LOK SABHA STARRED QUESTION NO.143 TO BE ANSWERED ON 17.07.2014

SHORTAGE OF POWER

*143. SHRI SUSHIL KUMAR SINGH: DR. KIRIT P. SOLANKI:

Will the Minister of **POWER** be pleased to state:

- (a) whether there is shortage of power both peaking and non-peaking in the country, if so, the details thereof along with the gap between demand and supply of power during each of the last three years and the current year, State/UT-wise;
- (b) whether the reasons for shortfall in power have been assessed and if so, the details thereof;
- (c) the details of power projects commissioned and capacity realised thereof during the said period, State/UT-wise;
- (d) whether a number of thermal power plants in the country are reportedly facing shortage of coal, if so, the details thereof and the corrective action being taken by the Government in this regard; and
- (e) the steps being taken/proposed to be taken by the Government to ensure uninterrupted supply of quality power to the consumers?

ANSWER

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

(SHRI PIYUSH GOYAL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO. 143 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014 REGARDING SHORTAGE OF POWER.

(a): Yes, Madam.

The State/UT-wise details of energy and peak demand and supply with shortage of power, during the years 2011-12, 2012-13, 2013-14 and for the current year (April, 2014 to June, 2014), as given by the States/UTs, are given at **Annex-I**.

- **(b):** The reasons for shortfall in power, inter alia, are:
- (i) Less generation due to fuel shortage in some power plants.
- (ii) Low Plant Load Factor of some of the thermal generating units.
- (iii) Transmission and Distribution constraints
- (iv) Less Hydro generation because of poor monsoon in some areas.
- (v) High Aggregate Technical and Commercial (AT&C) losses of State Discoms.
- (vi) Poor financial health of State Utilities rendering it difficult for them to raise the resources necessary for making required investments to create adequate generation, transmission and distribution system. At times State Utilities are even unable to purchase power due to financial constraints.
- (c): The details of power projects commissioned during the last three years and the current year (upto June 2014) is at **Annex-II**. As a result of commissioning of the power projects, the electricity generation has increased from 811.14 BU during 2010-11 to 876.89 BU during 2011-12, 912.06 BU during 2012-13 and 967.15 BU during 2013-14.
- (d): As on 09.07.2014, out of the power plants monitored by Central Electricity Authority, 45 power plants had coal stock of less than 7 days. The coal based generation capacity has increased from 77,649 MW, as on 31.03.2009, to 1,13,280 MW, as on 31.03.2014, i.e. an increase of 46% whereas domestic coal supply has increased from 342.6 Million Tonne (MT) during 2008-09 to 419.6 MT during 2013-14, i.e. an increase of only 22.5%.

The corrective action being taken by the Government in this regard, inter-alia, are:

- (i) Multi-dimensional efforts are underway by Coal India Ltd. to enhance production of domestic coal beyond current year's targets.
- (ii) Power utilities have been advised to use imported coal wherever necessary.

- (iii) The availability of coal is being regularly monitored closely at the highest level in the Government.
- (e): The steps being taken by the Government to ensure uninterrupted supply of quality power to the consumers, inter alia, are:
 - (i) Acceleration in generation capacity addition during 12th Plan with a proposed target of 88,537 MW from conventional sources and 30,000 MW from renewable energy sources.
 - (ii) Undertaking a massive programme for strengthening of inter-state and inter-regional transmission capacity for evacuation of power.
 - (iii) A new scheme has been announced in this year's Budget for strengthening of sub-transmission and distribution networks and for segregation of agricultural feeders.
 - (iv) Expeditiously resolving issues relating to environmental and forest clearances for power projects under implementation.
 - (v) Bridging the gap of indigenous coal availability through coal imports for increased generation by thermal plants.
 - (vi) Promoting energy conservation, energy efficiency and demand side management measures.

ANNEX REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 143 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014 REGARDING SHORTAGE OF POWER.

Power Supply Position for 2011-12

	Energy		Peak					
State /	Apri	I, 2011 - Ma			April,	2011 - Ma	rch, 2012	ı
System /	Requirement	Availability	Surplus / D	eficit (-)	Peak Demand	Peak Met	Surplus /l	Deficit(-)
Region	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	1,568	1,564	-4	0	263	263	0	0
Delhi	26,751	26,674	-77	-0.3	5,031	5,028	-3	-0.1
Haryana	36,874	35,541	-1,333	-3.6	6,533	6,259	-274	-4.2
Himachal Pradesh	8,161	8,107	-54	-0.7	1,397	1,298	-99	-7.1
Jammu & Kashmir	14,250	10,889	-3,361	-23.6	2,385	1,789	-596	-25.0
Punjab	45,191	43,792	-1,399	-3.1	10,471	8,701	-1,770	-16.9
Rajasthan	51,474	49,491	-1,983	-3.9	8,188	7,605	-583	-7.1
Uttar Pradesh	81,339	72,116	-9,223	-11.3	12,038	11,767	-271	-2.3
Uttarakhand	10,513	10,208	-305	-2.9	1,612	1,600	-12	-0.7
Northern Region	2,76,121	2,58,382	-17,739	-6.4	40,248	37,117	-3,131	-7.8
Chhattisgarh	15,013	14,615	-398	-2.7	3,239	3,093	-146	-4.5
Gujarat	74,696	74,429	-267	-0.4	10,951	10,759	-192	-1.8
Madhya Pradesh	49,785	41,392	-8,393	-16.9	9,151	8,505	-646	-7.1
Maharashtra	1,41,382	1,17,722	-23,660	-16.7	21,069	16,417	-4,652	-22.1
Daman & Diu	2,141	1,915	-226	-10.6	301	276	-25	-8.3
Dadar Nagar Haveli	4,380	4,349	-31	-0.7	615	605	-10	-1.6
Goa	3,024	2,981	-43	-1.4	527	471	-56	-10.6
Western Region	2,90,421	2,57,403	-33,018	-11.4	42,352	36,509	-5,843	-13.8
Andhra Pradesh	91,730	85,149	-6,581	-7.2	14,054	11,972	-2,082	-14.8
Karnataka	60,830	54,023	-6,807	-11.2	10,545	8,549	-1,996	-18.9
Kerala	19,890	19,467	-423	-2.1	3,516	3,337	-179	-5.1
Tamil Nadu	85,685	76,705	-8,980	-10.5	12,813	10,566	-2,247	-17.5
Pondicherry	2,167	2,136	-31	-1.4	335	320	-15	-4.5
Lakshadweep	37	37	0	0	8	8	0	0
Southern Region	2,60,302	2,37,480	-22,822	-8.8	37,599	32,188	-5,411	-14.4
Bihar	14,311	11,260	-3,051	-21.3	2,031	1,738	-293	-14.4
DVC	16,648	16,009	-639	-3.8	2,318	2,074	-244	-10.5
Jharkhand	6,280	6,030	-250	-4.0	1,030	868	-162	-15.7
Orissa	23,036	22,693	-343	-1.5	3,589	3,526	-63	-1.8
West Bengal	38,679	38,281	-398	-1.0	6,592	6,532	-60	-0.9
Sikkim	390	384	-6	-1.5	100	95	-5	-5.0
Andaman- Nicobar	244	204	-40	-16	48	48	0	0
Eastern Region	99,344	94,657	-4,687	-4.7	14,707	13,999	-708	-4.8
Arunachal Pradesh	600	553	-47	-7.8	121	118	-3	-2.5
Assam	6,034	5,696	-338	-5.6	1,112	1,053	-59	-5.3
Manipur	544	499	-45	-8.3	116	115	-1	-0.9
Meghalaya	1,927	1,450	-477	-24.8	319	267	-52	-16.3
Mizoram	397	355	-42	-10.6	82	78	-4	-4.9
Nagaland	560	511	-49	-8.8	111	105	-6	-5.4
Tripura	949	900	-49	-5.2	215	214	-1	-0.5
North-Eastern Region	11,011	9,964	-1,047	-9.5	1,920	1,782	-138	-7.2
All India	9,37,199	8,57,886	-79,313	-8.5	1,30,006	1,16,191	-13,815	-10.6

Power Supply Position for 2012-13

	Energy				Peak				
State /	Apr	il, 2012 - Ma			Apri	l, 2012 - Ma	arch,2013		
System /	Requireme	Availabili	Surplus /	Deficit	Peak	Peak	Surplus /	Deficit	
Region	nt	ty	(-)		Demand	Met	(-)		
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)	
Chandigarh	1,637	1,637	0	0	340	340	0	0	
Delhi	26,088	25,950	-138	-0.5	5,942	5,642	-300	-5.0	
Haryana	41,407	38,209	-3,198	-7.7	7,432	6,725	-707	-9.5	
Himachal Pradesh	8,992	8,744	-248	-2.8	2,116	1,672	-444	-21.0	
Jammu & Kashmir	15,410	11,558	-3,852	-25.0	2,422	1,817	-605	-25.0	
Punjab	48,724	46,119	-2,605	-5.3	11,520	8,751	-2,769	-24.0	
Rajasthan	55,538	53,868	-1,670	-3.0	8,940	8,515	-425	-4.8	
Uttar Pradesh	91,647	76,446	-15,201	-16.6	13,940	12,048	-1,892	-13.6	
Uttarakhand	11,331	10,709	-622	-5.5	1,759	1,674	-85	-4.8	
Northern Region	3,00,774	2,73,240	-27,534	-9.2	45,860	41,790	-4,070	-8.9	
Chhattisgarh	17,302	17,003	-299	-1.7	3,271	3,134	-137	-4.2	
Gujarat	93,662	93,513	-149	-0.2	11,999	11,960	-39	-0.3	
Madhya Pradesh	49,226	44,272	-4,954	-10.1	10,077	9,462	-615	-6.1	
Maharashtra	1,23,984	1,19,972	-4,012	-3.2	17,934	16,765	-1,169	-6.5	
Daman & Diu	1,991	1,860	-131	-6.6	311	286	-25	-8.0	
Dadar Nagar							_		
Haveli	4,572	4,399	-173	-3.8	629	629	0	0.0	
Goa	3,181	3,107	-74	-2.3	524	475	-49	-9.4	
Western Region	2,93,918	2,84,126	-9,792	-3.3	40,075	39,486	-589	-1.5	
Andhra Pradesh	99,692	82,171	-17,521	-17.6	14,582	11,630	-2,952	-20.2	
Karnataka	66,274	57,044	-9,230	-13.9	10,124	8,761	-1,363	-13.5	
Kerala	21,243	20,391	-852	-4.0	3,578	3,262	-316	-8.8	
Tamil Nadu	92,302	76,161	-16,141	-17.5	12,736	11,053	-1,683	-13.2	
Pondicherry	2,331	2,291	-40	-1.7	348	320	-28	-8.0	
Lakshadweep	36	36	0	0	8	8	0	0	
Southern Region	2,81,842	2,38,058	-43,784	-15.5	38,767	31,586	-7,181	-18.5	
Bihar	15,409	12,835	-2,574	-16.7	2,295	1,784	-511	-22.3	
DVC	17,299	16,339	-960	-5.5	2,573	2,469	-104	-4.0	
Jharkhand	7,042	6,765	-277	-3.9	1,263	1,172	-91	-7.2	
Orissa	25,155	24,320	-835	-3.3	3,968	3,694	-274	-6.9	
West Bengal	42,143	41,842	-301	-0.7	7,322	7,249	-73	-1.0	
Sikkim	409	409	0	0.0	95	95	0	0.0	
Andaman- Nicobar	241	186	-55	-23	48	48	0	0	
Eastern Region	1,07,457	1,02,510	-4,947	-4.6	16,655	15,415	-1,240	-7.4	
Arunachal		-					-		
Pradesh	589	554	-35	-5.9	116	114	-2	-1.7	
Assam	6,495	6,048	-447	-6.9	1,197	1,148	-49	-4.1	
Manipur	574	543	-31	-5.4	122	120	-2	-1.6	
Meghalaya	1,828	1,607	-221	-12.1	334	330	-4	-1.2	
Mizoram	406	378	-28	-6.9	75	73	-2	-2.7	
Nagaland	567	535	-32	-5.6	110	109	-1	-0.9	
Tripura	1,108	1,054	-54	-4.9	229	228	-1	-0.4	
North-Eastern	1,100		-34	-4.7	/	-20	- •	-0.7	
Region	11,566	10,718	-848	-7.3	1,998	1,864	-134	-6.7	
All India	9,95,557	9,08,652	-86,905	-8.7	1,35,453	1,23,294	-12,159	-9.0	

Power Supply Position for 2013-14 (Revised)

		Energ	у			Pea	ık		
State /	Aj		larch,2014		April	, 2013 -	March,201	4	
System /	Requirement	Availability	Surplus /	Deficit (-)	Peak Demand	Peak Met	Surplus / Deficit		
Region	(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	
Dadar 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.

Power Supply Position for 2014-15 (Provisional)

			Peak					
State /	Apri	April, 2014 - June,2014						
System /	Requirement	Availability	Surplus /De	eficit (-)	Peak	Peak Met	Surplus	/ Deficit (-)
Region	(MU)	(MU)	(MU)	(%)	Demand (MW)	(MW)	(MW)	(%)
Chandigarh	444	444	0	0	300	300	0	0
Delhi	8,160	8,090	-70	-0.9	5,688	5,533	-155	-2.7
Haryana	11,068	11,023	-45	-0.4	8,056	8,056	0	0.0
Himachal Pradesh	2,216	2,194	-22	-1.0	1,316	1,295	-21	-1.6
Jammu & Kashmir	4,002	3,203	-799	-20.0	2,422	1,938	-484	-20.0
Punjab	11,431	11,402	-29	-0.3	9,682	9,682	0	0.0
Rajasthan	15,468	15,413	-55	-0.4	9,131	9,131	0	0.0
Uttar Pradesh	26,845	23,372	-3,473	-12.9	15,670	11,821	-3,849	-24.6
Uttarakhand	3,144	3,083	-61	-12.9	1,833	1,833	0	0.0
Northern Region	82,778	78,224	-4,554	-5.5	46,762	45,242	-1,520	-3.3
Chhattisgarh	5,318	5,263	-55	-1.0	3,450	3,350	-100	-3.3 -2.9
Gujarat	25,533	25,527	-6	0.0	13,580	13,499	-81	-0.6
Madhya Pradesh	12,040	11,986	-54	-0.4	7,388	7,033	-355	-4.8
Maharashtra	36,045	35,173	-872	-2.4	19,749	18,658	-1,091	-5.5
Daman & Diu	559	559	0	0.0	297	297	0	0.0
Dadar Nagar Haveli	1,364	1,364	0	0.0	679	679	0	0.0
Goa	1,173	1,170	-3	-0.3	501	489	-12	-2.4
Western Region	82,032	81,042	-990	-1.2	43,170	42,365	-805	-1.9
Andhra Pradesh	21,334	19,204	-2,130	-10.0	6,870	6,146	-724	-10.5
Telangana	3,853	3,638	-215	-5.6	6,534	5,661	-873	-13.4
Karnataka	16,550	15,400	-1,150	-6.9	10,001	9,503	-498	-5.0
Kerala	5,707	5,576	-131	-2.3	3,760	3,495	-265	-7.0
Tamil Nadu	25,294	24,263	-1,031	-4.1	13,622	13,498	-124	-0.9
Puducherry	642	636	-6	-0.9	371	348	-23	-6.2
Lakshadweep	12	12	0	0	8	8	0	0
Southern Region	73,380	68,717	-4,663	-6.4	39,094	35,698	-3,396	-8.7
Bihar	4,240	4,145	-95	-2.2	2,560	2,410	-150	-5.9
DVC	4,439	4,404	-35	-0.8	2,610	2,590	-20	-0.8
Jharkhand	1,891	1,874	-17	-0.9	1,060	1,037	-23	-2.2
Odisha	6,985	6,855	-130	-1.9	3,814	3,764	-50	-1.3
West Bengal	12,917	12,846	-71	-0.5	7,544	7,524	-20	-0.3
Sikkim	97	97	0	0.0	80	80	0	0.0
Andaman- Nicobar	60	45	-15	-25	40	32	-8	-20
Eastern Region	30,569	30,221	-348	-1.1	16,628	16,342	-286	-1.7
Arunachal Pradesh	144	137	-7	-4.9	115	111	-4	-3.5
Assam	2,028	1,863	-165	-8.1	1,343	1,230	-113	-8.4
Manipur	145	138	-7	-4.8	118	117	-1	-0.8
Meghalaya	421	354	-67	-15.9	299	296	-3	-1.0
Mizoram	104	98	-6	-5.8	77	76	-1	-1.3
Nagaland	144	138	-6	-4.2	115	111	-4	-3.5
Tripura	281	265	-16	-5.7	246	246	0	0.0
North-Eastern Region	3,267	2,993	-274	-8.4	2,252	2,045	-207	-9.2
All India	2,72,026	2,61,197	-10,829	-4.0	1,42,647	1,37,352	-5,295	-3.7

NOTE: Energy figures for Andhra Pradesh includes the figures of undivided Andhra Pradesh (including Telangana area) for the period Apr-May,2014. Energy figures of Telangana are w.e.f. June, 2014. Peak figures for Andhra Pradesh and Telangana are w.e.f. June, 2014. This is due to bifurcation of Andhra Pradesh into Andhra Pradesh and Telangana w.e.f. June, 2014.

ANNEX REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 143 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014 REGARDING SHORTAGE OF POWER.

LIST OF PROJECTS COMMISSIONED DURING 2011-2012

SI. No.	PROJECT NAME	State	TOTAL CAPACITY (MW)	State-wise Capacity Commissioned (MW)
1	SIMHADRI U-4	ANDHRA	500	Tommooronea (MINA)
2	SIMHAPURI TPP U-1	PRADESH	150	-
	KOTHAGUDEM VI	PRADESH		1189
3 4		-	500 39	- 1107
5	JURALA PRIYA U-6	ASSAM	37.2	37.2
<u>5</u> 6	LAKWA W.H SIPAT-I U-1	CHHATTISGARH	660	37.2
0 7	SIPAT-1 U-2	CHRITISGARH	660	-
8	KASAIPALLI TPP U-1	-	135	1553
9	SVPL TPP U-1		63	1333
7 10	KATGHORA TPP U-1		35	_
11	RITHALA CCPP ST	DELHI	36.5	286.5
12		DELMI	250	286.5
	PRAGATI (BAWANA) ST-III GT-3	CILIADAT		
13 14	MUNDRA UMPP U-1	GUJARAT	800 600	-
14 15	SALAYA TPP U-1 MUNDRA TPP PH-II U-2	-	660	4391
16		-		4371
16 17	MUNDRA TPP PH-III U-I,2,3 HAZIRA CCPP EXPN	-	1980 351	+
		LUMAACUAL		1100
18 19	KARCHAM WANGTOO U1,2,3,4	HIMACHAL PRADESH	1000	1100
20	MALANA II U-1,2 INDRAGANDHI (JHAJJAR) U-2	HARYANA	100 500	1160
<u>20</u> 21	` '	HARTANA		1180
	MAHATMA GANDHI TPP U-1	HIADKHAND	660	4550
22	MAITHON RB U-1,2	JHARKHAND	1050	1550
23	KODERMA U-I	KADNATAKA	500	1100
24 25	UDUPI TPP U-2	KARNATAKA	600	1100
25 26	JSW ENERGY RATNAGIRI U-3,4	MAHARASHTRA	500 600	
20 27	WARDHA WARORA TPP U4	IVIAHAKASHIKA	135	-
2 <i>1</i> 28		-	246	2481
28 29	MIHAN TPP U-1- 4 KHAPERKHEDA TPS U-5	-	500	2401
29 30		-	1000	-
30 31	BHUSWAL TPS U-4,5 MYNTDU (LESHKA) U1,2	MEGHALAYA	84	84
	, , ,	ODISHA	600	600
32 33	STERLITE (JHARSUGUDA) U-3 JALIPA KAPURDI U-3,4	RAJASTHAN	270	270
33 34	NLC TPP-2 EXTN	TAMIL NADU	250	750
34 35	VALLUR ST-1 PH-1 TPP U-1	I AIVIIL IVADU	500	/30
36	UTRAULA IPP U-1,2	UTTAR PRADESH	90	
36 37	ROSA ST-II U-3,4	JIIAK PRADESH	600	-
3 <i>1</i> 38	KUNDARKI IPP U-1,2	=	90	-
39	KHAMBRKHERA U-1,2	-	90	2500
39 40	MAQSOODPUR IPP U-1,2	=	90	-
40 41	BARKHERA TPP U-1,2	=	90	-
41 42	LANCO ANPARA (C) U-1,2	-	1200	-
42 43	HARDUAGANJ U-8	=	250	-
43 44	KOTESHWAR U-3,4	UTTARAKHAND	200	200
44 45	DURGAPUR STEEL TPP U-2	WEST BENGAL	500	200
		WEST BENGAL		1250
<u>46</u> 47	DURGAPUR STEEL TPP U-I	-	500 250	1230
7/	SANTALDIH ST-II U-6 Total		20501.7	20501.7

List of Projects Commissioned During 2012-13

1 Simhapuri Ph-1 U-2 Andhra Pradesh 150 2 Thamminapatnam 300 3 Sipat U-3 660 4 Kasaipalli U-2 135 5 Ratija U-1 (Addl.) 500 6 Korba West US (Addl.) 500 7 Pragati CCGT-III GT, U-3 Delhi 250 8 Salaya U-2 600 9 Mundra UMTPP, U-3 - (Addl.) 800 10 Mundra UMTPP, U-4 (Addl.) 800 11 Mundra UMTPP, U-5 (Addl.) 800 12 Mundra UMTPP, U-5 (Addl.) 800 13 Uno Sugen (Addl.) 382.5 14 Ukai TPP Extn., U-6 500 15 Pipavav CCPP Block-2 351 16 CHAMERA III, U 3 77 17 CHAMERA III, U 1 Himachal Pradesh 77 19 Budhil, U 2 35 20 Budhil, U 1 35 21 Indira Gandhi TPP U3 500 22 Jhajjar TPS (M.G. TPP), U2 Haryana 660	
2	
135	
5 Ratija U-1 (Addl.) 6 Korba West U5 (Addl.) 7 Pragati CCGT-III GT, U-3 8 Salaya U-2 9 Mundra UMTPP U-2 10 Mundra UMTPP, U-3 · (Addl.) 11 Mundra UMPP, U-4 (Addl.) 12 Mundra UMTPP, U-5 (Addl.) 13 Uno Sugen (Addl.) 14 Ukai TPP Extn., U-6 15 Pipavav CCPP Block-2 16 CHAMERA III, U 3 17 CHAMERA III, U 2 18 CHAMERA III, U 1 19 Budhil, U 2 20 Budhil, U 1 21 Indira Gandhi TPP U3	
6 Korba West U5 (Addl.) 7 Pragati CCGT-III GT, U-3 8 Salaya U-2 9 Mundra UMTPP U-2 10 Mundra UMTPP, U-3 - (Addl.) 11 Mundra UMTPP, U-4 (Addl.) 12 Mundra UMTPP, U-5 (Addl.) 13 Uno Sugen (Addl.) 14 Ukai TPP Extn., U-6 15 Pipavav CCPP Block-2 16 CHAMERA III, U 3 17 CHAMERA III, U 2 18 CHAMERA III, U 1 19 Budhil, U 2 20 Budhil, U 1 21 Indira Gandhi TPP U3 Delhi 250 250 Sugarat Sugarat Sugarat Sugarat Sugarat Sugarat Fundamental Pradesh Funda	
7 Pragati CCGT-III GT, U-3 Delhi 250 250 8 Salaya U-2 600 9 Mundra UMTPP U-2 800 10 Mundra UMTPP, U-3 - (Addl.) 800 11 Mundra UMTPP, U-4 (Addl.) 800 12 Mundra UMTPP, U-5 (Addl.) 800 13 Uno Sugen (Addl.) 382.5 14 Ukai TPP Extn., U-6 500 15 Pipavav CCPP Block-2 351 16 CHAMERA III, U 3 77 17 CHAMERA III, U 2 77 18 CHAMERA III, U 1 Himachal Pradesh 77 19 Budhil, U 2 35 20 Budhil, U 1 35 21 Indira Gandhi TPP U3 Harvana	
8 Salaya U-2 9 Mundra UMTPP U-2 10 Mundra UMTPP, U-3 - (Addl.) 11 Mundra UMPP, U-4 (Addl.) 12 Mundra UMTPP, U-5 (Addl.) 13 Uno Sugen (Addl.) 14 Ukai TPP Extn., U-6 15 Pipavav CCPP Block-2 16 CHAMERA III, U 3 17 CHAMERA III, U 2 18 CHAMERA III, U 1 19 Budhil, U 2 20 Budhil, U 1 21 Indira Gandhi TPP U3 4800 5,033.5 5,033.5 6ujarat 800 800 800 800 800 800 800 800 800 80	
9 Mundra UMTPP U-2 10 Mundra UMTPP, U-3 - (Addl.) 11 Mundra UMTPP, U-4 (Addl.) 12 Mundra UMTPP, U-5 (Addl.) 13 Uno Sugen (Addl.) 14 Ukai TPP Extn., U-6 15 Pipavav CCPP Block-2 16 CHAMERA III, U 3 17 CHAMERA III, U 2 18 CHAMERA III, U 1 19 Budhil, U 2 20 Budhil, U 1 21 Indira Gandhi TPP U3 800 5,033.5 Sujarat 800 800 5,033.5 Himachal Pradesh 77 301 301	
10	
11	
12 Mundra UMTPP, U-5 (Addl.) 13 Uno Sugen (Addl.) 14 Ukai TPP Extn., U-6 15 Pipavav CCPP Block-2 16 CHAMERA III, U 3 17 CHAMERA III, U 2 18 CHAMERA III, U 1 19 Budhil, U 2 20 Budhil, U 1 21 Indira Gandhi TPP U3 Harvana 800 382.5 500 377 77 77 4 Himachal Pradesh 77 301 301 301	
14 Ukai TPP Extn., U-6 500 15 Pipavav CCPP Block-2 351 16 CHAMERA III, U 3 77 17 CHAMERA III, U 2 77 18 CHAMERA III, U 1 Himachal Pradesh 77 19 Budhil, U 2 35 20 Budhil, U 1 35 21 Indira Gandhi TPP U3 Harvana 500	
15	
16 CHAMERA III, U 3 17 CHAMERA III, U 2 18 CHAMERA III, U 1 19 Budhil, U 2 20 Budhil, U 1 21 Indira Gandhi TPP U3 21 Harvana 21 Harvana 25 T7 301 301 301 301 301 301 301 301 301 301	
17 CHAMERA III, U 2 18 CHAMERA III, U 1 19 Budhil, U 2 20 Budhil, U 1 21 Indira Gandhi TPP U3	
18 CHAMERA III, U 1 Himachal Pradesh 77 301 19 Budhil, U 2 35 20 Budhil, U 1 35 21 Indira Gandhi TPP U3 Harvana 500 1 160	
19 Budhil, U 2 20 Budhil, U 1 21 Indira Gandhi TPP U3	
20 Budhil, U 1 35 21 Indira Gandhi TPP U3 500 1 160 100	
21 Indira Gandhi TPP U3 Harvana 500	
Harvana 1 160	
" "	
23 Chutak, U-2 11	
24 Chutak, U-3	
25 Chutak, U-1 Jammu & Kashmir 44	
26 Chutak, U-4 11	
27 Koderma TPP, U-2 500	
28 Adhunik U-2 (Addl.) Jharkhand 270 1,040	
29 Adunik power TPP, U-1 270	
30 Vindhyachal-IV, U-11 500	
31 Vindhyachal-IV, U-12 (Addl.) 500	
32 Bina TPP U-1	
33 Mahan, U-1 (Addl.) 600 34 Bina U-2 (Addl.) 250	
35 Satpura Ext U-10 250	
36 Mauda U1 500	
37 Mouda TPP, U-2 (Addl.) 500	
38 Tirora Ph-I U-2 660	
39 Tirora Ph-I U-1 660	
40 EMCO Warora TPP, U-1 Maharashtra 300 3,580	
41 Bela, U-1 270	
42 Amarvati U-1 (Addl.) 270	
43 GEPL, U2 (Addl.) 60	
44 GEPL, U-1 (Addl.) 60 45 Butibori TPP Ph II U1, 300	
45 Butibori TPP Ph II U1, 300	
47 Kamalanaga, U-1 (Addl.) 350	
48 Jharsugda U-4 Odisha 950	
49 Jallipa-Kapurdi, U-5 135	
50 Jallipa-Kapurdi, U-8 (Addl.)	
51 Jallipa-Kapurdi, U-6 (Addl.) Rajasthan 135 650	
52 Jallipa-Kapurdi, U-7 (Addl.)	
53 Ramgarh GT 110	
54 Vallur TPP Ph1, U-2 500	
55 Tuticorin, U-1 (Addl.) 150	
56 Mettur Ext U-1 Tamil Nadu 600 1,865	
57 North Chennai Extn, U-2 600 58 Bhawani Kattalai-III, U-1 15	
58 Bhawani Kattalai-III, U-1 15 59 Tripura Gas, Mod-1 Tripura 363.3 363.3	
60 Rihand III, U-5 500	
61 Paricha Extr U-5	
62 Harduaganj Ext., U9 Uttar Pradesh 250	
63 Paricha Extn., U-6 250	
64 TLDP, U-2 (Addl.) 33	·
65 TLDP, U-1 (Addl.) West Bengal 33 99	
66 TLDP, U-3 (Addl.) 33	
Total Capacity Commissioned during 2012-13 : 20,622.8 20,622.8	

List of Projects Commissioned During 2013-14

		Cts Commissioned During 20	Capacity	State-wise Capacity
SI. No.	Project Name	State	(MW)	Commissioned (MW)
1	Thamminapatnam TPP U-2		150	
2	Simhapuri, U-3	Andhra Pradesh	150	300
3	Barh-II, U-4	Bihar	660	660
4	AkaltaraTPP U-1		600	
5	Jangir Champa, U-1		600	
6	Tamner, U-1		600	
7	Marwa, U-1	Chhattisgarh	500	3,530
8	Tamner, U-2 (Addl.)	- Offilattisgarii	600	- 3,330
9	Korba West, U-1 (Addl.)		600	
10	Chakabura, U-1 (Addl.)		30	-
11	Pragati -III CCGT (Bawana) GT-4		250	
12	Pragati -III CCGT (Bawana) ST-2	Delhi	250	500
13	Pipavav CCGT, Block-1		351	
14	DGEN CCCP, Block-1	 Gujarat	400	1,151
	·	Gujarat		- 1,151
15	DGEN CCCP, Block-3		400	
16	Parbati III, U-1		130	-
17	Parbati III, U-2		130	_
18	Parbati III, U-3	Himachal Pradesh	130	596
19	Rampur, U-1		69	-
20	Rampur, U-2		69	_
21	Rampur, U-5 (Addl.)		69	
22	Uri-II, U-1		60	
23	Uri-II, U-3		60	
24	Nimmo Bazgo-U1		15	_
25	Nimmo Bazgo-U2	J&K	15	285
26	Nimmo Bazgo-U3		15	4
27	Uri-II, U-2		60	4
28	Uri-II, U-4		60	
29	Sasan UMPP, U-3		660	
30	Gadawara, U-1 (Addl.)		45	
31	Sasan UMPP, U-2	Madhya Pradesh	660	2,875
32	Sasan UMPP, U-1		660	
33	Malwa, U-1		600	
34	Satpura TPS, U-11 (Sarni)		250	
35	Tiroda TPP U-3		660	
36	EMCO Warora TPP U-2		300	
37	Dhariwal Infrastructure TPP U-1		300	
38	Amarwati, U-2	Maharashtra	270	2,760
39	Nashik, U-1		270	
38	Tiroda, U-4 (Addl.)		660	
39	Butibori, U-2 (Addl.)		300	
40	Kamalanga TPP U-2	Orissa	350	700
41	Kamalanga TPP U-3	Oilissa	350	,,,,
42	Rajpura (Nabha)-1	Punjab	700	700
43	Kawai-1 (Addl.)		660	
44	Kawai-2 (Addl.)	Rajasthan	660	1,570
45	Chhabra TPP Ext U-3		250	
46	Chuzachen HEP U-2	Cildrina	49.5	00
47	Chuzachen HEP U-1	Sikkim	49.5	99
48	Ind Barath-2		150	
49	Bhawani Kattali Barrage-II U-1		15	
50	Bhawani Kattali Barrage-II U-2	T	15	1 205
51	Bhawani Kattali Barrage-III U-2	Tamil Nadu	15	1,295
52	North Chennai TPP Ext U-1		600	7
53	Vallur, U-3		500	7
54	Rokhia GT-9 (Addl.)	Tripura	21	21
55	Rihand STPS-III U-6	Uttar Pradesh	500	500
56	Teesta LD -III U-4		33	
57	Durgapur, U-8 (Addl.)	West Bengal	250	283
	Total Capacity Commissioned during 201	3-14 :	17,825	17,825
	1 . J.a. Japanis John Basinica daring 201		17,023	,020

State-wise: List of Projects Commissioned During 2014-15 (Upto 13-July-2014)

SI. No.	Project Name	State	Sector	Fuel Type	Capacity (MW)	State-wise Capacity Commissioned (MW)	
1	Salora TPP	Ohla atti a manda	Private	Coal	135	F2F	
2	Chakbura, U-2	Chhattisgarh	Private	Coal	400	535	
3	D-Gen, Block-2	Cuionat	Private	Gas	30	407	
4	Dhuvaran CCPP, Ext.	Gujarat	State	Gas	376	406	
5	Parbati-III, U-4	Himachal	Central	Hydro	130	199	
6	Rampur, U-4	Pradesh	Central	Hydro	68.67		
7	Sasan, U-1 (Addl.)	Madhya Pradesh	Private	Coal	660	660	
8	Dhariwal TPP, U-2	Maharashtra	Private	Coal	300	300	
9	Derang TPP	Orissa	Private	Coal	600	600	
10	Talwandi Sabo, U-1	Dumiah	Private	Coal	660	440	
11	Rajpura TPP (Nabha), U-4	Punjab	Private	Coal	700	660	
12	Ramgarh CCPP		State	Gas	50		
13	Kalisindh TPP	Rajasthan	State	Coal	600	900	
14	Chhabra, U-4		State	Coal	250		
	Total Capacity Co	mmissioned during	2014-15 :		4,960	4,960	

LOK SABHA STARRED QUESTION NO.157 TO BE ANSWERED ON 17.07.2014

TRANSMISSION TOWERS

†*157. SHRI HUKUM SINGH:

Will the Minister of **POWER** be pleased to state:

- (a) whether a number of transmission towers collapsed/got affected in Uttar Pradesh, Haryana, Uttarakhand and Delhi due to heavy rains and thunder storm on 30 May 2014, causing black-out like situation;
- (b) whether any inquiry has been conducted in this regard; and
- (c) if so, the details and the outcome thereof and the action being taken/proposed to be taken thereon to prevent recurrence of such incidents in future?

ANSWER

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

(SHRI PIYUSH GOYAL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO. 157 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014 REGARDING TRANSMISSION TOWERS.

- (a): On 30th May, 2014, a number of transmission towers in Delhi, Uttar Pradesh, Haryana and Uttarakhand collapsed or got affected due to heavy rain and thunder storm which affected the power supply in these areas.
- (b) & (c): To normalize the power supply in the affected areas, the restoration of transmission lines was undertaken first through deployment of Emergency Restoration System (ERS) and then on normal towers with the help of Power Grid Corporation of India Ltd., a Central Public Sector Undertaking which worked day and night to restore the system in the shortest possible time.

The Standing Committee of Central Electricity Authority (CEA), with members from Indian Institute of Technology (IIT) and utilities, which investigates such failures, has observed that some of the towers failed due to localized cyclone/whirl-wind conditions. The collapse, in some cases, was accentuated as few members of towers were found missing on account of theft. The Committee has recommended that the design of towers should be reviewed as per the latest Indian Standard codes for further strengthening, and to avoid theft of tower members, patrolling in theft prone areas be intensified.

These recommendations/suggestions of the Standing Committee have been forwarded to the concerned utilities for implementation to prevent recurrence of such incidents in future.

LOK SABHA STARRED QUESTION NO.160 TO BE ANSWERED ON 17.07.2014

HYDEL POWER PROJECTS

*160. SHRI NIMMALA KRISTAPPA:

Will the Minister of **POWER** be pleased to state:

- (a) whether the construction of hydel power projects is facing a number of bottlenecks, both natural and man-made;
- (b) if so, the details thereof and the steps being taken by the Government to overcome these bottlenecks;
- (c) whether the life extension works have led to increase in the operational time period of the hydel power projects and if so, the details thereof during the last three years and the current year; and
- (d) the other steps being taken by the Government to augment power generation capacity of the hydel power projects?

ANSWER

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

(SHRI PIYUSH GOYAL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. 160 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014 REGARDING HYDEL POWER PROJECTS.

(a) & (b): Hydel Power Projects due to difficult location and geological uncertainties face a number of bottlenecks, both natural and man-made. The major natural bottlenecks encountered in hydel power projects are natural calamities, geological uncertainties, difficult terrain & poor accessibility, etc. The major man-made bottlenecks relate to land acquisition problems, local agitations/ resistance including rehabilitation & resettlement issues, etc.

The Project-wise details of major bottlenecks being faced in the hydro projects under construction and the steps being taken by the Government/ Developer to overcome these are at **Annex-I**.

- (c): Life extension works of old hydro-electric projects have led to increase in the operational time period of the projects. The Project-wise details of hydro-electric projects on which life extension (LE) works have been completed during last three years and the current year are given at Annex-II.
- (d): To augment the power generation capacity of the existing hydro electric power plants, the generating utilities in the country undertake Renovation and Modernisation works which leads to Uprating and life extension of the hydro electric plants.

ANNEX REFERRED TO IN PARTS (a) & (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 160 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014 REGARDING HYDEL POWER PROJECTS.

Major bottlenecks faced in under execution Hydro Electric Projects

SI.	Name of	State	Bottlenecks / Issues	Steps taken by Government /
No	Project /	Commissioning		Developer
	Executing	Schedule		
	Agency	(original/ Now		
	3	Anticipated		
Α.	Hydro Capacity	for benefits during	12 th Plan - Under Execution	1
	Central Sector			
1.	Parbati-II NHPC	<u>H.P.</u> <u>2009-10</u> 2016-17 (likely to slip)	Poor geology in HRT (TBM-Face) Contractor (M/s HJV) was unable to give requisite progress. Cash crunch with M/s	 Contract with M/s HJV has been terminated on 09.03.2012 and reawarded to M/s Gammon-CMC (JV) on 13.8.2013 for TBM portion & to M/s Valecha Engg. on 21.11.2013 for DBM portion. NHPC Board in its 362nd Meeting approved for release / deferment of
			Patel SEW (Dam works) & M/s Coastal Project Ltd. (Jiwa Nallah works)	LD against BG for repair of equipments under breakdown & deployment of additional resources.
2.	Tapovan Vishnugad NTPC	Uttarakhand 2011-12 2016-17 (likely to slip)	 Heavy water ingress in HRT during excavation. TBM stuck three times due to poor geology in HRT. Contractor for HRT 	 Technical solutions explored/ implemented each time. Contract for HRT package terminated on 9.1.14. Yet to be re-awarded.
			package was unable to give progress. - Unsatisfactory progress in the package of barrage & desilting chamber due to non-performance of the Contractor (M/s SSJV). - Flash flood in June, 2013. (Uttarakhand Tragedy)	 Contract terminated in Nov., 2010 and fresh award has been placed on 18.07.2012. Highway from Rishikesh to the project was restored by the Government and project specific restoration work done by NTPC.
3.	Teesta Low Dam-IV NHPC	<u>2009-10</u> 2015-16 (Best effort 2014-15: 40 MW)	Civil works are standstill since 20.03.2013 due to financial crunch with HCC. Gorkha Jan Mukti Morcha agitation.	- Contract terminated on 20.05.14. Balance works to be taken up at the risk & Cost of M/s HCC.

4.	Subansiri Lower NHPC	Arunachal Pradesh Assam 2010-11 2016-18 (likely to slip)	- Issue of Downstream Impact Assessment & demand for stoppage of works by anti dam activists. Since 16.12.2011 works stopped due to agitation by activists.	- A tripartite meeting between representatives of State Government, Central Government & Agitating Groups held on 6 th Dec., 2013. Further, two meetings between Expert Group of Assam and Experts from Government of India held on 23 rd Dec., 2013 and 2 nd June, 2014 to deliberate on technical issues related to safety of dam and downstream impact. The issue is in advanced stage of resolution.
	State Sector	1		
5.	Kashang-II & III H.P.	<u>H.P.</u> <u>2013-14</u> 2016-17	 Works getting delayed due to continuous agitation by Lippa villagers. 	- The matter is sub-judice.
6.	New Umtru MePGCL,	<u>Meghalaya</u> <u>2011-12</u> 2015-16	- Financial constraints with the Developer.	- Revised Cost Estimates prepared by the Developer and are under approval. Works likely to re-start soon.
7.	Lower Jurala TENGCO (Earlier APGENCO)	<u>Telengana</u> <u>2011-13</u> 2014-16	- Weir works hampered due to frequent stoppage of works by Rekulapally villagers.	
	Private Sector			
8	Sorang Himachal Sorang Power Corporation Ltd.	<u>H.P.</u> <u>2012-13</u> 2015-16	- Failure of penstock during water filling in the month of Nov., 2013.	- Technical solutions explored by the Developer and repair works are under progress.
9	Phata Byung M/s Lanco	Uttarakhand 2013-14 2016-17	Poor geology. Flash flood in June-2013. Works yet to commence after floods. Financial constraints with the Developer.	- The developers are planning to start restoration works shortly.
10	Singoli Bhatwari M/s L&T	<u>Uttarakhand</u> <u>2015-16</u> 2016-17	Poor geology in HRT. Flash flood in June- 2013. (Uttarakhand Tragedy) Financial constraints with the Developer.	The developers are planning to start restoration works shortly.
11	<u>Maheshwar</u> SMHPCL	M. P. 2001-02 2015-17 (Best efforts in 2014-15: 120 MW)	- Cash flow problem R&R issues.	- Government is exploring ways to restart the works.

12	Teesta-III Teesta Urja Ltd. (TUL)	<u>Sikkim</u> <u>2011-13</u> 2014-16	 Collapse of Bridge. Earthquake in Sikkim in September., '11 Financial crunch with the developer. 	- Reconstruction of Bridge to carry Heavy Packages.
13	Teesta-VI LANCO	<u>Sikkim</u> <u>2012-13</u> 2016-17	- Poor geology in HRT. - Financial constraints with the Developer.	- Technical solutions explored/implemented each time.
В	Hydro Capacity	for benefits beyor	nd 12 th Plan – Under Executio	on .
	Central Sector			
14	Lata Tapovan NTPC	<u>Uttarakhand</u> <u>2017-18</u> 2018-19	- Flash flood in June- 2013. (Uttarakhand Tragedy) - Works of barrage & HRT yet to start due to protest by villagers Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14.	Highway from Rishikesh to the project was restored by the Government and project specific restoration work done by NTPC. The matter is sub-judice.
	State Sector			
15	Shongtong Karcham H.P. Power Corpn. Ltd.	H.P. 2017-18 2017-18	-Issue of construction activities within the army notified area is affecting construction of some portion of the project.	- The matter is sub-judice.

ANNEX REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 160 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014 REGARDING HYDEL POWER PROJECTS.

State-wise list of Life Extension schemes completed during last three years and the current year

As on 31.03.2014

							AS On 3	1.03.2014
S. No	Project, Agency	Category of Project/ Central Sector (CS)/	Installed Capacity (MW)	Estimated Cost (Provisional)	Actual Expenditure	Benefits in terms of MW	Increase in operational time period (life	Year of Completion
		State Sector (SS)		(Rs. in Crs.)	(Rs. in Crs.)		extension)	
Com	pleted Schemes							
Maha	arashtra 💮 💮							
1	Koyna St.III, MSPGCL	SS	4x80	16.65	5.79	320	More than 20 years	2011-12
	nalaya	1	T			1	T	1
2	Umium St.II, MeSEB	SS	2x9	90.46	55.67 (as on 31.03.12)	18.00	35 years	2011-12
Odisl	ha		•				*	
3	Rengali Unit-1 OHPC	SS	1x50	47.50	36.76 (as on 30.06.12)	50	More than 20 years	2012-13
4	Rengali Unit-2 OHPC	SS	1x50	25.2 (approx)	20.73	50	More than 20 years	2013-14
Hima	chal Pradesh							
5	Bassi, HPSEB	SS	4x16.5	119.83	155.42 (as on 28.02.14)	60	35 years	2013-14
					Sub Total	498		
Onac	│ oing Schemes - Und	ler Implementati			Jub Iotai	170	1	
	mu & Kashmir	ier impiementati	<u> </u>					
6	Chenani, J&KSPDC	SS	5x4.66	34.94	7.09 (as on	23.30	More than 20 years	2014-15
7	Ganderbal, J&KSPDC	ss	2x3+ 2x4.5	34.65	30.09.13) 9.51 (as on	9.00	More than 20 years	2014-15
Litto	 rakhand				30.09.13)			
8	Pathri, UJVNL	SS	3x6.8	113.25	49.05 (as on 30.11.13)	20.40	More than 20 years	2014-15
Kera	la		•				*	
9	Sabirigiri, KSEB Unit-4	ss	1x60	52.2	49.79 (as on 30.06.13)	5	35 years	2014-15
Tami	il Nadu	•	•	•	•		•	•
10	Periyar, TANGEDCO	ss	3x42+ 1x35	161.18	127.82 (as on 31.03.14)	140.00	More than 20 years	2014-15
West	: Bengal	1	1	I	J 1.00.14)	1	1	1
11	Jaldhaka St.I, WBSEB	ss	3x9	88.62	76.04 (as on 30.09.13)	27.00	More than 20 years	2014-15
Assa	m	1		<u> </u>	30.07.13)	1	1	<u> </u>
12	Khandong, NEEPCO	cs	2x25	25.05	16.34 (as on 31.03.13)	50.00	More than 20 years	2014-15
					Sub Total	274.7		
		1	İ		Total	772.7		1
	1	1	1	1			1	1

Abbreviations: LE - Life Extension; MW - Mega Watt; CS-Central Sector: SS- State Sector

LOK SABHA UNSTARRED QUESTION NO.985 TO BE ANSWERED ON 17.07.2014

COAL SUPPLIES FROM CAPTIVE MINES

985. SHRI SHIVKUMAR UDASI:

Will the Minister of **POWER** be pleased to state:

- (a) whether the National Thermal Power Corporation (NTPC) is set to receive coal supplies from its captive mines; and
- (b) if so, the details thereof?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) & (b): Coal supply from NTPC captive mines such as Pakri-Barwadih, Chatti-Bariatu, Kerandari, Taliapalli and Dulanga coal blocks is due from December, 2015 to June, 2016. This is contingent upon law & order situation, land acquisition, approval of R&R Plan by the concerned States.

Preliminary work for exploration activities have commenced in the recently allocated coal blocks namely, Banai and Bhalumuda in Chhattisgarh and Chandrabila and Kudanali-Luburi in Odisha.

LOK SABHA UNSTARRED QUESTION NO.989 TO BE ANSWERED ON 17.07.2014

ALLOCATION OF POWER

989. SHRI RAMSINH RATHWA:

Will the Minister of **POWER** be pleased to state:

- (a) whether the share of power amongst States out of the allocated share from Central Power Units of Western Zone has been reduced by the Union Government;
- (b) if so, the details thereof and the reasons therefor along with the shortage of power being faced by those States as a result thereof, State-wise; and
- (c) the manner in which the Union Government proposes to compensate this shortage?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) to (c): During the current year, the allocated share of power amongst Western Region States / UTs from Central Sector Generating Stations (CGSs) situated in Western Region has not been reduced.

LOK SABHA UNSTARRED QUESTION NO.1004 TO BE ANSWERED ON 17.07.2014

GENERATION OF ELECTRICITY FROM SOLID WASTE

†1004. SHRI DEVJI M. PATEL:

Will the Minister of **POWER** be pleased to state:

- (a) whether the Union Government proposes to generate electricity from municipal solid waste in view of the shortage of electricity;
- (b) if so, the details thereof;
- (c) the number of such projects being run in various cities, State-wise; and
- (d) the number of proposals received by the Union Government during the last three years and the current year to generate electricity from municipal solid waste and the action taken thereon?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) to (d): The Ministry of New and Renewable Energy is implementing programmes on energy from urban, industrial and agricultural wastes/residues including setting up of five pilot projects for power generation from municipal solid waste. The programme provides Central Financial Assistance of Rs.2.00 crore/MW limited to Rs.10 Crore per project. In addition, excise duty exemption and concessional custom duty are also being provided to such projects.

Only one project of 16 MW capacity is operational at Okhla, New Delhi and four more projects [at Delhi (2 Nos.), Hyderabad (A.P.), Pune (Maharashtra)] have been commenced.

LOK SABHA UNSTARRED QUESTION NO.1014 TO BE ANSWERED ON 17.07.2014

PENDING POWER PROJECTS

1014. SHRI BADRUDDIN AJMAL:

Will the Minister of **POWER** be pleased to state:

- (a) whether several power projects are pending/suffering due to non-accordance, delayed accordance of environmental clearance from the Ministry of Environment and Forests;
- (b) if so, the details thereof, project-wise and State-wise including the North-Eastern States;
- (c) the steps taken by the Union Government to accord early environment clearance to pending power projects;
- (d) whether the Union Government has provided any financial assistance under the Restructured Accelerated Power Development and Reforms Programme (RAPDRP) to the State Governments including the North-Eastern States; and
- (e) if so, the details thereof?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) & (b): Thirty numbers of Hydro Electric Projects (HEPs) with an aggregate installed capacity of 20948 MW, with concurrence accorded by CEA are awaiting environment and forest clearances by Ministry of Environment & Forests (MoEF). Out of this, seventeen numbers of HEPs aggregating to 17934 MW are located in North Eastern Region. The details are given at **Annex**.

In respect of Thermal Power Projects, there is no major issue pertaining to clearance by MoEF and therefore, there is no thermal power project pending / delayed due to non accordance of Environmental Clearance from MoEF.

As regards transmission line projects, they have been kept out of the purview of different Pollution Law and Environment (Protection) Act, 1986, except in three districts viz. Alwar in Rajasthan and Gurgaon & Mewat in Haryana. As per the MoEF Notification dated 29th November, 1999, power has been given to Expert Committee in each State and hence there is no necessity to forward the cases to MoEF.

Only one transmission project is pending in Haryana and the detail is given as under:

SI. No	Name of the Project/(Location)	Brief history of issues pending with State Government
1.	Transmission System for Phase-I Generation Projects in Jharkhand and West Bengal (part B)	Proposal submitted on July 05, 2013 to State Govt.
	(1) Kanpur-Jhatikara 765kV S/C Line is passing through Gurgaon/Nuh-Mewat district of Haryana	

- (c): The status of Environment clearance for Power Projects is being monitored regularly by Ministry of Power (MoP). Regular inter-Ministerial consultation and interaction is also held by MoP with MoEF for expediting the clearances.
- (d) & (e): Yes, Madam. Government of India is having Restructured Accelerated Power Development and Reforms Programme (R-APDRP) under which funding is provided to State/Discoms. The focus of the programme is on actual, demonstrable performance in terms of sustained loss reduction, establishment of reliable and automated system for collection of accurate base line data, the adoption of Information Technology (IT) in the areas of energy accounting are necessary preconditions before sanctioning any project.

The details of financial assistance provided under RAPDRP to State Government including the North Eastern States are as follows:

- (I) Under Part-A of R-APDRP, 1412 projects at an estimated cost of Rs 5347.38 Crores have been approved for 30 States/UTs (Chandigarh and Pondicherry) and Rs 2495.61 Crores have been disbursed till date.
- (ii) Under SCADA projects for 72 towns of 19 states have also been sanctioned at an estimated cost of Rs 1601.28 Crores and Rs 416.20 Crores have been disbursed.
- (III) Under Part-B of R-APDRP, 1244 projects at an estimated cost of Rs 31139.48 Crores have been approved for 26 States and Rs 4272.03 Crores have also been disbursed.

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO.1014 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

Hydro power projects concurred by CEA and pending for environment and forest clearance of MoEF

SI No.	Scheme/ Sector/	Agency	Nos. x MW	IC (MW)	CEA Concurrence	Remarks
J &	 		1	(IAIAA)	<u> </u>	
1	New Ganderwal	JKSPDC	3x31	93	10.06.14	Environment Clearance obtained on 27.09.13. FC yet to be obtained.
2	Miyar Private	MHPCL	3x40	120	07.02.2013	Environment clearance obtained on 30.07.2012. Stage-I FC clearance accorded on 27.07.2012. Stage-II FC awaited.
3	Chango Yangthang	MPCL	3x60	180	31.03.14	EC & FC awaited
Uttara	akhand					
4	Kotlibhel St-IA Central	NHPC	3x65	195	03.10.06 Validity extended up to 2.10.2014 on 27.11.2012	EC obtained on 9.5.2007. St - I FC obtained on 13.10.2011. St - II FC awaited.
5	Kotlibhel St-IB Central	NHPC	4x80	320	31.10.06 Validity extended up to 30.10.14 on 23.11.2012.	MOEF declined FC. EC given earlier on 14.08.07 is withdrawn on 22.11.10.
6	Kotlibhel St-II Central	NHPC	8x66.25	530	30.11.06 Validity extended up to 29.11.14 on 27.11.2012	E.C. accorded on 23.08.2007. F.C. declined.
7	Rupsiyabagar Khasiyabara Central	NTPC	3x87	261	16.10.08	Forest clearance awaited.
8	Vyasi /State	UJVNL	2x60	120	25.10.11	EC obtained on 7.9.2007 and FC obtained on 21.10.1986. Fresh FC awaited.
9	Devsari / Central	SJVNL	3x84	252	07.08.12	EAC meeting held on 27.12.2011 recommended for EC. Formal letter will be issued after FC. FC is awaited.
Chhai	ttisgarh					
10	Matnar State Sikkim	CSPCPL	3x20	60	19.08.04	Yet to be cleared by MOEF.
11	Teesta St-IV Central	NHPC	4x130	520	13.05.10 Validity extended upto 12.05.15	EC cleared on 09.01.14. Stage-I FC cleared on 26.02.2013. Stage-II FC awaited.
Keral	a					
12	Athirappilly State	KSEB	2x80+2x1.5	163	31.03.05	Project was referred by MOEF to Western Ghats Ecology Expert Panel (WGEEP) constituted by MOEF in Feb., 2010 to study ecologically aspects.

	1	 	<u> </u>	1	1	WOEED
						WGEEP has recommended to MOEF that Athirapilly -
						Vazachal area should be
						protected as such and the
						permission for the proposed
						hydro-electric project at
						Athirapilly should not be
						given. KSEB communicated
						its views on WGEEP report
						to Govt. of Kerla on
						25.01.2012. The state Govt.
						submitted the response to the Recommendation of
						WGEEP to High Level
						Working Group Chaired by
						Dr. K Karthrirangam,
						Member (Science), Planning
						commission. The working
						group Member visited the
						site on 18.01.2013. Outcome
						of this visit is awaited.
Karna	taka	_		1	1	
13	Gundia	KPCL	1x200	200	25.04.08	Project was referred by
	State					MOEF to Western Ghats
						Ecology Expert Panel
						(WGEEP) constituted by
						MOEF in Feb., 2010 to study ecologically aspects.
						ecologically aspects. WGEEP has Submitted its
						report to MOEF indicating
						that MOEF need not to
						permit the execution of
						Gundia HEP as the loss of
						diversity and environmental
						impacts would be
						significant. MOEF sought for
						opinion of GOK on this
						report and the same has
						already been submitted to
						MOEF.Centre has
						constituted a committee
						under Chairmanship of Dr. Kasturirangan, Member
						Planning Commission to
						prepare a road map for
						implementation of
						infrastructure projects that
						would not affect
						environment. Committee
						held a meeting on 21.8.12 at
1						New Delhi and details
						sought have been furnished.
						On 13.01.2013 Dr.
						Kasturirangan with a high
						level working group has
						visited the Project. Director,
						MOEF has sought some more
						details on 31.01.2013.
						HLWG has submitted the report to MOEF on 15.04.13
						and the ministry has
						accepted the HLWG report
						on 19.10.13. MOEF has
<u> </u>	j	1	L	l	I .	J. 17.10.13. WIOLI Has

						sought detailed report on 12.12.2013. KPCL initated action for study report by approaching Institute of eminence on issue raised in the HLWG report. MOEF informed accordingly on 04.01.2014. EC awaited from MOEF.
14	Manipur	NUIDO	(w2E0	1500	02.07.02	FC ammoved an
14	Tipaimukh Central	NHPC	6x250	1500	02.07.03	EC approved on 24.10.08.MOEF vide 29.08.2013 has declared diversion of 22777.50 ha to forest land falling in Manipur and vide letter dated 26.09.2013 has rejected diversion of 1551.30 ha of forest land falling in Mizoram for the project. Project is proposed to be undertaken through JVC (NHPC-69%, SJVNL - 26%, Govt of Manipur-5%.
15	Loktak D/S Central	LDHCL	2x33	66	15.11.06 Concurrence transferred, from NHPC to LHDC on 6.8.12 validity of concurrence extended upto 14.11.14 on 24.01.13	EC approved on 16.01.2013. Stage-I FC accorded on 03.03.11. Stage-II FC awaited.
	Ar. Pradesh				<u> </u>	
16	Dibang Central	NHPC	12x250	3000	23.01.08 Concurrence validity extended up to 22.1.2013 on 07.06.2012	EC & FC yet to be cleared by MOEF. FAC of MOEF during its meeting held on 12.07.2013 recommended rejection of Forest Clearance. EAC of MOEF in meeting held on 23.09.2013 has raised issue related to flora & Fauna, environmental flow etc.
17	Dibbin Private	KSKDHPL	2x60	120	04.12.09	EC accorded on 23.07.12 Stage-I FC accorded on 07.02.12. Stage-II FC awaited.
18	Lower Siang Private	JAVL	9x300	2700	16.12.10	Yet to be cleared by MOEF.
19	Nyamjang Chhu Private	BEL	6x130	780	24.03.11	EC obtained on 19.4.12. St-I FC obtained on 9.4.2012. St-II FC awaited.
20	Tawang St-I Central/	NHPC	3x200	600	10.10.11	Environment clearance accorded on 10.6.11. Forest clearance proposal forwarded by State Govt. to MOEF on 21.08.2011. FC awaited.
21	Tato-II Private	THPPL	4x175	700	22.05.12	Environment clearance accorded on 27.6.11. Forest clearance awaited.

22	Tawang St-II Central/	NHPC	4x200	800	22.09.11	EC accorded on 10.06.11. FC - proposal forwarded by State Govt. to MOEF on 28.08.11, FC awaited
23	Hirong Private	JAPL	4x125	500	10.04.13	EC & FC awaited.
24	Etalin Private	EHEPCL	10x307+1 x19.6+1x 7.4	3097	12.07.13	EC - Clearance for revised install capacity of 3097 MW yet to be obtained.FC - Proposal for diversion of forest land submitted by developer to State Forest Department vide letter dated 10.11.2012. Clearance yet to be obtained.
25	Talong Londa Private	GMR	3x75	225	16.08.13	EC & FC awaited.
26	Naying Private	NDSCPL	4x250	1000	11.09.13	EC & FC awaited
27	Siyom	SHPPL	6x166.67	1000	17.12.13	FC awaited
28	Kalai-II	KPPL	5x190+ 1x190+ 1x60	1200	Concurrence meeting held on 08.01.2014.*	EC & FC awaited
	Mizoram					
29	Kolodyne St-II Central	NTPC	4x115	460	14.09.11	Revised TOR submitted on 26.7.11. Forest proposal submitted to State Govt. on 20.12.2010. EC& FC awaited
	Nagaland					
30	Dikhu	NMPPL	3x62	186	31.03.14	EC & FC awaited
	Total : All India			20948		

EC: Environment Clearance FC: Forest Clearance JVC: Joint Venture Company

(*)- Concurrence letter is yet to be issued for want of letter regarding revalidation of MOA dated 02.09.2007 and equity participation of M/s KPPL and state Government from Govt. of Arunachal Pradesh.

LOK SABHA UNSTARRED QUESTION NO.1018 TO BE ANSWERED ON 17.07.2014

CENTRAL ASSISTANCE TO STATE ELECTRICITY BOARDS

1018. MOHAMMED FAIZAL:

Will the Minister of **POWER** be pleased to state:

- (a) whether the Union Government has provided any central assistance to State Electricity Boards in the country;
- (b) if so, the details of the central assistance provided during each of the last three years and the current year, State/UT wise; and
- (c) the measures taken by the Union Government to reduce the loss incurred by different boards during the said period, Board-wise?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) to (c): The Union Government has taken various measures to improve the functioning of the distribution sector and reduce losses of Power distribution utilities of the country. The details of the same are given at Annex.

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 1018 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

The measures taken by the Union Government to improve distribution and to reduce the losses of Power Distribution Companies in the country:

R-APDRP:

To reduce the AT&C losses in the country and to improve the power distribution sector of state utilities, Government of India has launched the Restructured-Accelerated Power Development and Reforms Programme (R-APDRP) during 11th Plan period. The focus of R-APDRP is on actual demonstrable performance by utilities in terms of sustained AT&C loss reduction in the project areas. Projects under the scheme are taken up in two parts in towns having population more than 30,000 (10,000 for special category States) as per census 2001. Part-A of the scheme is for establishing IT enabled system for energy accounting / auditing (including Supervisory Control and Data Acquisition (SCADA) for big cities having population:4 lacs and Annual Energy Input: 350MU), whereas Part-B is for up-gradation, augmentation & strengthening of electrical infrastructure in project towns.

Rating of Utilities

In order to enable a unified approach by Financial Institutions (FIs)/ Banks for funding State Distribution Utilities, Ministry of Power has developed an integrated rating methodology for State Distribution Utilities. The overall objective of the integrated rating methodology is to help the distribution utilities to improve their operational and financial performance, enable regulatory compliance and influence respective State Governments to fulfill commitments on subsidy, equity support including transition funding support to achieve self-sustaining operations.

Order of Appellate Tribunal for Electricity (APTEL)

Ministry of Power had requested "Appellate Tribunal for Electricity" to issue directions under section 121 of the Electricity Act to the State Electricity Regulatory Authorities to revise the tariff appropriately (suo-motu, if required), in the interest of improving the financial health and long term viability of electricity sector in general and distribution utilities in particular.

The Appellate Tribunal for Electricity(APTEL) in its order dated 11th November, 2011 has issued directions to the State Commissions with a view to improve the financial health of SEBs/ Discoms and ultimately help to deal with the mounting arrears of pending dues of the distribution utilities.

Model Tariff Guidelines:

Forum of State Regulators and Central Electricity Regulatory Commission (CERC) have resolved to implement Model Tariff Guidelines, which address issue of rationalization of tariff. FOR (Forum of Regulators) has circulated Model Tariff Guidelines to SERCs, for their adoption. Now SERCs are required to adopt these tariff guidelines and make regulations. Adoption of Model Tariff Guidelines is a precondition for disbursement of loan by Power Finance Corporation and Rural Electrification Corporation to utilities.

Financial Restructuring of State Distribution Companies

A scheme for Financial restructuring of State Owned Discoms has been notified by the Government of India to enable the turnaround of the State Discoms and to ensure their long term viability. The scheme contains measures to be taken by the State Discoms and State Govt. for achieving financial turnaround by restructuring their debt with support through a Transitional Finance Mechanism by Central Govt.

National Electricity Fund(NEF)

Government of India launched the National Electricity Fund (Interest Subsidy Scheme) in July 2012 to provide interest subsidy on loans raised by both public and private Distribution Companies (DISCOMS), for capital works sanctioned by financial institutions to improve the infrastructure in distribution sector during the financial year 2012-13 and 2013-14. The preconditions for eligibility are linked to reform measures taken by the States and the amount of interest subsidy is linked to the progress achieved in reforms linked parameters.

LOK SABHA UNSTARRED QUESTION NO.1056 TO BE ANSWERED ON 17.07.2014

ELECTRICITY DEMANDS OF CITIES/INDUSTRIES

†1056. DR. ARUN KUMAR:

Will the Minister of **POWER** be pleased to state:

- (a) whether most of the power generated in the country is used for electricity demands of cities and big industries due to which the Government fails to provide electricity to meet the needs of rural areas and small scale industries and if so, the details thereof;
- (b) whether the Government proposes to ensure that the large-scale public and private industries generate power from their own captive power plants to meet their requirements and do not depend on public sector power companies and if so, the details thereof;
- (c) whether the Government is also likely to ensure that those public and private industries besides providing compensation to farmers for acquiring their land would also provide them electricity at Government rates from their captive power plants and the details thereof;
- (d) whether the Government is likely to provide special concession or incentive to the private and public sector industries for captive power generation and minimize their dependence on the Government; and
- (e) if so, the time by which this scheme is likely to be implemented?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a): The power generated in the country is mainly consumed in various categories of consumers such as Domestic, Industry and Agriculture. As per the information supplied by States / UTs, for the year 2012-13, 22% consumption was in domestic sector, 6% in Low Tension (LT) industries, 39% in High Tension (HT)

industries, 18% in Agriculture and remaining for other categories of consumers. The 18% of electricity consumed in Agriculture category is primarily in rural areas. The 6% electricity consumed in LT Industries is primarily for meeting requirement of small scale industries.

The distribution of electricity to various consumers including rural areas falls under the purview of the respective State Government/State Power Utility and it is the responsibility of distribution licensees to provide reliable & quality power supply to all consumers in their area of operation including rural areas and small scale industries. The supply of electricity to Urban area, rural area and industries etc. is decided by the utilities based on the availability and demand of the state.

(b) to (e): There is no such proposal under the consideration of the Government.

LOK SABHA UNSTARRED QUESTION NO.1068 TO BE ANSWERED ON 17.07.2014

POWER PROJECTS

1068. SHRI BHARTRUHARI MAHTAB:

SHRI NISHIKANT DUBEY: SHRI SANJAY DHOTRE:

Will the Minister of **POWER** be pleased to state:

- (a) the details of on-going power projects in the country, State/UT-wise;
- (b) the details of power projects held up at various stages of construction, as on date along with their capacity, State/UT wise;
- (c) whether the Government is aware that the stressful economic scenario forcing the entrepreneurs to exit from the said projects;
- (d) if so, the details thereof and the reaction of the Government thereto;
- (e) whether the cost of the said projects has been escalating as a result of delays in their completion; and
- (f) if so, the details thereof along with the cost escalation of each of the said project, State/UT-wise and the corrective steps taken/proposed to be taken by the Government to complete all the projects in a time-bound manner?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) to (f): Details of ongoing power projects, including those held up at various stages of construction, along with details of cost escalation are at Annex-IA for thermal projects and at Annex-IB for hydro projects above 25 MW. In view of financial stress being faced by generating entities on account of lack of gas supply, the developers have requested for extra forbearance in terms of relaxation in external commercial borrowings and extension of commercial operation date. The list of gas based power projects held up due to non-availability of gas is at Annex-IC.

.....2.

The following steps have been taken by Ministry of Power, Government of India for timely completion of power projects:

- Central Electricity Authority (CEA) is monitoring the progress of construction
 of the power projects through frequent site visits and interaction with the
 developers and equipment suppliers. In addition, CEA holds review meetings
 periodically with the developers and other stakeholders and identifies issues
 critical to commissioning of projects and helps in resolving them.
- 2. A Power Project Monitoring Panel (PPMP) has been set up by the Ministry of Power for independent monitoring of Thermal and Hydro Generation projects targeted for commissioning during the 12th Plan and beyond along with the associated transmission system.
- 3. Regular reviews are undertaken by the Ministry of Power at various levels including Ministry of Heavy Industries, Planning Commission and Cabinet Secretariat to identify the problem areas and facilitate faster resolution of inter-ministerial and other outstanding issues.

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (f) OF UNSTARRED QUESTION NO. 1068 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

State	Project Name	Unit No	Capacity	Date of	Source	Remarks
			(MW)	Commissioning		
CENTRAL SEC	CTOR					
Assam	Bongaigaon TPP	U-1	250	Mar-15	Coal	Under Construction
		U-2	250	Mar-16		Under Construction
		U-3	250	Aug-16		Under Construction
Bihar	Barh STPP- I	U-1	660	Nov-15	Coal	Under Construction
		U-2	660	Jul-16		Under Construction
		U-3	660	Mar-17		Under Construction
	Barh STPP-II	U-5	660	Mar-15	Coal	Under Construction
	Muzaffarpur TPS Exp	U-3	195	Mar-15	Coal	Under Construction
		U-4	195	Jun-15		Under Construction
	Nabi Nagar TPP	U-1	250	Mar-15	Coal	Under Construction
		U-2	250	Sep-15		Under Construction
		U-3	250	Mar-16		Under Construction
		U-4	250	Sep-16		Under Construction
	New Nabi Nagar TPP	U-1	660	Jan-17	Coal	Under Construction
		U-2	660	Jul-17		Under Construction
		U-3	660	Jan-18		Under Construction
Chhattisgarh	Lara TPP	U-1	800	Dec-16	Coal	Under Construction
		U-2	800	Jun-17		Under Construction
Jharkhand	Bokaro TPS "A" Exp.	U-1	500	Mar-15	Coal	Under Construction
Karnataka	Kudgi STPP Ph-I	U-1	800	May-16	Coal	Under Construction
		U-2	800	Nov-16		Under Construction
		U-3	800	May-17		Under Construction
Maharashtra	Mouda STPS Ph-II	U-3	660	May-16	Coal	Under Construction
	Solapur STPP	U-4	660	Nov-16	Coal	Under Construction
		U-1	660	May-16		Under Construction
		U-2	660	Nov-16		Under Construction
MP	Vindhyachal TPP Ph-V	U-13	500	Nov-15	Coal	Under Construction
	Gadarwara	U-1	800	Mar-17	Coal	Under Construction
		U-2	800	Sep-17		Under Construction
Orissa	Darlipalli STPP	U-1	800	Feb-18	Coal	Under Construction
		U-2	800	Jun-18	Coal	Under Construction
UP	Unchahar St- IV	U-6	500	Jun-17	Coal	Under Construction
TN	Neyveli TPS-II Exp.	U-2	250	Mar-15	Lignite	Under Construction
	Tuticorin JV	U-1	500	Dec-14	Coal	Under Construction
		U-2	500	Mar-15		Under Construction
Tripura	Monarchak CCPP	GT	61.3	Feb-15	Gas	Under Construction
		ST	39.7	Apr-15		Under Construction
Tripura	Agartala CCPP	ST -1	51	Mar-15	Gas	Under Construction
-		ST -2		Jun-15		Under Construction
	Tripura Gas	Module-2	363.3	Sep-14	Gas	Under Construction
UP	Meja STPP	U-1	660	Jun-16	Coal	Under Construction
		U-2	660	Jun-17		Under Construction
WB	Raghunathpur TPP, Ph-I	U-1	600	Sep-14	Coal	Under Construction
		U-2	600	Jun-15		Under Construction
	Raghunathpur TPP, Ph-II	U-1	660	Mar-18	Coal	Under Construction
		U-2	660	Sep-18	- 54.	Under Construction

STATE SECT						
AP	Damodaram Sanjeevaiah TPS	U-1	800	Jul-14	Coal	Under Construction
		U-2	800	Feb-15		Under Construction
	Kakatiya TPP Extn	U-1	600	Jul-15	Coal	Under Construction
	Rayalseema TPP St-III	U-6	600	Mar-16	Coal	Under Construction
	Singareni TPP	U-1	600	Nov-15	Coal	Under Construction
		U-2	600	Mar-16		Under Construction
Assam	Namrup CCGT	GT	70	Mar-15	Gas	Under Construction
		ST	30	Sep-15		Under Construction
Bihar	Barauni TPS Extn.	U-1	250	Sep-15	Coal	Under Construction
		U-2	250	Dec-15		Under Construction
Chhattisgarh	Marwa TPP	U-2	500	Dec-14	Coal	Under Construction
Gujarat	Sikka TPP Extn.	U-3	250	Dec-14	Coal	Under Construction
		U-4	250	Mar-15		Under Construction
	Bhavnagar CFBC TPP	U-1	250	Mar-15	Lignite	Under Construction
		U-2	250	Jun-15		Under Construction
Karnataka	Bellary TPS	U-3	700	Aug-15	Coal	Under Construction
	Yermarus TPP	U-1	800	Jul-15	Coal	Under Construction
		U-2	800	Sep-15		Under Construction
Maharashtra	Chandrapur TPS	U-8	500	Oct-14	Coal	Under Construction
		U-9	500	Mar-15		Under Construction
	Koradi TPP Expn.	U-8	660	Sep-14	Coal	Under Construction
		U-9	660	Jan-15		Under Construction
		U-10	660	Jun-15		Under Construction
	Parli TPP Expn.	U-8	250	Mar-15	Coal	Under Construction
MP	Malwa TPP (Shree Singaji)	U-2	600	Sep-14	Coal	Under Construction
Rajasthan	Chhabra TPP Extn.	U-5	660	Jun-16	Coal	Under Construction
	Kalisindh TPS	U-2	600	Jan-15	Coal	Under Construction
	Suratgarh TPS	U-7	660	Sep-16	Coal	Under Construction
		U-8	660	Dec-16		Under Construction
UP	Anpara-D	U- 6	500	Mar-15	Coal	Under Construction
		U-7	500	Jun-15		Under Construction
WB	Sagardighi TPP-II	U-3	500	Mar-15	Coal	Under Construction
		U-4	500	Jun-15		Under Construction
PRIVATE SEC	CTOR					
AP	Bhavanapadu TPP Ph-I	U-1	660	Mar-17	Coal	Under Construction
		U-2	660	Jun-17		Under Construction
	NCC TPP	U-1	660	Apr-16	Coal	Under Construction
		U-2	660	Aug-16		Under Construction
	Painampuram TPP	U-1	660	Nov-14	Coal	Under Construction
		U-2	660	Feb-15		Under Construction
	Simhapuri Energy Pvt Ltd Ph-II	U-4	150	Sep-14	Coal	Under Construction
	Thamminapatnam TPP stage -II	U-3	350	Aug-16	Coal	Under Construction
		U-4	350	Nov-16		Under Construction
	Vizag TPP	U-1	520	Sep-14	Coal	Under Construction
		U-2	520	Dec-14		Under Construction
Bihar	Jas Infra. TPP	U-1	660	*	Coal	Work is held up due to financial
						problems.
		U-2	660	*		
		U-3	660	*		
		U-4	660	*		

U-3 U-4 U-5 U-6 U-2 U-1 U-1 U-1 U-1 U-2 U-3 U-4 U-3 U-4 U-1 U-2 U-1 U-3	600 600 600 600 300 300 300 300 300 300	Mar-15 Nov-15 Sep-16 Mar-17 Jul-14 14-15* 14-15* Oct-14 Mar-15 Jun-15 ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14 Nov-14	Coal Coal Coal Coal Coal Coal Coal Coal	Under Construction Under Construction Under Construction Under Construction Under Construction Work is held up due to non availability of consent to operate Under Construction Under Construction Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-4 U-5 U-6 U-2 U-1 U-1 U-1 U-2 U-3 U-4 U-3 U-4 U-1 U-2 U-1 U-3	600 600 600 300 300 300 300 300 300 300	Nov-15 Sep-16 Mar-17 Jul-14 14-15* Oct-14 Mar-15 Jun-15 ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal Coal Coal	Under Construction Under Construction Under Construction Under Construction Work is held up due to non availability of consent to operate Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-5 U-6 U-2 U-1 U-1 U-1 U-1 U-2 U-3 U-4 U-1 U-2 U-1 U-1	600 600 300 300 300 300 300 300 660 660	Sep-16 Mar-17 Jul-14 14-15* Oct-14 Mar-15 Jun-15 ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal Coal Coal	Under Construction Under Construction Work is held up due to non availability of consent to operate Under Construction Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-6 U-2 U-1 U-1 U-1 U-2 U-3 U-4 U-1 U-2 U-1 U-1 U-2	600 600 300 300 300 300 300 300	Mar-17 Jul-14 14-15* 14-15* Oct-14 Mar-15 Jun-15 ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal Coal Coal	Under Construction Under Construction Work is held up due to non availability of consent to operate Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-2 U-1 U-1 U-2 U-3 U-4 U-1 U-2 U-1 U-3	600 300 300 300 300 300 300 660 660 685 685 685 600 600	Jul-14 14-15* 14-15* Oct-14 Mar-15 Jun-15 ** ** Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal Coal Coal	Under Construction Work is held up due to non availability of consent to operate Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-1 U-2 U-3 U-4 U-1 U-2 U-1 U-2 U-1 U-2 U-1 U-2 U-1 U-2 U-1 U-2 U-1 U-3	300 300 300 300 300 300 660 660 685 685 685 600 600 25 600	14-15* 14-15* Oct-14 Mar-15 Jun-15 ** ** Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal Coal Coal	Work is held up due to non availability of consent to operate Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-2 U-1 U-1 U-2 U-3 U-4 U-3 U-4 U-1 U-2 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-3	300 300 300 300 300 300 660 660 685 685 685 600 600 25 600	14-15* Oct-14 Mar-15 Jun-15 ** ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal Coal	to non availability of consent to operate Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-1 U-2 U-3 U-4 U-3 U-4 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-3	300 300 300 300 300 660 660 685 685 600 600 25 600	Oct-14 Mar-15 Jun-15 ** ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal	Under Construction Under Construction Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction
U-1 U-2 U-3 U-4 U-3 U-4 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-3	300 300 300 300 300 660 660 685 685 600 600 25 600	Oct-14 Mar-15 Jun-15 ** ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal	Under Construction Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction Under Construction
U-1 U-2 U-3 U-4 U-3 U-4 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-3	300 300 300 300 300 660 660 685 685 600 600 25 600	Oct-14 Mar-15 Jun-15 ** ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal	Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction
U-1 U-2 U-3 U-4 U-3 U-4 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-4 U-1	300 300 300 300 660 660 685 685 600 600 25 600	Mar-15 Jun-15 ** ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal Coal	Under Construction Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction
U-2 U-3 U-4 U-3 U-4 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-4	300 300 300 660 660 685 685 600 600 25 600	yun-15 ** ** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal Coal	Under Construction Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction
U-4 U-1 U-2 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-4	300 300 660 660 685 685 600 25 600	** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal	Under Construction Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction
U-4 U-3 U-4 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-4	300 660 660 685 685 600 600 25 600	** * Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal	Under Construction Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction
U-4 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-4	660 685 685 600 600 25 600	* Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal	Work is held up due to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-4 U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-1	660 685 685 600 600 25 600	* Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal Coal	to financial problems. Cost overrun of Rs. 814 Crores. Under Construction
U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-1	685 685 600 600 25 600	Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal	problems. Cost overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction Under Construction
U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-1	685 685 600 600 25 600	Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal	overrun of Rs. 814 Crores. Under Construction Under Construction Under Construction Under Construction Under Construction
U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-1	685 685 600 600 25 600	Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal	Under Construction Under Construction Under Construction Under Construction Under Construction
U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-1	685 685 600 600 25 600	Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal	Under Construction Under Construction Under Construction Under Construction Under Construction
U-1 U-2 U-1 U-2 U-1 U-3 U-4 U-1	685 685 600 600 25 600	Oct-14 Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal	Under Construction Under Construction Under Construction Under Construction
U-2 U-1 U-2 U-1 U-3 U-4 U-1	685 600 600 25 600	Jul-15 Sep-15 Mar-16 Nov-14 Aug-14	Coal	Under Construction Under Construction Under Construction Under Construction
U-1 U-2 U-1 U-3 U-4 U-1	600 600 25 600	Sep-15 Mar-16 Nov-14 Aug-14	Coal	Under Construction Under Construction Under Construction
U-2 U-1 U-3 U-4 U-1	600 25 600	Mar-16 Nov-14 Aug-14	Coal	Under Construction Under Construction
U-1 U-3 U-4 U-1	25 600 600	Nov-14 Aug-14		Under Construction
U-3 U-4 U-1	600	Aug-14		
U-4 U-1	600		Coal	Under Construction
U-1		Nov 14		
U-1		Nov 14		
				Under Construction
	300	Mar-15	Coal	Under Construction
U-2	300	Jun-15		Under Construction
U-1	360	Oct-14	Coal	Under Construction
U-2	360	Mar-15		Under Construction
U-3	360	Jun-15		Under Construction
U-4	360	Sep-15		Under Construction
U-2	135	Dec-14	Coal	Under Construction
U-1	600	*	Coal	Work is held up due
				to financial
				problems.
U-1	270	*	Coal	Work is held up due
				to financial
				problems.
U-2	270	*		
U-3	270	*	Coal	
U-4	270	*		
U-1	600	Dec-16	Coal	Under Construction
U-2	600	**		Under Construction
U-3	270	Sep-14	Coal	Under Construction
U-4	270	Feb-15		Under Construction
U-5	270	Jun-15		Under Construction
U-1	270	*	Coal	Work is held up due
- '	-			to financial
				problems.
U-2	270	*		F. 02.0.113.
		*		
		*		
∵	210			
	U-1 U-2 U-3 U-4 U-1 U-2 U-3 U-4 U-5 U-1	U-1 600 U-1 270 U-2 270 U-3 270 U-4 270 U-1 600 U-2 600 U-3 270 U-4 270 U-5 270 U-1 270 U-2 270 U-2 270 U-3 270	U-1 600 * U-1 270 * U-2 270 * U-3 270 * U-4 270 * U-1 600 Dec-16 U-2 600 ** U-3 270 Sep-14 U-4 270 Feb-15 U-5 270 Jun-15 U-1 270 * U-2 270 * U-2 270 * U-3 270 *	U-1 600 * Coal U-1 270 * Coal U-2 270 * Coal U-3 270 * Coal U-4 270 * Coal U-1 600 Dec-16 Coal U-2 600 ** U-3 270 Sep-14 Coal U-4 270 Feb-15 U-5 270 Jun-15 U-1 270 * Coal U-2 270 * Coal

aharachtra	Lanco Vidarbha TPP	U-1	660	*	Cool	Work is hold up du
anarasnıra	Lanco vidarbna iPP	0-1	660		Coal	Work is held up du to financial
						problems.
		U-2	660	*		problems.
	Nasik TPP Ph-I	U-2	270	Aug-14	Coal	Under Construction
	Nasik III III	U-3	270	Nov-14	Jour	Under Construction
		U-4	270	Jan-15		Under Construction
		U-5	270	Mar-15		Under Construction
	Nasik TPP Ph-II	U-1	270	*	Coal	Work is held up du
	nasik iii iiii		270		oou.	to financial
						problems.
		U-2	270	*		P 201211121
		U-3	270	*		
		U-4	270	*		
		U-5	270	*		
	Tirora TPP Ph-II	U-3	660	Sep-14	Coal	Under Construction
MP	Anuppur TPP Ph-I	U-1	600	Nov-14	Coal	Under Construction
		U-2	600	Apr-15		Under Construction
	Mahan TPP	U-2	600	Dec-14	Coal	Under Construction
	Nigri TPP	U-1	660	Jul-14	Coal	Under Construction
		U-2	660	Feb-15		Under Construction
	Sasan UMPP	U-5	660	Sep-14	Coal	Under Construction
		U-6	660	Dec-14		Under Construction
	Gorgi TPP	U-1	660	**	Coal	Under Construction
	Seoni TPP Ph-I	U-1	600	Dec-14	Coal	Under Construction
Orissa	Derang TPP	U-2	600	Dec-14	Coal	Under Construction
	Ind Bharat TPP (Orissa)	U-1	350	Dec-14	Coal	Under Construction
		U-2	350	Mar-15		Under Construction
	KVK Nilanchal TPP	U-1	350	Mar-16	Coal	Under Construction
		U-2	350	2016-17		Under Construction
		U-3	350	2016-17		Under Constructi
	Lanco Babandh TPP	U-1	660	*	Coal	Work is held up d
						to financial
						problems.
		U-2	660	*		
	Malibrahmani TPP	U-1	525	Mar-15	Coal	Under Construction
		U-2	525	Jun-15		Under Construction
Punjab	Goindwal Sahib	U-1	270	Nov-14	Coal	Under Constructi
		U-2	270	Feb-15		Under Construction
	Talwandi Sabo TPP	U-2	660	Jan-15	Coal	Under Construction
		U-3	660	Mar-15		Under Construction
TN	Melamaruthur TPP	U-1	600	Oct-14	Coal	Under Constructi
		U-2	600	Jan-15		Under Constructi
	Tuticorin TPP (Ind- Barath)	U-1	660	13th plan	Coal	Under Constructi
UP	Prayagraj (Bara) TPP	U-1	660	Feb-15	Coal	Under Constructi
		U-2	660	Oct-15		Under Constructi
		U-3	660	Mar-16		Under Constructi
	Lalitpur TPP	U-1	660	Feb-15	Coal	Under Constructi
		U-2	660	May-15		Under Constructi
		U-3	660	Oct-15		Under Construction
WB	Haldia TPP-I	U-1	300	Aug-14	Coal	Under Construction
WD					1	Under Construction

TPP = Thermal Power Project.

CCGT =Combine Cycle Gas Turbine

UMPP= Ultra Mega Power Project.

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (f) OF UNSTARRED QUESTION NO. 1068 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

State-Wise list of ongoing Hydro Projects (above 25 mw)

SI.	Name of Project	Unit	Sector	Capacity	Date of	Remarks
No.		No.		(MW)	Commissioning	
	Jammu & Kashmir					
1	Kishanganga	U-1 to	Central	330	2016-17	Under
	3x110= 330 MW	U-3				construction
2	Baglihar-II	U-1 to	State	450	2016-17	Under
	3x150= 450 MW	U-3				construction
3	Ratle	U-1 to	Private	850	2017-18	Under
	4x205+1x30= 850 MW	U-5				construction
	Himachal Pradesh					
4	Parbati St. II	U-1 to	Central	800	2016-17	Under
	4x200= 800 MW	U-4			(likely to slip)	construction
5	Kol Dam	U-1 to	Central	800	2015-16	Under
	4x200= 800 MW	U-4				construction
6	Rampur	U-3,	Central	137.33	2014-15	Under
	6x68.67= 412 MW	& U-6				construction
7	Uhl-III	U-1 to	State	100	2016-17	Under
	3x33.33= 100 MW	U-3				construction
8	Kashang-I	U-1	State	65	2016-17	Under
	1x65 =65 MW					construction
9	Kashang-II & III	U- 1 &	State	130	2016-17	Under
	1x65 + 1x65= 130 MW	U- 2				construction
10	Sainj	U- 1 &	State	100	2015-16	Under
	2X50=100 MW	U- 2				construction
11	Swara Kuddu	U-1 to	State	111	2016-17	Under
	3x37= 111 MW	U-3				construction
12	Shongtong Karcham	U-1 to	State	450	2017-18	Under
	3x150= 450 MW	U-3				construction
13	Sorang	U-1 &	Private	100	2015-16	Under
	2x50= 100 MW	U-2				construction
14	Tangnu Romai- I	U-1 to	Private	44	2016-17	Under
• •	2x22= 44 MW	U-2	1111410		2010 17	construction
15	Bajoli Holi	U-1 to	Private	180	2017-18	Under
	3x60= 180 MW	U-3	1111410	1.00	2017 10	construction
16	Chanju-I	U-1 to	Private	36	2017-18	Under
	3x12= 36 MW	U-3	Tilvate	30	2017-10	construction
17	Tidong-I	U-1 to	Private	100	2016-17	Under
17	2x50= 100 MW	U-2	FIIVALE	100	2010-17	construction
	Uttarakhand	3-2				CONSTRUCTION
18	Tapovan Vishnugad	U-1 to	Central	520	2016-17	Under
10	4x130=520 MW	U-4	Central	320	(likely to slip)	construction
19	Tehri PSS	U-1 to	Central	1000	2017-18	Under
17	4x250= 1000 MW	U-1 to	central	1000	2017-18	construction
20			Control	171	2018-19	
20	Lata Tapovan 3x57= 171 MW	U-1 to U-4	Central	171	2018-19	Under construction.
	3X3/= 1/1 IVIVV	U-4				
						Cost overrun of
24	Waharan Direction	11.6.1	0		2010 10	Rs. 735 crore.
21	Vishnugad Pipalkoti	U-1 to	Central	444	2018-19	Under
	4x111= 444 MW	U-4				construction

22	Shrinagar	U-1 to	Private	330	2015-16	Under
	4x82.5= 330 MW	U- 4				construction
23	Phata Byung		Private	76	2016-17	Under
	76 MW				(likely to slip)	construction
24	Singoli Bhatwari	U-1 to	Private	99	2016-17	Under
	3x33= 99 MW	U-3			(likely to slip)	construction
	Punjab				(interf to emp)	
25	Shahpurkandi	U-1 to	State	206	2017-18	Under
	3x33+3x33+1x8= 206 MW	U-7	Otato		2017 10	construction
	Madhya Pradesh					
26	Maheshwar	U-1 to	Private	400	2015-17	Under
	10x40= 400 MW	U-10				construction.
						Cost overrun of
						Rs. 1190.73
						crore.
	Maharashtra					
27	Koyna Left Bank PSS	U-1 to	State	80	2017-18	Under
	2x40= 80 MW	U-2		<u> </u>		construction
	Andhra Pradesh/Telengana					
28	Nagarujana Sagar TR	U-1 &	State	50	2014-15	Under
	2x25= 50 MW	U-2				construction
29	Lower Jurala	U-1 to	State	240	2014-16	Under
	6x40= 240 MW	U-6				construction
30	Pulichintala	U-1 to	State	120	2015-17	Under
	4x30= 120 MW	U-4				construction
	Kerala					
31	Pallivasal	U-1 to	State	60	2016-17	Under
	2x30= 60 MW	U-2				construction
32	Thottiyar	U-1 to	State	40	2016-17	Under
	1x30 + 1x10= 40 MW	U-2				construction
	West Bengal					
33	Teesta Low Dam-IV	U-1 to	Central	160	2015-16	Under
	4x40= 160 MW	U-4				construction
	Sikkim					
34	Teesta- III	U-1 to	Private	1200	2014-16	Under
	6x200= 1200 MW	U-6				construction
35	Teesta- VI	U-1 to	Private	500	2016-17	Under
	4x125= 500 MW	U-4			(likely to slip)	construction
36	Rangit-IV	U-1 to	Private	120	2016-17	Under
	3x40= 120 MW	U-3				construction
37	Jorethang Loop		Private	96	2014-15	Under
	2x48= 96 MW					construction
38	Bhasmey	U-1 to	Private	51	2016-17	Under
	3x17= 51 MW	U-3			(likely to slip)	construction
39	Tashiding	U-1 to	Private	97	2017-18	Under
	2x48.5= 97 MW	U-2				construction
40	Dikchu	U-1 to	Private	96	2017-18	Under
	3x32= 96 MW	U-3				construction
41	Rangit-II	U-1 to	Private	66	2017-18	Under
	2x33= 66 MW	U-2		1		construction
42	Rongnichu	U-1 to	Private	96	2017-18	Under
	2x48= 96 MW	U-2				construction
43	Panan	U-1 to	Private	300	2017-18	Under
	4x75= 300 MW	U-4				construction

	Arunachal Pradesh					
44	Subansiri Lower	U-1 to	Central	2000	2016-18	Work held up.
	8x250= 2000 MW	U-8			(likely to slip)	Cost overrun of
						Rs. 4381.67
						crore.
45	Kameng	U-1 to	Central	600	2016-17	Under
	4x150= 600 MW	U-4			(likely to slip)	construction
46	Pare	U-1 to	Central	110	2016-17	Under
	2x55= 110 MW	U-2				construction
	Mizoram					
47	Tuirial	U-1 to	Central	60	2016-17	Under
	2x30= 60 MW	U-2				construction
	Meghalaya					
48	New Umtru	U-1&	State	40	2015-16	Under
	2x20= 40 MW	U-2				construction

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (f) OF UNSTARRED QUESTION NO. 1068 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

List of Gas based Power Projects held up due to non- availability of gas

SI. No	Name of the Project	State	Developer	Capacity (MW)
	Private Sector			
1	GMR Vemagiri Exp	A.P	GMR	768
2	Kondapalli Exp St-III	A.P	LANCO	742
3	Samalkot Exp	A.P	REL	2400
4	CCGT by Panduranga	A.P	Panduranga	116
5	Gas Engine by Astha	A.P	Astha Power	35
6	Kashipur Sravanthi St-I&II	Uttarakhand	Sravanthi	450
7	Beta Infratech CCGT	Uttarakhand	Beta Infratech	225
8	Gama Infraprop CCGT	Uttarakhand	Gama Infraprop	225
9	CCGT by Pioneer Gas Power Ltd	Maharashtra	Pioneer Gas Power Ltd	388

CCGT = Combine Cycle Gas Turbine.

St = Stage.

LOK SABHA UNSTARRED QUESTION NO.1069 TO BE ANSWERED ON 17.07.2014

FOREIGN INVESTMENT IN POWER SECTOR

†1069. SHRI SHAILESH KUMAR:

Will the Minister of **POWER** be pleased to state:

- (a) whether the Government has started any programmes for encouraging foreign investment in power sector;
- (b) if so, the details and the outcome thereof; and
- (c) if not, the reasons therefor?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) & (b): Government of India notifies the 'Consolidated FDI Policy' from time to time to encourage the foreign investment which includes the power sector also.

The existing policy for FDI in Power Sector, provides 100% Foreign Direct Investment (FDI) under automatic route for projects of electric generation (except atomic energy), transmission, distribution and trading. Government of India has also allowed the foreign investment up to 49% (with FDI limit of 26 per cent and FII/FPI limit of 23 per cent) of the paid-up capital in Power Exchanges registered under the Central Electricity Regulatory Commission (Power Market) Regulations, 2010, under the automatic route, subject to certain conditions, as laid down in the policy.

(c): Does not arise in view of (a) & (b) above.

LOK SABHA UNSTARRED QUESTION NO.1072 TO BE ANSWERED ON 17.07.2014

SHARING OF HYDRO POWER PROJECTS

†1072. SHRI P.P. CHAUDHARY:

Will the Minister of **POWER** be pleased to state:

- (a) whether any agreement has been signed amongst the Union Government and the State Governments of Punjab, Haryana and Rajasthan on the share in hydro power projects of Punjab;
- (b) if so, the percentage/quantity of share of Rajasthan under various agreements and the percentage/quantity provided to Rajasthan;
- (c) whether any dispute has arisen over sharing in power projects;
- (d) if so, the steps being taken by the Union Government to settle the disputes;
- (e) whether the Union Government is considering to seek the opinion of the Hon'ble Supreme Court in this regard; and
- (f) if so, the details thereof?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) to (f): An agreement was reached between the States of Punjab, Haryana and Rajasthan and Government of India on 10.05.1984 wherein it was agreed that in view of the claims raised by Haryana and Rajasthan for sharing of power in Anandpur Sahib Hydel Project, Mukerian Hydel Project, Thein Dam Project, UBDC Stage-II and Shahpur Kandi Hydel Scheme, the Government of India shall refer the matter to the Supreme Court for its opinion. The opinion of the Hon'ble Supreme Court was to be sought on whether the States of Rajasthan and Haryana are entitled to a share in the power generated from these hydel schemes and in case they are, what would be the share of each State.

However, subsequently in the discussions held between the Chief Ministers of Punjab, Haryana and Rajasthan on 29-30 July, 1992 and 6th August, 1992 a consensus was reached not to refer the matter to the Hon'ble Supreme Court. It was also decided that the States would come to a reasonable agreement through mutual consultations. In order to resolve the issue amicably, a number of formal and informal discussions have taken place. However, no consensus has emerged so far due to the divergent views of the stakeholder States.

LOK SABHA UNSTARRED QUESTION NO.1076 TO BE ANSWERED ON 17.07.2014

SETTING UP/CONSTRUCTION OF NEW POWER PLANTS

1076. SHRI IDRIS ALI:

SHRI M. RAJA MOHAN REDDY:

Will the Minister of **POWER** be pleased to state:

- (a) whether the Government proposes to set up/construct new power plants in the country particularly in backward/tribal areas of Andhra Pradesh;
- (b) if so, the details thereof, State/UT wise; and
- (c) the likely production capacity of the new power plants, State/UT-wise?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) to (c): Additional generation capacity of 88,537 MW has been planned from conventional sources during the 12th Five Year Plan. State/UT wise details of additional generation capacity planned, including united Andhra Pradesh, are at Annex.

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 1076 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

SI. No.	Project Name	Sector	Fuel Type	Capacity (MW)
	NORTHERN REGION			
	DELHI			
1	Pragati -III (BAWANA) CCGT	S	Gas/LNG	750
	HARYANA			
1	Indira Gandhi TPP (Jhajjar) JV U-3	С	Coal	500
2	Mahatmi Gandhi Jhajjar TPP U2	Р	Coal	660
	HIMACHAL PRADESH			
1	Parbati-II HEP	С	Hydro	800
2	Rampur HEP	С	Hydro	412
3	Kol Dam HEP	С	Hydro	800
4	Chamera-III HEP	С	Hydro	23′
5	Parbati - III HEP	С	Hydro	520
6	Kashang - I HEP	S	Hydro	6!
7	Uhl-III HEP	S	Hydro	100
8	Sawara Kuddu HEP	S	Hydro	111
9	Kashang II & III HEP	S	Hydro	130
10	Sainj HEP	S	Hydro	100
11	Tidong-I HEP	Р	Hydro	100
12	Sorang HEP	Р	Hydro	100
13	Tangnu Romai-I HEP	Р	Hydro	44
14	Budhil HEP	Р	Hydro	7(
	JAMMU & KASHMIR			
1	Kishan Ganga HEP	С	Hydro	330
2	Uri-II HEP	С	Hydro	240
3	Nimoo Bazgo HEP	С	Hydro	4!
4	Chutak HEP	С	Hydro	44
5	Baglihar-II HEP	S	Hydro	450
	PUNJAB			
1	Talwandi Sabo TPP U1-3	Р	Coal	1980
2	Goindwal Sahib TPP U1,2	Р	Coal	540
3	Nabha TPP U-1,2	Р	Coal	1400
	RAJASTHAN			
1	RAPP U 7 & 8	С	Nuclear	1400
2	Kalisindh TPP U1	S	Coal	600
3	Chhabra TPP Ext U3,4	S	Coal	500
4	Ramgarh CCGT	S	Gas	160
5	Jallipa Kapurdi TPP U 5-6	Р	Lignite	270
	UTTAR PRADESH			
1	Rihand TPP-III U 5,6	С	Coal	1000
2	Anpara-D TPP U 1,2	S	Coal	1000
3	Parichha TPP EXT U-5,6	S	Coal	500
4	Harduaganj TPP EXT U-9	S	Coal	250
5	Bara TPP U1-3	Р	Coal	1980
	UTTARAKHAND			
1	Tapovan Vishnugad HEP	С	Hydro	52
2	Singoli Bhatwari HEP	Р	Hydro	9
3	Phata Byung HEP	Р	Hydro	7
4	Srinagar HEP	P	Hydro	33

	WESTERN REGION			
	CHHATTISGARH			
1	Sipat-I TPP U 3	С	Coal	660
2	Korba West St.III TPP U5	S	Coal	500
3	Marwah TPP U1-2	S	Coal	1000
4	Avantha Bhandar TPP U1	Р	Coal	600
5	Maurti Clean Coal & Power Ltd.TPP U1	Р	Coal	300
6	Lanco Amarkantak TPP U- 3,4	Р	Coal	1320
7	Uchpinda TPP U1-3	Р	Coal	1080
8	Vinjkote (Darrampura) TPP U1-3	Р	Coal	900
9	Akaltara (Nariyara) TPP U 1-3	Р	Coal	1800
10	Kasaipalli TPP U 2	Р	Coal	135
11	Swastik Korba TPP U 1	Р	Coal	25
12	Vandana Vidyut TPP U 1,2	Р	Coal	270
13	Balco TPP U-1,2	Р	Coal	600
14	Athena Singhtarai TPP U-1	Р	Coal	600
15	D B Power TPP U-1,2	Р	Coal	1200
16	TRN Energy TPP U-1,2	Р	Coal	600
17	Ratija TPP	Р	Coal	50
18	Raigarh TPP U1,2	Р	Coal	1200
	GUJARAT			
1	KAPP U-3,4	С	Nuclear	1400
2	Sikka TPP Ext. U3	S	Coal	250
3	Ukai TPP EXT U6	S	Coal	500
4	Pipavav JV CCGT Block-1,2	S	Gas/LNG	702
5	Mundra UMPP, U 2	Р	Coal	800
6	Salaya TPP U 2	Р	Coal	600
	MAHARASHTRA			
1	Mauda TPP U1,2	С	Coal	1000
2	Chandrapur TPP Ext. U 8	s	Coal	500
3	Koradi TPP Ext U 8	s	Coal	660
4	Parli TPP U 3	S	Coal	250
5	India Bulls- Amravati TPP Ph-I,U1-5	Р	Coal	1350
6	India Bulls - Nasik TPP Ph-I,U1-5	Р	Coal	1350
7	Dhariwal Infrastructure (P) Ltd TPP U1,2	Р	Coal	600
8	EMCO Warora TPP U 1,2	Р	Coal	600
9	Butibori TPP Ph -II U 1	Р	Coal	300
10	Lanco Mahanadi, Vidarbha TPP U1,2	Р	Coal	1320
11	Tiroda TPP PH-I U 1,2	Р	Coal	1320
12	Tiroda TPP Ph-II U1	Р	Coal	660
13	GEPL TPP U-1,2	Р	Coal	120
14	Bela TPP U 1	Р	Coal	270
	MADHYA PRADESH			
1	Vindhyachal TPP St-IV U-11,12	С	Coal	1000
2	Satpura TPP EXT U-10,11	s	Coal	500
3	Shree Singhaji TPP U-1,2	S	Coal	1200
4	Annupur TPP Ph-I U1,2	Р	Coal	1200
5	Bina TPP U 1,2	Р	Coal	500
6	Sasan UMPP U 1,2	Р	Coal	1320
7	Maheshwar HEP U 1-10	Р	Hydro	400
8	D B Power TPP, Sidhi U-1	Р	Coal	660
9	Jhabua TPP U1	Р	Coal	600
	SOUTHERN REGION			
	ANDHRA PRADESH			
1	Lower Jurala HEP	S	Hydro	240
2	Pulichintala HEP	S	Hydro	120
3	Nagarjuna Sagar TR HEP	s	Hydro	50
4	Sri Damodaram Sanjeevaiah TPP	s	Coal	1600
	(Krishnapattnam TPP) U1,2			

			Ι	1
5	Rayal seema TPP U6	S	Coal	600
6	Thamminapatnam TPP U3,4	P P	Coal	700
7	Nagarjuna Construction Company Ltd Ph-I U-1,2	Р	Coal	1320
8	Painampuram TPP U 1,2	Р	Coal	1320
9	Bhavanapaddu TPP U-1,2	Р	Coal	1320
10	Thamminapatnam TPP U1,2	Р	Coal	300
11	Simhapuri TPP Ph-I, U 2	Р	Coal	150
12	Hinduja TPP,U1-2	Р	Coal	1050
	KERALA			
1	Thottiar HEP	S	Hydro	40
2	Pallivasal HEP	S	Hydro	60
	TAMIL NADU			
1	Kudankulam U 1,2	С	Nuclear	2000
2	PFBR(Kalpakkam)	С	Nuclear	500
3	Vallur (Ennore) TPP U 2,3	С	Coal	1000
4	Tuticorin TPP JV U1,2	С	Coal	1000
5	Neyveli II TPP U2	С	Lignite	250
6	Bhawani Barrage HEP II & III	S	Hydro	60
7	Mettur TPP EXT U1	S	Coal	600
8	North Chennai TPP Ext U1,2	S	Coal	1200
9	Ind Barath TPP U1	Р	Coal	660
	EASTERN REGION			
	BIHAR			
1	Muzaffarpur (Kanti) TPP U 3,4	С	Coal	390
2	Barh STPP-I U 1,2,3	С	Coal	1980
3	Barh STPP-II U 1,2	С	Coal	1320
4	Nabinagar TPP U1-4	С	Coal	1000
	JHARKHAND			
1	Bokaro TPP A Exp U1	С	Coal	500
2	Koderma TPP U2	С	Coal	500
3	Mata Shri Usha TPP Ph-I U 1,2	Р	Coal	540
4	Adhunik Power & Natural Resources Ltd TPP U1,2	P	Coal	540
	ORISSA			
1	Derang TPP U1	P	Coal	600
2	Ind Barath Energy Pvt. Ltd. TPP U1,2	<u>.</u> Р	Coal	700
3	Lanco Babandh Dhenkanal TPP U 1	<u>.</u> Р	Coal	660
4	K.V.K. Nilanchal TPP U 1	<u>.</u> Р	Coal	350
-	Kamalanga TPP U 1-3	<u>.</u> Р	Coal	1050
6	Sterlite TPP U 4	<u>.</u> Р	Coal	600
	SIKKIM	-	- Cou.	333
1	Bhasmey HEP	Р	Hydro	51
2	Jorethang Loop HEP	<u>.</u> Р	Hydro	96
3	Rangit-IV HEP	<u>.</u> Р	Hydro	120
4	Teesta-VI HEP	P	Hydro	500
-	Teesta-III HEP	P	Hydro	1200
6	Chujachen HEP	P	Hydro	99
	WEST BENGAL	•	,	77
1	Teesta Low Dam-III HEP	С	Hydro	132
2	Teesta Low Dam-IV HEP	С	Hydro	160
3	Raghunathpur TPP U1,2	C	Coal	1200
4	Haldia TPP U1-2	P	Coal	600
•	NORTH-EASTERN REGION	<u> </u>	1	1
	ARUNACHAL PRADESH			
1	ARUNACHAL PRADESH Pare HEP	С	Hvdro	110
1 2	Pare HEP Kameng HEP	C C	Hydro Hydro	110 600

	ASSAM								
1	Bongaigaon TPP U 1,2,3	С	Coal	750					
2	Namrup CCGT	S	Gas	100					
	MEGHALAYA								
1	New Umtru HEP	S	Hydro	40					
2	Myntdu St-I HEP ADDL UNIT	S	Hydro	42					
	MIZORAM								
1	Tuirial HEP	С	Hydro	60					
	TRIPURA								
1	Tripura CCGT	С	Gas	726.6					
2	Monarchak CCGT	С	Gas	101					
	TOTAL 8853								
	C: CENTRAL SECTOR; S: STATE SECTOR; P: PRIVATE SECTOR								
	TPP= Thermal Power Project.								
	HEP=Hydro Electric Project.								
	CCGT=Combined Cycle Gas Turbine								
	UMPP= Ultra Mega Power Project.								
	RAPP= Rajasthan Atomic Power Project.								
	KAPP= Kakrapar Atomic Power Project								
	GEPL= Gupta Energy Private Limited.								
	PFBR= Prototype Fast Breeder Reactor								

LOK SABHA UNSTARRED QUESTION NO.1083 TO BE ANSWERED ON 17.07.2014

ELECTRIFICATION OF VILLAGES UNDER RGGVY

1083. SHRI SATAV RAJEEV:

SHRI SUSHIL KUMAR SINGH:

SHRI ABHIJIT MUKHERJEE:

SHRI RAM MOHAN NAIDU KINJARAPU:

SHRI RAJESH RANJAN:

SHRI OM PRAKASH YADAV:

SHRI SHAILESH KUMAR:

SHRI BHARAT SINGH:

SHRI BADRUDDIN AJMAL:

SHRI YOGI ADITYANATH:

SHRIMATI RANJAN RANJEET:

SHRI OM BIRLA:

Will the Minister of POWER

be pleased to state:

- (a) the aims and objectives of the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY);
- (b) the funds allocated and released under the second phase of RGGVY in the country, State/UT-wise;
- (c) the number of villages electrified and those yet to be electrified under the said scheme in the country including the backward areas of various States, State/UTwise;
- (d) the number of families living below poverty line provided with electricity and the number of those to which such facility is yet to be provided along with the reasons therefor, State/UT-wise; and
- (e) whether the Government has evaluated the implementation of this scheme in various States of the country, if so, the details and the outcome thereof along with the steps taken/being taken by the Government to speed up the electrification of villages particularly in the naxal affected villages and other backward areas in the country, State/UT-wise?

ANSWER

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

(SHRI PIYUSH GOYAL)

- (a): The aims and objectives of Rajiv Gandhi Grameen Vidyutikaran Yojana at present are as under:-
- (i) To provide electricity connection to Below Poverty Line (BPL) families free of charge.
- (ii) Creation of Rural Electricity Distribution Backbone (REDB) with at least one 33/11KV (or 66/11KV) substation in each block of the district.

.....2.

- (iii) Creation of Village Electrification Infrastructure (VEI) with at least one distribution transformer in each village/habitation.
- (iv) Creation of Decentralised Distributed Generation (DDG) systems where grid supply is not feasible or cost effective.
- (v) To cover all the remaining census villages and habitations with population of above 100.
- (b): There is no upfront allocation of funds to States/UTs under RGGVY Scheme. Funds are released against sanctioned projects in installments based on the reported utilization of funds in the previous installment(s) and fulfillment of other conditionalities. However, as on 31.05.2014, a capital subsidy of Rs. 2472.15 crore has been released under RGGVY during Phase-II of XI Plan. The State-wise details are at **Annex-I**.
- (c) & (d): Under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), 648 projects were sanctioned in the country during X & XI Plan and Phase-II of RGGVY. Cumulatively as on 31.05.2014, electrification works in 1.08 lakh un-electrified villages have been completed and free electricity connections to 2.17 crore BPL households have been released in the country including backward areas of various States in the country. The State-wise details are presented at **Annex-II**.

Further, the Government of India has approved continuation of RGGVY for XII Five Year Plan in September 2013, under which 273 projects have been sanctioned in the financial year 2013-14, covering electrification of 12,468 un-electrified villages, intensive electrification of 2.32 lakh villages and release of free electricity connections to 1.33 crore BPL households in various States.

(e): Ministry of Power through Rural Electrification Corporation commissioned an independent third party evaluation of Rajiv Gandhi Grameen Vidyutikaran Yojana through four independent agencies.

The major findings of the study are:-

- (i) Every block has been provided with minimum one sub-station.
- (ii) 11 KV system established under the scheme is adequate to cater to the sanctioned domestic load.
- (iii) Distribution transformer capacity is adequate to cater to the envisaged load of BPL households with single point light connection of 40 Watt / 60 Watt, but it falls short of actual load as most BPL families use electricity for many other purposes like fan, heater, TV, refrigerator, etc.
- (iv) Some of the households are using electricity through unauthorized connections resulting into overloading and burning of transformers.
- (v) Access to electricity has been provided to almost all public places i.e. Schools, Panchayat, Health Centres etc.
- (vi) Improvement in Children education, ease in households chores, women empowerment, sense of security and comfort has also been reported.

(vii) All States except Bihar, Jharkhand and parts of UP, supply minimum 6-8 hours of power supply.

The steps taken by the Government to speed up the electrification of villages in the country including naxal affected villages and other backward areas in the country, are:

- (i) Government of India has set up an inter-Ministerial Monitoring Committee under chairmanship of Secretary (Power) which periodically meets to review the progress of implementation.
- (ii) States have been advised to set up district committees to monitor the progress of rural electrification works. District committees have been set up in all the states to monitor the progress of rural electrification works.
- (iii) States have also been advised to associate elected representatives including the Member of Parliament in the District Committee.
- (iv) The States have also been requested by MOP to hold monthly meeting under the Chairmanship of Chief Secretary to resolve the bottlenecks in implementation of RGGVY.
- (v) Ministry of Power as well as Rural Electrification Corporation (REC), the nodal agency for RGGVY, conduct frequent review meetings with all the stakeholders, the concerned State Governments, State Power Utilities and implementing agencies for expeditious implementation of the scheme as per the agreed schedules.
- (vi) As per notification of 12th Plan of RGGVY, State Governments have been asked to set up a State Level Standing Committee, headed by the Chief Secretary and consisting of Secretaries of Energy, Rural Development, Finance, Panchayat Raj, Forest, Revenue and a representative of REC etc. to vet the DPR before submitted to REC and also to monitor the progress, quality control & to resolve the issues relating to implementation of sanctioned projects Viz. allocation of land for substation, right of way, forest clearance, safety clearance etc.

ANNEX REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1083 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

State	State wise funds disbursed (subsidy only) under RGGVY against Phase-II of XI Plan.									
(Rs. in C										
SI. No.	State	No. of Projects	Project Cost	Cumulative Release (as on 31.05.2014)						
1	Bihar	11	2994.11	828.59						
2	Chhattisgarh	2	176.11	78.96						
3	Haryana	3	17.01	3.13						
4	Karnataka	2	119.38	50.30						
5	Kerala	7	89.83	23.14						
6	Madhya Pradesh	20	983.20	346.54						
7	Maharashtra	1	33.64	9.91						
8	Tamil Nadu	3	37.27	10.26						
9	Uttar Pradesh	22	4728.20	1071.31						
10	West Bengal	1	198.98	50.01						
	Grand Total	72	9377.73	2472.15						

ANNEX REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 1083 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

State-wise coverage & achievement of un-electrified villages and release of free electricity connections to BPL households under RGGVY.

	As on 31.05.							
SI. No.	State	Un-	n-electrified villages BPL households		BPL households			
		Coverage	Achievement	Balance	Coverage	Achievement	Balance	
1	Andhra Pradesh*	0	0	0	2750400	2750400	0	
2	Arunachal Pradesh	2096	1992	104	53312	47624	5688	
3	Assam	8353	8146	207	1270789	1136888	133901	
4	Bihar	24294	22937	1357	5448300	2462912	2985388	
5	Chhattisgarh	1731	1244	487	1268165	1056840	211325	
6	Gujarat*	0	0	0	841219	841219	0	
7	Haryana*	0	0	0	241220	199855	41365	
8	Himachal Pradesh	95	91	4	17333	16493	840	
9	Jammu & Kashmir	237	203	34	79991	67963	12028	
10	Jharkhand	18615	18135	480	1470260	1310497	159763	
11	Karnataka	58	58	0	918656	880466	38190	
12	Kerala*	0	0	0	125598	115476	10122	
13	Madhya Pradesh	879	736	143	1839046	1178118	660928	
14	Maharashtra*	0	0	0	1226185	1217410	8775	
15	Manipur	882	616	266	107369	29682	77687	
16	Meghalaya	1867	1805	62	109387	104026	5361	
17	Mizoram	144	109	35	30917	19363	11554	
18	Nagaland	105	92	13	74064	46207	27857	
19	Odisha	14525	14430	95	3085925	2867196	218729	
20	Punjab*	0	0	0	102176	100404	1772	
21	Rajasthan	4226	4164	62	1262612	1161414	101198	
22	Sikkim	25	25	0	12108	10129	1979	
23	Tamil Nadu*	0	0	0	525571	501202	24369	
24	Tripura	148	144	4	117163	116263	900	
25	Uttar Pradesh	28006	27750	256	2005867	1062226	943641	
26	Uttarakhand	1512	1511	1	263593	263593	0	
27	West Bengal	4202	4185	17	2307567	2212604	94963	
	Total	112000	108373	3627	27554793	21776470	5778323	

^{*}In the States of Andhra Pradesh, Gujarat, Haryana, Kerala, Maharashtra, Punjab and Tamil Nadu, no unelectrified village was proposed in the DPRs by these States. However, intensive electrification of already electrified villages are being undertaken in these States.

LOK SABHA UNSTARRED QUESTION NO.1107

TO BE ANSWERED ON 17.07.2014 SETTING UP OF POWER PLANTS

†1107. SHRIMATI KAMLA DEVI PAATLE:

Will the Minister of **POWER** be pleased to state:

- (a) the location-wise details of the power plants proposed to be set up or under construction by the National Thermal Power Corporation Limited in the country particularly in Chhattisgarh and their present status, State/UT-wise;
- (b) the estimated power generation capacity and the expenditure likely to be incurred thereon and the time schedule for completion of the construction thereof Power-Plantwise:
- (c) whether the land has been acquired for setting up of the said plants and if so, the details thereof; and
- (d) the rate at which compensation has been paid to the farmers and the steps taken by the Government to provide employment to the affected families, Power-Plant-wise?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) & (b): The details of the power projects of NTPC and its Joint Venture (JVs) where work has commenced, including their approved cost, schedule for project completion and present status, are placed at Annex-I.

Further, details of NTPC's renewable energy projects which are under construction and at various stages of tendering are placed at Annex-II.

(c) & (d) : The major portion of the land required for setting up of main plant of the proposed projects of NTPC and its JVs has been acquired.

Land for NTPC power projects has been acquired by the respective State Governments/State authorities on formal submission of request by NTPC under the provisions of Land Acquisition (LA) Act-1894/Special Acts of States.

Due compensation amount was deposited by NTPC with State Govt./State authorities as decided and demanded by them for further disbursement of compensation by the State Govt. to the eligible persons.

The concerned Public Sector Undertaking provides employment to the affected families as per the extant rules in consultation with the respective State Government.

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1107 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

Details of NTPC's and its JV's projects

A. Projects under Construction

SI. No.	Project / Capacity / Location	State	Approved Cost (Rs.Crore) / Time of approval	Schedule of Project Completion
NTPC	OWNED PROJECTS	'	1	
1	Bongaigaon 750 MW (3X250 MW) Distt:-Kokrajhar	Assam	6749.18 IV Qtr'13	2016-17
2	Barh-I 1980 MW (3x660 MW) Distt: Patna	Bihar	8692.97* IV Qtr'04	2017-18
3	Barh-II 1320 MW (2x660 MW) Distt: Patna	Bihar	7340.05* IV Qtr.′07	2014-15
4	Lara-I 1600 MW (2x800 MW) Distt:Raigarh	Chhattisgarh	11846.00 IIIQtr'12	2018-19
5	Kol Dam HEP 800 MW (4x200 MW) Distt: Bilaspur	Himachal Pradesh	7219.8 III Qtr'13	2015-16
6	North Karanpura (3x660) 1980 MW Dist.Chatra	Jharkhand	14366.58 (I Qtr.′14)	2019-20
7	Kudgi-I 2400 MW (3x800MW) Distt:Bijapur	Karnataka	15166.19 IV Qtr'11	2017-18
8	Gadarwara-I 1600 MW (2x800 MW) Distt:- Narsinghpur	Madhya Pradesh	11638.55 I Qtr'13	2017-18
9	Vindhyachal-V 500 MW (1x500 MW) Distt:Sidhi	Madhya Pradesh	3180.40 IV Qtr'11	2015-16
10	Mouda-II 1320 MW (2X660 MW) Distt: Nagpur	Maharashtra	7921.47 I Qtr'12	2017-18
11	Solapur 1320 MW (2X660 MW) Distt:Solapur	Maharashtra	9395.18 I Qtr′12	2017-18
12	Darlipalli (2x800)1600 MW Dist. Sundargarh	Odisha	12532.44 (IV Qtr./13)	2018-19
13	Unchahar -IV (1X500 MW) Distt: Raibareli	Uttar Pradesh	3363.12 III Qtr'13	2016-17
14	Lata-Tapovan HEP 171MW (3X57 MW) Distt:Chamoli	Uttarakhand	1527.08 I Qtr'12	2017-18
15	Tapovan Vishnugad HEP 520 MW (4x130 MW) Distt:Chamoli	Uttarakhand	3846.3 IV Qtr'12	2017-18

^{*} Revised Cost Estimate under approval

SI. No.	Project	State	Approved (FR) Cost (Rs.Crore) / Time of approval	Schedule of Project Completion
16	Muzaffarpur ExpJV with Bihar State Power Generating Co. Ltd. (BSPGCL) 390 MW (2x195 MW) Distt: Muzaffarpur	Bihar	3154.33 I Qtr.′10	2015-16
17	Nabinagar - JV with Railways 1000 MW (4x250 MW) Distt: Aurangabad	Bihar	5352.51 IV Qtr.′06	2016-17
18	Nabinagar - JV with BSPGCL 1980 MW (3X660 MW) Distt: Aurangabad	Bihar	13624.01 I Qtr'12	2018-19
19	Meja - JV with Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL) 1320 MW(2X660 MW) Distt: Allahabad	Uttar Pradesh	9750.89 IV Qtr.′10	2017-18

B. Projects where Notice Inviting Tender (NIT) has been issued

SI No.	Project	State	Approved (FR) Cost (Rs.Crore) / Time of approval	Schedule of Project Completion
1	Khargone (2x660) 1320 MW Distt. Khargone	Madhya Pradesh	9181.06 2 Qtr.′11	To be finalized after investment
2	Barethi (4x660) 2640 MW Distt. Chattarpur	Madhya Pradesh	17820.98 IV Qtr.′12	approval.
3	Tanda TPP-II 1320 MW (2x660MW) Distt: Ambedkar Nagar	Uttar Pradesh	7742.96 I Qtr.' 08	
4	Katwa (2x660) 1320 MW Distt. Bardhaman	West Bengal	8949.33 IV Qtr.′13	
5	Rammam-III 120 MW (Hydro) Distt: Darjeeling	West Bengal	633.92 1 Qtr.'06 (DPR Cost)- Excl Working Capital Margin (WCM)	

ANNEX-II

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1107 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

(As on 11th July, 2014)

NTPC's Renewable Energy Projects

SI. No.	Project	State	Approved Cost (Rs.Crore) / Time of approval	Schedule of Project Completion
1	Wind Energy Project (WEP) 40 MW	Karnataka	231.72 I Qtr'13	To be finalized after investment
2	Wind Energy Project (WEP) 40 MW	Maharastra	231.72 I Qtr'13	approval.
3	Singrauli Small Hydro Electric Project 8 MW	Uttar Pradesh	83.26 I Qtr'11	2014-15
4	Singrauli Solar PV 15 MW	Uttar Pradesh	101.43 III Qtr'13	2014-15

LOK SABHA UNSTARRED QUESTION NO.1113 TO BE ANSWERED ON 17.07.2014

HYDRO ELECTRIC POWER PROJECTS

1113. SHRI MULLAPPALLY RAMACHANDRAN:

Will the Minister of **POWER** be pleased to state:

- (a) the installed capacity of hydro electric power in the country and the production during each of the last three years and the current year, State-wise; and
- (b) the details of on-going hydro electric power projects in the country and the expected output of power generation on the completion, State-wise?

ANSWER

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

(SHRI PIYUSH GOYAL)

- (a): As on 30.06.2014, there are 188 hydro power projects (above 25 MW) with installed capacity of 40,730.08 MW under operation in the country. The details of generation of hydro power stations during each of the last three years and current year is enclosed at **Annex-I**.
- (b): Presently, 48 nos. hydro electric projects (above 25 MW) aggregating to 14,211.33 MW are under various stages of construction in the country. The Statewise list of such hydro projects is enclosed at **Annex-II**.

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1113 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

STATE-WISE INSTALLED CAPACITY, ACTUAL GENERATION VIS-À-VIS TARGET (ABOVE 25 MW) IN THE COUNTRY DURING THE YEAR 2011-12 TO 2014-15 (UPTO 30.06.2014)

	INSTALLED CAPACITY		2011-12			2012-13			2013-14		(u	2014-15 ipto 30.06.20	14)*
STATE	AS ON 30.06.2014 (MU)	Prog- ramme (MU)	Achieve- ment (MU)	% of achieve- ment over prog- ramme	Prog- ramme (MU)	Achieve- ment (MU)	% of achieve- ment over programme	Prog- ramme (MU)	Achieve- ment (MU)	% of achieve- ment over programme	Prog- ramme (MU)	Achieve- ment (MU)	% of achieve- ment over programme
	(11.0)	(IVIC)	(IVIO)	Tarrine	(IVIO)	(1410)		(IVIO)	(IVIO)		(1110)	(IIIO)	
Himachal Pradesh	8370.68	24733.00	30466.90	123.18	29680.00	30082.86	101.36	30135.00	32816.66	108.90	9386.04	10063.45	107.22
Jammu & Kashmir	2669.00	11649.00	12279.07	105.41	12436.00	12485.81	100.40	12927.00	12426.79	96.13	4247.00	5029.90	118.43
Rajasthan	411.00	307.00	821.57	267.61	545.00	845.34	155.11	562.00	1059.98	188.61	20.00	14.90	74.50
Punjab	1206.30	4745.00	5780.02	121.81	4852.00	5119.15	105.51	5062.00	4902.53	96.85	1117.00	1277.19	114.34
Uttar Pradesh	501.60	885.00	1403.67	158.61	885.00	1577.92	178.30	1006.00	1241.73	123.43	249.00	303.33	121.82
Uttarakhand	3426.35	11155.00	13542.54	121.40	11845.00	12438.79	105.01	11905.00	11025.01	92.61	3002.50	2830.25	94.26
Gujarat	1990.00	3644.00	4958.95	136.09	3757.00	4578.31	121.86	3831.00	7106.29	185.49	421.00	704.22	167.27
Madhya Pradesh	2395.00	5488.00	7736.09	140.96	5773.00	7227.71	125.20	6374.00	9215.93	144.59	773.00	1413.79	182.90
Chhattisgarh	120.00	175.00	314.11	179.49	250.00	301.51	120.60	250.00	251.51	100.60	30.00	25.14	83.80
Maharashtra	2887.00	5338.00	6238.44	116.87	5379.00	5557.47	103.32	5388.00	6255.03	116.09	1659.00	1606.06	96.81
Andhra Pradesh	3783.35	7968.00	6371.05	79.96	8187.00	3456.75	42.22	6603.00	7277.10	110.21	703.00	791.86	112.64
Karnataka	3585.40	11222.00	14257.68	127.05	12205.00	10169.78	83.32	11606.00	12851.04	110.73	3644.00	3340.73	91.68
Kerala	1881.50	6593.00	7807.98	118.43	6909.00	4650.08	67.30	6589.00	7708.18	116.99	1819.00	1756.06	96.54
Tamil Nadu	2182.20	4695.00	5201.22	110.78	5061.00	2868.00	56.67	4656.00	4994.74	107.28	890.00	819.62	92.09
Jharkhand	273.20	225.00	566.17	251.63	416.00	341.31	82.05	443.00	335.16	75.66	24.00	47.27	196.96
Odisha	2027.50	5183.00	4987.33	96.22	5497.00	4373.80	79.57	5650.00	6974.86	123.45	1375.00	1720.90	125.16
West Bengal	1109.00	1041.00	1077.89	103.54	1324.00	1138.12	85.96	1720.00	1395.56	81.14	377.00	572.08	151.75
Sikkim	669.00	2857.00	2920.60	102.23	2844.00	2596.50	91.30	3378.00	2945.38	87.19	950.00	955.58	100.59
Assam	375.00	1415.00	1631.79	115.32	1596.00	1267.50	79.42	1305.00	1395.36	106.92	261.00	85.41	32.72
Arunachal Pradesh	405.00	1400.00	978.40	69.89	1300.00	1239.94	95.38	1250.00	980.94	78.48	288.00	261.96	90.96
Meghalaya	282.00	642.00	415.71	64.75	629.00	609.89	96.96	896.00	802.20	89.53	187.00	175.00	93.58
Nagaland	75.00	227.00	228.84	100.81	227.00	213.34	93.98	227.00	245.71	108.24	29.00	7.89	27.21
Manipur	105.00	448.00	523.50	116.85	448.00	580.41	129.56	500.00	639.84	127.97	69.00	43.16	62.55
All India	40730.08	112035.00	130509.52	116.49	122045.00	113720.29	93.18	122263.00	134847.53	110.29	31520.54	33845.75	107.38
*Tentative													

ANNEX REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1113 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

State-wise list of under execution Hydro projects (above 25 MW)

SI.	Name of Project	Unit	Sector/	Capacity	Likely
No.		No.	Implem. Agency	(MW)	Commissioning
	Jammu & Kashmir				
1	Kishanganga	U-1 to	Central /	330	2016-17
	3x110= 330 MW	U-3	NHPC		
2	Baglihar-II	U-1 to	State /	450	2016-17
	3x150= 450 MW	U-3	JKPDC		
3	Ratle	U-1 to	Private /	850	2017-18
	4x205+1x30= 850 MW	U-5	Ratle Hydro Electric		
			Project Pvt. Ltd.		
			Sub-total	1630	
	Himachal Pradesh				
4	Parbati St. II	U-1 to	Central /	800	2016-17
	4x200= 800 MW	U-4	NHPC		(likely to slip)
5	Kol Dam	U-1 to	Central /	800	2015-16
	4x200= 800 MW	U-4	NTPC		
6	Rampur	U-3,	Central / SJVNL	137.33	2014-15
-	6x68.67= 412 MW	& U-6			
7	Uhl-III	U-1 to U-3	State /	100	2016-17
	3x33.33= 100 MW		Beas Valley Power Corp.		
			Ltd. (BVPC)		
8	Kashang-I	U-1	State / HPPCL	65	2016-17
	1x65 =65 MW				
9	Kashang-II & III	U- 1 &	State / HPPCL	130	2016-17
	1x65 + 1x65= 130 MW	U- 2			
10	Sainj	U- 1 &	State / HPPCL	100	2015-16
	2X50=100 MW	U- 2			
11	Swara Kuddu	U-1 to	State /	111	2016-17
	3x37= 111 MW	U-3	HPPCL		
12	Shongtong Karcham	U-1 to	State /	450	2017-18
	3x150= 450 MW	U-3	HPPCL		
13	Sorang	U-1 &	Private /	100	2015-16
	2x50= 100 MW	U-2	Himachal Sorang Power		
14	Tangnu Romai- I	U-1 to	Private /	44	2016-17
	2x22= 44 MW	U-2	Tangu Romai Power		
			Generation		
15	Bajoli Holi	U-1 to	Private /	180	2017-18
	3x60= 180 MW	U-3	GMR Bajoli Holi Hydro		
			Power Pvt. Ltd.		
16	Chanju-I	U-1 to	Private /	36	2017-18
	3x12= 36 MW	U-3	IA Energy		
17	Tidong-I	U-1 to	Private /	100	2016-17
	2x50= 100 MW	U-2	M/s Nuziveedu Seeds		
			Sub-total	3153.33	
	Uttarakhand				
18	Tapovan Vishnugad	U-1 to	Central /	520	2016-17
	4x130=520 MW	U-4			(likely to slip)
19	Tehri PSS	U-1 to	Central /	1000	2017-18
	4x250= 1000 MW	U-4	THDC		-
20	Lata Tapovan	U-1 to	Central /	171	2018-19
	3x57= 171 MW	U-4	NTPC		-

21	Vishnugad Pipalkoti	U-1 to	Central /	444	2018-19
	4x111= 444 MW	U-4	THDC		
22	Shrinagar	U-1 to	Private /	330	2015-16
	4x82.5= 330 MW	U- 4	M/s GVK Industries		
23	Phata Byung		Private /	76	2016-17
	76 MW		M/s Lanco		(likely to slip)
24	Singoli Bhatwari	U-1 to	Private /	99	2016-17
	3x33= 99 MW	U-3	L&T Uttaranchal Hydro		(likely to slip)
			power Limited		
			Sub-total	2640	
	Punjab				
25	Shahpurkandi	U-1 to	State /	206	2017-18
	3x33+3x33+1x8= 206 MW	U-7	Irr. Deptt. & PSPCL		
			Sub-total	206	
	Madhya Pradesh				
26	Maheshwar	U-1 to U-	Private /	400	2015-17
	10x40= 400 MW	10	SMHPCL		
			Sub-total	400	
	Maharashtra				
27	Koyna Left Bank PSS	U-1 to	State /	80	2017-18
	2x40= 80 MW	U-2	WRD, GO Mah.		
			Sub-total	80	
	Andhra Pradesh/Telengana				
28	Nagarujana Sagar TR	U-1 &	State /	50	2014-15
	2x25= 50 MW	U-2	APGENCO		
29	Lower Jurala	U-1 to	State /	240	2014-16
	6x40= 240 MW	U-6	APGENCO		
30	Pulichintala	U-1 to	State /	120	2015-17
	4x30= 120 MW	U-4	APGENCO		
			Sub-total	410	
	Kerala				
31	Pallivasal	U-1 to	State /	60	2016-17
	2x30= 60 MW	U-2	KSEB		
32	Thottiyar	U-1 to	State /	40	2016-17
	1x30 + 1x10= 40 MW	U-2	KSEB		
			Sub-total	100	
	West Bengal				
33	Teesta Low Dam-IV	U-1 to	Central /	160	2015-16
	4x40= 160 MW	U-4	NHPC		
	Cilcleine		Sub-total	160	
	Sikkim			40	004111
34	Teesta- III	U-1 to	Private /	1200	2014-16
25	6x200= 1200 MW	U-6	Teesta Urja Ltd.	F.0.0	2047.47
35	Teesta- VI	U-1 to	Private /	500	2016-17
27	4x125= 500 MW	U-4	LANCO	400	(likely to slip)
36	Rangit-IV	U-1 to	Private /	120	2016-17
27	3x40= 120 MW	U-3	Jal Power corp. Ltd.	0/	2044.45
37	Jorethang Loop		Private /	96	2014-15
20	2x48= 96 MW	1144-	M/s DANS Energy	E4	201/ 47
38	Bhasmey	U-1 to	Private /	51	2016-17
20				07	
39	_			97	2017-18
40				0/	2017.40
40	3x32= 96 MW	U-1 to U-3	Private / Sneha Kinetic Power	96	2017-18
39	3x17= 51 MW Tashiding 2x48.5= 97 MW Dikchu	U-3 U-1 to U-2 U-1 to	Gati Infrastructure Private / Shiga Energy Pvt. Ltd. Private /	97	(likely to slip 2017-18 2017-18

	•	Grand 1	otal	14211.33	
			Sub-total	40	
	2x20= 40 MW	U-2	MePGCL		
48	New Umtru	U-1&	State /	40	2015-16
	Meghalaya				
			Sub-total	60	
	2x30= 60 MW	U-2	NEEPCO		
47	Tuirial	U-1 to	Central /	60	2016-17
	Mizoram				
·			Sub-total	2710	
	2x55= 110 MW	U-2	NEEPCO		
46	Pare	U-1 to	Central /	110	2016-17
	4x150= 600 MW	U-4	NEEPCO		(likely to slip)
45	Kameng	U-1 to	Central /	600	2016-17
	8x250= 2000 MW	U-8	NHPC		(likely to slip)
44	Subansiri Lower	U-1 to	Central /	2000	2016-18
	Arunachal Pradesh				
			Sub-total	2022	
			Sub-total	2622	
	4X75= 300 WW	0-4	Pvt. Ltd.		
43	4x75= 300 MW	U-1 to	Himagiri Hydro Energy	300	2017-18
43	Panan	U-1 to	Corporation Ltd. Private /	300	2017-18
	2x48= 96 MW	U-2	Madhya Bharat Power		
42	Rongnichu	U-1 to	Private /	96	2017-18
	2x33= 66 MW	U-2	Sikkim Hydro Power Ltd.		
41	Rangit-II	U-1 to	Private /	66	2017-18

LOK SABHA UNSTARRED QUESTION NO.1120 TO BE ANSWERED ON 17.07.2014

HYDRO ENERGY

1120. SHRI SUSHIL KUMAR SINGH:

Will the Minister of **POWER** be pleased to state:

- (a) whether India has been endowed with abundant water as natural resource;
- (b) if so, details of the potential thereon, State-wise;
- (c) whether the abundant availability of water in our country can offset the energy deficit if hydro energy is developed properly and in a time-bound manner;
- (d) if so, whether Hydro power is a renewable, non-polluting and an environmental-friendly source of energy; and
- (e) if so, the steps taken by the Government for time bound development of hydro potential so as to ensure its optimum harnessing for the benefits of its people and progress of the country?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) to (c): As per the re-assessment studies of hydro-electric potential of the country, carried out by the Central Electricity Authority(CEA) during 1978-87, the hydro power potential in terms of Installed Capacity (IC) is estimated at 1,48,701 MW out of which 1,45,320 MW of the potential consists of hydro electric schemes having IC above 25 MW. Of the above identified capacity, 35,944.5 MW hydro capacity is under operation, 13,131.3 MW hydro capacity is under construction and 63,432 MW hydro capacity is under other various stages of development. The State-wise details of the hydro potential and its development is given at Annex.

It is expected that the total hydro potential of the country could be tapped by the end of 17th Plan, which would offset, to some extent, the energy deficit in the country.

(d) & (e): Hydro power is the renewable, Non-polluting and an environmental-friendly source of energy. Among the primary resources of energy, it is the only renewable source which has been recognized to be economical in the long run and

preferred source of energy due to its inherent benefits like peaking power, long life span, generate the employment for local people which leads to overall development of area and cost effective in long run because no fuel cost is involved during their operation.

The measures taken by the Government for time bound development of hydro potential so as to ensure its optimum harnessing for the benefits of its people and progress of the country are given below:

(i) National Electricity Policy:

The policy lays maximum emphasis on full development of the feasible hydro potential in the country which will facilitate economical development of States, particularly North Eastern States, Uttarakhand, Himachal Pradesh and Jammu & Kashmir. Since the hydel projects call for comparatively larger capital investment, debt financing of longer tenure has been recommended. The State Governments have been advised to review procedure for land acquisition and other approvals / clearances for speedy implementation of hydro projects. Full support of Central Government has been extended for hydel development by offering the services of CPSUs like NHPC, NEEPCO, SJVNL, THDC etc.

(ii) Hydro Power Policy- 2008: Salient Features (including subsequent changes):

Hydro Power Policy, 2008 has been notified by Govt. of India on 31.3.2008. The salient features of the policy are given below:

- The cost plus Tariff regime (in which tariff is to be determined by the regulator under section 62 of Electricity Act, 2003) has been extended for public as well as private sector hydro power projects up to December 2015.
- Transparent selection criteria for awarding sites to private developers.
- Enables developer to recover his additional costs through merchant sale of upto a maximum of 40% of the saleable energy. 5% reduction for a delay of every six months. - Balance long term PPAs.
- For 10 years from the COD, developer to provide 100 units of electricity per month to each PAF in cash or kind or a combination of both.
- Project developer assists in implementing rural electrification in the vicinity of the project area and contributes the 10% share of the State Govt. under the RGGVY scheme.
- Additional 1% free power from the project for a Local Area Development Fund,
 regular revenue stream for welfare schemes, creation of additional infrastructure and common facilities.
- The State Governments are also expected to contribute a matching 1% from their share of 12% free power.

(iii) Monitoring Mechanism / Other measures

- Central Electricity Authority (CEA) is monitoring the power projects in pursuance of Section 73 (f) of Electricity Act, 2003. The progress of each project is monitored continuously through frequent site visits, interaction with the developers and critical study of monthly progress reports. Chairperson, CEA holds regular review meetings with the developers and other stakeholders to sort out the critical issues.
- A Power Project Monitoring Panel (PPMP) has been set up by the Ministry of Power to independently follow up and monitor the progress of hydro projects.
- Review meetings are taken by Ministry of Power regularly with the concerned officers of CEA, equipment manufacturers, State Utilities/ CPSUs/ Project developers, etc. to sort out critical issues.
- Review meetings are held in the Ministry/CEA on regular basis.
- Inter-Ministerial consultations for expediting various issues relating to development of HEPs, especially with the MoEF, Border Roads Organisation, Ministry of Road Transport and Highways, Ministry of Defence and Ministry of Home Affairs etc.

(iv) National Rehabilitation & Resettlement Policies:

National Rehabilitation & Resettlement Policy 2007 addresses the need to provide succor to the asset less rural poor, support the rehabilitation efforts of the resource poor sections, namely small and marginal farmers, SCs/STs and women who have been displaced. Besides, it seeks to provide a broad canvas for an effective dialogue between the Project Affected Families and the Administration for Resettlement & Rehabilitation to enable timely completion of project with a sense of definiteness as regards costs and adequate attention to the needs of the displaced persons. The rehabilitation grants and other monetary benefits proposed in the Policy are minimum and applicable to all project affected families. States where R&R package are higher than proposed in the Policy are free to adopt their own package. The objectives of the Policy are to minimize displacement, to plan the R&R of PAFs including special needs of Tribals and vulnerable sections, to provide better standard of living to PAFs and to facilitate harmonious relationship between the Requiring Body and PAFs through mutual cooperation. A new Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 has been passed by Govt. which will have more participation of local people in terms of Land acquisition and Rehabilitation & Resettlement.

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 1120 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

STATUS OF HYDRO ELECTRIC POTENTIAL DEVELOPMENT (In terms of Installed capacity - Above 25 MW)

As on 30.06.2014

Region/ State	Identified Capacity as Capacity Under Capacity			- Colty	AS On 30.06.2014 Capacity Under Capacity yet to be					
Region State	per reassessment		Oper		_	nder	-	y Under 1 + Under	taken up under	
	•	study			construction		-	uction		ruction
	Total (MW)	Above 25 MW (MW)	(MW)	%	(MW)	(%)	(MW)	(%)	(MW)	%
NORTHERN	(11111)	(,	(11111)		()	(,,,,	(1111)	(,,,	(11111)	,,,
Jammu & Kashmir	14146	13543	2669.0	19.71	1630.0	12.04	4299.0	31.74	9244.0	68.26
Himachal Pradesh	18820	18540	8370.7	45.15	3153.3	17.01	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	64.0	100.00
Rajasthan	496	483	411.0	85.09	0.0	0.00	411.0	85.09	72.0	14.91
Uttarakhand	18175	17998	3426.4	19.04	1640.0	9.11	5066.4	28.15	12931.7	71.85
Uttar Pradesh	723	664	501.6	75.54	0.0	0.00	501.6	75.54	162.4	24.46
Sub Total (NR)	53395	52263	16584.9	31.73	6629.3	12.68	23214.3	44.42	29048.7	55.58
WESTERN						I.		ı		
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	1981	1956	1286.8	65.78	50.0	2.56	1336.8	68.34	619.3	31.66
Telangana	2443	2404	891.0	37.06	360.0	14.98	1251.0	52.04	1153.0	47.96
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	9426.9	59.33	510.0	3.21	9936.9	62.54	5953.2	37.46
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		0.0	0.00	0.0		40.0	100.00
Orissa	2999	2981	2027.5	68.01	0.0	0.00	2027.5	68.01	953.5	31.99
West Bengal	2841	2829	272.2	9.62	160.0	5.66	432.2	15.28	2396.8	84.72
Sikkim	4286	4248	669.0	15.75	2622.0	61.72	3291.0	77.47	957.0	22.53
Sub Total (ER)	10949	10680	3138.7	29.39	2782.0	26.05	5920.7	55.44	4759.3	44.56
NORTH EASTERN			1	1	1	ı		ı		
Meghalaya	2394	2298	282.0	12.27	40.0	1.74	322.0	14.01	1976.0	85.99
Tripura	15	0	0.0		0.0		0.0		0.0	
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 Pd	50328	50064	405.0	0.81	2710.0	5.41	3115.0	6.22	46949.0	93.78
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	2810.0	4.82	4052.0	6.94	54304.0	93.06
ALL INDIA	148701	145320	35944.5	24.73	13131.3	9.04	49075.8	33.77	96244.2	66.23

Note:-

- 1. Does not include pumped storage schemes
- 2. In some states the total of the capacity developed and balance capacity is different from the potential assessed. This is due to change in capacity of the schemes, addition/ deletion of the schemes and merger of two schemes into one etc.
- * Two schemes namely Ukai Dam and Sardar Sarovar were identified for an I.C. of 590 MW. However as per actual, the I.C. is 550 MW.
- 3. In addition to above 9 PSS (4785.6 MW) are under operation and 2 PSS (1080 MW) are under construction

LOK SABHA UNSTARRED QUESTION NO.1131 TO BE ANSWERED ON 17.07.2014

UNINTERRUPTED SUPPLY OF ELECTRICITY

†1131. DR. KIRIT P. SOLANKI:

Will the Minister of **POWER** be pleased to state:

- (a) whether the Government is aware that under Jyotigram Yojana, 24 hour electricity is supplied uninterruptedly in all the villages of Gujarat;
- (b) if so, the details thereof;
- (c) whether the Government proposes to implement the said Yojana in other parts of the country; and
- (d) if so, the details thereof and if not, the reasons therefor?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) & (b): The Jyoti Gram Yojana (JGY) is an initiative introduced by the Government of Gujarat in the year 2003 to make available three phase quality power supply for 24 hours to all the 18065 villages and also more than 16000 suburbs attached to the villages of Gujarat for non-agricultural activities.

The scheme involved laying of a parallel rural distribution network across the state to separate agricultural consumers to facilitate load management and regulation over agricultural consumption without affecting power supply to other consumers by laying 78,454 Kilometers of new lines and 18,724 new transformer centres.

At present there are 2495 Nos. of Jyotigram Feeders & 5767 Nos. of Agriculture feeders in the state as on March 2014.

(c) & (d): In the budget announcement 2014-15, a scheme namely 'Deendayal Upadhyaya Gram Jyoti Yojana' for feeder separation to augment power supply to the rural areas has been envisaged with an initial sum of Rs. 500 crores during the current year.

LOK SABHA UNSTARRED QUESTION NO.1148 TO BE ANSWERED ON 17.07.2014

RATIONALISATION OF COST OF ELECTRICITY

1148. SHRI N.K. PREMACHANDRAN: SHRI ANTO ANTONY:

Will the Minister of **POWER** be pleased to state:

- (a) whether the Union Government has received proposals from Kerala to rationalise the cost of electricity produced by National Thermal Power Corporation Limited (NTPC) and if so, the details thereof and the action taken by the Government on the proposals and the present status thereof;
- (b) whether the Union Government proposes to ensure uniformity in the cost of electricity produced through coal, gas and naphtha by NTPC Ltd. and if so, the details thereof;
- (c) whether considering the precarious power position in Kerala, the Union Government proposes to take steps to apply the rates of coal-based power to the power generated by the NTPC units in Kerala and if so, the details thereof; and
- (d) whether the Government has taken note of the fact that higher cost of production is a major hurdle for naphtha based projects in maximizing their full potential in power generation and if so, the details thereof and the steps taken by the Government in this regard?

ANSWER

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

(SHRI PIYUSH GOYAL)

- (a) & (b): Proposal from Kerala was received by the Ministry recently to introduce pooled tariff for power generated from NTPC plants. However, the same had already been examined and it was found that the proposal was not feasible as the states which are getting power at a price lower than the pooled price will not be agreeable to the proposal.
- (c): No, Madam.
- (d): Yes, Madam. The Ministry of Power has already allocated 180 MW of cheaper coal based power from Talcher Kaniha-II (Odisha) to the State of Kerala for pooling with Kayamkulam (NTPC State in Kerala) power.

LOK SABHA UNSTARRED QUESTION NO.1166 TO BE ANSWERED ON 17.07.2014

INCREASE IN POWER GENERATION

1166. SHRI B.V. NAIK:

Will the Minister of **POWER** be pleased to state:

- (a) the break-up of the quantum of increase in power generation in Rajasthan during the last three years;
- (b) the quantum of funds provided by the Union Government during the last financial year 2013-14 and the current financial year for making the State self-sufficient in power production, head-wise;
- (c) whether the Government of Rajasthan has demanded more funds for this purpose;
- (d) if so, whether the Union Government has considered the request of the State Government; and
- (e) if so, the time by which a final decision is likely to be taken in this regard?

ANSWER

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

(SHRI PIYUSH GOYAL)

- (a): The generation in Rajasthan has increased from 35.25 Billion Unit (BU) in 2010-11 to 45.85 BU in 2013-14. The details of sector-wise, category-wise and station-wise breakup of the quantum of increase in power generation by power plants in Rajasthan from 2010 to 2014 is given at **Annex**.
- (b) to (e): Funds have not been provided by Central Government during 2013-14 and the current financial year for power production. The power production cost is recovered through tariff by the generating companies.

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1166 TO BE ANSWERED IN THE LOK SABHA ON 17.07.2014.

Category wise, sector wise and station wise Power generation in Rajasthan from 2010 to 2014

			Monitored		Actual Gen	eration in MU			%
CATEGORY	SECTOR	NAME OF THE	Capacity	2014-15	2013-14	2012-13	2011-12	2010-11	Increase
		STATION	as on	(Apr-					of 2013-
			30.06.201	June)*					14 wrt
			4 (MW)						2010-11
		JAWAHAR SAGAR							
HYDRO	STATE	HPS	99	2.92	322.43	275.12	277.53	146.48	120.12
		MAHI BAJAJ HPS	140	9.29	227.1	204.19	180.49	69.26	227.89
		R P SAGAR HPS	172	2.69	510.45	366.03	363.55	174.4	192.69
	STATE Total		411	14.9	1059.98	845.34	821.57	390.14	171.69
HYDRO Total			411	14.9	1059.98	845.34	821.57	390.14	171.69
NUCLEAR	CENTRAL	DAE (RAJASTHAN)	100						
		RAJASTHAN							
		A.P.S.	1080	2117.01	9233.13	8846.88	8974.12	7704.54	19.84
	CENTRAL To	tal	1180	2117.01	9233.13	8846.88	8974.12	7704.54	19.84
NUCLEAR Total			1180	2117.01	9233.13	8846.88	8974.12	7704.54	19.84
THERMAL	CENTRAL	ANTA CCPP	419.33	387.08	1965.34	2176.45	2694.6	2487.9	-21.00
		BARSINGSAR							
		LIGNITE	250	287.51	1437.96	1280.5	617.08	265.23	442.16
	CENTRAL To	tal	669.33	674.59	3403.3	3456.95	3311.68	2753.13	23.62
		JALIPA KAPURDI							
	PVT	TPP	1080	1902.87	4194.32	3849.76	1684.41	961.15	336.39
		KAWAI TPS	1320	1890.24	3713.53				
	PVT Total		2400	3793.11	7907.85	3849.76	1684.41	961.15	722.75
	STATE	CHHABRA TPP	1000	1068.12	3204.15	2924.49	2497.18	1247.7	156.80
		DHOLPUR CCPP	330	265.83	975.79	1162.69	2253.77	1994.87	-51.09
		GIRAL TPS	250	119.24	378.2	471.87	488.47	596.86	-36.64
		KALISINDH TPS	600	80.92	0	0			
		KOTA TPS	1240	2311.44	9451.15	9739.64	10084.78	9891.55	-4.45
		RAMGARH CCPP	273.8	192.26	828.72	497.89	536.79	301.13	175.20
		SURATGARH TPS	1500	2583.34	9409.09	10570.32	10674.37	9409.81	-0.01
	STATE Total		5193.8	6621.15	24247.1	25366.9	26535.36	23441.92	3.43
THERMAL Total			8263.13	11088.85	35558.25	32673.61	31531.45	27156.2	30.94
RAJASTHAN To	tal		9854.13	13220.76	45851.36	42365.83	41327.14	35250.88	30.07

* Tentative

NOTE :-

- 1. CEA monitors generation from conventional sources (Thermal, Hydro and Nuclear) only.
- 2. Generation from stations up to 25 MW are not being monitored since 01.04.10

LOK SABHA UNSTARRED QUESTION NO.1173 TO BE ANSWERED ON 17.07.2014

SHARING OF ELECTRICITY

1173. SHRI M. RAJA MOHAN REDDY:

Will the Minister of **POWER** be pleased to state:

- (a) whether the Governments of Andhra Pradesh and Telangana have approached the Union Government to play the role of mediator for sharing of electricity between the two States; and
- (b) if so, the details thereof and the reaction of the Union Government thereto?

ANSWER

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

(SHRI PIYUSH GOYAL)

(a) & (b): Governments of Andhra Pradesh Telangana have approached the Union Government to resolve the issues relating to the sharing of electricity between the two States. A Committee has been constituted under the Chairperson, Central Electricity Authority to resolve the issues raised by the residual State of Andhra Pradesh and Telangana with reference to the Power Sector. The representative of both the States are Members of the Committee.

LOK SABHA UNSTARRED QUESTION NO.1180 TO BE ANSWERED ON 17.07.2014

ALLOCATION OF COAL MINES

†1180. SHRI HANSRAJ GANGAR	AΜ	AHIR:
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Will the Minister of **POWER** be pleased to state:

- (a) whether the Power Ministry has made any recommendation to the Ministry of Coal for allocation of coal mines for midterm power purchase agreement;
- (b) if so, the details thereof;
- (c) whether any action is being taken by the Ministry of Coal on the recommendations; and
- (d) if so, the details thereof and further action proposed to be taken by the Ministry in this regard?

ANSWER

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

(SHRI PIYUSH GOYAL)

- (a): No, Madam.
- (b) to (d): Do not arise.

LOK SABHA UNSTARRED QUESTION NO.1183 TO BE ANSWERED ON 17.07.2014

GENERATION OF POWER BY POWER PROJECTS

1183. SHRIMATI KOTHAPALLI GEETHA:

Will the Minister of **POWER** be pleased to state:

- (a) whether the power projects in the country have failed to generate power as per their installed capacity including the Hydro Power Projects;
- (b) if so, the details thereof during the last three years and the current year and the reasons therefor; and
- (c) the corrective steps being taken by the Government in this regard?

ANSWER

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

(SHRI PIYUSH GOYAL)

- (a): The Plant Load Factor (PLF) is an index of Utilization of the installed capacity of coal / Lignite / gas based power generating stations. There has been a decline in the PLF for coal / lignite based thermal generating stations during last three years. However, during current year, it has shown improvement. There has been substantial decline in the PLF of gas based generating stations due to non-availability of adequate gas. Hydro power generation depends on the availability of water inflows and was not affected in the year 2013-14 due to good monsoon.
- **(b):** Details of PLF for coal / lignite based and Gas based stations for last three years and the current year (upto June, 2014) are as under:

YEAR	% PLF (Coal/Lignite based Stations)	% PLF (Gas based Stations)
2011-12	73.32	59.94
2012-13	69.93	40.33
2013-14	65.55	24.85
2014-15 (up to June 14)	68.52	23.75

Generation of hydro based stations for last three years and the current year (upto June, 2014) are as under:

Generation in MU

YEAR	Hydro
2011-12	135794.03
2012-13	118514.79
2013-14	140445.44
2013-14 (up to June 14)	32865
2014-15 (up to June 14)	34726.91

Some of the major reasons for less generation, inter-alia, are:

- (i) Shortage of fuel.
- (ii) Reserve shut down/low schedule due to high cost and low demand.
- (iii) Vintage Units leading to un-economical operation.
- (iv) Forced outages of the generation units.
- (v) Transmission and distribution constraints.
- (vi) Commercial issues faced by utilities.

(c): Following corrective steps are being taken by the Government in this regard:

- (i) Coordinated operation and maintenance of hydro, thermal, nuclear and gas based power stations to optimally utilize the existing generation capacity.
- (ii) Power utilities have been advised to use imported coal wherever necessary.
- (iii) Multi-dimensional efforts are underway by Coal India Ltd. to enhance production of domestic coal even beyond current year's targets.
- (iv) Ministry of Petroleum has been impressed upon to increase allocation of gas to gas based power stations.
- (v) Renovation modernization and life extension of old and inefficient generation units.
- (vi) Undertaking a massive programme for strengthening of inter-state and inter-regional transmission capacity for evacuation of power.
- (vii) A new scheme has been announced in this year's Budget for strengthening of sub-transmission and distribution networks and for segregation of agricultural feeders.
- (viii) Regular reviews are held at various levels to identify the constraint areas and facilitate faster resolution of inter-ministerial and other outstanding issues.