GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.185
ANSWERED ON 04.07.2019

POWER SUPPLY TO INDUSTRIAL SECTOR

†*185. SHRI KAPIL MORESHWAR PATIL:

Will the Minister of POWER
be pleased to state:

(a) whether the Government proposes to supply adequate power to the industrial sector;

(b) if so, the details thereof;

(c) whether the Government has fixed any norms or standard for industrial units in 8 energy consuming sectors for reducing their specific energy consumption under the National Mission for Enhanced Energy Efficiency (NMEEE);

(d) if so, the details thereof; and

(e) the extent to which these units have achieved the set targets to reduce the use of energy by industrial units during the last three years and the current year, State/UT-wise?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(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.185 ANSWERED IN THE LOK SABHA ON 04.07.2019 REGARDING POWER SUPPLY TO INDUSTRIAL SECTOR.

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(a) & (b) : Electricity is a concurrent subject. Providing electricity to all the consumers including in the industrial sector is the primary responsibility of concerned State Governments/Power Distribution Companies (DISCOMs). At present the installed generation capacity in the country is around 357 GW which is sufficient to meet the demand of electricity in the country including the industrial sector.

(c) to (e) : As per the clause (g) and (n) of Section 14 of the Energy Conservation Act, 2001 the Government prescribed energy performance norms for efficient use of energy by high energy consuming industries in 8 sectors under National Mission for Enhanced Energy Efficiency (NMEEE) through Perform, Achieve and Trade (PAT) initiative.

PAT cycle – I started from April 2012 under which targets were notified to reduce the Specific Energy Consumption (SEC) of 478 Designated Consumers (DCs) from 8 sectors viz. Aluminum, Cement, Chlor- Alkali, Fertilizer, Iron & Steel, Paper & Pulp, Thermal Power Plant and Textile. The overall SEC reduction targets aimed to secure total energy saving of 6.686 Million Tonne of Oil Equivalent (MTOE) in 3 years. PAT Cycle-I was completed on 31st March, 2015. The total energy savings achieved in PAT Cycle–I was 8.67 MTOE which exceeded the target by about 30 percent. This energy saving translates into avoiding of about 31 million tonne of CO_2 emissions.

The State/UT- wise details of achievements under the PAT Cycle-I are given at Annexure.

Subsequent to PAT cycle–I, PAT cycles–II, III, IV & V have been initiated with total 956 Designated Consumers (DCs) from 13 sectors being given targets. The total targeted saving from cycles–II, III, IV and V is about 11.14 MTOE for the country.

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ANNEXURE

ANNEXURE REFERRED TO IN PARTS (c) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 185 ANSWERED IN THE LOK SABHA ON 04.07.2019 REGARDING POWER SUPPLY TO INDUSTRIAL SECTOR.

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The details of achievements under the PAT Cycle-I

Sl. No.	State	Total Target in MTOE	Total Saving in MTOE
1	Andhra Pradesh	0.25	0.18
2	Assam	0.08	0.06
3	Bihar	0.05	0.03
4	Chhattisgarh	0.64	0.65
5	Delhi	0.06	0.07
6	Goa	0.01	0.03
7	Gujarat	0.59	0.86
8	Haryana	0.27	0.41
9	Himachal Pradesh	0.03	0.05
10	Jharkhand	0.52	0.63
11	Karnataka	0.33	0.36
12	Kerala	0.01	0.01
13	Madhya Pradesh	0.50	0.75
14	Maharashtra	0.69	0.72
15	Meghalaya	0.01	0.01
16	Odisha	0.54	1.00
17	Puducherry	0.00	-0.01
18	Punjab	0.34	0.44
19	Rajasthan	0.36	0.72
20	Tamil Nadu	0.41	0.22
21	Telangana	0.11	0.22
22	Tripura	0.01	-0.0005
23	Uttar Pradesh	0.40	0.75
24	Uttarakhand	0.01	0.03
25	West Bengal	0.47	0.48
	Total	6.68	8.67

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2053
ANSWERED ON 04.07.2019

PRADHAN MANTRI SAHAJ BIJLI HAR GHAR YOJANA–SAUBHAGYA

2053. DR. SUKANTA MAJUMDAR:
SHRI KHAGEN MURMU:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has launched a new scheme called Pradhan Mantri Sahaj Bijli Har Ghar Yojana "Saubhagya" to ensure electrification of all willing households in the country;

(b) if so, the details including features, expected outcome, funds sanctioned and the number of beneficiaries thereof

(c) whether the Government has launched web portal to register citizens for free electricity and for monitoring household electrification progress and if so, the details thereof;

(d) whether there are four crore un-electrified households in the country and if so, the details thereof, State/UT-wise; and

(e) the steps taken by the Government to provide 'Electricity for All' in the country?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (e) : Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana – Saubhagya with an outlay of Rs.16,320 crore on October, 11, 2017. The salient features of the scheme are as under :

(i) Last mile connectivity and electricity connections to all un-electrified households in rural areas.

(ii) Solar Photo Voltaic (SPV) based standalone systems for un-electrified households located in remote and inaccessible villages / habitations where grid extension is neither feasible nor cost effective.

(iii) Last mile connectivity and electricity connections to all remaining economically poor un-electrified households in urban areas. Non-poor urban households are excluded from this scheme.

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The expected outcome of the Scheme is as follows:

- **Increased economic activities and jobs opportunities**
- **Improvement in children's education**
- **Improvement in public safety through lighting**
- **Improvement in Health services**
- **Better quality of life , especially for women, in daily chores**
- **Substitution of kerosene & associated hardship.**
- **Access to communication(radio, television, mobiles, etc.)**

To monitor the universal household electrification, the Saubhagya web-portal http://saubhagya.gov.in was launched in November, 2017. State Governments/Power Distribution utilities were asked to launch mobile apps to register applications and to expedite release of electricity connections.

As reported, States have declared Universal Electrification on Saubhagya Portal and 2.62 crore willing households were electrified across the country up to 31.03.2019 since launch of Saubhagya scheme, except 18,734 household in LWE affected area of Chhattisgarh.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2071
ANSWERED ON 04.07.2019

STREET LIGHTING NATIONAL PROGRAMME

2071. SHRI B.B. PATIL:

Will the Minister of POWER
be pleased to state:

(a) whether the Government is implementing the Street Lighting National Programme (SLNP) to promote the use of LED lights in place of conventional street lights in the country and if so, the details of the scheme along with the number of street lights installed so far, State-wise;

(b) whether SLNP is currently being implemented only in a few selected States and if so, the details thereof and the reasons therefor;

(c) the total number of local bodies which have entered into contract with Energy Efficiency Services Ltd. (EESL) for replacement of street lights with LED lights under SLNP so far, State-wise;

(d) whether the Government has made any study on the implementation of the project and if so, the details thereof; and

(e) the steps being taken by the Government for effective implementation of SLNP?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (c) : Hon'ble Prime Minister, on 5th January, 2015 launched the Street Lighting National Programme (SLNP) to replace 1.34 crore conventional street lights with energy efficient LED street lights by March, 2019. SLNP is being implemented by Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power. This programme is voluntary in nature and runs without any budgetary support from Government of India. The entire investment in supply, installation and maintenance of LED Street Lights is made by EESL. Payment to EESL is made by Urban Local Bodies (ULBs) from the resultant savings achieved in terms of reductions in electricity bills and maintenance cost, in respect of the street lights covered under the programme, over a period of seven years.

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As on date, total 1,502 Urban Local Bodies (ULBs) have signed the implementation agreement with EESL for replacement of conventional street lights with LED street lights. Out of these ULBs, installation work has been completed in 859 ULBs. Till date, EESL has installed over 92 lakh LED street lights in 29 States/UTs. States/UTs wise details on implementation of SLNP are given at Annexure-I.

(d) : EESL has conducted the studies on the implementation of SLNP in the states of Himachal Pradesh and Rajasthan. The gist of findings emerging from these studies is at Annexure-II.

(e) : For effective implementation of SLNP as well as for expediting the implementation in remaining States/UTs, as the programme is voluntary in nature, the following steps have been taken by EESL/Government:

(i) EESL has submitted proposals for replacement of Conventional street lights with LED street lights to remaining States/UTs.

(ii) Letters have been issued by Secretary (Power) to all the Chief Secretaries of all the States/UTs for implementation of SLNP Programme in their respective states.

(iii) Real time monitoring is done of performance of the installed Street Lights by Centralised Control and Monitoring System (CCMS).

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 2071 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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States/ UTs wise details on implementation of SLNP

Sl. No.	States/UTs	Number of ULBs signed till date	No. of LED Street Lights installed till date
States			
1	Andhra Pradesh	108	27,64,981
2	Assam	3	23,651
3	Bihar	143	2,45,917
4	Chhattisgarh	168	3,54,427
5	Goa	14	2,06,790
6	Gujarat	148	8,83,497
7	Haryana	1	65,231
8	Himachal Pradesh	48	54,321
9	Jammu & Kashmir*	-	11,991
10	Jharkhand	43	98,889
11	Karnataka*	-	9,882
12	Kerala	4	70,807
13	Madhya Pradesh	2	81,870
14	Maharashtra	355	6,15,522
15	Odisha	109	3,19,410
16	Punjab	16	89,052
17	Rajasthan	191	10,21,192
18	Sikkim*	-	868
19	Tamil Nadu*	-	6,689
20	Telangana	76	8,56,676
21	Tripura	20	75,376
22	Uttar Pradesh	43	8,85,079
23	Uttarakhand	1	41,940
24	West Bengal	6	41,119
UTs			
25	Andaman & Nicobar	1	13,500
26	Chandigarh	1	42,103
27	Delhi	1	3,22,412
28	Lakshadweep*	-	1,000
29	Puducherry *	-	450
	Total	1,502	92,04,642

*** In these States / UTs, only demonstration projects have been successfully completed.**

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 2071 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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The gist of the findings of the case studies on the implementation of LED street lights projects in Himachal Pradesh and Rajasthan are as follows:-

1. Himachal Pradesh: The energy & monetary saving achieved through implementation of Street Light National Program in Himachal Pradesh as per survey conducted by EESL, on sample basis is as follows:

Sl. No.	City	Total Inst. Lights	Monthly Energy Consumption with Conventional lights (in kWh)	Monthly Energy Consumption with LED (in kWh)	Monthly Energy Saving (in kWh)	% Saving	Monetary Saving Per Month (in INR)
1	Shimla	8516	358082	158199	199883	56%	9,89,419
2	Dharamshala	2910	120345	52495	67850	56%	3,35,859
3	Mandi	2189	80003	34917	45086	56%	2,23,174
4	Sundernagar	1821	62822	27023	35799	57%	1,77,205
5	Paonta Sahib	1948	114525	50654	63871	56%	3,16,159
6	Ghumarwin	608	22645	9911	12734	56%	63,033
7	Manali	798	40912	18876	22036	54%	1,09,079
Total		18790	799334	352075	447258	56%	22,13,928

(Average operating hours per day considered as 11; Monetary saving calculation is based on Deemed saving approach, considering unit rate of INR 4.95/kWh).

2. Rajasthan:

(i) Jhalawar Street Light Project:- The energy saving achieved through implementation of Street Light National Program in Jhalawar as per survey conducted by EESL, on sample basis, is as follows:

Total Inventory of Conventional Street Lights			
Sr. No.	Earlier Wattage of Lamp (W)	Quantity	Total kW
1	High Pressure Sodium Vapour - 400	36	16
2	High Pressure Sodium Vapour – 250	120	33
3	High Pressure Sodium Vapour – 150	140	23
4	High Pressure Sodium Vapour – 70	157	13
5	Fluorescent Tube Light - 40W	1624	78
6	Compact Fluorescent Lamp - 20W	372	7
Total kW			170
Total Inventory after Installation of LED Street Lights			
Sr. No.	Wattage of LED Light	Quantity	Total kW
1	190	36	7
2	120	120	14
3	72	140	10
4	40	157	6
5	18	1624	29
6	12	372	4
Total kW (New)			71

Estimates of energy saving potential	
Earlier Load (in kW)	170
New Load (in kW)	71
Reduction in Load after Installation (in kW)	99
Annual Energy Saving in kWh	395863
Annual Energy saving in MU's	0.396
% reduction in Load	58%

(Average operating hours per day considered as 11 and operating days considered as 365). Implementation of the LED street light project in Jhalawar has resulted in reduction of the street lighting load from 170 kW to 71kW.

(ii) Mount Abu Street Light Project: The energy saving achieved through implementation of Street Light National Program in Mount Abu as per survey conducted by EESL, on sample basis is as follows:

Total Inventory of Conventional Street Lights			
Sr. No.	Earlier Wattage of Lamp (W)	Quantity	Total kW
1	High Pressure Sodium Vapour – 400	106	42.4
2	High Pressure Sodium Vapour – 250	43	10.8
3	High Pressure Sodium Vapour – 150	492	73.8
4	High Pressure Sodium Vapour – 70	144	10.1
5	Fluorescent Tube Light – 40 W	508	20.3
6	Compact Fluorescent Lamp – 36 W	202	7.3
7	Compact Fluorescent Lamp – 72 W	6	0.432
8	Compact Fluorescent Lamp	3	0.045
9	Compact Fluorescent Lamp – 11 W	26	0.286
		Total kW	165.4

Total Inventory after Installation of LED Street Lights			
Sr. No	Wattage of LED Light	Quantity	Total kW
1	120	76	9.12
2	70	669	46.83
3	15	737	11.055
		Total kW(New)	67

Estimates of energy saving potential	
Earlier Load (in kW)	165.4
New Load (in kW)	67
Reduction in Load after Installation (in kW)	98.4
Annual Energy Saving in kWh	394996
Annual Energy saving in MU's	395
% reduction in Load	59%

(Average operating hours per day considered as 11 and operating days considered as 365). The implementation of LED street light project in Mount Abu has resulted in reduction of the street lighting load from 165.4 kW to 67 KW.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2104
ANSWERED ON 04.07.2019

NON-FUNCTIONAL UNITS OF NTPC

†2104. SHRI BHANU PRATAP SINGH VERMA:

Will the Minister of POWER
be pleased to state:

(a) the total number of units of National Thermal Power Corporation (NTPC) across the country, which are non-functional at present, location-wise;

(b) whether there is any scheme to ensure production with full capacity at the unit of NTPC situated in Dibiyapur of Auraiya district of Uttar Pradesh where there has been zero production during the last two years; and

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

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) : All power stations of NTPC across the country are available and generate power as per the requirement of the beneficiaries.

(b) & (c): NTPC Auraiya Gas power Plant, situated in Dibiyapur of Auraiya district of Uttar Pradesh, is fully operational and is generating power as per the requirement of beneficiaries.

Power generated by NTPC Auraiya Gas power plant during last two financial years is given below:

	2017-18	2018-19
Power Generated in MUs	377	545

The Auraiya Gas power plant is available to generate its full capacity. However, generation was low due to less requisition by beneficiaries for power generated by using Regasified Liquefied Natural Gas (RLNG) & Naphtha fuel as this power is more expensive compared to power generated by using coal or Renewables.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2108
ANSWERED ON 04.07.2019

HYDRO POWER PROJECTS

2108. DR. HEENA GAVIT:
DR. SUBHASH RAMRAO BHAMRE:
SHRI SUNIL DATTATRAY TATKARE:
DR. AMOL RAMSING KOLHE:
SHRIMATI SUPRIYA SULE:
SHRI KULDEEP RAI SHARMA:

Will the Minister of POWER be pleased to state:

(a) the details of hydro power projects constructed and under construction along with their installed capacities, State/UT-wise;

(b) the details of the hydro power projects in operation and the quantum of hydro power generated by each of the project during the last three years and the current year, State/UT-wise;

(c) the reasons for under utilisation of the installed capacity and the steps being taken by the Government to improve the efficiency of hydro power projects for generation of power as per their installed capacity;

(d) whether the Government has identified the stalled hydro power projects in the country and if so, the details thereof along with the cost over-run of these projects;

(e) whether the Government proposes to revive the stalled hydro power projects in order to increase the renewable power generation across the country and if so, the details thereof; and

(f) the other steps taken by the Government for completion of hydro power projects in a time bound manner in the country?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : As on 31.05.2019, a total of 204 Hydro Power Projects (above 25 MW) with an aggregate installed capacity of 45399.22 MW were in operation across the country. The State/UT-wise details of such projects along with power being generated during last three years and current year by each of the Hydro Power Projects is given at Annexure-I.

Presently, 36 Hydro Power Projects (above 25 MW) aggregating to 12034.50 MW are under construction across the country. The details, State/UT-wise, are given at Annexure-II.

.....2.

(c) : Majority of the Hydro Power Projects in the country, except a few, are generating power as per their installed capacity. However, some of the hydropower projects are not operating at their full capacity due to low inflows besides other reasons such as upstream water conductor system not being ready to its full capacity as per approved layout design and implementation of Renovation & Modernization works in some of the Projects.

(d) : Out of 36 under construction Hydro Power Projects, 13 Hydro Power Projects aggregating to 4706 MW are stalled. The details of these Projects along with their cost over-run is given at Annexure-III.

(e) & (f) : To promote Hydro Power Sector Government has approved the following measures:

1. **Declaring Large Hydro Power (LHPs) (> 25 MW projects) as Renewable Energy source;**
2. **Hydro Purchase Obligation (HPO) as a separate entity within Non-solar Renewable Purchase Obligation (RPO);**
3. **Tariff rationalization measures for bringing down hydro power tariff;**
4. **Budgetary Support for Flood Moderation/Storage Hydro Electric Projects (HEPs);**
5. **Budgetary Support to Cost of Enabling Infrastructure, i.e. roads/bridges etc.**

The above measures will help the revival of stalled hydro power projects.

The other steps being taken by the Government for completion of hydro power projects in a time bound manner in the country are as follows :-

- **Central Electricity Authority (CEA) is regularly monitoring the under construction hydro power projects (above 25 MW). The progress of each project is monitored continuously through site visits and interaction with the developers & other stake holders. Member (Hydro), CEA holds regular review meetings with the developers and other stakeholders.**
- **Ministry of Power reviews the progress of ongoing hydroelectric projects regularly with the concerned officers of CEA, State Utilities / CPSUs / Project developers, etc.**
- **Project Monitoring Group (PMG) set up under Prime Minister's Office (PMO) resolves issues / bottlenecks faced by developers by taking up with Central / State Government authorities.**
- **Issues are also raised in PRAGATI, for proactive governance and timely implementation, as and when required.**
- **In case of Central Power Sector Undertakings (CPSUs) projects, the project Implementation parameters / milestones are incorporated in the annual MoU signed between respective CPSU's and MoP and the same are monitored during the quarterly performance review meetings of CPSU's and other meetings held in MoP/ CEA. The issues related to erection and supply of Electro-Mechanical equipment is expedited with BHEL in various meetings held in CEA / MoP and other local issues affecting the progress of works are taken up with respective State Governments by the Concerned CPSU / MoP.**

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2108 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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STATE-WISE ACTUAL GENERATION OF H.E. STATIONS (I. C. ABOVE 25 MW) IN THE COUNTRY DURING LAST THREE YEARS AND CURRENT YEAR					
REGION/ UTILITY/ STATION	INSTALLED CAPACITY (MW) AS ON 30.05.2019	GENERATION (MU)			
		2016-17	2017-18	2018-19	2019-20 (Up to 30.05.2019)
HIMACHAL PRADESH					
BBMB					
Bhakra L&R	1379.00	5168.27	5134.02	4238.19	885.82
Dehar	990.00	3184.68	3086.24	3226.30	804.69
Pong	396.00	1369.93	1641.57	1512.56	146.56
Total BBMB-HP	2765.00	9722.88	9861.83	8977.05	1837.07
NHPC					
Baira Siul	180.00	669.33	641.73	366.67	0.00
Chamera-I	540.00	2224.39	2344.08	2484.56	635.63
Chamera-II	300.00	1443.93	1487.11	1508.02	383.65
Chamera-III	231.00	917.09	1068.05	1043.42	258.48
Parbati III	520.00	682.48	710.53	608.30	89.01
Parbati II*		0.00	0.00	0.00	0.00
Total NHPC -HP	1771.00	5937.22	6251.50	6010.97	1366.77
SJVN					
Naptha Jhakri	1500.00	7050.64	7207.73	6507.15	1316.24
Rampur	412.02	1960.42	2015.00	1828.77	374.22
Total SJVN - HP	1912.02	9011.06	9222.73	8335.92	1690.46
NTPC					
Kol Dam	800.00	3225.16	3313.62	3013.93	507.09
Total NTPC - HP	800.00	3225.16	3313.62	3013.93	507.09
HPPCL					
Kashang I	65.00	56.09	197.13	118.24	31.52
Kashang II & III	130.00				
Sainj	100.00	0.00	134.99	408.81	0.00
Total HPPCL	295.00	56.09	332.12	527.05	31.52
HPSEB LTD					
Bassi	66.00	297.76	315.17	251.56	78.74
Giri Bata	60.00	140.60	169.94	214.45	17.61
Larji	126.00	611.66	612.36	593.86	147.34
Sanjay	120.00	187.40	493.39	589.42	105.36
Total HPSEB LTD	372.00	1237.42	1590.86	1649.29	349.05
PSPCL					
Shanan	110.00	472.88	508.52	472.39	142.10
Total PSPCL-HP	110.00	472.88	508.52	472.39	142.10
Allain Duhangan Power Power Ltd.					
Allain Duhangan	192.00	679.12	683.01	582.23	109.87
Everest Power Private Ltd.					
Malana-II	100.00	366.54	368.89	349.39	62.07
HBPCL					
Baspa-II	300.00	1342.75	1336.65	1275.58	186.46
Karcham Wangtoo	1000.00	4372.29	4569.93	3968.69	716.06
Total HBPCL	1300.00	5715.04	5906.58	5244.27	902.52
GBHPPL					
Budhil	70.00	261.25	317.63	288.08	58.19
IA Energy Pvt. Ltd.					
Chanju I	36.00	11.29	79.42	137.45	43.00
Malana Power Company Ltd.					
Malana	86.00	353.79	346.29	320.55	62.51
Total H.P.	9809.02	37049.74	38783.00	35908.56	7162.22

JAMMU & KASHMIR					
NHPC					
Chutak	**44.00**	**44.12**	**45.72**	**48.96**	**8.99**
Dulhasti	**390.00**	**2280.02**	**2343.86**	**2273.38**	**412.89**
Nimoo Bazgo	**45.00**	**95.21**	**98.83**	**105.55**	**17.26**
Salal-I	**345.00**	**3423.09**	**3247.09**	**3412.55**	**902.61**
Salal-II	**345.00**				
Sewa-II	**120.00**	**470.61**	**506.39**	**498.32**	**181.12**
Uri	**480.00**	**2803.10**	**2349.66**	**3048.29**	**706.52**
Uri -II	**240.00**	**1471.94**	**1207.44**	**1580.92**	**336.54**
Kishenganga	**330.00**	**0.00**	**1.68**	**529.25**	**221.63**
Total NHPC -J&K	**2339.00**	**10588.09**	**9800.67**	**11497.22**	**2787.56**
JKSPDC					
Baglihar	**450.00**	**2184.56**	**2506.71**	**2291.15**	**429.75**
Baglihar II	**450.00**	**1758.98**	**1821.95**	**1857.91**	**490.28**
Lower Jhelum	**105.00**	**483.15**	**480.99**	**589.33**	**110.69**
Upper Sindh II	**105.00**	**362.91**	**327.24**	**305.97**	**42.70**
Total JKSPDC	**1110.00**	**4789.60**	**5136.89**	**5044.36**	**1073.42**
Total Jammu & Kashmir	**3449.00**	**15377.69**	**14937.56**	**16541.58**	**3860.98**
PUNJAB					
BBMB					
Ganguwal	**77.65**	**416.54**	**494.09**	**599.37**	**96.37**
Kotla	**77.65**	**430.58**	**508.22**	**609.60**	**97.48**
Total BBMB-Punjab	**155.30**	**847.12**	**1002.31**	**1208.97**	**193.85**
PSPCL					
A.P.Sahib I & II	**134.00**	**673.87**	**647.81**	**427.78**	**111.11**
Mukerian I - IV	**207.00**	**1083.51**	**1270.76**	**1244.13**	**104.06**
Ranjit Sagar	**600.00**	**1306.08**	**1803.42**	**1454.52**	**453.16**
Total PSPCL	**941.00**	**3063.46**	**3721.99**	**3126.43**	**668.33**
Total Punjab	**1096.30**	**3910.58**	**4724.30**	**4335.40**	**862.18**
RAJASTHAN					
RRVUNL					
Jawahar Sagar	**99.00**	**307.55**	**261.10**	**247.00**	**2.08**
Mahi Bajaj I & II	**140.00**	**209.66**	**180.17**	**117.08**	**4.63**
R.P. Sagar	**172.00**	**448.78**	**378.26**	**334.32**	**0.02**
Total RRVUNL	**411.00**	**965.99**	**819.53**	**698.40**	**6.73**
Total Rajasthan	**411.00**	**965.99**	**819.53**	**698.40**	**6.73**
UTTAR PRADESH					
UPJVNL					
Khara	**72.00**	**268.93**	**259.14**	**286.14**	**65.89**
Matatilla	**30.60**	**122.68**	**93.81**	**97.48**	**9.37**
Obra	**99.00**	**216.71**	**299.96**	**231.03**	**9.00**
Rihand	**300.00**	**567.24**	**833.78**	**561.71**	**25.22**
Total UPJVNL	**501.60**	**1175.56**	**1486.69**	**1176.36**	**109.48**
Total Uttar Pradesh	**501.60**	**1175.56**	**1486.69**	**1176.36**	**109.48**
UTTARAKHAND					
NHPC					
Dhauliganga	**280.00**	**956.13**	**1153.16**	**1106.21**	**237.22**
Tanakpur	**94.20**	**430.29**	**459.74**	**452.89**	**85.36**
Total NHPC-UK	**374.20**	**1386.42**	**1612.90**	**1559.10**	**322.58**
THDC LTD					
Tehri	**1000.00**	**3146.32**	**3080.94**	**3172.08**	**471.90**
Koteshwar	**400.00**	**1224.55**	**1220.33**	**1223.84**	**223.52**
Total THDC LTD - UK	**1400.00**	**4370.87**	**4301.27**	**4395.92**	**695.42**
UJVNL					
Chibro (Y.St.II)	**240.00**	**714.00**	**783.57**	**809.53**	**174.94**
Chilla	**144.00**	**769.35**	**811.66**	**632.41**	**129.78**
Dhakrani (Y.St.I)	**33.75**	**120.19**	**129.68**	**147.48**	**31.37**
Dhalipur (Y.St.I)	**51.00**	**180.40**	**186.71**	**219.99**	**44.12**
Khatima	**41.40**	**180.14**	**212.60**	**232.25**	**36.27**
Khodri (Y.St.II)	**120.00**	**333.29**	**355.75**	**369.68**	**80.06**

Kulhal (Y.St.IV)	30.00	122.20	123.97	146.55	28.12
Maneri Bhali-I	90.00	349.22	394.77	430.40	91.25
Maneri Bhali-II	304.00	1251.71	1276.65	1302.34	257.22
Ram Ganga	198.00	180.94	250.64	188.14	5.23
Total UJVNL	1252.15	4201.44	4526.00	4478.77	878.36
AHPC LTD					
Srinagar	330.00	1280.75	1382.54	1375.31	220.54
Jaiprakash Power Venture Ltd.					
Vishnu Prayag	400.00	2042.05	2160.90	1932.02	315.28
Total Uttarakhand	3756.35	13281.53	13983.61	13741.12	2432.18
CHHATISGARH					
CSPGC					
Hasdeo Bango	120.00	153.76	178.07	243.08	40.85
Total CSPGC	120.00	153.76	178.07	243.08	40.85
Total Chhatisgarh	120.00	153.76	178.07	243.08	40.85
GUJARAT					
GSECL					
Kadana PSS	240.00	339.01	308.92	237.39	11.70
Ukai	300.00	395.66	303.53	210.58	46.02
Total GSECL	540.00	734.67	612.45	447.97	57.72
SSNNL					
Sardar Sarovar CHPH	250.00	876.34	562.86	594.84	49.61
Sardar Sarovar RBPH	1200.00	2332.87	376.61	0.00	0.00
Total SSNNL	1450.00	3209.21	939.47	594.84	49.61
Total Gujarat	1990.00	3943.88	1551.92	1042.81	107.33
MADHYA PRADESH					
NHDC					
Indira Sagar	1000.00	3320.79	881.76	1308.79	181.04
Omkareshwar	520.00	1427.70	443.6	612.04	116.42
Total NHDC - MP	1520.00	4748.49	1325.36	1920.83	297.46
MPPGCL					
Bansagar Tons-I	315.00	1239.02	545.37	578.35	194.15
Bansagar Tons-II	30.00	109.73	56.12	37.09	16.90
Bansagar Tons-III	60.00	53.48	68.80	85.32	3.49
Bargi	90.00	445.47	159.05	356.19	21.23
Gandhi Sagar	115.00	351.00	351.38	249.88	0.66
Madhikheda	60.00	147.21	22.52	88.99	0.02
Rajghat	45.00	62.26	58.21	80.02	0.00
Total MPPGPCL	715.00	2408.17	1261.45	1475.84	236.45
Total M.P.	2235.00	7156.66	2586.81	3396.67	533.91
MAHARASHTRA					
MAHAGENCO					
Bhira Tail Race	80.00	101.58	97.15	94.57	12.80
Ghatghar PSS	250.00	383.87	152.83	192.98	24.70
Koyna DPH	36.00	156.02	135.15	196.18	44.17
Koyna St.I&II	600.00	1290.21	1051.22	1024.61	357.59
Koyna St.III	320.00	614.14	498.91	480.65	244.91
Koyna IV	1000.00	1245.48	945.47	1066.51	754.68
Tillari	60.00	106.16	57.81	110.96	18.14
Vaitarna	60.00	153.52	204.62	154.17	55.09
Total MAHAGENCO	2406.00	4050.98	3143.16	3320.63	1512.08
MPPGPCL					
Pench	160.00	360.14	159.53	131.61	10.85
Total MPPGPCL-Maha.	160.00	360.14	159.53	131.61	10.85
Dodson-Lindblom Hydro Power Pvt. Ltd. (DLHPPL)					
Bhandardhara - II	34.00	47.12	42.55	56.44	3.39
Total DLHP	34.00	47.12	42.55	56.44	3.39

Tata Power Company Ltd.					
Bhira	**150.00**	**951.63**	**341.17**	**351.02**	**45.29**
Bhira PSS	**150.00**		**551.13**	**558.77**	**81.59**
Bhivpuri	**75.00**	**206.59**	**307.20**	**315.90**	**74.04**
Khopoli	**72.00**	**307.24**	**316.38**	**342.49**	**50.63**
Total TPCL	**447.00**	**1465.46**	**1515.88**	**1568.18**	**251.55**
Total Maharashtra	**3047.00**	**5923.70**	**4861.12**	**5076.86**	**1777.87**
ANDHRA PRADESH					
APGENCO					
N.J.Sagar TPD	**50.00**	**7.35**	**42.13**	**49.92**	**1.50**
N.J.Sagar RBC	**90.00**	**4.15**	**59.73**	**101.55**	**0.00**
Srisailam RB	**770.00**	**640.61**	**574.95**	**551.07**	**28.28**
Upper sileru I & II	**240.00**	**340.41**	**482.22**	**476.34**	**113.51**
Lower Sileru	**460.00**	**831.90**	**1109.77**	**1094.06**	**174.06**
Total APGENCO	**1610.00**	**1824.42**	**2268.80**	**2272.94**	**317.35**
Total Andhra Pradesh	**1610.00**	**1824.42**	**2268.80**	**2272.94**	**317.35**
KARNATAKA					
KPCL					
Almatti Dam	**290.00**	**404.05**	**441.58**	**408.42**	**4.64**
Bhadra	**26.00**	**27.06**	**15.69**	**55.21**	**1.68**
Gerusoppa	**240.00**	**276.60**	**280.89**	**525.67**	**85.50**
Ghatprabha	**32.00**	**48.74**	**48.37**	**80.67**	**8.16**
Jog	**139.20**	**288.25**	**191.48**	**194.44**	**41.97**
Kadra	**150.00**	**176.42**	**192.91**	**375.85**	**39.82**
Kalinadi	**855.00**	**1344.82**	**1537.28**	**2777.85**	**554.01**
Supa DPH	**100.00**	**239.20**	**290.98**	**596.16**	**107.68**
Kodasali	**120.00**	**154.16**	**170.94**	**345.56**	**51.09**
Lingnamakki	**55.00**	**105.64**	**125.55**	**252.53**	**35.71**
Munirabad	**28.00**	**31.49**	**51.38**	**89.42**	**0.00**
Sharavathy	**1035.00**	**2708.77**	**2722.35**	**4786.18**	**912.69**
Shivasamudram	**42.00**	**145.14**	**176.81**	**284.19**	**20.13**
Varahi	**460.00**	**740.75**	**762.44**	**1243.79**	**200.45**
Total KPCL	**3572.20**	**6691.09**	**7008.65**	**12015.94**	**2063.53**
APGENCO					
T.B.Dam & Hampi	**72.00**	**81.26**	**133.97**	**171.75**	**2.10**
Total APGENCO-Karnataka	**72.00**	**81.26**	**133.97**	**171.75**	**2.10**
Total Karnataka	**3644.20**	**6772.35**	**7142.62**	**12187.69**	**2065.63**
KERALA					
KSEB Ltd.					
Idamalayar	**75.00**	**171.72**	**256.26**	**345.50**	**59.33**
Idukki	**780.00**	**1380.06**	**1611.06**	**2920.43**	**635.15**
Kakkad	**50.00**	**131.68**	**159.88**	**221.66**	**39.12**
Kuttiadi & Kuttiady Addl.	**225.00**	**478.72**	**601.06**	**693.38**	**87.63**
Lower Periyar	**180.00**	**307.23**	**507.74**	**525.18**	**35.85**
Neriamangalam	**45.00**	**197.30**	**310.60**	**377.85**	**35.71**
Pallivasal	**37.50**	**166.05**	**188.39**	**185.25**	**23.61**
Panniar	**30.00**	**62.33**	**129.47**	**114.59**	**21.25**
Poringalkuthu	**32.00**	**91.10**	**116.74**	**94.60**	**3.93**
Sabarigiri	**300.00**	**798.79**	**968.46**	**1516.40**	**281.45**
Sengulam	**48.00**	**115.66**	**144.91**	**122.98**	**24.96**
Sholayar	**54.00**	**166.85**	**204.69**	**202.39**	**53.36**
Total KSEB LTD.	**1856.50**	**4067.49**	**5199.26**	**7320.21**	**1301.35**
Total Kerala	**1856.50**	**4067.49**	**5199.26**	**7320.21**	**1301.35**
TAMIL NADU					
TANGEDCO					
Aliyar	**60.00**	**61.73**	**90.08**	**48.57**	**5.33**
Bhawani K Barrage-III	**30.00**	**17.47**	**0.00**	**34.06**	**0.00**
Bhawani K Barrage-II	**30.00**	**19.83**	**37.62**	**77.16**	**2.63**
Bhawani K Barrage-I	**30.00**	**20.59**	**16.96**	**70.20**	**1.33**

Kadamparai PSS	400.00	289.39	384.36	434.75	0.79
Kodayar I&II	100.00	169.43	123.98	194.08	11.46
Kundah I-V	555.00	815.61	806.23	1608.99	213.72
Lower Mettur I-IV	120.00	92.27	131.95	220.32	11.83
Mettur Dam	50.00	125.48	52.24	147.96	10.87
Mettur Tunnel	200.00		163.32	440.59	5.91
Moyar	36.00	61.52	94.40	161.99	13.93
Papanasam	32.00	66.54	115.28	120.91	1.55
Parson's Valley	30.00	23.95	27.11	45.94	0.00
Periyar	161.00	93.91	287.10	703.00	0.00
Pykara	59.20	12.74	0.98	22.05	0.04
Pykara Ultimate	150.00	192.55	274.11	507.96	40.21
Sarkarpathy	30.00	63.29	85.46	129.65	26.60
Sholayar I&II	70.00	228.11	157.73	220.86	0.00
Suruliyar	35.00	42.71	70.69	92.55	7.92
Total TANGEDCO	2178.20	2397.12	2919.60	5281.59	354.12
Total Tamilnadu	2178.20	2397.12	2919.60	5281.59	354.12
TELANGANA					
TSGENCO					
Lower Jurala	240.00	176.34	205.90	153.31	0.00
N.J.Sagar PSS	815.60	186.15	184.49	338.82	17.70
N.J.Sagar LBC	60.00	0.00	12.80	53.30	0.00
Pochampad	36.00	75.29	35.69	31.70	0.40
Priyadarshni Jurala	234.00	211.99	217.40	165.00	0.00
Pulichinthala	120.00	13.00	6.60	17.30	0.00
Srisailam LB	900.00	617.22	829.10	985.18	20.73
Total TSGENCO	2405.60	1279.99	1491.98	1744.61	38.83
Total Telangana	2405.60	1279.99	1491.98	1744.61	38.83
JHARKHAND					
DVC					
Panchet	80.00	133.51	141.94	79.79	4.80
Total DVC - Jharkhand	80.00	133.51	141.94	79.79	4.80
JUUNL					
Subernarekha I&II	130.00	30.13	190.38	101.19	0.66
Total JUUNL	130.00	30.13	190.38	101.19	0.66
Total Jharkhand	210.00	163.64	332.32	180.98	5.46
ODISHA					
OHPC					
Balimela	510.00	1001.38	1477.19	1732.21	303.88
Hirakud I&II	347.50	716.97	863.05	548.58	96.05
Rengali	250.00	553.56	762.61	837.89	55.54
Upper Indravati	600.00	1521.64	1745.57	2141.84	403.50
Upper Kolab	320.00	619.34	706.87	923.25	139.11
Total OHPC	2027.50	4412.89	5555.29	6183.77	998.08
APGENCO					
Machkund	114.75	700.31	467.70	593.68	113.54
Total APGENCO-Odisha	114.75	700.31	467.70	593.68	113.54
Total Odisha	2142.25	5113.20	6022.99	6777.45	1111.62
SIKKIM					
NHPC					
Rangit	60.00	347.14	345.91	349.09	52.03
Teesta-V	510.00	2773.46	2818.78	2701.46	580.35
Total NHPC - Sikkim	570.00	3120.60	3164.69	3050.55	632.38
Teesta Urja Ltd. (TUL)					
Teesta III	1200.00	309.42	4429.33	4258.40	1116.67
Total TUL	1200.00	309.42	4429.33	4258.40	1116.67
DANS Energy Pvt. Ltd. (DEPL)					
Jorethang Loop	96.00	405.63	406.01	409.75	37.69
Shiga Energy Pvt. Ltd. (SEPL)					
Tashiding	97.00	0.00	73.07	423.73	40.62

Gati Infrastructure Pvt. Ltd. (GIPL)					
Chuzachen HEP	**110.00**	**494.75**	**444.79**	**417.40**	**69.44**
Sneha Kinetic					
Dikchu	**96.00**		**370.10**	**462.24**	**81.31**
Total Sikkim	**2169.00**	**4330.40**	**8887.99**	**9022.07**	**1978.11**
WEST BENGAL					
NHPC					
Teesta Low Dam-III	**132.00**	**553.87**	**386.87**	**572.06**	**93.79**
Teesta Low Dam-IV	**160.00**	**602.53**	**495.15**	**708.45**	**114.93**
Total NHPC - WB	**292.00**	**1156.40**	**882.02**	**1280.51**	**208.72**
DVC					
Maithon	**63.20**	**122.03**	**114.41**	**101.36**	**1.28**
Total DVC-WB	**63.20**	**122.03**	**114.41**	**101.36**	**1.28**
WBSEDCL					
Jaldhaka I	**36.00**	**205.46**	**145.18**	**197.04**	**34.96**
Purulia PSS	**900.00**	**1106.97**	**1014.37**	**1103.97**	**161.24**
Rammam II	**50.00**	**248.42**	**122.47**	**236.93**	**23.36**
Total WBSEDCL	**986.00**	**1560.85**	**1282.02**	**1537.94**	**219.56**
Total West Bengal	**1341.20**	**2839.28**	**2278.45**	**2919.81**	**429.56**
ARUNACHAL PRADESH					
NEEPCO					
Ranganadi	**405.00**	**1249.01**	**1416.74**	**1051.85**	**172.88**
Pare	**110.00**		**0.00**	**347.16**	**62.90**
Total NEEPCO-Arunachal	**515.00**	**1249.01**	**1416.74**	**1399.01**	**235.78**
Total Arunachal	**515.00**	**1249.01**	**1416.74**	**1399.01**	**235.78**
ASSAM					
NEEPCO					
Kopili	**200.00**	**1088.27**	**1172.83**	**1117.82**	**148.95**
Khandong	**50.00**	**197.10**	**260.77**	**203.82**	**35.46**
Total NEEPCO-Assam	**250.00**	**1285.37**	**1433.60**	**1321.64**	**184.41**
APGCL					
Karbi Langpi	**100.00**	**396.59**	**484.98**	**372.72**	**40.34**
Total APGCL	**100.00**	**396.59**	**484.98**	**372.72**	**40.34**
Total Assam	**350.00**	**1681.96**	**1918.58**	**1694.36**	**224.75**
NAGALAND					
NEEPCO					
Doyang	**75.00**	**258.94**	**274.39**	**231.47**	**5.54**
Total NEEPCO-Nagaland	**75.00**	**258.94**	**274.39**	**231.47**	**5.54**
Total Nagaland	**75.00**	**258.94**	**274.39**	**231.47**	**5.54**
MANIPUR					
NHPC					
Loktak (Manipur)	**105.00**	**741.07**	**837.74**	**602.61**	**70.89**
Total NHPC-Manipur	**105.00**	**741.07**	**837.74**	**602.61**	**70.89**
Total Manipur	**105.00**	**741.07**	**837.74**	**602.61**	**70.89**
MEGHALAYA					
MePGCL					
Kyrdemkulai	**60.00**	**65.29**	**132.18**	**134.84**	**15.16**
Myntdu	**126.00**	**391.65**	**502.47**	**362.95**	**54.40**
New Umtru	**40.00**		**159.52**	**180.03**	**14.68**
Umium St.I	**36.00**	**96.65**	**128.65**	**85.11**	**10.61**
Umium St.IV	**60.00**	**166.01**	**217.44**	**166.60**	**16.34**
Total MePGCL	**322.00**	**719.60**	**1140.26**	**929.53**	**111.19**
Total Meghalaya	**322.00**	**719.60**	**1140.26**	**929.53**	**111.19**
MIZORAM					
Tuirial	**60.00**		**78.37**	**168.44**	**7.89**
Total NEEPCO-Mizoram	**60.00**		**78.37**	**168.44**	**7.89**
Total Mizoram	**60.00**		**78.37**	**168.44**	**7.89**
Total All India	**45399.22**	**122377.56**	**126122.70**	**134893.61**	**25151.80**

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2108 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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State – wise list of Under Construction Hydro Electric Projects in the Country (above 25 MW)			
Sl. No.	Name of Scheme (Executing Agency)	Sector	I.C. (in MW) (No. x MW)
	Andhra Pradesh		
1	Polavaram (APGENCO/ Irrigation Dept., A.P.)	State	12x80=960.00 MW
	Sub-total: Andhra Pradesh		960.00 MW
	Arunachal Pradesh		
2	Kameng (NEEPCO)	Central	4x150=600.00 MW
3	Subansiri Lower (NHPC)	Central	8x250=2000.00 MW
	Sub-total: Arunachal Pradesh		2600.00 MW
	Himachal Pradesh		
4	Parbati St. II (NHPC)	Central	4x200=800.00 MW
5	Uhl-III (BVPCL)	State	3x33.33=100.00 MW
6	Sawra Kuddu (HPPCL)	State	3x37=111.00 MW
7	Shongtong Karcham (HPPCL)	State	3x150=450.00 MW
8	Bajoli Holi (GMR)	Private	3x60=180.00 MW
9	Sorang (HSPCL)	Private	2x50=100.00 MW
10	Tangnu Romai (TRPG)	Private	2x22=44.00 MW
11	Tidong-I (Statkraft IPL)	Private	100.00=100.00 MW
	Sub-total: Himachal Pradesh		1885.00 MW
	Jammu & Kashmir		
12	Pakal Dul (CVPPL)	Central	4x250=1000.00 MW
13	Parnai (JKSPDC)	State	3x12.5=37.50 MW
14	Lower Kalnai (JKSPDC)	State	2x24=48.00 MW
15	Ratle (RHEPPL)	Private	4x205 + 1x30=850.00 MW
	Sub-total: Jammu & Kashmir		1935.50 MW
	Kerala		
16	Pallivasal (KSEB)	State	2x30=60.00 MW
17	Thottiyar (KSEB)	State	1x30+1x10=40.00 MW
	Sub-total: Kerala		100.00 MW
	Madhya Pradesh		
18	Maheshwar (SMHPCL)	Private	10x40=400.00 MW
	Sub-total: Madhya Pradesh		400.00 MW
	Maharashtra		
19	Koyna Left Bank (WRD,MAH)	State	2x40=80.00 MW
	Sub-total: Maharashtra		80.00 MW
	Punjab		
20	Shahpurkandi (PSPCL/ Irrigation Deptt., Pb.)	State	3x33+3x33+1x8=206.00 MW
	Sub-total: Punjab		206.00 MW
	Sikkim		
21	Teesta St. VI NHPC	Central	4x125=500.00 MW
22	Bhasmey (Gati Infrastructure)	Private	3x17=51.00 MW
23	Rangit-IV (JAL Power)	Private	3x40=120.00 MW
24	Rangit-II (Sikkim Hydro)	Private	2x33=66.00 MW
25	Rongnichu (Madhya Bharat)	Private	2x48=96.00 MW
26	Panan (Himagiri)	Private	4x75=300.00 MW
	Sub-total: Sikkim		1133.00 MW

	Tamil Nadu		
27	**Kundah Pumped Storage**	**State**	**1x125=125.00 MW**
	Sub-total: Tamil Nadu		**125.00 MW**
	Uttarakhand		
28	**Lata Tapovan (NTPC)**	**Central**	**3x57=171.00 MW**
29	**Tapovan Vishnugad (NTPC)**	**Central**	**4x130=520.00 MW**
30	**Tehri PSS (THDC)**	**Central**	**4x250=1000.00 MW**
31	**Vishnugad Pipalkoti (THDC)**	**Central**	**4x111=444.00 MW**
32	**Naitwar Mori (SJVNL)**	**Central**	**2x30=60.00 MW**
33	**Vyasi (UJVNL)**	**State**	**2x60=120.00 MW**
34	**Phata Byung (LANCO)**	**Private**	**2x38=76.00 MW**
35	**Singoli Bhatwari (L&T)**	**Private**	**3x33=99.00 MW**
	Sub-total: Uttarakhand		**2490.00 MW**
	West Bengal		
36	**Rammam-III (NTPC)**	**Central**	**3x40=120.00 MW**
	Sub-total: West Bengal		**120.00 MW**
	Total:		**12034.50 MW**

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ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 2108 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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Stalled Under Construction Hydro Power Projects

(As on 31.05.2019)

Sl. No.	Name of Project/ Executing Agency / Capacity (MW)	State / District	Cost over-run (Rs. Cr.)
	Central Sector		
1	Lata Tapovan, NTPC Limited 3x57=171 MW	Uttarakhand/ Chamoli	274.07
2	Subansiri Lower, NHPC Limited 8x250=2000 MW	Arunachal Pradesh / Assam Lower Subansiri/ Dhemaji	13211.01
3	Teesta VI, Lanco Teesta Hydro Power Ltd. 4x125=500 MW (Project taken over by NHPC w.e.f. 08.03.2019)	Sikkim/South Sikkim	The project has been allotted afresh to NHPC Ltd. through bidding process by NCLT.
	State Sector		
4	Koyna Left Bank PSS, WRD, Govt. of Maharashtra 2x40=80 MW	Maharashtra/Satara	1249.92
5	Lower Kalnai, JKSPDC 2x24=48 MW	J&K/Kishtwar	Not updated by the developer
	Private Sector		
6	Maheshwar, Shree Maheshwar Hydel Power Corporation Limited 10x40= 400 MW	M.P./Khargone & Khandwa	6551.73
7	Rangit-IV, Jal Power Corp. Ltd. (JPCL) 3x40= 120 MW	Sikkim/ West Sikkim	966.43
8	Panan, Himagiri Hydro Energy Pvt Ltd. 4x75 = 300 MW	Sikkim/North Sikkim	682.95
9	Ratle, GVK Ratle Hydro Electric Project Pvt. Ltd. 4x205+1x30=850 MW	J&K/Kishtwar	921.26
10	Tangnu Romai, Tangnu Romai Power Generation 2x22=44 MW	H.P./Shimla	386.89
11	Rangit II, Sikkim Hydro Pvt. Ltd. 2x33=66 MW	Sikkim/West Sikkim	Not updated by the developer
12	Bhasmey, Gati Infrastructure 2x25.5=51 MW	Sikkim/East Sikkim	281.80
13	Phata Byung, Lanco 2x38=76 MW	Uttarakhand/ Rudraprayag	612

Total = 13 Nos. (4706 MW)

Note :- The cost figures are as furnished by the developers in the monthly progress reports.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2116
ANSWERED ON 04.07.2019

POWER PURCHASE AGREEMENT

†2116. SHRI DILIP SAIKIA:
SHRI ANIL FIROJIYA:

Will the Minister of POWER be pleased to state:

(a) whether the faulty power purchase agreement signed by the States is one of the reason for poor power distribution in the country;

(b) if so, the details thereof; and

(c) the extent to which Ujwal DISCOM Assurance Yojana (UDAY) of the Government has proved beneficial in dealing with the said situation?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (c) : The Power Purchase Agreement (PPA) is a contract between the seller i.e. Generating Company and the procurer i.e. Distribution Company. The Tariff for power purchase is determined either through competitive bidding as per Section 63 of the Act or by the Regulator as per Section 62 of the Electricity Act. The performance of the distribution sector depends upon various factors such as distribution network adequacy, tie-up of adequate power to meet the demand; efficiencies of the distribution companies; reduction of AT&C losses etc.

Government of India launched Ujwal DISCOM Assurance Yojana (UDAY) on 20-11-2015 for financial and operational turnaround of Power Distribution Companies (DISCOMs). As a result of implementation of UDAY and as per data uploaded by States on UDAY Portal, State Power Distribution Utilities have reported improvement in their performance in number of parameters such as (i) Aggregate Technical & Commercial (AT&C) losses have come down from 20.80% in 2015-16 to 18.76% in 2017-18 (ii) Average Cost of Supply (ACS) – Average Revenue Realised (ARR) Gap has come down from 60 paise per unit in 2015-16 to 17 paise per unit in 2017-18, thus having a positive impact on Power Distribution Sector.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2118
ANSWERED ON 04.07.2019

GAP IN DEMAND AND SUPPLY OF POWER

2118. SHRI SYED IMTIAZ JALEEL:
SHRI ASADUDDIN OWAISI:

Will the Minister of POWER
be pleased to state:

(a) whether India has achieved higher production in all types of power generation sources, *viz.* thermal, hydro, nuclear and renewable;

(b) if so, the details thereof;

(c) whether in spite of higher production there is a huge gap in demand and supply of power in the country;

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

(e) the total demand and supply of power during the last two years and the current year, State/UT-wise;

(f) the total power transmission, distribution, theft and losses which are responsible for gap in demand and supply; and

(g) the steps taken or being taken by the Government in this regard?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : There has been increase in power generation from conventional fuel sources (except Nuclear) of 25 MW and above plants and from renewable sources in the country during the last three years i.e. 2016-17, 2017-18 and 2018-19. The details of source- wise generation from last three years are given at Annexure-I.

.....2.

(c) to (e) : As on 31.05.2019, the installed generation capacity was about 357 Giga Watt (GW) which is sufficient to meet the peak power demand of the country. The maximum peak demand occurred during the current year 2019-20 (upto May, 2019) was around 183 GW which was successfully met. During April-May, 2019 the average power shortage in the country was only around 0.4% and the peak power shortage was only around 0.5%. The state-wise details of power supply position in the country during the last two years and the current year 2019-20 (up to May, 2019) are at Annexure-II. This gap is generally on account of factors like constraints in distribution network, financial constraints to purchase power by Distribution Company etc.

(f) & (g) : The transmission losses in Inter-State Transmission System (ISTS) are in the range of 2.5% to 3% which is for technical reasons. As per the report information submitted by states participating under Ujwal DISCOM Assurance Yojana (UDAY) the Aggregate Technical and Commercial (AT&C) losses, which include theft and pilferage for the year 2017-18 stood at 18.7%. Inspite of the above mentioned losses which includes technical losses inherent to the electrical system, there is practically no gap between supply and demand.

To reduce the losses at Distribution level, the Government has launched several schemes such as Integrated Power Development Scheme (IPDS) and Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) for strengthening the Distribution infrastructure in urban and rural areas respectively. This includes provision of consumer and system metering, star rated transformers, underground cabling and aerial bunched cables. A total of 32 States/ Union Territories and their Power distribution utilities have also signed Memorandum of Understanding (MOUs) under UDAY the main outcome parameters of which is to reduce AT&C loss levels to 15%.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2118 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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The details of source-wise generation for last three years and current year (upto May,19)

Source	Monitored Capacity as on 31.05.2019 (in MW)	2018-19	2017-18	2016-17
THERMAL	226212.85	1072223.88	1037059.10	994230.17
NUCLEAR	6780.00	37812.59	38346.12	37915.87
HYDRO	45399.22	134893.61	126122.70	122377.56
Bhutan Import	-	4406.62	4778.33	5617.34
Total (conventional)	278392.07	1249336.70	1206306.25	1160140.94
RENEWABLE SOURCES		126759.09	101839.48	81548.21
Grand Total (Conventional +Renewable)		1376095.79	1308145.73	1241689.15

* PROVISIONAL BASED ON ACTUAL-CUM-ASSESMENT

Note: Gross Generation from conventional sources (Thermal, Hydro and Nuclear) stations of 25 MW and above only.

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) TO (e) OF UNSTARRED QUESTION NO. 2118 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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The details of state/UT-wise demand and supply in terms of Energy during last 2 years and current year upto May, 2019

Power Supply Position (Energy)												
State / System / Region	April, 2019 - May,2019 *				April, 2018 - March,2019				April, 2017 - March,2018			
	Energy Requirement	Energy Supplied	Energy not Supplied		Energy Require-ment	Energy Supplied	Energy not Supplied		Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Chandigarh	271	271	0	0.0	1,571	1,571	0	0.0	1,610	1,601	9	0.5
Delhi	6,065	6,064	1	0.0	32,299	32,282	17	0.1	31,826	31,806	19	0.1
Haryana	8,679	8,679	0	0.0	53,665	53,665	0	0.0	50,775	50,775	0	0.0
Himachal Pradesh	1,654	1,644	10	0.6	9,850	9,618	232	2.4	9,399	9,346	53	0.6
Jammu & Kashmir	3,364	2,720	644	19.1	18,988	15,616	3,372	17.8	18,808	15,050	3,759	20.0
Punjab	8,475	8,475	0	0.0	55,328	55,315	13	0.0	54,812	54,812	0	0.0
Rajasthan	13,313	13,300	13	0.1	79,815	79,626	189	0.2	71,194	70,603	591	0.8
Uttar Pradesh	22,897	22,817	79	0.3	117,133	116,149	984	0.8	120,052	118,303	1,749	1.5
Uttarakhand	2,449	2,449	0	0.0	13,845	13,753	92	0.7	13,457	13,426	31	0.2
Northern Region	67,166	66,419	747	1.1	382,493	377,595	4,898	1.3	371,934	365,723	6,211	1.7
Chhattisgarh	5,765	5,764	1	0.0	26,471	26,417	54	0.2	25,916	25,832	84	0.3
Gujarat	21,748	21,748	0	0.0	116,372	116,356	15	0.0	109,984	109,973	12	0.0
Madhya Pradesh	12,735	12,735	0	0.0	76,056	76,054	2	0.0	69,925	69,925	0	0.0
Maharashtra	29,295	29,294	0	0.0	158,295	158,157	137	0.1	149,761	149,531	230	0.2
Daman & Diu	443	443	0	0.0	2,558	2,558	0	0.0	2,534	2,534	0	0.0
Dadar Nagar Haveli	1,106	1,106	0	0.0	6,303	6,302	0	0.0	6,168	6,168	0	0.0
Goa	801	801	0	0.0	4,295	4,292	3	0.1	4,117	4,117	0	0.0
Western Region	71,893	71,892	1	0.0	390,349	390,136	212	0.1	368,405	368,080	326	0.1
Andhra Pradesh	11,709	11,702	7	0.1	63,861	63,804	58	0.1	58,384	58,288	96	0.2
Telangana	10,772	10,771	1	0.0	66,489	66,427	62	0.1	60,319	60,235	83	0.1
Karnataka	13,569	13,568	1	0.0	71,764	71,695	69	0.1	67,869	67,701	168	0.2
Kerala	4,888	4,878	10	0.2	25,016	24,898	118	0.5	25,002	24,917	85	0.3
Tamil Nadu	20,031	20,030	1	0.0	109,482	109,380	102	0.1	106,006	105,839	166	0.2
Puducherry	517	516	1	0.1	2,766	2,756	10	0.3	2,668	2,661	7	0.3
Lakshadweep #	8	8	0	0.0	46	46	0	0.0	47	47	0	0.0
Southern Region	61,486	61,465	21	0.0	339,377	338,960	417	0.1	320,248	319,642	606	0.2
Bihar	5,662	5,659	3	0.1	30,061	29,825	236	0.8	27,019	26,603	417	1.5
DVC	3,757	3,755	2	0.1	22,745	22,372	372	1.6	21,549	21,373	176	0.8
Jharkhand	1,505	1,495	10	0.7	8,737	8,490	247	2.8	7,907	7,753	154	1.9
Odisha	5,261	5,261	0	0.0	32,145	32,115	30	0.1	28,802	28,706	96	0.3
West Bengal	9,920	9,897	23	0.2	51,471	51,287	184	0.4	50,760	50,569	191	0.4
Sikkim	78	78	0	0.0	527	527	0	0.1	485	484	0	0.1
Andaman- Nicobar#	58	54	4	6.7	346	323	23	6.7	328	299	29	8.9
Eastern Region	26,182	26,144	38	0.1	145,686	144,616	1,070	0.7	136,522	135,489	1,034	0.8
Arunachal Pradesh	127	126	1	0.6	869	859	9	1.1	799	788	10	1.3
Assam	1,573	1,434	139	8.8	9,566	9,238	328	3.4	9,094	8,779	315	3.5
Manipur	135	134	2	1.2	905	895	10	1.2	874	827	46	5.3
Meghalaya	336	318	18	5.5	1,957	1,956	2	0.1	1,557	1,553	3	0.2
Mizoram	100	99	1	0.8	643	635	8	1.2	497	488	9	1.7
Nagaland	124	123	1	0.8	888	795	93	10.5	794	774	20	2.5
Tripura	292	288	4	1.3	1,863	1,841	22	1.2	2,602	2,553	49	1.9
North-Eastern Region	2,686	2,521	165	6.2	16,691	16,219	472	2.8	16,216	15,763	453	2.8
All India	229,413	228,441	972	0.4	1,274,595	1,267,526	7,070	0.6	1,213,326	1,204,697	8,629	0.7
* Provisional												
# Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and supply.												
Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments.												

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2135
ANSWERED ON 04.07.2019

CONSTRUCTION OF HYDRO POWER PROJECTS

2135. SHRI TAPIR GAO:

Will the Minister of POWER be pleased to state:

(a) the details of MoUs signed between Union Government and the State Government of Arunachal Pradesh for construction of hydro power projects;

(b) whether the projects got the required environment and other clearances by the Union Government and if so, the details thereof;

(c) whether the projects have not been taken off and if so, the details thereof and the reasons therefor;

(d) whether the Union Government has any alternate plan to harness abundant availability of hydro power in the State and if so, the details thereof; and

(e) the details of the river basin studies which have been carried out in Arunachal Pradesh by the Union Government and the major outcomes thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (c) : No Memorandum of Understandings (MoUs) were signed between Union Government and the State Government of Arunachal Pradesh (GoAP) for construction of Hydropower Projects. However, details of the MoUs signed between Govt. of Andhra Pradesh and Hydro CPSEs under the administrative control of Ministry of Power, along with the status of Environment Clearance (EC) / Forest clearance (FC) received for each of the projects, is given below:-

S.No.	Name of HEP / Developer	IC (MW)	Date of signing of MoU	EC received	FC received	
					Stage-I	Stage-II
1	Ranganadi * / NEEPCO	405	1978 (entrusted by NEC)	26.07.1985	05.07.1990	
2	Kameng ** / NEEPCO	600	31.03.1999	29.03.2001	25.05.1992	03.08.2000
3	Pare HEP*** / NEEPCO	110	21.09.2006	13.09.2006	11.01.2008	24.06.2009
4	Subansiri **** Lower / NHPC	2000	27.01.2010	16.07.2003	10.06.2003	12.10.2004
5	Dibang Multipurpose Project / NHPC	2880	24.06.2007	19.05.2015	15.04.2015	Not received

.....2.

6	Tawang Stage-I / NHPC	600	24.06.2007	10.06.2011	Not received	Not received
7	Tawang Stage-II / NHPC	800	24.06.2007	10.06.2011	08.01.2014	Not received
8	Siang Upper St-II / NEEPCO	3750	28.05.2013	TOR clearance: 22.10.2014		
9	Kurung / NEEPCO	330	27.01.2015	TOR clearance: 22.04.2016		
10	Doimukh / SJVNL	52	12.08.2014	GoAP withdrew Doimukh HEP vide its letter dated 13.09.2017.		

*** Ranganadi HEP was commissioned by NEEPCO in 2002**

**** Kameng HEP is in advanced stage of commissioning**

***** Pare HEP was commissioned by NEEPCO in 2018**

****** construction works of Subansiri Lower HE Project commenced in 2005 but stalled since Dec'11 due to local agitation & stay granted by NGT.**

(d) : Government of Arunachal Pradesh is vigorously pursuing private developers and assisting them for completion of the project. Simultaneously, it is considering termination of the projects where the developers have not started the construction. 21 such projects have already been terminated and is proposed to be reallotted to new developers.

Government of India has also approved a number of measures for promoting hydro power sector in the country vide Ministry of Power's OM.No. 15/2/2016 H.I (Pt) dated 08.03.2019, which are as under:

i) Declaring Large Hydro Power (LHPs) (> 25 MW projects) as Renewable Energy source.

ii) Hydro Purchase Obligation (HPO) as a separate entity within Non-solar Renewable Purchase Obligation (RPO).

iii) Tariff rationalization measures for bringing down hydro power tariff.

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

v) Budgetary Support to Cost of Enabling Infrastructure, i.e. roads/bridges.

a. Rs. 1.5 crore per MW for projects upto 200 MW.
b. Rs. 1.0 crore per MW for projects above 200 MW.

.....3.

(e) : Basin-wise Cumulative Environment Impact Studies, have already been carried out by MoEF&CC through consultants in respect of the Siang, Subansiri, Bichom, Lohit, Dibang, Kameng (excluding Bichom) & Tawang river basins in Arunachal Pradesh. The major outcomes thereof are as below:

Basin Name	Major Outcome
Siang basin	• **15 HEPs dropped** • **FRL reduced in 3 HEPs** • **Capacity reduced in 1 HEP** • **E-flow recommended for 28 HEPs**
Subansiri basin	• **1 HEP dropped** • **2 HEPs merged into one** • **E-flow recommended for 1 HEP**
Bichom basin	• **4 HEPs abandoned** • **Level/ location modification recommended for 1 HEP** • **E-flow recommended for all project**
Lohit Basin	• **1 HEP dropped**
Kameng Basin	• **7 HEP dropped**
Dibang Basin	• **1 HEP dropped** • **E-flow recommended on 2 HEPs**
Tawang Basin	• **2 HEPs dropped** • **Four seasons study recommended for 1 HEP**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2146
ANSWERED ON 04.07.2019

UPGRADATION AND RENEWABLE OF ELECTRIC TRANSFORMERS

†2146. SHRI MUKESH RAJPUT:

Will the Minister of POWER be pleased to state:

(a) whether the Government proposes any plan for up-gradation and renewable of dilapidated electric transformers located in the Municipal and Nagar Panchayat areas;

(b) if so, the details thereof;

(c) whether the Government also proposes to conduct a survey of such towns for improving the power supply system therein; and

(d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : As per Electricity Act 2003, the distribution of electricity is a licensed activity and it is the responsibility of respective Distribution Utilities to upgrade & replace the dilapidated transformers to provide quality and reliable power supply in their area of operation. Government of India is helping the states by launching various schemes from time to time to enable States to improve their Distribution Infrastructure including augmentation of distribution transformers. Government of India launched the Integrated Power Development Scheme (IPDS) in Dec 2014 for improvement of Distribution Infrastructure in urban areas including Municipal & Nagar panchayat areas. Under IPDS central funding is being provided to States for strengthening of sub-transmission and distribution networks in the urban areas. The scope of works under IPDS includes:

Under Integrated Power Development Scheme (IPDS), transformers have been sanctioned for 546 circles spread across entire India. The details are as mentioned below:

S.No.	Item	Capacity	Numbers
1	Sub- stations	10987 MVA	1043
2	Additional Power Transformer	2947 MVA	440
3	Capacity enhancement (PT)	4433 MVA	1133
4	New Distribution Transformer	8274 MVA	60309
5	Capacity enhancement (DT)	3301 MVA	28471
	Total	29942 MVA	91396

(c) & (d) : Under IPDS, a system of third party concurrent evaluation has been envisaged for evaluation of the works done under IPDS, including that of Distribution Transformers.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2169
ANSWERED ON 04.07.2019

ADVERSE HEALTH EFFECTS OF LED BULBS

2169. SHRI ANTO ANTONY:
SHRI BALASHOWRY VALLABHANENI:

Will the Minister of POWER
be pleased to state:

(a) whether the Government is encouraging the use of LED bulbs/lights and if so, the details thereof and the reasons therefor;

(b) whether the Government has noticed that recent study in France reveal that the use of LED lights is photo-toxic and can cause damage to retina and if so, the details thereof;

(c) whether it is scientifically proven and if so, the details thereof;

(d) whether the Government has carried out any study to find out the impact of exposure of LED lights on eyes and if so, the details thereof; and

(e) if not, whether the Government proposes to conduct the same in near future and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) : Hon'ble Prime Minister launched the National LED Programme on 5th January, 2015 which has two components (i) Unnat Jyoti by Affordable LEDs for All (UJALA) to provide LED bulbs to domestic consumers, and (ii) Street Lighting National Programme (SLNP) to replace conventional street lights with energy efficient LED street lights. Energy Efficiency Services Limited (EESL), a JV of PSUs under the Ministry of Power is the implementing agency of the programme. The objectives of the National LED Programme is to (i) to reduce energy consumption in lighting sector which helps DISCOMs to manage peak demand, and (ii) to promote the use of the most efficient lighting technology at affordable rates to domestic consumers leading to reduced energy bill.

As on 28th June, 2019, EESL has distributed over 35.16 crore LED bulbs and installed over 92 lakh LED street lights across India.

.....2.

(b) to (e) : As per the information received from the Indian Council of Medical Research (ICMR), a white paper of the French Agency for Food, Environmental and Occupational Health and Safety regarding LEDs has concluded that acute exposure to blue rich lights causes retina photo toxicity and exposure to blue rich lights in evening and night causes disruption of circadian rhythms.

Further, Central Power Research Institute (CPRI), an autonomous organization under Ministry of Power has informed that looking straight into bright, point-like sources of light such as LED bulbs, clear filament and including the sun can cause damage to eyes. Further, lamps not conforming to relevant standards may pose hazards to skin and eye.

The Government has not carried out any separate study to find out the impact of exposure to LED lights. However, the Bureau of Indian Standards (BIS) has mandated safety and performance standards for LED bulbs and LED tube lights. Further, recognizing the photo-biological impact of light sources, BIS has also mandated standards on photo-biological safety of Lamps and Lamp systems. The Indian standards for LED Lamps and LED Tube light [IS 16102 (Part 1) and IS 16614 (Part 1)] includes mandatory marking requirement for photo-biological hazard-related risk group labeling of lamps as given in IS 16108 (Part 2). At present, there is no specific proposal to conduct any separate study to find out the impact of exposure of LED lights.

LED bulbs procured by EESL under UJALA scheme conform to Quality Control Measures i.e. IS 16102 (Part 1) and (Part 2): 2012 specified by BIS. These standards have been made mandatory in May, 2015 by BIS and are applicable to domestic manufacturing as well as imports.

LED bulbs are placed under mandatory regime of Star labeling program of the Bureau of Energy Efficiency (BEE) w.e.f. 1st January, 2018. As part of this programme, it is mandatory for the manufacturers of LED bulbs to submit photobiological test report for respective LED bulb model in accordance with the National Standard IS 16108- Photobiological Safety of Lamps and Lamp Systems.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2181
ANSWERED ON 04.07.2019

PRODUCTION OF ELECTRICITY

2181. SHRI RAJESHBHAI CHUDASAMA:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has decided to enhance the production of electricity in the country;

(b) if so, the details thereof along with the targets and time frame fixed for the said purpose;

(c) whether the said targets have been achieved; and

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

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (d) : As per the National Electricity Plan notified in 2018, a power generation capacity of 1,76,140 MW consisting of 47,855 MW from thermal, 6823 MW from Hydro, 3300 MW from Nuclear and 1,17,756 MW from renewable energy sources is likely to be added during the period 2017-22.

A power generation capacity of 35,824 MW consisting of 14,492 MW from thermal, 935 MW from hydro and 20,397 MW from renewable energy sources has been added during the period 2017-19.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2189
ANSWERED ON 04.07.2019

ENERGY CRISIS

2189. SHRI B.B. PATIL:

Will the Minister of POWER
be pleased to state:

(a) whether there is any energy-crisis in the country and if so, the details thereof;

(b) whether power producers sit on thousands of megawatts of underutilized capacities and are facing insolvency proceedings and the consumers are facing power cuts as well as load shedding and if so, the details thereof; and

(c) the details of the major problems faced by the power producers and the remedial measures/steps taken/being taken to solve the problems?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : As reported by States to Central Electricity Authority (CEA), during April-May, 2019 the peak and energy shortages was only 0.5% and 0.4% respectively in the country. Thus, there is no energy crisis in the country. As on 31.05.2019, the installed generation capacity is about 357 Giga Watt (GW) which is sufficient to meet the power demand of the country. The maximum peak demand during the current year was around 183 GW which was successfully met.

(c) : Government of India constituted a High Level Empowered Committee (HLEC) under the Chairmanship of Cabinet Secretary to address the issues of stressed thermal power projects. The report of the HLEC was submitted on 12.11.18 and was also placed in the public domain on the website of Ministry of Power. HLEC report mentions the major reasons for stress in the Power Sector, which are as follows:

(i) Issues related to Coal supply,
(ii) Inability of the Promoter to infuse equity and service debt,
(iii) Slow implementation of project by the developers,
(iv) Issues related to Banks/ Financial Institutions (FIs)
(v) Aggressive tariffs quoted by bidders in competitive bidding process,
(vi) Regulatory and contractual disputes,
(vii) Legal issues related to auctioned coal mines,
(viii) Other operational issues such as delay in land acquisitions, inadequate transmission system etc.

.....2.

Based on High Level Empowered Committee (HLEC) recommendations, a Group of Ministers (GoM) has made recommendations regarding stressed power projects. The major recommendations of the GoM as approved by the Government are:

I. **Grant of linkage coal for short-term Power Purchase Agreement (PPA).**

II. **Allowed existing coal linkage to be used in case of termination of PPAs due to payment default by DISCOMs.**

III. **Procurement of bulk power by a nodal agency against pre-declared linkages.**

IV. **Central/State Gencos may act as an aggregator of power.**

V. **Increase in quantity of coal for special forward e-auction for power sector.**

VI. **Coal linkage auctions to be held at regular intervals.**

VII. **Non-lapsing of short supplies of coal.**

VIII. **Annual Contracted Quantity (ACQ) to be determined based on efficiency.**

IX. **Payment of Late Payment Surcharge (LPS) has been made mandatory.**

X. **Non-cancellation of Power Purchase Agreement (PPA)/Fuel Supply Agreement (FSA)/ Long Term Open Access (LTOA) post National Company Law Tribunal (NCLT) scenario.**

XI. **Non-cancellation of PPA for non-compliance of Commercial Operation Date (COD).**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2191
ANSWERED ON 04.07.2019

STRESSED POWER PLANTS

2191. SHRI KANUMURU RAGHU RAMA KRISHANA RAJU:

Will the Minister of POWER
be pleased to state:

(a) whether the Government proposes to protect and rescue the stressed power plants in the country and if so, the details thereof;

(b) whether the Government has issued any instructions to regulators asking them to abstain from lowering tariffs of stressed plants; and

(c) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) : The steps taken by Government for resolution of stressed assets in power sector are listed in the Annexure.

(b) : No, Sir.

(c) : Question does not arise.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2191 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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Government of India constituted a High Level Empowered Committee (HLEC) under the Chairmanship of Cabinet Secretary to address the issues of stressed thermal power projects. The report of the HLEC was submitted on 12.11.18 and was also placed in the public domain on the website of Ministry of Power.

The Government thereafter constituted a Group of Ministers (GoM) to examine the specific recommendations of HLEC. The Group of Ministers (GoM) had made recommendations regarding stressed power projects. The major recommendations of the GoM as approved by the Government are:

I. **Grant of linkage coal for short-term Power Purchase Agreement (PPA).**

II. **Allowed existing coal linkage to be used in case of termination of PPAs due to payment default by DISCOMs.**

III. **Procurement of bulk power by a nodal agency against pre-declared linkages.**

IV. **Central/State Gencos may act as an aggregator of power.**

V. **Increase in quantity of coal for special forward e-auction for power sector.**

VI. **Coal linkage auctions to be held at regular intervals.**

VII. **Non-lapsing of short supplies of coal.**

VIII. **Annual Contracted Quantity (ACQ) to be determined based on efficiency.**

IX. **Payment of Late Payment Surcharge (LPS) has been made mandatory.**

X. **Non-cancellation of Power Purchase Agreement (PPA)/Fuel Supply Agreement (FSA)/ Long Term Open Access (LTOA) post National Company Law Tribunal (NCLT) scenario.**

XI. **Non-cancellation of PPA for non-compliance of Commercial Operation Date (COD).**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2194
ANSWERED ON 04.07.2019

ENERGY EFFICIENT ELECTRICAL EQUIPMENTS

2194. SHRI PARTHIBAN S.R.:

Will the Minister of POWER
be pleased to state:

(a) the details of the demand and supply of power in the country;

(b) the steps taken by the Government to meet the gap between demand and supply of power;

(c) whether the Government proposes to promote LED bulbs in order to reduce the demand of power;

(d) if so, the details thereof; and

(e) the steps taken by the Government to promote energy efficient electrical equipments?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) : As reported by States to Central Electricity Authority (CEA), the state-wise details of power supply position in the country during the current year 2019-20 (up to May, 2019) are at Annexure.

(b) : Government of India supplement the efforts of the States through its schemes including Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS), Pradhan Mantri Sahaj Bijli Har Ghar Yojana- Saubhagya, Ujjwal Discom Assurance Yojana (UDAY). These schemes help them to strengthen distribution network/grid connectivity to achieve 24x7 Power for All and would facilitate uninterrupted power supply to consumers.

.....2.

Government of India also assists the States/UTs by allocating power from Central Generating Stations (CGSs). State can also purchase power through various market mechanisms including power exchanges to meet any gap in demand and supply.

(c) & (d): Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power, is distributing Light Emitting Diode (LED) bulbs under Unnat Jyoti by Affordable LEDs for All (UJALA) to domestic consumers across the country. As on date, EESL has distributed over 35.30 crore LED bulbs resulting in estimated energy savings of 45.85 billion kWh per year with avoided peak demand of 9,180 MW and estimated GHG emission reduction of 37.13 million tonnes CO_2 per year.

In addition to distribution of LED bulbs under UJALA, LED industry has also sold 111.66 crore LED bulbs, till March, 2019.

(e) : Bureau of Energy Efficiency (BEE) launched Standards & Labelling (S&L) program with an objective of providing consumers an informed choice about the energy saving and thereby the cost saving potential of the marketed household appliances/equipment. These appliances are rated from 1 star to 5 star where 5 star is the most efficient. This initiative is expected to impact the energy savings in the medium and long run, while at the same time it will position the domestic industry to compete in such markets where norms for energy efficiency are mandatory.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 2194 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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Power Supply Position for 2019-20 (Provisional)

State / System / Region	Energy				Peak			
	April, 2019 - May,2019 *				April, 2019 - May,2019 *			
	Energy Requirement	Energy Supplied	Energy not Supplied		Peak Demand	Peak Met	Demand not Met	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	271	271	0	0	356	356	0	0
Delhi	6,065	6,064	1	0.0	6,461	6,461	0	0.0
Haryana	8,679	8,679	0	0.0	8,874	8,874	0	0.0
Himachal Pradesh	1,654	1,644	10	0.6	1,480	1,480	0	0.0
Jammu & Kashmir	3,364	2,720	644	19.1	2,885	2,426	459	15.9
Punjab	8,475	8,475	0	0.0	8,802	8,802	0	0.0
Rajasthan	13,313	13,300	13	0.1	11,791	11,791	0	0.0
Uttar Pradesh	22,897	22,817	79	0.3	22,487	22,057	430	1.9
Uttarakhand	2,449	2,449	0	0.0	2,155	2,155	0	0.0
Northern Region	67,166	66,419	747	1.1	60,987	60,078	909	1.5
Chhattisgarh	5,765	5,764	1	0.0	4,596	4,574	22	0.5
Gujarat	21,748	21,748	0	0.0	18,094	18,094	0	0.0
Madhya Pradesh	12,735	12,735	0	0.0	10,145	10,131	14	0.1
Maharashtra	29,295	29,294	0	0.0	23,621	23,613	8	0.0
Daman & Diu	443	443	0	0.0	344	344	0	0.1
Dadar Nagar Haveli	1,106	1,106	0	0.0	818	818	0	0.0
Goa	801	801	0	0.0	594	594	0	0.0
Western Region	71,893	71,892	1	0.0	57,113	57,093	20	0.0
Andhra Pradesh	11,709	11,702	7	0.1	9,854	9,854	0	0.0
Telangana	10,772	10,771	1	0.0	10,269	10,202	67	0.7
Karnataka	13,569	13,568	1	0.0	12,700	12,688	12	0.1
Kerala	4,888	4,878	10	0.2	4,316	4,300	16	0.4
Tamil Nadu	20,031	20,030	1	0.0	15,680	15,659	21	0.1
Puducherry	517	516	1	0.1	453	444	9	2.0
Lakshadweep	8	8	0	0	8	8	0	0
Southern Region	61,486	61,465	21	0.0	49,218	49,103	115	0.2
Bihar	5,662	5,659	3	0.1	5,481	5,481	0	0.0
DVC	3,757	3,755	2	0.1	3,048	3,048	0	0.0
Jharkhand	1,505	1,495	10	0.7	1,330	1,330	0	0.0
Odisha	5,261	5,261	0	0.0	5,142	5,140	3	0.1
West Bengal	9,920	9,897	23	0.2	9,335	9,335	0	0.0
Sikkim	78	78	0	0.0	100	100	0	0.0
Andaman- Nicobar	58	54	4	7	58	54	4	7
Eastern Region	26,182	26,144	38	0.1	23,558	23,558	0	0.0
Arunachal Pradesh	127	126	1	0.6	140	138	2	1.2
Assam	1,573	1,434	139	8.8	1,910	1,673	237	12.4
Manipur	135	134	2	1.2	197	188	9	4.8
Meghalaya	336	318	18	5.5	337	337	0	0.0
Mizoram	100	99	1	0.8	116	113	3	2.8
Nagaland	124	123	1	0.8	157	131	27	16.9
Tripura ##	292	288	4	1.3	297	295	1	0.5
North-Eastern Region	2,686	2,521	165	6.2	2,848	2,780	68	2.4
All India	229,413	228,441	972	0.4	183,513	182,533	981	0.5

*** Provisional**

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

Excludes the supply to Bangladesh.

Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2210
ANSWERED ON 04.07.2019

ELECTRIFICATION OF VILLAGES IN BIHAR

†2210. SHRI GIRIDHARI YADAV:

Will the Minister of POWER
be pleased to state:

(a) whether several villages in Banka and Jamui districts of Bihar have not been electrified so far;

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

(c) the number of villages in Banka and Jamui districts still to be electrified at present?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (c) : As reported by the State, all the inhabited census villages in Bihar, including Banka and Jamui districts, stand electrified on 28.04.2018.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2213
ANSWERED ON 04.07.2019

INCIDENTS OF POWER THEFT

†2213. SHRI RAMCHARAN BOHRA:

Will the Minister of POWER
be pleased to state:

(a) whether the development of power sector is adversely affected due to incidents of power theft;

(b) if so, the details thereof along with the action taken thereon;

(c) whether the Government proposes to formulate any plan in consultation with the States to prevent incidents of power theft in the country; and

(d) if so, the details thereof along with the punitive provisions proposed against guilty persons?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : Power theft affects the financial positions of Power Distribution Utilities as they increase in the Aggregate Technical & Commercial (AT&C) losses.

The responsibility of reduction of AT&C losses in the Distribution network rests with the State Power Departments/Utilities. Government of India have launched various schemes such as Integrated Power Development Scheme (IPDS), Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Ujwal Discom Assurance Yojana (UDAY) to enable States to improve their Distribution infrastructure systems and management of Discoms so that energy losses including those due to theft are reduced. Under IPDS/DDUGJY schemes, projects envisages metering of distribution transformers/feeders/ consumers, underground (UG) and aerial bunched (AB) cables including IT enablement of distribution infrastructures for reduction of AT&C losses.

.....2.

(c) : Memorandum of Understanding (MoUs) have been signed under Ujwal DISCOM Assurance Yojana (UDAY) with State Governments/UTs, Power Distribution companies (DISCOMs) and the Ministry of Power, which inter-alia envisage Power Distribution companies (DISCOMs) to undertake various steps to reduce Aggregate Technical & Commercial (AT&C) losses including those due to electricity theft to 15%.

(d) : The Electricity Act, 2003 provides for detection of theft, speedy trial of theft related offences and also for recovery of the charges of electricity stolen. Section 135 and Section 151 of the Electricity Act, 2003 were amended through the Electricity (Amendment) Act, 2007 making the offences punishable under Section 135-140 and Section 150 as cognizable and non-bailable. The definition of theft has been expanded under Section 135 to cover use of tampered meters and use of electricity for unauthorized purpose by insertion of provisions (d) and (e) under Section 135(1) of the Electricity Act, 2003. The Electricity Act also provides for setting up Special Courts by State Governments under Section 153 for speedy trial of offences of theft of electricity.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2217
ANSWERED ON 04.07.2019

COLLAPSE OF ELECTRICITY TRANSMISSION TOWERS

2217. SHRI BIDYUT BARAN MAHATO:
SHRI GAJANAN KIRTIKAR:
SHRI SUDHEER GUPTA:

Will the Minister of POWER be pleased to state:

(a) whether as per Central Electricity Authority (CEA) latest report, as many as 52 electricity transmission towers have collapsed between October, 2016 to March 2018 due to rampant irregularities on the part of transmission companies;

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

(c) whether most of the dysfunctional towers failed within 5 years of commissioning;

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

(e) whether the power companies had been clamping and clipping additional components of towers instead of replacing the damaged parts despite recommendations of Standing Committee of CEA; and

(f) if so, the details thereof and the action taken by the Government against such erring power companies?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : Various utilities during the period of October, 2016, to March, 2018 have reported the collapse/failure of total 52 no. towers of 220 kV and above voltage level due to reasons like wind, flood, vehicular impact, etc. Details of these failures are given in Annexure-I.

(c) & (d) : More than 75% of total transmission tower failures reported during October, 2016, to March, 2018, failed within 5 years of commissioning of transmission line. The details of the failure are given in Annexure-II.

(e) & (f) : The damaged/failed towers are replaced by the utilities with new towers in accordance with Standing Committee recommendations.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2217 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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Details of transmission lines failures reported to CEA between October, 2016 to March, 2018

Sl. No	Name of Transmission line	Name of utility	Year of Commission-ing	No. of towers failed	State /UT
1.	400 kV D/C Dadri - Panipat transmission line	PGCIL	1984	5	Uttar Pradesh
2	400 kV D/C Silchar-PurbaKanchan Bari transmission line	PGCIL	2015	8	Assam
3.	765 kV D/C Wardha –Nizamabad transmission line	PGCIL	2017	1	Maharashtra
4	400 kV D/C Koderma-Bokaro transmission line	PGCIL	2014	3	Jharkhand
5.	400 kV D/C Farakka -Kahalgaon I & II transmission line	PGCIL	1992	4	Jharkhand
6.	765 kV S/C Gaya- Varanasi-I transmission line	PGCIL	2012	5	Bihar
7.	765 kV S/C Bina- Gwalior transmission line	PGCIL	2014	2	Madhya Pradesh
8.	765 kV S/C Bina-Indore transmission line	PGCIL	2012	4	Madhya Pradesh
9.	765 kV S/C Agra- Jatikara transmission line	PGCIL	2013	3	Haryana
10.	400 kV S/C Singrauli-Lucknow transmission line	PGCIL	1986	2	Uttar Pradesh
11.	765 kV S/C Bhiwani-Jhatikra transmission line	PGCIL	2012	1	Delhi/Haryana
12.	400 kV D/C Tikrikalan-Bawana transmission line	Delhi Transco Ltd. (DTL)	2000	1	Delhi
13.	765 kV S/C Jabalpur-Bina transmission line	Sterlite Power	2015	5	Madhya Pradesh
14.	±500 HVDC Mundra - Mohindergarh transmission line	Adani Transmission Ltd. (ATL)	2012	1	Gujarat
15	(i)400kV D/C Barh -Motihari Transmission Line (ii) 400kV D/C Motihari-Gorakhpur Transmission line	Darbhanga-Motihari Transmission Company Ltd. (DMTCL) (Essel Infra Ltd.)	2017	1 1	Bihar
16	765KV D/C Narendra (New)–Madhugiri (Tumkur) Transmission Line (Hexa Zebra)	L&T	2016	5	Karnataka

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 2217 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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Details of transmission lines failures reported to CEA between October, 2016 to March, 2018 which failed within 5 years of line commissioning.

Sl. No.	Name of Transmission line	Name of utility	Year of Commission-ing	No. of towers failed	State /UT	Reason of Failure
1	400 kV D/C Silchar-PurbaKanchan Bari transmission line	PGCIL	2015	8	Assam	Erection deficiencies such as missing cover plates, missing bolts in butt joints of leg member, unplugged holes, rusted stubs due to water logging etc. might have resulted in reduced strength of tower and combined with localized wind storm might have caused the failure of towers.
2.	765 kV D/C Wardha – Nizamabad transmission line	PGCIL	2017	1	Maharashtra	The structural integrity of transmission towers depends on many factors including quality of material grade used in tower body, Construction methodology,workmanship and erection practices, member theft, O&M of the transmission utilities etc. High speed of wind in conjunction with gaps in one or more of the above mentioned aspects might have caused the failure of transmission tower.
3.	400 kV D/C Koderma-Bokaro transmission line	PGCIL	2014	3	Jharkhand	---do---
4.	765 kV S/C Bina-Gwalior transmission line	PGCIL	2014	2	Madhya Pradesh	----do---
5.	765 kV S/C Agra-Jatikara transmission line	PGCIL	2013	3	Haryana	---do---
6.	765 kV S/C Jabalpur-Bina transmission line	Sterlite Power	2015	5	Madhya Pradesh	The structural integrity of transmission towers depends on many factors including quality of material grade used in tower body, Construction methodology, workmanship and erection practices, Operations & Maintenance practices of the transmission

						utilities etc. High speed of wind in conjunction with gaps in one or more of the above mentioned aspects appears to be the cause of transmission tower failure.
7.	**(i)400 kV D/C Barh - Motihari Transmission Line** **(ii) 400 kV D/C Motihari-Gorakhpur Transmission line**	**Darbhanga Motihari Transmission Company Ltd. (DMTCL)** **(Essel Infra Ltd.)**	**2017**	**1** **1**	**Bihar**	**Water level of Gandak river was 600 mm above HFL and 2000 mm above danger level. Towers were located near river bank. Due to the sudden release of water from the barrage, the velocity of the water might have been very high and some rock might have hit the foundation of tower in Gandak river, causing damage to the tower foundations**
8.	**765KV D/C Narendra (New)– Madhugiri (Tumkur) Transmission Line (Hexa Zebra)**	**L&T**	**2016**	**5**	**Karnataka**	**Wind speed data provided by the utility Indicates that the wind speed was 16 m/s at 22:10 hrs. i.e. at the time of failure of towers. The maximum wind speed measured was 29.37m/s at around 21:20 hrs on 24.05.2017 which is below the design wind speed of 33 m/s considered for Wind Zone-1. The high wind velocity might have induced the failure of towers but it may not be the sole reason for the occurrence of the incident. The structural integrity of transmission towers depends on many factors including quality of material grade used in tower body, Construction methodology, work-manship and erection practices, members theft, Operation & Maintenance practices of the transmission utilities, etc. High speed of wind in Conjunction with gaps in one or more of the above mentioned aspects appears to be the cause of transmission tower failure.**

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2222
ANSWERED ON 04.07.2019

STATUS OF THERMAL POWER PLANTS

2222. SHRI PINAKI MISHRA:

Will the Minister of POWER be pleased to state:

(a) the details of all thermal power plants in the country along with those which are in operation to their full capacity, State/UT-wise;

(b) the details of all thermal power plants being managed separately by the Union Government, State Governments and private companies, State/UT-wise;

(c) whether all these power plants are being supplied the required amount of coal for production of power to their full capacity; and

(d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : Details of all the thermal power plants in operation along with their power generation & plant load factor (PLF) in Central/State/Pvt. Sector for the year 2018-19 & the current year (up to May, 2019) are furnished at Annexure-I.

The PLF of the station depends on a number of factors like the outages for planned maintenance, forced outages on account of equipment failures, inadequate availability of coal etc. and actual despatch schedule for the station by the beneficiaries. The actual despatch depends on the prevailing electricity demand, availability of electricity from other different sources like hydro, nuclear and renewable etc. and merit order of the of the station based on its variable cost of supply.

(c) & (d) : The coal requirement at 85% PLF, receipt and consumption of coal (Domestic + Imported) by the coal based thermal power plants in the country during 2018-19 is furnished at Annexure-II.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2222 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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Details of generation & plant load factor (PLF) of Thermal Power plants during last year & current year (up to May ,19)

REGION	STATE	SECTOR	FUEL	NAME OF PLANTS	MONITORED CAPACITY AS ON 31.05.2019(MW)	2018-19		2019-20 (upto-May 19)*	
						GENERA-TION (MU)	% PLF	GENERA-TION (MU)	% PLF
NR	DELHI	STATE	NATURAL GAS	I.P.CCPP	270	599.63	25.35	91.57	23.17
		STATE	NATURAL GAS	PRAGATI CCGT-III	1500	3620.46	27.55	622.93	28.37
		STATE	NATURAL GAS	PRAGATI CCPP	330.4	1515.62	52.37	223.65	46.24
	HARYANA	CENTRAL	COAL	INDIRA GANDHI STPP	1500	7387.28	56.22	572.97	26.09
		STATE	COAL	PANIPAT TPS	920	3378.89	41.93	530.81	39.41
		STATE	COAL	RAJIV GANDHI TPS	1200	3852.19	36.65	177.38	10.10
		STATE	COAL	YAMUNA NAGAR TPS	600	3321.63	63.20	650.91	74.10
		PVT	COAL	MAHATMA GANDHI TPS	1320	6898.35	59.66	949.06	49.11
	PUNJAB	STATE	COAL	GH TPS (LEH.MOH.)	920	2485.15	30.84	86.47	6.42
		STATE	COAL	ROPAR TPS	840	1669.99	18.76	13.64	1.11
		PVT	COAL	GOINDWAL SAHIB TPP	540	2445.49	51.70	235.57	29.80
		PVT	COAL	RAJPURA TPP	1400	9123.71	74.39	1447.03	70.60
		PVT	COAL	TALWANDI SABO TPP	1980	10639.92	61.34	1923.59	66.36
	RAJASTHAN	CENTRAL	LIGNITE	BARSINGSAR LIGNITE	250	1357.10	61.97	166.26	45.43
		CENTRAL	NATURAL GAS	ANTA CCPP	419.33	550.65	14.99	179.26	29.20
		STATE	COAL	CHHABRA TPP	2320	10379.13	83.22	2208.69	65.30
		STATE	COAL	KALISINDH TPS	1200	5550.40	52.80	678.55	38.62
		STATE	COAL	KOTA TPS	1240	7921.01	72.92	1318.74	72.64
		STATE	COAL	SURATGARH TPS	1500	7168.92	54.56	798.68	36.37
		STATE	NATURAL GAS	RAMGARH CCPP	273.8	998.09	41.61	140.79	35.12
		PVT	COAL	KAWAI TPS	1320	7599.26	65.72	1417.39	73.35
		PVT	LIGNITE	JALIPA KAPURDI TPP	1080	6700.10	70.82	1011.86	64.00
	UTTAR PRADESH	CENTRAL	COAL	DADRI (NCTPP)	1820	10533.54	66.07	1449.57	54.40
		CENTRAL	COAL	MEJA STPP	660	69.61	1.20	279.67	35.91
		CENTRAL	COAL	RIHAND STPS	3000	22686.80	86.33	4130.88	94.05
		CENTRAL	COAL	SINGRAULI STPS	2000	14798.21	84.46	2594.42	88.61
		CENTRAL	COAL	TANDA TPS	440	2371.80	61.53	405.34	62.93
		CENTRAL	COAL	UNCHAHAR TPS	1550	7241.00	71.52	1573.89	69.36
		CENTRAL	NATURAL GAS	AURAIYA CCPP	663.36	544.96	9.38	18.19	1.87
		CENTRAL	NATURAL GAS	DADRI CCPP	829.78	1661.51	22.86	437.85	36.04
		STATE	COAL	ANPARA TPS	2630	20140.46	87.42	3447.13	89.53

		STATE	COAL	HARDUAGANJ TPS	605	3141.52	59.28	572.08	64.59
		STATE	COAL	OBRA TPS	1094	3648.03	38.07	621.70	38.82
		STATE	COAL	PARICHHA TPS	1140	4978.88	49.86	662.89	39.72
		PVT	COAL	ANPARA C TPS	1200	8236.75	78.36	1439.44	81.94
		PVT	COAL	BARKHERA TPS	90	148.70	18.86	32.24	24.47
		PVT	COAL	KHAMBARKHERA TPS	90	141.20	17.91	31.67	24.04
		PVT	COAL	KUNDARKI TPS	90	203.67	25.83	50.23	38.12
		PVT	COAL	LALITPUR TPS	1980	5449.92	31.42	1475.04	50.89
		PVT	COAL	MAQSOODPUR TPS	90	141.28	17.92	32.22	24.45
		PVT	COAL	PRAYAGRAJ TPP	1980	7759.32	44.74	1438.40	49.62
		PVT	COAL	ROSA TPP Ph-I	1200	4340.90	41.29	1321.71	75.23
		PVT	COAL	UTRAULA TPS	90	196.09	24.87	32.76	24.86
	UTTARAKHAND	PVT	NATURAL GAS	GAMA CCPP	225	412.36	20.92	135.72	41.20
		PVT	NATURAL GAS	KASHIPUR CCPP	225	841.88	42.71	263.33	79.94
WR	CHHATTISGARH	CENTRAL	COAL	BHILAI TPS	500	3426.23	78.22	554.08	75.69
		CENTRAL	COAL	KORBA STPS	2600	20083.42	88.18	3394.85	89.19
		CENTRAL	COAL	LARA TPP	800	262.91	3.75	71.15	6.07
		CENTRAL	COAL	SIPAT STPS	2980	23907.12	91.58	3968.45	90.96
		STATE	COAL	DSPM TPS	500	3828.15	87.40	679.72	92.86
		STATE	COAL	KORBA-III	240	1317.27	62.66	239.47	68.16
		STATE	COAL	KORBA-WEST TPS	1340	9472.41	80.70	1439.39	73.37
		STATE	COAL	MARWA TPS	1000	6415.52	73.24	729.09	49.80
		PVT	COAL	AKALTARA TPS	1800	7912.22	50.18	1958.01	74.30
		PVT	COAL	BALCO TPS	600	2768.07	52.66	530.17	60.36
		PVT	COAL	BANDAKHAR TPP	300	2137.60	81.34	389.68	88.72
		PVT	COAL	BARADARHA TPS	1200	6729.62	64.02	1215.05	69.16
		PVT	COAL	BINJKOTE TPP	600	1464.92	27.87	484.09	55.11
		PVT	COAL	CHAKABURA TPP	30	241.55	91.91	43.56	99.18
		PVT	COAL	KASAIPALLI TPP	270	1900.36	80.35	342.37	86.61
		PVT	COAL	NAWAPARA TPP	600	3095.17	58.89	594.60	67.69
		PVT	COAL	OP JINDAL TPS	1000	3349.21	38.23	489.46	33.43
		PVT	COAL	PATHADI TPP	600	4293.08	81.68	658.70	74.99
		PVT	COAL	RAIKHEDA TPP	1370	2830.89	46.68	699.44	34.87
		PVT	COAL	RATIJA TPS	100	799.10	90.61	115.92	79.18
		PVT	COAL	SVPL TPP	63	12.44	2.25	48.81	52.92
		PVT	COAL	TAMNAR TPP	2400	7044.63	39.51	1426.79	40.61
		PVT	COAL	UCHPINDA TPP	1440	1953.26	20.27	439.58	20.85
	GUJARAT	CENTRAL	NATURAL GAS	GANDHAR CCPP	657.39	1573.91	27.33	99.47	10.34
		CENTRAL	NATURAL GAS	KAWAS CCPP	656.2	2499.39	43.48	451.89	47.04
		STATE	COAL	GANDHI NAGAR TPS	630	3703.99	67.12	626.70	67.95
		STATE	COAL	SIKKA REP. TPS	500	2725.93	62.24	551.14	75.29
		STATE	COAL	UKAI TPS	1110	6936.96	71.34	1386.71	85.33
		STATE	COAL	WANAKBORI TPS	1470	8343.14	64.79	1488.54	69.17

		STATE	LIGNITE	AKRIMOTA LIG TPS	250	1188.45	54.27	129.78	35.46
		STATE	LIGNITE	KUTCH LIG. TPS	290	1205.39	47.45	193.09	45.48
		STATE	NATURAL GAS	DHUVARAN CCPP	594.72	699.97	13.44	69.65	8.00
		STATE	NATURAL GAS	HAZIRA CCPP EXT	351	352.28	11.46	56.34	10.96
		STATE	NATURAL GAS	PIPAVAV CCPP	702	493.76	8.03	26.34	2.56
		STATE	NATURAL GAS	UTRAN CCPP	374	418.22	12.77	54.78	10.00
		PVT	COAL	MUNDRA TPS	4620	23912.38	59.08	5573.33	82.40
		PVT	COAL	MUNDRA UMTPP	4000	26839.30	76.60	5122.70	87.48
		PVT	COAL	SABARMATI (D-F STATIONS)	362	2785.64	87.84	491.26	92.70
		PVT	COAL	SALAYA TPP	1200	0.00	0.00	303.42	17.27
		PVT	LIGNITE	SURAT LIG. TPS	500	3521.75	80.41	599.36	81.88
		PVT	NATURAL GAS	DGEN MEGA CCPP	1200	0.70	0.01	273.42	15.56
		PVT	NATURAL GAS	SUGEN CCPP	1147.5	6237.45	62.05	1268.55	75.51
		PVT	NATURAL GAS	UNOSUGEN CCPP	382.5	0.00	0.00	173.35	30.96
	MADHYA PRADESH	CENTRAL	COAL	VINDHYACHAL STPS	4760	37539.00	90.03	6193.26	88.87
		STATE	COAL	AMARKANTAK EXT TPS	210	1636.16	88.94	307.55	100.04
		STATE	COAL	SANJAY GANDHI TPS	1340	8680.63	73.95	1351.17	68.88
		STATE	COAL	SATPURA TPS	1330	7472.97	64.14	1068.14	54.86
		STATE	COAL	SHREE SINGAJI TPP	2520	7753.38	60.68	1800.63	48.81
		PVT	COAL	ANUPPUR TPP	1200	6689.60	63.64	1338.47	76.19
		PVT	COAL	BINA TPS	500	2503.79	57.16	489.91	66.93
		PVT	COAL	MAHAN TPP	1200	3220.09	40.88	951.78	54.18
		PVT	COAL	NIGRI TPP	1320	7330.28	63.39	1347.34	69.72
		PVT	COAL	NIWARI TPP	45	77.38	19.63	35.60	54.04
		PVT	COAL	SASAN UMTPP	3960	32877.27	94.78	5671.03	97.82
		PVT	COAL	SEIONI TPP	600	2500.55	47.58	515.09	58.64
	MAHARASHTRA	CENTRAL	COAL	MAUDA TPS	2320	11878.13	58.45	2211.45	65.11
		CENTRAL	COAL	SOLAPUR	1320	1783.67	30.85	76.69	3.97
		CENTRAL	NATURAL GAS	RATNAGIRI CCPP	1967.08	4465.63	25.92	729.13	25.32
		STATE	COAL	BHUSAWAL TPS	1210	6595.75	62.23	1251.50	70.65
		STATE	COAL	CHANDRAPUR(MAHARASHTRA) STPS	2920	15850.79	61.97	3276.57	76.65
		STATE	COAL	KHAPARKHEDA TPS	1340	7471.18	63.65	1464.05	74.63
		STATE	COAL	KORADI TPS	2400	8429.52	40.09	1818.80	51.76
		STATE	COAL	NASIK TPS	630	2316.16	41.97	583.92	63.31
		STATE	COAL	PARAS TPS	500	2628.25	60.01	709.54	96.93
		STATE	COAL	PARLI TPS	1170	2842.07	27.73	156.17	9.12
		STATE	NATURAL GAS	URAN CCPP	672	2574.69	43.74	398.57	40.51
		PVT	COAL	AMARAVATI TPS	1350	4074.09	34.45	599.34	30.32
		PVT	COAL	DAHANU TPS	500	3617.02	82.58	618.14	84.45
		PVT	COAL	DHARIWAL TPP	600	3228.90	61.43	607.87	69.20
		PVT	COAL	GMR WARORA TPS	600	3895.25	74.11	771.38	87.82
		PVT	COAL	JSW RATNAGIRI TPP	1200	8019.75	76.29	1428.05	81.29
		PVT	COAL	TIRORA TPS	3300	21665.55	74.95	4266.77	88.32
		PVT	COAL	TROMBAY TPS	1250	5018.74	45.83	853.70	46.65
		PVT	NATURAL GAS	TROMBAY CCPP	180	1410.82	89.47	260.75	98.95

SR	ANDHRA PRADESH	CENTRAL	COAL	SIMHADRI	2000	12449.08	71.06	1897.08	64.79
		STATE	COAL	DAMODARAM SANJEEVAIAH TPS	1600	6957.21	49.64	1480.29	63.20
		STATE	COAL	Dr. N.TATA RAO TPS	1760	10885.93	70.61	2074.69	80.52
		STATE	COAL	RAYALASEEMA TPS	1650	6637.55	45.92	1575.98	65.24
		STATE	NATURAL GAS	JEGURUPADU CCPP PH I	235.4	826.31	40.07	83.88	24.34
		PVT	COAL	PAINAMPURAM TPP	1320	8369.17	72.38	1532.72	79.31
		PVT	COAL	SGPL TPP	1320	9736.08	84.20	1706.57	88.31
		PVT	COAL	VIZAG TPP	1040	949.10	10.42	604.73	39.72
		PVT	NATURAL GAS	GODAVARI CCPP	208	1142.85	62.72	82.21	27.00
		PVT	NATURAL GAS	KONDAPALLI CCPP	350	1667.06	54.37	175.79	34.31
		PVT	NATURAL GAS	VIJJESWARAM CCPP	272	1114.49	46.77	116.23	29.19
	KARNATAKA	CENTRAL	COAL	KUDGI STPP	2400	7566.33	40.07	1088.53	30.98
		STATE	COAL	BELLARY TPS	1700	4059.06	27.26	877.22	35.25
		STATE	COAL	RAICHUR TPS	1720	8917.98	59.19	2165.60	86.00
		PVT	COAL	TORANGALLU TPS(SBU-I)	260	1319.47	57.93	190.29	49.99
		PVT	COAL	TORANGALLU TPS(SBU-II)	600	2484.62	47.27	301.50	34.32
		PVT	COAL	UDUPI TPP	1200	5214.35	49.60	1050.60	59.80
	PUDUCHERRY	STATE	NATURAL GAS	KARAIKAL CCPP	32.5	229.88	80.74	42.61	89.55
	TAMIL NADU	CENTRAL	COAL	TUTICORIN (JV) TPP	1000	5486.62	62.63	502.64	34.33
		CENTRAL	COAL	VALLUR TPP	1500	7706.87	58.65	1202.42	54.76
		CENTRAL	LIGNITE	NEYVELI (EXT) TPS	420	2949.65	80.17	565.52	91.97
		CENTRAL	LIGNITE	NEYVELI TPS- I	500	3105.90	56.19	500.41	68.36
		CENTRAL	LIGNITE	NEYVELI TPS-II	1470	10744.54	83.44	1828.33	84.96
		CENTRAL	LIGNITE	NEYVELI TPS-II EXP	500	1931.31	44.09	324.75	44.36
		STATE	COAL	METTUR TPS	840	5807.22	78.92	1080.43	87.86
		STATE	COAL	METTUR TPS - II	600	3153.10	59.99	726.26	82.68
		STATE	COAL	NORTH CHENNAI TPS	1830	10711.12	66.82	2065.02	77.08
		STATE	COAL	TUTICORIN TPS	1050	6306.31	68.56	1280.64	83.31
		STATE	NATURAL GAS	KOVIKALPAL CCPP	107.88	315.36	33.37	38.92	24.64
		STATE	NATURAL GAS	KUTTALAM CCPP	100	410.27	46.83	29.09	19.87
		STATE	NATURAL GAS	VALUTHUR CCPP	186.2	1178.03	72.22	227.74	83.54
		PVT	COAL	ITPCL TPP	1200	5544.59	52.75	1105.07	62.90
		PVT	COAL	MUTHIARA TPP	1200	3221.74	30.65	346.04	19.70
		PVT	LIGNITE	NEYVELI TPS(Z)	250	1290.36	58.92	260.66	71.22
		PVT	NATURAL GAS	KARUPPUR CCPP	119.8	647.48	61.70	129.26	73.70
		PVT	NATURAL GAS	VALANTARVY CCPP	52.8	352.86	76.29	51.54	66.68
	TELANGANA	CENTRAL	COAL	RAMAGUNDEM STPS	2600	18547.91	81.44	3151.14	82.79
		STATE	COAL	KAKATIYA TPS	1100	7727.37	80.19	1491.33	92.61
		STATE	COAL	KOTHAGUDEM TPS	420	3611.15	57.25	424.75	69.08
		STATE	COAL	KOTHAGUDEM TPS (NEW)	1800	9210.48	87.32	2438.21	92.52
		STATE	COAL	RAMAGUNDEM - B TPS	62.5	423.03	77.27	83.42	91.17
		STATE	COAL	SINGARENI TPP	1200	8698.48	82.75	1618.23	92.11
ER	BIHAR	CENTRAL	COAL	BARH II	1320	9845.23	85.14	1753.33	90.73
		CENTRAL	COAL	KAHALGAON TPS	2340	16485.91	80.43	2502.74	73.06
		CENTRAL	COAL	MUZAFFARPUR TPS	610	3039.78	56.89	670.94	75.13

		CENTRAL	COAL	NABI NAGAR TPP	750	2754.75	60.26	764.56	69.63
		STATE	COAL	BARAUNI TPS	710	44.85	2.44	8.89	0.86
	JHARKHAND	CENTRAL	COAL	BOKARO `B` TPS	210	688.44	37.42	52.99	17.24
		CENTRAL	COAL	BOKARO TPS `A` EXP	500	2920.75	66.68	527.60	72.08
		CENTRAL	COAL	CHANDRAPURA(DVC) TPS	630	3560.59	64.52	689.08	74.71
		CENTRAL	COAL	KODARMA TPP	1000	6278.75	71.68	1275.31	87.11
		STATE	COAL	TENUGHAT TPS	420	1689.05	45.91	415.97	67.65
		PVT	COAL	JOJOBERA TPS	240	1519.04	72.25	282.86	80.50
		PVT	COAL	MAHADEV PRASAD STPP	540	2876.22	60.80	469.85	59.43
		PVT	COAL	MAITHON RB TPP	1050	7267.81	79.02	1221.50	79.46
	ORISSA	CENTRAL	COAL	TALCHER (OLD) TPS	460	3606.84	89.51	663.49	98.52
		CENTRAL	COAL	TALCHER STPS	3000	21242.30	80.83	3812.57	86.81
		STATE	COAL	IB VALLEY TPS	420	3085.46	83.86	546.88	88.94
		PVT	COAL	DERANG TPP	1200	4213.60	40.08	753.22	42.87
		PVT	COAL	KAMALANGA TPS	1050	6690.02	72.73	1228.71	79.93
		PVT	COAL	STERLITE TPP	1200	828.09	7.88	74.40	4.23
	WEST BENGAL	CENTRAL	COAL	FARAKKA STPS	2100	14846.44	80.70	2444.88	79.52
		CENTRAL	COAL	DURGAPUR STEEL TPS	1000	6293.54	71.84	1230.18	84.03
		CENTRAL	COAL	DURGAPUR TPS	210	981.28	53.34	34.18	11.12
		CENTRAL	COAL	MEJIA TPS	2340	12744.35	62.17	2606.70	76.09
		CENTRAL	COAL	RAGHUNATHPUR TPP	1200	3208.40	30.52	827.95	47.13
		STATE	COAL	BAKRESWAR TPS	1050	7182.26	78.09	1439.12	93.62
		STATE	COAL	BANDEL TPS	330	1315.39	44.18	204.99	42.43
		STATE	COAL	D.P.L. TPS	660	2442.23	42.24	544.06	56.31
		STATE	COAL	KOLAGHAT TPS	1260	4422.88	40.07	772.60	41.88
		STATE	COAL	SAGARDIGHI TPS	1600	6051.94	49.94	1236.81	52.80
		STATE	COAL	SANTALDIH TPS	500	3552.62	81.11	674.12	92.09
		PVT	COAL	BUDGE BUDGE TPS	750	6011.69	91.50	1049.73	95.60
		PVT	COAL	HALDIA TPP	600	4614.74	87.80	753.52	85.78
		PVT	COAL	SOUTHERN REPL. TPS	135	283.78	24.00	101.32	51.26
NER	ASSAM	CENTRAL	COAL	BONGAIGAON TPP	750	2824.21	64.44	708.16	64.50
		CENTRAL	NATURAL GAS	KATHALGURI CCPP	291	1639.49	64.31	285.69	67.06
		STATE	NATURAL GAS	LAKWA GT	97.2	464.66	50.67	56.15	39.46
		STATE	NATURAL GAS	LAKWA REPLACEMENT POWER PROJ.	69.76	287.86	81.11	91.18	89.29
		STATE	NATURAL GAS	NAMRUP CCPP	161.25	314.40	22.26	41.86	17.73
	TRIPURA	CENTRAL	NATURAL GAS	AGARTALA GT	135	650.63	55.02	116.01	58.70
		CENTRAL	NATURAL GAS	MONARCHAK CCPP	101	681.27	77.00	110.08	74.45
		CENTRAL	NATURAL GAS	TRIPURA CCPP	726.6	4711.38	74.02	872.93	82.06
		STATE	NATURAL GAS	BARAMURA GT	58.5	173.54	33.86	28.99	33.85
		STATE	NATURAL GAS	ROKHIA GT	111	414.03	42.58	74.31	45.73

* PROVISIONAL BASED ON ACTUAL-CUM-ASSESMENT

Note:

1. Gross Generation from thermal power stations of 25 MW and above only.
2. Figures given above indicate gross generation of all power stations(Central, State& Private Sector) located geographically in the respective State/UT.

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 2222 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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PLANT-WISE Annual Requirement, Receipt and Consumption of Coal during 2018-19					
					Figures in '000 Tonnes
				2018-19	
Sector	Utility	Plant Name	Requirement at 85% PLF	Receipt	Consumption
State	HPGCL	PANIPAT TPS	4475	2412	2207
State	HPGCL	RAJIV GANDHI TPS	6263	2950	2700
State	HPGCL	YAMUNA NAGAR TPS	2945	2010	2190
State	PSPCL	GH TPS (LEH.MOH.)	4520	1944	1640
State	PSPCL	ROPAR TPS	4353	1476	1162
State	RRVUNL	CHHABRA TPP	5137	6667	4314
State	RRVUNL	KOTA TPS	6217	5555	5334
State	RRVUNL	SURATGARH TPS	6727	4527	4318
State	RRVUNL	KALISINDH TPS	5019	3223	3118
State	UPRVUNL	ANPARA TPS	12304	12544	12654
State	UPRVUNL	HARDUAGANJ TPS	2785	1890	1942
State	UPRVUNL	OBRA TPS	5689	2261	2548
State	UPRVUNL	PARICHHA TPS	5851	3400	3432
State	CSPGCL	DSPM TPS	2397	2530	2464
State	CSPGCL	KORBA-II & III	3205	1522	1510
State	CSPGCL	KORBA-WEST TPS	7018	6973	6663
State	CSPGCL	MARWA TPS	4876	4207	4201
State	GSECL	GANDHI NAGAR TPS	2966	2622	2342
State	GSECL	UKAI TPS	4965	4458	4168
State	GSECL	WANAKBORI TPS	6850	5817	5221
State	MPPGCL	AMARKANTAK EXT TPS	841	829	880
State	MPPGCL	SANJAY GANDHI TPS	6543	5675	5692
State	MPPGCL	SATPURA TPS	7550	5174	5697
State	MPPGCL	SHREE SINGAJI TPP	10313	5738	5774
State	MAHAGENCO	BHUSAWAL TPS	6804	5139	4981
State	MAHAGENCO	CHANDRAPUR(MAHARASHTRA) STPS	15884	11826	11580
State	MAHAGENCO	KHAPARKHEDA TPS	8640	6428	6470
State	MAHAGENCO	KORADI TPS	13924	6577	6568
State	MAHAGENCO	NASIK TPS	3777	1890	1865
State	MAHAGENCO	PARAS TPS	2736	2005	1932
State	MAHAGENCO	PARLI TPS	6343	2385	2069
State	APPDCL	DAMODARAM SANJEEVAIAH TPS	7604	4438	4440
State	APGENCO	Dr. N.TATA RAO TPS	10758	9132	8936
State	APGENCO	RAYALASEEMA TPS	8934	4981	4827
State	KPCL	BELLARY TPS	8169	2605	2619
State	KPCL	RAICHUR TPS	8916	6928	6208
State	KPCL	YERMARUS TPP	7145	445	474
State	TANGEDCO	METTUR TPS	3175	4121	4068
State	TANGEDCO	NORTH CHENNAI TPS	9919	7773	7797
State	TANGEDCO	TUTICORIN TPS	5640	4717	4549
State	TSGENCO	KAKATIYA TPS	4546	4325	4289
State	TSGENCO	KOTHAGUDEM TPS	5449	3989	3671
State	TSGENCO	KOTHAGUDEM TPS (NEW)	4437	6210	6417
State	TSGENCO	RAMAGUNDEM - B TPS	318	298	289
State	TSGENCO	SINGARENI TPP	5336	5096	5195
State	TVUNL	TENUGHAT TPS	2282	1078	1232
State	OPGCL	IB VALLEY TPS	2599	2613	2564
State	WBPDCL	BAKRESWAR TPS	4515	4092	4148
State	WBPDCL	BANDEL TPS	2147	1164	1150
State	WBPDCL	D.P.L. TPS	3260	1608	1620
State	WBPDCL	KOLAGHAT TPS	8164	4079	3849

State	WBPDCL	SAGARDIGHI TPS	7095	3780	3604
State	WBPDCL	SANTALDIH TPS	2492	2437	2378
Central	NTPC	BADARPUR TPS	3760	824	916
Central	NTPC-JV	INDIRA GANDHI STPP	6849	5225	4530
Central	NTPC	DADRI (NCTPP)	8507	7161	6612
Central	NTPC	RIHAND STPS	12974	13356	13177
Central	NTPC	SINGRAULI STPS	9424	9073	9365
Central	NTPC	TANDA TPS	2235	2084	1618
Central	NTPC	UNCHAHAR TPS	7171	4748	4499
Central	NTPC-JV	BHILAI TPS	2466	2333	2270
Central	NTPC	KORBA STPS	13188	13784	13681
Central	NTPC	SIPAT STPS	13240	14541	14265
Central	NTPC	VINDHYACHAL STPS	23391	24233	24774
Central	NTPC	MAUDA TPS	11649	8268	8010
Central	NTPC	SOLAPUR	3485	1570	1265
Central	NTPC	SIMHADRI	10651	9179	8904
Central	NTPC	KUDGI STPP	10172	3967	4307
Central	NLC-TN-JV	TUTICORIN (JV) TPP	4648	3264	3425
Central	NTPC-JV	VALLUR TPP	8151	5060	5624
Central	NTPC	RAMAGUNDEM STPS	12089	11816	11582
Central	NTPC	BARH II	5790	6361	5800
Central	NTPC	KAHALGAON TPS	13305	13147	12589
Central	NTPC-JV	MUZAFFARPUR TPS	3131	2203	2096
Central	NTPC-JV	NABI NAGAR TPP	2123	1640	1571
Central	DVC	BOKARO TPS	3055	2182	2085
Central	DVC	CHANDRAPURA(DVC) TPS	2631	2392	1997
Central	DVC	KODARMA TPP	4261	3697	3593
Central	NTPC	TALCHER (OLD) TPS	2800	2992	2948
Central	NTPC	TALCHER STPS	18192	17059	17300
Central	DVC	DURGAPUR STEEL TPS	4659	4267	3938
Central	DVC	DURGAPUR TPS	1156	890	725
Central	NTPC	FARAKKA STPS	10255	9732	9737
Central	DVC	MEJIA TPS	11305	8522	8269
Central	DVC	RAGHUNATHPUR TPP	5286	1995	1898
Central	NTPC	BONGAIGAON TPP	2092	1746	1587
Private	IPP	MAHATMA GANDHI TPS	5925	4618	4158
Private	IPP	GOINDWAL SAHIB TPP	2756	1711	1676
Private	IPP	RAJPURA TPP	5444	4967	4765
Private	IPP	TALWANDI SABO TPP	9124	6974	6585
Private	IPP	KAWAI TPS	5599	4566	4329
Private	IPP	ANPARA C TPS	5344	4930	4927
Private	IPP	BARKHERA TPS	514	106	114
Private	IPP	KHAMBARKHERA TPS	517	106	109
Private	IPP	KUNDARKI TPS	501	158	152
Private	IPP	LALITPUR TPS	9212	3970	3405
Private	IPP	MAQSOODPUR TPS	504	92	106
Private	IPP	PRAYAGRAJ TPP	9105	4850	4792
Private	IPP	ROSA TPP Ph-I	5293	2999	2571
Private	IPP	UTRAULA TPS	500	144	146
Private	IPP	AKALTARA TPS	8490	5062	5012
Private	IPP	BALCO TPS	2865	1779	1775
Private	IPP	BANDAKHAR TPP	1661	1353	1589
Private	IPP	BARADARHA TPS	6246	4970	4704
Private	IPP	BINJKOTE TPP	3509	1040	1151
Private	IPP	NAWAPARA TPP	3532	2458	2447
Private	IPP	PATHADI TPP	3003	2754	2886
Private	IPP	TAMNAR TPP	13460	5350	5306
Private	IPP	UCHPINDA TPP	5817	1359	1413
Private	IPP	OP JINDAL TPS	5533	2661	2489
Private	IPP	RAIKHEDA TPP	6021	1650	1671
Private	IPP	SABARMATI TPS	1715	1560	1521
Private	IPP	MUNDRA TPS	19064	13365	13251
Private	IPP	MUNDRA UMTPP	12511	11072	11274

Private	IPP	SIKKA REP. TPS	1848	1415	1353
Private	IPP	ANUPPUR TPP	5343	3988	4000
Private	IPP	BINA TPS	2491	1671	1676
Private	IPP	SEIONI TPP	3252	1823	1820
Private	IPP	MAHAN TPP	5810	2376	2094
Private	IPP	NIGRI TPP	5443	4157	4059
Private	IPP	SASAN UMTPP	16218	18000	18084
Private	IPP	AMARAVATI TPS	5933	3029	2405
Private	IPP	BUTIBORI TPP	2903	1431	1438
Private	IPP	DAHANU TPS	2230	2231	2167
Private	IPP	DHARIWAL TPP	1893	1532	1368
Private	IPP	GMR WARORA TPS	2884	2498	2514
Private	IPP	TIRORA TPS	15528	14265	13691
Private	IPP	WARDHA WARORA TPP	2941	800	770
Private	IPP	JSW RATNAGIRI TPP	3763	3369	3377
Private	IPP	TROMBAY TPS	4254	2319	2294
Private	IPP	PAINAMPURAM TPP	5751	4663	4897
Private	IPP	VIZAG TPP	5033	473	605
Private	IPP	SGPL TPP	4937	4820	4891
Private	IPP	THAMMINAPATNAM TPS	1117	15	51
Private	IPP	TORANGALLU TPS(SBU-I)	968	372	372
Private	IPP	TORANGALLU TPS(SBU-II)	2075	1129	1154
Private	IPP	UDUPI TPP	3804	2198	2220
Private	IPP	ITPCL TPP	5004	3007	3105
Private	IPP	MUTHIARA TPP	5579	2150	2012
Private	IPP	MAHADEV PRASAD STPP	2793	1905	1998
Private	IPP	MAITHON RB TPP	4608	4483	4284
Private	IPP	JOJOBERA TPS	1224	1122	1041
Private	IPP	DERANG TPP	7229	3437	3409
Private	IPP	KAMALANGA TPS	5611	5085	4802
Private	IPP	STERLITE TPP	6606	411	612
Private	IPP	BUDGE BUDGE TPS	3306	3626	3559
Private	IPP	HALDIA TPP	3003	3100	3102
Private	IPP	SOUTHERN REPL. TPS	704	168	199

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2247
ANSWERED ON 04.07.2019

IMPLEMENTATION OF SAUBHAGYA

2247. MS. DIYA KUMARI:

Will the Minister of POWER
be pleased to state:

(a) the status of implementation and coverage of Pradhan Mantri Sahaj Bijli Har Ghar Yojana 'Saubhagya' in the country;

(b) whether the said Yojana covers all the States and UTs and if so, the details thereof; and

(c) the status of implementation and coverage of the said Yojana in the State of Rajasthan, especially in the districts of Nagaur, Pali, Ajmer and Rajsamand?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana – SAUBHAGYA in October, 2017 for universal household electrification by providing last mile connectivity and electricity connections to all households in rural and all poor households in urban areas across the country. As reported by the States, 2.63 crore households have been electrified since launch of Saubhagya. State-wise data is at Annexure.

(c) : Government of Rajasthan had earlier updated the status on Saubhagya portal that all willing households in the State stood electrified as on 31.03.2019. However, the State Government have now informed vide letter dated 10.06.2019 that 1.56 lakh households are un-electrified and are willing to take electric connections.
As reported by Government of Rajasthan, the status of implementation of 'Saubhagya' in Districts Nagaur, Pali, Ajmer and Rajsamand is as under:-

Sl. No.	Name of Districts	Target No. of Households	Achievement – No. of Households
1.	Nagaur	22167	21467
2.	Pali	3472	3472
3.	Ajmer	1292	1104
4.	Rajsamand	539	335

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2247 ANSWERED IN THE LOK SABHA ON 04.07.2019.

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Households electrified since launch of Saubhagya (As on 31.03.2019)		
Sl. No.	**State**	**Total Household Electrified**
1	Andhra Pradesh	1,81,930
2	Arunachal Pradesh	47,089
3	Assam	17,45,149
4	Bihar	32,59,041
5	Chhattisgarh	7,49,397
6	Gujarat	41,317
7	Haryana	54,681
8	Himachal Pradesh	12,891
9	Jammu & Kashmir	3,87,501
10	Jharkhand	15,30,708
11	Karnataka	3,56,974
12	Madhya Pradesh	19,84,264
13	Maharashtra	15,17,922
14	Manipur	1,20,748
15	Meghalaya	1,99,839
16	Mizoram	27,970
17	Nagaland	1,32,507
18	Odisha	24,52,444
19	Puducherry	912
20	Punjab	3,477
21	Rajasthan	18,62,736
22	Sikkim	14,900
23	Tamil Nadu	2,170
24	Telangana	5,15,084
25	Tripura	1,39,090
26	Uttar Pradesh	79,80,568
27	Uttarakhand	2,48,751
28	West Bengal	7,32,290
	Total	2,62,84,350

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2254
ANSWERED ON 04.07.2019

24X7 POWER SUPPLY

2254. SHRI D.K. SURESH:
SHRIMATI RANJAN BEN DHANANJAY BHATT:

Will the Minister of POWER
be pleased to state:

(a) whether the Government proposes to provide 24x7 power supply to all parts of the country;

(b) if so, the details thereof along with the steps taken in this direction and if not, the reasons therefor;

(c) whether the Government has set any targets in this regard; and

(d) if so, the time-frame by which the same are likely to be achieved?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) to (d) : Electricity being a concurrent subject, the supply / distribution of electricity falls primarily under the purview of respective State Governments and/or State Power Utilities. All States and Union Territories have signed MoUs with Central Government to ensure supply 24 x 7 power from 1st April 2019 onwards. Many States and Union Territories have claimed to supply 24 x 7 power other than planned outages and interruptions due to unforeseen events.

Government of India is supplementing the efforts of the States through its schemes including Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS) and Ujjwal Discom Assurance Yojana (UDAY) to strengthen infrastructure as well as financial and operational efficiency of Distribution Companies (DISCOMs) to help them supply 24x7 power.

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