkhand	2,583
8	Karnataka	39
9	Madhya Pradesh	422
10	Maharashtra	80
11	Manipur	366
12	Meghalaya	1,051
13	Mizoram	54
14	Nagaland	78
15	Odisha	3,281
16	Rajasthan	427
17	Tripura	26
18	Uttar Pradesh	1,498
19	Uttarakhand	91
20	West Bengal	22
	Total	18,374

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ANNEXURE-II

ANNEXURE REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 273 ANSWERED IN THE LOK SABHA ON 04.08.2022 REGARDING VILLAGES ELECTRIFIED UNDER DDUGJY

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BPL HOUSEHOLDS ELECTRIFIED UNDER DEEN DAYAL UPADHYAY GRAM JYOTI YOJANA

Sl. No.	State	Cumulative achievement as on 31.03.2019
1	Andhra Pradesh	729553
2	Arunachal Pradesh	8291
3	Assam	782370
4	Bihar	3385597
5	Chhattisgarh	163551
6	Gujarat	5060
7	Haryana	5419
8	Himachal Pradesh	43
9	J&K	53666
10	Jharkhand	675174
11	Karnataka	369626
12	Kerala	136193
13	Madhya Pradesh	1047133
14	Maharashtra	386498
15	Manipur	48799
16	Meghalaya	2639
17	Mizoram	1915
18	Nagaland	60701
19	Odisha	1629495
20	Punjab	0
21	Rajasthan	410604
22	Sikkim	5271
23	Tamil Nadu	23496
24	Telangana	539306
25	Tripura	82019
26	Uttar Pradesh	2127011
27	Uttarakhand	7251
28	West Bengal	81939
29	Dadra & Nagar Haveli	0
30	Puducherry	0
Total		12768620

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ANNEXURE-III

ANNEXURE REFERRED TO IN PARTS (c) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 273 ANSWERED IN THE LOK SABHA ON 04.08.2022 REGARDING VILLAGES ELECTRIFIED UNDER DDUGJY

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STATE-WISE AND YEAR-WISE DETAILS OF AT&C LOSSES

	2015-16	2016-17	2017-18	2018-19	2019-20
State Sector	**24.04**	**24.05**	**22.15**	**22.57**	**21.73**
Andaman & Nicobar Islands			19.34	23.39	22.71
Andhra Pradesh	10.36	13.77	14.26	25.67	10.77
Arunachal Pradesh	54.58	53.64	58.36	55.50	45.71
Assam	26.02	20.11	17.64	20.14	23.37
Bihar	43.30	43.34	33.51	33.30	40.38
Chandigarh (Non Uday UT)			4.00	4.21	4.60
Chattisgarh	22.10	23.87	22.50	29.81	23.68
Dadra & Nagar Haveli			6.55	5.45	3.56
Daman & Diu			17.01	6.19	4.07
Goa	19.77	24.33	13.52	15.69	13.99
Gujarat	16.23	14.42	12.96	13.99	11.95
Haryana	29.27	26.42	21.78	18.08	18.19
Himachal Pradesh	9.68	11.48	11.08	12.46	11.68
Jammu & Kashmir	58.75	59.96	53.67	49.94	60.46
Jharkhand	33.34	35.95	32.48	28.60	36.96
Karnataka	17.13	16.84	15.61	19.83	17.59
Kerala	12.40	13.42	12.81	9.10	14.47
Lakshadweep			19.15	23.33	14.28
Madhya Pradesh	27.37	26.80	30.51	36.64	30.38
Maharashtra	21.74	22.84	14.38	16.23	19.92
Manipur	31.72	33.01	27.50	38.17	20.27
Meghalaya	45.98	38.81	41.19	35.22	34.32
Mizoram	35.18	24.98	22.44	16.20	20.66
Nagaland	33.44	38.50	41.36	40.06	52.93
Odisha (Non Uday State)	38.60	37.19	33.59	31.55	28.94
Puducherry	22.43	21.34	19.19	19.77	18.45
Punjab	15.88	14.46	17.31	11.28	14.35
Rajasthan	31.59	27.33	24.07	28.25	29.85
Sikkim	43.89	35.62	32.48	41.83	28.88
Tamil Nadu	16.83	18.23	19.47	17.86	15.00
Telangana	14.01	15.19	19.08	17.80	21.54
Tripura	32.68	31.79	30.31	35.49	37.85
Uttar Pradesh	39.76	40.91	37.80	33.19	30.05
Uttarakhand	18.01	16.68	16.34	16.96	20.35
West Bengal (Non Uday State)	28.08	27.83	26.69	23.00	20.40
Private Sector	**12.44**	**10.80**	**9.36**	**8.28**	**8.00**
Delhi	12.44	10.80	9.93	9.17	8.19
Gujarat			6.53	5.20	4.59
Maharashtra				8.20	9.52
Uttar Pradesh			9.08	9.36	9.76
West Bengal			10.74	8.95	9.06
Grand Total	23.70	23.66	21.50	21.74	20.93

ANNEXURE-IV

ANNEXURE REFERRED TO IN PARTS (c) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 273 ANSWERED IN THE LOK SABHA ON 04.08.2022 REGARDING VILLAGES ELECTRIFIED UNDER DDUGJY

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ACS-ARR GAP ON TARIFF SUBSIDY RECEIVED BASIS (RS/KWH)

	2015-16	2016-17	2017-18	2018-19	2019-20
State Sector	**0.50**	**0.39**	**0.32**	**0.54**	**0.35**
Andaman & Nicobar Islands			19.86	19.47	19.58
Andhra Pradesh	0.80	0.52	0.09	2.67	(0.19)
Arunachal Pradesh	0.49	3.65	4.64	4.27	4.92
Assam	0.23	0.06	(0.32)	(0.32)	(0.36)
Bihar	0.46	0.51	0.68	0.61	0.92
Chandigarh (Non Uday UT)			(1.64)	(0.26)	(0.82)
Chhattisgarh	(0.01)	0.21	0.23	0.45	0.17
Dadra & Nagar Haveli			0.01	(0.02)	(0.03)
Daman & Diu			(1.38)	(0.61)	(0.30)
Goa	0.71	0.70	(0.06)	0.39	0.60
Gujarat	(0.02)	(0.05)	(0.06)	(0.02)	(0.06)
Haryana	0.16	0.04	(0.08)	(0.05)	(0.06)
Himachal Pradesh	(0.31)	0.18	0.03	(0.09)	(0.02)
Jammu & Kashmir	3.00	2.65	1.85	1.72	2.03
Jharkhand	0.93	1.39	0.16	0.58	0.87
Karnataka	0.01	0.29	0.30	0.24	0.39
Kerala	0.30	0.62	0.32	0.05	0.10
Lakshadweep			19.11	20.30	18.22
Madhya Pradesh	0.87	0.18	0.78	1.29	0.69
Maharashtra	0.21	0.06	(0.13)	(0.19)	(0.19)
Manipur	0.02	0.06	(0.02)	0.34	0.08
Meghalaya	0.82	1.66	1.16	0.85	1.80
Mizoram	2.06	2.12	(1.30)	1.18	(1.94)
Nagaland	0.20	0.81	0.81	4.09	5.62
Odisha (Non Uday State)	0.39	0.38	0.32	0.60	0.34
Puducherry	(0.02)	0.03	(0.02)	0.13	0.97
Punjab	0.53	0.65	0.48	(0.07)	0.17
Rajasthan	1.83	0.50	(0.09)	0.06	0.31
Sikkim	2.09	1.20	0.25	0.02	0.54
Tamil Nadu	0.67	0.50	0.89	1.32	1.27
Telangana	0.74	1.23	1.12	1.38	1.09
Tripura	0.42	(0.15)	(0.09)	(0.06)	0.43
Uttar Pradesh	0.29	0.33	0.45	0.54	0.34
Uttarakhand	0.10	0.24	0.18	0.38	0.38
West Bengal (Non Uday State)	(0.04)	0.04	(0.02)	(0.01)	(0.12)
Private Sector	**(0.10)**	**(0.16)**	**(0.44)**	**(0.38)**	**(0.48)**
Delhi	(0.10)	(0.16)	(0.19)	(0.26)	(0.37)
Gujarat			(0.50)	(0.26)	(0.52)
Maharashtra				(0.15)	(0.22)
Uttar Pradesh			(1.34)	(0.97)	(0.69)
West Bengal			(0.93)	(0.99)	(0.94)
Grand Total	0.48	0.37	0.28	0.49	0.30

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3020
ANSWERED ON 04.08.2022

POWER LOAD FACTOR

3020. SHRI GIRISH BHALCHANDRA BAPAT:
DR. PRITAM GOPINATHRAO MUNDE:
SHRI RAHUL RAMESH SHEWALE:
SHRI CHANDRA SEKHAR SAHU:

Will the Minister of POWER
be pleased to state:

(a) whether country's installed capacity to generate electricity is insufficient to support 7-8 percent annual economic growth;

(b) if so, the details thereof and the reaction of the Government thereto;

(c) whether except for renewables the perceptual share of all other energy sources have decreased overtime;

(d) if so, the details thereof and the reaction of the Government thereto;

(e) whether Power Load Factor (PLF) is extremely low in the country and very little effort is being made to improve it;

(f) if so, the details thereof and the reaction of the Government thereto; and

(g) the time by which any concrete steps would be finalised to improve the PLF?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : At present there is adequate installed capacity in the country to meet the demand of power. As on 30.06.2022, the installed generation capacity of the county was 403.76 Giga Watt (GW), as against the Peak Power Demand of around 215.89 Giga Watt (GW), in the country which had occurred in the month of April, 2022.

In order to meet the consistent increase in demand of electricity in the country, Thermal Power Projects (39 units) of aggregate capacity 27,550 MW are under construction in the country. Further, 36 Hydro Electric Projects (above 25 MW capacity) totalling to 14,103.5 MW are also being implemented in the country. Apart from this, Nuclear Power Plants of 8,700 MW capacity are under construction and 7,000 MW of Nuclear Power Plants have been accorded Administrative Approval and Financial Sanction.

.....2.

(c) & (d) : The share of other energy sources (Coal, Lignite, Gas, Nuclear, etc.) has reduced to 60.15% from 68.23% during the last Ten years. Whereas the Renewable Energy sources capacity (Solar, Wind, Hydro, etc) has increased from 31.77% to 39.85%. This is a welcome development and is outcome of our efforts to promote renewable energy sources.

(e) to (g) : The PLF of units depend on a number of factors such as total energy demand, generation from various sources like hydro, nuclear, gas and renewables etc. In addition, PLF of station also depends upon no. of the other factors like outages for planned maintenance, forced outages, availability of required quality and quantity of fuel, availability of transmission network etc. Presently, the PLF for coal/lignite based power plant for the current year 2022-23 (up to June, 2022) is 69.5%.

The Central Government's thrust is on production of energy from renewable resources to mitigate greenhouse gases. The Indian Electricity Grid Code notified by the Central Electricity Regulatory Commission (CERC) accords "Must Run Status" to Renewable Energy projects (Solar, Wind & Small Hydro) which therefore get dispatched on priority and are generally fully utilized, and the generation from the hydro power plants is also generally fully utilized. The utilization of coal/lignite based plants depends on balance generation required from thermal Stations, and the PLF of such fossil based plants is likely to reduce further in the coming times.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3033
ANSWERED ON 04.08.2022

LED DISTRIBUTED UNDER UJALA

3033. SHRI SUDHAKAR TUKARAM SHRANGARE:
SHRI RANJEETSINGH HINDURAO NAIK NIMBALKAR:
SHRI SHIVAKUMAR C. UDASI:

Will the Minister of POWER
be pleased to state:

(a) the total quantity of energy efficient and affordable LED distributed under Unnat Jyoti by Affordable LED for All (UJALA) scheme during the last five years along with the details of Kwh energy saved therefrom;

(b) the extent to which UJALA scheme helped in reducing annual household electricity bills; and

(c) the fresh steps taken by the Government to enroll Self-Help Groups (SHGs) for distribution of LED bulbs across the country under UJALA scheme?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : During the last five years, 14.3 crore LED bulbs have been distributed under the Unnat Jyoti by Affordable LED for All (UJALA) scheme which has resulted in an estimated annual energy savings of 18.6 billion units (kWh). The total annual reduction in electricity bills of these consumers is estimated to be Rs 7440 Crores (at a price of Rs. 4/unit).

(c) : To enroll self-help group under the UJALA Scheme, Energy Efficiency Services Limited (EESL) signs a tri-party Memorandum of Understanding (MoU) with State Rural Livelihood Mission (SRLM) and the Self-Help Group nominated by the concerned SRLM for sale of LED bulbs under UJALA Scheme. Interested SRLM may approach EESL for the enrolment.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3036
ANSWERED ON 04.08.2022

ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

†3036. DR. BHARATIBEN DHIRUBHAI SHIYAL:
SHRI SHANKAR LALWANI:
DR. MANOJ RAJORIA:
SHRIMATI RANJEETA KOLI:
SHRI SUMEDHANAND SARASWATI:

Will the Minister of POWER
be pleased to state:

(a) whether the Government is taking swift steps to create and augment electric vehicle charging infrastructure to promote electric vehicles across the country;

(b) if so, the details thereof and the guidelines issued in this regard;

(c) the details of incentives, subsidy and financial assistance given by the Government for setting up of these charging stations;

(d) the details of charging stations installed in the country, State-wise including Rajasthan;

(e) the time by which these are likely to be installed; and

(f) the steps being taken by the Government to increase the number of electric charging stations across the country?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (f) : To increase the number of the charging stations across the country, the following steps have been taken;

i. **Ministry of Power has issued a clarification that the charging of batteries of electric vehicles through charging station does not require any license.**

ii. **Central Electricity Authority (CEA) has issued amendments in the regulations regarding Technical Standards pertaining to Grid Connectivity and Safety of supply for Charging Stations.**

iii. **Revised consolidated Guidelines & Standards for charging infrastructure have been issued by the Ministry of Power on 14.01.2022 to accelerate the E-Mobility transition in the country.**

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iv. The Bureau of Energy Efficiency (BEE) has been selected as the Central Nodal Agency to take various initiatives for promotion of Charging Infrastructure for Electric Vehicles.

v. Ministry of Power along with Ministry of Road Transport and Highways, Ministry of Heavy Industries and NITI Aayog has launched a nationwide "Go Electric" Campaign on 19.02.2021 to educate the general public on the benefits of electric vehicles.

vi. Action plans for 9 major cities have been prepared by Bureau of Energy Efficiency (BEE) for installation of Public Charging Stations. As per the initial estimates, a total of 46,397 Public Charging Stations (PCS) are being targeted in these cities by 2030.

vii. All the Central Ministries and the State Governments have been requested to join the Government of India's initiative on transformative mobility and to convert their fleet of official vehicles from the present Petrol/Diesel Vehicles with Electric Vehicles.

viii. There are 2826 operational public charging stations (PCS) in the country including the State of Rajasthan. The details of the PCS in the States are given at Annexure-A.

ix. Ministry of Housing and Urban Affairs has issued amendments in Model Building By-Laws and Urban and Regional Development Plans, Formulation and Implementation Guidelines regarding Charging Infrastructure for Electric Vehicles.

Faster Adoption and Manufacturing of Electric & Hybrid Vehicles (FAME) is being implemented by Ministry of Heavy Industries (MHI). MHI had sanctioned 520 Charging Stations/Infrastructure under the Phase-I of FAME India Scheme. Further, MHI has also sanctioned 2,877 Electric Vehicle Charging Stations in 68 cities across 25 States/UTs and 1576 Charging Stations across 9 Expressways and 16 Highways under Phase II of FAME India Scheme. Under FAME India Schemes I & II, a total of 532 Charging Stations have been installed as on 15th July, 2022 (479 under FAME-I and 53 under FAME-II).

At present, Phase-II of FAME India Scheme is being implemented on pan-India basis (including Rajasthan) for a period of 5 years w.e.f. 01st April, 2019 with a total budgetary support of Rs. 10,000 crores. This phase focuses on supporting electrification of public & shared transportation and aims to support, through subsidies, 7090 e-buses, 5 lakh e-3 wheelers, 55000 e-4 wheeler passenger cars and 10 lakh e-2 Wheelers. In addition, creation of charging infrastructure is also supported to address the range anxiety among users of electric vehicles.

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ANNEXURE-A

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (f) OF UNSTARRED QUESTION NO. 3036 ANSWERED IN THE LOK SABHA ON 04.08.2022

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State wise Operational Public Charging Stations (PCS)

Sl. No.	States	Operational PCS (nos.)
1	Andhra Pradesh	100
2	Arunachal Pradesh	2
3	Assam	12
4	Bihar	8
5	Chandigarh	7
6	Chhattisgarh	11
7	Delhi	504
8	Goa	18
9	Gujarat	55
10	Haryana	88
11	Himachal Pradesh	8
12	Jammu	2
13	Jharkhand	16
14	Karnataka	501
15	Kerala	95
16	Madhya Pradesh	33
17	Maharashtra	573
18	Manipur	1
19	Meghalaya	12
20	Nagaland	2
21	Odisha	24
22	Puducherry	2
23	Punjab	22
24	Rajasthan	54
25	Sikkim	1
26	Tamil Nadu	276
27	Telangana	173
28	Tripura	2
29	Uttar Pradesh	159
30	Uttarakhand	23
31	West Bengal	42
	Total	2826

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3038
ANSWERED ON 04.08.2022

WORKS DONE THROUGH CSR FUND

†3038. SHRIMATI REKHA VERMA:

Will the Minister of POWER
be pleased to state the number and details of works done by the Public Sector Undertakings (PSUs) under Ministry of Power through Corporate Social Responsibility (CSR) fund in Dhaurahra Parliamentary Constituency of Uttar Pradesh during the last five years and the current year?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

Dhaurahra Parliamentary Constituency is located around 170/195 Kms away from National Thermal Power Corporation's (NTPC) Tanda/Unchahar Stations in the State of Uttar Pradesh. A total of 155 Energy Efficient Pumps were installed in Daurahara Parliamentary Constituency with a total expenditure of Rs. 62 Lakh.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3048
ANSWERED ON 04.08.2022

BESS FOR SOLAR POWER PLANTS

3048. SHRI MAGUNTA SREENIVASULU REDDY:
SHRI P.V. MIDHUN REDDY:

Will the Minister of POWER
be pleased to state:

(a) the details of Li-Ion Battery Energy Storage Systems (BESS) set-up in the country for storing the energy generated by various solar power plants during the last year and the current year;

(b) whether the Government has taken any steps to promote and encourage BESS in the country; and

(c) if so, the details thereof and if not, the reasons therefor?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : As per the information available, three Li-ion Battery Energy Storage Systems (BESS) projects (above 5 MW) have been commissioned in the country till now at Mehsana, Gujarat (19.2 MWh), Delhi (10 MW/10 MWh) and Andaman (16 MW/8 MWh). During the current year no project has been commissioned so far.

(b) & (c) : The Government have taken following steps to promote and encourage development of BESS in the country;

i. **A Circular on legal Status for Energy Storage Systems has been issued on 29th January, 2022.**
ii. **Waiver of ISTS Charges on BESS charging has been provided vide order dated 23rd November, 2021.**
iii. **Guidelines for Procurement and Utilization of BESS as part of Generation, Transmission and Distribution assets, along with Ancillary Services issued on 10th March 2022.**
iv. **Solar Energy Corporation of India (SECI) has called bids for Pilot project of 500 MW/1000 MWh Battery Energy Storage System (BESS) as a combination of grid support and peaking product on commercial basis under tariff-based global competitive bidding.**
v. **SECI has awarded RE Projects of cumulative capacity of 1200 MW with assured peak power supply, wherein the RE developers have to set up energy storage systems (amounting to 600 MWh) in their projects, which, among other storage technologies also includes BESS.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3051
ANSWERED ON 04.08.2022

PRODUCTION OF ELECTRICITY AT NTPC KAYAMKULAM

3051. ADV. A.M. ARIFF:

Will the Minister of POWER be pleased to state:

(a) whether the Government proposes to restart the production of electricity in the NTPC power plant at Kayamkulam in Kerala using alternate fuel like Liquefied Natural Gas (LNG) and if so, the details thereof;

(b) whether the Government is aware that the Kerala State Electricity Board (KSEB) Limited is paying an Annual Fixed Charge (AFC) of Rs. hundred crore to NTPC upto 28.02.2025 and if so, the details thereof;

(c) whether the Government would consider paying the recurring expense of around Rs. three crore per annum for the functioning of NTPC Kendriya Vidyalaya, Kayamkulam from the AFC; and

(d) if so, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : Rajiv Gandhi Combined Cycle Power Plant (RGCCPP) is a Naphtha fuel fired station. The entire power (359.58 MW) from the station has been allocated to the state of Kerala by Ministry of Power (MoP), GoI. On substantial increase of Naphtha prices, Kerala stopped scheduling the power due to high Energy Charge Rate. However, even now, this Station is kept on ready for generation on Naphtha after due notice.

Multi fuel firing system has been installed at Kayamkulam with the consent of KSEBL, making the system suitable for Gas firing in addition to the present Naphtha firing.

However, Kerala has not agreed for the option of pipeline to transport RLNG from PLL's (Petronet LNG Limited) Kochi Regasification Terminal, which is around 120 kms from Kayamkulam.

(b) : RGCCPP, Kayamkulam has been set up based on the request of Kerala State to meet its demand on a long term basis. This plant has been set up to recover its cost through tariff (Including Fixed Charges) throughout useful life of the plant. The Tariff/fixed charges are determined by the CERC (Central Electricity Regulatory Commission), a statutory body.

.....2.

Currently, due to substantial increase of Naphtha prices, Kerala stopped scheduling the power due to high Energy Charge Rate. Accordingly, a special dispensation was evolved after mutual discussions and agreement, wherein it was inter-alia agreed that Kerala will pay Rs. 100 Crore/year from 1.4.2019 as fixed charges as against fixed charges of around Rs. 240 Crore/year. This Station is kept ready for generation on Naphtha after due notice.

(c) & (d) : The matter regarding Kendriya Vidyalaya is sub judice; case reference being SLP (C) No 6030 of 2022 in the Hon'ble Supreme Court of India.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3058
ANSWERED ON 04.08.2022

ACCESS TO CLEAN ELECTRICITY

3058. DR. MOHAMMAD JAWED:

Will the Minister of POWER
be pleased to state:

(a) whether thirty seven percent of rural households in Bihar do not have access to reliable electricity;

(b) if so, the details thereof;

(c) whether the Government has devised a concrete plan for increasing access to clean electricity in rural areas of Bihar; and

(d) if so, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : The State Government of Bihar had reported 100 percent Household electrification of all willing un-electrified Households under Pradhan Mantri Sahaj Bijli Har Ghar Yojana – Saubhagya on 25.10.2018. Under Saubhagya a total of 32,59,041 households were electrified in Bihar, as on 31.03.2019.

(c) & (d) : Under the newly launched Revamped Distribution Sector Scheme (RDSS), convergence with the KUSUM Scheme is envisaged, under which the feeders segregated for agriculture shall be solarized. This would enable increase of clean energy supply to the rural areas in Bihar. A total of 1351 feeders are planned for solarization in the State of Bihar under this convergence.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3059
ANSWERED ON 04.08.2022

INSTALLATION OF SULPHUR REGULATOR TECHNOLOGY

3059. SHRI G.M. SIDDESHWAR:

Will the Minister of POWER be pleased to state:

(a) whether even after the deadline given by the Government to install the technology to prevent sulphur dioxide present in the black smoke emitted from the thermal power stations, many power companies are yet to install this technology;

(b) if so, the details thereof;

(c) whether the coal-fired power stations of the country are facing technical difficulties in installing sulphur regulator technology;

(d) if so, the details thereof; and

(e) the guidelines issued by the Government for immediate installation of sulphur regulator technology in all the thermal power stations of the country?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (e) : Coal based Thermal Power Plants (TPPs) are required to ensure compliance of the emission norms, as notified by Ministry of Environment, Forest & Climate Change (MoEF&CC) and directions given by the Central Pollution Control Board (CPCB) from time to time. As per the recent notification dated 31.03.2021 issued by MoEF&CC, the following timelines and penalty provisions have been provided for those power plants which do not comply after the timelines given in the notification:

Category and Description	Timelines for compliance	Environment Compensation (Rs. per unit electricity generated) for non-compliance beyond timelines		
		0-180 days	180-365 days	366 days & beyond
Category A - Within 10 km radius of NCR or cities having million plus Population as per 2011 census of India.	Upto 31.12.2022	0.10	0.15	0.20
Category B - Within 10 km radius of critically polluted areas or Non-Attainment cities as defined by CPCB.	Upto 31.12.2023	0.07	0.10	0.15
Category C-Other than those included in Category A and B.	Upto 31.12.2024	0.05	0.075	0.10

.....2.

As per the above notification, the earliest timelines for compliance begins from 31.12.2022 for Category A plants.

Flue Gas Desulphurisation (FGD) is one of the technologies chosen by the Thermal Power Plants for compliance to Sulphur dioxide (SO2) emission norms. As informed by the Central Electricity Authority (CEA), the percentage of works awarded for installation of FGD by Central, State and Private sector thermal generating units are 86.6%, 12.1% and 25.1% respectively.

Constraints faced by the Thermal Power Plants in implementation of Sulphur emission norms using FGD technology are as follows:

i. **Minimum time period required for FGD commissioning from the date of award is 36-42 months.**

ii. **Limited availability of vendors.**

iii. **Price escalation due to limited supply of components**

iv. **Impact of COVID-19 pandemic on supply chain and manpower availability.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3074
ANSWERED ON 04.08.2022

ELECTRICITY-BASED COOKING

3074. SHRI JASWANT SINGH BHABHOR:

Will the Minister of POWER
be pleased to state:

(a) the details of electricity-based cooking penetration which helps in reduction in energy import dependency thereby achieving the goal of Atmanirbhar Bharat;

(b) the penetration of electricity-based cooking in urban and rural areas; and

(c) the details of city/town/village having the highest penetration of electricity-based cooking in the country including the State of Gujarat?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : No assessment has been carried out with respect to penetration of electricity based cooking by the Ministry of Power or the PSUs/Organizations under its administrative control. However, with an objective to promote clean and safe cooking, Bureau of Energy Efficiency (BEE), a statutory body under the administrative control of Ministry of Power, has developed the performance benchmarks for Induction hobs and carried out a market assessment study to understand the market acceptability of the product category wherein the market size for Induction hobs was estimated to be around 40 lakhs units in the FY 2018-19. Further, based on the market data received, it was reported that approximately 60% of the units are being assembled locally while their components are imported, with remaining 40% units being imported in the fully assembled state.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3079
ANSWERED ON 04.08.2022

WORKS SANCTIONED UNDER DDUGJY

3079. SHRIMATI SUMALATHA AMBAREESH:

Will the Minister of POWER be pleased to state:

(a) the number of works sanctioned under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and erstwhile Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) during the last three years and the current year, State and year-wise;

(b) the quantum of funds allocated, released and spent for the sanctioned projects during the said period, State and year-wise;

(c) whether it is true that there are huge number of works yet to be completed under the said yojanas; and

(d) if so, the details thereof along with the reaction of the Government thereon?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Government of India launched Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in December, 2014 for various rural electrification works including separation of agriculture and non-agriculture feeders, strengthening and augmentation of sub-transmission & distribution infrastructure, metering of distribution transformers/feeders/consumers and electrification of villages across the country. The erstwhile Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) was subsumed under DDUGJY. Works under the scheme have been completed and the scheme stands closed on 31.03.2022.

The States/UTs-wise and year-wise details of number of projects sanctioned under the project, funds allocated, released and spent under DDUGJY are furnished at Annexure.

(c) & (d) : Under DDUGJY and thereafter under Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya), all States had declared electrification of all Villages on 28th April, 2018 and all willing Households on 31st March, 2019 respectively.

While, a total of 18374 Villages were electrified under DDUGJY, a total of 2.86 crore Households were electrified under the aegis of Saubhagya including additional households in two tranches that became willing after 31.03.2019 but were unwilling for electrification earlier.

While fresh arisings of new households is a continuous process and electrification of such households is expected to be taken care of by the Distribution Utilities, the Government of India stands committed to help the States to electrify all the households which existed when Saubhagya was sanctioned. In this respect, the Government of India recently issued guidelines for their electrification under the Revamped Distribution Sector Scheme (RDSS). The States have been advised to pose their DPRs to the Ministry of Power in this regard.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3079 ANSWERED IN THE LOK SABHA ON 04.08.2022

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DDUGJY (New+ Addl. Infra)

State-wise Financial & Physical Infrastructure created since 2014-15 (as on 31.03.2022)

Sl. No.	State/UT	Financials (in Rs. Crores)			Physical Infrastructure Created																	
		Project Cost (Rs Crore)	GBS sanctioned (Rs Crore)	GBS Released (Rs Crore)	S/S-New (Nos.)		S/S-Aug (Nos.)		DTR (Nos.)		LT Lines (Ckm)		HT Lines (Ckm)		Feeder Separation (Ckm)		Consumer Meters (Nos.)		DT Meters (Nos.)		Feeder Meters (Nos.)	
					Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.
1	Andaman & Nicobar	21	13	6													39200	39200				
2	Andhra Pradesh	941	566	553	204	204			18869	18869	8055	8055	5277	5277			15779	15779	3618	3618	342	342
3	Arunachal Pradesh	743	631	420	5	5			29876	29876	2940	2940	2641	2641			95522	95522	1623	1623	377	377
4	Assam	4747	4036	2355	21	21	13	13	21932	21932	40081	40081	14700	14700					17118	17118	257	257
5	Bihar	7301	4395	3805	280	280	9	9	81485	81485	73689	73689	23347	23347	18378	18378	2457482	2457482				
6	Chhattisgarh	1624	977	899	80	80	83	83	11937	11937	13372	13372	8316	8316	4714	4714	52819	52819	837	837	3388	3388
7	Dadra & Nagar Haveli	5	3	2									21	21			300	300	350	350		
8	Goa	20	12	12					21	21	56	56	13	13			94187	94187				
9	Gujarat	925	557	556	15	15	27	27	17817	17817	19644	19644	6454	6454			1092722	1092722	57106	57106		
10	Haryana	346	208	161	14	14	19	19	2761	2761	1970	1970	1432	1432	184	184	40072	40072				
11	Himachal Pradesh	168	143	107	14	14	28	28	314	314	1452	1452	341	341	10	10	121105	121105	381	381	15	15
12	Jammu & Kashmir	1903	1618	648	20	20	13	13	7209	7209	21091	21091	5219	5219	130	130			280	280		
13	Jharkhand	4926	2963	2564	116	116	98	98	68302	68302	62278	62278	18815	18815	5577	5577	334147	334147			1017	1017
14	Karnataka	1882	1133	1107	4	4	3	3	13215	13215	9009	9009	10818	10818	11784	11784	1483376	1483376	23790	23790		
15	Kerala	485	292	292	2	2	7	7	598	598	2705	2705	1293	1293			2063687	2063687	23436	23436	97	97
16	Ladakh	170	145	47	1	1			144	144	432	432	560	560								
17	Madhya Pradesh	3889	2339	2129	145	145	295	295	40361	40361	49698	49698	30184	30184	5718	5718	410055	410055	402	402	242	242
18	Maharashtra	2544	1531	1258	210	210	150	150	10914	10914	14122	14122	8027	8027	8315	8315						
19	Manipur	202	172	103					937	937	1663	1663	793	793			100000	100000				
20	Meghalaya	685	583	443	9	9	2	2	2567	2567	13282	13282	2373	2373					999	999	179	179
21	Mizoram	84	71	63			4	4	368	368	403	403	428	428			19133	19133			236	236
22	Nagaland	165	140	85	6	6			364	364	596	596	596	596					697	697	191	191
23	Odisha	2227	1339	1017	12	12	164	164	14228	14228	11421	11421	7145	7145	1240	1240	2271702	2271702			902	902
24	Puducherry	20	12	11					28	28	8	8	38	38			75609	75609	1250	1250		
25	Punjab	443	267	218					7912	7912	246	246	3268	3268	2032	2032	169357	169357				
26	Rajasthan	5059	3041	2171	231	231	90	90	127534	127534	78645	78645	31609	31609	6396	6396	8125	8125			1787	1787
27	Sikkim	87	74	72					373	373	924	924	380	380			45969	45969			65	65
28	Tamil Nadu	924	556	556	106	106	131	131	1189	1189	1174	1174	3008	3008	797	797	1195115	1195115				
29	Telangana	462	278	278	86	86			9150	9150	8162	8162	1890	1890							1435	1435
30	Tripura	433	368	247	4	4			2027	2027	4360	4360	2845	2845			161728	161728				
31	Uttar Pradesh	13778	8280	6431	261	261	1032	1032	148258	148258	83895	83895	41991	41991	33814	33814	2055439	2055439	82553	82553	1812	1812
32	Uttarakhand	845	719	614	1	1			3818	3818	5935	5935	3224	3224			13462	13462				
33	West Bengal	4179	2516	2394	80	80	152	152	23035	23035	40438	40438	6534	6534	9427	9427	2595107	2595107	16787	16787	3193	3193
Grand Total		**62232**	**39978**	**31624**	**1927**	**1927**	**2320**	**2320**	**667543**	**667543**	**571748**	**571748**	**243579**	**243579**	**108517**	**108517**	**17011199**	**17011199**	**231227**	**231227**	**15535**	**15535**

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3083
ANSWERED ON 04.08.2022

REQUIREMENT OF COAL AND GAS FOR POWER PROJECTS

†3083. SHRI ASHOK KUMAR RAWAT:

Will the Minister of POWER be pleased to state:

(a) the total requirement of coal and gas for each power project during the last three years and the current year, State-wise;

(b) the quantum of coal and gas supplied during the said period, year-wise;

(c) whether the supply of coal and gas has decreased and if so, the details thereof; and

(d) the steps taken or proposed to be taken by the Government to meet this demand?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : The total requirement and supply of coal during the last three years and the current year (April – June, 2022) in the thermal power plants (coal based) in the country are as under:

Coal (Million Tonnes)			
Year	Projected Requirement	Supply	Consumption
2019-20	698.2	638.7	622.2
2020-21	690.2	596.3	615.4
2021-22	723.2	694.6	697.3
2022-23 (Apr-June)	201.2	205.5	205.4

The details of State-wise requirement, receipt and consumption of coal, during the last three years and the current year (Apr-Jun, 2022) at Annexure-I.

The requirement of gas in gas based power plants (@ 85% PLF, assuming GCV of 9500 kcal/SCM and SHR of 2000 kcal/kWh) and gas supplied/consumed during last three years and current year (Apr-Jun, 2022) is as under:

Gas (MMSCMD)		
Year	Projected Requirement	Supply
2019-20	102.4	29.5
2020-21	102.4	30.1
2021-22	102.4	22.6
2022-23 (Apr-June)	102.4	19.4

(MMSCMD- Million Metric Standard Cubic Meters per Day)

.....2.

State-wise requirement of gas and gas supplied during last three years and current year (Apr-Jun, 2022) is enclosed at Annexure-II.

(c) : The supply of coal has increased from 638.7 MT in FY 2019-20 to 694.7 MT in FY 2021-22 with a marginal dip during FY21 to 596.3 MT. Further, during 2022-23 (Apr-June), coal supply has been 205.5 MT against the requirement of 201.2 MT.

However, the supply of gas has declined from 29.5 MMSCMD during FY 2019-20 to 19.4 MMSCMD in FY 2022-23 (Apr-June).

(d) : Government has taken the following measures to meet the demand:

(i) Commercial Auction of coal mines on revenue share mechanism:- Since Launch of auction of coal mines for commercial mining in June 2020, 42 coal mines have been successfully auctioned.

(ii) Allowed sale of excess coal from captive mines: Government has allowed sale of coal from captive mines upto 50% of the total coal or lignite produced in a financial year on payment of additional amount to the State Government, after meeting the requirement of end use plant linked with the mine.

(iii) Increasing share of renewable energy; capacity of 500 GW of non-fossil by 2030.

(iv) Imported Regasified Liquefied Natural Gas (RLNG) is kept under Open General License (OGL) and gas based power plants are free to import RLNG on mutually agreed terms and conditions. Further, Government has taken several steps to enhance exploration & production of natural gas in the country such as Discovered Small Field Policy, Hydrocarbon Exploration and Licensing Policy, Policy for Extension of Production Sharing Contracts, Policy for early monetization of Coal Bed Methane etc.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3083 ANSWERED IN THE LOK SABHA ON 04.08.2022

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Coal Requirement, Supplied and Consumption in Last Three Years and Current Year

All Figures in Million Tones

State	2019-20			2020-21			2021-22			2022-23 (Apr-Jun)		
	Require-ment	Receipt	Consump-tion	Require-ment	Receipt	Consump-tion	Require-ment	Receipt	Consump-tion	Require-ment	Receipt	Consump-tion
Andhra Pradesh	43.7	39.4	38.4	43.4	28.0	29.5	44.3	37.2	37.3	11.9	12.3	11.1
Assam	2.1	2.7	2.3	2.4	1.4	1.7	1.7	2.4	2.5	0.5	0.9	0.8
Bihar	21.5	25.5	25.3	25.9	24.8	24.6	26.7	30.0	30.1	9.2	9.3	9.6
Chhattisgarh	79.2	80.1	78.9	80.2	93.3	92.8	89.4	101.7	101.9	25.7	24.3	26.1
Gujarat	45.5	41.3	40.8	43.7	34.5	36.6	44.3	26.0	25.3	8.8	9.1	9.0
Haryana	16.2	12.3	10.9	15.6	7.5	9.1	14.4	14.3	15.0	4.2	5.2	5.7
Jharkhand	17.6	16.7	16.3	18.0	16.5	16.8	17.4	17.7	17.8	4.7	4.5	4.9
Karnataka	22.0	15.4	14.5	20.9	10.3	11.3	19.7	18.1	18.4	6.5	7.4	7.0
Madhya Pradesh	80.1	75.5	74.6	78.5	75.8	77.6	82.7	84.0	83.7	24.0	24.3	24.0
Maharashtra	86.6	76.4	72.7	81.3	62.6	66.6	81.7	78.4	80.3	22.7	24.7	24.1
Odisha	37.1	33.2	33.1	37.0	42.2	42.1	40.6	45.4	44.5	12.6	11.4	11.3
Punjab	18.4	12.5	12.1	17.7	10.2	11.1	20.6	14.8	15.3	4.7	5.8	5.3
Rajasthan	28.9	24.3	22.3	27.7	20.4	21.4	30.2	24.6	24.5	8.5	8.3	7.9
Tamil Nadu	34.7	28.9	28.7	34.5	23.7	24.4	38.9	31.1	29.6	10.2	9.5	8.9
Telangana	30.9	29.6	29.9	29.6	25.6	26.5	32.3	31.2	31.2	8.8	8.7	8.3
Uttar Pradesh	82.9	75.4	74.0	82.4	73.8	76.5	87.5	84.1	84.6	23.7	25.0	26.7
West Bengal	50.8	49.4	47.3	51.2	45.7	47.0	50.7	53.6	55.2	14.6	14.7	14.7
Grand Total	698.3	638.7	622.2	690.2	596.3	615.4	723.2	694.6	697.3	201.2	205.5	205.4

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3083 ANSWERED IN THE LOK SABHA ON 04.08.2022

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Gas Requirement and Supplied in Last Three Years and Current Year

State	2019-20		2020-21		2021-22		2022-23 (Apr-Jun)	
	Require-ment	Supplied	Require-ment	Supplied	Require-ment	Supplied	Require-ment	Supplied
Andhra Pradesh	21.7	1.9	21.7	2.0	21.7	1.4	21.7	0.9
Assam	2.7	2.4	2.7	2.2	2.7	2.6	2.7	2.8
Delhi	9.5	3.5	9.5	3.0	9.5	2.8	9.5	3.2
Gujarat	31.5	7.2	31.5	9.9	31.5	4.0	31.5	2.0
Haryana	1.9	0.3	1.9	0.6	1.9	0.1	1.9	0.0
Maharashtra	13.8	4.7	13.8	3.5	13.8	3.8	13.8	2.5
PUDUCHERRY	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
Rajasthan	4.4	1.1	4.4	1.0	4.4	1.3	4.4	1.2
Tamil Nadu	3.8	1.7	3.8	1.4	3.8	1.2	3.8	1.3
TRIPURA	4.7	4.0	4.7	4.4	4.7	4.0	4.7	4.0
Uttar Pradesh	6.4	1.5	6.4	1.6	6.4	0.7	6.4	1.4
UTTARAKHAND	1.9	1.2	1.9	0.4	1.9	0.6	1.9	0.0
Grand Total	102.4	29.5	102.4	30.1	102.4	22.6	102.4	19.4

***- Requirement is calculated at 85% PLF (assuming GCV of 9500 Kcal/SCM and SHR of 2000 Kcal/kWh)**

(MMSCMD- Million Metric Standard Cubic Metres Daily)

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3085
ANSWERED ON 04.08.2022

ASSET MONETIZATION OF PGCIL

3085. SHRI JAYADEV GALLA:

Will the Minister of POWER
be pleased to state:

(a) whether the Government proposes to monetize assets of Power Grid Corporation of India Limited (PGCIL) by creating an infrastructure investment trust and if so, the details thereof;

(b) the details of sponsors, investment managers, project managers and the trustee of the proposed infrastructure investment trust;

(c) the details and values of the assets that are being monetized under the proposed plan along with the details of the Special Purpose Vehicles that held these assets;

(d) whether the draft prospectus has been prepared for the infrastructure investment trust and if so, the details thereof along with the date on which the details of the prospectus would be released;

(e) whether the proceeds of asset monetisation would be used for fresh investments of PGCIL; and

(f) if so, the details of the proposed projects in which these proceeds would be invested?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : Yes Sir. The Government of India have granted approval to Power Grid Corporation of India Limited (PGCIL) to undertake monetization of its TBCB (Tariff Based Competitive Bidding) assets, held in Special Purpose Vehicles (SPVs) through Infrastructure Investment Trust (InvIT).

(b) : PGCIL had set up its InvIT – POWERGRID Infrastructure Investment Trust ('PGInvIT/Trust'). PGInvIT was registered by Securities and Exchange Board of India (SEBI) under SEBI (Infrastructure Investment Trusts) Regulations, 2014 as an Infrastructure Investment Trust vide registration No.IN/InvIT/20-21/0016 dated 07th January, 2021. The details of Sponsor, Investment Managers, Project Managers and the Trustee to PGInvIT are as under:

- **Sponsor & Project Manager: Power Grid Corporation of India Ltd.**
- **Trustee: IDBI Trusteeship Services Ltd.**

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•**Investment Manager: POWERGRID Unchahar Transmission Ltd., PUTL (a wholly owned subsidiary of POWERGRID)**

(c) : In May 2021, PGCIL monetized following five (05) of its SPVs, acquired through Tariff Based Competitive Bidding process, through PGInvIT:

- **POWERGRID Vizag Transmission Limited (PVTL),**
- **POWERGRID Kala Amb Transmission Limited (PKATL),**
- **POWERGRID Parli Transmission Limited (PPTL),**
- **POWERGRID Warora Transmission Limited (PWTL) and**
- **POWERGRID Jabalpur Transmission Limited (PJTL)**

During FY 2021-22, PGCIL raised Rs. 8,370 Crore through monetization. In the FY 2022-23, the target for monetization is Rs. 6,860 Crore.

(d) : In respect of the IPO by PGInvIT in May 2021, the Draft Offer Document (DOD) was filed with SEBI on 25th January 2021. The Updated Draft Offer Document (UDOD) was filed with SEBI prior to the IPO on 22nd April 2021 and after conclusion of the IPO process, the Final Offer Document (FOD) was filed with SEBI on 06th May 2021.

(e) & (f) : The proceeds from asset monetization are used to meet capital expenditure requirements of PGCIL.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3119
ANSWERED ON 04.08.2022

ACQUISITION OF LAND FOR NTPC PLANT

†3119. SHRIMATI GOMATI SAI:

Will the Minister of POWER be pleased to state:

(a) whether the Government has provided compensation and jobs for acquiring farmers land for the establishment of NTPC plant in Lara and Tilaipali village in Raigarh district of Chhattisgarh;

(b) if so, the details thereof; and

(c) if not, the reasons therefor?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : The land acquisition is carried by the District Administration/ Appropriate Govt., under the extant Land Acquisition (LA) Act; on NTPC's requisition for required land for the Project. NTPC deposits the demanded amount to the respective Land Acquisition Authority/ District Administration for disbursement of the amounts of due compensation to the concerned farmers.

As far as jobs are concerned, these are not committed under the extant LA Act. However, the construction and operation stages of the project do give rise to various job opportunities.

The details of compensation & jobs are given as under:

<u>NTPC Lara -</u>

The State Govt. had acquired the private land through CSIDC, Raipur (Chhattisgarh State Industrial Development Corporation) for NTPC Lara, measuring 1929.20 acre and CSIDC has handed over land to NTPC Lara on 99 years lease basis. The total amount of Rs.292.35 Cr towards land acquisition has been deposited by NTPC with CSIDC-Raipur for disbursement of compensation to land losers through the District Administration.

NTPC Lara, in consultation with stakeholders, has offered compensation under the R&R plan which has also been approved by the State Govt.

Accordingly, till date 1821 Land oustees out of 2449 Land oustees have received the R&R grant from NTPC. The R&R dispensation by NTPC for the eligible beneficiaries is being processed after due documentation.

.....2.

Further, till date, as against notified available vacancies for 79 regular posts at NTPC Lara, 57 candidates found suitable from Project Affected Families, were selected and provided employment.

Talaipalli Coal Mining Project (Talaipalli CMP) -

The Central Govt. (Ministry of Coal, Govt. of India) had acquired the private land admeasuring 2959 acre for NTPC Talaipalli Coal Mining Project under CBA (Coal Bearing Areas) Act & an amount of Rs. 250.83 Cr has already been disbursed as compensation by the Competent Authority. Further, 788.46 acre of private land has been acquired by the State Govt. of Chhattisgarh under the LA(Land Acquisition) Act 1894 / RFCTLARR (Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement) Act 2013 for which an amount of Rs. 176.87 Cr was deposited with the District Administration for the disbursement of compensation.

For the land acquired under the CBA Act, compensation for 95 percent of the land and related assets have been paid by the Competent Authority (as notified under Section 3 of the CBA Act by the Ministry of Coal, Govt. of India) while for the land acquired under the RFCTLARR Act 2013, almost 88 percent of compensation has been paid to the landowners by the District Administration.

NTPC, in consultation with the stakeholders has decided the R&R package, approved by the State Govt. where-in the eligible PAFs (Project Affected Families) shall be given R&R grants.

Out of 3379 eligible PAFs, 2788 PAFs have been paid R&R grants. For the balance PAFs, the process of payment of R&R grants is under progress, as mining is an ongoing process.

In addition to the above, secondary employment opportunities like shops, contractual works, vehicle contracts, etc. are also extended to the Project Affected Families.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3160
ANSWERED ON 04.08.2022

STATUS OF SAUBHAGYA IN GUJARAT

3160. SHRIMATI POONAMBEN MAADAM:

Will the Minister of POWER
be pleased to state:

(a) the details of the work undertaken under Pradhan Mantri Sahaj Bijli Har Ghar Yojana-Saubhagya in Gujarat during the last three years and the current year;

(b) the quantum of funds sanctioned, allocated and utilised for the said work during the said period;

(c) the average power supply per day in rural and urban areas of the country;

(d) the number of unelectrified households identified in the country, State-wise; and

(e) the time by which these households are likely to be electrified?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : The Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana – Saubhagya, in October, 2017 with the objective of achieving universal household electrification, by providing electricity connections to all un-electrified households in rural areas and all poor households in urban areas in the country. The State Government of Gujarat had reported that most of the houses were already electrified in Gujarat before launch of Saubhagya Scheme; hence, Gujarat had not participated in Saubhagya.

(c) : As per the information made available by the States on National Power Portal (NPP), the supply hours in urban areas and the rural areas, as on 08.07.2022, was 23.78 (HH.hh) & 21.48 (HH.hh) respectively.

(d) & (e) : Under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and, thereafter, under Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya), since closed on 31.03.2022, all the States had already declared electrification of all the Villages as on 28th April, 2018 and all willing Households as on 31st March, 2019 respectively.

While a total of 18374 Villages were electrified under DDUGJY, a total of 2.86 crore Households were electrified under the aegis of Saubhagya, including additional households in two tranches, became willing after 31.03.2019 but were unwilling for electrification earlier.

While fresh arisings of new households is a continuous process and electrification of such households is expected to be taken care of by the Distribution Utilities, the Government of India stands committed to extend financial assistance to the States to electrify all households which existed at the time of launch of Saubhagya. In this respect, the Government of India has recently issued guidelines for their electrification under the Revamped Distribution Sector Scheme (RDSS). The States have been advised to pose their DPRs to the Ministry of Power in this regard.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3163
ANSWERED ON 04.08.2022

GENERATION OF POWER FROM STUBBLE

†3163. SHRI VIJAY KUMAR DUBEY:

Will the Minister of POWER be pleased to state:

(a) whether the Government proposes to formulate any scheme of power generation from stubble;

(b) if so, the details thereof;

(c) the time by which the Government proposes to implement this scheme to protect the environment as well as to increase the income of the farmers;

(d) the status of gasifiers installed and under construction till date; and

(e) the details of the work undertaken by the Government to promote entrepreneurship in the said sector?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : Ministry of Power (MoP) has issued "Policy of Biomass utilization for power generation through co-firing in coal based power plants" in October, 2021, envisaging to use of 5-7% biomass for co-firing in all coal based thermal power plants.

All coal based thermal power plants of power generation utilities having bowl mills for pulverisation of coal, are required to blend biomass pellets (annual use of 5%) with coal, primarily, of agro residue along with coal with effect from one year of the date of issue of the policy. It shall increase to 7 percent with effect from two years after the date of issue of the order and thereafter.

As on date 31.07.2022, about 35 nos. of power plants in the country have co-fired biomass pellet in their units.

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Biomass is converted into electricity in coal based thermal power plants eco-friendly and generates additional income to farmers by consumption of their agro residues.

(d) : The total installed capacity of gasifiers is about 174244 kWeq and 1710 kWeq is under construction. State-wise details of Biomass gasifiers plants is given at Annexure.

(e) : In order to develop biomass supply chain infrastructure and to encourage the investors and entrepreneur to participate in this sector, MoP has issued Model Long term Contract (Minimum tenure of 7 years) for Biomass supply on 02.03.2022.

Further, MoP through its SAMARTH Mission has organized 18 training and awareness programs since October, 2021 for farmers, pellet manufacturers, entrepreneurs and Thermal Power Plant officers in several states across the country.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 3163 ANSWERED IN THE LOK SABHA ON 04.08.2022

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Status of Gasifiers installed and under construction upto 30/06/2022

Sl. No.	State/UT	Total installed capacity	Under installation
1	Assam	2933	-
2	Andhra Pradesh	22914	-
3	Bihar	6254	-
4	Chhattisgarh	1210	150
5	Gujarat	20080	-
6	Haryana	6463	-
7	J&K	200	-
8	Jharkhand	500	-
9	Karnataka	6297	-
10	Maharashtra	7150	-
11	Madhya Pradesh	10207	-
12	Meghalaya	250	-
13	Odisha	270	-
14	Rajasthan	2629	-
15	Tamil Nadu	14860	-
16	Uttar Pradesh	33899	-
17	Uttarakhand	2150	-
18	West Bengal	31178	1560
19	Telangana	4800	-
Total (kWeq)		174244	1710

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3175
ANSWERED ON 04.08.2022

PAYMENT TO GENCOS BY DISCOMS

3175. SHRI VELUSAMY P.:

Will the Minister of POWER be pleased to state:

(a) the details of the outstanding amount of Discoms to be paid to Gencos;

(b) whether the Government is monitoring the payment system of Gencos under 'Payment Rectification and Analysis in Power Procurement for bringing Transparency in Invoicing';

(c) if so, the details of the steps taken by the Government to secure the payment to Gencos by the Discoms since the procurement of input costs of Gencos also would be under default;

(d) whether the Government has any proposal for liquidity infusion for Discoms to pay the arrears to Gencos;

(e) if so, the details thereof; and

(f) if not, the steps taken by the Government toensure timely payment to Gencos?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : As per data provided by the power sector Generating companies, on the PRAPTI Portal, total outstanding amount to paid by Electricity Distribution Companies (DISCOMs) to Central Power Generation Stations, Independent Power Producers (IPPs) and Renewable Energy (RE) Generators as on 12.07.2022 are Rs.1,09,948 Crores. State-wise Details of power dues are Annexed.

(b) : Ministry of Power have launched web-portal called PRAPTI (Payment Ratification and Analysis in Power procurement for bringing Transparency in Invoicing of generators) for transparency in monitoring of GENCO, dues at the national level.

(c) to (f) : Recognizing the cash flow problems arising out of outstanding receivables of Generating Companies from DISCOMs and in order to increase basic payment discipline in the power sector value chain, sustenance of which has been matter of concern due to increasing receivables to Gencos, recently, Government of India promulgated Electricity (Late Payment Surcharge and Related Matters) Rules, 2022 on 3rd June, 2022. These rules entail obligations upon the DISCOMs to clear their legacy dues as existing on 03.06.2022 in a time bound phased manner in equated monthly installments with benefits of non applicability of late payment surcharge after 03.06.2022. These rules also provide framework for time bound clearance of current dues through establishment of a Payment Security Mechanism and disincentives of progressive withdrawal of open access as well as power regulation if the provisions of the Rules are not followed. DISCOMs can avail loans from PFC Ltd. and REC Ltd. to clear their dues to Generating Companies.

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ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3175 ANSWERED IN THE LOK SABHA ON 04.08.2022

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Overdues of States/Discoms towards Gencos (CPSE, IPP, RE) excluding State Owned Gencos as on 12.07.2022						
						(Rs. in Cr.)
Sl. No.	States	DISCOMs	CPSEs	IPPs	REs	Total
1	Andaman & Nicobar Islands	Electricity Department, Govt. of Andaman and Nicobar Islands	3	-	-	3
2	Andhra Pradesh	Andhra Pradesh Central Power Distribution Company Limited	23	-	-	23
		Andhra Pradesh Eastern Power Distribution Company Limited	37	-	0	37
		Andhra Pradesh Power Purchase Coordination Committee	168	1723	2250	4141
		Andhra Pradesh Southern Power Distribution Company Limited	117	34	5593	5744
3	Arunachal Pradesh	Arunachal Power Distribution Department	0	-	-	0
4	Assam	Assam Power Distribution Company Limited	1	-	2	3
5	Bihar	Bihar State Power Holding Company Limited	-	2	-	2
		North Bihar Power Distribution Company Ltd.	9	213	84	306
		South Bihar Power Distribution Company Ltd.	11	369	6	386
6	Chandigarh	Chandigarh Electricity Department	78	-	-	78
7	Chhattisgarh	Chhattisgarh State Power Distribution Company Limited	1	-	27	28
		Chhattisgarh State Power Trading Company Limited	-	155	-	155
8	Dadra & Nagar Haveli	Daman & Dui Electricity Department	4	-	-	4
9	Daman & Diu	Dadra and Nagar Haveli Electricity Department	1	402	-	403
10	Delhi	BSES Rajdhani Power Limited	111	0	-	111
		BSES Yamuna Power Limited	358	0	-	358
		Delhi Tata Power Distribution Limited	1	5	-	6
		The New Delhi Municipal Council	0	0	-	0
11	Goa	Goa Power Department	10	-	-	10
12	Gujarat	Dakshin Gujarat Vij Company Ltd	-	-	1	1
		Gujarat Urja Vikas Nigam Limited	24	643	263	930
		Madhya Gujarat Vij Company Ltd	-	-	1	1
		Paschim Gujarat Vij Company Ltd	-	-	1	1
		Uttar Gujarat Vij Company Ltd	-	-	2	2
13	Haryana	Haryana Power Purchase Centre	41	645	-	686
14	Himachal Pradesh	Govt. of HP	0	-	-	0
		Himachal Pradesh State Electricity Board Limited	8	53	-	61
15	Jammu & Kashmir	Jammu and Kashmir Power Distribution Department	7257	-	-	7257
		Jammu And Kashmir State Power Trading Company Limited	688	9	-	697
16	Jharkhand	Jharkhand Bijli Vitran Nigam Limited	4091	-	-	4091

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17	Karnataka	Bangalore Electricity Supply Company Ltd.	120	236	818	1174
		Chamundeshwari Electricity Supply Corporation Limited	7	26	237	270
		Gulbarga Electricity Supply Company Ltd.	90	31	704	825
		Hubli Electricity Supply Company Ltd.	151	524	950	1625
		Mangalore Electricity Supply Company Ltd.	0	24	24	48
18	Kerala	The Kerala State Electricity Board	61	501	-	562
19	Lakshadweep		-	-	-	0
20	Madhya Pradesh	Madhya Pradesh Power Generation Company Limited	0	576	38	614
		Madhya Pradesh Power Management Co Ltd	514	2319	2335	5168
21	Maharashtra	AMEL	-	0	0	0
		Best Undertaking	-	-	3	3
		Maharashtra State Electricity Distribution Co. Ltd	218	21017	1467	22702
		Maharashtra Tata Power DDL	-	-	7	7
22	Manipur	Manipur State Power Distribution Company Ltd.	50	-	-	50
23	Meghalaya	Meghalaya Power Distribution Corporation Limited	608	-	-	608
24	Mizoram	Mizoram Power Department	15	-	-	15
25	Nagaland	Nagaland Power Department	0	-	-	0
26	Odisha	Grid Corporation of Odisha	0	251	3	254
27	Puducherry	Puducherry Power Department	19	-	-	19
28	Punjab	Punjab State Power Corporation Limited	24	517	201	742
29	Rajasthan	Ajmer Vidyut Vitran Nigam Ltd.	36	174	277	487
		Jodhpur Vidyut Vitran Nigam Ltd.	199	425	319	943
		Jaipur Vidyut Vitran Nigam Ltd.	60	216	543	819
		Rajasthan Discoms Power Procurement Centre	26	0	16	42
		Rajasthan Rajya Vidyut Prasaran Nigam Limited	-	144	0	144
30	Sikkim	Sikkim Power Department	13	-	-	13
31	Tamil Nadu	Tamil Nadu Generation & Distribution Corporation Limited	7221	10663	2692	20576
		Tamil Nadu Electricity Board	687	-	136	823
32	Telangana	Telangana State Northern Power Distribution Company	117	75	504	696
		Telangana State Power Commission Company	708	12027	1446	14181
		Telangana State Southern Power Distribution Company	269	606	1492	2367
33	Tripura	Tripura State Electricity Corporation Limited	137	-	-	137
34	Uttar Pradesh	Uttar Pradesh Power Corporation Ltd	350	7603	20	7973
35	Uttarakhand	Uttarakhand Power Corporation Limited	3	-	-	3
36	West Bengal	CESC LTD	-	-	-	-
		Damodar Valley Corporation	0	-	-	0
		West Bengal State Electricity Distribution Company Ltd.	0	533	-	533
Total			24745	62741	22462	109948

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3179
ANSWERED ON 04.08.2022

POWER CRISIS

†3179. KUNWAR DANISH ALI:
SHRI RAJIV RANJAN SINGH ALIAS LALAN SINGH:

Will the Minister of POWER
be pleased to state:

(a) whether there is power crisis in the country;

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

(c) whether the Government has identified the States facing severe power crisis and if so, the details thereof, State-wise;

(d) the assessment related to actual power generation from different sources along with the requirement of electricity, State-wise;

(e) whether currently all the power plants have coal storage as per stipulated norms or not and if so, the details thereof; and

(f) the steps being taken by the Union Government to increase power generation to meet the demand of the said States?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (d) : At present, there is adequate installed capacity in the country to meet the demand. As on 30.06.2022, the installed generation capacity of the country was 403.76 Giga Watt (GW) as against the Peak Power Demand of the country of around 215.89 Giga Watt (GW) which had occurred in the month of April, 2022. The details of actual All India Power Supply Position during the current year i.e. 2022-23 (April, 2022 to June, 2022), are given at Annexure-I. There was a gap of 1% between the energy requirement and energy supplied during this period and this gap between Energy Requirement and Energy Supplied was generally on account of factors, other than adequacy of power availability in the country e.g. constraints in distribution network, financial constraints, commercial reasons, outages of generating units etc.

The details of State/UT wise power supply position in the country during the current year i.e. 2022-23 (April, 2022 to June, 2022), are given at Annexure-II. Further, the details of source-wise power generation (Program & Actual) from all sources fossil and non fossil during the current year 2022-23 (upto June, 2022), are given at Annexure-III.

.....2.

(e) : As on 30.07.2022, the coal stock available with the thermal power plants monitored on daily basis by CEA was about 29.6 MT, which was about 52% of the normative coal stock required to be maintained by the Thermal Power Plants (TPPs).

(f) : In order to meet the consistent increase in demand of electricity in the country, Thermal Power Projects (39 units) of an aggregate capacity 27,550 MW are under construction in the country. Further, 36 Hydro Electric Projects (above 25 MW capacity) totalling to 14,103.5 MW are also under construction in the country. Apart from this, Nuclear Power Plants of 8,700 MW capacity are under construction and 7,000 MW of Nuclear Power Plants have been accorded Administrative Approval and Financial Sanction.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3179 ANSWERED IN THE LOK SABHA ON 04.08.2022

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The details of actual All India Power Supply Position during the current year i.e. 2022-23 (April, 2022 to June, 2022)

Year	ENERGY [in Million Units (MU)]			
	Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)
2022-23 (upto June, 2022) (*)	404,761	400,654	4,107	1.0

(*) Provisional

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3179 ANSWERED IN THE LOK SABHA ON 04.08.2022

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The details of State/UT wise power supply position in the country during the current year i.e. 2022-23 (April, 2022 to June, 2022)

Power Supply Position (Energy) during the period April, 2022 - June, 2022 (Provisional)				
State / System / Region	April, 2022 - June, 2022 (*)			
	Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)
Chandigarh	527	527	0	0.0
Delhi	10,895	10,892	3	0.0
Haryana	16,967	16,598	369	2.2
Himachal Pradesh	3,112	3,048	63	2.0
UT of J&K and Ladakh	4,665	4,441	224	4.8
Punjab	18,730	18,564	166	0.9
Rajasthan	26,152	25,430	722	2.8
Uttar Pradesh	42,423	41,666	757	1.8
Uttarakhand	4,355	4,254	102	2.3
Northern Region	128,112	125,706	2,405	1.9
Chhattisgarh	9,697	9,643	54	0.6
Gujarat	38,693	38,689	4	0.0
Madhya Pradesh	23,469	23,167	302	1.3
Maharashtra	51,522	51,412	109	0.2
Dadra & Nagar Haveli and Daman & Diu	2,514	2,514	0	0.0
Goa	1,279	1,278	0	0.0
Western Region	128,545	128,075	470	0.4
Andhra Pradesh	12,770	18,530	403	2.1
Telangana	18,307	18,284	22	0.1
Karnataka	19,006	18,983	23	0.1
Kerala	7,090	7,075	15	0.2
Tamil Nadu	30,967	30,894	73	0.2
Puducherry	846	845	1	0.1
Lakshadweep	17	17	0	0.0
Southern Region	95,160	94,624	536	0.6
Bihar	10,826	10,568	258	2.4
DVC	6,561	6,554	7	0.1
Jharkhand	3,217	2,901	316	9.8
Odisha	11,140	11,095	45	0.4
West Bengal	16,569	16,524	45	0.3
Sikkim	140	140	0	0.0
Andaman- Nicobar	89	89	0	0.0
Eastern Region	48,467	47,797	670	1.4
Arunachal Pradesh	224	219	5	2.1
Assam	2,725	2,725	0	0.0
Manipur	226	225	1	0.3
Meghalaya	496	488	8	1.6
Mizoram	162	162	0	0.0
Nagaland	224	213	11	4.8
Tripura	418	418	0	0.0
North-Eastern Region	4,477	4,452	25	0.6
All India	404,761	400,654	4,107	1.0

(*) Provisional

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ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3179 ANSWERED IN THE LOK SABHA ON 04.08.2022

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The details of source-wise power generated (Program & Actual) from Fossil Fuel during the current year 2022-23 (upto June, 2022)

Region	State	Source	Fuel	Monitored Capacity (in MW) as on 30.06.2022	2022-23 (upto June-2022)	
					Program (in MU)	Generation (in MU)
Northern Region	DELHI		NATURAL GAS	2208.40	1637.00	1415.86
	HARYANA	THERMAL	COAL	5330.00	6335.00	8807.94
	HARYANA		NATURAL GAS	431.59	80.00	2.55
	JAMMU AND KASHMIR	THERMAL	HIGH SPEED DIESEL	175.00	0.00	0.00
	PUNJAB	THERMAL	COAL	5680.00	7531.00	8358.67
	RAJASTHAN	THERMAL	COAL	8900.00	13808.00	12384.86
	RAJASTHAN		LIGNITE	1580.00	2142.00	2059.90
	RAJASTHAN		NATURAL GAS	1022.83	314.00	341.68
	UTTAR PRADESH	THERMAL	COAL	24389.00	36552.00	41080.57
			LIGNITE	0.00	447.00	0.00
			NATURAL GAS	1493.14	438.00	574.34
	UTTARAKHAND	THERMAL	NATURAL GAS	450.00	263.00	0.00
Western Region	CHHATTISGARH	THERMAL	COAL	23688.00	37723.00	35257.83
	GOA	THERMAL	NAPTHA	48.00	0.00	0.00
	GUJARAT	THERMAL	COAL	14692.00	16928.00	15913.37
			LIGNITE	1400.00	1277.00	1548.40
			NATURAL GAS	7551.41	2716.00	844.34
	MADHYA PRADESH	THERMAL	COAL	21950.00	36570.00	37979.05
	MAHARASHTRA	THERMAL	COAL	23856.00	32738.00	34428.49
			NATURAL GAS	3207.08	1710.00	985.37
Southern Region	ANDHRA PRADESH	THERMAL	COAL	11590.00	17658.00	15843.56
			DIESEL	36.80	0.00	0.00
			NATURAL GAS	4898.54	616.00	338.27
	KARNATAKA	THERMAL	COAL	9480.00	10657.00	10931.86
			DIESEL	25.20	0.00	0.00
			NATURAL GAS	0.00	124.00	0.00
	KERALA	THERMAL	DIESEL	159.96	0.00	0.12
			NAPTHA	533.58	0.00	0.00
	PUDUCHERRY	THERMAL	NATURAL GAS	32.50	58.00	56.43
	TAMIL NADU	THERMAL	COAL	10045.00	14346.00	11560.52
			DIESEL	211.70	0.00	0.00
			LIGNITE	3640.00	4836.00	6524.19
			NAPTHA	120.00	0.00	0.83
			NATURAL GAS	897.18	508.00	511.02
	TELANGANA	THERMAL	COAL	7842.50	14274.00	13573.89
Eastern Region	ANDAMAN NICOBAR	THERMAL	DIESEL	40.05	37.00	30.59
	BIHAR	THERMAL	COAL	8400.00	13031.00	14383.62
	JHARKHAND	THERMAL	COAL	4250.00	7359.00	7876.63
	ODISHA	THERMAL	COAL	9540.00	16442.00	15820.61
	WEST BENGAL	THERMAL	COAL	13697.00	21848.00	22331.80
			HIGH SPEED DIESEL	80.00	0.00	0.00
North-Eastern Region	ASSAM	THERMAL	COAL	750.00	889.00	1419.76
			NATURAL GAS	620.36	698.00	873.34
	MANIPUR	THERMAL	DIESEL	36.00	0.00	0.00
	TRIPURA	THERMAL	NATURAL GAS	1099.60	1468.00	1556.91
Grand Total:				236078.42	324058.00	325617.17

The details of source-wise power generated (Program & Actual) from Non-Fossil Fuel during the current year 2022-23 (upto June, 2022)

Region	State	Source	Fuel	Monitored Capacity (in MW) as on 30.06.2022	2022-23 (upto June-2022)	
					Program (in MU)	Generation (in MU)
Northern Region	HIMACHAL PRADESH	HYDRO	HYDRO	10263.02	11155.00	10325.19
	JAMMU AND KASHMIR	HYDRO	HYDRO	3360.00	5919.00	5942.96
	LADAKH	HYDRO	HYDRO	89.00	114.00	108.64
	PUNJAB	HYDRO	HYDRO	1096.30	1017.00	956.32
	RAJASTHAN	NUCLEAR	NUCLEAR	1180.00	1708.00	1930.41
		HYDRO	HYDRO	411.00	4.00	65.19
	UTTAR PRADESH	NUCLEAR	NUCLEAR	440.00	615.00	503.79
		HYDRO	HYDRO	501.60	376.00	194.47
	UTTARAKHAND	HYDRO	HYDRO	3975.35	3404.00	3833.33
Western Region	CHHATTISGARH	HYDRO	HYDRO	120.00	40.00	59.17
	GUJARAT	NUCLEAR	NUCLEAR	440.00	1578.00	939.92
		HYDRO	HYDRO	1990.00	762.00	530.95
	MADHYA PRADESH	HYDRO	HYDRO	2235.00	853.00	764.35
	MAHARASHTRA	NUCLEAR	NUCLEAR	1400.00	2199.00	2371.16
		HYDRO	HYDRO	3047.00	1798.00	1912.08
Southern Region	ANDHRA PRADESH	HYDRO	HYDRO	1610.00	451.00	358.44
	KARNATAKA	NUCLEAR	NUCLEAR	880.00	1443.00	1934.04
		HYDRO	HYDRO	3689.20	3059.00	3074.98
	KERALA	HYDRO	HYDRO	1856.50	2053.00	1879.00
	TAMIL NADU	NUCLEAR	NUCLEAR	2440.00	2987.00	3233.97
		HYDRO	HYDRO	2178.20	595.00	877.13
	TELANGANA	HYDRO	HYDRO	2405.60	229.00	193.10
Eastern Region	JHARKHAND	HYDRO	HYDRO	210.00	20.00	23.77
	ODISHA	HYDRO	HYDRO	2154.55	1117.00	1037.54
	SIKKIM	HYDRO	HYDRO	2282.00	2892.00	3462.28
	WEST BENGAL	HYDRO	HYDRO	1341.20	701.00	872.96
North-Eastern Region	ARUNACHAL PRADESH	HYDRO	HYDRO	1115.00	1129.00	1279.76
	ASSAM	HYDRO	HYDRO	350.00	139.00	107.37
	MANIPUR	HYDRO	HYDRO	105.00	140.00	146.75
	MEGHALAYA	HYDRO	HYDRO	322.00	211.00	307.85
	MIZORAM	HYDRO	HYDRO	60.00	12.00	13.40
	NAGALAND	HYDRO	HYDRO	75.00	31.00	41.01
Bhutan (IMPORT)			HYDRO	0.00	2036.00	1772.80
Grand Total:				53622.52	50787.00	51054.08

	Name of State/UT	RE Generation April'2022-June'2022
Northern Region	Chandigarh	3.27
	Delhi	131.49
	Haryana	421.23
	Himachal Pradesh	600.91
	Jammu & Kashmir	123.97
	Ladakh	0.00
	Punjab	902.40
	Rajasthan	11076.55
	Uttar Pradesh	1603.16
	Uttarakhand	233.43
	Sub Total	15096.40
Western Region	Chhattisgarh	507.63
	Gujarat	9323.99
	Madhya Pradesh	3045.50
	Maharashtra	4557.60
	Daman & Diu	12.49
	Dadra & Nagar Haveli	6.94
	Goa	2.53
	Sub Total	17456.67

Southern Region	**Andhra Pradesh**	**4638.63**
	Telangana	**1931.29**
	Karnataka	**7222.48**
	Kerala	**383.93**
	Tamil Nadu	**7849.94**
	Lakshadweep	**0.03**
	Puducherry	**3.06**
	Sub Total	**22029.36**
Eastern Region	**Andaman Nicobar**	**9.87**
	Bihar	**46.67**
	Jharkhand	**5.59**
	Odisha	**238.61**
	Sikkim	**3.09**
	West Bengal	**488.44**
	Sub Total	**792.27**
North-Eastern Region	**Arunachal Pradesh**	**13.82**
	Assam	**53.54**
	Manipur	**2.05**
	Meghalaya	**20.47**
	Mizoram	**1.92**
	Nagaland	**18.79**
	Tripura	**1.49**
	Sub Total	**112.08**
	Grand Total	**55486.79**

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3181
ANSWERED ON 04.08.2022

POWER CRISIS DUE TO LOW COAL STOCK

3181. SHRI BENNY BEHANAN:

Will the Minister of POWER
be pleased to state:

(a) whether any efforts are being made to ensure that coal based power plants accumulated coal in anticipation of the monsoon season;

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

(c) whether the low pre-monsoon coal stock could lead to another power crisis in the months of July-August, 2022 and if so, the details thereof; and

(d) the reaction of the Government on the impact of inadequate logistics on the current coal crisis especially the insufficient number of railway carriages to transport coal?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : The Government has taken the following steps to ensure adequate coal stock during the Monsoon season:

I. **The Government on 06.12.2021 has issued the revised coal stocking norms, which mandates the power plants to maintain coal stock at a daily requirement of 85% PLF for 12 to 17 days in case of pithead plants and 20 to 26 days in case of non-pithead plants, with seasonal variation based on despatch/consumption pattern during the year. During the month of June, the non-pithead plants are to maintain 26 days of coal stock and pithead plants are to maintain 17 days of coal stock at a requirement of 85% PLF.**

II. **An Inter-Ministerial Sub Group comprising of representatives from Ministry of Power, Ministry of Coal, Ministry of Railways, Central Electricity Authority (CEA), Coal India Limited (CIL) and Singareni Collieries Company Limited (SCCL) meet regularly to take various operational decisions to enhance supply of coal to thermal power plants as well as for meeting any contingent situations relating to Power Sector including to alleviate critical coal stock position in power plants.**

III. **As per the decision taken in the meeting held under the Chairmanship of Cabinet Secretary on Augmentation of coal supply and power generation capacity, a Secretary level Inter Ministerial Committee (IMC) has been set up to ensure that the medium and long term requirements of coal are met. The IMC comprises of Chairman, Railway Board, Secretary, Ministry of Coal, Secretary, Ministry of Environment Forest & Climate Change, as Members and Secretary, Ministry of Power as Convenor. Further, CEA provides technical support to the IMC.**

.....2.

IV. CIL has allocated about 16 MT coal on Road cum Rail (RCR) mode to TPPs.

V. Ministry of Railways has issued an order to give preference to Power Sector for loading of coal from Good Shed Siding (GSS) and Private Washery.

(c) : The coal stock available with the thermal power plants monitored on a daily basis by CEA was about 29.5 MT, as on 27.07.2022, which was about 52% of the normative coal stock required to be maintained by the TPPs. The stock available as on 27.07.2022 is sufficient to run these power plants for an average of 11 days at 85% PLF.

(d) : Considering the importance of coal transportation, the Indian Railways has increased the deployment of rakes for coal loading to power houses. During, the first quarter of the current financial year (April-June 2022), the coal loading to power sector during the period has been 434 rakes per day which is 32% more than the corresponding period of 2021-22. In July 2022 (upto 13th), coal loading to power sector has been 425 rakes per day which is 41% more than the corresponding period in July 2021.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3183
ANSWERED ON 04.08.2022

LOSS DUE TO ELECTRIC SHORT CIRCUIT AND ELECTROCUTION

†3183. DR. MANOJ RAJORIA:
SHRIMATI RANJEETA KOLI:
SHRI SUMEDHANAND SARASWATI:

Will the Minister of POWER
be pleased to state:

(a) whether every year there is a loss of lives and property due to electric short circuit and electrocution in the country and if so, the details thereof during the last three years and the current year, State-wise;

(b) whether the Government has formulated any effective scheme or developed any equipment to prevent short circuit of electricity under Make in India and Start-Up initiative and if so, the details thereof;

(c) whether there is any proposal to install any equipment such as electric shock proof devices in Government or private institutions such as offices, schools, hospitals, etc. to prevent fire and loss of lives caused by short circuit and electrocution in the country; and

(d) if so, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : There is loss of lives and property due to electric short circuit every year across the Country. As reported by various power utilities, details of number of electrical accidents and number of persons/animals died or injured during the last three years i.e. 2019-20, 2020-21 and 2021-22 are at Annexure. The current year's data is not available as yet, as the collection of data regarding statistics on electrical accidents is done annually. Data pertaining to loss of property due to electrical accidents is not reported by the power utilities.

(b) : Safety and protection devices are required to be provided in the system as per the applicable regulations and technical standards. The requisite protection and safety devices that are commonly used are manufactured in India by various manufacturers in accordance with the relevant Indian/International standards.

(c) & (d) : CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 already provide for disconnection of supply instantly on the occurrence of an earth fault or leakage of current, to prevent the loss of lives. The Regulations mandate that the supply of electricity to every electrical installation other than voltage not exceeding 250 V below 5 KW and those installations of voltage not exceeding 250 V which do not attract provisions of Section 54 of the Act, shall be controlled by an earth leakage protective device so as to disconnect the supply instantly on the occurrence of earth fault or leakage of current.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO.3183 ANSWERED IN THE LOK SABHA ON 04.08.2022

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ALL INDIA ELECRICAL ACCIDENTS
STATE WISE STATISTICS FOR 2019-20

State/UT	Generating Stations/ Transmission / Distribution												Industrial Installations of Consumers								Installations of Consumers other than Industrial								Total
	Generating Station				Transmission System				Distribution system				Owned by Govt/Semi-Govt bodies/local authorities				Owned by private companies				Owned by Govt/Semi-Govt bodies/local authorities				Owned by private companies				Person (s)				
	Human		Animal		Human		Animal		Human		Animal		Human		Animals		Human		Animals		Human		Animals		Human		Animals		Human		Animals		
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fata l	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	
WESTERN REGION																																	
Madhya Pradesh	0	0	0	0	1	0	0	0	208	74	220	2	1	1	0	0	3	0	0	0	24	3	4	0	1	0	0	0	165	18	30	0	755
Maharashtra	1	3	0	0	20	26	3	0	705	637	1944	5	4	2	2	0	37	4	0	0	56	10	27	0	62	6	2	0	561	55	95	0	4267
Chhattisgarh	0	4	0	0	35	16	19	0	85	33	260	0	0	0	0	0	6	2	0	0	1	0	0	0	10	0	2	0	45	5	4	0	527
Goa	0	0	0	0	0	0	0	0	5	19	7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Gujarat	1	0	0	0	47	54	56	0	254	139	414	0	11	4	0	0	37	5	0	0	5	4	14	0	64	7	3	0	221	13	5	0	1358
																													Total				**6939**
SOUTHERN REGION																																	
Andhra Pradesh	0	0	0	0	0	0	0	0	292	53	289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	7	5	0	710
Karnataka	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	9	2	8	0	23	7	0	0	NA	NA	NA	NA	55
Kerala	1	0	0	0	3	4	0	0	90	119	41	2	0	1	0	0	4	1	1	0	0	5	5	1	6	0	0	0	118	19	13	0	434
Tamil Nadu	0	0	0	0	61	57	16	0	86	44	42	0	0	1	0	0	13	1	0	0	0	1	0	0	79	6	13	0	12	0	0	0	432
Telangana	0	0	0	0	0	0	0	0	24	4	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	80
																													Total				**1711**
NORTH EASTERN REGION																																	
Assam	0	0	0	0	5	6	0	0	68	24	24	77	0	0	0	0	2	0	0	0	0	0	0	0	6	2	0	0	7	4	0	0	225
Mizoram	Fatal:- 29, Non-Fatal:-28																																57
Nagaland	Fatal:- 01, Non-Fatal:-03																																4
Manipur	Fatal:- 06, Non-Fatal:-06																																12
Meghalaya	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Tripura	2	9	7	0	0	2	0	0	0	4	5	0	0	0	5	0	0	5	3	0	0	0	0	0	3	6	4	0	0	0	0	0	55
Arunachal Pradesh	Fatal:- 29, Non-Fatal:-28																																57
																													Total				**410**
EASTERN REGION																																	
West Bengal	0	0	0	0	0	0	0	0	48	31	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
Bihar	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Jharkhand	0	0	0	0	0	0	0	0	61	14	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121
Sikkim	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Odisha	1	0	0	0	1	0	0	0	138	62	37	2	0	0	0	0	1	2	0	0	6	1	0	0	0	0	0	0	31	2	3	0	287
																													Total				**498**
NORTHERN REGION																																	
Haryana	0	0	0	0	0	0	0	0	113	35	15	0	0	0	0	0	0	0	0	0	5	9	0	0	0	0	0	0	2	0	0	0	179
Himachal Pradesh	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Jammu and Kashmir	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Punjab	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Rajasthan	0	0	0	0	19	17	13	0	28	35	41	0	19	13	3	0	6	3	0	0	2	0	0	0	4	0	0	0	78	68	75	0	424
Uttar Pradesh	0	0	0	0	18	9	15	0	1132	479	2021	7	0	0	0	0	0	0	0	0	8	0	0	0	1	0	0	0	56	6	1	0	3753
Uttarakhand	0	0	0	0	2	0	0	0	53	38	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144
Delhi	0	0	0	0	3	2	0	0	16	13	2	0	1	0	0	0	20	1	0	0	0	1	0	0	2	0	0	0	75	3	1	0	140
																													Total				**4640**

OTHERS																																
Mines	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Central Govt. Installations	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Railways	0	0	0	0	0	2	0	0	27	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
																													Total			**97**
Union Territories																																
A & N Islands	0	0	0	0	0	0	2	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8
Puducherry	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	3	8
Chandigarh	0	0	0	0	0	0	0	0	113	35	15	0	0	0	0	0	0	0	0	0	5	9	0	0	0	0	0	0	2	0	0	179
D&N Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lakshadweep	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
																													Total			**195**
																						All India Total										**14490**
NA=Not Available																																

ALL INDIA ELECRICAL ACCIDENTS
STATE WISE STATISTICS FOR 2020-21

State/UT	Generating Stations/ Transmission / Distribution												Industrial Installations of Consumers								Installations of Consumers other than Industrial												Total
	Generating Station				Transmission System				Distribution system				Owned by Govt/Semi-Govt bodies/local authorities				Owned by private companies				Owned by Govt/Semi-Govt bodies/local authorities				Owned by private companies				Person (s)				
	Human		Animal		Human		Animal		Human		Animal		Human		Animals		Human		Animals		Human		Animals		Human		Animals		Human		Animals		
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	
WESTERN REGION																																
Madhya Pradesh	Break up not available																															629
Maharashtra	0	0	15	17	10	18	1	3	730	540	1186	5	2	o	9	0	25	3	0	0	31	2	9	0	33	2	0	0	584	24	52	0	3301
Chhattisgarh	28	2	45	0	28	22	87	0	105	30	144	0	1	0	0	0	3	1	0	0	1	0	0	0	1	0	0	0	69	5	3	0	575
Goa	0	0	0	0	1	2	0	0	2	15	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
Gujarat	0	3	0	0	22	51	63	0	261	146	318	0	4	1	2	0	31	1	0	0	5	0	10	0	47	9	3	0	264	4	0	0	1245
																													Total				**5774**
SOUTHERN REGION																																
Andhra Pradesh	0	0	0	0	0	0	0	0	383	90	392	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	5	0	0	912
Karnataka	0	0	0	0	2	2	0	0	446	230	687	0	0	0	0	0	2	2	0	0	7	0	21	0	34	4	6	0	4	0	0	0	1447
Kerala	0	0	0	0	1	3	0	0	104	136	47	0	0	0	0	0	4	0	1	0	1	2	0	0	3	1	0	0	129	21	13	0	466
Tamil Nadu	1	0	0	0	40	18	56	2	141	55	29	0	5	1	3	0	33	4	1	0	9	0	0	0	54	4	5	0	38	4	0	0	503
Telangana	0	0	0	0	0	0	0	0	51	9	118	0	0	0	0	0	0	0	0	0	2	0	2	0	9	0	10	0	17	1	26	0	245
																													Total				**3573**
NORTH EASTERN REGION																																
Assam	0	0	0	0	10	2	14	0	50	20	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	1	0	155
Mizoram	Fatal: 13, Non-fatal: 20																															33
Nagaland	0	0	0	0	2	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Manipur	0	0	0	0	0	0	0	0	2	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Meghalaya	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tripura	1	2	0	0	14	2	5	0	1	4	0	14	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	2	0	0	0	50
Arunachal Pradesh	Fatal: 06, Non-fatal: 270																															276
																													Total				**532**
EASTERN REGION																																
West Bengal	0	0	0	0	0	0	0	0	47	45	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Bihar	0	0	0	0	0	0	0	0	16	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Jharkhand	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Sikkim	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Odisha	0	0	0	0	10	0	0	0	109	50	40	0	0	0	0	0	2	0	0	0	6	0	2	0	0	1	0	0	10	1	0	0	231
																													Total				**351**

NORTHERN REGION																																	
Haryana	17	4	7	0	1	0	0	0	145	73	30	0	0	0	0	0	0	0	0	0	8	4	0	0	0	0	0	0	1	0	0	0	290
Himachal Pradesh	0	1	0	0	0	2	0	0	13	42	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	0	69
Jammu and Kashmir	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Punjab	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Rajasthan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Uttar Pradesh	0	0	0	0	17	5	23	0	1113	356	1617	5	0	0	0	0	0	0	0	0	6	3	8	0	9	0	0	0	63	15	8	0	3248
Uttarakhand	0	0	0	0	35	29	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
Delhi	0	0	0	0	2	6	1	0	11	21	1	0	0	0	0	0	0	10	0	0	0	3	0	0	0	11	2	0	0	53	4	0	0	125
																														Total				**3852**
OTHERS																																	
Mines	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Central Govt. Installations	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Railways	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
																														Total				**2**
Union Territories																																	
A & N Islands	0	0	0	0	0	1	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7
Puducherry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
Chandigarh	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
D&N Haveli	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lakshadweep	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
																														Total				**12**
																						All India Total											**14096**
NA=Not Available																																	

ALL INDIA ELECRICAL ACCIDENTS
STATE WISE STATISTICS FOR 2021-22*

State/UT	Generating Stations/ Transmission / Distribution												Industrial Installations of Consumers								Installations of Consumers other than Industrial												Total Accidents
	Generating Station				Transmission System				Distribution system				Owned by Govt/Semi-Govt bodies/local authorities				Owned by private companies				Owned by Govt/Semi-Govt bodies/local authorities				Owned by private companies				Person (s)				
	Human		Animal		Human		Animal		Human		Animal		Human		Animals		Human		Animals		Human		Animals		Human		Animals		Human		Animals		
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	
WESTERN REGION																																	
Madhya Pradesh	Not Available																																
Maharashtra	5	4	14	0	16	20	23	0	587	498	1099	1	11	8	16	0	32	4	1	0	17	4	5	0	33	3	1	0	545	41	57	0	3045
Chhattisgarh	Not Available																																
Goa	0	0	0	0	0	2	0	0	3	16	7	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0	32
Gujarat	0	2	0	0	27	47	81	0	230	130	328	0	3	1	3	0	28	3	0	0	8	1	8	0	26	5	5	0	236	7	3	0	1182
																													Total				**4259**
SOUTHERN REGION																																	
Andhra Pradesh	Not Available																																0
Karnataka																																	0
Kerala																																	0
Tamil Nadu	0	0	0	0	0	0	1	0	94	35	107	0	29	19	31	0	39	18	22	0	21	4	4	0	29	9	11	0	34	5	8	0	520
Telangana	0	0	0	0	1	0	0	0	143	19	395	0	0	0	0	0	0	0	0	0	1	0	2	0	2	0	1	0	10	2	10	0	586
																													Total				**1106**
NORTH EASTERN REGION																																	
Assam	0	0	0	0	10	7	0	0	55	17	42	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	133
Mizoram	0	0	0	0	8	0	0	0	2	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	30
Nagaland	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Manipur	Not Available																																0
Meghalaya																																	0
Tripura	0	0	0	0	0	1	6	0	2	4	2	0	1	5	3	0	4	0	0	0	3	2	0	0	5	2	1	0	0	0	2	0	43
Arunachal Pradesh	Not Available																																
																													Total				**211**

EASTERN REGION																																		
West Bengal	0	0	0	0	0	0	0	0	83	91	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	195
Bihar	Not Available																																	0
Jharkhand																																		0
Sikkim	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Odisha	Not Available																																	0
																														Total				**196**
NORTHERN REGION																																		
Haryana	Not Available																																	0
Himachal Pradesh																																		0
Jammu and Kashmir																																		0
Punjab																																		0
Rajasthan																																		0
Uttar Pradesh																																		0
Uttarakhand																																		0
Delhi																																		0
																														Total				**0**
OTHERS																																		
Mines	Not Available																																	0
Central Govt. Installations																																		0
Railways																																		0
																														Total				**0**
Union Territories																																		
A & N Islands	Not Available																																	0
Puducherry	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
Chandigarh	Not Available																																	0
D&N Haveli																																		0
Daman & Diu	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lakshadweep	Not Available																																	0
																														Total				**4**
																														All India Total				**5776**

*** Based on the data reported by various State/UT power utilities till date.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3184
ANSWERED ON 04.08.2022

POLLUTION GENERATED BY COAL BASED POWER PLANTS

3184. SHRI NIHAL CHAND:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has conducted any study or survey to evaluate the pollution generated by the coal-based power plants in the country;

(b) if so, the details thereof;

(c) the comprehensive and effective steps taken by the Government to stop the said pollution; and

(d) the other comprehensive steps taken by the Government to reduce or end the dependency of power plants on coal in the future?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (d) : The Coal based Thermal Power Plants (TPPs) are required to ensure compliance of the emission norms, as notified by Ministry of Environment, Forest & Climate Change (MoEF&CC) and directions given by the Central Pollution Control Board (CPCB), from time to time. MoEF&CC vide Notification dated 31.03.2021 has stipulated timelines for compliance to emission norms by TPPs. Compliance with these norms is regularly monitored by the CPCB and State agencies.

The TPPs are adopting supercritical and ultra-supercritical technologies in order to improve efficiency, thereby reducing coal consumption and emissions.

Further, the Government of India has set a target to achieve 500 GW of cumulative installed electricity capacity from non-fossil sources by 2030.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3192
ANSWERED ON 04.08.2022

DEMAND AND SUPPLY OF POWER

†3192. SHRI GUMAN SINGH DAMOR:

Will the Minister of POWER
be pleased to state:

(a) the total demand and supply of power in the country and the efforts being made by the Government to overcome the gap between the demand and supply of power;

(b) the quantum of thermal, hydro, solar, wind and atomic power generated in the country, source and location-wise;

(c) the measures being taken by the Government to maintain quality of power supply and to prevent electricity losses and theft of electricity;

(d) the extent of participation of the private sector in the power generation sector; and

(e) the rate at which power is being procured from the private sector and the rate at which it is being supplied to the consumers?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The details of All India Power Supply Position during the current year 2022-23 (period April, 2022 to June, 2022), are given at Annexure-I. We have adequate installed capacity to meet the power demand. Further, in order to meet the consistent increase in demand of electricity in the country, Thermal Power Projects (39 units) of an aggregate capacity 27,550 MW are under construction in the country. Further, 36 Hydro Electric Projects (above 25 MW capacity) totalling to 14,103.5 MW are also being implemented in the country and capacity of 60,660 MW Renewable Energy projects (Solar, wind, small hydro) are under construction. Apart from this, Nuclear Power Plants of 8,700 MW capacity are under construction and 7,000 MW of Nuclear Power Plants have been accorded Administrative Approval and Financial Sanction.

(b) : The details of source-wise and location-wise power generation from Conventional Sources, during the current year 2022-23 (till June, 2022) are given at Annexure-II and the details of power generation from Renewable Energy Sources for the current year (till June, 2022) are given at Annexure-III.

(c) : The details of the measures taken by the Central Government to maintain quality of power supply and to prevent electricity losses and theft of electricity are given at Annexure-IV.

(d) : The share of Private Sector in the power generation (as on 30.06.2022) is 49.48% of the installed capacity.

(e) : The average rate at which power has been procured from the private sector for 2020-21 (provisional) is 390.70 paisa/kWh. The procurement of power by DISCOMs including the rate thereof are approved by CERC / SERC. Further the average rates of supply of electricity to Consumers as determined by concerned State Electricity Regulatory Commission, for the year 2020-21, are given at Annexure-V.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3192 ANSWERED IN THE LOK SABHA ON 04.08.2022

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The details of All India Power Supply Position during the current year 2022-23 (period April, 2022 to June, 2022),

Year	ENERGY [in Million Units (MU)]			
	Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)
2022-23 (upto June, 2022) (*)	404,761	400,654	4,107	1.0

(*) Provisional

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 3192 ANSWERED IN THE LOK SABHA ON 04.08.2022

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The details of source-wise and location-wise power generated from Conventional Sources (excluding Large Hydro) during current year 2022-23 (till June, 2022)

Region	State	Source	Fuel	Monitored Capacity as on 30.06.2022 MW	2022-23 (upto June-2022 Generation (in MU)
Northern Region	DELHI		NATURAL GAS	2208.4	1415.86
	HARYANA	THERMAL	COAL	5330	8807.94
			NATURAL GAS	431.59	2.55
	JAMMU AND KASHMIR	THERMAL	HIGH SPEED DIESEL	175	0
	PUNJAB	THERMAL	COAL	5680	8358.67
	RAJASTHAN	THERMAL	COAL	8900	12384.86
			LIGNITE	1580	2059.9
			NATURAL GAS	1022.83	341.68
		NUCLEAR	NUCLEAR	1180	1930.41
	UTTAR PRADESH	THERMAL	COAL	24389	41080.57
			LIGNITE	0	0
			NATURAL GAS	1493.14	574.34
		NUCLEAR	NUCLEAR	440	503.79
	UTTARAKHAND	THERMAL	NATURAL GAS	450	0
Western Region	CHHATTISGARH	THERMAL	COAL	23688	35257.83
	GOA	THERMAL	NAPTHA	48	0
	GUJARAT	THERMAL	COAL	14692	15913.37
			LIGNITE	1400	1548.4
			NATURAL GAS	7551.41	844.34
		NUCLEAR	NUCLEAR	440	939.92
	MADHYA PRADESH	THERMAL	COAL	21950	37979.05
	MAHARASHTRA	THERMAL	COAL	23856	34428.49
			NATURAL GAS	3207.08	985.37
		NUCLEAR	NUCLEAR	1400	2371.16
Southern Region	ANDHRA PRADESH	THERMAL	COAL	11590	15843.56
			DIESEL	36.8	0
			NATURAL GAS	4898.544	338.27
	KARNATAKA	THERMAL	COAL	9480	10931.86
			DIESEL	25.2	0
			NATURAL GAS	0	0
		NUCLEAR	NUCLEAR	880	1934.04
	KERALA	THERMAL	DIESEL	159.96	0.12
			NAPTHA	533.58	0
	PUDUCHERRY	THERMAL	NATURAL GAS	32.5	56.43
	TAMIL NADU	THERMAL	COAL	10045	11560.52
			DIESEL	211.701	0
			LIGNITE	3640	6524.19
			NAPTHA	120	0.83
			NATURAL GAS	897.18	511.02
		NUCLEAR	NUCLEAR	2440	3233.97
	TELANGANA	THERMAL	COAL	7842.5	13573.89
Eastern Region	ANDAMAN NICOBAR	THERMAL	DIESEL	40.048	30.59
	BIHAR	THERMAL	COAL	8400	14383.62
	JHARKHAND	THERMAL	COAL	4250	7876.63
	ODISHA	THERMAL	COAL	9540	15820.61
	WEST BENGAL	THERMAL	COAL	13697	22331.8
			HIGH SPEED DIESEL	80	0
North-Eastern Region	ASSAM	THERMAL	COAL	750	1419.76
			NATURAL GAS	620.355	873.34
	MANIPUR	THERMAL	DIESEL	36	0
	TRIPURA	THERMAL	NATURAL GAS	1099.6	1556.91
Grand Total:				242858.42	336530.46

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ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 3192 ANSWERED IN THE LOK SABHA ON 04.08.2022

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The details of power generation from Renewable Energy Sources for the current year (till June, 2022)

State-wise, Source-wise and Fuel-wise Generation from Renewable Sources (except large Hydro) during current year 2022-23 (up to June,2022)							
							(All fig. in MUs)
Name of State/UT	**Wind**	**Solar**	**Biomass**	**Bagasse**	**Small Hydro**	**Others**	**Renewable Energy Total**
Chandigarh	0.00	3.27	0.00	0.00	0.00	0.00	3.27
Delhi	0.00	65.33	0.00	0.00	0.00	66.16	131.49
Haryana	0.00	189.12	89.10	62.88	66.48	13.65	421.23
HP	0.00	16.47	0.00	0.00	584.44	0.00	600.91
J & K	0.00	0.00	0.00	0.00	123.97	0.00	123.97
Ladakh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Punjab	0.00	552.51	137.51	44.68	167.71	0.00	902.40
Rajasthan	2652.50	8332.85	90.96	0.00	0.23	0.00	11076.55
Uttar Pradesh	0.00	971.57	26.35	562.49	34.85	7.90	1603.16
Uttarakhand	0.00	82.95	0.00	62.13	88.35	0.00	233.43
Northern Region	2652.50	10214.06	343.92	732.18	1066.03	87.71	15096.40
Chhattisgarh	0.00	128.97	365.04	0.60	13.02	0.00	507.63
Gujarat	6676.89	2606.35	0.00	2.86	35.65	2.24	9323.99
Madhya Pradesh	1796.90	1182.64	5.36	22.15	27.37	11.08	3045.50
Maharashtra	2294.82	979.83	81.50	1028.61	172.68	0.16	4557.60
Dadra and Nagar Haveli	0.00	10.07	2.42	0.00	0.00	0.00	12.49
Daman & Diu	0.00	6.13	0.81	0.00	0.00	0.00	6.94
Goa	0.00	1.26	0.00	0.00	0.00	1.27	2.53
Western Region	10768.60	4915.25	455.12	1054.22	248.72	14.76	17456.67
Andhra Pradesh	2298.76	2170.86	24.79	44.89	39.35	59.98	4638.63
Telangana	70.11	1789.26	15.42	7.16	6.49	42.87	1931.29
Karnataka	2704.92	3684.96	38.69	489.43	304.48	0.00	7222.48
Kerala	35.68	146.94	0.00	13.32	187.99	0.00	383.93
Tamil Nadu	5478.45	2160.52	30.66	154.25	26.06	0.00	7849.94
Lakshadweep	0.00	0.03	0.00	0.00	0.00	0.00	0.03
Puducherry	0.00	3.06	0.00	0.00	0.00	0.00	3.06
Southern Region	10587.91	9955.64	109.56	709.05	564.36	102.85	22029.36
Andaman Nicobar	0.00	7.04	0.00	0.00	2.83	0.00	9.87
Bihar	0.00	46.21	0.00	0.00	0.46	0.00	46.67
Jharkhand	0.00	5.59	0.00	0.00	0.00	0.00	5.59
Orissa	0.00	180.51	17.24	0.00	40.86	0.00	238.61
Sikkim	0.00	0.00	0.00	0.00	3.09	0.00	3.09
West Bengal	0.00	31.59	0.00	0.00	43.07	413.78	488.44
Eastern Region	0.00	270.93	17.24	0.00	90.32	413.78	792.27
Arunachal Pradesh	0.00	12.56	0.00	0.00	1.26	0.00	13.82
Assam	0.00	38.53	0.00	0.00	15.01	0.00	53.54
Manipur	0.00	2.05	0.00	0.00	0.00	0.00	2.05
Meghalaya	0.00	0.00	0.00	0.00	20.47	0.00	20.47
Mizoram	0.00	0.89	0.00	0.00	1.03	0.00	1.92
Nagaland	0.00	0.00	0.00	0.00	18.79	0.00	18.79
Tripura	0.00	1.49	0.00	0.00	0.00	0.00	1.49
North Eastern Region	0.00	55.52	0.00	0.00	56.56	0.00	112.08
Total	24009.02	25411.40	925.84	2495.45	2025.98	619.10	55486.79

State-wise, Source-wise and Fuel-wise Generation from Large Hydro during the current year 2022-23 (up to June,2022)					
Region	State	Source	Fuel	Monitored Capacity as on 30.06.2022 MW	2022-23 (upto June-2022 Generation (in MU)
Northern Region	HIMACHAL PRADESH	HYDRO	HYDRO	10263.02	10325.19
	JAMMU AND KASHMIR	HYDRO	HYDRO	3360	5942.96
	LADAKH	HYDRO	HYDRO	89	108.64
	PUNJAB	HYDRO	HYDRO	1096.3	956.32
	RAJASTHAN	HYDRO	HYDRO	411	65.19
	UTTAR PRADESH	HYDRO	HYDRO	501.6	194.47
	UTTARAKHAND	HYDRO	HYDRO	3975.35	3833.33
Western Region	CHHATTISGARH	HYDRO	HYDRO	120	59.17
	GUJARAT	HYDRO	HYDRO	1990	530.95
	MADHYA PRADESH	HYDRO	HYDRO	2235	764.35
	MAHARASHTRA	HYDRO	HYDRO	3047	1912.08
Southern Region	ANDHRA PRADESH	HYDRO	HYDRO	1610	358.44
	KARNATAKA	HYDRO	HYDRO	3689.2	3074.98
	KERALA	HYDRO	HYDRO	1856.5	1879
	TAMIL NADU	HYDRO	HYDRO	2178.2	877.13
	TELANGANA	HYDRO	HYDRO	2405.6	193.1
Eastern Region	JHARKHAND	HYDRO	HYDRO	210	23.77
	ODISHA	HYDRO	HYDRO	2154.55	1037.54
	SIKKIM	HYDRO	HYDRO	2282	3462.28
	WEST BENGAL	HYDRO	HYDRO	1341.2	872.96
North-Eastern Region	ARUNACHAL PRADESH	HYDRO	HYDRO	1115	1279.76
	ASSAM	HYDRO	HYDRO	350	107.37
	MANIPUR	HYDRO	HYDRO	105	146.75
	MEGHALAYA	HYDRO	HYDRO	322	307.85
	MIZORAM	HYDRO	HYDRO	60	13.4
	NAGALAND	HYDRO	HYDRO	75	41.01
Bhutan (IMPORT)			HYDRO	0	1772.8
Total:				46842.52	40140.79

All India Total of Renewable Energy Sources	95627.58

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ANNEXURE-IV

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3192 ANSWERED IN THE LOK SABHA ON 04.08.2022

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The details of the measures taken by the Central Government to maintain quality of power supply and to prevent electricity losses and theft of electricity.

(i) Government of India has notified the Electricity (Rights of Consumers) Rules in December 2020 which were first amended in June, 2021 and later in April, 2022. These Rules specify the obligations of the licensee and sets the practices that must be adopted by the licensee to promote efficient, cost effective, and reliable and consumer friendly services so as to facilitate ease of use by consumers. As per these Rules, it is right of consumers to have minimum standards of service for supply of electricity from the distribution licensee in accordance with the provisions made in these rules. Further, the distribution licensee shall arrange to display feeder wise outage data, efforts made for minimizing outages, prevention of theft or unauthorized use of electricity or tampering, distress or damage to electrical plant, electric lines or meter and results obtained during the year, on its website.

(ii) Government of India has launched a new Reforms-based and Results-linked, 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 in the country. The scheme aims to reduce the AT&C losses to pan-India levels of 12-15% and ACS-ARR gap to Zero by 2024-25. This Scheme has an outlay of Rs. 3,03,758 crore and an estimated GBS of Rs.97,631 crore from the Central Government. Under this Scheme, financial assistance is being provided to the eligible Discoms i.e all DISCOMs/Power Departments (excluding Private Sector DISCOMs) for upgradation of distribution infrastructure including measures for reduction of losses and theft by use of ABC cable/UG cable/HVDS, etc., system modernization including SCADA, communicable system metering and smart pre-paid metering for 25 crore consumers, etc. This will facilitate to improve the quality of power supply and to reduce losses including theft of electricity to achieve targeted AT&C losses.

(iii) The Electricity Act, 2003, has incorporated specific provisions for detection of theft, setting up of Special Courts for speedy disposal of theft related cases and also for recovery of the charges of electricity stolen.

(iv) The Tariff Policy, 2016, mandates that in order to reduce theft of power, the distribution companies should have enabling feature like distribution SCADA with distribution management system and energy audit functions.

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ANNEXURE-V

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 3192 ANSWERED IN THE LOK SABHA ON 04.08.2022

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ESTIMATED AVERAGE RATES OF ELECTRICITY (FY 2020-21)

(Rates in Paise/KWh)

Sl. No.	Name of State/ Utility	Tariff effective from	Domestic						Commercial								Agriculture						Small Industry 10KW (1500 KWh/ Month)		Medium Industry 50KW (7500 KWh/ Month)		Large Industry (11KV) 1000KW 60%L.F. (438000 KWh/ Month)		Heavy Industry (11KV) 10000KW 60%L.F. (4380000 KWh/ Month)		Heavy Industry (33KV) 20000KW 60%L.F. (8760000 KWh/ Month)		Railway Traction 12500KW (25000000 KWh/ Month)	
			1KW (100 KWh/ Month)		4KW (400 KWh/ Month)		10KW (1000 KWh/ Month)		2KW (300 KWh/ Month)		10KW (1500 KWh/ Month)		30KW (4500 KWh/ Month)		50KW (7500 KWh/ Month)		2HP (400 KWh/ Month)		5HP (1000 KWh/ Month)		10HP (2000 KWh/ Month)													
1	Andaman & Nicobar Islands	01.06.2020	245.00		546.00		666.00		827.00		1092.00		1164.00		1178.00		181.00		181.00		181.00		770.00		824.00		-		-		-		-	
2	Andhra Pradesh	01.04.2020	266.00		592.00		823.00		902.00		1030.00		1057.00		1063.00		350.00	#	350.00	#	350.00	#	726.00		726.00		773.00		773.00		726.00		763.00	
3	Arunachal Pradesh	01.06.2018	400.00		400.00		400.00		500.00		500.00		500.00		500.00		310.00		310.00		310.00		430.00		430.00		385.00		385.00		350.00		-	
4	Assam	01.04.2020	588.00		722.00		782.00		868.00		868.00		909.00		909.00		485.00		485.00		485.00		583.00	U	762.00		725.00		725.00		725.00		826.00	
																							550.00	R										
5	Bihar	01.04.2020	684.00	U	814.00		891.00		853.00	U	900.00		908.00		909.00		599.00		599.00		599.00		867.00		895.00		852.00		-		840.00	at 132kV	900.00	at 132 kV
			676.00	R					726.00	R																						
6	Chandigarh	01.06.2020	294.00		422.00		492.00		593.00		627.00		634.00		635.00		290.00		290.00		290.00		511.00		614.00		557.00		557.00		557.00		-	
7	Chhattisgarh	01.04.2020	348.00		469.00		693.00		720.00		915.00		932.00		932.00		480.00		480.00		480.00		556.00		645.00		983.00		983.00		937.00		661.00	at 132 kV
8	Dadra & Nagar Haveli	01.06.2020	195.00		241.00		301.00		403.00		429.00		433.00		434.00		80.00		80.00		80.00		458.00		531.00		590.00		590.00		-		-	
9	Daman & Diu	01.06.2020	160.00		215.00		266.00		378.00		400.00		403.00		404.00		75.00		75.00		75.00		436.00		436.00		547.00		547.00		-		-	
10	Delhi (BYPL/BRPL/NDPL)	01.09.2020	335.00		444.00		678.00		885.00		1177.00		1177.00		1177.00		204.00		204.00		204.00		1089.00		1089.00		942.00		942.00		933.00		870.00	
11	Delhi (NDMC)	01.09.2020	335.00		444.00		678.00		885.00		885.00		885.00		885.00		204.00		204.00		204.00		1089.00		1089.00		942.00		942.00		933.00		870.00	at 33 kV
12	Goa	01.06.2020	195.00		283.00		380.00		512.00		576.00		589.00		591.00		179.00		179.00		179.00		482.00		497.00		613.00		613.00		613.00		-	
13	Gujarat	01.04.2020	394.00	U	505.00	U	566.00	U	562.00		562.00		617.00		672.00		90.00		90.00		90.00		579.00		588.00		551.00		626.00		630.00		600.00	at 132 kV
			325.00	R	433.00	R	494.00	R																								
14	Haryana	01.06.2020	235.00		471.00		720.00		645.00		715.00		893.00		893.00		10.00		10.00		10.00		757.00		870.00		838.00		838.00		826.00		875.00	at 11kV
15	Himachal Pradesh	01.06.2020	479.00		504.00		538.00		598.00		560.00		670.00		670.00		432.00		417.00		412.00		494.00		642.00		649.00		649.00		662.00		819.00	at 66 kV
16	Jammu & Kashmir	01.10.2016	200.00		307.00		369.00		420.00		656.00		656.00		656.00		85.00		85.00		85.00		418.00		416.00		441.00		441.00		429.00		-	

17	Jharkhand	01.10.2020	720.00	U	668.00	U	657.00	U	680.00	U	697.00	U	697.00	U	697.00	U	512.00		512.00		512.00		760.00		760.00		649.00		649.00		627.00		839.00	at 25 kV
			615.00	R	604.00	R	601.00	R	612.00	R	638.00	R	638.00	R	638.00	R																		
18	Karnataka	01.11.2020	617.00	D	844.00	D	912.00	D	1050.00	D	1065.00	D	1067.00	D	1068.00	D	0.00		0.00		0.00		800.00	D	909.00	D	885.00	D	891.00	D	890.00	D	831.00	
			575.00	F	790.00	F	852.00	F	989.00	F	1003.00	F	1006.00	F	1006.00	F							748.00	F	856.00	F	863.00	F	867.00	F	866.00	F		
19	Kerala	08.07.2019	422.00		879.00		1019.00		861.00		1070.00		1116.00		1116.00		257.00		257.00		257.00		630.00		758.00		671.00		671.00		671.00		677.00	at 110 kV
20	Lakshadweep	01.06.2020	155.00		418.00		578.00		792.00		918.00		939.00		944.00		-		-		-		687.00		687.00		958.00		958.00		-		-	
21	Madhya Pradesh	26.12.2020	611.00	U	708.00	U	763.00	U	846.00	U	852.00	U	946.00	U	947.00	U	523.00		579.00		605.00		952.00	U	952.00	U	803.00		803.00		856.00		762.00	at 132/220 KV
			590.00	R	703.00	R	759.00	R	822.00	R	828.00	R	916.00	R	916.00	R							868.00	R	868.00	R								
22	Maharashtra	01.04.2020	686.00		1028.00		1311.00		1248.00		1118.00		1853.00		1853.00		351.00		351.00		351.00		768.00		1073.00		1038.00	B	1038.00	B	1038.00		1043.00	
																											1069.00	C	1069.00	C				
23	Manipur	01.04.2020	480.00		623.00		669.00		727.00		784.00		794.00		795.00		442.00		442.00		442.00		483.00		707.00		814.00		814.00		-		-	
24	Meghalaya	01.04.2020	435.00		548.00		600.00		776.00		808.00		813.00		814.00		347.00		347.00		347.00		685.00		685.00		795.00		795.00		750.00		-	
25	Mizoram	01.04.2020	380.00		518.00		555.00		573.00		613.00		620.00		621.00		309.00		309.00		309.00		565.00		580.00		645.00		645.00		-		-	
26	Nagaland	01.04.2020	523.00		618.00		667.00		812.00		874.00		885.00		887.00		310.00		310.00		310.00		633.00		673.00		729.00		730.00		-		-	
27	Odisha	01.05.2020	374.00		496.00		566.00		658.00		738.00		752.00		754.00		161.00		158.00		158.00		625.00		669.00		665.00		665.00		640.00		671.00	at 25/33KV
28	Puducherry	01.06.2020	190.00		373.00		503.00		686.00		729.00		736.00		738.00		0.00	S	0.00	S	0.00	S	604.00		597.00		657.00		-		642.00		-	
29	Punjab	01.06.2020	547.00		759.00		856.00		834.00		870.00		881.00		881.00		557.00	WS	557.00	WS	557.00	WS	741.00		798.00		889.00		852.00		889.00		930.00	at 132KV
30	Rajasthan	01.02.2020	833.00		830.00		845.00		1022.00		1046.00		1155.00		1157.00		574.00		574.00		574.00		793.00		868.00		763.00		-		745.00		710.00	
31	Sikkim	01.04.2020	150.00		288.00		355.00		483.00		599.00		698.00		702.00		-		-		-		717.00	U	657.00		799.00		799.00		-		-	
																							567.00	R										
32	Tamil Nadu	11.08.2017	85.00		470.00		584.00		841.00		884.00		891.00		892.00		0.00		0.00		0.00		685.00		685.00		760.00		760.00		760.00		842.00	
33	Telangana	01.04.2018	239.00		669.00		821.00		911.00		1011.00		1034.00		1039.00		258.00	$	253.00	$	252.00	$	721.00		731.00		800.00		800.00		747.00		632.00	at 33 kV
34	Tripura	01.09.2020	548.00		643.00		793.00		743.00		826.00		826.00		826.00		394.00		394.00		513.00		796.00		821.00		-		-		-		-	
35	Uttar Pradesh	20.11.2020	693.00	U	739.00	U	801.00	U	1043.00	U	1219.00	U	1248.00	U	1254.00	U	665.00	U	665.00	U	665.00	U	1003.00	U	1057.00	U	985.00	U	985.00	U	944.00		1271.00	Below 132KV
			446.00	R	574.00	R	659.00	R	670.00	R	670.00	R	670.00	R	670.00	R	235.00	R	235.00	R	235.00	R	928.00	R	978.00	R	911.00	R	911.00	R			1235.00	132KV & above
36	Uttarakhand	01.04.2020	355.00		478.00		564.00		657.00		657.00		750.00		750.00		203.00		203.00		203.00		593.00		648.00		701.00		701.00		701.00		694.00	
37	West Bengal	01.04.2020	654.00	U	869.00	U	967.00	U	906.00	U	1054.00	U	1071.00	U	1075.00	U	510.00		510.00		510.00		782.00	U	921.00	U	964.00		964.00		958.00		936.00	at 25KV
			640.00	R	856.00	R	962.00	R	905.00	R	1053.00	R	1071.00	R	1075.00	R							763.00	R	894.00	R							936.00	at 132KV
38	Torrent Power Ltd. (Ahmedabad)	01.04.2020	437.00		503.00		544.00		596.00		612.00		704.00		704.00		330.00		330.00		330.00		561.00		645.00		588.00		588.00		-		-	
39	Torrent Power Ltd. (Surat)	01.04.2020	423.00		507.00		556.00		578.00		578.00		720.00		720.00		70.00		70.00		70.00		530.00		660.00		624.00		624.00		-		-	
40	CESC Ltd. (Kolkata)	01.04.2019	613.00		852.00		960.00		883.00		1053.00		1075.00		1079.00		-		-		-		780.00		922.00		887.00		887.00		860.00		775.00	
41	IPCL(West Bengal)	01.04.2019	444.00		591.00		630.00		583.00		657.00		651.00		651.00		242.00	^	242.00	^	242.00	^	512.00		618.00		626.00		626.00		451.00	^	661.00	

42	D.V.C.(A) Jharkhand Area	01.10.2020	520.00		465.00		456.00		495.00		459.00		453.00		452.00		317.00		317.00		317.00		617.00		617.00		540.00		540.00		524.00			
	(B) West Bengal Area	01.04.2016	-		-		-		-		-		-		-		-		-		-		-		-		-		-		617.00		646.00	at 132KV
43	Mumbai (B.E.S.T)	01.04.2020	476.00		739.00		1010.00		989.00		865.00		1127.00		1127.00								743.00		997.00		851.00		851.00		-		-	
44	Mumbai (Adani Electricity)	01.04.2020	626.00		798.00		977.00		1069.00		945.00		1243.00		1243.00		557.00		557.00		557.00		827.00		1097.00		910.00		910.00		-		-	
45	Mumbai (TATA'S)	01.04.2020	545.00		806.00		1053.00		1027.00		902.00		1164.00		1164.00		-		-		-		773.00		1022.00		877.00		877.00		-		821.00	at 33/22kV

^ TOD tariff from 23:00 hrs to 06:00 hrs for IPCL in West Bengal.

Note: Electricity duty of Sikkim is of the year 2019-20.

B : General Industry C : Seasonal Industry D : Bangalore, Devangere & Other City Municipal Corp. F : Areas under Village Panchayats U : Urban R : Rural O : Other Areas

WS : Without Subsidy # Without Demand side management measures $ For Corporate Farmers S : With Subsidy

Tariffs notified have varying parameters for various categories of consumers. The above comparison is based on certain assumed loads and electricity consumption levels in a month.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3202
ANSWERED ON 04.08.2022

NEW ENERGY POLICY

†3202. SHRI SATYADEV PACHAURI:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has formulated/is formulating any new energy policy for the country;

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

(c) the time by which it is likely to be completed;

(d) whether the Government has made any assessment regarding the demand for energy upto the year 2040 and if so, the details thereof; and

(e) the manner in which the Government proposes to meet this growing demand?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : No, Sir.

(b) & (c) : Does not arise.

(d) & (e) : In so far as demand for electricity is concerned, Central Electricity Authority (CEA) conducts Electric Power Survey (EPS) of the country every five years for estimating the electricity demand of the country on medium and long term basis as obligated under Section 73(a) of the Electricity Act 2003. The 19th Electric Power Survey (EPS) report, published in January 2017, covers electricity demand projection for the years 2016-17 to 2026-27 as well as electricity demand projection for the years 2031-32 and 2036-37 for each State/UT. The demand in 2031-32 and 2036-37 is projected to be 2530 BU and 3049 BU respectively.

Steps planned to increase production of electricity in the country matching with growing demand are given below:

- **Enhancing installed capacity from non-fossil fuel based generation to 500 GW by 2030**
- **Thermal Power Plants of 27,550 MW of capacity are at various stages of construction in the country.**
- **Hydro Power Plants of 14103.50 MW of capacity are at various stages of construction in the country.**
- **Nuclear Power Plants of 8,700 MW of capacity are under construction and**

7000 MW of Nuclear power plants have been accorded Administrative Approval and Financial Sanction.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.3204
ANSWERED ON 04.08.2022

PROMOTION OF ELECTRIC VEHICLES

†3204. SHRI MAHABALI SINGH:

Will the Minister of POWER be pleased to state:

(a) whether the Government formulates any plan to promote the use of electric vehicles in the country;

(b) if so, the details thereof;

(c) the steps taken by the Government to increase the number of charging stations across the country;

(d) whether the Government has framed any policy to provide the facility of replacement of batteries at the charging stations itself; and

(e) if so, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : The Government has taken following steps to promote the use of Electric Vehicles (EVs) in the country:

(i) Ministry of Heavy Industries (MHI) formulated Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME India) Scheme in 2015 to promote adoption of EVs. At present, Phase-II of FAME India Scheme is being implemented.

(ii) The Government has approved Production Linked Incentive scheme for manufacturing of Advanced Chemistry Cell batteries.

(iii) EVs have been covered under Production Linked Incentive Scheme for Automobiles and Auto Components.

(iv) The GST on EVs has been reduced from 12% to 5%. The GST on chargers/charging stations has been reduced from 18% to 5%.

(v) Ministry of Road Transport & Highways exempted battery operated transport vehicles from the requirement of permits.

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(vi) Ministry of Road Transport & Highways issued an advisory dated 17.07.2019 for the States to promote use of EVs and increase share of zero emission vehicles in shared mobility as well as public transport.

(c) : To increase the number of the charging stations across the country, the following steps have been taken;

i. Ministry of Power has issued clarification that the charging of batteries of EVs through charging station does not require any license.
ii. Central Electricity Authority (CEA) has issued amendments in the regulations regarding Technical Standards pertaining to Grid Connectivity and Safety of supply for Charging Stations.
iii. Revised consolidated Guidelines & Standards for charging infrastructure have been issued by the Ministry of Power on 14.01.2022 to accelerate the E-Mobility transition in the country.
iv. The Bureau of Energy Efficiency (BEE) has been selected as the Central Nodal Agency to take various initiatives for promotion of Charging Infrastructure for Electric Vehicles.
v. Ministry of Power along with Ministry of Road Transport and Highways, Ministry of Heavy Industries and NITI Aayog has launched a nationwide "Go Electric" Campaign on 19.02.2021 to educate the general public on the benefits of EVs.
vi. Action plans for 9 major cities have been prepared by the BEE for installation of Public Charging Stations (PCS). As per the initial estimates, a total of 46,397 PCS are being targeted in these cities by 2030.
vii. All the Central Ministries and the State Governments have been requested to join the Government of India's initiative on transformative mobility and to convert their fleet of official vehicles from present Petrol/Diesel Vehicles with EVs.
viii. In addition to the 520 charging stations sanctioned under FAME-I, the Government has sanctioned installation of 2,877 public EV charging stations in 68 cities and 1576 public EV charging stations on 9 prominent Expressways and 16 Highways in the country.
ix. Ministry of Housing and Urban Affairs has issued amendments in Model Building By-Laws and Urban and Regional Development Plans, Formulation and Implementation Guidelines regarding Charging Infrastructure for EVs.

(d) & (e) : During the Budget Speech 2022-23, it has been announced that considering the constraint of space in urban areas for setting up charging stations at scale, a battery swapping policy will be brought out and inter-operability standards will be formulated. The private sector will be encouraged to develop sustainable and innovative business models for 'Battery or Energy as a service'. This will improve efficiency in the EV eco-system.

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