

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.244
ANSWERED ON 17.11.2016

REVAMPING OF DDUGJY

244. SHRI CHANDRA PRAKASH JOSHI:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government is planning to revamp the funding and execution pattern of "DDUGJY Scheme" for improvisation of efficiency;
- (b) if so, the details thereof;
- (c) if not, the reasons therefor; and
- (d) the extent to which this initiative will help to ensure the uninterrupted supply of electricity to the rural areas?

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 existing funding and execution pattern of Deen Dayal Upadhyaya Gram Jyoti Yojana is as under:

Agency	Nature of support	Quantum of support (Percentage of project cost)	
		Other than Special Category States	Special Category States #
Govt of India	Grant	60	85
DISCOM Contribution	Own Fund	10	5
Lender (FIs/ Banks)	Loan	30	10
Additional Grant from GOI on achievement of prescribed milestones	Grant	50% of total loan component (30%) i.e. 15%	50% of total loan component (10%) i.e. 5%
Maximum Grant by GOI (including additional grant on achievement of prescribed milestones)	Grant	75%	90%

Special Category States (All North Eastern States including Sikkim, J&K, Himachal Pradesh, Uttarakhand)

Additional grant (i.e. conversion of 50% of loan component) under the scheme is subject to achievement of following milestones:

- (i) Timely completion of the scheme as per laid down milestones.
- (ii) Reduction in AT&C losses as per trajectory finalized by MOP in consultation with State Governments (DISCOM-wise).
- (iii) Upfront release of admissible revenue subsidy by State Govt. based on metered consumption.

The funding and execution pattern of "DDUGJY" are broadly streamlined.

(d) : The Scheme envisages feeder separation, strengthening of sub-transmission & distribution network including metering and rural electrification. Thus, the scheme helps in ensuring uninterrupted supply of electricity to the rural areas.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.250
ANSWERED ON 17.11.2016

FINANCIAL ASSISTANCE TO KERALA

250. SHRI P.K. BIJU:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government is giving financial assistance to the Government of Kerala for improving or augmenting the energy needs of the State, if so, the details thereof; and
- (b) the schemes under which Government has given or proposes to give financial assistance or other assistance to the State Government?

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. Government of India (GoI) is providing financial assistance to Kerala for improving or augmenting the energy needs of the State. The projects sanctioned under the various schemes are as under:

- (i) Under Integrated Power Development Scheme (IPDS) including Restructured Accelerated Power Development & Reforms Programme (RAPDRP) subsumed, Projects worth Rs. 1976.28 crore has been sanctioned to the Utilities in the State of Kerala and an amount of Rs. 327.40 crore have been released so far.
- (ii) Under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), GoI has approved 14 projects with the project cost of Rs. 485.35 crore for Kerala in August, 2015 for various rural electrification works.
- (iii) Under Power System Development Fund (PSDF), GoI has sanctioned an amount of Rs.97.90 crore for Kerala for Renovation and Upgradation of protection system of substations.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.256
ANSWERED ON 17.11.2016

DEMAND AND SUPPLY OF POWER

256. SHRI RABINDRA KUMAR JENA:
SHRI SIRAJUDDIN AJMAL:

Will the Minister of POWER
be pleased to state:

- (a) whether the generation of power during current year is less as compared to its generation during previous year and if so, the reasons therefor;
- (b) the details of All India and state-wise annual electricity demand and supply during each of the last three years separately for peaking and non-peaking period;
- (c) the steps being taken/ proposed to be taken to bridge the gap between the demand and supply of electricity in the country;
- (d) the details of All India and state-wise annual T&D losses during each of the last three years;
- (e) the details of All India and state-wise per capita electricity consumption during the last three years; and
- (f) the extent to which the country performs in terms of the above indicators when compared to the global average and other developed and developing nations in the world?

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. Electricity generation during the current year was more as compared to previous year. The Electricity generation including from renewable sources during April to September, 2016 was about 632.11 BU as against 593.68 BU during the same period last year showing a growth of 6.5%.

(b) : The details of All India and state-wise annual electricity demand and supply during peaking period and the energy requirement and availability which covers peaking as well as non peaking period in each of the last three years and the current year is given at Annex-I.

(c) : The following steps have been taken to bridge the gap between the demand and supply of electricity in the country:

(i) During the 12th Plan period (2012-17), a capacity addition of about 88928.2 MW from conventional sources have been achieved till 31st October, 2016 and about 21,128 MW from renewable sources have been achieved till 30th September, 2016.

(ii) Adequate supply of the domestic coal to power plants has been ensured. The growth of domestic coal supply to power plants has been around 6.2% during 2015-16.

(iii) During the 12th Plan (2012-17), 1,00,468 ckm of transmission lines and 2,88,458 MVA of transformation capacity have been completed till 31st October, 2016.

(iv) Government of India has taken an initiative to prepare State specific Action Plans for providing 24X7 Power For All (PFA) in partnership with the States.

(v) Two new schemes have been launched by the Government of India, namely, Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) for strengthening of sub-transmission and distribution networks and for segregation of agricultural feeders to give adequate and reliable supply and reduce line losses.

(vi) Government of India has taken several steps to promote energy conservation, energy efficiency and other demand side management measures.

(vii) Central Government has notified Ujjawal Discom Assurance Yojana (UDAY) scheme on 20.11.2015 for Operational & Financial Turnaround of DISCOMs.

(viii) Government of India has taken steps for expeditious resolution of issues relating to Environmental and forest clearances for facilitating early completion of generation and transmission projects.

(ix) Government of India has launched a scheme by providing support from Power System Development Fund (PSDF) for stranded gas based generation.

(d) : The details of All India and State wise annual T&D losses as reported by the states during 2012-13, 2013-14 & 2014-15 is at Annex-II.

(e): The details of All India and state-wise per capita electricity consumption during the last three years is at Annex- III.

(f) : A comparative statement of per capita electricity consumption of various developed and developing countries along with India is at Annex-IV(a) and Annex-IV(b). The T&D Losses of various developed and developing countries is at Annex-V.

ANNEX REFERRED TO IN REPLY TO PARTS (b) OF UNSTARRED QUESTION NO. 256 ANSWERED IN THE LOK SABHA ON 17.11.2016.

Power Supply Position for April-October, 2016*

State / System / Region	Energy Requirement	Energy Availability	Surplus/Deficit(-)		Peak Requirement	Peak Availability	Surplus/Deficit (-)	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	1,135	1,135	0	0	361	361	0	0
Delhi	21,666	21,639	-27	-0.1	6,342	6,261	-81	-1.3
Haryana	32,179	32,179	0	0.0	9,262	9,262	0	0.0
Himachal Pradesh	5,142	5,113	-29	-0.6	1,342	1,342	0	0.0
Jammu & Kashmir	9,737	7,929	-1,808	-18.6	2,480	2,102	-378	-15.2
Punjab	37,557	37,557	0	0.0	11,408	11,408	0	0.0
Rajasthan	38,538	38,351	-187	-0.5	9,906	9,906	0	0.0
Uttar Pradesh	65,677	64,217	-1,460	-2.2	17,183	15,501	-1,682	-9.8
Uttarakhand	7,943	7,899	-44	-0.6	2,020	1,972	-48	-2.4
Northern Region	219,575	216,020	-3,555	-1.6	53,372	52,612	-760	-1.4
Chhattisgarh	14,724	14,671	-53	-0.4	3,875	3,851	-25	-0.6
Gujarat	62,059	62,059	0	0.0	14,724	14,708	-16	-0.1
Madhya Pradesh	35,799	35,798	-1	0.0	8,832	8,832	0	0.0
Maharashtra	80,875	80,838	-37	0.0	20,499	20,462	-37	-0.2
Daman & Diu	1,434	1,434	0	0.0	327	327	0	0.0
Dadra Nagar Haveli	3,620	3,620	0	0.0	784	784	0	0.0
Goa	2,857	2,855	-2	-0.1	497	496	-1	-0.3
Western Region	201,368	201,278	-90	0.0	46,123	46,090	-33	-0.1
Andhra Pradesh	31,471	31,435	-36	-0.1	7,969	7,965	-4	-0.1
Telangana	29,538	29,532	-6	0.0	8,284	8,284	0	0.0
Karnataka	37,114	36,828	-286	-0.8	9,980	9,567	-413	-4.1
Kerala	14,107	14,084	-23	-0.2	4,132	3,996	-135	-3.3
Tamil Nadu	63,324	63,313	-11	0.0	14,823	14,823	0	0.0
Puducherry	1,545	1,544	-1	-0.1	371	368	-3	-0.7
Lakshadweep#	28	28	0	0	8	8	0	0
Southern Region	177,100	176,734	-366	-0.2	41,298	41,259	-39	-0.1
Bihar	16,025	15,766	-259	-1.6	3,843	3,638	-205	-5.3
DVC	10,829	10,775	-54	-0.5	2,686	2,686	0	0.0
Jharkhand	4,673	4,662	-11	-0.2	1,498	1,498	0	0.0
Odisha	16,243	16,241	-2	0.0	4,012	4,012	0	0.0
West Bengal	30,916	30,813	-103	-0.3	7,881	7,881	0	0.0
Sikkim	270	270	0	0.0	153	112	-41	-26.8
Andaman-Nicobar	140	105	-35	-25	40	32	-8	-20
Eastern Region	78,958	78,527	-431	-0.5	18,642	18,596	-46	-0.2
Arunachal Pradesh	407	397	-10	-2.5	148	140	-8	-5.4
Assam	5,730	5,481	-249	-4.3	1,673	1,633	-40	-2.4
Manipur	418	399	-19	-4.5	152	151	-1	-0.7
Meghalaya	970	970	0	0.0	311	311	0	0.0
Mizoram	278	270	-8	-2.9	95	95	0	0.0
Nagaland	438	429	-9	-2.1	130	130	0	0.0
Tripura	861	845	-16	-1.9	284	284	0	0.0
North-Eastern Region	9,099	8,785	-314	-3.5	2,487	2,475	-12	-0.5
All India	686,099	681,346	-4,753	-0.7	159,542	156,934	-2,608	-1.6

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

* October' 2016- Provisional data

Power Supply Position for 2015-16

State / System / Region	Energy Requirement	Energy Availability	Surplus/Deficit (-)		Peak Requirement	Peak Availability	Surplus/Deficit (-)	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	1,607	1,607	0	0	342	342	0	0
Delhi	29,626	29,583	-43	-0.1	5,846	5,846	0	0.0
Haryana	47,506	47,437	-69	-0.1	9,113	9,113	0	0.0
Himachal Pradesh	8,821	8,758	-63	-0.7	1,488	1,488	0	0.0
Jammu & Kashmir	16,572	14,037	-2,535	-15.3	2,544	2,158	-386	-15.2
Punjab	49,687	49,675	-12	0.0	10,852	10,852	0	0.0
Rajasthan	67,417	67,205	-212	-0.3	10,961	10,961	0	0.0
Uttar Pradesh	106,351	93,033	-13,318	-12.5	16,988	14,503	-2,485	-14.6
Uttarakhand	12,889	12,675	-214	-1.7	2,034	2,034	0	0.0
Northern Region	340,476	324,009	-16,467	-4.8	54,474	50,622	-3,852	-7.1
Chhattisgarh	25,649	25,309	-340	-1.3	3,932	3,757	-175	-4.5
Gujarat	103,544	103,540	-4	0.0	14,495	14,448	-47	-0.3
Madhya Pradesh	62,374	62,374	0	0.0	10,902	10,902	0	0.0
Maharashtra	141,817	141,361	-456	-0.3	20,973	20,594	-379	-1.8
Daman & Diu	2,337	2,337	0	0.0	307	307	0	0.0
Dadra Nagar Haveli	5,925	5,925	0	0.0	740	740	0	0.0
Goa	5,120	5,119	-1	0.0	583	552	-31	-5.3
Western Region	346,768	345,966	-802	-0.2	48,640	48,199	-441	-0.9
Andhra Pradesh	50,436	50,366	-70	-0.1	7,400	7,391	-9	-0.1
Telangana	50,254	49,948	-306	-0.6	6,854	6,849	-5	-0.1
Karnataka	64,302	60,971	-3,331	-5.2	10,202	9,508	-694	-6.8
Kerala	23,318	23,194	-124	-0.5	3,977	3,856	-121	-3.1
Tamil Nadu	97,276	96,586	-690	-0.7	14,190	14,171	-19	-0.1
Puducherry	2,437	2,429	-8	-0.3	368	352	-16	-4.3
Lakshadweep	48	48	0	0	8	8	0	0
Southern Region	288,025	283,494	-4,531	-1.6	40,030	39,875	-155	-0.4
Bihar	23,961	23,659	-302	-1.3	3,735	3,484	-251	-6.7
DVC	18,437	18,234	-203	-1.1	2,814	2,794	-20	-0.7
Jharkhand	7,735	7,561	-174	-2.2	1,153	1,153	0	0.0
Odisha	26,762	26,600	-162	-0.6	4,091	4,091	0	0.0
West Bengal	47,359	47,194	-165	-0.3	7,905	7,885	-20	-0.3
Sikkim	399	399	0	0.0	109	109	0	0.0
Andaman-Nicobar	240	180	-60	-25	40	32	-8	-20
Eastern Region	124,654	123,646	-1,008	-0.8	18,169	18,056	-113	-0.6
Arunachal Pradesh	626	591	-35	-5.6	139	135	-4	-2.9
Assam	8,762	8,272	-490	-5.6	1,491	1,378	-113	-7.6
Manipur	840	810	-30	-3.6	168	167	-1	-0.6
Meghalaya	1,833	1,725	-108	-5.9	400	377	-23	-5.8
Mizoram	471	455	-16	-3.4	102	101	-1	-1.0
Nagaland	755	739	-16	-2.1	140	138	-2	-1.4
Tripura	1,202	1,146	-56	-4.7	300	269	-31	-10.3
North-Eastern Region	14,488	13,735	-753	-5.2	2,573	2,367	-206	-8.0
All India	1,114,408	1,090,850	-23,558	-2.1	153,366	148,463	-4,903	-3.2

Power Supply Position for 2014-15

State / System / Region	Energy Requirement	Energy Availability	Surplus/Deficit(-)		Peak Requirement	Peak Availability	Surplus / Deficit (-)	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	1,616	1,616	0	0	367	367	0	0
Delhi	29,231	29,106	-125	-0.4	6,006	5,925	-81	-1.3
Haryana	46,615	46,432	-183	-0.4	9,152	9,152	0	0.0
Himachal Pradesh	8,807	8,728	-79	-0.9	1,422	1,422	0	0.0
Jammu & Kashmir	16,214	13,119	-3,095	-19.1	2,554	2,043	-511	-20.0
Punjab	48,629	48,144	-485	-1.0	11,534	10,023	-1,511	-13.1
Rajasthan	65,717	65,310	-407	-0.6	10,642	10,642	0	0.0
Uttar Pradesh	103,179	87,062	-16,117	-15.6	15,670	13,003	-2,667	-17.0
Uttarakhand	12,445	12,072	-373	-3.0	1,930	1,930	0	0.0
Northern Region	332,453	311,589	-20,864	-6.3	51,977	47,642	-4,335	-8.3
Chhattisgarh	21,499	21,230	-269	-1.3	3,817	3,638	-179	-4.7
Gujarat	96,235	96,211	-24	0.0	13,603	13,499	-104	-0.8
Madhya Pradesh	53,374	53,082	-292	-0.5	9,755	9,717	-38	-0.4
Maharashtra	134,897	133,078	-1,819	-1.3	20,147	19,804	-343	-1.7
Daman & Diu	2,086	2,086	0	0.0	301	301	0	0.0
Dadra Nagar Haveli	5,307	5,304	-3	-0.1	714	714	0	0.0
Goa	3,969	3,932	-37	-0.9	501	489	-12	-2.4
Western Region	317,367	314,923	-2,444	-0.8	44,166	43,145	-1,021	-2.3
Andhra Pradesh	59,198	56,313	-2,885	-4.9	7,144	6,784	-360	-5.0
Telangana	43,337	40,644	-2,693	-6.2	7,884	6,755	-1,129	-14.3
Karnataka	62,643	59,926	-2,717	-4.3	10,001	9,549	-452	-4.5
Kerala	22,459	22,127	-332	-1.5	3,760	3,594	-166	-4.4
Tamil Nadu	95,758	92,750	-3,008	-3.1	13,707	13,498	-209	-1.5
Puducherry	2,402	2,376	-26	-1.1	389	348	-41	-10.5
Lakshadweep	48	48	0	0	8	8	0	0
Southern Region	285,797	274,136	-11,661	-4.1	39,094	37,047	-2,047	-5.2
Bihar	19,294	18,759	-535	-2.8	2,994	2,874	-120	-4.0
DVC	18,222	17,728	-494	-2.7	2,653	2,590	-63	-2.4
Jharkhand	7,599	7,390	-209	-2.8	1,075	1,055	-20	-1.9
Odisha	26,482	26,052	-430	-1.6	3,920	3,892	-28	-0.7
West Bengal	47,086	46,827	-259	-0.6	7,544	7,524	-20	-0.3
Sikkim	399	399	0	0.0	83	83	0	0.0
Andaman-Nicobar	240	180	-60	-25	40	32	-8	-20
Eastern Region	119,082	117,155	-1,927	-1.6	17,040	16,932	-108	-0.6
Arunachal Pradesh	677	610	-67	-9.9	139	126	-13	-9.4
Assam	8,527	7,926	-601	-7.0	1,450	1,257	-193	-13.3
Manipur	705	678	-27	-3.8	150	146	-4	-2.7
Meghalaya	1,930	1,634	-296	-15.3	370	367	-3	-0.8
Mizoram	455	425	-30	-6.6	90	88	-2	-2.2
Nagaland	688	661	-27	-3.9	140	128	-12	-8.6
Tripura	1,242	1,048	-194	-15.6	310	266	-44	-14.2
North-Eastern Region	14,224	12,982	-1,242	-8.7	2,528	2,202	-326	-12.9
All India	1,068,923	1,030,785	-38,138	-3.6	148,166	141,160	-7,006	-4.7

Power Supply Position for 2013-14

State / System / Region	Energy Requirement	Energy Availability	Surplus/Deficit (-)		Peak Requirement	Peak Availability	Surplus/Deficit (-)	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	1,574	1,574	0	0	345	345	0	0
Delhi	26,867	26,791	-76	-0.3	6,035	5,653	-382	-6.3
Haryana	43,463	43,213	-250	-0.6	8,114	8,114	0	0.0
Himachal Pradesh	9,089	8,883	-206	-2.3	1,561	1,392	-169	-10.8
Jammu & Kashmir	15,613	12,187	-3,426	-21.9	2,500	1,998	-502	-20.1
Punjab	47,821	47,084	-737	-1.5	10,089	8,733	-1,356	-13.4
Rajasthan	58,202	58,042	-160	-0.3	10,047	10,038	-9	-0.1
Uttar Pradesh	94,890	81,613	-13,277	-14.0	13,089	12,327	-762	-5.8
Uttarakhand	11,944	11,493	-451	-3.8	1,826	1,826	0	0.0
Northern Region	309,463	290,880	-18,583	-6.0	45,934	42,774	-3,160	-6.9
Chhattisgarh	18,932	18,800	-132	-0.7	3,365	3,320	-45	-1.3
Gujarat	88,497	88,488	-9	0.0	12,201	12,201	0	0.0
Madhya Pradesh	49,410	49,385	-25	-0.1	9,716	9,716	0	0.0
Maharashtra	126,288	123,672	-2,616	-2.1	19,276	17,621	-1,655	-8.6
Daman & Diu	2,252	2,252	0	0.0	322	297	-25	-7.8
Dadra Nagar Haveli	5,390	5,388	-2	0.0	661	661	0	0.0
Goa	3,890	3,871	-19	-0.5	529	529	0	0.0
Western Region	294,659	291,856	-2,803	-1.0	41,335	40,331	-1,004	-2.4
Andhra Pradesh	95,662	89,036	-6,626	-6.9	14,072	13,162	-910	-6.5
Karnataka	64,150	58,052	-6,098	-9.5	9,940	9,223	-717	-7.2
Kerala	21,577	21,052	-525	-2.4	3,671	3,573	-98	-2.7
Tamil Nadu	93,508	87,980	-5,528	-5.9	13,522	12,492	-1,030	-7.6
Pondicherry	2,344	2,320	-24	-1.0	351	333	-18	-5.1
Lakshadweep	48	48	0	0	9	9	0	0
Southern Region	277,245	258,444	-18,801	-6.8	39,015	36,048	-2,967	-7.6
Bihar	15,391	14,759	-632	-4.1	2,465	2,312	-153	-6.2
DVC	17,407	17,296	-111	-0.6	2,745	2,745	0	0.0
Jharkhand	7,143	7,007	-136	-1.9	1,111	1,069	-42	-3.8
Orissa	24,958	24,546	-412	-1.7	3,727	3,722	-5	-0.1
West Bengal	42,891	42,762	-129	-0.3	7,325	7,294	-31	-0.4
Sikkim	413	413	0	0.0	90	90	0	0.0
Andaman-Nicobar	240	180	-60	-25	40	32	-8	-20
Eastern Region	108,203	106,783	-1,420	-1.3	15,888	15,598	-290	-1.8
Arunachal Pradesh	552	517	-35	-6.3	125	124	-1	-0.8
Assam	7,544	7,062	-482	-6.4	1,329	1,220	-109	-8.2
Manipur	579	548	-31	-5.4	134	133	-1	-0.7
Meghalaya	1,794	1,604	-190	-10.6	343	330	-13	-3.8
Mizoram	446	430	-16	-3.6	84	82	-2	-2.4
Nagaland	577	561	-16	-2.8	109	106	-3	-2.8
Tripura	1,195	1,144	-51	-4.3	254	250	-4	-1.6
North-Eastern Region	12,687	11,866	-821	-6.5	2,164	2,048	-116	-5.4
All India	1,002,257	959,829	-42,428	-4.2	135,918	129,815	-6,103	-4.5

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

Note: Both peak met and energy availability represent the net consumption (including the transmission losses) in the various States. Net export has been accounted for in the consumption of importing States.

ANNEX REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 256
ANSWERED IN THE LOK SABHA ON 17.11.2016.

All India and State wise annual T&D losses from 2012-13 to 2014-15

Region		STATES/UTs	2012-13	2013-14	2014-15
NR	1	HARYANA	35.95	35.83	34.05
	2	HIMACHAL PRADESH	19.14	21.03	20.81
	3	JAMMU & KASHMIR	56.63	54.68	53.06
	4	PUNJAB	20.3	20.67	18.45
	5	RAJASTHAN	24.93	26.92	27.51
	6	UTTAR PRADESH	26.88	29.07	27.19
	7	UTTARAKHAND	26.93	21.82	24.53
	8	CHANDIGARH	19.32	19.12	19.1
	9	DELHI	22.11	19.86	21.49
WR	1	GUJARAT	18.48	18.11	19.28
	2	MADHYA PRADESH	31.45	31.47	32.26
	3	CHHATTISGARH	28.83	28.38	29.21
	4	MAHARASHTRA	21.82	21.8	20.39
	5	D & N HAVELI	9.86	8.55	10.33
	6	GOA	13.35	12.67	14.97
	7	DAMAN & DIU	15.61	13.77	29.63
SR	1	ANDHRA PRADESH	19.3	20.06	17.94
	2	KARNATAKA	11.14	10.18	11.5
	3	KERALA	17.73	14.99	15.4
	4	TAMILNADU	14.51	10.84	11.07
	5	LAKSHADWEEP	18.6	11.2	3.63
	6	PUDUCHERRY	13.53	14.83	14.9
ER	1	BIHAR	49.42	47.26	46.27
	2	JHARKHAND	13.58	13.06	17.2
	3	ORISSA	39.84	38.86	41.96
	4	SIKKIM	28.14	23.11	24.97
	5	WEST BENGAL	24.07	24.05	24.66
	6	A & N ISLS.	18.14	19.79	20.5
NER	1	ASSAM	30.68	31.08	27.57
	2	MANIPUR	35.12	38.51	40.95
	3	MEGHALAYA	23.64	21.38	33.34
	4	NAGALAND	40.16	35.79	26.51
	5	TRIPURA	31.73	35.35	35.93
	6	ARUNACHAL PRADESH	46	46.3	46.24
	7	MIZORAM	37.79	41.54	42.05
All India			23.04	22.84	22.77

ANNEX REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 256
ANSWERED IN THE LOK SABHA ON 17.11.2016.

PER CAPITA CONSUMPTION (kWh)

State/UTs	2013-14	2014-15	2015-16
Chandigarh	1133	1052	1112
Delhi	1446	1561	1557
Haryana	1773	1909	1936
Himachal Pradesh	1348	1336	1339
Jammu & Kashmir	1066	1169	1234
Punjab	1810	1858	1919
Rajasthan	1011	1123	1164
Uttar Pradesh	472	502	524
Uttarakhand	1285	1358	1431
Chhattisgarh	1601	1719	2022
Gujarat	1973	2105	2248
Madhya Pradesh	764	813	929
Maharashtra	1183	1257	1318
Daman & Diu	8003	6960	7836
Dadra & Nagar Haveli	14515	13769	15137
Goa	2198	1803	2738
Andhra Pradesh	1196	1040	1230
Telangana		1356	1439
Karnataka	1179	1211	1242
Kerala	645	672	704
Tamil Nadu	1544	1616	1688
Puducherry	1692	1655	1672
Lakshadweep	665	657	649
Bihar	160	203	258
Jharkhand	810	835	884
Odisha	1349	1419	1564
West Bengal	609	647	660
Sikkim	700	685	687
Andaman-Nicobar	368	361	355
Arunachal Pradesh	503	525	600
Assam	280	314	322
Manipur	266	295	360
Meghalaya	684	704	835
Mizoram	445	449	503
Nagaland	259	311	346
Tripura	331	303	329
All India	957	1010	1075

Note: Per Capita Consumption=(Gross Energy Generation+Net Import)/Mid Year Population.

ANNEX REFERRED TO IN REPLY TO PART (f) OF UNSTARRED QUESTION NO. 256
ANSWERED IN THE LOK SABHA ON 17.11.2016.

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 PART (f) OF UNSTARRED QUESTION NO. 256
ANSWERED IN THE LOK SABHA ON 17.11.2016.

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 (kWh) 2012	Per Capita Consumption (kWh) 2013
1	Kuwait	16542	15905
2	United Arab Emirate	10175	10547
3	Chinese Taipei	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 of Rep. 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	Philippines	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

ANNEX REFERRED TO IN REPLY TO PART (f) OF UNSTARRED QUESTION NO. 256
ANSWERED IN THE LOK SABHA ON 17.11.2016.

T&D Losses of various Countries in 2012-2013 in (%)

Sl. No.	Name of Country	2012	2013
1	Korea	3.47	3.47
2	Japan	4.79	4.87
3	Germany	4.46	4.51
4	Italy	6.61	6.87
5	Australia	5.68	6.69
6	South Africa	10.19	9.88
7	France	7.99	7.86
8	China	6.56	6.52
9	USA	6.73	6.32
10	Canada	8.19	10.40
11	UK	8.26	7.80
12	Russia	12.59	12.27
13	Brazil	16.63	16.11
14	India	23.65	23.04
15	World	8.89	8.91

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.257
ANSWERED ON 17.11.2016

LOAN FROM ADB FOR GREEN ENERGY CORRIDOR

257. SHRI B. SENGUTTUVAN:

Will the Minister of POWER
be pleased to state:

- (a) whether the Power Grid Corporation has sought nearly \$ 1000 million loan from the Asian Development Bank for the purpose of building and upgrading high voltage transmission lines as part of Government's Green Energy Corridor Initiative;
- (b) if so, the details of the time schedule of receipt, the exact quantum of the loan, the rate of interest and mode or repayment of the loan etc.;
- (c) the details of the projects for which the loan would be utilized; and
- (d) whether any scheme implemented by TANGEDCO in Tamil Nadu would receive the benefit of this loan 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) : Power Grid Corporation of India Limited (PGCIL) has sought a Loan assistance of US\$ 1,000 million from the Asian Development Bank (ADB) comprising of (i) Sovereign guaranteed loan of US\$ 500 million and (ii) Non-Sovereign loan of US\$ 500 million. The Loan would be utilized for funding of the following transmission projects including a project under Green Energy Corridor projects in next 3-4 years:

- (i) HVDC Bipole link between Western Region (Raigarh, Chhattisgarh) and Southern Region (Pugalur, Tamil Nadu) - North Trichur (Kerala)- Scheme 1: Raigarh-Pugalur 6000 MW HVDC System.
- (ii) HVDC Bipole link between Western Region (Raigarh, Chhattisgarh) and Southern Region (Pugalur, Tamil Nadu) - North Trichur (Kerala)- Scheme 3: Pugalur- Trichur 2000 MW VSC based HVDC System.
- (iii) Real Time Measurement/ monitoring scheme.

.....2.

(iv) Inter State Transmission System (ISTS) associated with Green Energy Corridor as under:

- a) Ajmer(New) – Bikaner (New) 765 kV D/c
- b) Bikaner(New) – Moga (PG) 765 kV D/c
- c) LILO of one circuit of 400kV Bhadla- Bikaner (RVPN) line at Bikaner(New)
- d) Establishment of 2x1500 MVA, 765/400 kV S/s at Bikaner (New)

As per the terms of draft Loan document, the interest rates for above loans are London Inter Bank Offered Rate (LIBOR) based with applicable spread and surcharge/ rebate and having repayments period of 15 to 20 years including grace period.

The implementing agency of the projects is PGCIL.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.264
ANSWERED ON 17.11.2016

MONITORING MECHANISM OF UDAY

264. DR. RATNA DE (NAG):

Will the Minister of POWER
be pleased to state:

- (a) whether the Government proposes to change the monitoring mechanism of "Discom UDAY Scheme" in near future;
- (b) if so, the details thereof and the extent to which it is likely to strengthen and make accountable the power sector of the country; and
- (c) 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) to (c) : Monitoring mechanism for Ujwal DISCOM Assurance Yojana (UDAY) includes monitoring at DISCOM level by its head, at State level by a Committee under the Chairmanship of Chief Secretary/Energy Secretary and at the Government of India level by an inter-ministerial Committee headed by Secretary (Power). Also a web portal (www.uday.gov.in) has been created for monitoring purpose.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.266
ANSWERED ON 17.11.2016

HYDRO POWER PROJECTS

266. SHRI B. SRIRAMULU:

Will the Minister of POWER
be pleased to state:

- (a) the details of hydro power projects constructed/under construction and their installed capacities, State-wise;
- (b) the power being generated by each of the hydel power projects along with the reasons for under utilisation of the installed capacity and the steps being taken by the Government to improve the efficiency of hydro power projects for generation of power as per their installed capacity;
- (c) the total expenditure incurred on setting up of each of the power projects of the National Hydro Power Corporation Limited (NHPC) including in Karnataka and the depreciated book value of each of these power projects as on date, project-wise;
- (d) whether various hydro power projects with a combined capacity of 40,000 Mega Watt. allotted to the private sector in various States are yet to take off;
- (e) if so, the details thereof along with the reasons for delay project-wise; and
- (f) the steps taken/being taken by the Government 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) & (b) : A total of 197 Hydro Power projects with an aggregate installed capacity of 43112.42 MW (including Pumped Storage Scheme) are presently under operation in the country. The state-wise details of Hydro Electric Stations under operation along with energy generated by each of the hydel power projects is given at Annex-I. In addition, 44 Hydro Electric Projects (above 25 MW) totalling to 13182 MW are under construction in the country. Details are given at Annex-II.

Majority of the hydro power projects in the country are generating power as per their installed capacity. The major reason for some of the hydro power projects not operating at their full capacity is availability of lesser water flows especially in the Southern states of Karnataka, Tamil Nadu, Telangana, Kerala, Andhra Pradesh. In addition, generation is affected in some of the stations like Rihand, Bhadra, Hirakud etc. due to ongoing renovation and modernization activities.

(c) : The project-wise expenditure incurred on setting up of each of the power projects of the National Hydro Power Corporation limited (NHPC) including in Karnataka and the depreciated book value of each of these power projects, as on date, as received from NHPC, is given at Annex - III.

(d) : As per information available in CEA, the status of various Hydro Projects in Private sector in the country is as under:

Sl. No.	Status	No of Projects	Total Capacity (MW)
1	In operation*	26	3269
2	Under construction	19	4555
3	DPR concurred by CEA	22	15058
4	DPR under Examination in CEA	6	3317
5	DPR returned for resubmission	16	5338
6	DPR under Preparation	31	6502
	Total	120	38039

* Note: Having installed capacity above 3 MW

(e) : The reasons for delay in respect of hydro projects under construction in private sector mainly include Law and order issues, Rehabilitation and resettlement, natural calamities, geological surprises, Environmental Clearances, financial constraints etc.

(f) : Regular review meetings are held at various levels including CEA, MoP with developers, States and other concerned agencies for resolution of the issues.

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 266 ANSWERED IN THE LOK SABHA ON 17.11.2016.

(As on 31.10.2016)

STATE/STATION/ UTILITY	INSTALLED CAPACITY AS ON 31.10.2016 (MW)	2016-17 (Upto 31.10.2016)* Energy Generated (MU)
NORTHERN REGION		
HIMACHAL PRADESH		
Bhakra L&R	1325.00	3576.02
Dehar	990.00	2626.67
Ganguwal	77.65	240.89
Kotla	77.65	256.06
Pong	396.00	726.15
Baira Siul	180.00	492.15
Chamera-I	540.00	1802.01
Chamera-II	300.00	1217.46
Chamera-III	231.00	856.45
Nathpa Jhakri	1500.00	5980.38
Rampur	412.02	1666.22
Kol Dam	800.00	2805.48
Kashang I	65.00	35.79
Kashang II & III	65.00	
Bassi	60.00	244.62
Giri Bata	60.00	105.09
Larji	126.00	510.43
Sanjay	120.00	96.68
Shanan	110.00	387.35
Allain Duhagan (Pvt.)	192.00	607.85
Malana - II (Pvt.)	100.00	336.57
Baspa-II	300.00	1181.39
Karcham Wangtoo	1000.00	3795.87
Budhil (Pvt.)	70.00	237.66
Malana	86.00	314.45
Total H.P.	9183.32	30099.69
JAMMU & KASHMIR		
Chutak	44.00	22.98
Dhauliganga	280.00	803.75
Dulhasti	390.00	1788.11
Nimoo Bazgo	45.00	44.23
Parbati III	520.00	610.18
Salal-I	345.00	2781.56
Salal-II	345.00	
Sewa-II	120.00	286.62
Tanakpur	94.20	328.68
Uri	480.00	1965.52
Uri-II	240.00	1013.06
Baglihar	450.00	1611.05
Baglihar	450.00	1714.39
Lower Jhelum	105.00	311.69
Upper Sindh II	105.00	311.45
Total J&K	4013.20	13593.27
PUNJAB		
A.P.Sahib I&II	134.00	511.54
Mukerian I-IV	207.00	534.18
Ranjit Sagar	600.00	963.27
Total Punjab	941.00	2008.99
RAJASTHAN		
Jawahar Sagar	99.00	95.48
Mahi Bajaj I&II	140.00	109.36
R.P. Sagar	172.00	114.93
Total Rajasthan	411.00	319.77

UTTAR PRADESH		
Khara	72.00	208.39
Matatilla	30.60	59.92
Obra	99.00	124.18
Rihand	300.00	315.03
Total UP	501.60	707.52
UTTARAKHAND		
Chibro (Y.St.II)	240.00	567.63
Chilla	144.00	488.40
Dhakrani (Y.St.I)	33.75	94.57
Dhalipur (Y.St.I)	51.00	142.67
Khatima	41.40	117.97
Khodri (Y.St.II)	120.00	260.80
Kulhal (Y.St.IV)	30.00	92.79
Maneri Bhali-I	90.00	223.63
Maneri Bhali-II	304.00	1066.94
Ram Ganga	198.00	26.21
Tehri	1000.00	1996.83
Koteshwar	400.00	791.83
Srinagar	330.00	1095.85
Vishnu Prayag	400.00	1733.44
Total Uttarakhand	3382.15	8699.56
Total N. REGION	18432.27	55428.80
WESTERN REGION		
CHHATTISGARH		
Hasdeo Bango	120.00	141.68
Total Chhattisgarh	120.00	141.68
GUJARAT		
Kadana PSS	240.00	257.21
Ukai	300.00	203.90
Sardar Sarovar CHPH	250.00	453.57
Sardar Sarovar RBPH	1200.00	2244.51
Total Gujarat	1990.00	3159.19
MADHYA PRADESH		
Bansagar Tons-I	315.00	652.15
Bansagar Tons-II	30.00	47.59
Bansagar Tons-III	60.00	49.13
Bargi	90.00	282.66
Gandhi Sagar	115.00	89.78
Madhikhhera	60.00	95.86
Rajghat	45.00	23.66
Indira Sagar	1000.00	2208.08
Omkareshwar	520.00	959.98
Total M.P.	2235.00	4408.89
MAHARASHTRA		
Bhira Tail Race	80.00	67.49
Ghatghar PSS	250.00	164.36
Koyna DPH	36.00	68.72
Koyna St.I& II	600.00	660.63
Koyna St.III	320.00	307.23
Koyna IV	1000.00	451.69
Tillari	60.00	56.30
Vaitarna	60.00	58.95
Pench	160.00	232.21
Bhandardhara - II	34.00	15.23
Bhira	150.00	605.41
Bhira PSS	150.00	
Bhivpuri	75.00	61.63
Khopoli	72.00	164.79
Total Maharashtra	3047	2915
Total Western	7392.00	10624.40

SOUTHERN REGION		
ANDHRA PRADESH		
Lower Sileru	460.00	367.61
N.J.Sagar RBC	90.00	1.18
N.J.Sagar TPD		0.00
Srisaillam RB	770.00	422.76
Upper sileru I&II	240.00	133.30
Total AP	1560.00	924.85
TELANGANA		
Lower Jurala	240.00	175.24
N.J.Sagar PSS	815.60	118.53
N.J.Sagar LBC	60.00	0.00
Pochampad	27.00	31.63
Srisaillam LB	900.00	373.81
Priyadarshni	234.00	211.99
Pulinchinthala	30.00	7.41
Total Telangana	2306.60	918.61
KARNATAKA		
Amatti Dam	290.00	321.34
Bhadra	39.20	15.87
Gerusoppa	240.00	135.22
Ghatprabha	32.00	8.97
Jog	139.20	211.87
Kadra	150.00	127.69
Kalinadi	855.00	682.83
Supa DPH	100.00	104.40
Kodasali	120.00	94.01
Lingnamakki	55.00	36.59
Munirabad	28.00	30.43
Sharavathy	1035.00	1151.35
Shivasamudram	42.00	125.18
Varahi	460.00	485.14
T.B.Dam & Hampi	72.00	64.74
Total Karnataka	3657.40	3595.63
KERALA		
Idamalayar	75.00	93.68
Idukki	780.00	911.76
Kakkad	50.00	87.40
Kuttiadi	125.00	310.99
Kuttiadi Addn. Extn.	100.00	
Lower Periyar	180.00	270.68
Neriamangalam	70.00	166.74
Pallivasal	37.50	121.35
Panniar	30.00	52.12
Poringalkuthu	32.00	74.76
Sabarigiri	300.00	499.31
Sengulam	48.00	91.74
Sholayar	54.00	94.45
Total Kerala	1881.50	2774.98
TAMIL NADU		
Aliyar	60.00	42.79
Bhawani Kattalai Barrage-III	30.00	16.57
Bhawani Kattalai Barrage-II	30.00	17.86
Bhawani Kattalai Barrage-I	30.00	18.71
Kadamparai PSS	400.00	145.78
Kodayar I&II	100.00	97.91
Kundah I-V	555.00	555.18
Lower Mettur I-IV	120.00	82.63
Mettur Dam & Tunnel	250.00	114.75
Moyar	36.00	46.18
Papansam	32.00	54.34
Parson's Valley	30.00	11.50

Periyar	140.00	93.94
Pykara	59.20	12.70
Pykara Ultimate	150.00	139.73
Sarkarpathy	30.00	41.01
Sholayar I&II	95.00	214.76
Suruliyar	35.00	29.07
Total Tamilnadu	2182.20	1735.41
Total Southern	11587.70	9949.48
EASTERN REGION		
JHARKHAND		
Subernarekha I&II	130.00	30.23
Panchet	80.00	103.09
Total Jharkhand	210.00	133.32
ODISHA		
Balimela	510.00	533.67
Hirakud I	275.50	532.04
Hirakud II	72.00	
Rengali	250.00	479.79
Upper Indravati	600.00	973.45
Upper Kolab	320.00	387.17
Machkund	114.75	350.28
Total Odisha	2142.25	3256.40
SIKKIM		
Jorethang Loop	96.00	328.75
Chuzachen (Sikkim)	99.00	434.21
Teesta III		0.21
Rangit	60.00	255.56
Teesta-V	510.00	2219.21
Total Sikkim	765.00	3237.94
WEST BENGAL		
Jaldhaka - I	36.00	158.53
Purulia PSS	900.00	691.85
Ramman II	50.00	185.83
Maithon	63.20	98.09
Teesta Low Dam-III	132.00	462.10
Teesta Low Dam-IV	160.00	479.86
Total WB	1341.20	2076.26
Total Eastern	4458.45	8703.92
NORTH EASTERN REGION		
ASSAM		
Karbi Langpi	100.00	310.64
Khandong	75.00	146.59
Kopili	200.00	789.46
Total Assam	375.00	1246.69
MEGHALAYA		
Kyrdemkulai	60.00	39.76
Myntdu	126.00	348.35
Umium St.I	36.00	80.29
Umium St. IV	60.00	138.63
New Umtru		0.00
Total Meghalaya	282.00	607.03
NAGALAND		
Doyang	75.00	217.87
Total Nagaland	75.00	217.87
ARUNACHAL PRADESH		
Ranganadi	405.00	1049.06
Total Ar. Pradesh	405.00	1049.06
Manipur		
Loktak	105.00	479.52
Total Manipur	105.00	479.52
Total N.Eastern States	1242.00	3600.17
TOTAL ALL INDIA	43112.42	88306.77

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 266 ANSWERED IN THE LOK SABHA ON 17.11.2016.

List of Under Construction Hydro Electric Projects (above 25 MW) in the country - State-wise

Sl. No.	Name of Scheme (Executing Agency)	Sector	(As on 31.10.2016)	
			Cap. Under Execution (MW)	Completion Period
	Andhra Pradesh			
1	Polavaram (PPA)	State	960.00	2021-22 ##
2	Nagarujana Sagar TR(APGENCO)	State	50.00	2016-17
	Sub-total: Andhra Pradesh		1010.00	
	Arunachal Pradesh			
3	Kameng (NEEPCO)	Central	600.00	2017-18 @
4	Pare (NEEPCO)	Central	110.00	2017-18 @
5	Subansiri Lower (NHPC)	Central	2000.00	2020-21 *
6	Gongri(Dirang Energy)	Private	144.00	2019-20 #
	Sub-total: Arunachal Pradesh		2854.00	
	Himachal Pradesh			
7	Parbati St. II (NHPC)	Central	800.00	2018-19
8	Uhl-III (BVPCL)	State	100.00	2017-18
9	Sawra Kuddu (HPPCL)	State	111.00	2018-19
10	Sainj (HPPCL)	State	100.00	2016-17
11	Shongtong Karcham (HPPCL)	State	450.00	2019-20
12	Kashang -II & III (HPPCL)	State	65.00	2019-20 *
13	Bajoli Holi (GMR)	Private	180.00	2019-20
14	Sorang (HSPCL)	Private	100.00	2017-18 *
15	Tangnu Romai (TRPG)	Private	44.00	2018-19 *
16	Tidong-I (NSL Tidong)	Private	100.00	2017-18
17	Chanju-I (IA Energy)	Private	36.00	2016-17
	Sub-total: Himachal Pradesh		2086.00	
	Jammu & Kashmir			
18	Kishanganga (NHPC)	Central	330.00	2017-18
19	Ratle (RHEPPL)	Private	850.00	2021-22 *
	Sub-total: Jammu & Kashmir		1180.00	
	Kerala			
20	Pallivasal (KSEB)	State	60.00	2019-20 *
21	Thottiyar (KSEB)	State	40.00	2019-20 *
	Sub-total: Kerala		100.00	
	Madhya Pradesh			
22	Maheshwar (SMHPCL)	Private	400.00	2017-19 *
	Sub-total: Madhya Pradesh		400.00	
	Maharashtra			
23	Koyna Left Bank (WRD,MAH)	State	80.00	2019-20 #
	Sub-total: Maharashtra		80.00	
	Meghalaya			
24	New Umtru (MePGCL)	State	40.00	2016-18 @
	Sub-total: Meghalaya		40.00	
	Mizoram			
25	Tuirial (NEEPCO)	Central	60.00	2017-18
	Sub-total: Mizoram		60.00	
	Punjab			
26	Shahpurkandi (PSPCL)	State	206.00	2019-20 *
	Sub-total: Punjab		206.00	
	Sikkim			
27	Bhasmey (Gati Infrastructure)	Private	51.00	2019-20
28	Dikchu (Sneha Knietic)	Private	96.00	2016-17
29	Rangit-IV (JAL Power)	Private	120.00	2019-20 *
30	Rangit-II (Sikkim Hydro)	Private	66.00	2019-20 #

31	Rongnichu (Madhya Bharat)	Private	96.00	2019-20
32	Tashiding (Shiga Energy)	Private	97.00	2016-17
33	Teesta St. III (Teesta Urja Ltd.)	State	1200.00	2016-17
34	Teesta St. VI (LANCO)	Private	500.00	2021-22 *
35	Panan (Himagiri)	Private	300.00	2020-21 ##
	Sub-total: Sikkim		2526.00	
	Telangana			
36	Pulichintala (TSGENCO)	State	90.00	2016-18
	Sub-total: Telangana		90.00	
	Uttarakhand			
37	Lata Tapovan (NTPC)	Central	171.00	2021-22 *
38	Tapovan Vishnugad (NTPC)	Central	520.00	2019-20
39	Tehri PSS (THDC)	Central	1000.00	2019-20
40	Vishnugad Pipalkoti (THDC)	Central	444.00	2019-20
41	Vyasi (UJVNL)	State	120.00	2018-19
42	Phata Byung (LANCO)	Private	76.00	2018-19 #
43	Singoli Bhatwari (L&T)	Private	99.00	2019-20 #
	Sub-total: Uttarakhand		2430.00	
	West Bengal			
44	Rammam-III (NTPC)	Central	120.00	2019-20
	Sub-total: West Bengal		120.00	
	Total:		13182.00	

* Subject to restart of works

Subject to active start of works

Subject to active start of works and award of E&M works

@ Projects in the programme of F.Y. 2016-17, however slipping over to F.Y. 2017-18.

ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 266 ANSWERED IN THE LOK SABHA ON 17.11.2016.

TOTAL EXPENDITURE INCURRED ON SETTING UP OF THE PROJECT AND DEPRECIATED BOOK VALUE OF THE PROJECTS AS ON 30TH JUNE 2016

(Amount Rupees in Crore)

NHPC LIMITED							
TOTAL EXPENDITURE INCURRED ON SETTING UP THE PROJECT AND DEPRECIATED BOOK VALUE OF THE PROJECTS AS ON 30TH JUNE 2016							
(AMOUNT IN CRORE)							
Sl. No	UNIT	STATE	GROSS BLOCK OF FIXED ASSETS	CAPITAL WORK IN PROGRESS	TOTAL EXPENDITURE INCURRED ON SETTING UP THE PROJECT	DEPRECIATION	DEPRECIATED BOOK VALUE OF THE PROJECT
A	PROJECT UNDER OPERATION						
1	SALAL	JAMMU & KASHMIR	992.54	13.10	1,005.64	654.45	351.19
2	URI - I	JAMMU & KASHMIR	3,517.09	8.23	3,525.33	1,786.89	1,738.44
3	URI - II	JAMMU & KASHMIR	2,166.08	18.62	2,184.70	290.71	1,893.99
4	DULHASTI	JAMMU & KASHMIR	5,257.68	4.32	5,262.00	2,252.94	3,009.06
5	SEWA-II	JAMMU & KASHMIR	1,106.65	0.00	1,106.65	334.80	771.85
6	NIMMO BAZGO	JAMMU & KASHMIR	971.78	1.27	973.05	131.17	841.88
7	CHUTAK	JAMMU & KASHMIR	877.07	2.08	879.15	154.08	725.06
8	BAIRASIUL	HIMACHAL PRADESH	225.13	0.14	225.28	185.85	39.43
9	CHAMERA-I	HIMACHAL PRADESH	2,161.52	1.98	2,163.51	1,250.81	912.70
10	CHAMERA-II	HIMACHAL PRADESH	2,078.68	1.34	2,080.02	1,051.32	1,028.70
11	CHAMERA-III	HIMACHAL PRADESH	1,956.91	10.53	1,967.44	404.72	1,562.72
12	PARBATI-III	HIMACHAL PRADESH	2,466.75	21.38	2,488.13	273.49	2,214.64
13	TANAKPUR	UTTARAKHAND	420.33	1.80	422.14	229.36	192.78
14	DHAULIGANGA-I	UTTARAKHAND	1,759.31	1.12	1,760.42	792.12	968.30
15	LOKTAK	MANIPUR	195.30	0.64	195.93	148.53	47.41
16	RANGIT	SIKKIM	515.83	0.26	516.09	240.12	275.98
17	TEESTA-V	SIKKIM	2,911.38	1.83	2,913.21	1,143.28	1,769.93
18	TLDP-III	WEST BENGAL	1,880.56	10.14	1,890.70	306.99	1,583.71
19	TLDP-IV	WEST BENGAL	1,352.69	298.09	1,650.77	20.52	1,630.25
B	PROJECT UNDER CONSTRUCTION/ INVESTIGATION						
1	KISHANGANGA	JAMMU & KASHMIR	297.65	4,337.53	4,635.18	53.44	4,581.74
2	PARBATI -II	HIMACHAL PRADESH	217.89	5,701.27	5,919.15	81.93	5,837.22
3	SUBANSIRI LOWER	ASSAM/ ARUNACHAL PRADESH	151.44	5,702.73	5,854.17	76.15	5,778.02
4	BURSUR	JAMMU & KASHMIR	4.07	1.66	5.72	3.09	2.63
5	DIBANG	ARUNACHAL PRADESH	7.60	194.55	202.15	5.96	196.19
6	TAWANG	ARUNACHAL PRADESH	3.71	178.83	182.54	2.55	179.99
7	KOTLIBHEL 1A	UTTARAKHAND	23.73	0.95	24.67	10.73	13.95
8	DHAULIGANGA INTERMEDIATE	UTTARAKHAND	0.32	46.50	46.81	0.19	46.63
9	TEESTA-IV	SIKKIM	1.58	126.38	127.96	0.85	127.11
10	WIND POWER PROJECT JAISE LMER (WPPJ)	RAJASTHAN	1.04	319.68	320.72	0.01	320.72
	TOTAL		33,522.31	17,006.95	50,529.26	11,887.05	38,642.21
NOTE:-Presently, NHPC Limited has no Power Project located in the state of Karnataka.							

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.276
ANSWERED ON 17.11.2016

FUND FOR DEVELOPMENT OF POWER SECTOR

†276. SHRI NIHAL CHAND:

Will the Minister of POWER
be pleased to state:

- (a) the details of funds released by the Union Government for the development of power sector in various States during the last three years;
- (b) whether the Union Government proposes to augment budgetary allocation to the power sector so as to meet the power needs of the country; and
- (c) 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) : Funds have been released by Ministry of Power to States under different schemes, viz., Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS) and Power System Development Fund (PSDF) through the nodal agencies, namely Rural Electrification Corporation (REC), Power Finance Corporation (PFC) and Power System Operation Corporation Limited (POSOCO) respectively for further disbursement to state DISCOMs, for the development of power sector. The detail of funds released under all the three schemes during the last three years is as under:

(Rs. in Cr.)

Sl. No.	Name of Schemes	Fund released		
		2013-14	2014-15	2015-16
1.	DDUGJY	2938.52	3374.41	4500.00
2.	IPDS	639.99	628.47	944.80
3.	PSDF	Nil	185.46	175.00

Further, one time assistance of Rs.200 crore was also provided to NCT of Delhi as Power Sector Support in financial year 2014-15.

(b) & (c) : Ministry of Power has proposed to Ministry of Finance to augment the budgetary allocation to the power sector from Rs.12,252.71 crore in BE to Rs.13130 crore in RE for 2016-17 and Rs.22767.39 core in BE for 2017-18.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.292
ANSWERED ON 17.11.2016

HYDRO POWER IN MAHARASHTRA

†292. SHRI RAJU SHETTY:
SHRI FEROZE VARUN GANDHI:

Will the Minister of POWER
be pleased to state:

- (a) the details of the potential of hydropower generation in the country, State-wise;
- (b) the reasons for not able to tap this potential, State-wise; and the reasons for consistent decline in the hydropower generation during last two decades;
- (c) the details of the present hydropower projects under various states and corporations with their proposed capacity and completion period and in case of delayed projects reasons therefor, project-wise; and
- (d) the steps being taken/proposed to be taken to fully harness the hydropower potential in the country, State-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) & (b) : As per Reassessment-Studies, carried out by CEA during 1978-87, the assessed hydro potential in the country is 148701 MW out of which 145320 MW of the potential consists of hydro electric schemes having installed capacity above 25 MW. Currently, 43112 MW (including Pumped Storage Schemes) of potential has been exploited. The state-wise details of potential and its development is enclosed at Annex-I.

The share of hydro power generation has declined due to High Capital Cost, Land Acquisition Issues, Environment and Forest Clearances, Rehabilitation & Resettlement Issues, Inadequate Infrastructural facilities in remote hydro project locations, Law & Order / Local issues, Geological Surprises, Natural Calamities, Inter-State issues, etc. and resultant relatively high tariff.

(c) : Presently, 44 Hydro-electric projects (above 25 MW) aggregating to 13182 MW are under construction in the country. The details of such projects are enclosed at Annex-II. Out of these projects, 19 Hydro electric projects aggregating to 6281 MW are stalled/stressed. The details of such projects along with reasons thereof are enclosed at Annex-III.

(d) : A number of remedial measures have been undertaken by the Government to fully harness the hydropower potential in the country 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 in Revised Tariff Policy, excluding hydro power from Renewable Purchase Obligation etc.

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 292 ANSWERED IN THE LOK SABHA ON 17.11.2016.

STATUS OF HYDRO ELECTRIC POTENTIAL DEVELOPMENT

(In terms of Installed Capacity – above 25 MW)

As on 31.10.2016

Region/ State	Identified Capacity as per reassessment study		Capacity Under Operation		Capacity Under Construction		Capacity Under Operation + Under Construction		Capacity yet to be taken up under construction	
	Total (MW)	Above 25 MW (MW)	(MW)	%	(MW)	(%)	(MW)	(%)	(MW)	%
NORTHERN										
Jammu & Kashmir	14146	13543	3119.0	23.03	1180.0	8.71	4299.0	31.74	9244.0	68.26
Himachal Pradesh	18820	18540	9438.0	50.91	2086.0	11.25	11524.0	62.16	7016.0	37.84
Punjab	971	971	1206.3	100	206.0	21.22	1412.3	100.00	0.0	0.00
Haryana	64	64	0.0	0	0.0	0.00	0.0	0.00	0.0	0.00
Rajasthan	496	483	411.0	85.09	0.0	0.00	411.0	100.00	0.0	0.00
Uttarakhand	18175	17998	3756.4	20.87	1430.0	7.95	5186.4	28.82	12811.7	71.18
Uttar Pradesh	723	664	501.6	75.54	0.0	0.00	501.6	75.54	39.0	5.87
Sub Total (NR)	53395	52263	18432.3	35.27	4902.0	9.38	23334.3	44.65	28928.8	55.35
WESTERN										
Madhya Pradesh	2243	1970	2395.0	100	400.0	20.30	2795.0	100.00	0.0	0.00
Chhattisgarh	2242	2202	120.0	5.45	0.0	0.00	120.0	5.45	2082.0	94.55
Gujarat	619	590	550.0	100	0.0	0.00	550.0	100.00	0.0	0.00
Maharashtra	3769	3314	2487.0	75.05	0.0	0.00	2487.0	75.05	827.0	24.95
Goa	55	55	0.0	0.00	0.0	0.00	0.0	0.00	55.0	100.00
Sub total (WR)	8928	8131	5552.0	68.28	400.0	4.92	5952.0	73.20	2179.0	26.80
SOUTHERN										
Andhra Pradesh	2366	2341	1746.8	74.62	1010.0	43.14	2756.8	117.76	0.0	0.00
Telangana	2058	2019	701.0	34.72	90.0	4.46	791.0	39.18	1228.0	60.82
Karnataka	6602	6459	3585.4	55.51	0.0	0.00	3585.4	55.51	2873.6	44.49
Kerala	3514	3378	1881.5	55.70	100.0	2.96	1981.5	58.66	1396.5	41.34
Tamil Nadu	1918	1693	1782.2	100	0.0	0.00	1782.2	100.00	0.0	0.00
Sub Total (SR)	16458	15890	9696.9	61.02	1200.0	7.55	10896.9	68.58	4993.2	31.42
EASTERN										
Jharkhand	753	582	170.0	29.21	0.0	0.00	170.0	29.21	412.0	70.79
Bihar	70	40	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Odisha	2999	2981	2027.5	68.01	0.0	0.00	2027.5	68.01	953.5	31.99
West Bengal	2841	2829	441.2	15.60	120.0	4.24	561.2	19.84	2267.8	80.16
Sikkim	4286	4248	765.0	18.01	2526.0	59.46	3291.0	77.47	957.0	22.53
Sub Total (ER)	10949	10680	3403.7	31.87	2646.0	24.78	6049.7	56.65	4630.3	43.35
NORTH EASTERN										
Meghalaya	2394	2298	282.0	12.27	40.0	1.74	322.0	14.01	1976.0	85.99
Tripura	15	0	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
Manipur	1784	1761	105.0	5.96	0.0	0.00	105.0	5.96	1656.0	94.04
Assam	680	650	375.0	57.69	0.0	0.00	375.0	57.69	275.0	42.31
Nagaland	1574	1452	75.0	5.17	0.0	0.00	75.0	5.17	1377.0	94.83
Arunachal Pradesh	50328	50064	405.0	0.81	2854.0	5.70	3259.0	6.51	46805.0	93.49
Mizoram	2196	2131	0.0	0.00	60.0	2.82	60.0	2.82	2071.0	97.18
Sub Total (NER)	58971	58356	1242.0	2.13	2954.0	5.06	4196.0	7.19	54160.0	92.81
ALL INDIA	148701	145320	38326.8	26.37	12102.0	8.33	50428.8	34.70	94891.2	65.30

Note:-

In addition to above 9 PSS (4785.6 MW) are under operation, 2 PSS (1080 MW) are under construction.

ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 292 ANSWERED IN THE LOK SABHA ON 17.11.2016.

List of Under Construction Hydro Electric Projects (above 25 MW) in the country – State-wise

Sl. No.	Name of Scheme (Executing Agency)	Sector	(As on 31.10.2016)	
			Cap. Under Execution (MW)	Completion Period
Andhra Pradesh				
1	Polavaram (PPA)	State	960.00	2021-22 ##
2	Nagarujana Sagar TR(APGENCO)	State	50.00	2016-17
Sub-total: Andhra Pradesh			1010.00	
Arunachal Pradesh				
3	Kameng (NEEPCO)	Central	600.00	2017-18 @
4	Pare (NEEPCO)	Central	110.00	2017-18 @
5	Subansiri Lower (NHPC)	Central	2000.00	2020-21 *
6	Gongri(Dirang Energy)	Private	144.00	2019-20 #
Sub-total: Arunachal Pradesh			2854.00	
Himachal Pradesh				
7	Parbati St. II (NHPC)	Central	800.00	2018-19
8	Uhl-III (BVPCL)	State	100.00	2017-18
9	Sawra Kuddu (HPPCL)	State	111.00	2018-19
10	Sainj (HPPCL)	State	100.00	2016-17
11	Shongtong Karcham (HPPCL)	State	450.00	2019-20
12	Kashang -II & III (HPPCL)	State	65.00	2019-20 *
13	Bajoli Holi (GMR)	Private	180.00	2019-20
14	Sorang (HSPCL)	Private	100.00	2017-18 *
15	Tangnu Romai (TRPG)	Private	44.00	2018-19 *
16	Tidong-I (NSL Tidong)	Private	100.00	2017-18
17	Chanju-I (IA Energy)	Private	36.00	2016-17
Sub-total: Himachal Pradesh			2086.00	
Jammu & Kashmir				
18	Kishanganga (NHPC)	Central	330.00	2017-18
19	Ratle (RHEPPL)	Private	850.00	2021-22 *
Sub-total: Jammu & Kashmir			1180.00	
Kerala				
20	Pallivasal (KSEB)	State	60.00	2019-20 *
21	Thottiyar (KSEB)	State	40.00	2019-20 *
Sub-total: Kerala			100.00	
Madhya Pradesh				
22	Maheshwar (SMHPCL)	Private	400.00	2017-19 *
Sub-total: Madhya Pradesh			400.00	
Maharashtra				
23	Koyna Left Bank (WRD,MAH)	State	80.00	2019-20 #
Sub-total: Maharashtra			80.00	
Meghalaya				
24	New Umtru (MePGCL)	State	40.00	2016-18 @
Sub-total: Meghalaya			40.00	
Mizoram				
25	Tuirial (NEEPCO)	Central	60.00	2017-18
Sub-total: Mizoram			60.00	
Punjab				
26	Shahpurkandi (PSPCL)	State	206.00	2019-20 *
Sub-total: Punjab			206.00	
Sikkim				
27	Bhasmey (Gati Infrastructure)	Private	51.00	2019-20

28	Dikchu (Sneha Knietic)	Private	96.00	2016-17
29	Rangit-IV (JAL Power)	Private	120.00	2019-20 *
30	Rangit-II (Sikkim Hydro)	Private	66.00	2019-20 #
31	Rongnichu (Madhya Bharat)	Private	96.00	2019-20
32	Tashiding (Shiga Energy)	Private	97.00	2016-17
33	Teesta St. III (Teesta Urja Ltd.)	State	1200.00	2016-17
34	Teesta St. VI (LANCO)	Private	500.00	2021-22 *
35	Panan (Himagiri)	Private	300.00	2020-21 ##
	Sub-total: Sikkim		2526.00	
	Telangana			
36	Pulichintala (TSGENCO)	State	90.00	2016-18
	Sub-total: Telangana		90.00	
	Uttarakhand			
37	Lata Tapovan (NTPC)	Central	171.00	2021-22 *
38	Tapovan Vishnugad (NTPC)	Central	520.00	2019-20
39	Tehri PSS (THDC)	Central	1000.00	2019-20
40	Vishnugad Pipalkoti (THDC)	Central	444.00	2019-20
41	Vyasi (UJVNL)	State	120.00	2018-19
42	Phata Byung (LANCO)	Private	76.00	2018-19 #
43	Singoli Bhatwari (L&T)	Private	99.00	2019-20 #
	Sub-total: Uttarakhand		2430.00	
	West Bengal			
44	Rammam-III (NTPC)	Central	120.00	2019-20
	Sub-total: West Bengal		120.00	
	Total:		13182.00	

* Subject to restart of works

Subject to active start of works

Subject to active start of works and award of E&M works

@ Projects in the programme of 2016-17, however slipping to 2017-18.

ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 292 ANSWERED IN THE LOK SABHA ON 17.11.2016.

Stalled Under Construction Hydro Electric Projects

Sl. No	Name of Project/ Executing Agency / Capacity (MW)	State	Reasons for Stuck up
	Central Sector		
1	Lata Tapovan, NTPC Limited 3x57=171 MW	Uttarakhand	Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14.
2	Subansiri Lower NHPC Limited 8x250=2000 MW	Arunachal Pradesh / Assam	-Since 16.12.2011 works stopped due to agitation by various activists, fearing dam safety and downstream impacts of dam. -Case in Hon'ble NGT, Kolkata bench.
	State Sector		
3	Kashang - II & III HPPCL 2x65 = 130 MW (1 unit already commissioned)	H.P.	-Works on KK Link tunnel could not start since 2011, due to two separate cases (one for Environmental clearance and another for Forest clearance) were pending in NGT. The case of Environmental clearance has been decided in favour of HPPCL, whereas in the case of Forest clearance, it has been directed by the NGT that matter shall be placed before Gram Sabha in the presence of a Judicial Officer. The entire proceeding shall be completed not later than three months from the date of commencement of proceeding of Gram Sabha. HPPCL shall then submit the report to NGT. The application for challenging the NGT decision has been filed in the Hon'ble Supreme Court by HPPCL which has now been withdrawn on the direction of Govt. of Himachal Pradesh on dated 08.09.2016.
4	Shahpurkandi Irr. Deptt., Pb. & PSPCL 3x33+3x33+1x8=206 MW	Punjab	- Works of Dam (J&K side) stopped since 30.08.2014 due to inter-state disputes between Punjab and J&K Government.
5	Polavaram Polavaram Project Authority(12x80 = 960 MW)	A.P.	-Slow progress of works due to funds constraints. - Public hearing for construction of protective embankment to be held in Oddisha and Chhattisgarh as desired by MOEF.
6	Thottiyar KSEB 1x30+1x10=40 MW	Kerala	- Works are almost standstill since Nov, 2015. The contractor has put forward a proposal for foreclosure of the Project due to their financial stringency and a detailed note regarding the same was submitted to the Board for approval. It is decided to foreclose the work and the balance work may be re-arranged through open tender or through Govt. approved executing agencies like Uralungal Labour Contract Co-operative Society.

Sl. No	Name of Project/ Executing Agency / Capacity (MW)	State	Reasons for Stuck up
7	Pallivasal KSEB 2x30=60 MW	Kerala	- Works are almost standstill since Jan, 2015. The contractor has put forward a proposal for foreclosure of the Project due to their financial stringency and a detailed note regarding the same was submitted to the Board for approval. It is decided to foreclose the work and the balance work may be re-arranged through open tender or through Govt. approved executing agencies like Uralungal Labour Contract Co-operative Society.
8	Koyna Left Bank PSS WRD, Govt. of Maharashtra 2x40=80 MW	Maharashtra	- Project stalled since July, 2015. The current expenditure on the project has already reached to almost original administrative approved cost level hence expenditure on the project is stopped and project work is processing at very slow rate. Revised cost is under approval by State Govt.
	Private Sector		
9	Maheshwar Shree Maheshwar Hydel Power Corporation Limited 10x40= 400 MW	M. P.	Works suspended since Nov-11 due to cash flow problem with developer.
10	Teesta VI Lanco Teesta Hydro Power Ltd. 4x125=500 MW	Sikkim	There is almost no progress since April, 2014. (Funds Constraints)
11	Rangit-IV Jal Power Corp. Ltd. (JPCL) 3x40= 120 MW	Sikkim	Works stopped since Oct-13 due to funds constraints with developer.
12	Panan Himagiri Hydro Energy Pvt Ltd. 4x75 = 300 MW	Sikkim	Major Civil Works could not start since April, 2014 for want of NGT Clearance
13	Ratle GVK Ratle Hydro Electric Project Pvt. Ltd. 4x205+1x30=850MW	J&K	There is no progress since 11 th July, 2014. (R&R issues, Local issues, Law & order problem, Indus Water Treaty etc.)
14	Tangnu Romai Tangnu Romai Power Generation 2x22=44 MW	H.P.	The developer informed that the project suffered due to very poor geology in HRT, due to which project got delayed and cost had increased. Further Works stalled since January, 2015 due to fund constraints.
15	Sorang Himachal Sorang Power Ltd. 2x50=100 MW	H.P.	Works are stalled since 18.11.2015 due to rupture in the surface penstock pipe when unit#2 was under trial run.

Total = 15 Nos. (5896 MW)

In addition to above, the following projects are also stressed :-

Sl. No	Name of Project/ Executing Agency/ Capacity (MW)	State	Reasons for Stress
1	Phata Byung M/s.Lanco 2x38=76 MW	Uttarakhand	- Works affected due to flash flood in June, 2013. - Slow pace of works. - High tariff due to time & cost over-run.
2	Singoli Bhatwari M/s.L&T 3x33=99 MW	Uttarakhand	- Works affected due to flash flood in June, 2013. - Slow pace of works. - High tariff due to time & cost over-run.
3	Gongri Dirang Energy Pvt. Ltd. 2x72=144 MW	Arunachal Pradesh	Works stopped since 2 nd week of April, 2016 due to fund flow problem with promoter / lenders. Works restarted in July-2016 but fund constraints still exist.
4	Rangit-II Sikkim Hydro Power Ltd. 2x33=66MW	Sikkim	Works are stalled since 2014 due to non-release of funds by lenders because of power evacuation and land acquisition issues. Developer has to infuse equity into the project. Meanwhile, the promoter of the company 'Gammon India Ltd' is under CDR. Hence PFC is unable to disburse the loan. Talks between developer & lenders is under progress, however funds yet not disbursed by banks. The developer re-started works w.e.f. September, 2016.

Total = 4 Nos. (385 MW)

Grand Total = 19 Nos. (6281 MW)

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.296
ANSWERED ON 17.11.2016

APPOINTMENTS IN BBMB

296. SHRI RAHUL KASWAN:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government appoints a full time Chairman and members in the Bhakra Beas Management Board (BBMB) under the clause 79 (2) of the Punjab Reorganisation Act, 1966, if so, the details thereof;
- (b) whether the Government has been appointing Member (Energy) from the State of Punjab and Member (Irrigation) from State of Haryana in BBMB, if so ,the details thereof and the reasons therefor;
- (c) whether Rajasthan has 52.69% share in the surplus water of the Rabi and Beas rivers;
- (d) if so, the reasons for not appointing Member (Energy) and Member (irrigation) from the State of Rajasthan; and
- (e) whether the Union Government proposes to make such an appointment from Rajasthan, 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) : A whole-time Chairman and two whole-time Members are appointed by the Central Government under the clause 79(2)(a) of the Punjab Reorganisation Act, 1966.

(b) : Since inception of BBMB, by convention, Member (Irrigation) is being appointed from the State of Haryana and Member (Power) from the State of Punjab.

(c) to (e) : It is a fact that Rajasthan has the largest share in the surplus water of the Ravi and Beas Rivers amongst the participating States. As regards, appointment of one whole time member from Rajasthan, Govt. of Rajasthan has been consistently requesting for appointment of one whole time member in BBMB from the state of Rajasthan. The appointment of an additional whole time member in BBMB requires amendment in Punjab Reorganization Act, 1966. The Ministry of Home Affairs is seized of the issue.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.300
ANSWERED ON 17.11.2016

BBMB WORKSHOP

300. SHRI RAVNEET SINGH:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government is aware that the Bhakra Beas Management Board (BBMB) Workshop at Nangal, Punjab does not have any project in hand and that its machinery is lying idle for the last many years, if so, the details thereof;
- (b) whether the Government is considering a proposal to undertake rail wagon manufacturing in its vast premises; and
- (c) if so, the details thereof and if not, the reasons therefor as to why a national asset is not being brought under productive use?

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 informed by BBMB, the BBMB Workshop, Nangal is being utilized for execution / fabrication of job orders of maintenance activities of BBMB Projects independently and in support of Ancillary Units in the vicinity of BBMB Workshop.

(b) & (c) : Considering the reduction in recurring job orders in the Nangal Workshop over a period of time, BBMB had taken up with Chairman, Railway Board for utilization of infrastructure facilities of BBMB workshop at Nangal for Railway works. However, Rail Coach Factory at Kapurthala did not respond to the offer. With increase in skilled manpower in BBMB, Nangal workshop is now in a position to execute and fabricate various jobs and conduct repair jobs as well; which is being done by them.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.313
ANSWERED ON 17.11.2016

SUPPLY OF RENEWABLE ENERGY UNDER DDUGJY

313. DR. SHASHI THAROOR:

Will the Minister of POWER
be pleased to state:

- (a) whether the Minister is aware that the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), the rural electrification component under the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), does not provide an exclusive policy to develop and supply renewable energy in rural areas, if so, the details thereof;
- (b) whether the Government proposes to take measures to enhance the use of renewable energy sources, including small hydro power, solar energy and biogas and launch a component under the RGGVY to strengthen rural infrastructure to promote equitable distribution and use of renewable energy in the country, so as to fulfil country's Intended Nationally Determined Contribution (INDC) target of achieving 40% of installed capacity from renewable energy sources by 2030;
- (c) if so, the details thereof; and
- (d) 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) to (d) : Under Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY), apart from electrification of villages/habitations through grid connectivity, there is also a provision to electrify the villages/habitations through off-grid/Decentralized Distributed Generation (DDG) through renewable sources such as biomass, bio-fuels, biogas, Mini hydro, solar etc. where grid connectivity is either not feasible or not cost effective.

Government of India has scaled up the target of renewable energy capacity to 175 GW by the year 2022, which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power.

So far, 4604 DDG projects covering 3586 un-electrified villages and 1,87,286 BPL households have been sanctioned under DDG with the project cost of Rs.1470.64 crore.

As on 31.10.2016, 518 projects have been commissioned under DDG.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.321
ANSWERED ON 17.11.2016

WORKS IN GUJARAT UNDER UDAY

†321. SHRI MANSUKHBHAI DHANJIBHAI VASAVA:

Will the Minister of POWER
be pleased to state:

- (a) the details of the works undertaken so far in Narmada and Bharuch regions of Gujarat under UDAY Yojana;
- (b) the number of people benefitted by UDAY Yojana in the regions; and
- (c) the details of the work proposed to be taken up in the region under UDAY Yojana and the time by which these are likely to be completed?

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) : Ujwal DISCOM Assurance Yojana (UDAY) is not a project financing scheme. The scheme has been formulated and launched for the financial and operational turnaround of state-owned Power Distribution Companies (DISCOMs). The scheme aims to reduce interest burden, reduce the cost of power, reduce power losses in Distribution sector and improve operational efficiency of DISCOMs. The Government of Gujarat has joined UDAY for the operational turnaround of its DISCOMs.

A total of 5,90,297 beneficiaries in Narmada District and 15,51,019 beneficiaries in Bharuch District will be benefitted.

The work to be taken up in these districts would include installation of distribution transformer metering, feeder metering, distribution of LED bulbs, feeder improvement etc. By October 2016, 721300 bulbs in Bharuch and 180324 bulbs in Narmada have been replaced by LED bulbs.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.336
ANSWERED ON 17.11.2016

DDG under DDUGJY

336. SHRIMATI KAVITHA KALVAKUNTLA:

Will the Minister of POWER
be pleased to state:

(a) whether the Government is implementing Decentralized Distributed Generation (DDG) under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) through Rural Electrification Corporation to provide access to electricity to un-electrified villages/habitations where grid connectivity is either not feasible or not cost effective, if so, the details thereof; and

(b) the number of habitations which have been under the project and the total allocations made for them, 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) & (b) : Decentralized Distributed Generation (DDG) under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) is for providing electricity access to the un-electrified villages/habitations where grid connectivity is either not feasible or not cost effective. DDG can be from sources such as biomass, biofuels, biogas, Mini hydro, solar etc.

As on date, 4604 DDG projects at a total project cost of Rs.1470.64 crore have been sanctioned, covering 4745 villages/hamlets in various states across the country. Out of 4,604 DDG projects, 2,224 projects are based on standalone systems and balance are mini/micro grids. 518 mini/micro grids have already been commissioned in Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Kerala, Uttar Pradesh and Uttarakhand.

The State/UT-wise number of habitations sanctioned under DDG along with project cost are given at Annexure.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 336 ANSWERED IN THE LOK SABHA ON 17.11.2016.

Sanctioned DDG projects : State-wise

S. No	State	Villages/Hamlets covered	Project cost (Rs. in lakh)
1	Andhra Pradesh	427	8788.1
2	Assam	521	26670.84
3	Arunachal Pradesh	1176	15173
4	Bihar	175	3784.64
5	Chhattisgarh	640	30160.96
6	Jharkhand	522	20992.91
7	Karnataka	238	4797.62
8	Kerala	15	531.83
9	Madhya Pradesh	333	10504.57
10	Meghalaya	212	4278.4
11	Odisha	279	9701.69
12	Rajasthan	42	1891.11
13	Telangana	39	925.88
14	Uttar Pradesh	103	8026
15	Uttarakhand	23	836.76
TOTAL		4745	147064.31

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.340
ANSWERED ON 17.11.2016

CENTRAL ELECTRICITY REGULATORY COMMISSION

†340. SHRI HARISHCHANDRA CHAVAN:
SHRI LAXMAN GILUWA:

Will the Minister of POWER
be pleased to state:

- (a) whether Section 73 of Electricity Act 2003 contains provisions regarding Central Electricity Regulatory Commission;
- (b) if so, the details of the functions prescribed to be performed in public interest by the said Commission;
- (c) the functions carried out by the said commission in public interest during the last three years along with the number of decisions given against power distribution companies; and
- (d) the provisions proposed to be made to make the Central Electricity Regulatory Commission more effective?

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) : No, Madam. Section 73 of the Electricity Act, 2003 is pertaining to the duties of the Authority i.e. the Central Electricity Authority. However, provisions regarding the Central Commission have been prescribed in Sections 76 to 79 of the Electricity Act, 2003. The provisions regarding the functions of the Central Electricity Regulatory Commission as prescribed in section 79 of the Act, are given at Annexure-I.

(c) & (d) : The Central Electricity Regulatory Commission (CERC), in exercise of its power prescribed under Section 178 read with other relevant sections of the Act, has notified regulations on various matters to carry out the provisions of the Act. A detailed list of Regulations (along with amendments) notified by the Commission during the last three years is given at Annexure-II

The important regulatory interventions of CERC *vis-a-vis* the statutory requirement under the Act, are in the field of Tariff determination of companies owned and controlled by Central Government and other generating companies which enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State, License to transmit electricity as an interstate transmission licensees and to undertake trading in electricity as on interstate electricity traders, power of adjudication, Grid Discipline and Grid Security, market development, promotion of Renewable Power, promotion of Energy Efficiency etc.

The Government has already introduced Electricity (Amendment) Bill, 2014 in the Lok Sabha on 19th December, 2014, which includes the provisions regarding performance oversight of Regulatory Commissions. The above Bill will be enacted only after its approval by the Parliament.

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 340 ANSWERED IN THE LOK SABHA ON 17.11.2016.

Functions of the Central Electricity Regulatory Commission

- Section 79. (1) The Central Commission shall discharge the following functions, namely:-*
- (a) to regulate the tariff of generating companies owned or controlled by the Central Government;*
 - (b) to regulate the tariff of generating companies other than those owned or controlled by the Central Government specified in clause (a), if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State;*
 - (c) to regulate the inter-State transmission of electricity ;*
 - (d) to determine tariff for inter-State transmission of electricity;*
 - (e) to issue licenses to persons to function as transmission licensee and electricity trader with respect to their inter-State operations.*
 - (f) to adjudicate upon disputes involving generating companies or transmission licensee in regard to matters connected with clauses (a) to (d) above and to refer any dispute for arbitration;*
 - (g) to levy fees for the purposes of this Act;*
 - (h) to specify Grid Code having regard to Grid Standards;*
 - (i) to specify and enforce the standards with respect to quality, continuity and reliability of service by licensees.*
 - (j) to fix the trading margin in the inter-State trading of electricity, if considered, necessary;*
 - (k) to discharge such other functions as may be assigned under this Act.*
- (2) The Central Commission shall advise the Central Government on all or any of the following matters, namely :-*
- (a) Advise the Central Government on all or any of the following matters, namely:-*
 - (i) formulation of National Electricity Policy and tariff policy;*
 - (ii) promotion of competition, efficiency and economy in activities of the electricity industry;*
 - (iii) promotion of investment in electricity industry;*
 - (iv) any other matter referred to the Central Commission by that Government.*
- (3) The Central Commission shall ensure transparency while exercising its powers and discharging its functions.*
- (4) In discharge of its functions, the Central Commission shall be guided by the National Electricity Policy, National Electricity Plan and tariff policy published under section 3.*

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 340 ANSWERED IN THE LOK SABHA ON 17.11.2016.

Sl. No.	CERC Regulations
1	The Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) (Fourth Amendment) Regulations, 2016
2	The Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016.
3	Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters)(Third Amendment) Regulations, 2016.
4	Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016.
5	Central Electricity Regulatory Commission (Miscellaneous Provisions) Order, 2016.
6	Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Fourth Amendment) Regulations, 2016.
7	Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) (Fifth Amendment) Regulations, 2016.
8	Central Electricity Regulatory Commission (Recruitment, Control and Service Conditions of Staff) (Third Amendment) Regulations, 2016.
9	Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2015.
10	Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) (Fourth Amendment) Regulations, 2015.
11	Central Electricity Regulatory Commission (Ancillary Services Operations) Regulations, 2015.
12	Framework on Forecasting, Scheduling and Imbalance Handling for Variable Renewable Energy Sources (Wind and Solar): Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (Second Amendment) Regulations, 2015. Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Third Amendment) Regulations, 2015.
13	Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) (Third Amendment) Regulations, 2015.
14	Central Electricity Regulatory Commission (Power System Development Fund) (First Amendment) Regulations, 2015.
15	Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) (Fourth Amendment) Regulations, 2015.
16	Central Electricity Regulatory Commission (Miscellaneous Provisions) Order, 2015.
17	Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2015.

18	Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Fifth Amendment) Regulations, 2015.
19	Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission Scheme to Central Transmission Utility) (First Amendment) Regulations, 2015.
20	Central Electricity Regulatory Commission (Open Access in inter-State Transmission) (Third Amendment) Regulations, 2015.
21	The Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) (Third Amendment) Regulations, 2015.
22	The Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) (Second Amendment) Regulations, 2014.
23	Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) (First Amendment) Regulations, 2014.
24	The Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Third Amendment) Regulations, 2014.
25	Central Electricity Regulatory Commission (Appointment of Consultants) (Second Amendment) Regulations, 2014.
26	Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Fourth Amendment) Regulations, 2014.
27	Central Electricity Regulatory Commission (Power System Development Fund) Regulations, 2014 .
28	Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
29	Central Electricity Regulatory Commission (Power Market) (First Amendment) Regulations, 2014.
30	Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) (First Amendment) Regulations, 2014.
31	Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Second Amendment) Regulations, 2014.
32	Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014.
33	Central Electricity Regulatory Commission (Conduct of Business) (Amendment) Regulations, 2013.
34	Central Electricity Regulatory Commission (Open Access in inter-State Transmission)(Second Amendment) Regulations, 2013.
35	Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading licence and other related matters) (Second Amendment) Regulations, 2013.
36	Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulations, 2013.
37	CERC (Recruitment, Control and Service Conditions of Staff) (First Amendment) Regulations, 2013

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.357
ANSWERED ON 17.11.2016

ELECTRIFICATION OF VILLAGES

†357. SHRI VINOD KUMAR SONKAR:
SHRI SUNIL KUMAR SINGH:
MAJ GEN BC KHANDURI AVSM (Retd):
SHRI HARISH MEENA:

Will the Minister of POWER
be pleased to state:

- (a) the number of villages to which electricity is targeted to be provided under the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) along with the time by which this target is likely to be achieved, State/UT-wise;
- (b) the number of villages where electricity has been provided so far under the DDUGJY, State-wise including Chatra, Latehar and Palamu regions of Jharkhand State;
- (c) the number of villages where electricity has not yet reached, State-wise including the details for Chatra, Latehar and Palamu regions of Jharkhand;
- (d) the details of assistance being provided by the Union Government to the State Governments under DDUGJY, State-wise;
- (e) whether any mechanism has been developed for monitoring of DDUGJY, if so, the details thereof; and
- (f) whether the contractual companies have completed the electrification task on time under DDUGJY and if not, the action being 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) to (c) : As reported by the States, there were 18,452 un-electrified census villages in the country, as on 01.04.2015. Out of these villages, 10,628 un-electrified villages have been electrified as on 31.10.2016. Electrification works in the remaining 7824 un-electrified villages including Chatra, Latehar and Palamu regions of Jharkhand are targeted to be completed by May, 2018. The State-wise details are given at Annexure-I.

Under DDUGJY scheme, from 01.12.2014 to 31.10.2016, electrification works in 11,497 villages have been completed. The State-wise details of electrification of un-electrified villages including Chatra, Latehar and Palamu regions of Jharkhand, are given at Annexure-II.

(d) : Under DDUGJY, Government of India has sanctioned 4501 new projects (Including 3867 off-grid/DDG projects) with total project cost of Rs. 42391.25 crore (Including Rs. 1123.27 crore for off-grid projects) for various rural electrification works. The State-wise details are given at Annexure-III.

(e) : At State level, a committee under the Chairmanship of Chief Secretary is in place to monitor the progress and resolve issues relating to implementation viz. allocation of land for sub-stations, right of way, forest clearance, railway clearance, safety clearance etc.

At District level, District Development Co-ordination & Monitoring Committee namely DISHA (administered by Ministry of Rural Development) headed by senior most Member of Parliament (Lok Sabha) is in place to review and monitor implementation of central sector schemes including DDUGJY.

Rural Electrification Corporation Limited (REC), the nodal agency, monitor implementation of scheme through its project offices at field level and web based Mobile App, 'GARV'.

At Central level, inter-ministerial Monitoring Committee on DDUGJY also monitors implementation of scheme. Besides, the progress is reviewed with States / Power Utilities in Review, Planning and Monitoring (RPM) meeting of Ministry of Power on monthly basis.

(f) : There were some delay in the completion of the DDUGJY projects due to delay in forest and railway clearance for the Projects, delays in land acquisition for 33/11 KV sub-stations, Right of Way (RoW) issues, delay in providing BPL list, Law & Order issues including Naxal problem and difficult terrain in some of the States. Penalty as per extant rules/clause is imposed by the implementing agency on the contractors if the delay is attributable to the contractors.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 357 ANSWERED IN THE LOK SABHA ON 17.11.2016.

State-wise number of un-electrified villages in the country to be electrified under Deendayal Upadhyaya Gram Jyoti Yojana

Sl. No.	State	Number of un-electrified villages (as on 01.04.2015)	Number of villages electrified (as on 31.10.2016)	Number of villages to be electrified (as on 31.10.2016)
1	Arunachal Pradesh	1578	345	1233
2	Assam	2892	1731	1161
3	Bihar	2747	2012	735
4	Chhattisgarh	1080	521	559
5	Himachal Pradesh	35	28	7
6	Jammu & Kashmir	134	32	102
7	Jharkhand	2525	1279	1246
8	Karnataka	39	7	32
9	Madhya Pradesh	472	347	125
10	Manipur	276	112	164
11	Meghalaya	912	658	254
12	Mizoram	58	38	20
13	Nagaland	82	22	60
14	Odisha	3474	1688	1786
15	Rajasthan	495	346	149
16	Tripura	26	15	11
17	Uttar Pradesh	1529	1436	93
18	Uttarakhand	76	3	73
19	West Bengal	22	8	14
	Total	18452	10628	7824

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 357 ANSWERED IN THE LOK SABHA ON 17.11.2016.

State-wise achievement under DDUGJY from 01.12.2014 to 31.10.2016

Sl. No.	State	Electrification of Un-electrified villages
1	Andhra Pr.	0
2	Arunachal Pr.	393
3	Assam	1773
4	Bihar	2281
5	Chhattisgarh	537
6	Gujarat	0
7	Haryana	0
8	Himachal Pr.	28
9	J&K	35
10	Jharkhand	1437
11	Karnataka	7
12	Kerala	0
13	Madhya Pr.	363
14	Maharashtra	0
15	Manipur	287
16	Meghalaya	676
17	Mizoram	78
18	Nagaland	32
19	Orissa	1700
20	Punjab	0
21	Rajasthan	391
22	Sikkim	0
23	Tamilnadu	0
24	Telangana	0
25	Tripura	15
26	Uttar Pr.	1449
27	Uttarakhand	7
28	West Bengal	8
	Total	11497

ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 357 ANSWERED IN THE LOK SABHA ON 17.11.2016.

State-wise project sanctioned under DDUGJY

As on 31.10.2016

Sl. No.	State/UT	No. of projects	Sanctioned cost (Rs. Cr.)
1	Andhra Pradesh	181	944.14
2	Andaman & Nicobar	2	20.96
3	Arunachal Pradesh	1192	418.93
4	Assam	548	1540.80
5	Bihar	38	5856.35
6	Chhattisgarh	933	1527.78
7	Goa	2	20.00
8	Gujarat	27	924.72
9	Haryana	21	316.07
10	Himachal Pradesh	12	159.10
11	Jammu & Kashmir	21	619.53
12	Jharkhand	446	3885.23
13	Karnataka	62	1754.86
14	Kerala	14	485.35
15	Madhya Pradesh	204	2943.13
16	Maharashtra	37	2163.44
17	Manipur	3	54.96
18	Meghalaya	216	300.49
19	Mizoram	8	30.45
20	Nagaland	10	42.38
21	Odisha	299	1751.56
22	Punjab	20	251.98
23	Puducherry	2	20.15
24	Rajasthan	33	2819.37
25	Sikkim	4	20.10
26	Tamilnadu	27	924.09
27	Telangana	10	462.29
28	Tripura	8	74.12
29	Uttar Pradesh	75	6946.44
30	Uttarakhand	26	845.30
31	West Bengal	19	4262.15
32	Dadra & Nagar Haveli	1	5.00
	Total	4501	42391.24

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.364
ANSWERED ON 17.11.2016

ENERGY THROUGH CLEAN ELECTROCHEMICAL PROCESS

364. SHRI CH. MALLA REDDY:

Will the Minister of POWER
be pleased to state:

- (a) whether an Indian firm, Bloom energy, by tweaking the technology has created electricity in an easy and non-polluting manner, if so, the details thereof;
- (b) whether the Solid Oxide Fuel Cell that converts fuel into electricity through a clean electrochemical process produces clean power for over 100 of the Fortune 500 companies, if so, the details thereof;
- (c) whether the country can shift from the existing infrastructure that is capital intensive, inflexible and requires long planning horizons to Bloom Energy Servers that are highly flexible, modular, upgradeable and rapidly deployable;
- (d) if so, the details and the time-frame therefor; and
- (e) 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) : Bloom Energy, a United States based firm tweaked the technology of Solid Oxide Fuel Cell to generate electricity with flexi fuels like - natural gas, purified biogas through a clean electrochemical process with better efficiency of electricity generation and lesser emissions of green-house gas and pollutants like - NO_x, CO and Volatile Organic Compounds. Bloom Energy lists the name of about 70 customers on its website.

(c) to (e): The Ministry of New and Renewable Energy is implementing various programmes on new and renewable energy, under which the country has already an infrastructure consisting of 49.2 lakh Family Biogas Plants, and a few plants for Power Generation from waste through production of biogas route. This infrastructure is widening with further implementation of these programmes. The Family Biogas Plants are not feasible for coupling with Solid Oxide Fuel Cell (SOFC). Deployment of the SOFC systems is dependent on the availability of feedstock which could be natural gas; hydrogen or purified biogas.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.378
ANSWERED ON 17.11.2016

SAFE GUARDING POWER GRIDS FROM CYBER ATTACK

378. SHRI E.T. MOHAMMED BASHEER:

Will the Minister of POWER
be pleased to state:

- (a) whether Union Government proposes to take any steps to safeguard national power grids from cyber attack; and
- (b) 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) : The Ministry of Power (MoP) is committed to safeguarding of national power grids from Cyber Attacks. Under the directions received from National Critical Information Infrastructure Protection Centre (NCIIPC) and Indian Computer Emergency Response Team (CERT-in), the specified agencies under Information Technology Act, 2000, the MoP has taken steps to sensitize all critical organisations under them. The underlying information infrastructure has been audited by third-party agencies accredited by CERT-in and have been hardened to ward off any attacks. Critical setups at POWERGRID and POSOCO have been certified against ISO-27001 Information Security Management System (ISMS) Standard. Further, sectoral Computer Emergency Response Team for transmission sector (CERT-Transmission) has been identified for coordinating cyber security preparedness in the sector.

GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.380
ANSWERED ON 17.11.2016

POLLUTION BY NTPC POWER PLANTS

380. SHRI PARVESH SAHIB SINGH:

Will the Minister of POWER
be pleased to state:

- (a) whether there has been a study conducted by the Center for Science and Environment which revealed that the NTPC power plants are currently functioning way below the prescribed standards and performing poorly across various pollution parameters;
- (b) if so, the details thereof as well as the Government's reaction thereto;
- (c) whether the NTPC has any plans to shut down the Badarpur plant which according to the study has been rated the most polluting and contributing a meagre amount to the power consumption of Delhi;
- (d) if so, the details thereof, and if not, the detailed reasons therefor; and
- (e) the details of actual emissions by various power plants under NTPC along with the prescribed standards and parameters for each of them?

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 Centre for Science and Environment (CSE) report, published in 2015, presents an assessment of 47 power plants in the country, including only six power plants of NTPC.

In the report, the average score of coal and lignite based thermal power sector was 23%. Four of the projects of NTPC were rated above average while two of the projects were rated below average and NTPC has already improved the position by implementing Electrostatic Precipitator (ESP) upgradation.

(c) & (d) : Badarpur Thermal Power Station is a part of one of the islanding schemes of Delhi, which was prepared after the Northern Region Grid failure in 2012. This Station can be closed if an alternative to this islanding scheme is ready. One of the key elements required is to make ready a 400 KV sub-station at Tughlakabad, for which land has been recently provided by Delhi Development Authority. It is understood that the sub-station will be ready in about 20-24 months.

(e): The details of actual emissions by the various power plants of NTPC along with the prescribed standards and parameters is given at Annex.

ANNEX REFERRED TO IN REPLY TO PART (e) OF UNSTARRED QUESTION NO. 380
ANSWERED IN THE LOK SABHA ON 17.11.2016.

Name of Project	Unit No	Present SPM Norms	Present SPM Level	REMARKS
BADARPUR TPS	4	50	30	
BADARPUR TPS	5	50	35	
BARH II	4	100	42	
BARH II	5	100	40	
BONGAIGAON TPP	1	50	45	
DADRI (NCTPP)	1	100	88	
DADRI (NCTPP)	2	100	62	
DADRI (NCTPP)	3	100	89	
DADRI (NCTPP)	4	100	71	
DADRI (NCTPP)	5	50	32	
DADRI (NCTPP)	6	50	38	
FARAKKA STPS	1	150	128	ESP Renovation and Modernisation work in progress.
FARAKKA STPS	2	150	139	
FARAKKA STPS	3	150	143	
FARAKKA STPS	4	150	143	
FARAKKA STPS	5	150	143	ESP Renovation & Modernisation being taken up.
FARAKKA STPS	6	75	72	
KAHALGAON TPS	1	150	137	ESP Renovation & Modernisation being taken up.
KAHALGAON TPS	2	150	137	
KAHALGAON TPS	3	150	137	
KAHALGAON TPS	4	150	137	
KAHALGAON TPS	5	100	48	
KAHALGAON TPS	6	100	45	
KAHALGAON TPS	7	100	42	
KORBA STPS	1	50	113	ESP Renovation and Modernisation work in progress.
KORBA STPS	2	50	109	
KORBA STPS	3	50	110	
KORBA STPS	4	50	118	
KORBA STPS	5	50	119	
KORBA STPS	7	50	49	
MAUDA TPS	1	100	65	
MAUDA TPS	2	100	71	
RAMAGUNDAM STPS	1	115	86	
RAMAGUNDAM STPS	2	115	100	
RAMAGUNDAM STPS	3	115	89	
RAMAGUNDAM STPS	4	115	110	
RAMAGUNDAM STPS	5	115	110	
RAMAGUNDAM STPS	6	115	110	
RAMAGUNDAM STPS	7	115	87	
RIHAND STPS	1	100	40	
RIHAND STPS	2	100	45	
RIHAND STPS	3	100	86	
RIHAND STPS	4	100	88	
RIHAND STPS	5	50	43	
RIHAND STPS	6	50	45	
SIMHADRI	1	115	85	
SIMHADRI	2	115	82	
SIMHADRI	3	100	66	
SIMHADRI	4	100	57	
SINGRAULI STPS	1	150	130	ESP Renovation and Modernisation work in progress.
SINGRAULI STPS	2	150	129	
SINGRAULI STPS	3	150	139	
SINGRAULI STPS	4	150	134	
SINGRAULI STPS	5	150	131	
SINGRAULI STPS	6	150	136	
SINGRAULI STPS	7	150	138	

Name of Project	Unit No	Present SPM Norms	Present SPM Level	REMARKS
SIPAT STPS	1	50	44	
SIPAT STPS	2	50	42	
SIPAT STPS	3	50	43	
SIPAT STPS	4	50	45	
SIPAT STPS	5	50	44	
TALCHER (OLD) TPS	1	100	91	
TALCHER (OLD) TPS	2	100	95	
TALCHER (OLD) TPS	3	100	92	
TALCHER (OLD) TPS	4	100	95	
TALCHER (OLD) TPS	5	100	94	ESP Renovation and Modernisation work in progress.
TALCHER (OLD) TPS	6	100	95	
TALCHER STPS	1	100	99	ESP Renovation and Modernisation work in progress.
TALCHER STPS	2	100	97	
TALCHER STPS	3	100	91	
TALCHER STPS	4	100	89	
TALCHER STPS	5	100	85	
TALCHER STPS	6	100	91	
TANDA TPS	1	150	121	
TANDA TPS	2	150	128	
TANDA TPS	3	150	135	
TANDA TPS	4	150	135	
UNCHAHAR TPS	1	150	149	
UNCHAHAR TPS	2	150	149	
UNCHAHAR TPS	3	150	131	
UNCHAHAR TPS	4	150	125	
UNCHAHAR TPS	5	150	61	
VINDHYACHAL STPS	1	75	138	
VINDHYACHAL STPS	2	75	140	
VINDHYACHAL STPS	3	75	138	
VINDHYACHAL STPS	4	75	138	ESP Renovation and Modernisation work in progress.
VINDHYACHAL STPS	5	75	137	
VINDHYACHAL STPS	6	75	139	
VINDHYACHAL STPS	7	75	88	
VINDHYACHAL STPS	8	75	92	
VINDHYACHAL STPS	9	75	70	
VINDHYACHAL STPS	10	75	72	
VINDHYACHAL STPS	11	50	47	
VINDHYACHAL STPS	12	50	48	
VINDHYACHAL STPS	13	50	49	
