

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
STARRED QUESTION NO.326  
TO BE ANSWERED ON 09.08.2018

POWER SHORTAGES

\*326. SHRI D.K. SURESH:  
SHRI NALIN KUMAR KATEEL:

Will the Minister of POWER  
be pleased to state:

- (a) whether approximately 40 per cent of the country still faces power shortages and/or has no access to electricity;
- (b) if so, the details thereof;
- (c) whether it is true that surplus generating power capacity is available in our country and if so, the details thereof;
- (d) whether the Government is aware that there are leakages across the transmission and distribution chain in the country; and
- (e) if so, the details thereof and the measures taken by the Government to put an end to leakages to save energy?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R.K. SINGH )

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

\*\*\*\*\*

## STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.326 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018 REGARDING POWER SHORTAGES.

\*\*\*\*\*

(a) to (c) : No, madam. As on 30.06.2018, the installed generation capacity is about 344 Giga Watt (GW) which is more than sufficient to meet the present peak power demand of the country which was around 170 GW during the current year 2018-19 (upto July, 2018). However, there are some states in the country where there is gap between peak demand and peak met. This gap is generally on account of factors, other than adequacy of power in the country such as sub-transmission & distribution network constraints and financial constraints.

Government of India also launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana –“Saubhagya” to achieve universal household electrification. As on 06.08.2018, there are 21.92 crore households in the country; of these 19.42 crore households (88.57%) have been electrified and all the remaining 2.50 crore households (11.42%) are targeted for electrification under the ongoing Pradhan Mantri Sahaj Bijli Har Ghar Yojana –“Saubhagya” by 31<sup>st</sup>March, 2019.

(d) to (e) : Yes, madam. The leakage of electrical energy along with technical loss in Transmission and Distribution (which are inevitable in a system), inadequate Billing efficiency and non-recovery of billed amount (collection efficiency) are collectively termed as Aggregate Technical and Commercial (AT&C) losses.

As per data posted by UDAY States / UTs on UDAY portal for UDAY States/UTs AT&C loss was 18.75% as on 31-Mar-2018. 20 UDAY States/UTs reduced AT&C losses in FY2017-18 as compared to FY2016-17. The AT&C loss has reduced from 20.74% during 2015-16 to 18.75% during 2017-18.

Government is taking various measures to reduce the AT&C loss like installation of feeder meters, Distribution Transformers (DT) meters, Smart Meters for improved metering and auditing. Operational efficiency improvements like smart/prepaid metering, upgradation of transformers, meters etc., energy efficiency measures like efficient LED bulbs, use of Aerial Bunched Cables (ABC), agricultural pumps, fans & air-conditioners etc. will reduce the average AT&C loss.

Govt. of India launched Ujwal Discom Assurance Yojana (UDAY) on 20.11.2015 for the financial and operational turnaround of State-owned Power Distribution Companies (DISCOMS). The scheme aims to reduce Aggregate Technical & Commercial (AT&C) losses to 15% by FY 2018-19.

Government of India is assisting states through schemes like Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) etc. for strengthening of sub-transmission and distribution networks which would also help in reduction of AT&C losses.

\*\*\*\*\*

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
STARRED QUESTION NO.334  
TO BE ANSWERED ON 9.08.2018

EMISSION NORMS FOR THERMAL POWER PLANTS

\*334. SHRI A.P. JITHENDER REDDY:

Will the Minister of POWER  
be pleased to state:

- (a) the names and details of the thermal power plants that have been allowed to start their operations since the commencement of the year 2017;
- (b) whether his Ministry is aware of the report of the Central Pollution Control Board in which it has been stated that none of the sixteen power plants which began their operations post January, 2017 are abiding by the stricter emission norms and if so, the details thereof;
- (c) whether his Ministry has taken any action against them, if so, the details thereof and if not, the reasons therefor;
- (d) whether these thermal power plants are abiding by the mandatory new air pollution regulations set in place by the Ministry of Environment, Forest and Climate Change and if so, the details thereof; and
- (e) if not, the reasons for allowing these companies to start their operations?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R.K. SINGH )

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

\*\*\*\*\*

## STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.334 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018 REGARDING EMISSION NORMS FOR THERMAL POWER PLANTS.

\*\*\*\*\*

(a) : The names and details of Thermal Projects Commissioned during the period January 2017 to till date is given at Annexure I.

(b) to (e) : Ministry of Environment, Forest & Climate Change (MOEF&CC) has notified new stricter environmental norms on 7<sup>th</sup> December, 2015 for Thermal Power Plants (TPPs) for Particulate Matter (PM), SO<sub>x</sub>, NO<sub>x</sub>, Mercury (Hg) and water consumption. These norms were to be complied by 07.12.2017 for TPPs installed before 31.12.2003 and TPPs units installed after 01.01.2003 upto 31.12.2016. TPPs to be installed from 01.01.2017 were to comply with these norms from the date of installation (commissioning). To meet the new emission norms, certain pollution control equipment are to be retrofitted like upgradation of Electrostatic Precipitators for PM, installation of Flue Gas Desulphurization (FGD) system for SO<sub>x</sub>, combustion optimization/post combustion & De- NO<sub>x</sub> systems for NO<sub>x</sub> control. Installation of such equipment's requires certain time period and certain time for shut down of power plants.

As per Section 7 of the Electricity Act, 2003, setting up of a Thermal Power Plant is a de-licensed activity. However, Thermal Power Plants require Environment and Forest Clearances from MoEF&CC before construction of a power plant. Further, before start of operations of the power plant, TPPs requires Consent to Operate from respective State Pollution Control Board (State PCB). Hence, Ministry of Power has no jurisdiction in either grant of permission for setting up of thermal power plant or in grant of Consent to Operate to TPPs.

In order to ensure that there is no disruption of power supply in the country and taking into account the time required as well as the techno economic challenges, a phased implementation plan from 2018 to 2022 for installation of FGD in plants for a capacity of 1,61,402 MW (414 Units) and upgradation of ESP in plants for a capacity of 64,525 MW (222 units) was prepared by Central Electricity Authority (CEA) in consultation with the stakeholders in the Regional Power Committees (RPCs) which are bodies for coordinated Generating unit Outage Planning. This plan was submitted to MoEF&CC on 13.10.2017. Based on the directions of MoEF&CC on 07.12.2017, the Central Pollution Control Board (CPCB) has issued directions to all such Thermal Power Plants to ensure compliance of the revised timelines as per above phasing plan.

As per the MoEF&CC notification, TPPs installed (commissioned) after 01.01.2017 are required to meet the new environmental norms from the date of such installation (commissioning). The environmental clearance for such TPPs was already accorded before issuance of new environmental norms by MoEF&CC. Further, as stated above, MoEF&CC/CPCB has issued directions for implementation of these norms as per revised timelines i.e. maximum by 2022. Accordingly, concerned State PCBs have issued Consent to Operate to all such TPPs currently under operation, including those which have been installed (commissioned) after 01.01.2017.

Further, it is stated that all Thermal Power Plants getting Environment Clearance after 07.12.2015 will comply with the new environment norms.

\*\*\*\*\*

#

#

#

## ANNEXURE

ANNEXURE REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 334 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018 REGARDING EMISSION NORMS FOR THERMAL POWER PLANTS.

\*\*\*\*\*

#

## THERMAL PROJECTS COMMISSIONED DURING THE PERIOD JANUARY 2017 TO TILL DATE

Sl. No.	Project Name	Developer	State	Unit No	Capacity (MW)	Date of Commissioning
1	Mouda TPS	NTPC	Maharashtra	U-4	660	18-03-17
2	Bongaigaon TPP		Assam	U-2	250	22-03-17
3	Kudgi STPP Ph-I		Karnataka	U-2	800	23-03-17
4	Unchahar TPS		UP	U-6	500	31-03-17
5	Nabi Nagar TPP		Bihar	U-2	250	03-04-17
6	Solapur STPP		Maharashtra	U-1	660	07-04-17
7	Kudgi STPP Ph-I		Karnataka	U-3	800	12-03-18
8	Lara STPP		Chhattisgarh	U-1	800	23-03-18
9	Meja STPP		UP	U-1	660	30-03-18
10	Muzaffarpur TPS		Bihar	U-4	195	24-03-17
STATE SECTOR						
11	Rayalaseema TPP St-IV	APGENCO	AP	U-6	600	12-03-18
12	Bhavnagar TPP	BECL	Gujarat	U-2	250	27-03-17
13	Barauni TPS Extn.	BSEB	Bihar	U-8	250	11-01-18
				U-9	250	31-03-18
14	CHHABRA TPP	RRVUNL	Rajasthan	U-5	660	04-04-17
15	YERMARUS TPP	KPCL	Karnataka	U-2	800	29-03-17
PRIVATE SECTOR						
16	Akaltara TPP (Naiyara)	KSK Mahandi Power Co. Ltd.	Chhattisgarh	U-3	600	18-01-18
17	PRAYAGRAJ TPP(Bara TPP)	Prayagraj Power Gen. Co. Ltd.	Uttar Pradesh	U-3	660	22-05-17
18	NASIK (P) TPS	Ratan Power	Maharashtra	U-2	270	15-02-17
				U-3	270	14-04-17
				U-4	270	19-05-17
				U-5	270	30-05-17
19	India Power TPP	IPCL(Haldia)	West Bengal	U-1	150	07-06-17
				U-2	150	31-12-17
20	Uchpinda TPP	RKM Powergen. Pvt. Ltd.	Chhattisgarh	U-3	360	12-09-17
21	Sembcorp GayatriPvt.Ltd.(NCC TPP)	Sembcorp GayatriPvt. Ltd.	AP	U-2	660	15-02-17
22	Shirpur TPP	Shirpur Power Pvt. Ltd.	Maharashtra	U-1	150	28-09-17
23	Binjkote TPP	SKS Power Gen. (CG Ltd.)	Chhattisgarh	U-1	300	25-04-17
				U-2	300	28-03-18
24	NAWAPARA TPP	TRN Energy Private Ltd.	Chhattisgarh	U-2	300	18-04-17
TOTAL CAPACITY in MW					13095	

\*\*\*\*\*

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3704  
TO BE ANSWERED ON 09.08.2018

UNINTERRUPTED POWER SUPPLY

3704. SHRI PR. SENTHIL NATHAN:  
SHRI K.N. RAMACHANDRAN:  
SHRI BHARATHI MOHAN R.K.:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government has empowered the State Electricity Boards and Private Discoms to provide uninterrupted power supply to essential establishments like hospitals, vital institutions, police establishments etc.;
- (b) if so, the details thereof;
- (c) the steps taken by the Government to facilitate Tamil Nadu to meet its huge power requirements; and
- (d) the details of amount allocated for the same during the last three years?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : Electricity is a concurrent subject and distribution of electricity is done by Power Distribution Companies/State Energy Departments. Distribution licenses are issued by the respective State Electricity Regulatory Commissions. The States/Discoms are expected to provide power supply to all consumers including essential establishments like hospitals, vital institutions, police establishments etc. Government of India is supporting State Governments to ensure uninterrupted electricity supply through various schemes including Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS) and Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya).

(c) & (d) : As per the information furnished by the Government of Tamil Nadu, the average power demand of Tamil Nadu is around 14,800 MW to 15,300 MW and peak demand is 15,440 MW. The installed capacity of Tamil Nadu as on 30.06.2018, is 18747 MW of conventional Energy sources and 11,411 MW of Renewable Energy sources. The Tamil Nadu Generation and Distribution Corporation have reported that they are supplying uninterrupted power to all consumers. Government of India is supporting the States in augmenting and strengthening of the intra state transmission and distribution network through various schemes including Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS) for better power supply to the consumers. Projects worth Rs.1306.77 crore including Rural Electrification (RE) component have been sanctioned to Tamil Nadu under DDUGJY. Projects worth Rs.5,411.72 crore have been sanctioned to Tamil Nadu under IPDS including R-APDRP. The fund is released based on milestones of progress. The fund released to Tamil Nadu during the last three years is given below:

(Rs. in crore)

Financial year	2015-16	2016-17	2017-18	Total
DDUGJY	77.07	110.34	1.86	189.27
IPDS	Nil	216.05	282.50	498.55

#

\*\*\*\*\*

#

#

#

#

#

#



GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3707  
TO BE ANSWERED ON 09.08.2018

POWER GENERATION THROUGH VARIOUS SOURCES

3707. DR. A. SAMPATH:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government has any estimate on the generation of power through various sources by the year 2020;
- (b) if so, the details thereof including the installed capacity and the present percentage of utilization;
- (c) the details of industrial, household, service sector consumption etc.; and
- (d) the details of all the incomplete hydro-electric projects in the country?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : The expected installed power generation capacity under various sources by March 2022 is given at Annex-I.

As on 30.06.2018, the installed generation capacity is about 344 Giga Watt (GW). The peak demand during the current year 2018-19 was 170 GW. Further, during the current year 2018-19 (upto June, 2018), the average Plant Load Factor of coal and lignite based power stations has improved to 63.24% from 61.23% during the same period of last year.

(c) : Category-wise and State-wise Electricity consumption for year 2016-17 is given at Annex-II.

(d) : As on 31.07.2018, there are 38 nos. of under construction Hydro Electric Projects (above 25 MW) aggregating to 12208.50 MW. The State wise details of these projects are given at Annex-III.

\*\*\*\*\*

#

ANNEX-I

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3707 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

Installed generation capacity under various sources by March 2022

Source	Capacity (MW)
Coal and Lignite	217,302
Hydro	51,301
Gas	25,735
Nuclear	10,080
Renewable Energy Sources (RES)	175,000
Total	479,418

\*\*\*\*\*

ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3707 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

ELECTRICAL ENERGY SALES TO ULTIMATE CONSUMERS CATEGORYWISE/STATEWISE UTILITIES & NON-UTILITIES 2016-17					
(GWh)					
State/UTs	Domestic	Commercial	Industrial Power		Public Lighting
			(Low & Med. Voltage)	(High Voltage)	
Chandigarh	719.20	497.84	135.48	129.08	21.43
Delhi	14086.66	7290.32	3053.44	37.60	494.40
Haryana	7395.65	5341.45	1642.38	9405.54	102.55
Himachal Pradesh	1937.93	528.24	208.13	4451.50	12.99
Jammu & Kashmir	3272.06	1023.80	514.19	1018.85	52.80
Punjab	13047.33	3719.32	3271.90	12778.14	186.57
Rajasthan	11496.82	4273.11	3004.88	18382.56	330.35
Uttar Pradesh	33239.31	5613.82	5643.95	23748.35	977.56
Uttarakhand	2595.00	1198.00	311.00	7131.70	46.65
Sub Total (NR)	87789.95	29485.91	17785.35	77083.33	2225.30
Chhattisgarh	4938.82	1448.59	519.52	23352.40	106.69
Gujarat	13889.84	2954.02	15737.96	59769.62	348.45
Madhay Pradesh	11184.35	2829.98	1240.82	11956.04	420.85
Maharashtra	26870.37	13367.61	9331.25	31297.23	1837.68
Daman & Diu	96.01	44.32	171.30	1405.36	7.89
D & N Haveli	104.46	30.36	211.70	5370.90	8.28
Goa	880.59	368.45	160.75	2074.57	36.95
Sub Total (WR)	57964.44	21043.33	27373.30	135226.12	2766.80
Andhra Pradesh	12383.07	3185.84	3833.28	15922.26	395.18
Telangana	10055.86	4956.21	1146.23	12449.55	534.59
Karnataka	11829.43	6262.74	1694.69	25705.78	974.37
Kerala	10340.27	4389.22	1135.73	3561.04	378.48
Tamil Nadu	24529.53	9300.08	7880.78	31832.29	1202.33
Puducherry	659.73	186.94	172.42	1415.13	26.99
Lakshadweep	35.02	11.55	0.42	0.00	0.61
Sub Total (SR)	69832.91	28292.58	15863.54	90886.06	3512.55
Bihar	8443.32	1702.15	565.98	2403.68	32.28
Jharkhand \$	4918.62	527.90	210.67	17721.01	146.70
Orissa	6894.16	1560.50	324.71	32533.35	92.85
West Bengal \$	14301.50	5725.69	2132.16	16771.70	522.09
Sikkim	164.09	41.07	1.61	205.86	0.33
A & N Islands	139.08	65.57	16.88	0.00	10.30
Sub Total (ER)	34860.78	9622.89	3252.01	69635.59	804.55
Arunachal Pradesh	147.96	44.47	4.35	101.98	10.94
Assam	3425.00	1011.00	96.00	2159.99	17.00
Manipur	330.43	43.54	14.32	7.36	3.46
Meghalaya	396.45	87.15	5.06	588.41	0.45
Mizoram	233.90	33.87	1.64	8.83	4.89
Nagaland	342.00	82.58	61.29	0.00	14.60
Tripura	502.19	77.62	26.31	24.67	38.59
Sub Total (NER)	5377.93	1380.23	208.98	2891.24	89.92
Total(All India)	255826.01	89824.93	64483.18	375722.34	9399.12

Note: \$ - Includes DVC's sales to ultimate consumers in Jharkhand & West Bengal area

ELECTRICAL ENERGY SALES TO ULTIMATE CONSUMERS CATEGORYWISE/STATEWISE UTILITIES & NON-UTILITIES 2016-17					
(GWh)					
State/UTs	Traction	Agriculture	Public Water Works & Sewage Pumping	Miscella- neous	Total Energy Sold
Chandigarh	0.00	4.23	(B)	83.94	1591.20
Delhi	71.37	28.88	602.80	941.32	26606.79
Haryana	359.57	9708.81	806.50	795.48	35557.92
Himachal Pradesh	0.00	57.28	551.01	324.83	8071.91
Jammu & Kashmir	0.00	313.00	615.00	1095.00	7904.70
Punjab	197.25	12195.97	503.63	722.98	46623.09
Rajasthan	373.59	21361.21	1503.00	675.39	61400.90
Uttar Pradesh	1657.25	15638.04	1814.71	2911.74	91244.74
Uttarakhand	19.76	141.71	366.00	567.50	12377.32
Sub Total (NR)	2678.79	59449.13	6762.64	8118.19	291378.58
Chhattisgarh	900.62	4290.38	288.06	38.78	35883.86
Gujarat	652.93	16758.62	1959.05	671.14	112741.64
Madhya Pradesh	1827.00	17331.65	1431.94	1774.46	49997.10
Maharashtra	2297.80	28201.84	2510.32	12228.64	127942.74
Daman & Diu	0.00	2.72	3.22	8.19	1739.01
D & N Haveli	0.00	6.20	4.55	3.20	5739.65
Goa	0.00	29.94	0.00	49.32	3600.57
Sub Total (WR)	5678.35	66621.35	6197.14	14773.74	337644.57
Andhra Pradesh	1240.27	13296.61	511.63	1021.26	51789.40
Telangana	553.42	15676.32	533.53	1687.76	47593.48
Karnataka	67.61	21625.35	2733.36	949.48	71842.82
Kerala	227.94	331.56	0.00	678.67	21042.89
Tamil Nadu	852.24	11733.40	1202.33	3179.61	91712.59
Puducherry	0.00	59.17	0.00	149.10	2669.48
Lakshadweep	0.00	0.00	0.00	0.00	47.59
Sub Total (SR)	2941.48	62722.41	4980.84	7665.88	286698.26
Bihar	626.35	409.28	81.28	3326.42	17590.74
Jharkhand \$	1259.66	110.39	83.77	502.56	25481.28
Orissa	1103.74	327.04	140.57	780.48	43757.42
West Bengal \$	1394.38	1433.61	877.91	3332.48	46491.52
Sikkim	0.00	0.00	0.55	23.06	436.57
A & N Islands	0.00	0.00	0.00	34.00	265.83
Sub Total (ER)	4384.13	2280.32	1184.08	7999.01	134023.35
Arunachal Pradesh	0.00	0.04	0.00	61.09	370.82
Assam	0.00	36.00	87.00	594.00	7425.99
Manipur	0.00	0.96	23.51	88.34	511.92
Meghalaya	0.00	0.10	34.59	133.29	1245.50
Mizoram	0.00	0.00	49.95	20.46	353.54
Nagaland	0.00	0.02	9.24	125.10	634.83
Tripura	0.00	40.55	81.92	103.42	895.27
Sub Total (NER)	0.00	77.67	286.21	1125.70	11437.87
Total(All India)	15682.75	191150.89	19410.91	39682.51	1061182.64

\*\*\*\*\*

ANNEX REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 3707  
TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

List of Under Construction Hydro Electric Projects in the Country (above 25 MW)  
State wise Details of Rivers & Basin

Sl. No.	Name of Scheme (Executing Agency)	Cap. Under Execution (MW)
	Andhra Pradesh	
1	Polavaram (APGENCO/ Irrigation Dept., A.P.)	960.00
	Sub-total: Andhra Pradesh	960.00
	Arunachal Pradesh	
2	Kameng (NEEPCO)	600.00
3	Subansiri Lower (NHPC)	2000.00
4	Gongri (Dirang Energy)	144.00
	Sub-total: Arunachal Pradesh	2744.00
	Himachal Pradesh	
5	Parbati St. II (NHPC)	800.00
6	Uhl-III (BVPCL)	100.00
7	Sawra Kuddu (HPPCL)	111.00
8	Shongtong Karcham (HPPCL)	450.00
9	Bajoli Holi (GMR)	180.00
10	Sorang (HSPCL)	100.00
11	Tangnu Romai (TRPG)	44.00
12	Tidong-I (NSL Tidong)	100.00
	Sub-total: Himachal Pradesh	1885.00
	Jammu & Kashmir	
13	PakalDul (CVPPL)	1000.00
14	Parnai (JKSPDC)	37.50
15	Lower Kalnai (JKSPDC)	48.00
16	Ratle (RHEPPL)	850.00
	Sub-total: Jammu & Kashmir	1935.50
	Kerala	
17	Pallivasal (KSEB)	60.00
18	Thottiyar (KSEB)	40.00
	Sub-total: Kerala	100.00
	Madhya Pradesh	
19	Maheshwar (SMHPCL)	400.00
	Sub-total: Madhya Pradesh	400.00
	Maharashtra	
20	Koyna Left Bank (WRD,MAH)	80.00
	Sub-total: Maharashtra	80.00
	Punjab	
21	Shahpurkandi (PSPCL/ Irrigation Deptt.,Pb.)	206.00
	Sub-total: Punjab	206.00

#

Sikkim		
22	Bhasmey (Gati Infrastructure)	51.00
23	Rangit-IV (JAL Power)	120.00
24	Rangit-II (Sikkim Hydro)	66.00
25	Rongnichu (Madhya Bharat)	96.00
26	Teesta St. VI (LANCO)	500.00
27	Panan (Himagiri)	300.00
Sub-total: Sikkim		1133.00
Tamil Nadu		
28	Kundah Pumped Storage	125.00
Sub-total: Tamil Nadu		125.00
Telangana		
29	Pulichintala (TSGENCO) (3 units Comm.)	30.00
Sub-total: Telangana		30.00
Uttarakhand		
30	Lata Tapovan (NTPC)	171.00
31	Tapovan Vishnugad (NTPC)	520.00
32	Tehri PSS (THDC)	1000.00
33	Vishnugad Pipalkoti (THDC)	444.00
34	Naitwar Mori (SJVNL)	60.00
35	Vyasi (UJVNL)	120.00
36	Phata Byung (LANCO)	76.00
37	Singoli Bhatwari (L&T)	99.00
Sub-total: Uttarakhand		2490.00
West Bengal		
38	Rammam-III (NTPC)	120.00
Sub-total: West Bengal		120.00
Total:		12208.50

#

\*\*\*\*\*

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3728  
TO BE ANSWERED ON 09.08.2018

ENVIRONMENT NORMS

3728. SHRIMATI RITA TARAI:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Ministry of Power is aware about the revised environment norms introduced by the Ministry of Environment, Forest and Climate Change, if so, the details thereof;
- (b) whether meeting with/ implementing the revised modified norms including the need based retro fitting will be time consuming and will have significant impact on the power tariff, if so, the details thereof; and
- (c) whether the Ministry of Power and the Ministry of Environment, Forest and Climate Change are considering to allow exemption from environment up-gradation, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) : Yes, Madam. Ministry of Environment, Forest and Climate Change (MoEF&CC) notified following new environmental norms for Thermal Power Plants (TPPs) on 7<sup>th</sup> December 2015:

Emission parameter	TPPs (units) installed before 31 <sup>st</sup> December, 2003	TPPs (units) installed after 31 <sup>st</sup> December 2003 and upto 31 <sup>st</sup> December 2016	TPPs (units) to be installed from 1 <sup>st</sup> January 2017
Particulate Matter	100 mg/Nm <sup>3</sup>	50 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>
Sulphur Dioxide (SO <sub>2</sub> )	600 mg/Nm <sup>3</sup> for units less than 500MW capacity  200 mg/Nm <sup>3</sup> for units 500MW and above capacity	600 mg/Nm <sup>3</sup> for units less than 500MW capacity  200 mg/Nm <sup>3</sup> for units 500MW and above capacity	100 mg/Nm <sup>3</sup>
Oxides of Nitrogen (NOx)	600 mg/Nm <sup>3</sup>	300 mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>

#

.....2.

Mercury	0.03 mg/Nm <sup>3</sup> (for unit size 500 MW and above)	0.03 mg/Nm <sup>3</sup>	0.03 mg/Nm <sup>3</sup>
WATER NORMS	<p>a. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption of 3.5 m<sup>3</sup>/MWh within 2 years of notification.</p> <p>b. All existing CT based plants shall reduce specific water consumption up-to maximum of 3.5 m<sup>3</sup>/MWh within a period of 2 years of notification.</p> <p>c. New plants to be installed after 1st January 2017 shall have to meet specific water consumption of 2.5 m<sup>3</sup>/MWh and achieve zero water discharge.</p>		

Later, MoEF&CC vide Notification dated 28.06.2018 notified following revision in the environment norms:

- I. Specific water consumption shall not exceed maximum of 3.0 m<sup>3</sup> /MWh for new plants installed after the 1st January, 2017 and these plants shall also achieve zero waste water discharge.
- II. Water Consumption Limit shall not be applicable for Thermal Power plants using sea water.
- III. Stack Height/Limit in Meters for Thermal Power Plants with wet Flue Gas Desulfurization (FGD) is revised as under:
  - a. 100 MW and above -  $6.902 \times (\text{Emission rate of SO}_2 \text{ in kg/hr} \times 0.277)^{0.555}$   
or 100 m minimum
  - b. Less than 100 MW -  $6.902 \times (\text{Emission rate of SO}_2 \text{ in kg/hr} \times 0.277)^{0.555}$   
or 30 m whichever is more”;

(b) : Yes, Madam. Installation of Flue gas Desulphurization (FGD) in a unit takes about 3 years' time from the date of order placement followed by shut down of the unit for a period ranging from 2 to 6 months for making necessary connections depending upon the technology adopted (for e.g. construction of low height chimney / lining of existing chimney etc.) by the TPPs. Further, minimum time of about 6 months is required for bidding and finalization of a tender.

Upgradation/augmentation of Electrostatic Precipitator (ESP) also requires shutdown of the unit ranging from 4 to 6 months. Accordingly, the phasing plan for FGD and ESP in the units where both are required is kept the same, as this will avoid the shutdown of the units twice. This would also help maintain uninterrupted power supply in the country. FGD system can also reduce the PM levels of the flue gas substantially, the requirement of upgradation/augmentation of ESP may not be required in many units subject to the conditions of certain PM level at FGD inlet. This would result in lower expenditure by the utilities and hence will also lower the tariff burden on the consumers.



NOx control measures like combustion optimization, installation of low NOx burners etc. are envisaged to be undertaken during the shutdown to be taken for FGD in order to avoid multiple shut down of the units and to maintain the uninterrupted supply of power in the country.

On the tariff side, meeting with implementing the revised emission norms would have the following impacts:

- I. Additional capital expenditure because of installations to meet the revised norms
- II. Increase in Operation & Maintenance expenses.
- III. Increase in Auxiliary Power Consumption of power stations
- IV. Disruption in power generation during installation phase.
- V. Fixed cost during shut down period for installation.

Impact in tariff would depend upon the technology adopted for meeting the norms.

(c): To comply with the new norms without disrupting power supply situation in the country, a phased implementation plan from 2018 to 2022 for installation of FGD in plants for a capacity of 1,61,402 MW (414 Units) and upgradation of ESP in plants for a capacity of 64,525 MW (222 units) was prepared by Central Electricity Authority (CEA) in consultation with the stakeholders and this plan was submitted to MoEF&CC on 13.10.2017. Based on the directions received from MoEF&CC, the Central Pollution Control Board (CPCB) has issued directions to Thermal Power Plants to ensure compliance.

Government is committed for implementation of new environment norms by Thermal power plants in a phased manner. MOP has recommended MOEF&CC that Units having completed 25 years of operational life and where FGD and emission control is not possible may be allowed to operate for limited number of hours, subject to meeting the efficiency norms to be prescribed by Government, to meet the balancing/peaking requirement to maintain continuous power supply in the grid.

\*\*\*\*\*

#  
  
#  
  
#  
  
#  
  
#  
  
#

#  
#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3732  
TO BE ANSWERED ON 09.08.2018

PLAN TO GENERATE POWER

3732. SHRI M.I. SHANAVAS:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government has drawn up a plan to generate power and make it available to all people in the country, if so, the details thereof; and
- (b) whether millions of people still do not have electricity connections in their homes and places of work, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : As on 30.06.2018, the installed generation capacity is about 344 Giga Watt (GW) which is more than sufficient to meet the peak power demand of the country of around 170 GW.

As of now, the generation capacity is more than the demand in the country. However, taking into account the future projections of demand, Generation capacity addition of 47855 MW of coal based capacity, 406 MW Gas, 6823 MW Hydro and 3300 MW Nuclear capacity is likely to be commissioned during 2017-2022. The renewable energy capacity is targeted to be 175 GW by 2021-22.

Government of India has also launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana –“Saubhagya” to achieve universal household electrification. As on 06.08.2018, there are 21.92 crore households in the country; of these 19.42 crore households (88.57%) have been electrified and all the remaining 2.50 crore households (11.42%) are targeted for electrification under the ongoing Pradhan Mantri Sahaj Bijli Har Ghar Yojana –“Saubhagya” by 31<sup>st</sup> March, 2019.

\*\*\*\*\*

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3736  
TO BE ANSWERED ON 09.08.2018

INVESTMENT IN POWER SECTOR

3736. ADV. JOICE GEORGE:

Will the Minister of POWER  
be pleased to state:

- (a) whether India is likely to attract massive investments in the power generation sector in the five year period between 2017 and 2022 for setting up projects across thermal, hydro, nuclear and renewable segment;
- (b) if so, the details thereof;
- (c) whether the Government has received any positive signs of foreign investment in the sector; and
- (d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) to (d) : As per National Electricity Plan notified on 28.03.2018, a total capacity addition of 58,384 MW from conventional sources has been envisaged for the period 2017-2022, consisting of 47,855 MW of coal based power stations, 406 MW of gas based power stations, 6,823 MW of hydro power stations and 3,300 MW of nuclear stations. Besides this, there has been a big thrust by the Government of India for setting up renewable power generation capacity of 1,75,000 MW by the year 2022, out of which 1,17,756 MW is expected to be set up during the period 2017-2022.

Based on the above, the total fund requirement for the period 2017-2022 is estimated to be Rs.11,55,652 Crore, which also includes the likely expenditure on projects coming up during 2022-2027.

Department of Industrial Policy & Promotion (DIPP), Ministry of Commerce, Government of India notifies the 'Consolidated FDI Policy' from time to time to encourage the foreign investment which includes power sector also.

The detail of Financial-Year wise Foreign Direct Investment (FDI) reported through Equity Inflow for power sector from FY 2014-15 to 2017-18 is as under:

Financial Year	FDI in US\$ Million
2014-15	707.04
2015-16	868.80
2016-17	1112.98
2017-18	1621.00

The Government of India has launched Ujjwal DISCOM Assurance Yojana (UDAY) in 2015 with an objective to improve the operational and financial efficiency of the State DISCOMs which is expected to attract investment in power sector.

\*\*\*\*\*

#

#

#

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3746  
TO BE ANSWERED ON 09.08.2018

FUEL SHORTAGE

†3746. SHRI KAUSHALENDRA KUMAR:  
SHRI RAJESH RANJAN:

Will the Minister of POWER  
be pleased to state:

- (a) whether several thermal power plants in the country are struggling with the problem of shortage of coal, if so, the details thereof;
- (b) whether the transportation of coal is getting impacted due to the shortage in the required number of wagons, if so, the details thereof;
- (c) whether the production at thermal power plants is not getting affected due to this problem;
- (d) whether the coal is not being supplied to several thermal power plants in Delhi like Badarpur, Jhajjar and Dadri in full quantity; and
- (e) if so, the details thereof and the action being taken by the Government in this regard?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) to (e): As the growth in supply of coal to power sector by domestic coal companies including captive mines have been around 15.1% during the current year 2018-19 (upto June 18), the power plants in the country have been able to meet the electricity demand in the country and also improve the coal stock from 7.26 MT as on 19.10.2017 to 15.95 MT as on 01.08.2018.

There is consistent growth in the coal based generation during 2018-19 as compared to previous year. The cumulative generation growth during April-June, 2018 as compared to same period last year was 5.3%.

The number of plants with critical (coal stock less than 7 days)/ super critical coal stock (coal stock less than 4 days) has also reduced from 30 as on 01.04.2018 to 11 as on 01.08.2018.

Domestic coal companies have been supplying coal to the power plants in Delhi. The status of coal stock available at the Badarpur, Jhajjar and Dadri thermal power plants, as on 01.08.2018 is given at Annex.

The coal supply to the power plants and coal stock position is regularly monitored by Ministry of Power (MoP), Ministry of Coal (MoC) & Ministry of Railways (MoR) at the highest level. Secretary (MoP), Secretary (MoC) and the Member (Traffic), Ministry of Railways monitor the coal supply position. Hon'ble Minister of State (I/C) of Power & NRE has also taken meetings to review the coal supply position. An Inter-Ministerial Sub-Group comprising representatives of Ministry of Coal, Ministry of Power, Ministry of Railways, CEA, Coal India Limited (CIL) and Singareni Collieries Company Limited (SCCL) monitors the coal supply position on weekly basis. Based on the decision taken in the meeting, CIL/SCCL augment supply of coal and the Railways supply adequate number of rakes to the power plants having less coal stock.

\*\*\*\*\*

#

#

#

ANNEX

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO. 3746 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

#

#

Daily coal requirement and coal stock available at the Badarpur, Jhajjar and Dadri thermal power plants, as on 01.08.2018

Plant Name	Daily Requirement (in '000T)	Stock (in '000T)
Badarpur	6.05	11.70
Jhajjar	12.87	94.81
Dadri	17.25	39.51

\*\*\*\*\*

#

#

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3750  
TO BE ANSWERED ON 09.08.2018

FUNDING PATTERN FOR ELECTRIFICATION

3750. ADV. NARENDRA KESHAV SAWAIKAR:

Will the Minister of POWER  
be pleased to state:

- (a) the details of targets fixed and achievements made under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY);
- (b) the details of funding pattern under the Yojana i.e., Central share and State share;
- (c) whether the execution of the Yojana have been found to be very slow in several States of the country;
- (d) if so, the details thereof; and
- (e) whether the Government proposes to issue some advisory to these States for speedier implementation of the Yojana, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

#

(a) & (b) : Under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) all the inhabited un-electrified census villages have been electrified across the country as on 28.04.2018. Targets and achievements, as on 30.06.2018 under DDUGJY is as given below :-

Sl. No.	Particulars	Target	Achievement
1.	Feeder Separation - 11 KV	159771 Ckm	32881 Ckm
2.	System Strengthening - (a) Distribution Transformers (b) 11 KV lines (c) LT lines (d) New sub-stations (e) Augmentation of sub-stations	409989 Nos 109112 Ckm 122303 Ckm 1825 Nos 1693 Nos	82741 Nos. 33212 Ckm 62227 Ckm 487 Nos. 699 Nos.
3.	Metering - (a) Consumers (b) Feeders (c) Distribution Transformers	14889629 Nos 29336 Nos 376234 Nos	4869724 Nos. 5185 Nos. 64028 Nos.



The funding pattern of the scheme envisages 60% grant from Government of India in respect of States other than special category (85% for the Special Category States i.e. all North Eastern States including Sikkim, J&K, Himachal Pradesh, Uttarakhand).

Minimum 10% (5% for Special Category States) is contributed through own sources by the State Government / State Power Utility and the balance 30% (10% for Special Category States) is Loan or own sources by the State Government / State Power Utility. The loan is generally financed by Power Finance Corporation/Rural Electrification Corporation Limited.

Additional grant upto 15% (5% in case of Special Category States) by conversion of 50% of loan component will be provided by Government of India on achievement of prescribed milestones such as timely completion, timely electrification of households, reduction in AT&C losses & upfront release of revenue subsidy by State Government.

(c) to (e) : Under DDUGJY, electrification works are under progress except in some of the cases due to delay in forest & railway clearances, land acquisition for sub-stations, Right of Way (RoW) issues, providing BPL lists, law & order issues including naxal problem and difficult terrain. The progress is monitored regularly in Review, Planning and Monitoring (RPM) meetings and ways and means for expediting works are suggested.

A mechanism has been put in place at District, State and Central levels for effective monitoring of rural electrification. DDUGJY projects are reviewed at District level by District Development Co-ordination & Monitoring Committee namely DISHA (administered by Ministry of Rural Development), headed by senior most Hon'ble Member of Parliament (Lok Sabha), at the State level through State Level Standing Committees (SLSC), headed by Chief Secretary of the State and by the Inter-ministerial Monitoring Committee, headed by Secretary (Power) at national level.

\*\*\*\*\*

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3752  
TO BE ANSWERED ON 09.08.2018

ELECTRIFICATION IN BACKWARD AREAS

3752. SHRI BADRUDDIN AJMAL:

Will the Minister of POWER  
be pleased to state:

- (a) whether a number of villages in the country particularly in backward areas still remain unelectrified;
- (b) if so, the details of such villages, State/UT-wise;
- (c) the time by which all the villages in the country are likely to be electrified and all BPL houses are provided electricity connection;
- (d) the detail of funds allocated to the States/UTs for rural/BPL electrification during last three years; and
- (e) if so, the details thereof, State/UTwise?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) to (c) : As reported by the States, all inhabited census villages in the country including backward areas stands electrified on 28.04.2018. Further, Government of India have launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana –“Saubhagya” in September 2017, with the objective to achieve universal household electrification by providing last mile connectivity and electricity connections to all households in rural and all poor households in urban areas. All remaining un-electrified households including Below Poverty Line (BPL) households are targeted for electrification by 31st March, 2019.

(d) & (e) : Funds are released against sanctioned projects in installments based on the reported utilisation of amount in the previous installment(s) and fulfillment of stipulated conditionalities under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) schemes. Grant of Rs.21,527 crore and Rs.1,541 crore has been disbursed to the States during the last three years under DDUGJY and during last year under Saubhagya Scheme, respectively. The State-wise details are given at Annexure-I and Annexure-II.

\*\*\*\*\*

## ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (d) & (e) OF UNSTARRED QUESTION NO. 3752 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

#

State-wise details of grant disbursed under DDUGJY during the last three years.

(Rs. in crore)

Sl. No.	Name of the State	2015-16	2016-17	2017-18	Total
1	Andhra Pradesh	31	128	165	324
2	Arunachal Pradesh	31	101	81	213
3	Assam	338	598	401	1,337
4	Bihar	710	1,292	763	2,765
5	Chhattisgarh	279	126	552	957
6	Gujarat	58	110	143	312
7	Haryana	-	-	45	45
8	Himachal Pradesh	28	-	-	28
9	J&K	-	-	65	65
10	Jharkhand	-	327	862	1,189
11	Karnataka	44	145	204	393
12	Kerala	-	134	87	221
13	Madhya Pradesh	439	421	598	1,457
14	Maharashtra	43	257	143	443
15	Manipur	7	-	33	76
16	Meghalaya	-	26	58	83
17	Mizoram	19	14	42	75
18	Nagaland	48	21	24	93
19	Orissa	514	1,079	366	1,959
20	Punjab	-	-	15	15
21	Rajasthan	253	349	782	1,383
22	Sikkim	-	-	18	18
23	Tamil Nadu	77	110	2	189
24	Telangana	5	-	60	93
25	Tripura	49	-	62	189
26	Uttar Pradesh	1,249	2,262	3,149	6,660
27	Uttarakhand	71	16	33	121
28	West Bengal	305	273	241	819
29	Puducherry	-	1	-	1
30	Andaman Nicobar	-	-	1	1
	Grand Total	4599	7932	8995	21527

#

\*\*\*\*\*

#

#

## ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (d) & (e) OF UNSTARRED QUESTION NO. 3752 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

#

State-wise grant released under Saubhagya scheme		
Sl. No.	State	(Rs. in crore)
1	Assam	42
2	Bihar	115
3	Chhattisgarh	43
4	J&K	2
5	Jharkhand	70
6	Kerala	15
7	Madhya Pradesh	260
8	Maharashtra	15
9	Manipur	6
10	Nagaland	5
11	Odisha	76
12	Uttar Pradesh	864
13	Uttarakhand	13
14	West Bengal	14
	Total	1,541

\*\*\*\*\*

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3757  
TO BE ANSWERED ON 09.08.2018

POWER THEFT

†3757. SHRI SUSHIL KUMAR SINGH:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government has reviewed the situation regarding transmission losses and theft of power in the country;
- (b) if so, the details thereof;
- (c) whether the Southern parts of the country especially Kerala and Gujarat suffer from lesser power cuts as compared to Uttar Pradesh, Bihar and Jharkhand, if so, the details thereof;
- (d) whether the Government has collected the detail from States and Union Territories in this regard during the last one year and the current year with a view to bridge the gap between the demand and supply of power as well as curbing the loss/ theft of power; and
- (e) if so, the details thereof, State/ UT-wise?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

#

(a) & (b) : The Government of India monitors Aggregate Technical & Commercial (AT&C) losses of State Power Distribution Utilities which include the losses on account of theft also. The All India Aggregate Technical & Commercial (AT&C) losses for the year 2013-14, 2014-15 and 2015-16 are 22.62%, 25.72% and 23.98% respectively.

(c) to (e) : As per the information available, the demand-supply gap (energy not supplied) during last year 2017-18 and current year 2018-19 (upto June, 2018) including the States of Kerala, Gujarat, Uttar Pradesh, Bihar and Jharkhand is enclosed at Annexure.

Distribution of electricity is carried out by the States and their Utilities and they take appropriate measures to reduce AT&C losses in their system. Government of India has launched several schemes such as Integrated Power Development Scheme (IPDS), Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Ujwal DISCOM Assurance Yojana (UDAY) to enable States to improve their Distribution Infrastructure, which includes measures to reduce losses due to technical reasons and theft.

\*\*\*\*\*

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) TO (e) OF UNSTARRED QUESTION NO. 3757 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

#

Power Supply Position for 2018-19 (Provisional)				
State / System / Region	Energy			
	April, 2018 - June, 2018			
	Energy Requirement (MU)	Energy Supplied (MU)	Energy not Supplied (MU) (%)	
Chandigarh	457	457	0	0
Delhi	9,889	9,881	8	0.1
Haryana	14,025	14,025	0	0.0
Himachal Pradesh	2,370	2,354	16	0.7
Jammu & Kashmir	4,838	3,873	966	20.0
Punjab	14,320	14,307	13	0.1
Rajasthan	19,345	19,201	144	0.7
Uttar Pradesh	32,502	32,258	243	0.7
Uttarakhand	3,670	3,626	44	1.2
Northern Region	1,01,417	99,983	1,434	1.4
Chattisgarh	6,358	6,353	5	0.1
Gujarat	30,788	30,775	13	0.0
Madhya Pradesh	16,633	16,633	0	0.0
Maharashtra	42,183	42,181	2	0.0
Daman & Diu	665	665	0	0.0
Dadar Nagar Haveli	1,597	1,597	0	0.0
Goa	1,159	1,159	0	0.0
Western Region	99,382	99,363	19	0.0
Andhra Pradesh	15,879	15,857	22	0.1
Telangana	14,143	14,120	23	0.2
Karnataka	16,762	16,736	26	0.2
Kerala	6,354	6,329	25	0.4
Tamil Nadu	28,999	28,960	39	0.1
Puducherry	732	729	3	0.4
Lakshadweep	12	12	0	0
Southern Region	82,868	82,732	137	0.2
Bihar	7,884	7,794	90	1.1
DVC	5,604	5,561	43	0.8
Jharkhand	2,117	2,076	41	1.9
Odisha	8,232	8,222	11	0.1
West Bengal	13,876	13,803	73	0.5
Sikkim	119	119	0	0.1
Andaman- Nicobar	87	81	6	7
Eastern Region	37,833	37,575	258	0.7
Arunachal Pradesh	205	202	3	1.5
Assam	2,355	2,239	115	4.9
Manipur	199	196	3	1.6
Meghalaya	420	420	0	0.0
Mizoram	148	146	2	1.6
Nagaland	219	194	25	11.5
Tripura*	381	369	12	3.2
North-Eastern Region	3,928	3,766	162	4.1
All India	3,25,428	3,23,418	2,009	0.6
# Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these ,does not form part of regional requirement and availability				
* Excludes the supply to Bangladesh.				

#

#

#

#

Power Supply Position for 2017-18				
	Energy			
State/ System/ Region	April, 2017 - March, 2018			
	Energy Requirement (MU)	Energy Supplied (MU)	Energy not Supplied (MU) (%)	
Chandigarh	1,610	1,601	9	1
Delhi	31,826	31,806	19	0.1
Haryana	50,775	50,775	0	0.0
Himachal Pradesh	9,399	9,346	53	0.6
Jammu & Kashmir	18,808	15,050	3,759	20.0
Punjab	54,812	54,812	0	0.0
Rajasthan	71,194	70,603	591	0.8
Uttar Pradesh	1,20,052	1,18,303	1,749	1.5
Uttarakhand	13,457	13,426	31	0.2
Northern Region	3,71,934	3,65,723	6,211	1.7
Chhattisgarh	25,916	25,832	84	0.3
Gujarat	1,09,984	1,09,973	12	0.0
Madhya Pradesh	69,925	69,925	0	0.0
Maharashtra	1,49,761	1,49,531	230	0.2
Daman & Diu	2,534	2,534	0	0.0
Dadar Nagar Haveli	6,168	6,168	0	0.0
Goa	4,117	4,117	0	0.0
Western Region	3,68,405	3,68,080	326	0.1
Andhra Pradesh	58,384	58,288	96	0.2
Telangana	60,319	60,235	83	0.1
Karnataka	67,869	67,701	168	0.2
Kerala	25,002	24,917	85	0.3
Tamil Nadu	1,06,006	1,05,839	166	0.2
Puducherry	2,668	2,661	7	0.3
Lakshadweep	47	47	0	0
Southern Region	3,20,248	3,19,642	606	0.2
Bihar	27,019	26,603	417	1.5
DVC	21,549	21,373	176	0.8
Jharkhand	7,907	7,753	154	1.9
Odisha	28,802	28,706	96	0.3
West Bengal	50,760	50,569	191	0.4
Sikkim	485	484	0	0.1
Andaman- Nicobar	328	299	29	9
Eastern Region	1,36,522	1,35,489	1,034	0.8
Arunachal Pradesh	799	788	10	1.3
Assam	9,094	8,779	315	3.5
Manipur	874	827	46	5.3
Meghalaya	1,557	1,553	3	0.2
Mizoram	497	488	9	1.7
Nagaland	794	774	20	2.5
Tripura	2,602	2,553	49	1.9
North-Eastern Region	16,216	15,763	453	2.8
All India	12,13,326	12,04,697	8,629	0.7
# Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these, does not form part of regional requirement and availability				

Source: CEA

\*\*\*\*\*

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3765  
TO BE ANSWERED ON 09.08.2018

SAUBHAGYA

†3765. SHRIMATI DARSHANA VIKRAM JARDOSH:

Will the Minister of POWER  
be pleased to state:

- (a) the names of the State which have implemented Saubhagya Yojana;
- (b) the details of those entitled to receive benefits under the said scheme;  
and
- (c) the number of people benefited under the said scheme, State-wise?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) : The Saubhagya scheme is a national scheme, and all States which have unelectrified households are to implement it.

(b) : All the remaining un-electrified households in rural areas and all poor households in urban areas are entitled to receive benefits under the scheme.

(c) : As reported by the States, 101.56 lakh households have been electrified across the country, as on 06.08.2018, since launch of Saubhagya scheme. The State-wise details are given at Annexure.

\*\*\*\*\*



ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3765 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

#

State-wise details of electrification of households as per Saubhagya Portal

(As on 06.08.2018)

No.	State	Total Saubhagya
1	Uttar Pradesh	23,22,927
2	Odisha	5,65,275
3	Jharkhand	6,17,983
4	Bihar	20,36,905
5	Assam	3,92,363
6	Rajasthan	3,86,464
7	Madhya Pradesh	17,54,180
8	Karnataka	1,48,989
9	Telangana	81,177
10	Chhattisgarh	4,59,985
11	Uttarakhand	19,819
12	Jammu & Kashmir	7,721
13	West Bengal	4,63,837
14	Maharashtra	5,42,927
15	Meghalaya	39,509
16	Tripura	78,569
17	Arunachal Pradesh	2,531
18	Manipur	34,148
19	Nagaland	30,505
20	Haryana	10,393
21	Himachal Pradesh	3,468
22	Mizoram	4,740
23	Sikkim	3,707
24	Andhra Pradesh	1,13,021
25	Gujarat	31,569
26	Puducherry	912
27	Punjab	386
28	Tamil Nadu	2,170
Total		1,01,56,180

\*\*\*\*\*

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3770  
TO BE ANSWERED ON 09.08.2018

NTPC EQUITY

3770. ADV. M. UDHAYAKUMAR:

Will the Minister of POWER  
be pleased to state:

- (a) whether the NTPC has acquired 27.36% equity in two power units in Bihar;
- (b) if so, the details thereof;
- (c) whether the NTPC has any further plans to acquire stake in any other power units in the country and if so, the details thereof;
- (d) whether this is being done with a view to enhance the power generation capacity of NTPC; and
- (e) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : NTPC has acquired 27.36% equity of Bihar State Power Generation Company Ltd. (BSPGCL) in Kanti Bijlee Utpadan Nigam Limited (KBUNL) and 50% equity of BSPGCL in Nabinagar Power Generating Company Limited (NPGCL). With these acquisitions, NTPC now has 100% stake in KBUNL and NPGCL.

(c) to (e) : NTPC is open to acquiring stake in any power project, which is beneficial to both the sides. NTPC acquires stake in any power project when the acquisition is expected to bring in more value to the company presently or in future from commercial, financial, operational or execution point of view.

\*\*\*\*\*

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3776  
TO BE ANSWERED ON 09.08.2018

AC TEMPERATURE

3776. SHRIMATI VASANTHI M.:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government proposes to make 24 degree Celsius as the mandatory lowest default temperature setting for air conditioners within a few months;
- (b) if so, the details thereof;
- (c) whether the Government has held discussions with the air conditioner manufacturers in this regard, if so, the details thereof;
- (d) whether this initiative is being taken to save energy, if so, the details thereof; and
- (e) the other steps proposed to be taken up by the Government to save electricity?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) to (d) : At present, there is no proposal to make 24 °C (degree Celsius) as the mandatory lowest default temperature setting for air conditioners. However, with an objective to promote energy conservation in space cooling, Bureau of Energy Efficiency (BEE), under the guidance of Ministry of Power, have developed voluntary guidelines recommending air conditioning temperature setting at optimal level of 24-26 °C. These guidelines have been recommended for implementation in large commercial establishments, such as, Hotels, Airports, public office complexes and large institutions. To take forward this initiative, a meeting was held with the manufacturers of Air Conditioner (AC) on 22<sup>nd</sup> June 2018, wherein it was suggested to explore the technical feasibility for default temperature setting of AC at 24 °C.

It is estimated that an increase in air conditioning temperature of room by 1 °C, saves about 6% of electricity. Generally, air conditioning temperature is set between 20-21 °C, whereas the ideal/optimal temperature is 24-26 °C. Change in air conditioning temperature from 20 °C to 24 °C, will save about 24% electricity. This will reduce emissions and thereby be good for the environment; it will save money, and it is also good for health.

.....2.

(e) : An outreach awareness programme for promoting energy conservation in space cooling through optimum temperature settings has been initiated for disseminating information regarding the benefits of optimum temperature setting in AC, apart from other measures that can be adopted by consumers for saving energy. Some of the other steps taken by the Government to save electricity include:-

- i. Standard & Labeling (S&L) Programme for appliances to provide the consumer an informed choice about the energy saving and thereby the cost saving potential of the relevant marketed product.
- ii. Labeling of energy efficient agriculture pumpsets upto a connected load of 15 KW.
- iii. Prescription of specific energy consumption norms for energy intensive industries notified as designated consumers and implemented through Perform, Achieve and Trade (PAT) Scheme.
- iv. Formulation of Energy Conservation Building Code (ECBC) for energy efficiency improvement in commercial buildings.
- v. Design-guidelines for energy efficiency in multi-storied residential buildings.
- vi. Demand Side Management (DSM) in Municipal, Household, Agriculture and Small & Medium Enterprises (SME) sectors.
- vii. Promotion of energy efficient LED lamps through Unnat Jyoti by Affordable LEDs for All (UJALA) and Street Lighting National Programme (SLNP).
- viii. Promotion of Energy Efficient Fans and Agriculture pumpsets.

\*\*\*\*\*

#  
#  
#  
#  
#  
#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3778  
TO BE ANSWERED ON 09.08.2018

CAPACITY ADDITION BY NTPC

3778. DR. P. VENUGOPAL:

Will the Minister of POWER  
be pleased to state:

- (a) whether NTPC's overall power generation capacity has reached 52,000 MW, after the commissioning of the 800 MW generating unit in its Kudgi plant;
- (b) if so, the details thereof;
- (c) whether NTPC is currently building an additional capacity of over 20,000 MW at multiple locations in the country; and
- (d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : With the commissioning of 3<sup>rd</sup> unit of Kudgi Super Thermal Power Station, Karnataka, the present installed capacity of NTPC Group (including its Joint Ventures and Subsidiaries) is 53,651 MW. The details are enclosed at Annexure-I.

(c) & (d) : NTPC is currently building an additional capacity of 19,751 MW at multiple locations in the country. The details are enclosed at Annexure-II.

\*\*\*\*\*

#

#

#

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3778 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

Installed capacity of NTPC

Sl. No.	Stations	State	Installed Capacity (MW)
I. NTPC's own capacity			
Coal based stations			
1	Simhadri I & II	Andhra Pradesh	2000
2	Bongaigaon Unit 1&2	Assam	500
3	Kahalgaoon I & II	Bihar	2340
4	Barh-II	Bihar	1320
5	Sipat I & II	Chhattisgarh	2980
6	Korba I, II & III	Chhattisgarh	2600
7	Lara Stage I Unit 1	Chhattisgarh	800
8	Badarpur	Delhi	705
9	Kudgi	Karnataka	2400
10	Mouda-I & II	Maharashtra	2320
11	Solapur-I	Maharashtra	660
12	Vindhyachal-I,II,III,IV&V	Madhya Pradesh	4760
13	Talcher I & II	Odisha	3000
14	Talcher TPS	Odisha	460
15	Ramagundam I, II, & III	Telangana	2600
16	Rihand I,II & III	Uttar Pradesh	3000
17	Singrauli I&II	Uttar Pradesh	2000
18	Dadri I & II	Uttar Pradesh	1820
19	Unchahar I, II, III & IV	Uttar Pradesh	1550
20	Tanda	Uttar Pradesh	440
21	Farakka I, II & III	West Bengal	2100
Total (Coal)			40,355
Combined Cycle Gas/Liquid fuel based stations			
1	Jhanor-Gandhar-I	Gujarat	657
2	Kawas-I	Gujarat	656
3	Faridabad	Haryana	432
4	Kayamkulam-I	Kerala	360
5	Anta-I	Rajasthan	419
6	Dadri	Uttar Pradesh	830
7	Auraiya-I	Uttar Pradesh	663
Total (Gas/Liquid)			4,017
Hydro stations			
1	Koldam	Himachal Pradesh	800
Total (Hydro)			800
Renewable stations			
1	A&N Solar	Andaman & Nicobar	5
2	Ananthapuramu Solar	Andhra Pradesh	250
3	Rojmal Wind	Gujarat	50

#

4	Faridabad Solar	Haryana	5
5	Rajgarh	Madhya Pradesh	50
6	Mandsaur Solar	Madhya Pradesh	250
7	Talcher Solar	Odisha	10
8	Bhadla Solar	Rajasthan	260
9	Ramagundam Solar	Telangana	10
10	Dadri Solar	Uttar Pradesh	5
11	Unchahar Solar	Uttar Pradesh	10
12	Singrauli Solar	Uttar Pradesh	15
13	Singaruli Small Hydro	Uttar Pradesh	8
	Total (Renewable)		928
	NTPC's own capacity		46,100
II. Power projects under Joint venture/ Subsidiary			
Coal based stations			
(a)Subsidiary			
1	Muzaffarpur-KBUNL	Bihar	610
2	Nabinagar - BRBCL	Bihar	500
(b)Joint ventures			
1	Bhilai-NSPCL	Chhattisgarh	574
2	Jhajjar-APCPL	Haryana	1500
3	Rourkela-NSPCL	Odisha	120
4	Vallur-I-NTECL	Tamil Nadu	1500
5	Meja- MUNPL	Uttar Pradesh	660
6	Durgapur-NSPCL	West Bengal	120
	Total (Coal)		5584
Combined Cycle Gas/Liquid based stations			
1	RGPPL	Maharashtra	1967
	Total (Gas/Liquid)		1,967
	Total (JV+Subsidiary)		7551
	Grand total (I+II)		53,651

KBUNL: Kanti Bijlee Utpadan Nigam Limited

BRBCL: Bharatiya Rail Bijlee Co. Ltd.

NSPCL: NTPC SAIL Power Company Private Limited

APCPL: Aravali Power Company Private Limited

NTECL: NTPC Tamil Nadu Energy Company Limited

MUNPL: MejaUrja Nigam Private Limited

RGPPL: Ratnagiri Gas and Power Private Limited

#

\*\*\*\*\*

#

#

## ANNEXURE-II

ANNEX REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 3778 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

Under Construction Power Projects of NTPC in India

Sl. No.	State/Union Territory	Project	Fuel Type	Capacity (MW)
NTPC owned Projects				
1.	Assam	Bongaigaon Unit -3	Coal	250
2.	Bihar	Barh-I	Coal	1980
3.	Chhattisgarh	Lara- Stage I Unit 2	Coal	800
4.	Jharkhand	North Karanpura	Coal	1980
5.	Madhya Pradesh	Khargone	Coal	1320
6.	Madhya Pradesh	Gadarwara-I	Coal	1600
7.	Maharashtra	Solapur Unit 2	Coal	660
8.	Odisha	Darlipalli-I	Coal	1600
9.	Uttar Pradesh	Tanda-II	Coal	1320
10.	Telangana	Telangana	Coal	1600
11.	Uttarakhand	Tapovan- Vishnugad	Hydro	520
12.	Uttarakhand	LataTapovan	Hydro	171
13.	West Bengal	Rammam-III	Hydro	120
Sub Total				13921
Subsidiary/Joint Venture Projects				
14.	Jharkhand	Patratu, PVUNL	Coal	2400
15.	Bihar	Nabinagar, BRBCL Unit 3 & 4	Coal	500
16.	Bihar	Nabinagar, NPGCPL	Coal	1980
17.	Uttar Pradesh	Meja, MUNPL Unit 2	Coal	660
18.	Odisha	Rourkela PP-II	Coal	250
19.	West Bengal	Durgapur Power Project III	Coal	40
Sub Total				5830
Grand Total (MW)				19,751

#

#

\*\*\*\*\*

#

#



GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3793  
TO BE ANSWERED ON 09.08.2018

SURPLUS POWER

3793. SHRI P. KUMAR:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government aims to make our country electricity surplus;
- (b) if so, the details thereof;
- (c) whether the Government is considering for reduction of electricity tariffs/prices in the domestic consumption; 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 AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : As on 30.06.2018, the installed generation capacity is about 344 Giga Watt (GW) which is more than sufficient to meet the peak power demand of the country of around 170 GW occurred during the current year 2018-19 (upto July, 2018).

As of now, the generation capacity is more than the demand in the country. However, taking into account the future projections of demand, Generation capacity addition of 47855 MW of coal based capacity, 406 MW Gas, 6823 MW Hydro and 3300 MW Nuclear capacity is likely to be commissioned during 2017-2022. The renewable energy capacity is targeted to be 175 GW by 2021-22.

(c) & (d) : Supply and Distribution of electricity at affordable rate and providing subsidy, if any, to consumers in a State/ UT falls within the purview of respective State Government/State Electricity Regulatory Commission and State Power Utility(ies). Thus for reduction of electricity tariff the State Government can give subsidy to any class of consumers including domestic consumers, to the extent they consider appropriate as per provision of Section 65 of the Electricity act, 2003 as well Clause 8.3 of the Tariff Policy.

\*\*\*\*\*

#  
#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3806  
TO BE ANSWERED ON 09.08.2018

PROCUREMENT OF ELECTRICITY BY PFC

3806. KUMARI SUSHMITA DEV:  
SHRI JYOTIRADITYA M. SCINDIA:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Power Finance Corporation (PFC) has launched a pilot scheme to procure electricity under medium term agreement from commissioned power plants without Power Purchase Agreements;
- (b) if so, the details in this regard and the reasons for not entering into Power Purchase Agreements by PFC with the power plants;
- (c) whether the Union Government has issued any guidelines/instructions to be followed by PFC and the power plants in this regard; and
- (d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) to (d) : The Government of India has notified the Guidelines for 'Procurement of Electricity under a Pilot Scheme for medium term through PFC Consulting Limited as Nodal Agency and PTC India Limited as Aggregator' on 10<sup>th</sup> April, 2018. The scheme provides for procurement of 2500 MW power for medium term i.e. 3 (three) years from the generating companies having coal based Power Plants which are already commissioned and without having a Power Purchase Agreement.

The scheme provides that PTC India Limited, would sign an Agreement for Procurement of Power with the Successful Bidder(s) and back to back Power Supply Agreement with the Distribution Licensee(s). The Guidelines and Standard Bidding Documents envisages minimum off take of power from these Generating Companies to the extent of 55% of the Contracted Capacity.

PFC Consulting Limited (PFCCL), a wholly owned subsidiary of Power Finance Corporation Limited (PFC), as the nodal agency, issued the tender document on 1<sup>st</sup> May, 2018 on Discovery of Efficient Electricity Price (DEEP) Portal as per the Guidelines and SBDs of the Pilot Scheme. As of now, the proposal is at the bidding stage.

\*\*\*\*\*

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3814  
TO BE ANSWERED ON 09.08.2018

HYDEL POWER PROJECTS ON MAHI RIVER

†3814. SHRI MANSHANKAR NINAMA:

Will the Minister of POWER  
be pleased to state:

- (a) the total number of hydel power projects proposed to be launched on Mahi river in Madhya Pradesh and Gujarat including Rajasthan;
- (b) the details of established capacity of these hydel power projects along with probable date of their commencement;
- (c) the steps taken by the Government to complete these projects expeditiously; and
- (d) the names of the agencies which are implementing the hydel power projects?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) : At present, neither any Hydel Power Project (above 25 MW) is under construction on Mahi River in Madhya Pradesh and Gujarat including Rajasthan nor any Detailed Project Report (DPR) for construction of any Hydel Power Project (above 25 MW) on Mahi river has been received in Central Electricity Authority (CEA) for concurrence.

(b) to (d) : Do not arise.

\*\*\*\*\*

#

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3831  
TO BE ANSWERED ON 09.08.2018

ELECTRIFICATION PROJECTS FUNDED BY THE GOVERNMENT

3831. SHRI HARISH MEENA:

Will the Minister of POWER  
be pleased to state:

(a) the number of Centrally funded rural electrification projects put on hold in Rajasthan State due to conflict over guidelines and subsidy clarity between State and Union Government agency particularly in Dausa and Alwar districts; and

(b) the steps taken by the Government to resolve these conflicts and complete the projects in due course ?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : There is no conflict over guidelines and subsidy clarity between Rajasthan State and Union Government in the execution of electrification work under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY).

\*\*\*\*\*

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3833  
TO BE ANSWERED ON 09.08.2018

FUNDS TO POWER PROJECTS

3833. SHRI MOHD. ASRARUL HAQUE:

Will the Minister of POWER  
be pleased to state:

- (a) the details of the funds provided by the financial institutions for various power projects in the country including Bihar, project-wise during the last three years;
- (b) whether financial institutions and banks opt/tend to finance thermal power projects as compared to hydro power projects;
- (c) if so, the reaction of the Government thereto;
- (d) whether the funding pattern for the power projects has been in line with the New Hydro Policy, 2008 and Tariff Policy which aim to correct the skewed hydro-thermal ratio; and
- (e) 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 AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) : Any credit information cannot be disclosed as prescribed under section 45 E of the Reserve Bank of India Act, 1934, which provides for the obligation of a bank or financial institution to maintain secrecy about the affairs of its constituents.

(b) & (c) : Funds to projects, including power projects, are given based on factors such as commercial viability, techno economic viability, credibility of promoters etc. No discrimination in funding of projects has been reported to this Ministry.

(d) & (e) : The Hydro Policy, 2008, and Tariff Policy 2016 do not mention funding pattern for projects. However, under the Tariff Policy 2016, appropriate Commission is required to develop suitable regulatory framework for incentivizing the developers of hydro electric projects for using long-term financial instruments in order to reduce tariff burden in initial years. Power Finance Corporation (PFC) and Rural Electrification Corporation (REC) have started long-term financing of Hydro Electric Projects with term loans of up to 20 years or more.

\*\*\*\*\*

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3844  
TO BE ANSWERED ON 09.08.2018

DE-ALLOCATION OF POWER FROM NTPC

3844. SHRI NAGENDRA KUMAR PRADHAN:

Will the Minister of POWER  
be pleased to state:

- (a) whether Ministry of Power proposes to notify the de-allocation of allocated power from the upcoming NTPC stations located outside Odisha except the allocation from North Karanpura Super Thermal Plant Station; and
- (b) if so, the details thereof and if not, the reason therefor?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : Based on the consent given by the states, NTPC has commissioned power stations for the benefit of its beneficiary states. Accordingly, Power Purchase Agreements have been signed between the States including Odisha and NTPC.

Government of Odisha, vide letter dated 28th June, 2014 has surrendered power from NTPC stations located outside the States. The request of Government of Odisha had been sent to all the States for availing this power and the letter has also been posted on the website of Ministry of Power with a request that the willing States may give their consent to avail such power.

As per CERC regulations, the surrendered power can be re-allocated to other beneficiaries if they give their consent to avail such power.

Based on the requests received from Uttar Pradesh, 155 MW from New Nabinagar Unit-I surrendered by Odisha was allocated to Uttar Pradesh. At present, Ministry of Power does not have any other request by other beneficiary States to avail the surrendered power of Odisha from other Central Generating Stations.

\*\*\*\*\*

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3868  
TO BE ANSWERED ON 09.08.2018

PENALTY FOR LOAD SHEDDING

3868. SHRI KAMAL NATH:  
SHRI JYOTIRADITYA M. SCINDIA:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government has recently announced that power distribution companies or discoms have to pay penalty for load shedding in any area across the country;
- (b) if so, the details thereof;
- (c) whether the Aggregate Transmission and Commercial (AT&C) losses claimed by any of the discoms would not be reimbursed;
- (d) if so, the reasons therefor; and
- (e) the details of Union Government's new power policy and the time by which it is likely to be announced?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) to (e) : The Central Government in the proposed draft amendments to the National tariff policy, 2016 has included the provision for imposition of penalties on the Distribution companies for power cuts other than force majeure conditions or technical faults by Appropriate Commission. In the draft amendments to the tariff policy, it has been proposed to stipulate that the State Electricity Regulatory Commissions and Joint Electricity Regulatory Commissions shall not consider AT&C losses exceeding 15% for determination of tariff after 31.03.2019.

The details of proposed amendments to tariff policy are given at Annexure. The proposed amendments are under finalisation on the basis of comments received from various stakeholders.

\*\*\*\*\*

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO. 3868 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

#

### Proposed Amendments in Tariff Policy

The proposed Amendments in Tariff Policy include amendments in provisions related to Generation, Transmission and Distribution of electricity. The focus is to make 24x7 uninterrupted power supply to all consumers, improve efficiency in the operation of distribution business, addressing certain constraints faced in implementing change-in-law provisions, issues in open access, compliance and related aspects, Tariff design related issues including simplification of tariff categories and rationalization of retail tariff. Highlights of certain key proposed amendments are as follows:

- Consumer should not be asked to pay the price of inefficiencies of the Discom, therefore AT&C Losses in excess of 15% shall not be passed on to the consumers but shall be borne by Discom.
- 24 hours supply of adequate and uninterrupted power may be ensured to all categories of consumers by March, 2019 or earlier. In case of power cuts other than in force majeure conditions or technical faults an appropriate penalty, as determined by the SERC shall be levied on the Distribution Company and credited to the account of the respective consumers.
- Standards of performance for Distribution Licensee to include continuity and reliability of supply, quality of supply, timeframe for disposing application for connection/ disconnection/enhancement or reduction of connected load and complaints of disruption in supply
- Subsidy to any category of consumers would be required to be given through Direct Benefit Transfer i.e. directly in the bank account of such consumers.
- Appropriate Commission would ensure that cross-subsidies are reduced and the tariff for all consumer categories are brought within  $\pm 20\%$  of the average cost of supply effective from 1st April 2019 or earlier.
- Simplification of tariff categories and rationalization of retail tariff.
- Suitable provisions for promotion of Electric Mobility- No licence would be required for setting up any charging stations for Electric Vehicles.

\*\*\*\*\*

#

#

#



#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3869  
TO BE ANSWERED ON 09.08.2018

LOSSES BY BURNT TRANSFORMERS

†3869. SHRI JAI PRAKASH NARAYAN YADAV:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government has estimated the financial loss caused by malfunctioning of electricity transformers in all the States and Union Territories of the country;
- (b) if so, the details thereof, State-wise;
- (c) whether the Government is considering to minimize such losses along with protecting electricity transformers by using online power transformers monitoring system based on 'internet of things'; and
- (d) if so, the time which same is likely to be done along with the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

#

(a) & (b) : Electricity is a concurrent subject and it is the responsibility of concerned Distribution Companies (DISCOMs) to supply quality and reliable power to consumers which requires the efficient functioning of Distribution Transformers. The performance of DISCOMs is monitored by the respective State Electricity Regulatory Commission (SERC) and they have issued Standard Operating Procedures (SOPs) to be followed by DISCOMs which also include the time limit for rectification of burnt/malfunctioning Distribution transformers. The financial losses caused by the malfunctioning of Distribution Transformers in states and UT's are not monitored at the central level.

(c) & (d) : As per the Central Electricity Authority (CEA) Regulations on Technical Standards for Construction of Electrical Plants and Electric Lines, 2010 and Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2010, all the transformers are required to comply with all the protective measures including installation of requisite protective devices. Further, the Central Electricity Authority Regulation on Technical Standards for Construction of Electrical Plants and Electric Lines has provision for condition monitoring of substations and switchyards equipment of 132 kV and above voltage level. Internet of Things (IoT) technology is not under consideration for the online monitoring at the present.

\*\*\*\*\*

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3889  
TO BE ANSWERED ON 09.08.2018

ELECTRIFICATION IN BIHAR

†3889. SHRIMATI RAMA DEVI:

Will the Minister of POWER  
be pleased to state:

- (a) whether several rural areas in Sheohar district of Bihar have not been electrified yet;
- (b) if so, the number of villages of the said district that have not electrified so far; and
- (c) the steps being taken for electrification of all villages of the said district?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

#

(a) to (c) : As reported by the State, all inhabited census villages in Bihar including in the district Sheohar stands electrified on 28.04.2018.

\*\*\*\*\*

#

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3900  
TO BE ANSWERED ON 09.08.2018

NEW SCHEME OF NTPC

3900. SHRI G. HARI:

Will the Minister of POWER  
be pleased to state:

- (a) whether the new scheme of the Government allowing thermal power generation companies to blend renewable energy to meet their existing contractual supply obligation may raise returns on equity for implementing power plants by 100-200 basis months, if so, the details thereof;
- (b) whether companies such as NTPC having coal dominated portfolios would benefit from it by neutralizing the perceived threat by competitive renewable power, if so, the details thereof;
- (c) whether the NTPC would gain more from the move as most of its power purchase agreements are on a cost plus basis, contrary to its private sector counterparts which have shifted largely to competitive bidding for tariff discovery; and
- (d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) : Government of India has issued a scheme on 5<sup>th</sup> April 2018 providing for flexibility in Generation and Scheduling of Thermal Power Stations to reduce emissions which enables Thermal Generating Companies to use generation from Renewable Energy sources to meet their supply obligations from thermal stations under existing contracts. The scheme is optional to the Generating Companies and can be used by them if found feasible. As per the scheme net gains arising out of such supply shall be shared between Generating Company and Beneficiaries in the ratio of 50:50. The returns to any generating company on account of the scheme would depend upon factors such as capacity of RE that is added under the scheme and the rate of RE power.

(b) : Presently, any new Renewable Energy (RE) power contracted by Discoms is through a process of competitive bidding. NTPC also intends to source RE power for this scheme through a competitive process. This scheme will provide an opportunity to power generators to optimally utilize generation from RE sources, help in reducing emissions and facilitate RE capacity addition.

(c) & (d) : The Scheme is applicable presently to thermal projects developed/ being developed under Section 62 of the Electricity Act. Therefore, the scheme applies equally to all projects – both NTPC projects and private sector IPPs whose tariff is regulated under section 62 of the Electricity Act.

\*\*\*\*\*

#

#

#

#

#

#

#

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3901  
TO BE ANSWERED ON 09.08.2018

TREATED SEWAGE WATER BY NTPC

3901. SHRIMATI K. MARAGATHAM:

Will the Minister of POWER  
be pleased to state:

- (a) whether the NTPC has signed pact with several authorities and local bodies to use treated sewage water for its thermal plants across the country;
- (b) if so, the details thereof;
- (c) whether the NTPC is pro-active towards continued environment conservation through adoption of the latest technologies; and
- (d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )  
#

(a) & (b) :# Yes, Madam. NTPC has signed agreement with NOIDA and Solapur Municipal Corporation for use of 80 million liters per day (MLD) and 52 MLD of treated sewage water in its Dadri and Solapur Super Thermal Power Plant respectively.

(c) & (d) : Yes, Madam. Various pro-active measures taken by NTPC for environment conservation are as follows:

- High Efficiency Electrostatic Precipitators (ESPs) to limit the particulate emission.
- Adoption of more efficient Ultra Super / Super Critical Technology in upcoming projects.
- Adoption of Renewable Energy/Hydro based technology for power generation.

- Continuous emission monitoring system to monitor emission on real time basis.
- Water Efficient High Concentrated Slurry Disposal (HCSD) system for fly ash disposal.
- Planted 34 million trees (approx.).
- Installing Flue Gas Desulphurization (FGD) system for reducing SO<sub>2</sub> emission.
- Dust extraction/suppression systems for reducing fugitive dust emission
- Low NOx burner for controlling NOx emission.
- Effluent management scheme comprising Sewage Treatment Plant (STP) / Effluent Treatment Plant (ETP) for achieving Zero Liquid Discharge (ZLD).
- Adoption of ACC (Air Cooled Condenser) based technology for water conservation.
- Greenbelt development in and around all of the plants to arrest fugitive emissions.

\*\*\*\*\*

GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3905  
TO BE ANSWERED ON 09.08.2018

ELECTRIFICATION IN UTTAR PRADESH

†3905. SHRI DEVENDRA SINGH BHOLE:

Will the Minister of POWER  
be pleased to state:

- (a) the number and details of the villages which have been electrified during the last two years in the country along with the number of remaining villages which are yet to be electrified ;
- (b) the district-wise details of remaining villages in Uttar Pradesh along with the time by which electrification is likely to be completed there;
- (c) the number of people belonging to BPL category in Uttar Pradesh who have been provided connection free of cost; and
- (d) the number of villages in Kanpur city and Dehat which have been electrified during the last two years and the number of free connections provided to BPL category?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

- (a): Under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), electrification works in 9,751 un-electrified villages were completed during the last two years i.e. 2016-17 to 2017-18. The State-wise and year-wise details are given at Annexure.
- (b): As reported by the State, all the inhabited census villages in Uttar Pradesh stand electrified on 28.04.2018.
- (c): Under DDUGJY, cumulatively, free electricity service connections to 32.36 lakh Below Poverty Line (BPL) households have been released in Uttar Pradesh, up to 30.06.2018.
- (d): As reported by the State, there were no un-electrified village in district Kanpur Nagar and Kanpur Dehat on 01.04.2015. Under DDUGJY free electricity service connections to 2,113 and 2,366 BPL households were released in District Kanpur Nagar and Kanpur Dehat respectively during the last two years i.e. 2016-17 to 2017-18.

\*\*\*\*\*

## ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3905 TO BE ANSWERED IN THE LOK SABHA ON 09.08.2018.

\*\*\*\*\*

#

STATE-WISE AND YEAR-WISE ELECTRIFICATION OF UN-ELECTRIFIED VILLAGES

Sl. No.	State	2016-17	2017-18
1	Arunachal Pradesh	175	854
2	Assam	1,218	572
3	Bihar	556	332
4	Chhattisgarh	294	348
5	Himachal Pradesh	27	-
6	J & K	5	35
7	Jharkhand	1,104	613
8	Karnataka	14	25
9	Madhya Pradesh	159	44
10	Manipur	121	77
11	Meghalaya	681	218
12	Mizoram	24	14
13	Nagaland	76	2
14	Odisha	1,092	544
15	Rajasthan	263	1
16	Tripura	17	-
17	Uttar Pradesh	162	9
18	Uttarakhand	18	43
19	West Bengal	9	5
	Total	6,015	3,736

#

\*\*\*\*\*

#

#

#

#

#



GOVERNMENT OF INDIA  
MINISTRY OF POWER

LOK SABHA  
UNSTARRED QUESTION NO.3907  
TO BE ANSWERED ON 09.08.2018

ELECTRIFICATION OF REMAINING VILLAGES

3907. SHRI R. DHRUVA NARAYANA:

Will the Minister of POWER  
be pleased to state:

- (a) whether the Government has the capacity to provide the remaining villages with power by the end of the year, if so, the details thereof; and
- (b) the steps being taken to provide electricity to the remaining 2.67 crore villages by the end of the year?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND  
NEW & RENEWABLE ENERGY

( SHRI R. K. SINGH )

(a) & (b) : As reported by the States, all inhabited census villages in the country stands electrified on 28.04.2018. Further, Government of India have launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana –“Saubhagya” with the objective to achieve universal household electrification by providing last mile connectivity and electricity connections to all households in rural and all poor households in urban areas. All remaining un-electrified households are targeted for electrification by 31st March, 2019. As on 30<sup>th</sup> June 2018, the installed generation capacity is about 344 Giga Watt (GW) which is more than sufficient to meet the present peak demand of around 170 GW in the country. However, taking into account the future projections of demand, Government of India has set a target of capacity addition of 8106.05 MW for year 2018-19 from conventional sources of energy. The target under renewable energy is for an installed capacity of 175 GW by 2021-22.

\*\*\*\*\*