

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.418
ANSWERED ON 15.12.2016

REVIEW OF PERFORMANCE OF STATE POWER UTILITIES

*418. SHRI B.S. YEDIYURAPPA:

Will the Minister of POWER
be pleased to state:

- (a) whether the Power Finance Corporation of India conducted review performance of State Power Utilities/DISCOMS;
- (b) if so, the details thereof and the outcome of the review; and
- (c) the steps taken/being taken by the Union Government on the basis of the outcome particularly to protect the interests of the household consumers?

A N S W E R

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

(SHRI PIYUSH GOYAL)

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

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO.418 ANSWERED IN THE LOK SABHA ON 15.12.2016 REGARDING REVIEW OF PERFORMANCE OF STATE POWER UTILITIES.

(a) & (b) : Yes, Madam. The Power Finance Corporation of India (PFC) conducts a review of State Power Utilities/DISCOMs and publishes the 'Report on Performance of State Power Utilities' annually, which covers state power utilities i.e. DISCOMs (including DISCOMs in Delhi and Odisha)/SEBs/PDs, GENCOs, TRANSCOs and Trading Companies. The review analyses operational and financial parameters of Utilities like profit/losses, Average Cost of Supply, Average Revenue on subsidy, Aggregate Technical & Commercial (AT&C) losses, Debts etc.

(c) : The Government of India has taken various steps to protect the interest of the household consumers like:-

- 39 Customer Care Centres have been commissioned under Integrated Power Development Scheme (IPDS).
- All India Short Code 1912 has been implemented to provide access to Power Distribution Companies' (DISCOMs') Customer Care Centres and lodge complaints.
- URJA App has been launched, to provide various customer centric services and real time information on various parameters to consumers.
- A scheme Ujwal DISCOM Assurance Yojana (UDAY) has been launched for operational and financial turnaround of DISCOMs, so that they can serve the consumers better.

GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.4608
ANSWERED ON 15.12.2016
EXEMPTION TO DISCOM

†4608. SHRI RAM CHARAN BOHRA:

Will the Minister of POWER
be pleased to state:

- (a) the details of the power tariff charged by the public/private sector thermal/Hydel power generation companies during each of the last three years and the current year along with the profit earned by the said companies, company-wise;
- (b) the details of the rates at which electricity is being sold to the big power consumers by these companies;
- (c) whether some of the power generation companies have more than doubled the power tariffs during the recent year; and
- (d) if so, the details thereof and the mechanism in place for regulating power tariff?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES
(SHRI PIYUSH GOYAL)

(a) to (d) : As per Section 79(1)(a) of the Electricity Act, 2003, the Central Electricity Regulatory Commission (CERC) is mandated to regulate tariff of generating companies owned or controlled by the Central Government and the generating companies, having composite scheme of generation and sale in more than one state. As per Section 86 of the Act, tariff for retail sale of electricity for different consumer categories is determined by the State Electricity Regulatory Commission (SERC) / Joint Electricity Regulatory Commission (JERC).

The guiding principles for determination of tariff are provided in sections 61, 62, 63 and 64 of the Electricity Act, 2003. One of the guiding principles for tariff determination, as stipulated in section 61 of the Act, is safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner.

The details of tariff, as determined by the CERC, during 2013-14, 2014-15 & 2015-16 is provided as Annexure-I, II & III respectively.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 4608 ANSWERED IN THE LOK SABHA ON 15.12.2016.

The details of tariff as determined by the Central Electricity Regulatory Commission during 2013-14

Tariff for Thermal Power Stations of DVC for the 2013-14

Sl. No.	Name of Generating Station	Installed Capacity (MW) as on 31.3.2013	Fixed charges as in Mar 14 (Paise/kWh)	Energy Charges (Paise/kWh) as in March, 2014	Total (Paise/KWh)
1	BTPS	630.00	123.00	172.60	295.60
2	CTPS	390.00	157.90	250.00	407.90
3	DTPS	350.00	135.10	339.50	474.60
4	MTPS (Unit 1 to Unit 3)	630.00	131.40	239.70	371.10
5	MTPS(Unit4)	210.00	176.90	239.70	416.60
6	MTPS (Unit 5 & Unit 6)	500.00	145.80	242.20	388.00
7.	CTPS (Unit 7 & Unit 8)	500.00	183.40	185.10	368.50

Tariff of Central Thermal Power Stations of NTPC, NLC & NEEPCO as on 31.03.2014

Sl. No.	Generating Station	Installed Capacity (MW) as on 31.3.2014	Fixed charges as in Mar 14 (Paise/ kWh)	Energy Charges (Paise/kWh) as in March, 2014	Total (Paise/kWh)
1: Coal Based thermal generating Stations of NTPC					
A.	Pit head Generating Stations				
1	Rihand STPS St-I	1000	82.06	150.20	232.26
2	Rihand STPS St-II	1000	94.26	147.10	241.36
3	Rihand STPS St-III	500	130.55	143.40	273.95
4	Singrauli STPS	2000	53.66	121.20	174.86
5	Vindhyachal STPS St-I	1260	64.76	137.60	202.36
6	Vindhyachal STPS St-II	1000	74.97	129.80	204.77
7	Vindhyachal STPS St-III	1000	112.07	130.00	242.07
8	Vindhyachal STPS St-IV	500	141.50	129.90	271.40
9	Korba STPS St- 1 & II	2100	53.88	91.70	145.58
10	Korba STPS-III	2100	157.88	90.70	248.58
11	Ramagundam STPS (St-I&II)	2100	60.62	221.40	282.02
12	Ramagundam STPS (St-III)	500	95.69	288.20	383.89
13	TalcherTPS	460	126.33	69.00	195.33
14	Talcher STPS (St-I)	1000	82.78	169.60	252.38
15	Talcher STPS (St-II)	2000	80.40	169.70	250.10
16	Sipat STPS Stage-I	1980	140.87	153.00	293.87
17	Sipat STPD Stage-II	1000	129.23	157.70	286.93
18	Korba STPS Stage-III	500	157.88	91.30	249.18
	Sub-Total (A)	22000			
B.	Non-Pit head Generating Stations				
19	FGUTPPTPS (St-I)	420	86.66	324.00	410.66
20	FGUTPP (St-II)	420	102.68	328.30	430.98
21	FGUTPP (St-III)	210	140.43	328.50	468.93
22	NCTP Dadri (St-I)	840	88.50	338.60	427.10
23	NCTP Dadri (St-II)	980	159.58	335.20	494.78
24	Farrakka STPS (St-I&II)	1600	79.96	298.90	378.86
25	Farrakka STPS (St-III)	500	168.52	296.20	464.72
26	TandaTPS	440	107.43	387.50	494.93
27	BadarpurTPS	705	84.14	439.40	523.54
28	Kahalgaon STPS (St-I)	840	96.87	312.00	408.87
29	Kahalgaon STPS (St-II)	1500	118.60	294.50	413.10
30	Simhadri (St-I)	1000	102.24	270.80	373.04
31	Simhadri (St-II)	1000	169.77	272.80	442.57
32	Mauda	1000	154.22	308.10	462.32
	Sub-Total (B)	10955			
	Total Coal (A+B)	32955			

Sl. No.	Name of Generating Station	Installed Capacity (MW) as on 31.3.2013	Fixed charges as in Mar 14 (Paise/kWh)	Energy Charges (Paise/kWh) as in March, 2014	Total (Paise/KWh)
Lignite Based thermal generating Stations of NLC					
1	TPS-I	600.00	87.70	256.90	344.60
2	TPS-II (St-I)	630.00	62.60	216.80	279.40
3	TPS-II (St-II)	840.00	63.80	216.80	280.60
4	TPS-I (Expansion)	420.00	124.00	202.80	326.80
5	CFBC based Barsingsar TPS	250.00	290.50	110.30	400.80
	Total	2740.00			
Gas/LNG/Liquid Based Stations of NTPC					
A	Using Natural Gas as Fuel (APM)				
1	Dadri CCGT	829.78	54.16	344.50	398.66
2	Faridabad	431.00	79.51	266.20	345.71
3	Anta CCGT	419.33	69.90	289.80	359.70
4	Auraiya GPS	663.36	52.84	332.10	384.94
5	Gandhar GPS	657.39	100.13	245.50	345.63
6	Kawas GPS	656.20	78.65	256.90	335.55
B	Using NAPM Gas as Fuel				
1	Gandhar GPS	657.39	100.13	338.50	438.63
2	Kawas GPS	656.20	78.65	344.20	422.85
C.	Using LNG as Fuel				
1	Dadri CCGT	829.78	54.16	1056.50	1110.66
2	Anta CCGT	419.33	69.90	878.70	948.60
3	Auraiya GPS	663.36	52.84	1067.20	1120.04
4	Faridabad	431.00	79.51	841.10	920.61
5	Gandhar GPS	657.39	100.13	1172.00	1272.13
6	Kawas GPS	656.20	78.65	1029.10	1107.75
D	Using Liquid Fuel (Naphtha/HSD) as Fuel				
1	Dadri CCGT	829.78	54.16	792.90	847.06
2	Faridabad	431.00	79.51	766.90	846.41
3	Anta CCGT	419.33	69.90	815.20	885.10
4	Auraiya GPS	663.36	52.84	1038.30	1091.14
5	Kayamkulam CCGT	359.58	86.20	1280.00	1366.20
6	Kawas Gas	656.20	78.65	886.40	965.05
Gas/Liquid Fuel Based Station of NEEPCO					
1	Agartala GPS	84	124.50	258.90	383.40
2	Assam GPS	291	146.70	197.80	344.50
	Total NEEPCO	375			

Composite Tariff of Hydro Stations under the purview of CERC

Sl. No.	Organization/Power Station	Installed Capacity	Composite Rate for 2013-14*
	NHPC:	MW	Rs/kWh
1	Baira siul	180	1.51
2	Loktak	105	2.73
3	Salal	690	0.92
4	Tanakpur	123	2.24
5	Chamera -1	540	1.91
6	Uri-I	480	1.50
7	Rangit	60	2.76
8	Chamera-II	300	2.58
9	Dhauliganga-I	280	2.79
10	Dulhasti	390	5.74
11	Teesta-V	510	2.22
12	Sewa -II	120	4.05
13	Chamera-III	231	3.53
14	Chutak	44	5.61
15	Uri-II	240	3.35
16	Nimmo Bazgo	45	5.91
	NEEPCO:		
1	Kopili Stg.I	200	0.79
2	Khandong	50	1.34
3	Kopili Stage-II	25	1.76
4	Doyang	75	4.06
5	Ranganadi	420	1.81
	NHDC		
1	Indira Sagar	1000	2.59
2	Omkareshwar	520	4.76
	THDC:		
1	Tehri stage-I	1000	4.63
2	Koteshwar	400	3.81
	SJVNL:		
1	Naptha jhakri	1500	2.59

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 4608 ANSWERED IN THE LOK SABHA ON 15.12.2016.

The details of tariff as determined by the Central Electricity Regulatory Commission during 2014-15

Fixed Charge & Energy Charge Data of thermal power stations

Sl. No.	Name of the Generating Station	Installed Capacity as in March 2015	Fixed Charges 2014-15	Energy Charges As on 31.03.2015	Total
		MW	P/kWh	P/kWh	P/kWh
Coal Based thermal generating Stations of NTPC					
A.	Pit head Generating Stations				
1	Rihand STPS Stage-I	1000	82.06	172.00	254.06
2	Rihand STPS Stage-II	1000	93.91	170.10	264.01
3	Rihand STPS Stage-III	1000	130.55	165.70	296.25
4	Singrauli STPS	2000	53.66	117.30	170.96
5	Vindhyachal STPS Stage-I	1260	64.76	171.20	235.96
6	Vindhyachal STPS Stage-II	1000	65.56	161.40	226.96
7	Vindhyachal STPS Stage-III	1000	112.07	161.10	273.17
8	Vindhyachal STPS Stage-IV	1000	141.50	161.30	302.80
9	Korba STPS stage-I & II	2100	53.37	105.10	158.47
10	Korba STPS stage-III	500	162.35	105.20	267.55
11	Ramagundam STPS Stage-I & II	2100	60.62	259.70	320.32
12	Ramagundam STPS Stage-III	500	95.69	269.80	365.49
13	Talcher TPS	460	126.33	135.60	261.93
14	Talcher STPS Stage-I	1000	84.55	145.00	229.55
15	Talcher STPS Stage-II	2000	80.54	145.00	225.54
16	Sipat STPS Stage-I	1980	140.88	138.00	278.88
17	Sipat STPS stage-II	1000	129.23	137.00	266.23
18	Barh-II	660		388.20	388.20
19	FGUTPP TPS Stage-I	420	87.41	291.40	378.81
20	FGUTPP Stage-II	420	90.73	291.40	382.13
21	FGUTPP Stage-III	210	139.84	291.40	431.24
22	NCTP Dadri Stage-I	840	90.52	392.10	482.62
23	NCTP Dadri Stage-II	980	159.54	367.10	526.64
24	Farrakka STPS Stage-I&II	1600	81.74	259.40	341.14
25	Farrakka STPS stage-III	500	168.52	257.10	425.62
26	Tanda TPS	440	112.86	351.80	464.66
27	Badarpur TPS	705	89.81	464.10	553.91
28	Kahalgaon STPS Stage-I	840	96.87	236.10	332.97
29	Kahalgaon STPS Stage-II	1500	121.34	222.90	344.24
30	Simhadri Stage-I	1000	101.50	294.00	395.50
31	Simhadri stage-II	1000	167.80	292.50	460.30
32	Mauda	1000	154.22	378.00	532.22
B.	Using Natural Gas as Fuel (APM)				
1	Dadri CCGT	829.78	54.16	401.60	455.76
2	Faridabad CCGT	431.00	79.51	328.00	407.51
3	Anta CCGT	419.33	69.90	340.40	410.30
4	Auraiya GPS	663.36	52.84	413.80	466.64
5	Gandhar GPS	657.39	100.13	326.50	426.63
6	Kawas GPS	656.20	78.65	332.00	410.65

C	Using NAPM Gas as Fuel				
1	Gandhar GPS	657.39	100.13	356.20	456.33
2	Kawas Gas	656.20	78.65	362.30	440.95
D	Using LNG as Fuel				
1	Dadri CCGT	829.78	54.16	1134.50	1188.66
2	Faridabad	431.00	79.51	0.00	79.51
3	Anta CCGT	419.33	69.90	954.10	1024.00
4	Auraiya GPS	663.36	52.84	1148.20	1201.04
5	Kawas Gas	431.00	78.65	1030.60	1109.25
6	Gandhar GPS	657.39	100.13	*0	
E	Using Liquid Fuel (Naphtha/HSD) as Fuel				
1	Dadri CCGT	829.78	54.16	*0	
2	Faridabad	431.00	79.51	*0	
3	Anta CCGT	419.33	69.90	*0	
4	Auraiya GPS	663.36	52.84	*0	
5	Kayamkulam CCGT	359.58	86.20	*0	
6	Kawas Gas	656.20	78.65	*0	

Neyvelli Lignite Corporator

Sl. No.	Name of the Generating Station	Installed Capacity as in March 2015	Fixed Charges	Energy Charges	Total
		MW	P/kWh	P/kWh	P/kWh
1	TPS-I	600.00	87.73	264.70	352.43
2	TPS-II (Stage-I)	630.00	62.08	221.30	283.38
3	TPS-II (Stage-II)	840.00	63.39	221.30	284.69
4	TPS-I (Expansion)	420.00	133.07	209.80	342.87
5	CFBC based Barsingsar TPS	250.00	255.79	126.20	381.99

DVC Stations for -2014-15

Sl. No.	Name of the Generating Station	Installed Capacity as in March 2015	Fixed Charges	Energy Charges	Total
		MW	P/kWh	P/kWh	P/kWh
1	BTPS	630.00	122.97	236.00	358.97
2	CTPS (1-3)	390.00	157.94	286.90	444.84
3	DTPS	350.00	135.13	284.80	419.93
4	DSTPS	1000.00	186.36	196.50	382.86
5	KTPS	1000.00	171.45	202.20	373.65
6	MTPS(Unit 1to Unit 4)	840.00	131.36	201.00	332.36
7	MTPS(Unit 5 & Unit 6)	500.00	171.87	205.10	376.97
8	MTPS(Unit 7 & Unit 8)	1000.00	168.15	207.90	376.05
9	CTPS(Unit 7 & Unit 8)	500.00	168.15	230.50	398.65

NEEPCO Stations for -2014-15

Sl. No.	Name of the Generating Station	Installed Capacity as in March 2015	Fixed Charges	Energy Charges	Total
		MW	P/kWh	P/kWh	P/kWh
1	Agartala GPS	84.00	126.78	346.70	473.48
2	Assam GPS	291.00	147.25	263.10	410.35

Composite Tariff of Hydro Stations under the purview of CERC			
Sl. No.	Organization / Power Station	Installed Capacity MW	Composite Rate for 2014-15 (Rs/kW)
NHPC			
1	Bairasiul	180	1.75
2	Loktak	105	3.26
3	Salal	690	1.01
4	Tanakpur	94.20	2.24
5	Chamera-I	540	2.01
6	Uri-I	480	1.50
7	Rangit	60	2.76
8	Chamera-II	300	2.63
9	Dhauliganga	280	2.79
10	Dulhasti	390	5.74
11	Teesta-V	510	2.22
12	Sewa -II	120	4.05
13	Chamera-III	231	3.98
14	Chutak	44	6.55
15	Teesta-III	132	6.80
16	Nimoo Bazgo	45	4.15
17	Uri-II	240	7.72
NEEPCO			
1	Kopili Stg.I	200	0.78
2	Khandong	50	1.28
3	Kopili Stage-II	25	1.76
4	Doyang	75	4.09
5	Ranganadi	405	1.97
NHDC			
1	Indira Sagar	1000	2.28
2	Omkareshwar	520	4.19
THDC			
1	Tehri stage-I	1000	6.05
2	Koteshwar	400	3.81
SJVNL			
1	Naptha jhakri	1500	2.59
2	Rampur	412	5.50
DVC			
1	MAITHAN	632	2.79
2	PANCHET	80	1.19
3	TILAIYA	4	4.85

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 4608 ANSWERED IN THE LOK SABHA ON 15.12.2016.

The details of tariff as determined by the Central Electricity Regulatory Commission during 2015-16

Sl. No.	Name of Station	Installed capacity (MW)	Nature	COD	AFC (Paise/kWh)	ECR (Paise/kWh)	Total Tariff (Paise/kWh)
1	Talcher-I	1000	Non-Pit	01-Jul-97	84.86	114.94	199.80
2	Singrauli STPS	2000	Pit-head	01-May-88	53.83	94.31	148.14
3	Tanda-I	440	Non-Pit	20-Feb-98	112.16	270.61	382.78
4	Rihand-II	1000	Pit-head	01-Apr-06	96.90	133.84	230.74
5	Simhadri-II	1000	Non-Pit	30-Sep-12	166.31	166.12	332.43
6	Simhadri-I	1000	Non-Pit	01-Mar-03	102.54	163.68	266.22
7	FGUTPS-II	420	Non-Pit	01-Jan-01	90.98	177.82	268.79
8	FGUTPS-I	420	Non-Pit	22-Mar-89	87.65	172.08	59.72
9	Udupi Power Plant	1200	Non-Pit	19-Aug-12	165.02	286.74	451.76
10	Korba-III	500	Pit-head	21-Mar-11	157.89	81.87	239.76
11	Vindhyachal-IV	1000	Pit-head	27-Mar-14	157.67	153.45	311.12
12	Mauda-I	1000	Non-Pit	30-Mar-14	195.16	436.72	631.87
13	Farakka-I&II	1600	Pit-head	01-Jul-96	81.97	217.95	299.92
14	Korba-I&II	2100	Pit-head	01-Jun-90	53.51	54.39	107.91
15	Rihand-I	1000	Pit-head	01-Jan-91	82.29	125.97	208.25
16	Farakka-III	500	Pit-head	04-Apr-12	168.52	280.62	449.14
17	Ramagundam-III	500	Non-Pit	23-Mar-05	95.96	108.81	204.77
18	Sipat-II	1000	Pit-head	01-Jan-09	129.58	65.29	194.87
19	Ramagundam-I&II	2100	Non-Pit	01-Apr-91	60.79	149.27	210.05
20	Kahalgaoon-I	840	Pit-head	01-Aug-96	97.13	192.13	289.26
21	Vindhyachal-III	1000	Pit-head	15-Jul-07	112.37	125.24	237.61
22	Talcher TPS	460	Pit-head	24-Mar-83	126.33	108.47	234.80
23	Vindhyachal-I	1260	Pit-head	01-Feb-92	64.94	132.68	197.62
24	Sipat-I	1980	Pit-head	01-Aug-12	140.88	136.21	277.09
25	Talcher-II	2000	Pit-head	01-Aug-05	80.86	114.94	195.80
26	Kahalgaoon-II	1500	Pit-head	20-Mar-10	119.80	174.24	294.04
27	Badarpur TPS	705	Non-Pit	01-Apr-82	81.64	209.36	291.00
28	NCTPS Dadri-I	840	Non-Pit	01-Dec-95	90.19	241.13	331.33
29	Vindhyachal-II	1000	Pit-head	01-Oct-00	64.94	125.24	190.18
30	FGUTPS-III	210	Non-Pit	01-Jul-07	141.35	177.16	318.51
31	NCTPS Dadri-II	980	Non-Pit	31-Jul-10	162.07	233.04	395.11
32	NTPC SAIL Bhilai Exp	500	Non-Pit	21-Oct-09	181.92	133.43	315.36

Tariff details for the year 2013-14 based on order issued up to 31.3.2016 pertaining to GAS Based Thermal Generating Stations.

S. No.	Name of Station	Installed capacity (MW)	COD	AFC (Rs. in lakh)	AFC (Paise/kWh)	ECR (Paise/kWh)	Total Tariff (Paise/kWh)
1	UNOSUGEN Power Plant	382.5	04-Apr-13	46,104.25	166.88	398.90	565.78
2	SUGEN Power Plant	1147.5	15-Aug-09	93,549.43	112.87	223.11	335.98
3	Faridabad GPS	431.586	01-Jan-01	24,769.64	79.46	161.97	241.43
4	Anta GPS	419.33	01-Aug-90	21,171.69	69.90	177.95	247.86
5	Dadri GPS	829.78	01-Apr-97	32,624.39	54.44	269.50	323.93
6	Jhanor Gandhar	657.39	01-Nov-95	47,540.54	100.13	261.33	361.45
7	Auraiya GPS	663.36	01-Dec-90	25,317.85	52.84	206.71	259.55
8	Kawas GPS	656.2	01-Nov-93	37,276.75	78.65	390.41	469.06
9	RGCCPP Kayamkulam	359.58	01-Mar-00	22,112.94	85.14	434.71	519.85
10	NTPC-ONGC, RGPP	1967.08	19-May-09	1,91,329.38	143.08	287.87	430.95

Composite Tariff of Hydro Stations under the purview of CERC

Composite Tariff of Hydro Stations under the purview of CERC for 2015-16		
NHPC		
1	Bairasiul	1.86
2	Loktak	3.46
3	Salal	1.05**
4	Tanakpur	2.80
5	Chamera-I	2.08
6	Uri-I	1.56
7	Rangit	3.41
8	Chamera-II	2.58
9	Dhauliganga	2.96
10	Dulhasti	5.71**
11	Teesta-V	2.32
12	Sewa -II	5.53**
13	Chamera-III	4.27
14	Chutak	8.44**
15	TLDP-III	6.90
16	Nimoo Bazgo	9.54**
17	Uri-II	4.87**
18	Parbati-III	5.48
NHDC		
1	Indira Sagar	3.48
2	Omkareshwar	5.32
THDC		
1	Tehri stage-I	5.68
2	Koteshwar	3.78
SJVNL		
1	Naptha jhakri	2.88
2	Rampur	3.22
NEEPCO		
1	Khandong	1.54
2	Kopili Stg.I	1.01
3	Doyang	5.25
4	Ranganadi	2.11
5	Kopili Stage-II	1.83
DVC		
1	MAITHAN	3.26
2	PANCHET	1.58
3	TILAIYA	4.96

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4609
ANSWERED ON 15.12.2016

UDAY

4609. SHRIMATI K. MARAGATHAM:
SHRI KESINENI NANI:
SHRI GAJENDRA SINGH SHEKHAWAT:
SHRI KANWAR SINGH TANWAR:

Will the Minister of POWER
be pleased to state:

- (a) whether a number of States have joined the Ujwal Discom Assurance Yojana (UDAY);
- (b) if so, the details thereof;
- (c) whether it is financially prudent to bail out distribution companies again and again using taxpayers' money when State Electricity Boards were supported under the Financial Restructuring Plan of 2001 and yet they are in a similar situation now, and if so, the details thereof and the justification therefor;
- (d) the manner in which the Union Government proposes to ensure accountability and monitoring of finances of distribution companies so that they are not in a similar situation again in the future; and
- (e) whether the Union Government proposes to permit State Governments for transfer of funds relating to UDAY Scheme in the form of loan (50%) instead of grant (75%) and equity (25%) as indicated in the UDAY scheme and 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,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : Yes, Madam. So far, seventeen States and one Union Territory viz. Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Rajasthan, Uttar Pradesh, Uttarakhand, Punjab and Puducherry have joined Ujwal DISCOM Assurance Yojana (UDAY).

.....2.

(c) : The dues of State Power Distribution Utilities are contingent liabilities of the States and UDAY recognizes this. The Financial Restructuring Plan (FRP) was formulated in the year 2012 and provided for financial support from the Government of India; however, under UDAY, no such financial support from the Government of India is envisaged.

(d) & (e) : Under UDAY, all participating DISCOMs/States have entered into a Memorandum of Understanding (MOU) with the Government of India, which includes operational and financial turnaround commitments in the form of well defined trajectories. UDAY incorporates several fiscal prudence measures on part of the participating States/DISCOMs, which include Banks and Financial Institutions (FIs) not funding any further losses; all loss financing to be carried out only within the defined loss trajectories; Working capital financing by Banks/FIs restricted to only 25% of last years revenue; and future takeover of DISCOM losses by the State Government in a graded manner.

UDAY provides that the transfer of 75% debt of DISCOMs taken over by the States during 2015-16 & 2016-17, is as a grant. UDAY further provides that in case the State is not able to absorb the interest burden of the entire grant immediately, the transfer of grant can be spread over three years, i.e 25% in each of the three years with the remaining transfer through State loan to the DISCOM. For States with high DISCOM debt, this period can be further relaxed by 2 years in consultation with the Ministry of Power.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4617
ANSWERED ON 15.12.2016

SCHEME TO ENERGY SECURITY PROGRAMME

4617. SHRI PR. SENTHIL NATHAN:
SHRI P.R. SUNDARAM:
SHRIMATI V. SATHYA BAMA:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government has any plans to expedite the "Green Corridor" projects to provide Grid Connectivity for green energy in the country;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) whether the Union Government has any special component scheme to provide support to States to implement the energy security programmes;
- (d) if so, the details thereof and the funds allocated during the last three years, State/ year-wise; and
- (e) the financial assistance received from the external funding agencies and international organizations to improve the energy security in the country, State/UT wise?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (e): In order to facilitate integration of large scale renewable generation capacity addition, a comprehensive scheme including Intra-State and Inter-State transmission system has been identified as a part of "Green Energy Corridors". Intra-State Transmission System is being implemented by respective State Transmission Utilities (STU) and Inter-State Transmission System is being implemented by POWERGRID.

Further, to integrate solar parks with the grid, Ministry of Power assigned POWERGRID to implement Inter-State transmission scheme for evacuation from eight (8) solar parks (7200 MW). Transmission scheme for six (6) solar parks (5750 MW) is already under implementation [Ananthapuram (1500 MW), Pavagada (2000 MW), Rewa (750 MW), Bhadla-III (500 MW), Bhadla-IV (250 MW), Essel Saurya (750 MW)]. Tender issued for Banaskantha Solar Park (700 MW), whereas Long Term Access (LTA) application for other MP solar park from the developer is awaited.

To evacuate power from the renewable capacity addition in renewable rich States (Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Maharashtra, Rajasthan, Madhya Pradesh and Tamil Nadu), transmission system strengthening, both Intra State and Inter State, along with setting up of Renewable Energy Management Centre (REMC) and the control infrastructure is being implemented under Green Energy Corridors (GEC).

For the funding of green energy corridors in both intra and inter State transmission projects, under the framework of cooperation between Govt. of India and Govt. of Germany, KfW Germany is providing soft loan to the tune of Euro One billion. Intra State transmission schemes under GEC are to be funded as 20% equity of the State Govt., 40% grant from National Clean Energy Fund (NCEF) and 40% soft loan, whereas, the inter State transmission schemes are to be funded as 30% equity by PGCIL and 70% as soft loan.

For Inter-state transmission projects pertaining to Part A, B and C of Green Energy Corridor, loan agreement for financial assistance of Euro 500 million from KfW, Germany has been signed by PGCIL and the projects are likely to be completed by 2018. Further, for implementation of transmission schemes under Green Energy Corridor-Part D, Powergrid has taken loan from ADB.

For Intra-state transmission projects under Green Energy Corridor; the States of Tamil Nadu, Rajasthan, Himachal Pradesh, Andhra Pradesh, Gujarat and Madhya Pradesh have signed the loan agreements from KfW, Germany for financial assistance of Euro 76 million, Euro 49 million, Euro 57 million, Euro 68 million, Euro 114 million and Euro 124 Million respectively.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4632
ANSWERED ON 15.12.2016

INCREASE IN ELECTRICITY TARIFF

4632. SHRI C.S. PUTTA RAJU:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government is contemplating to increase electricity tariffs of the Central generating stations after having consultations with the States, if so, the details thereof;
- (b) whether the Union Government has laid down a new policy to gradually increase electricity tariffs and if so, the details thereof;
- (c) whether the likely impact of increase in electricity tariffs on common men has been looked into in this regard, if so, the details thereof; and
- (d) whether Government is considering to provide financial help to the States to bail out the State Electricity Boards, if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (c) : As per the provisions given in sections 61 to 64 of the Electricity Act, 2003, Electricity Regulatory Commissions have been entrusted with the function of determination of tariff for generation, transmission and distribution. The tariff of generation companies owned by the Central Government is regulated by the Central Electricity Regulatory Commission (CERC). One of the guiding principles for tariff determination, as stipulated in section 61 of the Act, is safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner. Section 62 of the Act further provides for periodic tariff adjustment to take care of the variation in fuel price, as may be specified. Therefore, the Appropriate Commission specifies an appropriate price adjustment formula for recovery of the costs, arising on account of the variation in the price of fuel, power purchase etc. on monthly/quarterly basis for recovery of all prudent costs of the generating company and the licensee. The Central Government has no role in the determination of tariff.

(d) : The Central Government is not providing any financial help to States under UDAY scheme to bail out the State Electricity Boards. The outstanding debt of DISCOMs is the contingent liability of the States. UDAY envisages States taking over 75% of the debt of DISCOMs as existing on 30.09.2015 in 2015-16 and 2016-17.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4635
ANSWERED ON 15.12.2016

CONSUMPTION OF FOSSIL FUEL BY POWER SECTOR

4635. SHRI RAMSINH RATHWA:

Will the Minister of POWER
be pleased to state:

- (a) the details of amount of coal and other fossil fuels consumed by power sector during the last three years;
- (b) the quantum and value of coal imported by power sector during the period; and
- (c) the steps taken by the Union Government to replace fossil fuels with environment friendly options during the period?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : The amount of coal consumed by coal based power plants monitored in Central Electricity Authority (CEA) and the gas consumed as well as alternate fuel (Naphtha/High Speed Diesel) used by the gas based power plants, as reported by power utilities, during the last three years and the current year (upto Oct'16) is given at Annex-I.

(b) : The quantum of coal imported by power sector for blending with domestic coal as well as to meet the requirement of the imported coal based plants, as reported by power utilities, during the last three years and the current year (upto Oct'16) is given at Annex-II.

(c) : India is committed to construction of more and more renewable energy projects which is environment friendly as compared to fossil fuels. With the huge emphasis by Govt. of India on capacity addition of Renewable Energy Sources (RES), it is envisaged to replace conventional fossil fuels.

ANNEX-I

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 4635 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Year	Coal Consumption (Million Tonnes)	Gas supplied/ Consumed (MMSCMD)	Alternate fuel used (Kilo Litre)	
			Naptha	HSD
2013-14	489.4	27.1	306632.4	526.6
2014-15	530.4	25.2	253906.9	637.1
2015-16	545.9	28.3	107640.5	665.3
2016-17 (Upto Oct'16)	330.2	30.2	9200.0	71.0

(MMSCMD=Million Metric Standard Cubic Meter Per Day)

ANNEX-II

ANNEX REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 4635 TO BE ANSWERED IN THE LOK SABHA ON 15.12.2016.

Rrequirement of the imported coal based plants, as reported by power utilities, during the last three years and the current year (upto Oct'16)

Year	Coal Imported (Million Tonnes)
2013-14	80.0
2014-15	91.2
2015-16	80.6
2016-17 (Upto Oct'16)	40.0

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4636
ANSWERED ON 15.12.2016

PERFORMANCE REVIEW OF PRIVATE POWER DISTRIBUTION COMPANIES

4636. SHRI SIRAJUDDIN AJMAL:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government has conducted a performance review of the private power distribution companies;
- (b) if so, the details thereof; and
- (c) the steps taken by the Government to protect the consumers from harassment by these companies?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (c) : Electricity is a concurrent subject and the supply and distribution of electricity falls under the purview of respective State Government/State Power Utility. Government of India acts as a facilitator in supplementing the efforts of States to provide power to consumers in an improved manner.

Appropriate Electricity Regulatory Commissions have been entrusted with the responsibility of overseeing the performance of the distribution licensees. Under Section 86(1)(i) of the Electricity Act, 2003, the State Electricity Regulatory Commissions (SERCs), are empowered to Specify or enforce standards with respect to quality, continuity and reliability of service by licensees.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4637
ANSWERED ON 15.12.2016

EMPLOYEES IN CEA

4637. DR. MANOJ RAJORIA:

Will the Minister of POWER
be pleased to state:

- (a) the details of total number of employees working in the Central Electricity Authority and Public Sector Undertakings (PSUs) under the Ministry of Power including Scheduled Caste/ Scheduled Tribe (SC/ST) employees;
- (b) whether the posts reserved for SCs/ STs are vacant in the Central Electricity Authority and PSUs under Ministry of Power and if so, the details thereof; and
- (c) the action being taken by the Central Government for selection of candidates belonging to SC/ST on these posts?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : The details of total number of employees, including SC/ST employees, working in the Central Electricity Authority (CEA) and Public Sector Undertakings (PSUs), under the Ministry of Power and vacant posts of SCs/STs, are given below:-

Sl. No.	Name of Organization	Total Number of employees including SC/ST	Details of vacant posts reserved for SCs/STs
1.	Central Electricity Authority (CEA)	583	SC-10, ST-16
2.	National Thermal Power Corporation Ltd.(NTPC)	22356	SC-6, ST-153
3.	National Hydroelectric Power Corporation Ltd. (NHPC)	8248	SC-13, ST-15
4.	Power Grid Corporation of India Ltd. (PGCIL)	9228	SC-73, ST-44
5.	Power Finance Corporation Ltd. (PFC)	498	ST-02
6.	Rural Electrification Corporation (REC) Ltd.	580	ST-01
7.	North Eastern Electric Power Corporation (NEEPCO) Ltd.	2328	SC-198, ST-131
8.	Satluj Jal Vidyut Nigam Ltd. (SJVN Ltd.)	1714	SC-09, ST-01
9.	Tehri Hydro Development Corporation Ltd. (THDC)	1947	SC-01

(c) : The vacant posts including those reserved for SCs/STs in CEA are requisitioned for recruitment to UPSC/SSC, on regular basis. PSUs under the administrative control of Ministry of Power are advised, from time-to-time, to fill up the backlog/vacant posts of SCs and STs through Special Recruitment Drive (SRD).

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4638
ANSWERED ON 15.12.2016

T&D LOSSES

†4638. SHRIMATI JAYSHREEBEN PATEL:

Will the Minister of POWER
be pleased to state:

- (a) the percentage of transmission losses permissible presently;
- (b) the extent to which consumers are bearing the burden on account of transmission and distribution losses being incurred to the companies, State-wise;
- (c) the proportion in which States and consumers are bearing the burden of transmission losses; and
- (d) the steps being taken to bring down the transmission losses in the country?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : Presently, the percentage of transmission losses only are in the range of 2 to 4%, depending on the grid condition and availability of different sources of generation in the grid.

(b) & (c): As per the information available in Power Finance Corporation (PFC) report on "Report on Performance of State Power Utilities" the state-wise and utility-wise Aggregate Technical & Commercial (AT&C) losses for utilities selling directly to consumers for the years 2012-13 to 2014-15 is as given at Annex.

Respective State Electricity Regulatory Commissions (SERCs) take into account the AT&C losses to finalise the tariff for various categories of consumers.

(d) : As part of efforts to reduce transmission losses on Extra High Voltage (EHV) transmission lines, the transmission system is being planned with higher voltage level using 400 kV, 765 kV lines, especially for long distance transmission of power.

Electricity is a concurrent subject and distribution of electricity falls under the purview of the respective State Government/State Power Utility. It is the responsibility of distribution licensees to take steps to reduce AT&C losses. Central Government supplements their efforts by launching various schemes from time to time to achieve this objective.

ANNEX REFERRED TO IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO. 4638 ANSWERED IN THE LOK SABHA ON 15.12.2016.

AT&C Losses for Utilities Selling Directly to Consumers

Region	State	Utility	2012-13	2013-14	2014-15
Eastern	Bihar	BSEB	59.40		
		NBPDCL	50.85	41.93	41.76
		SBPDCL	45.77	48.70	45.28
		Bihar Total	54.64	46.33	43.99
	Jharkhand	JSEB	47.49	26.30	
		JBVNL			47.01
		Jharkhand Total	47.49	26.30	47.01
	Odisha	CESU	43.43	38.48	37.08
		NESCO	39.61	36.47	38.36
		SESCO	49.36	41.18	42.57
		WESCO	41.87	41.24	41.03
		Odisha Total	42.88	39.19	39.28
	Sikkim	Sikkim PD	53.51	71.23	42.37
		Sikkim Total	53.51	71.23	42.37
	West Bengal	WBSEDCL	34.43	32.05	35.35
	West Bengal Total	34.43	32.05	35.35	
	Eastern Total		42.04	36.24	39.64
North Eastern	Arunachal Pradesh	Arunachal PD	60.26	68.20	67.83
		Arunachal Pradesh Total	60.26	68.20	67.83
	Assam	APDCL	31.85	30.25	26.00
		Assam Total	31.85	30.25	26.00
	Manipur	Manipur PD	85.49	43.55	
		MSPDCL			49.62
		Manipur Total	85.49	43.55	49.62
	Meghalaya	MePDCL	41.71	39.77	34.69
		Meghalaya Total	41.71	39.77	34.69
	Mizoram	Mizoram PD	27.55	32.53	33.51
		Mizoram Total	27.55	32.53	33.51
	Nagaland	Nagaland PD	75.30	38.37	78.48
		Nagaland Total	75.30	38.37	78.48
	Tripura	TSECL	34.45	41.81	38.02
		Tripura Total	34.45	41.81	38.02
	North Eastern Total		39.97	35.92	35.29
Northern	Delhi	BSES Rajdhani	15.16	16.19	10.76
		BSES Yamuna	17.94	15.51	19.68
		TPDDL	13.12	9.75	10.31
		Delhi Total	15.22	14.09	12.90
	Haryana	DHBVNL	28.31	30.89	30.71
		UHBVNL	36.97	38.61	34.83
		Haryana Total	32.55	34.33	32.52
	Himachal Pradesh	HPSEB Ltd.	11.90	14.82	15.21
		Himachal Pradesh Total	11.90	14.82	15.21
	Jammu & Kashmir	J&K PDD	60.87	49.14	59.04
		Jammu & Kashmir Total	60.87	49.14	59.04
	Punjab	PSPCL	17.52	17.87	17.56
		Punjab Total	17.52	17.87	17.56
	Rajasthan	AVVNL	19.90	22.06	28.13
		JDVVNL	18.97	25.71	26.99
JVVNL		20.91	31.08	32.00	
	Rajasthan Total	20.00	26.77	29.28	

	Uttar Pradesh	DVVN	45.69	36.47	40.18
		KESCO	37.61	34.29	32.02
		MVVN	45.83	14.43	35.18
		Pash VVN	33.39	23.49	22.19
		Poorv VVN	52.37	20.09	42.91
	Uttar Pradesh Total		42.85	24.67	33.82
	Uttarakhand	Ut PCL	23.18	19.01	18.82
	Uttarakhand Total		23.18	19.01	18.82
Northern Total			28.89	24.86	28.06
Southern	Andhra Pradesh	APCPDCL	15.64	17.54	
		APEPDCL	10.15	6.57	7.67
		APNPDCL	13.09	20.80	
		APSPDCL	12.74	11.77	12.01
	Andhra Pradesh Total		13.70	14.77	10.55
	Karnataka	BESCOM	20.45	18.93	17.59
		CHESCOM	30.42	33.92	21.64
		GESCOM	18.28	30.45	21.25
		HESCOM	20.44	20.42	19.49
		MESCOM	14.57	14.83	15.72
	Karnataka Total		20.78	22.02	18.71
	Kerala	KSEB	12.32	11.45	
		KSEBL		22.99	17.64
	Kerala Total		12.32	16.48	17.64
	Puducherry	Puducherry PD	9.13	16.18	16.64
	Puducherry Total		9.13	16.18	16.64
	Tamil Nadu	TANGEDCO	20.71	22.35	24.74
	Tamil Nadu Total		20.71	22.35	24.74
	Telangana	TSNPDCL			16.49
		TSSPDCL			11.91
	Telangana Total				13.23
Southern Total			17.40	19.08	18.22
Western	Chhattisgarh	CSPDCL	25.12	23.17	27.84
	Chhattisgarh Total		25.12	23.17	27.84
	Goa	Goa PD	14.14	10.72	13.31
	Goa Total		14.14	10.72	13.31
	Gujarat	DGVCL	10.40	10.83	10.81
		MGVCL	14.94	14.77	11.47
		PGVCL	30.41	24.12	25.18
		UGVCL	14.37	9.10	10.21
	Gujarat Total		19.87	15.93	16.06
	Madhya Pradesh	MP Madhya Kshetra VVCL	29.97	29.60	32.47
		MP Paschim Kshetra VVCL	28.16	21.15	30.79
		MP Purv Kshetra VVCL	36.40	34.83	27.09
	Madhya Pradesh Total		31.15	28.03	30.26
	Maharashtra	MSEDCL	21.95	14.39	19.75
	Maharashtra Total		21.95	14.39	19.75
Western Total			23.36	18.37	21.59
Grand Total			25.48	22.58	24.62

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4678
ANSWERED ON 15.12.2016

ALLOCATION OF GAS FOR GAS BASED POWER GENERATION COMPANIES

4678. SHRI PONGULETI SRINIVASA REDDY:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government had recently conducted any auction for allocation and supply of gas for gas based power generation companies;
- (b) if so, the details thereof;
- (c) whether the State Governments have come forward to buy electricity produced by these companies;
- (d) if so, the details thereof and if not, the reasons therefor; and
- (e) whether the Government of Andhra Pradesh has asked the Central Government to reduce the price of power per unit from Rs. 4.70 to Rs. 4.00, if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (d) : Government of India has sanctioned a scheme for importing and supplying spot Re-gasified Liquefied Natural Gas (RLNG) in 2015-16 and 2016-17 for the stranded gas based power plants as well as for plants receiving domestic gas upto the target Plant Load Factor (PLF) selected through a reverse e-bidding process. The scheme provides for financial support from PSDF (Power System Development Fund). The scheme envisages sacrifices to be made collectively by all stakeholders, including the Central and State Governments by way of exemptions from applicable taxes and levies/duties on the incremental RLNG being imported for the purposes.

4 Phases of auction of e-bid RLNG have been completed so far and 4th Phase is presently under operation from 1st October, 2016 to 31st March, 2017. Details of successful power generator under 4th Phase auction along with the status of Power Purchase Agreement (PPA) are given at Annex.

(e) : Yes, Madam. A communication has been received from Government of Andhra Pradesh for reduction in the price for e-bid RLNG in the fourth phase from Rs. 4.70 to Rs. 4.00.

ANNEX

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 4678 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Name of Plants successful in 4th phase (1st October, 2016 to 31st March, 2017) of Auction under scheme for utilization of gas based generation capacity

Sl. No.	Name of Plants	Capacity (MW)	Status of PPA
1	Pioneer Gas Power Limited	388	PPA with Govt. of Telangana
2	M/s Panduranga Energy Systems Pvt. Limited	116	PPA not yet submitted
3	M/s GVK Industries Limited	220.5	PPA not yet submitted
4	Lanco Kondapalli Power Limited	1108	PPA not yet submitted
5	Ratnagiri Gas and Power Private Limited	1967	PPA with Railways
6	GMR Vemagiri Power Generation Limited	388.5	PPA not yet submitted
7	GAMA Infraprop Private Limited	225	PPA with Govt. of Uttarakhand.
8	Sravanthi Energy Private Limited	450	PPA with Govt. of Uttarakhand.
9	Beta Infratech Private Limited	225	PPA with Govt. of Uttarakhand.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4704
ANSWERED ON 15.12.2016

PER CAPITA CONSUMPTION OF POWER

4704. SHRI MALLIKARJUN KHARGE:

Will the Minister of POWER
be pleased to state:

- (a) whether per capita electricity consumption in the country is very low in comparison to almost all developed and developing countries despite constant increase in demand;
- (b) if so, the details thereof along with the reasons therefor; and
- (c) the names of the States and Union Territories of the country which have been electrified completely and the time by which complete electrification of the whole country is proposed?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b): Yes, Madam. As reported on International Energy Agency (IEA) website, the per capita electricity consumption of some of the developed and developing countries for the year 2012 & 2013 is given at Annex-I and Annex-II respectively. The per capita consumption of India, during 2012-13 and 2013-14, was 914 kWh and 957 kWh respectively.

The low per capita consumption is mainly due to large population, low per capita income and less access to electricity to a section of the population in the country.

(c) : The work of village electrification has been completed in the States/UTs of Chandigarh, Delhi, Haryana, Punjab, Daman & Diu, Dadra & Nagar Haveli, Goa, Gujarat, Maharashtra, Andhra Pradesh, Kerala, Lakshadweep, Puducherry, Tamil Nadu, Telangana, Andaman & Nicobar Islands and Sikkim.

The un-electrified villages in the remaining States/UTs are targeted to be completed by May 2018.

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 4704 ANSWERED IN THE LOK SABHA ON 15.12.2016.

PER CAPITA ELECTRICITY CONSUMPTION OF VARIOUS DEVELOPED COUNTRIES IN
2012 & 2013

Sl. No.	Per Capita Consumption (kWh)		
	Name of the Country	2012	2013
1	Canada	15558	15520
2	USA	12947	12987
3	Australia	10218	10067
4	Japan	7753	7836
5	France	7367	7382
6	Germany	7138	7022
7	Korea	10346	10428
8	UK	5452	5409
9	Russia	6602	6562
10	Italy	5277	5124
11	South Africa	4410	4328
12	Brazil	2509	2583
13	China	3475	3766
14	India*	884	914
15	World	2972	3026

Note :-

Basic data obtained from IEA Website (except) India.

* Per Capita Consumption= (Gross Electrical Energy Availability/Midyear Population).

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 4704 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Statement Showing Per Capita Consumption of Electricity (kWh) of Developing Countries & World for the years 2012 & 2013

Sl. No.	Name of the Country	Per Capita Consumption 2012	Per Capita Consumption 2013
1	Kuwait	16542	15905
2	United Arab Emirat	10175	10547
3	Chinese Teipei	N.A.	10458
4	Brunei Darussalam	8949	9553
5	Saudi Arabia	8763	9157
6	Oman	6520	6434
7	Montenegro	5412	5620
8	Gibraltar	5344	5545
9	Kazakhstan	5085	4893
10	Nederlands Antilles	4891	N.A.
11	Serbia	4371	4444
12	Malaysia	4313	4474
13	FYR of Macedonia	3625	3498
14	Libya	4805	3963
15	Ukraine	3641	3600
16	Belarus	3698	3648
17	Lebanon	3113	3780
18	Venezuela	3401	3231
19	People's Rep. of China	3475	3766
20	Bosnia & Herzegovina	3271	3214
21	Argentina	3027	3175
22	Kosovo	2860	2908
23	World	2972	3026
24	Uruguay	2933	2986
25	Turkey	2760	2761
26	Iran	2752	2888
27	Romania	2602	2495
28	Turkmenistan	2476	2602
29	Brazil	2509	2583
30	Jordan	2357	2350
31	Mexico	2098	2150
32	Thailand	2479	2487
33	Albania	1943	2532
34	Tajikistan	1732	1662
35	Georgia	1935	2070
36	Panama	1943	2007
37	Costarica	1896	1888
38	Syrian Arab Rep.	1169	953
39	Azerbaijan	2053	2092
40	Armenia	1838	1880
41	Egypt	1804	1812
42	Kyrgyzstan	1809	1887
43	Uzbekistan	1605	1637

44	Botswana	1611	1684
45	Mongolia	1604	1923
46	Jamaica	1198	1126
47	Namibia	1614	1641
48	Rep. of Moldova	1514	1353
49	Cuba	1376	1438
50	Tunisia	1411	1435
51	Iraq	1483	1817
52	Peru	1218	1278
53	Ecuador	1276	1327
54	Paraguay	1305	1400
55	Algeria	1203	1244
56	Colombia	1130	1153
57	Vietnam	1273	1306
58	Gabon	1081	1153
59	Dominican Rep.	1455	1499
60	El.Salvador	850	879
61	Morocco	888	878
62	India	884	914
63	Zimbabwe	596	560
64	DPR of Korea	654	660
65	Honduras	680	699
66	Indonesia	733	792
67	Phillippines	668	686
68	Bolivia	646	687
69	Zambia	600	767
70	Guatemala	539	563
71	Nicaragua	568	585
72	Sri Lanka	527	528
73	Mozambique	454	446
74	Pakistan	447	448
75	Ghana	348	386
76	Cameroon	262	278
77	Bangladesh	280	293
78	Angola	239	248
79	Cote d'Ivoire	255	269
80	Senegal	210	221
81	Yemen	177	259
82	Congo	180	231
83	Cambodia	206	220
84	Kenya	157	165
85	Nigeria	155	141
86	Sudan	159	209
87	Myanmar	152	164
88	Togo	147	150
89	Dem.Rep. of Congo	112	118
90	Benin	92	94
91	Nepal	119	128
92	United Rep. of Tanzania	101	91
93	Ethiopia	58	65
94	Eritrea	50	49
95	Haiti	50	49

Source- The above information has been downloaded from IEA's website www.iea.org
. Energy Indicators (Selected Indicators - 2012) expect for India

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4728
ANSWERED ON 15.12.2016

POWER GENERATION

4728. SHRI MUTHAMSETTI SRINIVASA RAO (AVANTHI):

Will the Minister of POWER
be pleased to state:

- (a) whether most of the power plants are running at lower capacity than their potential and if so, the details thereof;
- (b) whether the Government proposes to encourage use of induction cooking stoves;
- (c) if so, the details thereof;
- (d) the impact of large scale electrification of cooking energy needs on plant load factor and revenue sustainability of DISCOMS;
- (e) whether the cost towards creating a supply chain for cooking fuel is same in case of induction cooking stoves; and
- (f) if so, the details thereof and the comparative advantages/disadvantages in this regard?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : The capacity utilization of thermal power plant and nuclear generating units is expressed in terms of Plant Load Factor (PLF). The PLF of thermal and nuclear units mainly depends on planned outages and forced outages which may result due to age of units, availability of required quality and quantity of fuel, and other external constraints such as availability of transmission network and receipt of schedule from beneficiary DISCOMs. In case of Hydro power projects, the generation is influenced by the availability of water. The average PLF of thermal power plants coal/lignite during 2016-17 (April - October, 2016) was 59.17%.

(b) to (f) : In the National Energy Policy discussion, NITI Aayog has encouraged the use of appropriate electrical appliances including induction cooking stoves for cooking purpose. The electrification of cooking energy is likely to increase the PLF and revenue sustainability of Discoms. Electricity, as fuel for cooking, is safer and less polluting than biomass.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4729
ANSWERED ON 15.12.2016

POWER SHORTAGE DUE TO MONSOON FAILURE

4729. SHRI MULLAPPALLY RAMACHANDRAN:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government is aware of the power shortage being faced/going to be faced by States like Kerala due to lack of monsoon;
- (b) if so, the details thereof;
- (c) whether the Union Government has got any contingency plan to meet this power crisis being faced by various States and if so, the details thereof;
- (d) whether the Government of Kerala has sought any assistance to address the crisis situation; and
- (e) if so, the details thereof and the action taken thereon?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b): As reported by the state to Central Electricity Authority, during (April to November, 2016), the energy shortage in Kerala was 0.2%. The power supply position of Kerala during this year from Apr, 2016 to Nov, 2016 is given at Annex. There are no notified power cuts/restrictions on industrial and agricultural consumers in the state as per information furnished by the state.

(c): As reported by the states, during the current year 2016-17 (April-November), the demand & supply gap in the country, in terms of energy, has reduced to a marginal level of only 0.7% and majority of the States/UTs are experiencing demand & supply gap of even less than 0.7%. Electricity is a concurrent subject and states make their own plan to meet the power crisis. Central Government assists them if the state gives requisition for such power. Further, Central Government has taken joint initiative to prepare 24x7 Power for All plan for the states to meet their requirements.

(d) & (e): No request has been received from the Government of Kerala, for additional allocation of power from Central Generating Stations. However, total Transmission Capacity between North-East-West (NEW) to Southern region grid has been enhanced by 150 MW i.e. from 6650 MW to 6800 MW. Due to this, 150 MW Long Term Access (LTA) benefit has been passed on to Kerala.

ANNEX

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 4729 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Power supply position of Kerala during the current year (Apr, 2016 to Nov, 2016)

State	ENERGY (Nov*, 16)				ENERGY CUMULATIVE (Apr, 16 - Nov*, 16)			
	Requirement	Availability	Surplus(+)/ Deficit (-)		Requirement	Availability	Surplus(+)/ Deficit (-)	
	(MU)	(MU)	(MU)	(%)	(MU)	(MU)	(MU)	(%)
Kerala	1,939	1,937	-3.0	-0.1	16,081	16,056	-25	-0.2

* Provisional

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4730
ANSWERED ON 15.12.2016

DVC POWER PLANT

†4730. DR. RAVINDRA KUMAR RAY:

Will the Minister of POWER
be pleased to state:

- (a) whether expansion of DVC's Bajedeeh power plant in Jharkhand has been stopped and consequently the target of achieving 2000 MW power generation is not able to be fulfilled;
- (b) if so, the details thereof; and
- (c) the steps taken/proposed to be taken for the expeditious completion of expansion of the said power plant?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (c) : The Units under Stage I of Koderma Thermal Power Station at Jharkhand have been operationalised. Due to excess power in DVC System, there is no plan for expansion of Koderma Thermal Power Plant at present.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4741
ANSWERED ON 15.12.2016

SCHEMES TO ENCOURAGE HYDRO ELECTRIC PROJECTS

†4741. SHRI RATTAN LAL KATARIA:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government has formulated any scheme to encourage Hydro Electric Projects by allowing examination from competitive body upto 2022;
- (b) if so, the details thereof;
- (c) whether the Government has taken steps to solve the problems involved in the development of hydro-projects such as capital cost, rehabilitation and resettlement, period of construction etc.;
- (d) if so, the details thereof;
- (e) whether the Government has taken any decision to separate the hydro power from Renewable Purchase Obligation; and
- (f) if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : Under the revised Tariff Policy dated 28.01.2016, dispensations regarding exemption from Tariff Based Competitive Bidding, available to the developers of Hydro Power, have been extended upto 15.08.2022.

(c) to (f) : A number of remedial measures have been undertaken by the Government to incentivise the developers viz. provision of debt financing of longer tenure under National Electricity Policy, option of charging lower rate of depreciation vis-a-vis Central Electricity Regulatory Commission (CERC) norms, extending cost plus tariff regime for public and private sector hydro projects upto 15.08.2022. The Government has also decided to exclude hydro power from Renewable Purchase Obligation to hydro power projects above 25 MW.

GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.4746
ANSWERED ON 15.12.2016
POLICY FOR POWER SECTOR

4746. SHRI RAYAPATI SAMBASIVA RAO:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government has evaluated the energy requirement of the country for the next decade or so;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) the comparative percentage of different sources of energy including renewable energies, which are taking care of energy requirement of the country;
- (d) whether the Union Government proposes to frame a policy to resolve the issues relating to the power shortage in the country particularly in peak summers in cities; 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,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : Yes, Madam. As per 18th Electric Power Survey (EPS) Report, brought out by Central Electricity Authority, the electrical energy requirement of the country (Utilities), at power station bus bars, for the years 2021-22 and 2026-27 is given at Annex-I.

(c) : The comparative percentage of different sources of energy including renewable energy, which are taking care of energy requirement of the country is given at Annex-II.

(d) & (e): Electricity is a concurrent subject. Supply of electricity to all the consumers and frame a policy to resolve the issues relating to the power shortage particularly in peak summers at cities in a State / UT is within the purview of the respective State Government / State Power Utility. The Government of India supplements the efforts of the State Governments by establishing power plants in Central Sector through CPSUs and allocating power there from to them.

ANNEX-I

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 4746 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Electrical energy requirement of the country (Utilities), at power station bus bars, for the years 2021-22 and 2026-27

Year	Electrical Energy Requirement (MU)
2021-22	1904861
2026-27	2710058

ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 4746 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Generation Performance during April-October, 2016

Category-wise :	Generation (April-October, 2016) (BU)	% of Total Generation
Coal	518.947	70.3
Gas	29.834	4.0
Lignite	19.898	2.7
Diesel	0.170	0.0
Total Thermal	568.849	77.1
Hydro	88.307	12.0
Nuclear	22.136	3.0
Bhutan Import	4.909	0.7
Renewable	53.827	7.3
Total Generation :	738.027	

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4750
ANSWERED ON 15.12.2016

SYSTEM OF TRANSMITTING BULK POWER

4750. SHRI RAM CHARITRA NISHAD:

Will the Minister of POWER
be pleased to state:

- (a) whether a system for transmitting bulk power with a force of 1200 KV has been developed in the country and if so, the details thereof and the salient features of the new system; and
- (b) the manner in which it would be beneficial to the country?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : Towards indigenous development of 1200kV Ultra High Voltage Alternating Current (UHVAC) system, a Test Station has been established by Power Grid Corporation of India Limited (PGCIL) at Bina, Madhya Pradesh in partnership with Indian Equipment Manufacturers and Central Power Research Institute (CPRI). The Test Station is commissioned and is in operation under test setup. The operational experience of the test station would help in the establishment and operation of future 1200kV UHVAC commercial projects.

1200kV system shall help in transmitting bulk power of about 6000 Mega-Watts per circuit, which will help in optimal utilization of Right-of-Way required for transmission of power.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4751
ANSWERED ON 15.12.2016

CONFERENCE OF STATE MINISTERS OF POWER

4751. SHRI PARVESH SAHIB SINGH:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government has hosted a Conference of State Ministers of Power recently in order to review the implementation of the central schemes and programmes in the power sector;
- (b) if so, the details thereof;
- (c) the details of the suggestions made during the conference and the outcome thereof;
- (d) whether the Government has proposed any changes to the central schemes and programmes in pursuance of the said conference; and
- (e) if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (e) : Yes, Madam. The last Conference of Power, Renewable Energy and Mines Ministers of States and Union Territories (UTs) was held at Vadodara, Gujarat on 7th & 8th October, 2016, to review the implementation of the central schemes and programs in the Power, Renewable Energy, Coal and Mines Sectors. Based on the deliberations on Conference Agenda as well as suggestions made during the Conference, 58 resolutions were adopted. The resolutions adopted in the Conference are given at Annexure.

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO. 4751 ANSWERED IN THE LOK SABHA ON 15.12.2016.

RESOLUTIONS ADOPTED AT THE CONFERENCE OF POWER, RENEWABLE ENERGY AND MINES MINISTERS OF STATES AND UNION TERRITORIES (UTs) WAS HELD AT VADODARA, GUJARAT ON 7TH & 8TH OCTOBER, 2016

POWER DISTRIBUTION

- 1) States which have not yet joined Ujwal Discom Assurance Yojana (UDAY) and desire to do so, will give in-principal approval by 30th November, 2016 and finalize MoU latest by 31st December, 2016.
- 2) All states under UDAY will upload operational parameters monthly and financial parameters quarterly on UDAY portal for better monitoring.
- 3) States will award the works relating to electrification of un-electrified villages latest by 30th November 2016 and remaining works sanctioned under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) not later than 31st March 2017.
- 4) States will electrify all remaining un-electrified villages by 31st December, 2016 except those in Left Wing Extremism (LWE) areas and remote hilly regions, for which efforts will be made by the concerned States to electrify such villages by 1st May, 2017.
- 5) States reiterate to ensure access to electricity to 100 % households in 18452 villages by 15th August, 2017 by organizing camps in these villages with on-spot completion of necessary formalities and release of electricity connections on priority.
- 6) States also reiterate the timelines as shown below, agreed in the previous conference held in June 2016 to provide electricity access to 100% households in all the villages in India:

Sl. No.	State	Target
1.	West Bengal , Haryana, Kerala, Goa, Himachal Pradesh, Tamil Nadu and UTs	March 2017
2.	Maharashtra, Telangana and Chhattisgarh	March 2017 (Except LWE Areas) March 2018 (LWE Areas)
3.	Jammu & Kashmir	15th August 2017
4.	Sikkim	March 2018
5.	Assam, Odisha, Rajasthan, Madhya Pradesh	March 2018
6.	Bihar	20 lakh Households by March 2017 and all remaining households by December 2018
7.	Uttar Pradesh	90 Lakh Households by March 2018 and balance by March 2019
8.	Uttarakhand and other remaining States	December 2017

- 7) States will provide Feeder wise tagged consumer information as per the Common Data Format provided by REC Transmission Power Company Ltd by 15th November 2016.

- 8) States will integrate existing Meter Data Acquisition System (MDAS), DISCOM website & Call centers with Urja Mitra App and agree to provide customer information about outages through SMS by December 2016.
- 9) States will share Master data and Java Script Object Notation (JSON) formats of 11KV Rural Feeders for integration with National Power Portal (NPP) by October, 2016.
- 10) States will facilitate installation of modems & implementation of Rural Feeder Monitoring Scheme by December, 2016.
- 11) States will submit proposals for IT enablement of balance 2600 towns under Integrated Power Development Scheme (IPDS) by 31st December, 2016, to enable sanction by Ministry of Power (MoP) by 31st January, 2017. Subsequently, States will appoint implementing agencies progressively but not later than 31st March 2017 so as to complete projects no later than 30th September, 2017.
- 12) States will ensure issuance of NIT and subsequent award for IPDS projects not later than 31st December, 2016 and claim next tranche of grant as per scheme guidelines by 1st January, 2017.
- 13) States (Rajasthan-81, J&K-21, Tamil Nadu-21, Puducherry-4, Goa-2, Arunachal-10, Nagaland-9, Mizoram-8, Meghalaya-4, Manipur-1, Bihar-1, Jharkhand-5) will ensure Go-Live of balance towns under R-APDRP Part-A(IT) by 31st March 2017.
- 14) States (especially UP, Rajasthan, TN, Haryana) will ensure porting data from 11KV feeders of Go-Live towns to Urban Distribution Feeder Monitoring System (UDFMS) and ensure pushing transaction data on regular basis by 31st March 2017. States will use the feeder monitoring data as a management tool to ensure better power reliability and AT&C loss reduction as per UDAY.
- 15) States will ensure sanitization of data provided for 'URJA App' to ensure accurate information about various "consumer-related" and "DISCOM-related" parameters in public domain.
- 16) All States to ensure provision of reporting power theft on '1912' and make it toll-free.

HYDRO POWER

- 17) Incentives available to Small Hydro Projects 25 MW may be extended to the power project upto 100 MW. For others, a case to case approach may be considered.
- 18) Entire Hydro Power may be deemed as Renewable Energy.
- 19) Extending low cost credit to Hydro Power Project and access to NCEF will be explored.
- 20) Hydro Power may be included under RPO, as a separate component.

TRANSMISSION

- 21) States resolve to adopt the guidelines issued by MoP via OM No. 3/7/2015-Trans dated 15th October, 2015 to have a uniform methodology for payment of compensation for "Right of Way" of transmission lines
- 22) A Committee having Members from Ministry of Power, Railways, CEA and POSOCO will be constituted to frame guidelines for permitting crossing of railways lines by transmission lines so that process of approval for such crossing could be expedited.

UTILIZATION OF URS POWER

- 23) States shall use the option of lending URS (Un-requisitioned surplus) power to reduce the cost of power. If required, necessary changes in regulation / grid code may be made to provide for a deemed approval by procurers upto, say 50%, in case where producers do not give current on time.
- 24) A committee will be constituted on "Merit Order Dispatch" under the Chairmanship of Chairman, CEA with ToR given in Annexure.

FLEXIBILITY IN COAL UTILIZATION

- 25) State shall use the provision of flexibility in coal utilization to further reduce the cost of power. MoC shall facilitate in getting the supplementary agreement signed at the earliest with NTPC and States.

National Electricity Plan (NEP)

- 26) States to study the draft National Electricity Plan prepared by Central Electricity Authority (CEA) and circulated to the States and send their comments by end of November 2016.

CAPTIVE GENERATION

- 27) States to send their comments on the proposed amendment in the Rules put on website by MoP (of Captive Power generation provisions). States will send changes required in regulatory framework, if any, to be taken up with the FOR (Forum of Regulators) within two weeks.

ENERGY CONSERVATION

- 28) States shall mandate ECBC by December 2017 with the objective that new commercial buildings will be ECBC compliant.
- 29) States will establish ECBC Cells by December 2017 in State Urban Development Departments / PWDs to support and implement energy efficient building construction.
- 30) States will implement state-wide regulatory mechanism by December, 2017 for mandating the use of BEE Star Labelled pump sets, as far as possible, for new agriculture pump connection, including solar pump sets.
- 31) States will endeavour to implement the Agriculture Demand Side Management projects through Savings based model or Annuity based model as suitable for their States.

COAL RELATED ISSUES

- 32) State GENCOs shall clear the outstanding over dues in monthly installments latest by 30th June, 2017 (with interest/surcharge). In case of any disputed dues, the same may be settled with mutual reconciliation or alternatively the issues may be taken up in ADRM for speedy resolution.
- 33) In view of sufficient indigenous coal availability unless technically required or commercial commitments to be fulfilled, States shall endeavour that no coal based power plant shall import coal.

RENEWABLE ENERGY SOURCES

- 34) Potentially rich areas for installation of Renewable Energy Projects will be identified and advance planning for evacuation and transmission of Renewable Power in an effective and coordinated manner will be carried out. Necessary regulations to do advance planning and creation of infrastructure will be drawn up for consultation by 31st January, 2017.
- 35) Around 19,300 MW of solar capacity has been tendered. States will facilitate setting up of these power plants and sign PPAs/PSAs as may be required, addressing issues of unilateral termination, "must run" status and payment security mechanisms.
- 36) Fresh tendering of solar projects including PPAs, up to 20,000 MW will be done by 30th June, 2017.
- 37) States will ensure speedy implementation of renewable projects, by addressing issues of Land acquisition, PPAs and Grid Integration.
- 38) Renewable Energy projects are "must-run" projects and, therefore, they are not to be backed down. In case of backing down charges will have to be paid. Necessary regulations in this regard will be formulated.
- 39) For promotion of Solar Rooftop Projects, SERCs of Jammu & Kashmir, Telangana, the North-eastern States, except Assam and Tripura shall notify regulations to allow net metering/ feed-in-tariff by 31st March, 2017. Further, DISCOMs will streamline their processes and develop online mechanisms by 30th June, 2017 to provide grid connection.
- 40) Kisan Urja Sashaktikaran Mission (KUSUM), the proposed Mission, would enable optimal use of waste lands and encourage hybridization and enable earning of additional income for farmers. Concerned DISCOMs shall be responsible for providing connectivity of the farmer's solar PV power project to the nearest grid sub-station.
- 41) States will adhere to time schedules for achieving Project commissioning of over 25,000 MW of renewable energy projects during the Financial Year. If need be, SPDs, who complete & commission the projects ahead of scheduled date will not be penalized.
- 42) The States shall discourage squatting on wind-potential sites by ensuring strict adherence to the time line fixed for installation of projects.
- 43) The States shall take stock of wind power projects already commissioned and yet to be commissioned. The issue of signing PPAs will be resolved in a time bound manner.
- 44) The States shall evolve a mechanism for timely payment to solar and wind power generators and will ensure that, in no case, the delay is more than 2 months (paid with interest). Further, transparent norms will be followed for payment to all parties equitably, with no discrimination between solar and wind generators.
- 45) For smooth implementation of AJAY scheme for street lights' electrification, eligible States and DISCOMs shall provide full assistance to EESL for installation by 31st March, 2017. Similarly for providing solar lamps to students, the States shall provide support to IIT-Bombay and SECI.
- 46) In off-grid schemes, the States shall follow transparent process for ensuring competitive pricing in all segments of renewable energy. Such projects can be used for energizing the un-electrified households.

- 47) The State shall start forecasting and scheduling of wind power either by utilizing the services of NIWE or any other agency. Metering and communication infrastructure shall be installed at all pooling stations for real time generation of data. The States shall finalize and notify the mechanism for scheduling and forecasting for intra-state transmission of solar and wind power.
- 48) Intra-state transmission & wheeling charges will be levied on kWh basis to facilitate both intra and inter-state sale of renewable power in the States.
- 49) Issues relating to (a) Unilateral termination (b) "Must-run" and (c) Payment security will be addressed urgently so that tariff of renewable energy comes down further.
- 50) The States shall initiate capacity building of DISCOMs/SERC/SNA officers and entrepreneurs in renewable energy. Further, each State may nominate maximum number of official for training programme being conducted by MNRE.
- 51) States shall make rooftop solar installation mandatory in all new buildings / constructions. Further, the process of approval for rooftop solar subsidy and approval of building plan approved by Municipal Corporation shall be integrated.

MINES

- 52) Preparedness for e-auction of Major Mineral Blocks- The State Governments to auction 61 proposed blocks in 2016-17 and also re-auction the annulled blocks by March, 2017. Further, the States will expedite the mineral auction preparedness for 2017-18 and beyond.
- 53) Setting up of District Mining Fund (DMF) -The DMF will be set up in all districts by the States. Identification and implementation of projects under DMF will be done in line with the PMKKKY (Prandhan Mantri Khanij Kshetra Kalyan Yojana) Scheme. The DMF needs to be constituted for Minor Minerals also by the State Government. The State Governments should regularly monitor collection of funds and implementation of schemes under DMF, to give the maximum benefit to local people. The State Governments to prepare the portal for PMKKKY on the lines of the portal developed by State Government of Odisha.
- 54) Exploration Policy - The mechanism/procedure to be followed for reverse auctioning/allotment of exploration blocks under the New Mineral Exploration Policy will be finalized by the Ministry of Mines.
- 55) Star Rating- The system of Star Rating also to be adopted by the State Governments for minor minerals.
- 56) Curbing Illegal Mining through Mining Surveillance System (MSS) - The States are required to get the field verification done of the trigger generated by the MSS within the specified time period of 7 days, through the district level officers. The district wise nodal officers to whom the triggers should be sent may be registered with the MSS. The State Governments will support the Government of India's initiative of development of Mining Surveillance System (MSS) for major minerals. The State Governments to take up the project of Satellite Mapping and Digitization for Minor Minerals by January, 2017.
- 57) Minor mineral rules -Transparent systems for grant of mineral concessions for minor minerals will be adopted by the States, so that the directives issued by the Ministry, under 20A, should be in place by December, 2016.
- 58) Processing of saved Mining Lease Applications before 11th January, 2017 - The State Governments will expedite the decisions on cases pending for action or decisions, on their part, in respect to the mining lease applications which were saved by Section 10A (2) (c) of the MMDR Act, subject to fulfillment of the conditions of the previous approval or of the letter of intent, with the time line up to 11th January, 2017.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4766
ANSWERED ON 15.12.2016

SHORTAGE OF WATER

†4766. SHRI MANSHANKAR NINAMA:

Will the Minister of POWER
be pleased to state:

- (a) whether in view of unavailability of water, several power plants in the country have been closed permanently;
- (b) if so, the total number of power plants which have been closed permanently, State-wise;
- (c) whether the Government proposes to restart the said power plants; 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,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : No, Madam.

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

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4770
ANSWERED ON 15.12.2016

PAYMENT OF ROYALTY BY NTPC

†4770. SHRIMATI REKHA VERMA:

Will the Minister of POWER
be pleased to state:

- (a) whether National Thermal Power Corporation Ltd. (NTPC Ltd.) pays royalty to the States where NTPC's plants are located;
- (b) if so, the details thereof; and
- (c) the details of the total royalty paid by NTPC during the last three years and the current year, State-wise including Uttar Pradesh?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : No, Madam.

(b) & (c) : In view of reply to part (a) above, question doesn't arise.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4773
ANSWERED ON 15.12.2016

SHARE OF HYDRO POWER

4773. SHRI KESINENI NANI:
SHRI RABINDRA KUMAR JENA:

Will the Minister of POWER
be pleased to state:

- (a) the total installed capacity of power in the country as per the latest estimates available and the percentage shares of hydro, thermal, nuclear and other sources in the total;
- (b) the extent to which the total installed capacity and percentage share of various sources of energy changed in the last decade;
- (c) whether the share of hydro power in the power sector increased and reached maximum of 50.62% in 1962-63 and since then it has been constantly decreasing and at present it is a meagre 15.22 %;
- (d) if so, the reasons therefor and the steps taken by the Union Government to revive the Hydro Power Sector and increase its contribution;
- (e) whether the Government has taken note of the environmental problems associated with large hydroelectric power projects and if so, the action being taken thereon; and
- (f) the steps being taken to encourage smaller hydroelectric power projects that are more environmentally sustainable?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b): The total installed capacity of power in the country, as on 30.11.2016, is 3,08,834 MW.

The total installed capacity and percentage share of various sources of generation capacity for 2006-07 and 2016-17 (up to 30.11.2016) is given at Annex.

(c) : The percentage of hydropower in the total installed capacity has declined from a maximum of about 50.62% (2,936 out of a total of 5,801 MW) in the year 1962-63 to about 13.97% (43,133 MW out of total 3,08,834 MW) as on 30.11.2016.

(d) to (f) : The reasons for decrease in share of Hydro Power, inter alia, include larger and accelerated capacity addition in thermal sector to meet growing energy demand, long gestation period of hydro power projects, geological surprises, rehabilitation & resettlement issues, funds constraint in private sector projects etc.

The re-assessment of hydro power potential in the country has been necessitated due to the availability of additional hydrological, topographical and other data about upstream and downstream water usages as well as the e-flow and other considerations mandated by the Ministry of Environment, Forests & Climate Change (MoEF&CC). Further, the progress of according of Environment and Forest Clearances is reviewed at various levels in Ministry of Power (MoP) and MoEF&CC including at the level of Hon'ble Ministers. MoEF&CC have also issued various guidelines to streamline and expedite the process for according of Environment and Forest Clearances.

A number of steps have been undertaken by the Government to encourage smaller hydro electric power projects viz. provision of debt financing of longer tenure under National Electricity Policy, option of charging lower rate of depreciation vis-a-vis Central Electricity Regulatory Commission (CERC) norms, extending cost plus tariff regime for public and private sector hydro projects upto 15.08.2022, excluding hydro power from Renewable Purchase Obligation etc.

ANNEX

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 4773 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Total installed capacity and percentage share of various sources of energy for 2006-07 and 2016-17 (up to 30.11.2016)

Year	Hydro		Thermal		Nuclear		RES		Total
	MW	%	MW	%	MW	%	MW	%	MW
2006-07	34654	26.19	86015	65.00	3900	2.95	7761	5.86	132330
2016-17 (up to 30.11.2016)	43133	13.97	214004	69.29	5780	1.87	45917	14.87	308834

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4774
ANSWERED ON 15.12.2016

IMPLEMENTATION AGENCIES UNDER RGGVY

†4774. SHRI ARVIND SAWANT:
SHRI VINOD KUMAR SONKAR:

Will the Minister of POWER
be pleased to state:

- (a) the State-wise details of various agencies involved in implementation of the Rajiv Gandhi Grameen Vidyutikaran Yojana;
- (b) whether the electrification work undertaken by the said agencies have been completed and the work done by them are satisfactory;
- (c) if so, the details thereof and if not, the action taken on them, State/UT-wise;
- (d) whether any project proposals received from the implementation agencies are pending for approval; and
- (e) if so, the details thereof and the time by which these approvals are likely to be approved by the Government, State/ UT-wise including Maharashtra?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : The State-wise details of various agencies involved in implementation of Rural Electrification (RE) component of Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) is given at Annexure.

(b) & (c) : As on 30.11.2016, electrification of 1,20,120 un-electrified villages, intensive electrification of 4,05,329 villages, and free electricity connections to 250.86 lakh Below Poverty Line (BPL) households have been done under DDUGJY including its RE component.

The Scheme envisages inbuilt quality monitoring mechanism at State and Nodal Agency (Rural Electrification Corporation) level. Corrective measures are taken, as per the guidelines of quality monitoring.

(d) & (e) : One Proposal each from Governments of Nagaland, Sikkim and Maharashtra has been received by nodal agency Rural Electrification Corporation for techno-economic appraisal.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) OF UNSTARRED QUESTION NO. 4774 ANSWERED IN THE LOK SABHA ON 15.12.2016.

State-wise details of Implementing Agencies under DDUGJY

Andhra Pradesh	
1.	Central Power Distribution Company of Andhra Pradesh Ltd., H.No. 1-04-660, 3 rd Floor, Singareni Bhawan, Red Hills, HYDRABAD-500004
2.	Eastern Power Distribution Company of Andhra Pradesh Ltd., H.No. 30-14-9, Near Saraswati Park, Daba Gardens VISAKHAPATNAM-530020
3.	Northern Power Distribution Company of Andhra Pradesh Ltd., H.No. 1-1-504, Opp. NIT Petrol Pump, Chaitanya Puri, Hanamkonda, WARANGAL-506004
4.	Southern Power Distribution Company of Andhra Pradesh Ltd., H.No. 19-3-13(M) Upstairs, Renigunta Road, TRIUPATI-517501
5.	The Cooperative Electric Supply Society Limited, Sircilla.
6.	The Ankapalli RE Cooperative Society Limited, Anakapalli.
7.	The Kuppam RE Cooperative Society Limited, Kuppam.
8.	The Chipurupali RE Cooperative Society Limited, Chipurupali.
Arunachal Pradesh	
9.	Arunachal Power Development Agency (APDA), Jal Vidyut Bhawan, Niti Vihar Road, Near IG Park Gate, Itanagar-791111.
Assam	
10.	Assam Power Distribution Co. Ltd., (Annex Building), Bijulee Bhawan, Paltan Bazar, Guwhati-781001
11.	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001.
Bihar	
12.	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001.
13.	N.H.P.C., NHPC Office Complex, Sector-33, Faridabad - 121003 (Haryana).
14.	North Bihar Power Distribution Company Ltd., Vidyut Bhawan, Bailey Road, PATNA-800001
15.	South Bihar Power Distribution Company Ltd., Vidyut Bhawan, Bailey Road, PATNA-800001
Chhattisgarh	
16.	Chhattisgarh State Power Distribution Company Limited, Gudiary, Raipur
17.	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001.
18.	N.H.P.C., NHPC Office Complex, Sector-33, Faridabad - 121003 (Haryana)
19.	NTPC Ltd., NTPC, R&D Building, A-8A, Sector-24 NOIDA-201301
Gujarat	
20.	Dakshin Gujarat Vij Company Ltd., Nana Varcha Road, Kapodara, Near Gajjar Petrol Pump, Surat, Gujarat
21.	Madhya Gujarat Vij Company Ltd., Sardar Patel Vidyut Bhawan, Race Course, Vadodara-390007
22.	Paschim Gujarat Vij Company Ltd., Off Nana Mava Main Road, Laxmi Nagar, Rajkot-360004, Gujarat
23.	Uttar Gujarat Vij Company Ltd., Visnagar Road, Mehsana-384001, Gujarat
24.	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001.

Haryana	
25.	Uttar Haryana Bijli Vitaran Nigam Limited, Shakti Bhawan, Sector-6, PANCHKULA
26	Dakshin Haryana Bijli Vitaran Nigam Limited, Vidyut Nagar, HISSAR
Himachal Pradesh	
27.	HP State Electricity Board Limited, Vidyut Bhawan, SHIMLA
Jammu & Kashmir	
28	Power Development Department, Janipur, Jammu.
29	N.H.P.C., NHPC Office Complex, Sector-33, Faridabad - 121003 (Haryana)
Jharkhand	
30	Jharkhand Bijli Vitran Nigam Ltd., Engineering Bhawan, H.E.C., Dhurwa, RANCHI-834004
31	Damodar Valley Corporation DVC Tower, VIP Road, Kolkata-700054
32	NTPC Ltd., NTPC, R&D Building, A-8A, Sector-24 NOIDA-201301
Karnataka	
33	Bangalore Electricity Supply Company Ltd. K.R. Circle, BANGALORE-560001
34	Gulbarga Electricity Supply Company Ltd. Station Road, GULBARGA-585102
35	Hubli Electricity Supply Company Ltd., Nava Nagar Post, PB Road, HUBLI-580025
36	Mangalore Electricity Supply Company Ltd., Paradigyn Plaza, AB Shetty Circle, MANGALORE-575001
37	Chamundeshwari Electricity Supply Company Ltd., 927, LJ Avenue, New Kantharajurs Road, MYSORE-570009
38	The Hukeri RE Cooperative Society Limited, Hukeri-591309, District- Balgaum
Kerala	
39	Kerala State Electricity Board Ltd., Vidyuthi Bhawanam, Pattom THIRUVANANTHAPURAM
Madhya Pradesh	
40	Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Ltd., MPSEB Complex, Govindpura, , BHOPAL
41	Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Ltd., Pologround, INDORE
42	Madhya Pradesh Poorv Kshetra Vidyut Vitaran Company Ltd., Vidyut Bhawan, JABALPUR
43	NTPC Ltd., NTPC, R&D Building, A-8A, Sector-24 NOIDA-201301
Maharashtra	
44	Maharashtra State Electricity Distribution Company Ltd., Prakashgad, Plot No. G-9, Bandra, MUMBAI-400051.
Manipur	
45	MSPDCL, Secured Office Complex, 3rd Floor, Near Impjhal Hotel, North AOC, Imphal-795001
Meghalaya	
46	MePDCL, Meghalaya Energy Coporation Ltd., MeCL Complex, Lumjingshai, Short Round Road, Shillong-793001.
Mizoram	
47	Department of Power, Govt. of Mizoram, Khatia, Aizwal-796001, Mizoram.
Nagaland	
48	Department of Power, Govt. of Nagaland, Kohima, Nagaland.
Odisha	
49	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) – 122001.
50.	Central Electricity Supply Utility, Janpath Bhubaneswar, Odisha 751022
51	Southern Electricity Supply Co., Courtpetta, Behrampur-760004
52	North-Eastern Electricity Supply Co., Januganj, Balasore-756019
53	Western Electricity Supply Co., Burla, Sambhalpur-768017
54	GRIDCO, Janpath Bhubaneswar, Odisha 751022
55	N.H.P.C., NHPC Office Complex, Sector-33, Faridabad - 121003 (Haryana)
56	NTPC Ltd., NTPC, R&D Building, A-8A, Sector-24 NOIDA-201301

Punjab	
57	Punjab State Power Corporation Limited, PSEB Office Building, The Mall, Patiala, Punjab
Rajasthan	
58	Ajmer Vidyut Vitaran Nigam Limited, Ajmer, Rajasthan
59	Jodhpur Vidyut Vitaran Nigam Limited, New Power House, Jodhpur, Rajasthan
60	Jaipur Vidyut Vitaran Nigam Limited, Vidyut Bhawan, Janpath, Jyoti Nagar, Jaipur, Rajasthan
61	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001.
Sikkim	
62	Department of Power, Govt. of Sikkim, Kazi Road, Gangtok, Sikkim.
Tamil Nadu	
63	Tamil Nadu Generation and Distribution Corporation Limited, 44, Anna Salai, Chennai-600002
Tripura	
64	Tripura State Electricity Corporation Limited, Tripura.
65.	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001.
Uttar Pradesh	
66	Dakishananchal Vidyut Vitaran Nigam Limited, 220 KV GSS, Agra Mathura Bye-Pass, Sikandra, Agra, Uttar Pradesh.
67.	Madhyanchal Vidyut Vitaran Nigam Limited, 4-A, Gokhle Marg, Lucknow, Uttar Pradesh.
68.	Purvanchal Vidyut Vitaran Nigam Limited, Vidyut Nagar, PO DLW, Bhikharipur, Varanasi, Uttar Pradesh.
69	Paschimanchal Vidyut Vitaran Nigam Limited, Victoria Park, MEERUT, Uttar Pradesh.
70.	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001.
Uttarakhand	
71.	Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun, Uttarakhand
West Bengal	
72.	West Bengal State Electricity Distribution Corporation Limited, Bidyut Bhawan, Bidhan Nagar, Kolkata-700091
73.	Damodar Valley Corporation, DVC Tower, VIP Road, Kolkata-700054
74	Power Grid Corporation of India Ltd., Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001.
75.	NTPC, NTPC, R&D Building, A-8A, Sector-24 NOIDA-201301
76.	N.H.P.C., NHPC Office Complex, Sector-33, Faridabad - 121003 (Haryana)

GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.4776
ANSWERED ON 15.12.2016
ELECTRICITY CONSUMPTION

4776. SHRI ANANDRAO ADSUL:

Will the Minister of POWER
be pleased to state:

- (a) whether according to a study the renewed Demand Side Management (DSM) market potential is envisaged to deliver 178 billion units of electrical energy savings per annum that roughly translates into 18-20 per cent of the current levels of all India annual electricity consumption and 150 million tonnes of annual CO₂ emissions reduction potential, if so, the facts thereof;
- (b) whether the World Bank has pegged India's energy efficiency market at Rs.1.6 lakh crore, if so, the details thereof;
- (c) whether World Bank has placed five States as top States in terms of overall energy efficiency implementation readiness, if so, the names of these States;
- (d) whether the Union Government has fixed an achievable energy saving targets against the identified energy efficiency interventions, if so, the details thereof; and
- (e) the steps taken by the Union Government to achieve the aforesaid target?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (c) : Yes, Madam. The World Bank has carried out a study titled, "Utility Scale DSM Opportunities and Business Models in India", wherein the renewed Demand Side Management (DSM) market potential is estimated to be 178 billion kWh of energy savings per annum, which roughly translates into 18-20 percent of the current levels of all India annual electricity consumption and 150 million tonnes of annual CO₂ emissions reduction potential. The study has pegged India's energy efficiency market at 1.6 Lac Crore. Further, the study has placed 5 States, namely, Andhra Pradesh, Rajasthan, Karnataka, Maharashtra, and Kerala, in terms of their overall energy efficiency implementation readiness.

.....2.

(d) & (e) : The Ministry of Power, Government of India has fixed energy savings targets for XII Plan period (2012-17) as 60.5 BU (billion units) through various energy efficiency interventions. In order to achieve the energy saving targets, the following interventions have been implemented:-

- (i) Standards & Labeling 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) Prescription of Specific energy consumption norms for energy intensive industries notified as designated consumers and implemented through Perform Achieve and Trade (PAT) Scheme.
- (iii) Formulation of Energy Conservation Building Codes (ECBC) for energy efficiency improvement in commercial buildings.
- (iv) Design-guidelines for energy efficiency in multi-storied residential buildings.
- (v) Demand Side Management (DSM) in Municipal, Household, Agricultural and Small & Medium Enterprise (SME) sectors.
- (vi) Strengthening of State Designated Agency for Energy Efficiency.
- (vii) Promotion of energy efficient LED lamps through DSM based Unnat Jyoti Affordable LEDs for All (UJALA) & 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.4789
ANSWERED ON 15.12.2016

DEPENDENCY ON IMPORTED COAL

†4789. SHRI DHARMENDRA YADAV:
DR. SHRIKANT EKNATH SHINDE:
SHRI ANANDRAO ADSUL:

Will the Minister of POWER
be pleased to state:

- (a) whether there is a 60% rise in imported coal prices between April and October 2016;
- (b) if so, the details thereof and the reasons therefor;
- (c) whether the regulatory commissions are considering to allow a pass-through of such costs, by way of power purchase and fuel cost adjustment, since power purchase cost is an uncontrollable expenditure for the discoms, if so, the facts thereof;
- (d) whether most of the State regulatory commissions are not considering to allow for such adjustments on an actual and timely basis, if so, the steps taken by the Union Government to reduce the dependency on the import coal; and
- (e) whether the country has surplus power with adequate domestic coal availability, the details thereof and the reasons for import of coal?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : A statement containing information related to imported coal during the period from April, 2016 to October, 2016 is given at Annex.

(c) & (d) : As per Section 86 of the Electricity Act, 2003, tariff for retail sale of electricity for different consumer categories is determined by the Appropriate State Electricity Regulatory Commission (SERC) / Joint Electricity Regulatory Commission (JERC). Section 61 of the Act, mandates that the Appropriate Commission, while determining tariff to not only ensure safeguarding of consumer's interests but also the recovery of the cost of electricity in a reasonable manner. Section 62 of the Act further provides for periodic tariff adjustment during a year to take care of the variation in fuel price, as may be specified.

As per Section 63 of the Electricity Act, 2003, determination of tariff, by bidding process, the Appropriate Commission shall adopt the tariff, if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government.

Further, provisions as contained in Section 8.2.1 (7) of the Tariff Policy, 2016 provide for the Appropriate Commission to specify an appropriate price adjustment formula for recovery of the costs, arising on account of the variation in the price of fuel, power purchase etc. on monthly/quarterly basis for recovery of all prudent costs of the generating company and the licensee.

All the SERCs are required to take action as per the provisions mentioned above in the Electricity Act and the Tariff Policy.

(e) : The energy and peak shortage in country, during the period April-Nov, 2016 was only 0.7% and 1.6% respectively as against 2.3% and 3.2% during the corresponding period last year (2015-16). Due to enhanced supply of domestic coal, during the current year, there is no loss of generation in coal based power plants due to shortage of coal.

However, there are some power plants based on imported coal. The import of coal is being done for such imported coal based plants. However, efforts are being made to substitute imported coal by domestic coal to the extent it is technically feasible to further reduce its use.

ANNEX

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 4789 ANSWERED IN THE LOK SABHA ON 15.12.2016.

FOB Prices of Imported Coal (Monthly Average Price, USD/Tonne)				
Month	South African Coal Price (GCV-6000)	Australian Coal Price (GCV-6000)	Indonesian Coal Price (GCV-4600)	Average Price for all Three Varieties of Imported Coal
Apr-16	52.78	50.68	38.07	47.18
May-16	53.38	51.31	38.46	47.72
Jun-16	57.86	52.85	39.25	49.99
Jul-16	61.88	61.24	41.34	54.82
Aug-16	65.89	67.41	45.41	59.57
Sep-16	67.31	72.70	50.84	63.62
Oct-16	83.04	94.19	59.41	78.88
Price Escalation between April and October, 2016	57.33%	85.84%	56.03%	67.19%

Source: Global coal/Argus media ltd.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4798
ANSWERED ON 15.12.2016

LOSSES OF SEBs

†4798. SHRI GOPAL SHETTY:

Will the Minister of POWER
be pleased to state:

- (a) the extent of losses being incurred by the electricity boards of various States as on date annually, State/UT-wise; and
- (b) the present consumption of electricity in various States and the quantum of power being generated by the States out of their own resources and the contribution of central generating stations thereon, State/ UT-wise?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : As per 'Report on Performance of State Power Utilities', published by Power Finance Corporation (PFC) Ltd., the aggregate losses of utilities, on subsidy received basis, for the financial year 2014-15 was Rs. 58,275 crore.

The state-wise and utility-wise details are given at Annexure-I.

(b) : The details of availability of electricity to States from various sources including Central and State sector generating stations and the quantum of power contributed by Central Generating Stations, during the current year (April, 2016 to October, 2016), are given at Annexure-II.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 4798 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Details of State-wise and Utility-wise losses incurred during 2014-15 (Rs. in Crore).				
Region	State	Utility	2014-15 Profit/(Loss) on subsidy received basis	
Eastern	Bihar	BSEB		
		NBPDCL	-491	
		SBPDCL	-748	
		Bihar Total		-1,239
	Jharkhand	JSEB		0
		JBVNL		-37
		Jharkhand Total		-37
	Odisha	CESU		-202
		NESCO		-123
		SESCO		-379
		WESCO		-224
		Odisha Total		-929
	Sikkim	Sikkim PD		-126
	Sikkim Total			-126
	West Bengal	WBSEDCL		20
	West Bengal Total			20
	Eastern Total			-2,310
North Eastern	Arunachal Pradesh	Arunachal PD	-257	
	Arunachal Pradesh Total		-257	
	Assam	APDCL		-578
		Assam Total		-578
	Manipur	Manipur PD		0
		MSPDCL		0
	Manipur Total		0	
	Meghalaya	MePDCL		-202
	Meghalaya Total			-202
	Mizoram	Mizoram PD		-192
	Mizoram Total			-192
	Nagaland	Nagaland PD		-315
	Nagaland Total			-315
Tripura	TSECL		-82	
Tripura Total			-82	
North Eastern Total			-1,625	
Northern	Delhi	BSES Rajdhani	63	
		BSES Yamuna	19	
		TPDDL	336	
	Delhi Total			418
	Haryana	DHBVNL		-636
		UHBVNL		-1,481
	Haryana Total			-2,117
	Himachal Pradesh	HPSEB Ltd.		-125
	Himachal Pradesh Total			-125
	Jammu & Kashmir	J&K PDD		-3,913
	Jammu & Kashmir Total			-3,913
	Punjab	PSPCL		-1,100
	Punjab Total			-1,100
Rajasthan	AVVNL		-3,593	
	JDVVNL		-4,146	
	JVVNL		-4,735	
Rajasthan Total			-12,474	

	Uttar Pradesh	DVVN	-2,936
		KESCO	-168
		MVVN	-1,994
		Pash VVN	-1,577
		Poorv VVN	-2,000
	Uttar Pradesh Total		-8,675
	Uttarakhand	Ut PCL	-260
	Uttarakhand Total		-260
Northern Total			-28,245
Southern	Andhra Pradesh	APCPDCL	0
		APEPDCL	-722
		APNPDCL	0
		APSPDCL	-1,827
	Andhra Pradesh Total		-2,549
	Karnataka	BESCOM	113
		CHESCOM	37
		GESCOM	-110
		HESCOM	30
		MESCOM	14
	Karnataka Total		85
	Kerala	KSEB	0
		KSEBL	-1,273
	Kerala Total		-1,273
	Puducherry	Puducherry PD	157
	Puducherry Total		157
	Tamil Nadu	TANGEDCO	-12,757
	Tamil Nadu Total		-12,757
	Telangana	TSNPDCL	-1,741
		TSSPDCL	-1,171
	Telangana Total		-2,912
Southern Total			-19,249
Western	Chhattisgarh	CSPDCL	-1,569
	Chhattisgarh Total		-1,569
	Goa	Goa PD	-17
	Goa Total		-17
	Gujarat	DGVCL	51
		MGVCL	29
		PGVCL	11
		UGVCL	17
	Gujarat Total		108
	Madhya Pradesh	MP Madhya Kshetra VVCL	-2,765
		MP Paschim Kshetra VVCL	-1,061
		MP Purv Kshetra VVCL	-1,175
	Madhya Pradesh Total		-5,001
	Maharashtra	MSEDCL	-366
	Maharashtra Total		-366
Western Total			-6,845
Grand Total			-58,275

Source: PFC

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 4798 ANSWERED IN THE LOK SABHA ON 15.12.2016.

<u>Total availability of electricity & contribution of CGS therein during the current Year (Apr'16 - Oct'16)</u>		
State / System	Availability (MU)	Scheduled Energy from Central Generating Stations (MU)
<u>Northern Region</u>		
Chandigarh	1135	702
Delhi	21639	12947
Haryana	32179	8320
H.P.	5113	5474
J & K.	7929	7016
Punjab	37666	11781
Rajasthan	38362	10509
U.P.	64197	23123
Uttarakhand	7899	3463
<u>Western Region</u>		
Chhattisgarh	14091	4674
Gujarat	61687	16425
Madhya Pradesh	35815	17086
Maharashtra	80627	19130
DD	1424	1001
DNH	3588	2153
Goa	2722	2019
<u>Southern Region</u>		
Andhra Pr.	31435	6968
Telangana	29456	7798
Karnataka	36789	10989
Kerala	14119	6089
Tamil Nadu	63530	18904
Puducherry	1554	1573
<u>Eastern Region</u>		
Bihar	15541	10857
DVC	10808	862
Jharkhand	4615	2178
Odisha	16154	5425
W. Bengal	30849	4741
Sikkim	262	551
<u>N.E. Region</u>		
Arunachal Pr.	397	493
Assam	5481	3684
Manipur	399	645
Meghalaya	970	430
Mizoram	270	346
Nagaland	429	423
Tripura	845	1010

Source: CEA

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4800
ANSWERED ON 15.12.2016

BREAKDOWN IN NTPC UNITS

†4800. SHRI ASHOK MAHADEORAO NETE:

Will the Minister of POWER
be pleased to state:

- (a) the details of units of NTPC set up in backward areas in the country;
- (b) the details of breakdowns occurred in the said units during each of the last three years and the date, unit-wise; and
- (c) the corrective measures taken for providing recurrence of such faults/ breakdowns?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : The details of units of NTPC, set up in Backward areas in the Country, are given at Annex-I.

(b) : The details regarding breakdowns (Forced Outages %) in the aforementioned units are given at Annex-II.

(c) : The corrective measures taken to prevent breakdowns (forced outages) at NTPC plants are as follows:

- Each failure is analyzed by an expert committee within the company and corrective actions are taken based on their recommendations. Wherever required, assistance of Original Equipment Manufacturer is also taken.
- Detailed condition monitoring of each equipment is done in a scheduled manner. Based on the results, preventive and predictive maintenance are carried out to prevent such failures.

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 4800 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Details of NTPC units set up in Backward Areas (Districts)

Sl. No.	Station	District	State	Capacity (MW)
1.	Ramagundam	Karimnagar	Andhra Pradesh	2610*
2.	Bongaigaon	Kokrajhar	Assam	250
3.	Sipat	Bilaspur	Chhattisgarh	2980
4.	Rihand	Sonebhadra	Uttar Pradesh	3000
5.	Singrauli	Sonebhadra	Uttar Pradesh	2015*
6.	Unchahar	Raebareli	Uttar Pradesh	1060*

* including solar capacity

ANNEX-II

ANNEX REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 4800 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Details of Breakdown (Forced Outage %) during the last three years and the current year of NTPC units set up in Backward areas (Districts)

Sl. No.	Station	Breakdown (Forced Outage %)			
		2013-14	2014-15	2015-16	2016-17 (April-November, 2016)
1.	Ramagundam	1.23	1.29	2.32	1.56
2.	Bongaigaon**	-	-	-	2.75
3.	Sipat	1.91	1.22	3.97	3.54
4.	Singrauli	4.61	5.92	3.17	1.93
5.	Rihand	2.76	3.70	5.44	2.62
6.	Unchahar	0.96	0.91	0.61	0.79

** Commercial operation began in April, 2016.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4802
ANSWERED ON 15.12.2016

TRANSMISSION LINES

4802. DR. MANOJ RAJORIA:

Will the Minister of POWER
be pleased to state:

- (a) the present capacity of power transmission lines in the country;
- (b) whether the transmission lines are being run on their full capacity;
- (c) if so, the details thereof and if not, the reasons therefor;
- (d) whether the power surplus States are unable to supply/divert their surplus power to power deficit States on account of constraints in inter-regional transmission; and
- (e) if so, the details thereof and the steps being taken by the Government to address the issue?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : At present, a total of about 359,000 of circuit kilometers of transmission lines and 701 GVA of transformation capacity of Substations, (for the 220 kV and above voltage levels) exist in the country.

(b) & (c) : The transmission lines in the country are operated in accordance with the respective Grid Codes i.e. Indian Electricity Grid Code (IEGC) of Central Electricity Regulatory Commission (CERC) in respect of Inter State Transmission lines and in accordance with State Grid Codes of respective State Electricity Regulatory Commissions (SERCs) for the intra state transmission lines.

(d) & (e): The interstate transmission lines are planned and implemented as a part of the evacuation system from Inter State Generation Stations (ISGS) and also as system strengthening projects. These lines are mainly used for delivery of power from these generating stations to their beneficiaries in various states. These lines are also used to transfer power from surplus states/regions to deficit states/regions. Because of sufficient increase in the capacity in transmission during the last two years, only 0.1% of volume of electricity could not be cleared because of congestion in the market during the current year 2016-17 (upto August). Thus, the surplus states are able to supply power to the power deficit states.

The Government has targeted to commission 1,07,440 ckm of transmission lines during 12th Plan period. Out of this 1,01,852 ckm has already been commissioned upto November, 2016.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4818
ANSWERED ON 15.12.2016

BAILING OUT OF POWER PLANTS

4818. SHRI RAJESHBHAI CHUDASAMA:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government has decided to bail out close to 21400 mega watt capacity power plants by assuring coal linkages through new fuel supply agreements, if so, the details thereof;
- (b) whether this decision was taken after the Ministry had revised the commercial operation date of these plants which were originally supposed to be commissioned by March, 2016;
- (c) if so, the details thereof; and
- (d) whether this assured fuel supply would benefit the power plants and if so, the details thereof ?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (d) : So far, 177 Letter of Assurances (LoAs) have been issued to various power plants including Central/State Government Sector as well as Independent Power Producers (IPPs), covering a capacity of 1,08,000 MW. Out of this 1,08,000 MW capacity, the competent authority, in 2013, had approved signing of Fuel Supply Agreements (FSAs) in respect of 78,000 MW capacity power plants, which had been commissioned or were likely to be commissioned by 31.03.2015.

Government of India, Ministry of Coal have further issued instructions, on 15.10.2015, to Coal India Ltd for taking necessary action for signing of FSAs and supply of coal for the power plants that are commissioned/ to be commissioned (as part of 78000 MW) in 2015-16.

Signing of FSAs will ensure regular supply of coal to the thermal power plants for generation of electricity.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.4830
ANSWERED ON 15.12.2016

POWER REQUIREMENT FOR NEXT 5 TO 10 YEARS

4830. SHRIMATI POONAMBEN MAADAM:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government has conducted a study to gauge the demand for power in the country for the next 5 to 10 years, if so, the details thereof;
- (b) the steps being taken/proposed to be taken to meet the demand as per the outcome of the study;
- (c) whether States were notified regarding Power Agreements with renewable energy generators, if so, the details thereof including the States which have come forward in this regard;
- (d) whether any States are facing financial constraints to purchase power from thermal power plants; and
- (e) if so, the details thereof and the steps being taken/proposed to be taken by the Union Government thereon, State/ UT-wise?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : Yes, Madam. As per 18th Electric Power Survey (EPS) Report, brought out by Central Electricity Authority, the Electric Energy Requirement of the country (Utilities), at power station bus-bars, for year 2021-22 and 2026-27 is given at Annex. To reassess the electricity demand, the 19th Electric Power Survey Committee has been constituted. The Report of the committee is under finalisation.

(b) : To meet the electricity demand in the coming years, the following steps have been taken/are being taken by the Government:

- (i) Generation capacity addition has been planned to meet the rising demand of electricity in the country. The National Electricity Plan, 2012, has projected a generation capacity addition requirement of 86,400 MW from conventional sources during the period 2017-22 to meet the projected demand of electricity for the year 2021-22.
- (ii) Thrust is being given to electricity generation from renewable energy sources. Government has set a target of 175,000 MW of Renewable Energy by the year 2022.
- (iii) Renovation, modernization and life extension of old, inefficient generating units is being carried out to improve efficiency and better availability of generating units.

(c) : As per provision of the revised Tariff Policy, notified on 28.01.2016, Ministry of Power has issued orders vide order no. 23/03/2016-R&R dated 22.07.2016 regarding long term Renewable Purchase Obligation (RPO) trajectory upto the year 2018-19. The details are as follows:

Long term Trajectory	2016-17	2017-18	2018-19
Non-solar	8.75 %	9.50 %	10.25 %
Solar	2.75 %	4.75 %	6.75 %
Total	11.50%	14.25 %	17.00 %

The obligation will be on total consumption of electricity by an obligated entity excluding consumption met from hydro sources of power.

Further, in exercise of power conferred under the Electricity Act 2003, SERC's may notify RPO for their respective states in the line with aforesaid uniform RPO trajectory.

(d) & (e) : Electricity is a concurrent subject. The responsibility for purchase of sufficient power of the State/State Power Utilities is within the purview of the respective State Government / State Power Utility. However, in order to help the States, Government of India has notified a scheme namely Ujwal Discom Assurance Yojana (UDAY) for Operational and Financial Turnaround of Power Distribution Companies (DISCOMs), with an objective to improve the operational and financial efficiency of State owned DISCOMs. Participating States would undertake to achieve operational and financial turnaround of DISCOMs with the measures outlined in the Scheme. This would enable Discoms to purchase more power from thermal power plants.

ANNEX

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 4830 ANSWERED IN THE LOK SABHA ON 15.12.2016.

Electric Energy Requirement of the country (Utilities), at power station bus-bars, for year 2021-22 and 2026-27

Year	Electrical Energy Requirement (MU)	Peak Demand (MW)
2021-22	1904861	283470
2026-27	2710058	400705
