

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.465
ANSWERED ON 06.04.2017

USE OF TRANSFERRED COAL

†*465. SHRI DHARMENDRA YADAV:
SHRI SHRIRANG APPA BARNE:

Will the Minister of POWER
be pleased to state:

- (a) whether the methodology for use of transferred coal in independent power producer (IPP) generating stations has been finalized so as to bring in further efficiency in utilization of domestic coal and if so, the details thereof;
- (b) whether his Ministry has framed new rules for electricity supply from independent power producers in lieu of dry fuel and if so, the details thereof; and
- (c) whether as per the new rules any restriction imposed by the Regional Load Despatch Centre/State Load Despatch Centre on scheduling of power due to breakdown of transmission and grid constraints shall be treated as force majeure without any liability on either side and if so, the facts thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO.465 ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING USE OF TRANSFERRED COAL.

(a) & (b) : The proposal of the Ministry of Power was approved by the Cabinet on 4th May, 2016 for "Flexibility in utilization of domestic coal for reducing the cost of power generation".

Following Five cases have been envisaged for allowing flexibility in utilization of coal under this arrangement:-

- Case-1: Use of coal aggregated with the states in its own State Generating Stations.
- Case-2: Use of coal aggregated with the one state in generating stations of other state's utilities.
- Case-3: Use of coal aggregated with State in Central Generating Stations and vice versa.
- Case-4: Use of coal by any State/Central Generating Company in Private Generating Stations (IPPs).
- Case-5: Use of coal assigned to Central Generating Company in their own plants or any other more efficient plants.

Central Electricity Authority in consultation with the stakeholders issued the methodology on 8.6.2016 for transfer of coal amongst Generating Stations of State/Central Gencos.

Under case 4 of "Flexibility in utilization of domestic coal for reducing the cost of power generation", the methodology for use of coal transferred by a State to Independent Power Producer (IPP) generating stations has been issued by Ministry of Power, Govt. of India on 20.02.2017.

As per the methodology, the State can divert their coal and take equivalent power from IPP generating stations selected from the competing IPPs through an e-bidding process. The guiding principle of the methodology is that the landed cost of power from IPP generating station at the State's periphery should be lower than the variable cost of generation of the State generating station whose power is to be replaced by generation from IPP. The landed cost of power is inclusive of the transmission charges and transmission losses. The source of coal, quantity of coal, quality of coal, quantum of power, period for which power is required, delivery point for the receipt of power, has to be indicated upfront by the State.

(c) : As per the methodology, any restriction imposed by Regional Load Despatch Centre (RLDC) /State Load Despatch Centre (SLDC) in scheduling of power due to breakdown of transmission/grid constraint is to be treated as force majeure without any liability on either side and the contracted power is to be treated as deemed reduced for the period of transmission constraint.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.466
ANSWERED ON 06.04.2017

HYDRO ELECTRIC PROJECTS

*466. DR. SATYAPAL SINGH:
SHRI SANJAY DHOTRE:

Will the Minister of POWER
be pleased to state:

- (a) the details of Hydro Electric Projects which are under construction across the country as on date, State-wise;
- (b) whether a large number of such projects are held up due to financial constraints and other reasons and if so, the details thereof along with the time by which such projects are likely to be completed, State-wise and Project-wise;
- (c) the details of the cost escalation of such projects due to delay in construction along with the manner in which such escalated cost is likely to be arranged, Project-wise;
- (d) the extent to which the loss of generation of power occurred across the country due to delay in construction of the said projects; and
- (e) the steps taken/being taken by the Government for timely completion of Hydro Electric Projects across the country along with achievements thereof ?

A N S W E R

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

(SHRI PIYUSH GOYAL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.466 ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING HYDRO ELECTRIC PROJECTS.

(a) : As on 30th March, 2017, there are 43 under construction Hydro Electric Projects (above 25 MW) in the country, totalling to 11928.5 MW. The details of these projects, State-wise, is given at Annex-I.

(b) : Out of these 43 under construction Hydro Electric Projects, 16 projects, totalling to 5163 MW, are stalled/held up due to financial constraints and other reasons. The details of these projects alongwith the anticipated date of completion of these projects is given at Annex-II.

(c) : The project-wise details of cost overrun of the stalled under construction Hydro Electric projects is given at Annex-III. For financing the cost overrun, equity is being arranged by the developers and debt is raised by developers through loan / commercial borrowings.

(d) : As per calculation made by CEA, the annual loss of energy generation from these stalled projects is about 15564 MU.

(e) : The action taken by the Government for early completion of these projects are:

- Central Electricity Authority (CEA) monitors the progress of under construction power projects through frequent site visits and interaction with the developers and equipment suppliers. CEA holds review meetings periodically with the developers and other stakeholders to identify and resolve issues critical for commissioning of Projects.
- Regular reviews are also undertaken in Ministry of Power to identify the constraints areas and facilitate faster resolution of inter-ministerial and other outstanding issues.
- A Power Project Monitoring Panel (PPMP), set up by the Ministry of Power, independently follows up and monitors the progress of the hydro projects.
- Issues are also raised in PRAGATI, for proactive governance and timely implementation, as and when required.
- In case of CPSU's, the project implementation parameters / milestones are incorporated in the annual MoU signed between respective CPSU's and MoP and the same are monitored during the Quarterly Performance Review (QPR) meetings of CPSU's and other meetings held in MoP/ CEA.

- The issues related to erection and supply of Electro-Mechanical equipment is expedited in various meetings held in CEA / MoP and other local issues affecting the progress of works are taken up with respective State Governments by the Concerned CPSU / MoP.

The Government of India is pursuing proactively for early resolution of issues with stakeholders. With the intervention of Government of India, the works of Teesta-III HEP (1200 MW) in Sikkim which was held up, re-started in October, 2015 and the project has been commissioned in February / March, 2017.

ANNEX REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 466 ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING HYDRO ELECTRIC PROJECTS.

LIST OF UNDER CONSTRUCTION HYDRO ELECTRIC PROJECTS (ABOVE 25 MW) IN THE COUNTRY - STATE-WISE

(As on 30.03.2017)

Sl. No.	Name of Scheme (Executing Agency)	Sector	Installed Capacity (No. x MW)	Capacity Under Execution (MW)	Latest Commissioning
Andhra Pradesh					
1	Polavaram (PPA)	State	12x80	960.00	2021-22 ##
Sub-total: Andhra Pradesh				960.00	
Arunachal Pradesh					
2	Kameng (NEEPCO)	Central	4x150	600.00	2017-18
3	Pare (NEEPCO)	Central	2x55	110.00	2017-18
4	Subansiri Lower (NHPC)	Central	8x250	2000.00	2020-21 *
5	Gongri(Dirang Energy)	Private	2x72	144.00	2020-21 *
Sub-total: Arunachal Pradesh				2854.00	
Himachal Pradesh					
6	Parbati St. II (NHPC)	Central	4x200	800.00	2018-19
7	Uhl-III (BVPCL)	State	3x33.33	100.00	2017-18
8	Sawra Kuddu (HPPCL)	State	3x37	111.00	2018-19
9	Sainj (HPPCL)	State	2x50	100.00	2017-18
10	Shongtong Karcham (HPPCL)	State	3x150	450.00	2019-20
11	Bajoli Holi (GMR)	Private	3x60	180.00	2019-20
12	Sorang (HSPCL)	Private	2x50	100.00	2017-18 *
13	Tangnu Romai (TRPG)	Private	2x22	44.00	2018-19 *
14	Tidong-I (NSL Tidong)	Private	100.00	100.00	2018-19 *
15	Chanju-I (IA Energy)	Private	3x12	12.00	2017-18
Sub-total: Himachal Pradesh				1997.00	
Jammu & Kashmir					
16	Kishanganga (NHPC)	Central	3x110	330.00	2017-18
17	Parnai (JKSPDC)	State	3x12.5	37.50	2020-21
18	Lower Kalnai (JKSPDC)	State	2x24	48.00	2020-21 *
19	Ratle (RHEPPL)	Private	4x205 + 1x30	850.00	2021-22 *
Sub-total: Jammu & Kashmir				1265.50	
Kerala					
20	Pallivasal (KSEB)	State	2x30	60.00	2019-20 *
21	Thottiyar (KSEB)	State	1x30+1x10	40.00	2019-20 *
Sub-total: Kerala				100.00	
Madhya Pradesh					
22	Maheshwar (SMHPCL)	Private	10x40	400.00	2017-19 *
Sub-total: Madhya Pradesh				400.00	
Maharashtra					
23	Koyna Left Bank (WRD,MAH)	State	2x40	80.00	2019-20 *
Sub-total: Maharashtra				80.00	
Meghalaya					
24	New Umtru (MePGCL)	State	2x20	40.00	2017-18
Sub-total: Meghalaya				40.00	
Mizoram					
25	Tuirial (NEEPCO)	Central	2x30	60.00	2017-18
Sub-total: Mizoram				60.00	
Punjab					
26	Shahpurkandi (PSPCL)	State	3x33+3x33+1x8	206.00	2019-20 *
Sub-total: Punjab				206.00	

	Sikkim				
27	Bhasmey (Gati Infrastructure)	Private	3x17	51.00	2019-20
28	Dikchu (Sneha Knietic)	Private	2x48	96.00	2017-18
29	Rangit-IV (JAL Power)	Private	3x40	120.00	2019-20 *
30	Rangit-II (Sikkim Hydro)	Private	2x33	66.00	2019-20 #
31	Rongnichu (Madhya Bharat)	Private	2x48	96.00	2019-20
32	Tashiding (Shiga Energy)	Private	2x48.5	97.00	2017-18
33	Teesta St. VI (LANCO)	Private	4x125	500.00	2021-22 *
34	Panan (Himagiri)	Private	4x75	300.00	2020-21 *
	Sub-total: Sikkim			1326.00	
	Telangana				
35	Pulichintala (TSGENCO)	State	4x30	90.00	2017-18
	Sub-total: Telangana			90.00	
	Uttarakhand				
36	Lata Tapovan (NTPC)	Central	3x57	171.00	2021-22 *
37	Tapovan Vishnugad (NTPC)	Central	4x130	520.00	2019-20
38	Tehri PSS (THDC)	Central	4x250	1000.00	2019-20
39	Vishnugad Pipalkoti (THDC)	Central	4x111	444.00	2019-20
40	Vyasi (UJVNL)	State	2x60	120.00	2018-19
41	Phata Byung (LANCO)	Private	2x38	76.00	2019-20 #
42	Singoli Bhatwari (L&T)	Private	3x33	99.00	2019-20 #
	Sub-total: Uttarakhand			2430.00	
	West Bengal				
43	Rammam-III (NTPC)	Central	3x40	120.00	2020-21
	Sub-total: West Bengal			120.00	
	Total:			11928.50	

* Subject to restart of works

Subject to active start of works

Subject to award of E&M works

ANNEX REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 466 ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING HYDRO ELECTRIC PROJECTS.

Stalled Under Construction Hydro Electric Projects

(As on 30.03.2017)

Sl. No.	Name of Project/ Executing Agency / Capacity (MW)	Sector	Reasons for Stalling	Likely Commissioning
	Arunachal Pradesh / Assam			
1	Subansiri Lower NHPC Limited 8x250=2000 MW	Central	-Since 16.12.2011 work stopped due to agitation by various activists, fearing dam safety and downstream impact of dam. -Case in Hon'ble NGT, Kolkata Bench.	4 years after resumption of work.
	Arunachal Pradesh			
2	Gongri Dirang Energy Pvt. Ltd. 2x72=144 MW	Private	Work stopped since 2 nd week of April, 2016 due to fund flow problem with promoter / lenders. Work restarted in July-2016 but again stalled since October, 2016 due to fund constraints with developer.	3½ years after active start of work.
	Himachal Pradesh			
3	Tangnu Romai Tangnu Romai Power Generation 2x22=44 MW	Private	The developer informed that the project suffered due to very poor geology in HRT, due to which project got delayed and cost had increased. Further Works stalled since January, 2015 due to fund constraints.	4 years after the start of work.
4	Tidong-I NSL Tidong Power Generation Ltd. 2x50=100 MW	Private	Works are stalled since July, 2016 due to funds constraints with developer	1½ years after the start of work.
5	Sorang Himachal Sorang Power Ltd. 2x50=100 MW	Private	Work is stalled since 18.11.2015 due to rupture in the surface penstock pipe when unit#2 was under trial run.	1 year after the start of work.
	Jammu & Kashmir			
6	Lower Kalnai JKSPDC 2x24=48 MW	State	The work has been stalled due to financial issues with contractor. The contractor, M/s. Coastal Projects Ltd. has gone under CDR.	About 4 years after the re-start of work.
7	Ratle GVK Ratle Hydro Electric Project Pvt. Ltd. 4x205+1x30=850 MW	Private	There is no progress since 11 th July, 2014. (R&R issues, Local issues, Law & order problem, Indus Water Treaty etc.)	5 years after resumption of work.
	Kerala			
8	Thottiyar KSEB 1x30+1x10=40 MW	State	- Work is almost standstill since Nov, 2015. The contractor has put forward a proposal for foreclosure of the Project due to their financial stringency and a detailed note regarding the same was submitted to the Board for approval. It is decided to foreclose the work and the balance work may be re-arranged through open tender or through Govt. approved executing agencies like Uralungal Labour Contract Co-operative Society.	4 years after resumption of work.

9	Pallivasal KSEB 2x30=60 MW	State	- Work is almost standstill since Jan, 2015. The contractor has put forward a proposal for foreclosure of the Project due to their financial stringency and a detailed note regarding the same was submitted to the Board for approval. It is decided to foreclose the work and the balance work may be re-arranged through open tender or through Govt. approved executing agencies like Uralungal Labour Contract Co-operative Society.	4 years after resumption of work.
	Maharashtra			
10	Koyna Left Bank PSS WRD, Govt. of Maharashtra 2x40=80 MW	State	- Project stalled since July, 2015. The current expenditure on the project has already reached to original administrative approved cost level hence expenditure on the project is stopped and project work is stalled.	4 years after resumption of work.
	Madhya Pradesh			
11	Maheshwar Shree Maheshwar Hydrel Power Corporation Limited 10x40= 400 MW	Private	Work suspended since Nov-11 due to cash flow problem with developer.	1-½ year after resumption of work.
	Punjab			
12	Shahpurkandi Irr. Deptt., Pb. & PSPCL 3x33+3x33+1x8 =206 MW	State	- Work of Dam (J&K side) stopped since 30.08.2014 due to inter-state disputes between Punjab and J&K Government.	4 years after resumption of work.
	Sikkim			
13	Teesta VI Lanco Teesta Hydro Power Ltd. 4x125=500 MW	Private	There is almost no progress since April, 2014. (Funds Constraints)	3 years after resumption of work.
14	Rangit-IV Jal Power Corp. Ltd. (JPCL) 3x40= 120 MW	Private	Work stopped since Oct-13 due to funds constraints with developer.	2½ years after the start of work.
15	Panan Himagiri Hydro Energy Pvt Ltd. 4x75 = 300 MW	Private	Major Civil Work could not start since April, 2014 for want of NGT Clearance	4½ years after the start of work.
	Uttarakhand			
16	Lata Tapovan, NTPC Limited 3x57=171 MW	Central	Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14.	4 years after resumption of work.

Total = 16 Projects (5163 MW)

ANNEX REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 466 ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING HYDRO ELECTRIC PROJECTS.

DETAILS OF UNDER CONSTRUCTION HYDRO ELECTRIC PROJECTS (ABOVE 25 MW)
HAVING TIME/COST OVERRUN

(As on 30.03.2017)

Sl. No	Project Name / Installed Capacity / Executing Agency	Sector	Unit No.	Capacity (MW)	Original Commissioning Schedule	Anticipated Commissioning Schedule	Original Cost (Rs. in Crores)	Anticipated Completion Cost (Rs. in Crores)
1	2	3	4	5	6	7	9	10
Arunachal Pradesh / Assam								
1	Subansiri Lower (8x250 = 2000 MW) NHPC	Central	1 2 3 4 5 6 7 8	250 250 250 250 250 250 250 250	2009-11 2009-11 2009-11 2009-11 2009-11 2009-11 2009-11 2009-11	2020-21 2020-21 2020-21 2020-21 2020-21 2020-21 2020-21 2020-21 (subject to re-start of works)	6285.33 (12/02)	17435.15 (02/16)
Arunachal Pradesh								
2	Gongri 2x72= 144 MW Dirang Energy (P)Ltd	Private	1 2	72 72	2017-18 2017-18	2020-21 2020-21 (subject to re-start of works)	1436.27	1535.91 (10/16)
Himachal Pradesh								
3	Tangnu Romai-I (2x22 = 44 MW) TRPGPL	Private	1 2	22 22	2014-15 2014-15	2018-19 2018-19 (subject to re-start of works)	255.00 (2006)	562.97
4	Tidong-I 2x50 =100 MW NSL Tidong	Private	1 2	50 50	2013-14 2013-14	2018-19 2018-19 (subject to re-start of works)	543.15 (08/05)	1286.27
5	Sorang (2x50 = 100 MW), HSPPL	Private	1 2	50 50	2012-13 2012-13	2017-18 2017-18	586.00 (2006)	586.00 (Under revision)
Jammu & Kashmir								
6	Lower Kalnai 2x24= 48 MW JKSPDC	State	1 2	24 24	2017-18 2017-18	2020-21 2020-21	576.87	576.87
7	Ratle (4x205+1x30) = 850 MW Ratle HEP Pvt .Ltd.	Private	1 2 3 4 5	205 205 205 205 30	2017-18 2017-18 2017-18 2017-18 2017-18	2021-22 2021-22 2021-22 2021-22 2021-22 (subject to re-start of works)	5517.02	6257.00 (09/2013)
Kerala								
8	Thottiyar (1x30+1x10)= 40MW KSEB	State	1 2	30 10	2012-13 2012-13	2019-20 2019-20 (subject to re-start of works)	136.79 (2007)	150.02

9	Pallivasal 2x30 = 60 MW KSEB	State	1 2	30 30	2010-11 2010-11	2019-20 2019-20 (subject to re-start of works)	222.00 (1999)	284.69 (2007)	
	Maharashtra								
10	Koyna Left Bank PSS 2x40 = 80 MW WRD, Maha	State	1 2	40	2017-18	2019-20 (subject to active start of works)	245.02	1494.94	
	Madhya Pradesh								
11	Maheshwar (10x40 = 400 MW) SMHPCL	Private	1 2 3 4 5 6 7 8 9 10	40 40 40 40 40 40 40 40 40 40	2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02 2001-02	2017-19 (subject to re-start of works)	1569.27 (96-97)	6793.00	
	Punjab								
12	Shahpurkandi 3x33+3x33+1x8 =206 MW, Irrigation Deptt. &PSPCL	State	1 2 3 4 5 6 7	33 33 33 33 33 33 8	2017-18 2017-18 2017-18 2017-18 2017-18 2017-18 2017-18	2019-20 2019-20 2019-20 2019-20 2019-20 2019-20 2019-20 (subject to re-start of works)	2285.81	2285.81	
	Sikkim								
13	Teesta Stage VI (4x125 = 500 MW) Lanco Energy Pvt. Ltd.	Private	1 2 3 4	125 125 125 125	2012-13 2012-13 2012-13 2012-13	2021-22 2021-22 2021-22 2021-22 (subject to re-start of works)	3283.08	7542.00	
14	Rangit-IV HE Project (3X40 = 120 MW) JPCL	Private	1 2 3	40 40 40	2011-12 2011-12 2011-12	2019-20 2019-20 2019-20 (subject to re-start of works)	726.17	1692.60	
15	Panan 4x75= 300 MW Himagiri Hydro Energy Pvt. Ltd.	Private	1 2 3 4	75 75 75 75	2018-19 2018-19 2018-19 2018-19	2020-21 2020-21 2020-21 2020-21 (subject to active start of works)	1833.05	2021.90	
	Uttarakhand								
16	Lata Tapovan (3x57 = 171 MW) NTPC	Central	1 2 3	57 57 57	2017-18 2017-18 2017-18 (Aug'17)	2021-22 2021-22 2021-22 (subject to re-start of works)	1527.00	1801.07	
	Total							27027.83	52306.20

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.476
ANSWERED ON 06.04.2017

BIDS FOR POWER TRANSMISSION SECTOR

*476. SHRI JYOTIRADITYA M. SCINDIA:
KUMARI SUSHMITA DEV:

Will the Minister of POWER
be pleased to state:

- (a) whether several Chinese companies are gearing up to participate in the bids invited by Union Government and State sector utilities for power transmission sector across the country;
- (b) if so, the details of the bids invited by the Union Government and State sector power utilities during the last three years and the current year, year-wise;
- (c) the grounds on which the Government and State sector power utilities have invited bids from foreign companies for power transmission sector;
- (d) whether indigenous trade bodies/ manufacturers associations have raised concern over the entry of foreign companies in country's power transmission sector, particularly companies from China; and
- (e) if so, the facts and details thereof and the reaction of the Government in this regard?

A N S W E R

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

(SHRI PIYUSH GOYAL)

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

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.476 ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING BIDS FOR POWER TRANSMISSION SECTOR.

(a) : Yes, Madam. Chinese companies or its subsidiaries are participating in the bids invited by Bid Process Coordinators (BPCs) [RECTPCL and PFCCL] for development of various Inter State Transmission Schemes in the country.

(b) : The details of bids invited for Inter State Transmission Schemes during the last three financial years and the current financial year, along with details of Chinese participation in the bids, are furnished at Annexure.

(c) : The bidding conducted by BPCs are based on the "Tariff Based Competitive Bidding Guidelines for Transmission Service", "Guidelines for Encouraging Competition in Development of Transmission Projects" ("the Guidelines") and the Standard Bidding Documents notified by Ministry of Power, Government of India (GoI) for procurement of transmission services through tariff based competitive bidding process. REC Transmission Projects Ltd. (RECTPCL) and PFC Consulting Limited (PFCCL) have been appointed as the BPCs by the Government.

As per provision 9.2 of Tariff Based Competitive Bidding Guidelines for Transmission Service, the bidding shall necessarily be by way of International Competitive Bidding (ICB). Further, as per extant policy, Foreign Direct Investment (FDI) up to 100% is permitted in the power sector. Accordingly, any foreign power company can participate in the international competitive bids and enter power sector through FDI route.

In view of the above provisions, bids are invited by BPCs through ICB route.

(d) & (e) : Yes, Madam, indigenous trade bodies/manufacturers associations have raised concern over the entry of foreign companies in country's power transmission sector, particularly companies from China.

A Committee has been constituted by Ministry of Power, Government of India to look at the issues raised.

ANNEXURE REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 476 ANSWERED IN THE LOK SABHA ON 06.04.2017 REGARDING BIDS FOR POWER TRANSMISSION SECTOR.

Financial Year	BPC	Name of the Transmission Project	Name of the participating Chinese company or its subsidiaries	Project awarded to Chinese Company?
2013-14	RECTPCL	Northern Region System Strengthening Scheme, NRSS-XXIX	Nil	NA
		Transmission System for Northern Region System Strengthening Scheme, NRSS- XXXI (Part-A)	Nil	NA
		Transmission System for Northern Region System Strengthening Scheme, NRSS- XXXI (Part-B)	Nil	NA
2014-15	PFCCCL	ATS for Tanda Expansion TPS (2x660 MW)	Nil	NA
		System Strengthening for IPPs in Chhattisgarh and other generation projects in Western Region	Nil	NA
		Additional System Strengthening for Sipat STPS	Nil	NA
		Additional System Strengthening Scheme for Chhattisgarh IPPs - Part B	Nil	NA
	RECTPCL	Transmission System Strengthening associated with Vindhyachal-V	CLP India Pvt. Limited	NO
		Transmission System Associated with Gadarwara STPS (2 x 800 MW) of NTPC (Part-A)	CLP India Pvt. Limited	NO
		Transmission System Associated with Gadarwara STPS (2 x 800 MW) of NTPC (Part-B)	CLP India Pvt. Limited	NO
Transmission System for Connectivity Lines for Maheshwaram (Hyderabad) 765/400 kV Pooling S/s		CLP India Pvt. Limited	NO	
2015-16	PFCCCL	Common Transmission system for Phase - II Generation Projects in Odisha and Immediate Evacuation System for OPGC (1320 MW) Project in Odisha	Nil	NA
		Additional inter- Regional AC link for import into Southern Region i.e Warora - Warangal and Chilakaluripeta Hyderabad- Kurnool 765 kV link	Nil	NA
		Creation of new 400kV GIS Substations in Gurugram and Palwal areas as a part of ISTS	Nil	NA
		North Eastern Region Strengthening Scheme (NERSS)-VI	Nil	NA
	RECTPCL	Transmission System for Strengthening of transmission system beyond Vemagiri	Nil	NA
		Transmission System Strengthening in Indian System for Transfer of Power from New HEPs in Bhutan	Nil	NA
		Transmission System for Immediate evacuation for North Karanpura (3x660MW) generation project of NTPC alongwith creation of 400/220 kV sub-station at Dhanbad - Proposal of JUSNL (ERSS-XIX)	Nil	NA
		Transmission System for "System Strengthening Scheme in Northern Region (NRSS-XXXVI) along with LILO of Sikar-Neemrana 400kV D/C line at Babai (RRVPNL)	Nil	NA
		Transmission System for NER System Strengthening Scheme-II (Part-B) and V	Nil	NA
		Transmission System Strengthening in WR associated with Khargone TPP (1320 MW)	Nil	NA
		Transmission system for Phase-I generation projects in Arunachal Pradesh	Nil	NA

2016-17	PFCCCL	765 kV System Strengthening Scheme in Eastern Region (ERSS-XVIII)	Nil	NA
		Additional 400kV feed to Goa and Additional System for Power Evacuation from Generation Projects pooled at Raigarh (Tamnar) Pool	Nil	NA
		Connectivity and Long Term Access (LTA) to HPPCL 450 MW from Shongtong Karcham HEP	Nil	NA
		Transmission system for Ultra Mega Solar Park in Fatehgarh, distt. Jaisalmer Rajasthan.	CSGI (China Southern Power Grid International) in consortium with CLP India Pvt. Ltd.	Under Bidding
2016-17	RECTPCL	New WR-NR Inter regional Corridor	Consortium of CLP India Pvt. Ltd. and China Southern Power Grid International (HK) Co., Ltd	Under Bidding
		Eastern Region Strengthening Scheme - XXI (ERSS-XXI)	Consortium of CLP India Pvt. Ltd. and China Southern Power Grid International (HK) Co. Ltd	Under Bidding

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5291
ANSWERED ON 06.04.2017

ONLINE PURCHASE OF TURBINES

5291. ADV. JOICE GEORGE:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government proposes to allow purchase of power plant turbines from any online market place;
- (b) if so, the details thereof;
- (c) whether this is likely to save at least 10% on every transaction; and
- (d) if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (d) : As per Section 7 of the Electricity Act 2003, any generating company may establish, operate and maintain a generating station without obtaining a license/permission under this Act, if it complies with the technical standards relating to connectivity with the grid. Accordingly, sanction of the Government is not required for setting up of thermal power projects (TPP). However, for setting up of Hydroelectric Power Projects, the Detailed Project Reports (DPRs) are required to be submitted for concurrence of the Central Electricity Authority (CEA). Therefore, there is no restriction/stipulation from the Government regarding the process to be followed by the developer of power plants for procurement of power plant turbines. However, the process needs to be transparent and competitive.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5305
ANSWERED ON 06.04.2017

LIQUIDITY FOR FUTURE PROJECTS

5305. SHRI C. MAHENDRAN:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government has recently announced schemes to raise liquidity and enable swapping of coal in the country;
- (b) if so, the details thereof;
- (c) whether the Government was looking at making regulatory changes to enable public sector entity Power Grid to divert some of its operational assets and use the liquidity for future projects; and
- (d) if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : No scheme to raise liquidity has been announced by Ministry of Power. However, the Cabinet on 4th May, 2016 approved the proposal for "flexibility in utilization of domestic coal for reducing the cost of power generation". Central Electricity Authority (CEA), in consultation with all the stakeholders, issued the methodology on 08.06.2016 for transfer of coal amongst generating stations of State/Central Gencos. The State/Central Gencos can utilize their aggregated coal after adding individual Annual Contracted Quantity (ACQ) of their Thermal Power Plants, in a flexible manner amongst their efficient power plant as well as in other State/Central Gencos power plants to generate cheaper power.

Further, Ministry of Power issued the methodology on 20.02.2017 for use of transferred coal by any state in Independent Power Producers (IPPs) generating stations. As per the methodology, the State can divert their coal and take equivalent power from IPP generating stations selected from the competing IPPs through an e-bidding process. The guiding principle of the methodology is that the landed cost of power from IPP generating station at the State's periphery should be lower than the variable cost of generation of the State generating station whose power is to be replaced by generation from IPP. The landed cost of power is inclusive of the transmission charges and transmission losses.

(c) : No, Madam.

(d) : In view of (c) above does not arise.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5313
ANSWERED ON 06.04.2017

ELECTRIFICATION OF VILLAGES

†5313. SHRI JANAK RAM:

Will the Minister of POWER
be pleased to state:

- (a) the definition of electrification of a village;
- (b) whether nearly eighteen thousand villages have been electrified in the country as per assessment by the Government, if so, the details thereof;
- (c) the percentage of households in a village where electricity connection is required and minimum hours of power supply and power utilisation etc. of an electrified village as defined by the Government; and
- (d) whether Government proposes to include certain norms which are not specified under the definition of an electrified village and if so, the details hereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

- (a) : According to Rural Electrification Policy 2006, a village is reported as electrified, if
- i) basic infrastructure such as Distribution Transformer and Distribution Lines are provided in the inhabited locality as well as the locality inhabited by weaker sections of the society/hamlet where it exists,
 - ii) electricity is provided to public places like Schools, Panchayat Office, Health Centres, Dispensaries, Community Centres etc., and
 - iii) the number of households electrified should be at least 10% of the total number of households in the village.

.....2.

(b) : As per information furnished by the States, there were 18,452 un-electrified census villages in the country as on 01.04.2015; of these, 13,123 villages have been electrified up to 31.03.2017. Electrification of all the remaining un-electrified villages is being taken up on a mission mode and targeted to be completed by 1st May, 2018.

(c) : As per the definition of village electrification, at least 10% of the total number of households in the village should be electrified to declare the village as an electrified village. The criteria of minimum power supply is not specified in the definition of village electrification. However, Government of India has taken a joint initiative with the State Governments for 24x7 Power for All, which intends to supply electricity round the clock to urban as well as rural consumers in phases and adequate hours of supply to agricultural consumers.

(d) : A village is reported to be electrified by the States, if it fulfills the criteria mentioned in reply to part (c) above. However, the level of infrastructure may vary in different habitations of the same village. As of now, there is no proposal to change this norm.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5327
ANSWERED ON 06.04.2017

COAL SUPPLY TO DISCOM BY NTPC

5327. SHRI A. ARUNMOZHITHEVAN:

Will the Minister of POWER
be pleased to state:

- (a) whether National Thermal Power Corporation has decided to cut supply to DISCOMs for the reasons of unpaid bills;
- (b) if so, the details thereof;
- (c) the DISCOMs which currently receive power supply from NTPC;
- (d) whether NTPC was able to recover the dues from DISCOMs immediately after the power supply cut to them; and
- (e) if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : NTPC has regulated Power Supply to Meghalaya Energy Corporation Limited (MeECL) due to an outstanding amount of Rs. 74.72 Cr and regulation is effective from 03.03.2017.

(c) : The list of DISCOMS receiving power from NTPC is given at Annexure.

(d) : No, Madam.

(e) : Question doesn't arise.

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 5327 ANSWERED IN THE LOK SABHA ON 06.04.2017.

LIST OF DISCOMS RECEIVING POWER SUPPLY FROM NTPC

- 1) AP Eastern Power Distribution Company Ltd.
- 2) AP Southern Power Distribution Company Ltd.
- 3) Telangana Northern Power Distribution Company Ltd.
- 4) Telangana Southern Power Distribution Company Ltd.
- 5) Bangalore Electricity Supply Company Ltd.
- 6) Mangalore Electricity Supply Company Ltd.
- 7) Chamundeshwari Electricity Supply Corp. Ltd., Mysore
- 8) Gulbarga Electricity Supply Company Ltd.
- 9) Hubli Electricity Supply Company Ltd.
- 10) Kerala State Electricity Board Ltd.
- 11) Tamil Nadu Generation & Distribution Corporation Ltd.
- 12) Electricity Department , Govt. of Puducherry
- 13) Grid Corporation of Orissa Limited
- 14) Electricity Department ,Government of Goa
- 15) Madhya Pradesh Power Management Co. Ltd.
- 16) Chhattisgarh State Power Distribution Co. Ltd.
- 17) Maharashtra State Energy Distribution Co. Ltd.
- 18) Gujarat Urja Vikas Nigam Ltd.
- 19) Goa Electricity Department
- 20) Daman and Diu Electricity Department
- 21) Dadra & Nagar Haveli Power Distribution Corporation Ltd.
- 22) BSES Rajdhani Power Ltd.
- 23) BSES Yamuna Power Ltd.
- 24) New Delhi Municipal Council

- 25) Military Engineer Services
- 26) Tata Power Delhi Distribution Ltd.
- 27) Electricity Department, Chandigarh
- 28) Uttar Haryana Bijli Vitran Nigam Ltd.
- 29) Dakshin Haryana Bijli Vitran Nigam Ltd.
- 30) Himachal Pradesh State Electricity Board
- 31) Ajmer Vidyut Vitran Nigam Ltd.
- 32) Jaipur Vidyut Vitran Nigam Ltd.
- 34) Jodhpur Vidyut Vitran Nigam Ltd.
- 35) North Central Railways
- 36) Power Development Department, J&K
- 37) Punjab State Power Corporation Ltd.
- 38) Uttar Pradesh Power Corporation Ltd.
- 39) Uttarakhand Power Corporation Ltd.
- 40) South Bihar Power Distribution Co. Ltd.
- 41) North Bihar Power Distribution Company Limited
- 42) West Bengal State Electricity Distribution Company Limited
- 43) Jharkhand Bijli Vitran Nigam Limited
- 44) Deptt. of Power, Sikkim
- 45) Assam Power Distribution Co. Ltd.
- 46) Deptt. of Power, Arunachal Pradesh
- 47) Meghalaya Energy Corporation Limited
- 48) Deptt. of Power, Nagaland
- 49) Tripura State Electricity Corporation Limited
- 50) Deptt. of Power & Electricity, Mizoram
- 51) Manipur State Power Distribution Co. Ltd.
- 52) Damodar Valley Corporation

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5340
ANSWERED ON 06.04.2017

ELECTRIFICATION OF VILLAGES IN JHARKHAND

5340. SHRI PRALHAD JOSHI:
SHRI RAVINDRA KUMAR PANDEY:

Will the Minister of POWER
be pleased to state:

- (a) the details of villages which have been electrified during the last three years, State-wise, including Jharkhand;
- (b) the details of funds sanctioned and utilized for rural electrification during the above period, State-wise;
- (c) whether the Government has established any mechanism to monitor the progress of implementation of rural electrification; and
- (d) if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : As reported by States, 14,528 villages have been electrified during the last three years i.e. from 2014-15 to 2016-17. The State wise number of villages electrified including Jharkhand, during the last three years are given at Annexure-I.

(b) : The State-wise sanctioned project cost and funds disbursed under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) during the last three years, are given at Annexure-II.

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

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 5340
ANSWERED IN THE LOK SABHA ON 06.04.2017.

Number of villages electrified during the last three years

As on 31.03.2017

Sr. No.	State	Villages electrified during the financial years 2014-15 to 2016-17
1	Andhra Pradesh	-
2	Arunachal Pradesh	456
3	Assam	2,350
4	Bihar	2,651
5	Chhattisgarh	766
6	Gujarat	-
7	Haryana	-
8	Himachal Pradesh	36
9	J & K	41
10	Jharkhand	2,015
11	Karnataka	14
12	Kerala	-
13	Madhya Pradesh	459
14	Maharashtra	-
15	Manipur	388
16	Meghalaya	725
17	Mizoram	85
18	Nagaland	86
19	Odisha	2,369
20	Punjab	-
21	Rajasthan	496
22	Sikkim	-
23	Tamil Nadu	-
24	Telangana	-
25	Tripura	26
26	Uttar Pradesh	1,526
27	Uttarakhand	22
28	West Bengal	17
	Grand Total	14,528

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 5340 ANSWERED IN THE LOK SABHA ON 06.04.2017.

Details of Sanctioned Project Cost and funds disbursed under DDUGJY during the last three years (FY 2014-15 to 2016-17)			
As on 28.02.2017			
Sl. No.	Name of the State	Sanctioned Project Cost (Rs. in crore)	Funds disbursed (Rs. in crore)
1	Andhra Pradesh	944.17	126.52
2	Andaman & Nicobar Islands	20.96	-
3	Arunachal Pradesh	426.52	144.67
4	Assam	1,568.91	759.78
5	Bihar	5,856.36	3,448.64
6	Chhattisgarh	1,532.68	467.29
7	Dadra & Nagar Haveli	5.00	-
8	Goa	20.00	-
9	Gujarat	924.72	101.16
10	Haryana	316.38	-
11	Himachal Pradesh	159.12	28.35
12	Jammu & Kashmir	619.67	-
13	Jharkhand	3,918.29	322.38
14	Karnataka	1,754.92	98.55
15	Kerala	485.37	91.73
16	Madhya Pradesh	2,946.22	1,019.80
17	Maharashtra	2,174.97	112.91
18	Manipur	54.96	94.70
19	Meghalaya	302.24	8.50
20	Mizoram	30.43	19.57
21	Nagaland	84.56	55.48
22	Odisha	1,751.53	1,223.44
23	Puducherry	20.15	-
24	Punjab	252.06	-
25	Rajasthan	2,819.41	476.42
26	Sikkim	49.70	-
27	Telangana	462.30	82.62
28	Tamil Nadu	924.12	32.10
29	Tripura	74.12	134.14
30	Uttar Pradesh	6,946.40	3,007.49
31	Uttarakhand	845.30	72.70
32	West Bengal	4,262.10	511.94

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5345
ANSWERED ON 06.04.2017

UMPPs

†5345. SHRI NANA PATOLE:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government proposes to set up 12 Ultra Mega Power Plants (UMPPs) to improve power supply in the country;
- (b) if so, the details thereof;
- (c) the details of timeframe and production capacity of these power plants;
- (d) whether India lags far behind America and European countries in greenhouse gas emissions;
- (e) if so, the details thereof;
- (f) whether the Government implements/proposes to implement National LED programme - Unnat Jyoti by Affordable LEDs for All (UJALA) across the country by the year 2019; and
- (g) if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (c) : Four UMPPs namely Sasan in Madhya Pradesh, Mundra in Gujarat, Krishnapattnam in Andhra Pradesh and Tilaiya in Jharkhand have already been awarded and transferred to the developers. Out of the four awarded UMPPs, two UMPPs namely Mundra UMPP and Sasan UMPP are in operation. The status of the awarded UMPPs is at Annexure-I.

The power generation capacity of each of the existing and proposed UMPP is 4000 MW approximately. The fund for UMPP is arranged by the developer of the project which is selected through International Competitive Bidding Route as per the Standard Bidding Document issued by Ministry of Power.

Status of other UMPPs are under different stages of development which is given at Annexure-II.

The UMPPs would be commissioned within 4-5 years of award of the project to the successful bidder.

(d) & (e): The CO₂ emissions during the year 2015 as per information given by CEA are as under:

Sl. No.	Country	Year : 2015
		Million Tons CO ₂
1	United States of America	5414
2	European Countries (France, Germany, UK, Poland, Italy, Spain and Turkey)	2891
3	India	2274

(f) & (g): Yes, Madam. Hon'ble Prime Minister, on 5th January, 2015 launched National LED Programme, Unnat Jyoti by Affordable LED for All (UJALA) to provide LED bulbs to domestic consumers with a target to replace 77 crore incandescent bulbs with LED bulbs by March, 2019. As on date, over 22.44 crore LED bulbs have been distributed in 33 State/UTs.

ANNEXURE-I

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 5345 ANSWERED IN THE LOK SABHA ON 06.04.2017.

STATUS OF AWARDED ULTRA MEGA POWER PROJECTS

Sl. No	Name of UMPP	Location	Status
1	Sasan UMPP (6x660 MW)	Sasan in District Singrauli. Madhya Pradesh	Project awarded and transferred to M/s. Reliance Power Ltd. on 07.08.2007. Project is fully commissioned.
2	Mundra UMPP (5x800 MW)	Mundra in village Tundawand in District Kutch, Gujarat	Project awarded and transferred to M/s. Tata Power Ltd. on 24.04.2007. Project is fully commissioned.
3	Krishnapatnam UMPP (6x660 MW)	Krishnapatnam in District Nellore, Andhra Pradesh	The Project awarded and transferred to M/s. Reliance Power Ltd. on 29.01.2008. The developer has stopped work at site, citing new regulation of coal pricing in Indonesia. The procurers have issued termination notice. The matter is subjudice.
4	Tilaiya UMPP (6x660 MW)	Near Tilaiya village in Hazaribagh and Koderma Districts, Jharkhand	Project awarded and transferred to M/s Reliance Power Ltd on 07.08.2009. The developer (Jharkhand Integrated Power Ltd) has issued notice of termination of Power Purchase Agreement on 28.4.2015.

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 5345 ANSWERED IN THE LOK SABHA ON 06.04.2017.

STATUS OF OTHER IDENTIFIED ULTRA MEGA POWER PROJECTS

Sl. No.	Name of UMPP	Location	Status
Odisha			
1	Bedabahal Odisha	Bedabahal in Sundergarh District.	Fresh bid would be issued after finalization of Standard Bidding Documents and allocation of coal blocks to Infra SPV.
2	1st additional UMPP in Orissa	Bijoypatna in Chandbali Tehsil of Bhadrak district for coastal location	Site identified.
3	2 nd additional UMPP in Odisha	Narla & Kasinga sub division of kalahandi District for inland location	Site identified. However, MoP vide letter dated 22.09.2016 sought decision of Govt. of Odisha whether they are willing to set up UMPP or not. Response is awaited.
Tamil Nadu			
4	Cheyyur UMPP	Village Cheyyur, District Kancheepuram.	Fresh bid would be issued after finalization of Standard Bidding Documents
5	2nd Tamil Nadu UMPP	Site Not finalized	CEA vide letter dated 22.01.2015 requested TANGENDCO to identify an alternative site for setting up 2nd UMPP in Tamil Nadu.
Jharkhand			
6	Deoghar (2nd Jharkhand) UMPP	Husainabad, Deoghar Distt	Operating Special Purpose Vehicle (SPV) namely Deoghar Mega Power Ltd and Infrastructure SPV namely Deoghar Infra Limited were incorporated on 26.4.2012 and 30.06.2015 respectively. Ministry of Power has requested Ministry of Coal on 24.02.2016 to identify an alternative suitable coal block, having Geological Report (GR) available.

Gujarat			
7	2nd UMPP in Gujarat	---	<p>On 12.01.2016 a team of CEA & PFCCL officials visited site in Gir Somnath District identified by Govt of Gujarat to explore the possibilities for setting up of UMPP. A meeting was also held on 03.11.2016 for finalization of sie.</p> <p>However, MoP vide letter dated 06.10.2016 requested Govt. of Gujarat to comment upon whether Govt. of Gujarat is interested in pursuing the UMPP further.</p>
Karnataka			
8	Karnataka	State Govt. has identified a suitable site in Niddodi village of Mangalore taluka Dakshina Kannada District.	<p>Site visit report sent by CEA to Govt. of Karnataka for Niddodi village of Mangalore taluka Dakshina Kannada District highlighting issues with respect to the site and requested for quick resolution of the issues.</p> <p>However, MoP vide letter dated 22.09.2016 sought decision of Govt. of Karnataka whether they are willing to set up UMPP or not. Response is awaited.</p>
Maharashtra			
9	Maharashtra	----	<p>Project has been closed as of now due to resistance by local people. Formal confirmation has been sought from Govt. of Maharashtra vide this Ministry's communication dated 22.09.2016, 15.11.2016 and 04.01.2017. Response is awaited.</p>
Bihar			
10	Bihar	Kakwara in Banka Distt.	<p>Infrastructure Special Purpose Vehicle (SPV) namely Bihar Infrapower Limited and Operating SPV namely Bihar Mega Power Limited were incorporated on 30.06.2015 and 09.07.2015 respectively. Ministry of Coal has tentatively recommended Pirpainti/ Barahat coal blocks.</p>
Uttar Pradesh			
11	UMPP in Uttar Pradesh	Etah	<p>In the meeting held on 21.7.2015 under the Chairmanship of Secretary (Power), Govt. of India, Principal Secretary (Energy), Govt. of U.P informed that site at Etah has been identified for UMPP at Uttar Pradesh.</p>

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5347
ANSWERED ON 06.04.2017

SECOND PHASE OF RURAL ELECTRIFICATION PROGRAMME

5347. SHRI ANURAG SINGH THAKUR:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government has designed a power supply monitoring system called Grameen Vidyutikaran-II (GARV-II) and if so, the details thereof;
- (b) whether the Government has launched the second phase of its rural electrification scheme for energisation of households and if so, the details thereof;
- (c) the manner in which GARV-II monitoring system is likely to help the Government to achieve its objective of energisation of households; and
- (d) the steps proposed to be taken by the Government under the second phase of the rural electrification scheme for intensive electrification, complete household electrification, metering and energizing?

A N S W E R

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

(SHRI PIYUSH GOYAL)

- (a) : GARV App has been upgraded for monitoring the villages and households electrification in the country.
- (b) : Government of India launched Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) with total investment of Rs.43,033 crore in the country in December, 2014 with the objectives of, inter-alia, (i) Village Electrification; (ii) Providing access to households; (iii) Feeder Separation; (iv) Strengthening of sub-transmission and distribution network and (v) Metering.
- (c) : GARV includes monitoring of electrification of habitations as well as households. It also provides an interactive platform for feedback and would help in expediting electrification works.
- (d) : Under DDUGJY, projects of an amount of Rs.42553.17 crore have been sanctioned for rural electrification works which include village electrification, access to households, feeder separation, metering and system strengthening.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5348
ANSWERED ON 06.04.2017

SC/ST EMPLOYEES IN THDC

5348. DR. UDIT RAJ:

Will the Minister of POWER
be pleased to state:

- (a) whether any relaxation has been given to SC/ST candidates appearing in departmental written exam as per career growth scheme in THDC India Limited;
- (b) if so, the details of relaxation provided and if not, the reasons therefor;
- (c) the total number of workmen promoted to supervisory cadre through departmental exam;
- (d) the total number of SC/ST/OBC and general category workmen promoted to supervisory cadre after departmental exam; and
- (e) whether there is any shortfall in the number of SC/ST/OBC category employees at supervisory cadre level and if so, the steps proposed to be taken to remove this shortfall?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : Career growth of employees is governed by Promotion Policy of THDCIL for upgradation of workmen from Unskilled to Skilled, Skilled to Supervisory and Supervisory to Executive category. The promotion policy provides for relaxation of 5% marks in written examinations for promotion to Supervisory cadre in respect of SC/ST candidates. So far, no relaxation has been provided to any SC/ST candidates as all candidates, including SC/ST category candidates, are upgraded from Skilled category to Supervisory category without the need for relaxation.

(c) to (e) : Three Workmen (two general and one SC category) were promoted to supervisory cadre through departmental examination during 2016-17. There is no shortfall in promotion in the SC/ST/OBC category employees at supervisory category through departmental examination.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5365
ANSWERED ON 06.04.2017

COMPANIES INVOLVED IN RURAL ELECTRIFICATION IN UP

†5365. SHRI BHAIRON PRASAD MISHRA:

Will the Minister of POWER
be pleased to state:

- (a) the names of power companies to which the Government has assigned rural electrification work in Uttar Pradesh;
- (b) whether those power companies have assigned the said work to petty contractors and delay is being caused in the said work and if so, the details thereof; and
- (c) the details of arrangements made by the Government to get goods developed to them on time?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (c) : Under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), four State Power Utilities viz. Purvanchal Vidyut Vitran Nigam Ltd., Madhyanchal Vidyut Vitran Nigam Ltd., Dakshinanchal Vidyut Vitran Nigam Ltd., Paschimanchal Vidyut Vitran Nigam Ltd. have been assigned rural electrification works in Uttar Pradesh.

The execution of electrification works have been awarded by these Power companies to several agencies/contractors. Wherever the performance of contractors is not satisfactory, the implementing agency impose penalty/Liquidated Damage as per the terms and conditions of the agreement with the contractor.

GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.5386
ANSWERED ON 06.04.2017

T&D LOSSES

5386. SHRI K.N. RAMACHANDRAN:

Will the Minister of POWER
be pleased to state:

- (a) whether any standards with regard to transmission and distribution of electricity have been fixed by advanced countries;
- (b) if so, the details thereof along with the Transmission and Distribution (T&D) losses suffered in the country in comparison to the advanced countries, State-wise;
- (c) whether the factors responsible for T&D losses have been assessed;
- (d) if so, the steps taken by the Government to reduce the losses along with the success achieved therein; and
- (e) whether the Government proposes to modernize the State Electricity Boards (SEBs) specifically to reduce leakages and losses and if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : There are no universally accepted standards for Transmission and Distribution (T&D) losses. State-wise percentage of T&D losses (including energy unaccounted for) in the country during the last three years are given at Annex. In comparison to advanced countries, Transmission & Distribution losses in India are high. This is because upgradation has not taken place over several years.

(c) : The factors responsible for Aggregate Technical & Commercial (AT&C) losses and T&D losses are overloading of existing lines and substation equipment; Low HT: LT lines ratio; poor repair and maintenance of equipment; non-installation of sufficient capacitors/reactive power equipment; low metering/billing/collection efficiency; theft and pilferage of electricity & tampering of meters.

(d) & (e) : The responsibility of reduction of AT&C losses in the Distribution network rests with the State power department/utilities. However, to facilitate the reduction of AT&C losses and to improve power distribution system, the Government of India has launched schemes such as Integrated Power Development Scheme (IPDS), Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), National Electricity Fund (NEF) and Ujwal DISCOM Assurance Yojana (UDAY).

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO.5386 ANSWERED IN THE LOK SABHA ON 06.04.2017.

Region		STATES/UTs	2013-14	2014-15	2015-16*
NR	1	HARYANA	35.83	34.05	31.61
	2	HIMACHAL PRADESH	21.03	20.81	18.75
	3	JAMMU & KASHMIR	54.68	53.06	50.06
	4	PUNJAB	20.67	18.45	18.55
	5	RAJASTHAN	26.92	27.51	29.13
	6	UTTAR PRADESH	29.07	27.19	24.51
	7	UTTARAKHAND	21.82	24.53	25.6
	8	CHANDIGARH	19.12	19.1	18.74
WR	9	DELHI	19.86	21.49	19.58
	1	GUJARAT	18.11	19.28	19.1
	2	MADHYA PRADESH	31.47	32.26	28.61
	3	CHHATTISGARH	28.38	29.21	30.78
	4	MAHARASHTRA	21.8	20.39	19.89
	5	D & N HAVELI	8.55	10.33	10.06
	6	GOA	12.67	14.97	18.04
SR	7	DAMAN & DIU	13.77	29.63	31.85
	1	ANDHRA PRADESH	20.06	17.94	15.24
	2	Telangana		15.72	16.1
	3	KARNATAKA	10.18	11.5	10.21
	4	KERALA	14.99	15.4	10.78
	5	TAMILNADU	10.84	11.07	10.13
	6	LAKSHADWEEP	11.2	3.63	9.81
ER	7	PUDUCHERRY	14.83	14.9	14.01
	1	BIHAR	47.26	46.27	49.29
	2	JHARKHAND	13.06	17.2	16.99
	3	ODISHA	38.86	41.96	39.1
	4	SIKKIM	23.11	24.97	26.52
	5	WEST BENGAL	24.05	24.66	22.16
NER	6	A & N ISLS.	19.79	20.5	14.47
	1	ASSAM	31.08	27.57	25.2
	2	MANIPUR	38.51	40.95	44.45
	3	MEGHALAYA	21.38	33.34	32.32
	4	NAGALAND	35.79	26.51	29.89
	5	TRIPURA	35.35	35.93	30.56
	6	ARUNACHAL PRADESH	46.3	46.24	50.6
	7	MIZORAM	41.54	42.05	36.11
All India			22.84	22.77	21.81
*Provisional Source: CEA					

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5403
ANSWERED ON 06.04.2017

MOU WITH MUNICIPALITIES ON LED STREET LIGHTS

5403. SHRI A.T. NANA PATIL:

Will the Minister of POWER
be pleased to state:

- (a) the total number of municipalities which have entered into contract with Energy Efficiency Services Ltd. (EESL) for replacement of street lights with LED lights under Street Light National programme so far, State-wise;
- (b) the total number of street lights replaced so far vis a vis target fixed; and
- (c) the steps taken by the Government to impress upon the remaining municipalities to enter into contract with EESL for replacement of street lights in order to save electricity?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : As on 03.04.2017, 544 Urban Local Bodies (ULBs) have entered into an implementation agreement with Energy Efficiency Services Limited (EESL) for replacement of street lights with LED street lights. State-wise details are given in Annexure.

(b) : The target is to replace 3.5 crore conventional street lights by LED street lights, till March 2019. As on 03.04.2017, over 19.67 lakh conventional street lights have been replaced with LED street lights. EESL is playing an important role as a catalyst in replacing the lights, while several other suppliers are also engaged in the same.

(c) : Proposal for replacement of conventional street lights with LED street lights has been submitted to remaining States by EESL. In order to encourage States/UTs to join this programme, Ministry of Power has also written to all the States/UTs requesting them to participate in this programme.

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 5403 ANSWERED IN THE LOK SABHA ON 06.04.2017.

S. No.	State/UTs	ULBs enrolled under SLNP
1	Andhra Pradesh	111
2	Assam	2
3	Chhattisgarh	11
4	Delhi	1
5	Goa	1
6	Gujarat	130
7	Himachal Pradesh	7
8	Jharkhand	1
9	Kerala	1
10	Maharashtra	6
11	Punjab	24
12	Rajasthan	187
13	Telangana	35
14	Tripura	20
15	Uttar Pradesh	2
16	Uttarakhand	5
Total		544

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5410
ANSWERED ON 06.04.2017

REDUCTION OF POLLUTION

†5410. SHRI YOGI ADITYA NATH:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government is working on any special plan for reducing the pollution level of coal-based thermal power plants in the country;
- (b) if so, the details thereof; and
- (c) the steps taken by the Government for modernisation of the thermal power plants?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (c) : The steps taken by Government to modernize and improve the efficiency of coal based thermal power plants and to reduce the pollution level of coal based thermal power plants in the Country, in the vicinity of these plants, are as under:

- (i) Supercritical technology has already been adopted for thermal power generation. The design efficiency of Supercritical units is about 5% higher than that of typical 500 MW subcritical units and these (supercritical) units are likely to have correspondingly lower fuel consumption and CO₂ emissions in ambient air. A capacity addition of 39,710 MW power based on supercritical technology has already been achieved and 48,060 MW of supercritical technology is in the pipeline.
- (ii) All Ultra Mega Power Projects (UMPPs) are required to use supercritical technology.

- (iii) Coal based capacity addition during the 13th Plan period shall be through super-critical units.
- (iv) Indigenous research is being pursued for development of an Advanced Ultra Supercritical Technology (A-USC) with targeted efficiency improvement of about 10% over supercritical unit. Indira Gandhi Centre for Atomic Research (IGCAR), NTPC Ltd. and BHEL signed an MoU, in August 2010, for development of 800 MW A-USC indigenous demonstration plant with main steam pressure of 310 kg/cm² and temperature of 710/ 720 deg C.
- (v) A capacity of about 7751.94 MW of old and inefficient unit has already been retired till date.
- (vi) To facilitate State Utilities/IPPs to replace old inefficient coal based thermal units with supercritical units, Ministry of Coal, Government of India has formulated a policy of automatic transfer of Letter of Assurance (LOA)/Coal linkage (granted to old plants) to new (proposed) super-critical units.
- (vii) Perform Achieve and Trade (PAT) Scheme under National Mission on Enhanced Energy Efficiency is under implementation by BEE (Bureau of Energy Efficiency). In PAT cycle-II, individual target for improving efficiency has been assigned to 154 thermal power stations.
- (viii) High efficiency Electrostatics Precipitator (ESP) are installed to capture Particulate Matters from Flue gases.
- (ix) Low NO_x burners are installed for reducing NO_x emission from flue gases.
- (x) SO₂ emission control is achieved through dispersion of flue gases through tall stacks (275 metres) to reduce the concentration of polluting gases at ground level.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5417
ANSWERED ON 06.04.2017

ELECTRIFICATION OF VILLAGES IN TRIBAL AREAS

5417. SHRI NISHIKANT DUBEY:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government has chalked out any plan for electrification of all un-electrified villages, including those in tribal areas of the country;
- (b) if so, the details thereof; and
- (c) the steps taken by the Government to work out off-grid solutions for electrification of villages located in far flung areas where grid extension is neither feasible nor cost effective?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : As reported by the States, there were 18,452 un-electrified villages, as on 01.04.2015, including those villages falling under tribal areas in the country. Out of these, 13123 villages have been electrified as on 31.03.2017. The remaining villages are targeted to be electrified by May, 2018.

(c) : Decentralized Distributed Generation (DDG) under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) scheme is for providing electricity access to un-electrified villages/habitations, where grid connectivity is either not feasible or not cost effective. So far, 4,220 projects have been sanctioned under DDG for electrification of remote areas, 893 projects have been commissioned, as on 28.02.2017.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5418
ANSWERED ON 06.04.2017

ELECTRIFICATION OF VILLAGES IN GUJARAT

5418. SHRIMATI POONAMBEN MAADAM:

Will the Minister of POWER
be pleased to state:

- (a) whether there has been remarkable progress in electrification of rural areas in the country during the last two and a half years;
- (b) if so, the details thereof vis-a-vis preceding three years; and
- (c) the details of progress made, targets fixed regarding electrification in rural areas of Gujarat during the last two and a half years and the future plans in this regard?

A N S W E R

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

(a) & (b) : Yes, Madam. The progress of electrification of un-electrified villages in the country during the last two and half years, as informed by the State Power Utilities, is as under:

Sl. No.	Year	Target	Achievement
1	FY 2014-15	1,900	1,405 (73%)
2	FY 2015-16	5,686	7,108 (125%)
3	FY 2016-17 (upto28.02.2017)	8,360	5,256 (63%)

The progress of electrification of un-electrified villages in the country during the preceding three years are as under:

Sl. No.	Year	Target	Achievement
1	FY 2011-12	14,500	7,285 (50%)
2	FY 2012-13	6,000	2,587 (43%)
3	FY 2013-14	3,300	1,197 (36%)

(c) : As reported by the Government of Gujarat, there is no un-electrified census village left for electrification in the State. However, under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), 33 new projects have been sanctioned for the State of Gujarat in August, 2015 with project cost of Rs. 924.72 crore for works including provision of access to un-connected households, electrification of villages under Sansad Aadarsh Gram Yojana (SAGY), strengthening of sub-transmission and distribution networks, feeder separation and Metering.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5453
ANSWERED ON 06.04.2017

R&M/LE OF POWER PLANTS

5453. SHRI HARISHCHANDRA CHAVAN:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government have undertaken any works in regard to Renovation, Modernization and Life Extension (RoM/LE) of old and inefficient generating units;
- (b) if so, the details of above said works undertaken during the last three years and the current year;
- (c) the details of uncompleted works out of above pending after the stipulated time period;
- (d) whether any responsibility has been fixed on any erring officer in this regard; and
- (e) if so, the details thereof and if not, the reasons therefor?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : R&M (Renovation & Modernization) and Life Extension works are carried out by the concerned State and Central power utilities depending on their requirement. The R&M and Life Extension programme is primarily aimed at generation sustenance, obsolescence of equipment's/systems, inadequacies due to poor quality of coal, compliance of prescribed environmental conditions and to extend the life beyond the design economic life of 25 years.

(b) & (c) : The details of R&M and Life Extension works undertaken in Thermal Power Plants during the last three years are as under:

Sl. No.	Unit No. (MW)	Name of Station	Utility	State	Date of start	Actual/ Expected date of commissioning
1.	GT-1 (111.19)	Auraiya GT	NTPC	Central Sector	15.05.2014	22.06.2014
2.	GT-1 (131)	Gandhar	NTPC	Central Sector	15.05.2014	06.07.2014
3.	GT-2A (106)	Kawas GT	NTPC	Central Sector	24.06.2014	22.08.2014
4.	GT-2 (111.19)	Auraiya	NTPC	Central Sector	12.09.2014	28.10.2014
5.	GT-3 (111.19)	Auraiya	NTPC	Central Sector	10.11.2014	25.12.2014
6.	GT-4 (111.19)	Auraiya	NTPC	Central Sector	27.01.2015	02.03.2015
7.	GT-2 (131)	Gandhaar	NTPC	Central Sector	25.02.2015	15.04.2015
8.	6 (210)	Koradi TPS	MAHAGENCO	Maharashtra	25.08.2015	30.05.2017
9.	12 (200)	Obra TPS	UPRVUNL	UP	01.10.2016	31.12.2017

(d) & (e) : Question does not arise.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5476
ANSWERED ON 06.04.2017

SMART POWER GRID TECHNOLOGY

5476. SHRI GUTHA SUKENDER REDDY:
SHRI PRABHAKAR REDDY KOTHA:
SHRI Y.S. AVINASH REDDY:

Will the Minister of POWER
be pleased to state:

- (a) whether the Government is aware that as per a recent study, Smart Power Grid Technology is prone to hacking;
- (b) if so, the details thereof and the reasons therefor; and
- (c) whether the Government has taken any precautions in this regard, if so, the details thereof and if not, the reasons therefor?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) to (c) : Government of India, through Ministry of Electronics and Information Technology (MeitY) and National Critical Information Infrastructure Protection Centre (NCIIPC) has taken several steps to sensitise power utilities and key stakeholders against cyber threats.

Government of India, in line with National Cyber Security Policy 2013, has created sectoral Computer Emergency Response Teams (CERTs) to mitigate cyber security threat in power systems. Computer Emergency Response Team-Transmission (CERT-Transmission), CERT-Generation, CERT-Distribution have been formed to coordinate with power utilities. The relevant stakeholders of Smart Grid have been advised to identify critical infrastructure and use end to end encryption for data security.

All Utilities have been asked to identify a nodal senior executive as its Chief Information Security Officer (CISO) to lead the process of strengthening organizational systems with respect to cyber security and implement Information Security Management System as recommended by rules framed under the IT (Information Technology) Act 2008.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5480
ANSWERED ON 06.04.2017

LOAD GENERATION BALANCE REPORT

5480. SHRI ANANDRAO ADSUL:
SHRI DHARMENDRA YADAV:
DR. PRITAM GOPINATH MUNDE:

Will the Minister of POWER
be pleased to state:

- (a) whether the Union Government has brought out Load Generation Balance Report (LGBR) every year to project electricity demand and supply situation and if so, the details thereof;
- (b) whether the LGBR is finalised after detailed discussions with the States/ utilities and Central/State/Private generation companies, if so, the details thereof;
- (c) whether the Union Government has set a target of generating 1178 billion units with overall surplus of 1.1 per cent and peak surplus of 2.6 per cent and if so, the facts thereof;
- (d) whether a generating capacity above 16654.5 mw was considered in the LGBR for 2016-17 and if so, the details thereof; and
- (e) whether the inter-State and intra- State capabilities of power transfer in the country has enhanced considerably and if so, the details thereof?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : Yes, Madam. Central Electricity Authority (CEA), on behalf of the Union Government, brings out the Load Generation Balance Report (LGBR) every year, which shows state-wise anticipated electricity demand and supply situation in the country in the ensuing year. The LGBR for the year 2016-17 was published on 31st May 2016.

.....2.

(b) : Yes, Madam. The LGBR is finalized after detailed discussions with the States/Utilities and Central / State / Private generation companies through Regional Power Committees (RPCs). Generation targets for various power stations are decided in consultation with the generating companies, and demand for electricity in consultation with the States/Utilities.

(c) : Yes, Madam. The Union Government had set a target of generating 1,178 billion units (BU) during the year 2016-17. The anticipated Energy available in the country for 2016-17 based on this target as well as generation from Renewable Energy sources and captive power plants was 1228 BU while the anticipated Energy requirement was 1,215 BU implying anticipated Energy surplus of 13 BU (1.1%). Similarly, the anticipated Peak Demand and Peak availability were 165,253 MW and 169,503 MW, respectively implying anticipated Peak surplus of 4,250 MW (2.6%).

(d) : Yes, Madam. New generating capacity of 16,654.5 MW was considered in the LGBR for 2016-17. Details of the same are given at Annex.

(e) : The inter-state and intra-State capabilities of power transfer in the country have enhanced considerably with the construction of new transmission lines in the country. During the 12th Plan period (up to February, 2017), 1,07,653 circuit-km of inter-state & intra-state transmission system (220kV & above) was added in the country.

ANNEX REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 5480 ANSWERED IN THE LOK SABHA ON 06.04.2017.

Generating Schemes Expected to be commissioned during 2016-17

Scheme	Implementing Agency	Unit No.	Capacity (MW)	Commissioning Schedule
THERMAL				
CENTRAL SECTOR			2730.5 MW	
Nabinagar TPP	NTPC	2	250	Jan-17
Mauda STPP-II	NTPC	4	660	Feb-17
Lara STPP	NTPC	1	800	Jan-17
Kanti TPS St-II	NTPC	4	195	Sep-16
Kudgi TPP	NTPC	1	800	Sep-16
Agartala Gas Based Power Project	NEEPCO	ST-1	25.5	Jun-16
STATE SECTOR			3910 MW	
Namrup CCGT	APGCL	GT-ST	100	Sep-16
Barauni TPP,	BSEB	8	250	Dec-16
Bhavnagar TPP	BECL	1	250	Jun-16
Bhavnagar TPP	BECL	2	250	Nov-16
Yermarus TPP	KPCL	2	800	Jul-16
Koradi TPP	MSPGCL	10	660	Oct-16
Singreni TPP	SCCL	2	600	Jun-16
Marwa TPS	CSPGCL	2	500	Jun-16
Sagardighi TPS-II	WBPDC	4	500	Nov-16
PRIVATE SECTOR			6800 MW	
Nawapara TPP	TRN	1	300	May-16
Nawapara TPP	TRN	2	300	Nov-16
Bara TPP	Jaypee	2	660	Jul-16
Utkal TPP	Ind Barath	2	350	Nov-16
Ucchpinda TPP	RKM	3	360	Jul-16
ITPCL TPP	ILFS	2	600	May-16
Lanco Babandh TPP	Lanco Babandh	1	660	Feb-17
Lalitpur TPP	LPGL	3	660	4/1/2016(A)
Nashik TPP, Ph-I	Rattan Power	2	270	Jun-16
Nashik TPP, Ph-I	Rattan Power	3	270	Dec-16
NCC TPP	NCC	1	660	Jul-16
NCC TPP	NCC	2	660	Dec-16
Binjkote TPP	SKS	1	300	Nov-16
Athena Singhitari TPP	Athena Chhattisgarh	1	600	Oct-16
Haldia TPP	India Power	1	150	Jul-16
TOTAL THERMAL (CENTRAL + STATE + PRIVATE)			13440.5 MW	
HYDRO				

CENTRAL SECTOR			490 MW	
Teesta Low Dam-IV	NHPC	3	40	Jun-16
Teesta Low Dam-IV	NHPC	4	40	Sep-16
Kameng	NEEPCO	1	150	Feb-17
Kameng	NEEPCO	2	150	Mar-17
Pare	NEEPCO	1	55	Dec-16
Pare	NEEPCO	2	55	Jan-17
STATE SECTOR			395 MW	
Nagarujana Sagar TR	APGENCO	1	25	Aug-16
Nagarujana Sagar TR	APGENCO	2	25	Aug-16
Kashang-I	HPPCL	1	65	May-16
Sainj	HPPCL	1	50	Dec-16
Sainj	HPPCL	2	50	Jan-17
Lower Jurala	TSGENCO	5	40	Sep-16
Lower Jurala	TSGENCO	6	40	Nov-16
Pulichintala	TSGENCO	1	30	Aug-16
Pulichintala	TSGENCO	2	30	Dec-16
New Umtru	MePGCL	1	20	Nov-16
New Umtru	MePGCL	2	20	Dec-16
PRIVATE SECTOR			829 MW	
Teesta- III (*)	Teesta Urja Ltd. (*)	1	200	Dec-16
Teesta- III (*)	Teesta Urja Ltd. (*)	2	200	Jan-17
Teesta- III (*)	Teesta Urja Ltd. (*)	3	200	Feb-17
Chanju-I	IA Energy	1	12	Jul-16
Chanju-I	IA Energy	2	12	Sep-16
Chanju-I	IA Energy	3	12	Dec-16
Dikchu (#)	Sneha Kinetic Power Projects Pvt. Ltd.	1	32	Jul-16
Dikchu (#)	Sneha Kinetic Power Projects Pvt. Ltd.	2	32	Aug-16
Dikchu (#)	Sneha Kinetic Power Projects Pvt. Ltd.	3	32	Sep-16
Tashiding (#)	Shiga Energy Pvt. Ltd.	1	48.5	Jan-17
Tashiding (#)	Shiga Energy Pvt. Ltd.	2	48.5	Feb-17
TOTAL HYDRO (CENTRAL + STATE + PRIVATE)			1714 MW	
NUCLEAR				
Kudankulam NPP	NPC	2	1000	Jul-16
PFBR Kalpakkam	BHAVINI	1	500	Feb-17
TOTAL NUCLEAR			1500 MW	
TOTAL (THERMAL + HYDRO + NUCLEAR)			16654.5 MW	

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5482
ANSWERED ON 06.04.2017

LIFE OF POWER PLANTS

5482. SHRI SUDHEER GUPTA:
KUNWAR HARIBANSH SINGH:
SHRI GAJANAN KIRTIKAR:
DR. SUNIL BALIRAM GAIKWAD:
SHRI BIDYUT BARAN MAHATO:
SHRI ASHOK SHANKARRAO CHAVAN:
SHRI T. RADHAKRISHNAN:

Will the Minister of POWER
be pleased to state:

- (a) whether as per international standards the life of coal fired units is only 25 years, if so, the details thereof;
- (b) whether 188 thermal power plants with a total capacity of 56 GW, which are more than 25 years old are need to be scrapped immediately;
- (c) if so, the details thereof and the response of the Union Government thereto;
- (d) the total funds required to replace the old and inefficient units in the country;
- (e) whether old thermal plants are also required to spend more on adhering to pollution norms and if so, the details thereof; and
- (f) the steps taken/being taken by the Government to replace old and inefficient units in ultra mega power projects?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : No, Madam. The life of coal fired units depends upon operating conditions like rated capacity and steam parameters, start-ups, load cycling, operating and maintenance practices, quality of coal etc. As per normal practice, Life Assessment is carried out after 25 years to identify any potentially damaging factors. Thereafter, testing for the remnant life shall be carried out every five years.

(b) to (d) : In July 2016, the Central Electricity Authority (CEA) in consultation with various Power Utilities identified more than 25 years old coal based plants of about 9000 MW capacity in Govt. Sector for retirement on the basis of various techno-economic parameters. Out of which, Coal based units of aggregating capacity of 3750 MW have been retired till date. Funds to replace old and inefficient units are arranged by the power developers.

(e) : Plants not meeting prescribed environment norms, whether old or new, would require to upgrade/install additional pollution control equipments to bring down emissions within prescribed limits.

(f) : All units in ultra-mega power projects are of latest supercritical technology.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5499
ANSWERED ON 06.04.2017

NEW POWER PLANTS

†5499. SHRI NARANBHAI KACHHADIYA:

Will the Minister of POWER
be pleased to state:

- (a) the details of the various measures being taken by the Government to encourage energy efficiency;
- (b) whether the Government is of the view that efforts should be made to reduce carbon emission;
- (c) if so, the details thereof;
- (d) whether the Government is likely to make efforts to set up energy efficient super critical power plants equipped with state-of-the-art technology in place of all the old inefficient thermal power plants; and
- (e) if so, the details of the action taken so far in this regard?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : The details of the various measures being taken by the Government to encourage energy efficiency are as follows:-

- (i) Standards & Labeling programme for appliances to provide the consumer an informed choice about the energy saving and thereby the cost saving potential of the relevant marketed product.
- (ii) Prescription of Specific energy consumption norms for energy intensive industries notified as designated consumers and implemented through Perform, Achieve and Trade (PAT) Scheme.

- (iii) Formulation of Energy Conservation Building Code (ECBC) for energy efficiency improvement in commercial buildings.
- (iv) Design-guidelines for energy efficiency in multi-storied residential buildings.
- (v) Demand Side Management (DSM) in Municipal, Household, Agriculture and Small & Medium Enterprises (SME) sectors.
- (vi) Promotion of energy efficient LED lamps through DSM based Unnat Jyoti by Affordable LEDs for All (UJALA) & Street Lighting National Programme (SLNP).
- (vii) Promotion of Energy Efficient Fans and Agriculture pumpsets.
- (viii) Nation-wide campaign for Energy Conservation and Efficiency.

(b) & (c) : India in its Nationally Determined Contributions (NDCs) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) on 02.10.2016 has communicated to reduce Green House Gas (GHG) emissions intensity of its Gross Domestic Product (GDP) by 33 to 35 percent by 2030 from 2005 level, achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 and create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030.

(d) & (e) : In order to promote use of Super Critical and Ultra Super Critical Technology in thermal power plants, the following measures have been taken:

- (i) Super critical technology is already being adopted for thermal power plants. All Ultra Mega Power Projects (UMPPs) are required to use super critical technologies. Generation capacity of 39710 MW based on super critical technology has already been implemented. Additional capacity of 48060 MW of super critical thermal power plants is under construction.
- (ii) Ultra super critical technology is also being adopted by some power stations. Khargone Thermal Power Plant (2x660 MW) of NTPC, being set up in Madhya Pradesh, is based on Ultra Super Critical Technology.
- (iii) Indigenous research is also ongoing for development of Advanced Ultra Super Critical Technology (A-USC). Indira Gandhi Centre for Atomic Research (IGCAR), NTPC and BHEL have signed an MoU for development of 800 MW A-USC indigenous demonstration plant.
- (iv) Phased retirement of inefficient and old thermal power plants is also being carried out. Old thermal capacity of about 7751.94 MW has already been retired.

GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.5501
ANSWERED ON 06.04.2017

POWER PLANTS

5501. SHRI KONAKALLA NARAYANA RAO:

Will the Minister of POWER
be pleased to state:

- (a) the number of existing thermal power plants in the country along with their capacity, sector-wise;
- (b) whether this Government plans to commission any new Thermal Power Plants in the country, especially in the areas of Beedar & Yadadri;
- (c) if so, the details thereof;
- (d) if not, the reasons therefor; and
- (e) the conditions required to be fulfilled in order to set up thermal power plants?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : The number of existing thermal power plants in the country is 270, with a total installed capacity of 215214.88 MW as on 28.02.2017 (including 7 power plants having a capacity of less than 25 MW).

The detailed sector wise list of thermal power plants along with their capacity is given at Annex-I.

(b) to (d) : After enactment of the Electricity Act 2003, generation of electricity has been de-licensed. Techno-Economic Clearance of Central Electricity Authority (CEA) is not required for setting up of thermal power projects and proposals for setting up of thermal power projects in the country are not being received in CEA.

.....2.

However, as per information available in CEA, list of thermal power plants proposed to be set up in the country is given at Annex-II.

(e) : Developer of the thermal power plant is required to tie up various clearances like Land, Water, Environment, Fuel, National Airport Authority, Power Purchase Agreement etc.

It has been envisaged that all coal fired capacity addition for power generation during the 13th Plan period onwards shall be through supercritical units.

Also, an advisory has been issued by the CEA to all Central/State sector power generating companies, with a view to encouraging indigenous manufacturing of thermal power plant equipment based on supercritical technology. They may incorporate the condition of setting up of phased indigenous manufacturing facilities in the bids to be invited for boilers and turbine-generators of supercritical projects. The advisory is valid up to January, 2020.

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 5501 ANSWERED IN THE LOK SABHA ON 06.04.2017.

Sector-wise Installed Capacity of Thermal Power Plants as on 28.02.2017

Sl. No.	Region	State	Sector	Name of Project	Installed Capacity (MW)
1	Northern	Delhi	Central Sector	BADARPUR TPS	705.00
2			Private Sector	RITHALA CCPP	108.00
3			State Sector	I.P.CCPP	270.00
4				PRAGATI CCGT-III	1500.00
5				PRAGATI CCPP	330.40
6				RAJGHAT TPS	135.00
7		Haryana	Central Sector	FARIDABAD CCPP	431.59
8				INDIRA GANDHI STPP	1500.00
9			Private Sector	MAHATMA GANDHI TPS	1320.00
10			State Sector	PANIPAT TPS	920.00
11				RAJIV GANDHI TPS	1200.00
12				YAMUNA NAGAR TPS	600.00
13		Jammu & Kashmir	State Sector	PAMPURE GPS (Liq.)	175.00
14		Punjab	Private Sector	GOINDWAL SAHIB	540.00
15				Nabhan TPP (Rajpura TPP)	1400.00
16				TALWANDI SABO TPP	1980.00
17			State Sector	GH TPS (LEH.MOH.)	920.00
18				GND TPS(BHATINDA)	440.00
19				Rice Straw(Jalkheri)	10.00
20				ROPAR TPS	1260.00
21		Rajasthan	Central Sector	Anta CCPP	419.33
22				BARSINGSAR LIGNITE	250.00
23			Private Sector	JALIPA KAPURDI TPP	1080.00
24				KAWAI TPS	1320.00
25			State Sector	CHHABRA TPP	1000.00
26				DHOLPUR CCPP	330.00
27				GIRAL TPS	250.00
28				KALISINDH TPS	1200.00
29				KOTA TPS	1240.00
30				RAMGARH CCPP	273.80
31				SURATGARH TPS	1500.00
32		Uttar Pradesh	Central Sector	AURAIYA CCPP	663.36
33				DADRI (NCTPP)	1820.00
34				DADRI CCPP	829.78
35				RIHAND STPS	3000.00
36				SINGRAULI STPS	2000.00
37				TANDA TPS	440.00
38				UNCHAHAR TPS	1050.00
39			Private Sector	ANPARA C TPS	1200.00
40				BARKHERA TPS	90.00
41				KHAMBARKHERA TPS	90.00
42				KUNDARKI TPS	90.00
43				LALITPUR TPS	1980.00
44				MAQSOODPUR TPS	90.00
45				PRAYAGRAJ TPP	1320.00
46				ROSA TPP Ph-I	1200.00
47				UTRAULA TPS	90.00
48			State Sector	ANPARA TPS	2630.00
49				HARDUAGANJ TPS	665.00
50				OBRA TPS	1278.00

51				PANKI TPS	210.00
52				PARICHA TPS	1140.00
53		Uttarakhand	Private Sector	GAMA CCPP	225.00
54				KASHIPUR CCPP	225.00
55	Western	Chhattisgarh	Central Sector	BHILAI TPS	500.00
56				KORBA STPS	2600.00
57				SIPAT STPS	2980.00
58			Private Sector	AKALTARA TPS	1200.00
59				AVANTHA BHANDAR	600.00
60				BALCO TPS	600.00
61				BANDAKHAR TPP	300.00
62				BARADARHA TPS	1200.00
63				CHAKABURA TPP	30.00
64				KASAIPALLI TPP	270.00
65				KATGHORA TPP	35.00
66				NAWAPARA TPP	300.00
67				OP JINDAL TPS	1000.00
68				PATHADI TPP	600.00
69				RAIKHEDA TPP	1370.00
70				RATIJA TPS	100.00
71				SALORA TPP	135.00
72				SVPL TPP	63.00
73				SWASTIK KORBA TPP	25.00
74				TAMNAR TPP	2400.00
75				UCHPINDA TPP	720.00
76			State Sector	DSPM TPS	500.00
77				KORBA-II	200.00
78				KORBA-III	240.00
79				KORBA-WEST TPS	1340.00
80				MARWA TPS	1000.00
81		Goa	Private Sector	GOA CCPP (Liq.)	48.00
82		Gujarat	Central Sector	GANDHAR CCPP	657.39
83				KAWAS CCPP	656.20
84			Private Sector	BARODA CCPP	160.00
85				DGEN MEGA CCPP	1200.00
86				ESSAR CCPP	515.00
87				MUNDRA TPS	4620.00
88				MUNDRA UMTTP	4000.00
89				PEGUTHAN CCPP	655.00
90				SABARMATI (C STATION)	60.00
91				SABARMATI (D-F STATIONS)	362.00
92				SALAYA TPP	1200.00
93				SUGEN CCPP	1147.50
94				SURAT LIG. TPS	500.00
95				UNOSUGEN CCPP	382.50
96			State Sector	AKRIMOTA LIG TPS	250.00
97				BHAVNAGAR CFBC TPP	250.00
98				DHUVARAN CCPP	594.72
99				GANDHI NAGAR TPS	630.00
100				HAZIRA CCPP	156.10
101				HAZIRA CCPP EXT	351.00
102				KUTCH LIG. TPS	290.00
103				PIPAVAV CCPP	702.00
104				SIKKA REP. TPS	740.00
105				UKAI TPS	1350.00
106				UTRAN CCPP	518.00
107				WANAKBORI TPS	1470.00
108		Madhya Pradesh	Central Sector	VINDHYACHAL STPS	4760.00
109			Private Sector	ANUPPUR TPP	1200.00
110				BINA TPS	500.00
111				MAHAN TPP	600.00
112				NIGRI TPP	1320.00

113				NIWARI TPP	45.00
114				SASAN UMTTP	3960.00
115				SEIONI TPP	600.00
116			State Sector	AMARKANTAK EXT TPS	210.00
117				SANJAY GANDHI TPS	1340.00
118				SATPURA TPS	1330.00
119				SHRI SINGHAJI TPP	1200.00
120		Maharashtra	Central Sector	MAUDA TPS	1660.00
121				RATNAGIRI CCPP I	740.00
122				RATNAGIRI CCPP II	740.00
123				RATNAGIRI CCPP III	740.00
124			Private Sector	AMARAVATI TPS	1350.00
125				BELA TPS	270.00
126				BUTIBORI TPP	600.00
127				DAHANU TPS	500.00
128				DHARIWAL TPP	600.00
129				EMCO WARORA TPS	600.00
130				GEPL TPP Ph-I	120.00
131				JSW RATNAGIRI TPP	1200.00
132				MANGAON CCPP	388.00
133				MIHAN TPS	246.00
134				NASIK (P) TPS	540.00
135				TIRORA TPS	3300.00
136				TROMBAY CCPP	180.00
137				TROMBAY TPS	1250.00
138				WARDHA WARORA TPP	540.00
139			State Sector	BHUSAWAL TPS	1420.00
140				CHANDRAPUR(MAHARASHTRA) STPS	2920.00
141				KHAPARKHEDA TPS	1340.00
142				KORADI TPS	2600.00
143				NASIK TPS	630.00
144				PARAS TPS	500.00
145				PARLI TPS	1170.00
146				URAN CCPP	672.00
147	Southern	Andhra Pradesh	Central Sector	SIMHADRI	2000.00
148			Private Sector	GAUTAMI CCPP	464.00
149				GMR Energy Ltd - Kakinada	220.00
150				GODAVARI CCPP	208.00
151				GREL CCPP (Rajahmundry)	768.00
152				JEGURUPADU CCPP Ph II	220.00
153				KONASEEMA CCPP	445.00
154				KONDAPALLI EXTN CCPP	366.00
155				KONDAPALLI CCPP	350.00
156				KONDAPALLI ST-3 CCPP	742.00
157				LVS POWER DG	36.80
158				PAINAMPURAM TPP	1320.00
159				PEDDAPURAM CCPP	220.00
160				SGPL TPP	1320.00
161				SIMHAPURI TPS	600.00
162				THAMMINAPATNAM TPS	300.00
163				VEMAGIRI CCPP	370.00
164				VIJESWARAM CCPP	272.00
165				VIZAG TPP	1040.00
166			State Sector	DAMODARAM SANJEEVAIAH TPS	1600.00
167				Dr. N.TATA RAO TPS	1760.00
168				JEGURUPADU CCPP Ph I	235.40
169				RAYALASEEMA TPS	1050.00
170		Karnataka	Central Sector	KUDGI STPP	800.00
171				BELLARY DG	25.20
172				TORANGALLU TPS(SBU-I)	260.00

173				TORANGALLU TPS(SBU-II)	600.00
174				UDUPI TPP	1200.00
175			State Sector	BELLARY TPS	1700.00
176				RAICHUR TPS	1720.00
177				YELHANKA (DG)	127.92
178				YERMARUS TPP	800.00
179		Kerala	Central Sector	R. GANDHI CCPP (Liq.)	359.58
180			Private Sector	COCHIN CCPP (Liq.)	174.00
181			State Sector	BRAMHAPURAM DG	63.96
182				KOZHICODE DG	96.00
183		Puducherry	State Sector	KARAIKAL CCPP	32.50
184		Tamil Nadu	Central Sector	NEYVELI (EXT) TPS	420.00
185				NEYVELI TPS- I	600.00
186				NEYVELI TPS- II	1470.00
187				NEYVELI TPS-II EXP	500.00
188				TUTICORIN (JV) TPP	1000.00
189				VALLUR TPP	1500.00
190			Private Sector	B. BRIDGE D.G	200.00
191				ITPCL TPP	1200.00
192				KARUPPUR CCPP	119.80
193				MUTHIARA TPP	1200.00
194				NEYVELI TPS(Z)	250.00
195				P.NALLUR CCPP	330.50
196				SAMALPATTI DG	105.70
197				SAMAYANALLUR DG	106.00
198				TUTICORIN (P) TPP	300.00
199				VALANTARVY CCPP	52.80
200			State Sector	BASIN BRIDGE GT (Liq.)	120.00
201				ENNORE TPS	340.00
202				KOVIKALPAL CCPP	107.88
203				METTUR TPS	1440.00
204				NARIMANAM GPS	10.00
205				NORTH CHENNAI TPS	1830.00
206				TUTICORIN TPS	1050.00
207				VALUTHUR CCPP	186.20
208				TANGEDCO	100.00
209		Telangana	Central Sector	RAMAGUNDEM STPS	2600.00
210			State Sector	KAKATIYA TPS	1100.00
211				KOTHAGUNDEM TPS	720.00
212				KOTHAGUNDEM TPS (NEW)	1000.00
213				RAMAGUNDEM - B TPS	62.50
214				SINGARENI TPP	1200.00
215	Eastern	A & N Islands	State Sector	AND. NICOBAR DG	40.05
216		Bihar	Central Sector	BARH II	1320.00
217				KAHALGAON TPS	2340.00
218				MUZAFFARPUR TPS	415.00
219				NABI NAGAR TPP	250.00
220			State Sector	BARAUNI TPS	210.00
221		Jharkhand	Central Sector	BOKARO 'B' TPS	630.00
222				BOKARO TPS 'A' EXP	500.00
223				CHANDRAPURA(DVC) TPS	760.00
224				KODARMA TPP	1000.00
225			Private Sector	JOJOBERA TPS	360.00
226				MAHADEV PRASAD STPP	540.00
227				MAITHON RB TPP	1050.00
228			State Sector	PATRATU TPS	455.00
229				TENUGHAT TPS	420.00
230		Odisha	Central Sector	TALCHER (OLD) TPS	460.00
231				TALCHER STPS	3000.00
232			Private Sector	DERANG TPP	1200.00
233				IND BARATH TPP	350.00

234				KAMALANGA TPS	1050.00
235				STERLITE TPP	2400.00
236			State Sector	IB VALLEY TPS	420.00
237		West Bengal	Central Sector	DURGAPUR STEEL TPS	1000.00
238				DURGAPUR TPS	210.00
239				FARAKKA STPS	2100.00
240				MEJIA TPS	2340.00
241				RAGHUNATHPUR TPP	1200.00
242			Private Sector	BUDGE BUDGE TPS	750.00
243				CHINAKURI TPS	30.00
244				Dishergarh TPS	18.00
245				HALDIA TPP	600.00
246				Seebpore TPS	8.38
247				SOUTHERN REPL. TPS	135.00
248				TITAGARH TPS	240.00
249			State Sector	BAKRESWAR TPS	1050.00
250				BANDEL TPS	450.00
251				D.P.L. TPS	660.00
252				HALDIA GT (Liq.)	40.00
253				KASBA GT (Liq.)	40.00
254				KOLAGHAT TPS	1260.00
255				SAGARDIGHI TPS	1600.00
256				SANTALDIH TPS	500.00
257				SILIGURI GPS	20.00
258	North Eastern	Assam	Central Sector	BONGAIGAON TPP	250.00
259				Kathalguri CCPP	291.00
260			Private Sector	Adamtilla CCPP	9.00
261				Baskhandi CCPP	15.50
262			State Sector	CHANDRAPUR(ASSAM)	60.00
263				LAKWA GT	142.20
264				NAMRUP CCPP	181.25
265		Manipur	State Sector	LEIMAKHONG DG	36.00
266		Tripura	Central Sector	AGARTALA GT	135.00
267				MONARCHAK CCPP	101.00
268				TRIPURA CCPP	726.60
269			State Sector	BARAMURA GT	58.50
270				ROKHIA GT	111.00
	All India				215214.88

ANNEX REFERRED TO IN REPLY TO PARTS (b) TO (d) OF UNSTARRED QUESTION NO. 5501 ANSWERED IN THE LOK SABHA ON 06.04.2017.

List of Coal based Thermal Power Projects proposed to be set up in the country by various Central/State Sector

Sl. No.	Name of Project	State	Sector	Capacity (MW)
1	Yadadri TPS (Telangana State Power Generation Corporation Limited)	Telangana	State Sector	4000
2	Singareni Unit - 3 (Singareni Collieries Co. Ltd.)	Telangana	State Sector	660
3	Srikakulam TPS (Andhra Pradesh Power Generation Corporation Ltd.)	Andhra Pradesh	State Sector	2400
4	Margherita TPP (Assam Power Generation Corporation Ltd.)	Assam	State Sector	660
5	Godhna TPP (Karnataka Power Corporation Ltd)	Chhattisgarh	State Sector	1600
6	Sinor TPP Unit - 2 (Gujarat State Electricity Corporation Ltd.)	Gujarat	State Sector	800
7	Duwasan TPP (Gujarat State Electricity Corporation Ltd.)	Gujarat	State Sector	1600
8	Panipat TPP U-9 (Haryana Power Generation Corp Ltd)	Haryana	State Sector	660
9	Patratu TPS Expansion Phase - I (Jharkhand Urja Utpadan Nigam Ltd.)	Jharkhand	State Sector	2400
10	Tenughat TPS Expansion (Tenughat Vidyut Nigam Ltd.)	Jharkhand	State Sector	1320
11	Edlapur (Karnataka Power Corporation Ltd)	Karnataka	State Sector	800
12	Satpura TPS (Madhya Pradesh Power Generation Company Ltd)	Madhya Pradesh	State Sector	1320
13	Nasik TPS (Maharashtra State Power Generation Company Ltd.)	Maharashtra	State Sector	660
14	Bhusawal TPP U-6 (Maharashtra State Power Generation Company Ltd.)	Maharashtra	State Sector	660
15	Kamkhaya TPP (Odisha Thermal Power Corporation Ltd.)	Odisha	State Sector	2400
16	Ennore TPS Replacement (TANGEDCO)	Tamil Nadu	State Sector	660
17	Udangudi TPP St-I	Tamil Nadu	State Sector	1320
18	Uppur TPP	Tamil Nadu	State Sector	1600
19	Obra 'C' TPP (UPRVUNL)	Uttar Pradesh	State Sector	1320
20	Panki Extn. (UPRVUNL)	Uttar Pradesh	State Sector	660
21	Jawaharpur TPP (UPRVUNL)	Uttar Pradesh	State Sector	1320
22	Sagardighi (WBPDC)	West Bengal	State Sector	660
23	Bakreshwar TPP (WBPDC)	West Bengal	State Sector	660
24	Santalidih TPP (WBPDC)	West Bengal	State Sector	1600
25	Khurja TPP (THDCIL)	Uttar Pradesh	Central Sector	1320
26	Bilhaur TPP (NTPC)	Uttar Pradesh	Central Sector	1320
27	Barethi TPP (NTPC)	Madhya Pradesh	Central Sector	2640
28	Pudimadka (NTPC)	Andhra Pradesh	Central Sector	4000
29	Katwa TPP (NTPC)	West Bengal	Central Sector	1320
30	Bithnok TPP (NLC)	Rajasthan	Central Sector	250
31	Sirkali TPP (NLC)	Tamil Nadu	Central Sector	4000
32	Pit head Super Critical TPP by Mahanadi Basin Power Ltd. (a wholly owned subsidiary Company of MCL)	Odisha	Central Sector	1600
33	Pirpainti TPP (Pirpainti Bijlee Company Private Limited (JV of NHPC & BSPGCL)	Bihar	Central Sector	1320
34	Buxar TPP (SJVN Ltd.)	Bihar	Central Sector	1320
