

**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
STARRED QUESTION NO.325  
ANSWERED ON 03.01.2019**

**GAS BASED POWER PLANTS**

**\*325. SHRI GAURAV GOGOI:**

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

- (a) whether the Government is aware that more than 50 per cent of the country's GW gas based power plants, capacities are 'stranded' or 'unutilized';**
- (b) if so, the facts and details in this regard;**
- (c) whether the exact reasons for GW gas based power plants' capacities being 'stranded' or 'unutilised' have since been assessed; and**
- (d) if so, the details thereof and the steps the Government has taken to remove the hurdles coming in the way of gas based power plants to achieve optimal output?**

**A N S W E R**

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

**( SHRI R.K. SINGH )**

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

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## STATEMENT

**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO.325 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING GAS BASED POWER PLANTS.**

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**(a) to (c) : The present gas based installed capacity for power generation in the country is 24,937 MW and the Central Electricity Authority monitors a capacity of 23,883 MW (all natural gas based plants above 25 MW, excluding liquid fuel). The details of installed capacity and monitored capacity are placed at Annexure-A. Gas based power generation capacity of 14305 MW (11304 MW commissioned and 3001 MW under construction) is stranded due to non-availability of domestic gas, which is 51.2% of the gas based capacity (installed and under construction). State-wise list of stranded gas based capacity is at Annexure-B. The main reason for stranded gas based capacity is insufficient availability of domestic gas, particularly from Krishna Godavari Dhirubhai - 6 (KG D-6) basin. The supply of gas to power sector from this field is NIL since March, 2013.**

**(d) : Government has made provision for Nil Custom duty on import of Liquefied Natural Gas (LNG) and Natural Gas (NG), if it is used for generation of electrical energy by a generating company as defined in section 2(28) of the Electricity Act, 2003 (36 of 2003) to supply electrical energy or to engage in the business of supplying electrical energy to the grid. Gas based power plants are free to import the Liquefied Natural Gas (LNG), generate power and sell it to the consumers.**

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**ANNEXURE REFERRED TO IN PARTS (a) TO (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 325 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING GAS BASED POWER PLANTS.**

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**Details of installed capacity and monitored Capacity**

Sl. No.	State	Sector	Developer	Name of Project	CAPACITY (MW)		REMARKS
					INSTALLED	MONITORED	
1	Andhra Pradesh	Private Sector	GAUTAMI POWER LIMITED	GAUTAMI CCPP	464.00	464.00	Monitored
2	Andhra Pradesh	Private Sector	LANCO KONDAPALLI POWER PVT. LTD.	KONDAPALLI ST-3 CCPP	742.00	742.00	Monitored
3	Andhra Pradesh	Private Sector	SPECTRUM POWER GENERATION LIMITED	GODAVARI CCPP	208.00	208.00	Monitored
4	Andhra Pradesh	Private Sector	GMR RAJAHMUNDRY ENERGY LIMITED	GREL CCPP (Rajahmundry)	768.00	768.00	Monitored
5	Andhra Pradesh	Private Sector	GVK ENERGY LIMITED	JEGURUPADU CCPP Ph II	220.00	220.00	Monitored
6	Andhra Pradesh	Private Sector	KONASEEMA GAS POWER LIMITED	KONASEEMA CCPP	445.00	445.00	Monitored
7	Andhra Pradesh	Private Sector	LANCO KONDAPALLI POWER PVT. LTD.	KONDAPALLI CCPP	350.00	350.00	Monitored
8	Andhra Pradesh	Private Sector	LANCO KONDAPALLI POWER PVT. LTD.	KONDAPALLI EXTN CCPP	366.00	366.00	Monitored
9	Andhra Pradesh	Private Sector	RELIANCE INFRASTRUCTURE LIMITED - A.P.	PEDDAPURAM CCPP	220.00	220.00	Monitored
10	Andhra Pradesh	Private Sector	GMR ENERGY LIMITED	GMR Energy Ltd - Kakinada	220.00	220.00	Monitored
11	Andhra Pradesh	Private Sector	GMR VEMAGIRI POWER GENERATION LIMITED	VEMAGIRI CCPP	370.00	370.00	Monitored
12	Andhra Pradesh	Private Sector	A.P. GAS POWER CORPORATION LIMITED	VIJESWARAM CCPP	272.00	272.00	Monitored
13	Andhra Pradesh	State Sector	AP EASTERN POWER DISTRIBUTION COMPANY LIMITED	JEGURUPADU CCPP PH I	235.40	235.40	Monitored
14	Assam	Central Sector	NORTH-EASTERN ELECTRIC POWER CORPORATION LIMITED	KATHALGURI CCPP	291.00	291.00	Monitored
15	Assam	Private Sector	DLF POWER SUPPLY COMPANY LIMITED	Adamtilla CCPP	24.50	24.50	Monitored
16	Assam	State Sector	ASSAM POWER GENERATION CORPORATION LIMITED	LAKWA GT	97.20	97.20	Monitored
17	Assam	State Sector	ASSAM POWER GENERATION CORPORATION LIMITED	LAKWA Replacement CCPP	69.76	69.76	Monitored
17	Assam	State Sector	ASSAM POWER GENERATION CORPORATION LIMITED	NAMRUP CCPP	161.25	161.25	Monitored
18	Delhi	Private Sector	NORTH DELHI POWER LIMITED	RITHALA CCPP	108.00	108.00	Monitored
19	Delhi	State Sector	INDRAPRASTHA POWER GENERATION COMPANY LIMITED	I.P.CCPP	270.00	270.00	Monitored
20	Delhi	State Sector	PRAGATI POWER CORPORATION LIMITED	PRAGATI CCPP	330.40	330.40	Monitored
21	Delhi	State Sector	PRAGATI POWER CORPORATION LIMITED	PRAGATI CCGT-III	1500.00	1500.00	Monitored
22	Goa	Private Sector	RELIANCE ENERGY TRADING (P) LIMITED	GOA CCPP (Liq.)	48.00	-	Liquid, Not monitored
23	Gujarat	Central Sector	NTPC LIMITED	GANDHAR CCPP	657.39	657.39	Monitored
24	Gujarat	Central Sector	NTPC LIMITED	KAWAS CCPP	656.20	656.20	Monitored
25	Gujarat	Private Sector	GUJARAT INDUSTRIES POWER COMPANY LIMITED	BARODA CCPP	160.00	160.00	Monitored
26	Gujarat	Private Sector	TORRENT POWER LTD	DGEN MEGA CCPP	1200.00	1200.00	Monitored
27	Gujarat	Private Sector	ESSAR POWER LIMITED	ESSAR CCPP	515.00	300.00	Monitored
28	Gujarat	Private Sector	CLP INDIA PRIVATE LTD.	PEGUTHAN CCPP	655.00	655.00	Monitored
29	Gujarat	Private Sector	SUGEN MEGA POWER PROJECT - TORRENT POWER LTD	SUGEN CCPP	1147.50	1147.50	Monitored
30	Gujarat	Private Sector	TORRENT POWER LTD	UNOSUGEN CCPP	382.50	382.50	Monitored
31	Gujarat	State Sector	GUJARAT STATE ELECTRICITY CORPORATION LIMITED	DHUVARAN CCPP	594.72	594.72	Monitored
32	Gujarat	State Sector	GUJARAT STATE ENERGY GENERATION LIMITED	HAZIRA CCPP	156.10	156.10	Monitored
33	Gujarat	State Sector	GUJARAT STATE ENERGY GENERATION LIMITED	HAZIRA CCPP EXT	351.00	351.00	Monitored
34	Gujarat	State Sector	GSPC - PIPAVAV POWER COMPANY LTD.	PIPAVAV CCPP	702.00	702.00	Monitored
35	Gujarat	State Sector	GUJARAT STATE ELECTRICITY CORPORATION LIMITED	UTRAN CCPP	374.00	374.00	Monitored
36	Haryana	Central Sector	NTPC LIMITED	FARIDABAD CCPP	431.59	431.59	Monitored
37	Jammu & Kashmir	State Sector	J&K STATE POWER DEVELOPMENT CORPORATION	PAMPORE GPS (Liq.)	175.00	-	Liquid

38	Kerala	Central Sector	NTPC LIMITED	R. GANDHI CCPP (Liq.)	359.58	-	Liquid
39	Kerala	Private Sector	BSES KERALA POWER LIMITED	COCHIN CCPP (Liq.)	174.00	-	Liquid
40	Maharashtra	Central Sector	RATNAGIRI GAS POWER PRIVATE LIMITED	RATNAGIRI CCPP	1967.08	1967.08	Monitored
41	Maharashtra	Private Sector	TATA POWER COMPANY LTD.	TROMBAY CCPP	180.00	180.00	Monitored
42	Maharashtra	Private Sector	PIONEER GAS POWER LTD.	MANGAON CCPP	388.00	388.00	Monitored
43	Maharashtra	State Sector	MAHARASHTRA STATE POWER GENERATION COMPANY LIMITED	URAN CCPP	672.00	672.00	Monitored
44	Puducherry	State Sector	PUDUCHERRY POWER CORPORATION LTD.	KARAIKAL CCPP	32.50	32.50	Monitored
45	Rajasthan	Central Sector	NTPC LIMITED	ANTA CCPP	419.33	419.33	Monitored
46	Rajasthan	State Sector	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	DHOLPUR CCPP	330.00	330.00	Monitored
47	Rajasthan	State Sector	RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LIMITED	RAMGARH CCPP	273.80	273.80	Monitored
48	Tamil Nadu	Private Sector	LANCO-TANJORE POWER LIMITED	KARUPPUR CCPP	119.80	119.80	Monitored
49	Tamil Nadu	Private Sector	PPN POWER GENERATION COMPANY PVT LTD.	P.NALLUR CCPP	330.50	330.50	Monitored
50	Tamil Nadu	Private Sector	PIONEER POWER LTD	VALANTARVY CCPP	52.80	52.80	Monitored
51	Tamil Nadu	State Sector	TAMIL NADU GENERATION & DISTRIBUTION CORP. LTD.	BASIN BRIDGE GT (Liq.)	120.00	-	Liquid
52	Tamil Nadu	State Sector	TAMIL NADU GENERATION & DISTRIBUTION CORP. LTD.	KOVIKALPAL CCPP	107.88	107.00	Monitored
53	Tamil Nadu	State Sector	TAMIL NADU GENERATION & DISTRIBUTION CORP. LTD.	KUTTALAM CCPP	100.00	100.00	Monitored
54	Tamil Nadu	State Sector	TAMIL NADU GENERATION & DISTRIBUTION CORP. LTD.	NARIMANAM GPS	10.00	-	Not monitored as capacity less than 25 MW
55	Tamil Nadu	State Sector	TAMIL NADU GENERATION & DISTRIBUTION CORP. LTD.	VALUTHUR CCPP	186.20	186.20	Monitored
56	Tripura	Central Sector	NORTH-EASTERN ELECTRIC POWER CORPORATION LIMITED	AGARTALA GT	135.00	135.00	Monitored
57	Tripura	Central Sector	OTPC LIMITED	TRIPURA CCPP	726.60	726.60	Monitored
58	Tripura	Central Sector	NORTH-EASTERN ELECTRIC POWER CORPORATION LIMITED	MONARCHAK CCPP	101.00	101.00	Monitored
59	Tripura	State Sector	TRIPURA STATE ELECTRICITY CORPORATION LIMITED	BARAMURA GT	58.50	58.50	Monitored
60	Tripura	State Sector	TRIPURA STATE ELECTRICITY CORPORATION LIMITED	ROKHIA GT	111.00	111.00	Monitored
61	Uttar Pradesh	Central Sector	NTPC LIMITED	AURAIYA CCPP	663.36	663.36	Monitored
62	Uttar Pradesh	Central Sector	NTPC LIMITED	DADRI CCPP	829.78	829.78	Monitored
63	Uttarakhand	Private Sector	GAMA INFRAPROP PVT. LTD.	GAMA CCPP	225.00	225.00	Monitored
64	Uttarakhand	Private Sector	SRAVANTHI ENERGY PVT LTD.	KASHIPUR CCPP	225.00	225.00	Monitored
65	West Bengal	State Sector	WEST BENGAL POWER DEVELOPMENT CORP. LIMITED	HALDIA GT (Liq.)	40.00	-	Liquid
66	West Bengal	State Sector	WEST BENGAL POWER DEVELOPMENT CORP. LIMITED	KASBA GT (Liq.)	40.00	-	Liquid
67	West Bengal	State Sector	WEST BENGAL POWER DEVELOPMENT CORP. LIMITED	SILIGURI GPS	20.00	-	Not monitored as capacity less than 25 MW

Note: 1. ESSAR CCPP out of 515 MW, 300 MW is monitored in gas report

2. 148 MW additional capacity is being monitored (list given below) as EGOM had allotted kgd6 gas for these plants but these plants are not in CEA Installed capacity.

	Andhra Pradesh			PCIL POWER AND HOLDINGS Ltd*		30.00	
	Andhra Pradesh			RVK ENERGY*		28.00	
	Andhra Pradesh			SILK ROAD SUGAR*		35.00	
	Andhra Pradesh			LVS POWER*		55.00	
					24937.22	23882.76	

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**ANNEXURE REFERRED TO IN PARTS (a) TO (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 325 TO BE ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING GAS BASED POWER PLANTS.**

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**STRANDED GAS BASED CAPACITY (ALL INDIA)**

Sl. No	Name of Project	Sector	Developer	Installed Capacity (MW)	State	Status
1	GAUTAMI CCPP	P	GVK Gautami Power Ltd	464	ANDHRA PRADESH	Commissioned
2	GMR - KAKINADA (Tanirvavi)	P	GMR Energy	220	ANDHRA PRADESH	Commissioned
3	JEGURUPADU CCPP	P	GVK Industries Ltd	220.5	ANDHRA PRADESH	Commissioned
4	KONASEEMA CCPP	P	Konaseema Power	445	ANDHRA PRADESH	Commissioned
5	KONDAPALLI EXTN CCPP .	P	Lanco Power	366	ANDHRA PRADESH	Commissioned
6	VEMAGIRI CCPP	P	GMR Energy	370	ANDHRA PRADESH	Commissioned
7	SRIBA INDUSTRIES	P	PCIL Power & Holdings Limited	30	ANDHRA PRADESH	Commissioned
8	RVK ENERGY	P	RVK Energy	28	ANDHRA PRADESH	Commissioned
9	SILK ROAD SUGAR	P	SILK ROAD SUGAR	35	ANDHRA PRADESH	Commissioned
10	LVS POWER	P	LVS Power	55	ANDHRA PRADESH	Commissioned
11	GMR VEMAGIRI EXP	P	GMR Energy	768	ANDHRA PRADESH	Commissioned
12	KONDAPALLI EXP ST-III	P	Lanco Power	742	ANDHRA PRADESH	Commissioned
13	PRAGATI CCGT-III	S	Pragati Power Corporation Ltd	750	DELHI	Commissioned
14	RITHALA CCPP	P	NDPL	108	DELHI	Commissioned
15	DHUVRAN CCPP(GSECL)	S	Gujarat State Electricity Corporation Ltd	112	GUJARAT	Commissioned
16	UTRAN CCPP(GSECL)	S	Gujarat State Electricity Corporation Ltd	374	GUJARAT	Commissioned
17	PIPAVAV CCPP	S	GSPC Pipavav Power Company Ltd	702	GUJARAT	Commissioned
18	DHUVRAN CCPP	S	Gujarat State Electricity Corporation Ltd	376.3	GUJARAT	Commissioned
19	HAZIRA CCPP EXT	S	Gujarat State Energy Generation Ltd	351	GUJARAT	Commissioned
20	VATWA CCPP*	P	Torrent Power	100	GUJARAT	Commissioned

21	ESSAR CCPP	P	Essar Power	300	GUJARAT	Commissioned
22	UNOSUGEN CCPP	P	Torrent Power	382.5	GUJARAT	Commissioned
23	DGEN Mega CCPP	P	Torrent Power	1200	GUJARAT	Commissioned
24	RATNAGIRI (RGPPL-DHABHOL)	C	NTPC	1967	MAHARASHTRA	Commissioned
25	CCGT BY PIONEER GAS POWER LTD	P	Pioneer Gas Power Ltd	388	MAHARASHTRA	Commissioned
26	GAMA INFRAPROP CCGT	P	Gama Infraprop	225	UTTARKHAND	Commissioned
27	KASHIPUR SRAVANTHI ST-I	P	Sravanthi Energy	225	UTTARKHAND	Commissioned
28	KASHIPUR SRAVANTHI ST-I&II	P	Sravanthi Energy	225	UTTARKHAND	Under Construction
29	SAMALKOT EXP	P	Reliance Infra	2400	ANDHRA PRADESH	Under Construction
30	CCGT BY PANDURANGA	P	Panduranga Energy	116	ANDHRA PRADESH	Under Construction
31	GAS ENGINE BY ASTHA	P	Astha Power	35	TELENGANA	Under Construction
32	BETA INFRATECH CCGT	P	Beta Infratech	225	UTTARKHAND	Under Construction
	TOTAL			14305		

C: Central Sector; S: State Sector; P: Private Sector;

\* Vatwa CCPP was retired in 2015-16

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
STARRED QUESTION NO.336  
ANSWERED ON 03.01.2019**

**HYDRO ELECTRIC PROJECTS**

**\*336. SHRI SANJAY DHOTRE:  
SHRI BHARTRUHARI MAHTAB:**

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

- (a) the number of Hydro Electric Projects 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, State and Project-wise along with the time by which such Projects are likely to be completed;**
- (c) the details of the cost escalation of such projects due to delay in construction, Project-wise along with the manner in which such escalated cost is likely to be arranged;**
- (d) the extent of shortage/loss of generation of power 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 such projects along with the achievements thereof?**

**A N S W E R**

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

**( SHRI R.K. SINGH )**

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

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**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.336 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING HYDRO ELECTRIC PROJECTS.**

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**(a) : As on 30<sup>th</sup> November, 2018, there were 37 under construction Hydro Electric Projects (above 25 MW) in the country, aggregating to 12178.50 MW. The details of these projects, State-wise, is given at Annex-I.**

**(b) : Out of these 37 under construction Hydro Electric Projects, 16 projects, aggregating to 5950 MW, are stalled / held up due to financial constraints and other reasons. The State-wise details of these projects along with the anticipated date of completion of these projects is given at Annex-II.**

**(c) : The project-wise details of cost overrun of such 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 Central Electricity Authority (CEA), the annual loss of energy generation from these stalled projects is about 18761 Million Units (MUs).**

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

- **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 (MoP) to identify the constraints areas and facilitate faster resolution of inter-ministerial and other outstanding issues.**
- **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.**

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**ANNEX REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 336 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING HYDRO ELECTRIC PROJECTS.**

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

(As on 30.11.2018)

Sl. No.	Name of Scheme (Executing Agency)	Sector	Installed Capacity (No. x MW)	Capacity Under Execution (MW)	Latest Commissioning
<b>Andhra Pradesh</b>					
1	Polavaram (APGENCO/Irrigation Dept., A.P.)	State	12x80	960.00	2021-23 (Mar'23)
<b>Sub-total: Andhra Pradesh</b>				960.00	
<b>Arunachal Pradesh</b>					
2	Kameng (NEEPCO)	Central	4x150	600.00	2019-20 (Jun,19)
3	Subansiri Lower (NHPC)	Central	8x250	2000.00	2022-23 *
4	### Gongri (Dirang Energy)	Private	2x72	144.00	2022-23 *
<b>Sub-total: Arunachal Pradesh</b>				2744.00	
<b>Himachal Pradesh</b>					
5	Parbati St. II (NHPC)	Central	4x200	800.00	2021-22 (Dec'21)
6	Uhi-III (BVPCL)	State	3x33.33	100.00	2018-19 (Mar'19)
7	Sawra Kuddu (HPPCL)	State	3x37	111.00	2019-20 (May'19)
8	Shongtong Karcham (HPPCL)	State	3x150	450.00	2024-25 (Apr'24)
9	Bajoli Holi (GMR)	Private	3x60	180.00	2019-20 (Aug'19)
10	Sorang (HSPCL)	Private	2x50	100.00	2020-21 *
11	Tangnu Romai (TRPG)	Private	2x22	44.00	2021-22 *
12	Tidong-I (Statkraft IPL)	Private	100.00	100.00	2021-22 (Oct'21)
<b>Sub-total: Himachal Pradesh</b>				1885.00	
<b>Jammu &amp; Kashmir</b>					
13	Pakal Dul (CVPPL)	Central	4x250	1000.00	2023-24
14	Parnai (JKSPDC)	State	3x12.5	37.50	2021-22 (Mar'22)
15	Lower Kalnai (JKSPDC)	State	2x24	48.00	2022-23 *
16	# Ratle (RHEPPL)	Private	4x205 + 1x30	850.00	2023-24 *
<b>Sub-total: Jammu &amp; Kashmir</b>				1935.50	
<b>Kerala</b>					
17	Pallivasal (KSEB)	State	2x30	60.00	2020-21 (Dec'20)
18	Thottiyar (KSEB)	State	1x30+1x10	40.00	2020-21
<b>Sub-total: Kerala</b>				100.00	
<b>Madhya Pradesh</b>					
19	## Maheshwar (SMHPCL)	Private	10x40	400.00	2020-21 *
<b>Sub-total: Madhya Pradesh</b>				400.00	
<b>Maharashtra</b>					
20	Koyna Left Bank (WRD,MAH)	State	2x40	80.00	2022-23 *
<b>Sub-total: Maharashtra</b>				80.00	
<b>Punjab</b>					
21	Shahpurkandi (PSPCL/Irrigation Deptt., Pb.)	State	3x33+3x33+1x8	206.00	2021-22 (Nov'21)
<b>Sub-total: Punjab</b>				206.00	

<b>Sikkim</b>					
22	Bhasmey (Gati Infrastructure)	Private	3x17	51.00	2021-22 *
23	Rangit-IV (JAL Power)	Private	3x40	120.00	2021-22 *
24	Rangit-II (Sikkim Hydro)	Private	2x33	66.00	2020-21 *
25	Rongnichu (Madhya Bharat)	Private	2x48	96.00	2019-20 (Mar'20)
26	Teesta St. VI (LANCO)	Private	4x125	500.00	2021-22 *
27	Panan (Himagiri)	Private	4x75	300.00	2022-23 *
<b>Sub-total: Sikkim</b>				<b>1133.00</b>	
<b>Tamil Nadu</b>					
28	Kundah Pumped Storage	State	1x125	125.00	2022-23
<b>Sub-total: Tamil Nadu</b>				<b>125.00</b>	
<b>Uttarakhand</b>					
29	Lata Tapovan (NTPC)	Central	3x57	171.00	2022-23 *
30	Tapovan Vishnugad (NTPC)	Central	4x130	520.00	2020-21 (Dec'20)
31	Tehri PSS (THDC)	Central	4x250	1000.00	2021-22 * (May'21)
32	Vishnugad Pipalkoti (THDC)	Central	4x111	444.00	2021-22 (Dec'21)
33	Naitwar Mori (SJVNL)	Central	2x30	60.00	2021-22 (Dec-21)
34	Vyasi (UJVNL)	State	2x60	120.00	2019-20 (Mar'20)
35	Phata Byung (LANCO)	Private	2x38	76.00	2021-22 *
36	Singoli Bhatwari (L&T)	Private	3x33	99.00	2019-20 (Jun'19)
<b>Sub-total: Uttarakhand</b>				<b>2490.00</b>	
<b>West Bengal</b>					
37	Rammam-III (NTPC)	Central	3x40	120.00	2021-22 (Feb'22)
<b>Sub-total: West Bengal</b>				<b>120.00</b>	
<b>Grand Total:</b>				<b>12178.50</b>	

\* Subject to restart of works

# Govt. of J&K, PDD have terminated PPA on 09.02.2017 and directed JKSPDC to take over the project.

## PFC as lead lender have acquired majority equity i.e. 51% in the SMHPCL w.e.f. 1<sup>st</sup> June, 2016. Matter Sub-judice.

### State Govt. terminated the agreement with developer for execution of project.

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**ANNEX REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 336 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING HYDRO ELECTRIC PROJECTS.**

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**Stalled Under Construction Hydro Electric Projects**

(As on 30.11.2018)

Sl. No.	Name of Project/ Executing Agency / Capacity (MW)	Sector	Reasons for stalling of construction	Likely Commissioning
<b>Arunachal Pradesh / Assam</b>				
1	Subansiri Lower NHPC Limited 8x250=2000 MW	Central	-Since 16.12.2011 works stopped due to agitation by various activists, fearing dam safety and downstream impacts of dam. -Case in Hon'ble NGT, Kolkata bench.	4 years after restart of works.
<b>Arunachal Pradesh</b>				
2	Gongri Dirang Energy Pvt. Ltd. 2x72=144 MW	Private	Works stopped since 2 <sup>nd</sup> week of April, 2016 due to fund flow problem with promoter / lenders. Works restarted in July-2016 but again stalled since October, 2016 due to fund constraints with developer.	3½ years after re-start of works.
<b>Himachal Pradesh</b>				
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.	3 years after the start of works.
4	Sorang Himachal Sorang Power Ltd. 2x50=100 MW	Private	Works are stalled since 18.11.2015 due to rupture in the surface penstock pipe when unit#2 was under trial run.	1 year after the re-start of works.
<b>Jammu &amp; Kashmir</b>				
5	Lower Kalnai JKSPDC 2x24=48 MW	State	Works on all fronts at Dam and Power House site are stalled since 24.01.2018 due to payment dispute with subcontractors and due to non-settlement of extension of time of the contract by the JKSPDC.	4 years after restart of works.
6	Ratle GVK Ratle Hydro Electric Project Pvt. Ltd. 4x205+1x30=850 MW	Private	There is no progress since 11 <sup>th</sup> July, 2014. (R&R issues, Local issues, Law & order problem, Indus Water Treaty etc.)	5 years after restart of works.

<b>Madhya Pradesh</b>				
<b>7</b>	<b>Maheshwar Shree Maheshwar Hydel Power Corporation Limited 10x40= 400 MW</b>	<b>Private</b>	<b>Works suspended since Nov-11 due to cash flow problem with developer.</b>	<b>1-½ year after restart of works.</b>
<b>Maharashtra</b>				
<b>8</b>	<b>Koyna Left Bank PSS WRD, Govt. of Maharashtra 2x40=80 MW</b>	<b>State</b>	<b>- Project stalled since July, 2015. The current expenditure on the project has already reached to almost original administrative approved cost level hence expenditure on the project is stopped and project work is processing at very slow rate. Revised cost is under approval by State Govt.</b>	<b>4 years after restart of works.</b>
<b>Sikkim</b>				
<b>9</b>	<b>Teesta VI Lanco Teesta Hydro Power Ltd. 4x125=500 MW</b>	<b>Private</b>	<b>There is almost no progress since April, 2014. (Funds Constraints)</b>	<b>3 years after restart of works.</b>
<b>10</b>	<b>Rangit-IV Jal Power Corp. Ltd. (JPCL) 3x40= 120 MW</b>	<b>Private</b>	<b>Works stopped since Oct-13 due to funds constraints with developer.</b>	<b>3½ years after the re-start of works.</b>
<b>11</b>	<b>Panan Himagiri Hydro Energy Pvt Ltd. 4x75 = 300 MW</b>	<b>Private</b>	<b>Major Civil Works could not start since April, 2014 for want of NGT Clearance. NOC from NWLB.</b>	<b>4½ years after the start of works.</b>
<b>12</b>	<b>Rangit II Sikkim Hydro Pvt. Ltd. 2x33=66 MW</b>	<b>Private</b>	<b>Works are stalled since December, 2017 due to funds constraints with developer</b>	<b>2½ years after the start of works.</b>
<b>13</b>	<b>Bhasmey Gati Infrastructure 2x25.5=51 MW</b>	<b>Private</b>	<b>Works are stalled since Sept., 2016 due to funds constraints with developer</b>	<b>3 years after re-start of works.</b>
<b>Uttarakhand</b>				
<b>14</b>	<b>Lata Tapovan, NTPC Limited 3x57=171 MW</b>	<b>Central</b>	<b>Construction work stopped vide Hon'ble Supreme Court order dated 7.5.14.</b>	<b>4 years after restart of works.</b>
<b>15</b>	<b>Tehri PSS, THDC Limited 4x250=1000 MW</b>	<b>Central</b>	<b>Construction work stopped since April, 2018 due to funds constraints with Contractor (HCC).</b>	<b>3 years after restart of works.</b>
<b>16</b>	<b>Phata Byung Lanco 2x38=76 MW</b>	<b>Private</b>	<b>Works stalled since July, 2017 due to Financial crunch with the contractor / developer.</b>	<b>3 years after re-start of works.</b>

**Total = 16 Nos. (5950 MW)**

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**ANNEX REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 336 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING HYDRO ELECTRIC PROJECTS.**

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

(As on 30.11.2018)

Sl. No	Project Name / Installed Capacity / Executing Agency	Sector	Unit No.	Capacity (MW)	Original Commissioning Schedule	Anticipated Commissioning Schedule	Original Cost (Rs. in Crores)	Latest Cost/ Anticipated Completion Cost (Rs. in Crores)
1	2	3	4	5	6	7	9	10
	<b>Arunachal Pradesh / Assam</b>							
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	2022-23 2022-23 2022-23 2022-23 2022-23 2022-23 2022-23 2022-23 (subject to re-start of works, 4 years)	6285.33 (12/02)	18559.49 (04/17)
	<b>Arunachal Pradesh</b>							
2	Gongri 2x72= 144 MW Dirang Energy (P)Ltd	Private	1 2	72 72	2016-17 2016-17	2022-23 2022-23 (subject to re-start of works, 3.5 years)	1436.27 (05/2012)	1535.91 (10/2016)
	<b>Himachal Pradesh</b>							
3	Tangnu Romai-I (2x22 = 44 MW) TRPGPL	Private	1 2	22 22	2014-15 2014-15	2021-22 2021-22 (subject to re-start of works, 3 years)	255.00 (01/2007)	562.97 (01/2017)
4	Sorang (2x50 = 100 MW), HSPPL	Private	1 2	50 50	2011-12 2011-12	2020-21 2020-21 (subject to re-start of works, 2 years)	586.00 (04/2005)	586.00 (Under revision)

	<b>Jammu &amp; Kashmir</b>							
<b>5</b>	<b>Lower Kalnai 2x24= 48 MW JKSPDC</b>	<b>State</b>	<b>1</b> <b>2</b>	<b>24</b> <b>24</b>	<b>2017-18</b> <b>2017-18</b>	<b>2022-23</b> <b>2022-23</b> <b>(subject to re-start of works, 4 years)</b>	<b>576.87</b> <b>(12/2012)</b>	<b>576.87</b> <b>(12/2012)</b>
<b>6</b>	<b>Ratle (4x205+1x30) = 850 MW Ratle HEP Pvt .Ltd.</b>	<b>Private</b>	<b>1</b> <b>2</b> <b>3</b> <b>4</b> <b>5</b>	<b>205</b> <b>205</b> <b>205</b> <b>205</b> <b>30</b>	<b>2017-18</b> <b>2017-18</b> <b>2017-18</b> <b>2017-18</b> <b>2017-18</b>	<b>2023-24</b> <b>2023-24</b> <b>2023-24</b> <b>2023-24</b> <b>2023-24</b> <b>(subject to re-start of works, 5 years)</b>	<b>5517.02</b> <b>(03/2012)</b>	<b>6257.00</b> <b>(09/2013)</b>
	<b>Maharashtra</b>							
<b>7</b>	<b>Koyna Left Bank PSS 2x40 = 80 MW WRD, Maha</b>	<b>State</b>	<b>1</b> <b>2</b>	<b>40</b> <b>40</b>	<b>2014-15</b> <b>2014-15</b>	<b>2022-23</b> <b>2022-23</b> <b>(subject to re- start of works, 4 years)</b>	<b>245.02</b> <b>(1999)</b>	<b>1494.94</b> <b>(2014)</b>
	<b>Madhya Pradesh</b>							
<b>8</b>	<b>Maheshwar (10x40 = 400 MW) SMHPCL</b>	<b>Private</b>	<b>1</b> <b>2</b> <b>3</b> <b>4</b> <b>5</b> <b>6</b> <b>7</b> <b>8</b> <b>9</b> <b>10</b>	<b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b> <b>40</b>	<b>2001-02</b> <b>2001-02</b> <b>2001-02</b> <b>2001-02</b> <b>2001-02</b> <b>2001-02</b> <b>2001-02</b> <b>2001-02</b> <b>2001-02</b> <b>2001-02</b>	<b>2020-21</b> <b>(subject to re-start of works, 1.5 years)</b>	<b>1569.27</b> <b>(96-97)</b>	<b>8121.00</b> <b>(2016-17)</b>
	<b>Sikkim</b>							
<b>9</b>	<b>Teesta Stage VI (4x125 = 500 MW) Lanco Energy Pvt. Ltd.</b>	<b>Private</b>	<b>1</b> <b>2</b> <b>3</b> <b>4</b>	<b>125</b> <b>125</b> <b>125</b> <b>125</b>	<b>2012-13</b> <b>2012-13</b> <b>2012-13</b> <b>2012-13</b>	<b>2021-22</b> <b>2021-22</b> <b>2021-22</b> <b>2021-22</b> <b>(subject to re-start of works, 3 years)</b>	<b>3283.08</b> <b>(2008)</b>	<b>5748.00</b> <b>(07/2018)</b>
<b>10</b>	<b>Rangit-IV HEProject (3X40 = 120 MW) JPCL</b>	<b>Private</b>	<b>1</b> <b>2</b> <b>3</b>	<b>40</b> <b>40</b> <b>40</b>	<b>2011-12</b> <b>2011-12</b> <b>2011-12</b>	<b>2021-22</b> <b>2021-22</b> <b>2021-22</b> <b>(subject to re-start of works, 3.5 years)</b>	<b>726.17</b> <b>(2011-12)</b>	<b>1692.60</b> <b>(06/2016)</b>

11	Panan 4x75= 300 MW Himagiri Hydro Energy Pvt. Ltd.	Private	1	75	2018-19	2022-23	1833.05 (2009)	2516.00 (09/2016)
			2	75	2018-19	2022-23		
			3	75	2018-19	2022-23		
			4	75	2018-19	2022-23 (subject to active start of works, 4 years)		
12	Bhasmey 2x25.5=51 MW Gati Infrastructure	Private	1	25.5	2012-13	2021-22	408.50 (2012-13)	690.30
			2	25.5	2012-13	2021-22 (subject to re-start of works, 3 years)		
13	Rangit-II 2x33=66 MW Sikkim Hydro Power Ltd.	Private	1	33	2015-16	2020-21	496.44	496.44 (Under revision)
			2	33	2015-16	2020-21 (subject to re-start of works, 2.5 years)		
Uttarakhand								
14	Lata Tapovan (3x57 = 171 MW) NTPC	Central	1	57	2017-18	2022-23	1527.00 (07/2012)	1801.07 (Under revision)
			2	57	2017-18	2022-23		
			3	57	2017-18 (Aug'17)	2022-23 (subject to re-start of works, 4 years)		
15	Tehri PSS 4x250=1000 MW THDC	Central	1	250	2010-11	2021-22	1657.60 (12/2005)	3939.11
			2	250	2010-11	2021-22		
			3	250	2010-11	2021-22		
			4	250	2010-11	2021-22 (subject to re-start of works )		
16	Phata Byung 2x38=76 MW Lanco	Private	1	38	2012-13	2021-22	520.00 (2013-14)	1225.53
			2	38	2012-13	2021-22 (subject to re-start of works, 3 years)		
<b>Total</b>							<b>26922.62</b>	<b>55803.27</b>

**Note: Latest Cost/ Anticipated Cost of the project is as per data submitted by the project authorities to CEA.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
STARRED QUESTION NO.337  
ANSWERED ON 03.01.2019**

**POWER GENERATION**

**†\*337. SHRI MANSHANKAR NINAMA:**

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

- (a) the quantum of total power being generated in the country as on date, source- wise;**
- (b) the State-wise details of power generation capacity, demand, supply and difference between demand and supply in each State;**
- (c) the details of the States which are self-sufficient in power supply and the States with inadequate power supply along with the quantum of their power supply source-wise; and**
- (d) the total quantum of power generated through various power projects of the States during the financial years 2014-15, 2015-16 and 2016-17 along with the quantum of power given to the States out of the total power generated by them?**

**A N S W E R**

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

**( SHRI R.K. SINGH )**

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

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## **STATEMENT**

**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO.337 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING POWER GENERATION.**

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**(a) to (c) : The details of state wise, source wise installed generation capacity and power generation from conventional sources during current year, 2018-19 (upto November, 2018) is given at Annex-I.**

**The state wise details of installed capacity and power generation from Renewable Sources is given at Annex-II.**

**The state wise details of power supply position indicating electricity demand and supply during the current year 2018-19 (upto November, 2018) is given at Annex-III.**

**(d) : The quantum of power generated through various power projects supplying power to the States during the financial years 2014-15, 2015-16 and 2016-17 is given at Annex-IV. The Power generated through various power projects of the States is being consumed by the state itself to meet their power requirement.**

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**ANNEX REFERRED TO IN PARTS (a) TO (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 337 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING POWER GENERATION.**

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**State wise and Source wise generation during the current year, 2018-19 (up to November, 2018)**

State	CATEGORY	Installed Capacity as on 30.11.2018 MW	Generation (Million Unit)  2018-19 (upto Nov. 18)*
<b>BBMB</b>	<b>HYDRO</b>	<b>2920.3</b>	<b>7070.13</b>
<b>BBMB Total</b>		<b>2920.3</b>	<b>7070.13</b>
<b>DELHI</b>	<b>THERMAL</b>	<b>2343.4</b>	<b>5671.99</b>
<b>DELHI Total</b>		<b>2343.4</b>	<b>5671.99</b>
<b>HARYANA</b>	<b>THERMAL</b>	<b>5971.59</b>	<b>16823.39</b>
<b>HARYANA Total</b>		<b>5971.59</b>	<b>16823.39</b>
<b>HIMACHAL PRADESH</b>	<b>HYDRO</b>	<b>6934.02</b>	<b>23043.54</b>
<b>HIMACHAL PRADESH Total</b>		<b>6934.02</b>	<b>23043.54</b>
<b>JAMMU AND KASHMIR</b>	<b>THERMAL</b>	<b>175</b>	<b>0</b>
	<b>HYDRO</b>	<b>3449</b>	<b>13246.42</b>
<b>JAMMU AND KASHMIR Total</b>		<b>3624</b>	<b>13246.42</b>
<b>PUNJAB</b>	<b>THERMAL</b>	<b>5680</b>	<b>18691.03</b>
	<b>HYDRO</b>	<b>1051</b>	<b>2485.76</b>
<b>PUNJAB Total</b>		<b>6731</b>	<b>21176.79</b>
<b>RAJASTHAN</b>	<b>THERMAL</b>	<b>9523.13</b>	<b>31503.46</b>
	<b>NUCLEAR</b>	<b>1180</b>	<b>5383.38</b>
	<b>HYDRO</b>	<b>411</b>	<b>204.99</b>
<b>RAJASTHAN Total</b>		<b>11114.13</b>	<b>37091.83</b>
<b>UTTAR PRADESH</b>	<b>THERMAL</b>	<b>23242.14</b>	<b>82027.56</b>
	<b>NUCLEAR</b>	<b>440</b>	<b>2185.72</b>
	<b>HYDRO</b>	<b>501.6</b>	<b>689.05</b>
<b>UTTAR PRADESH Total</b>		<b>24183.74</b>	<b>84902.33</b>
<b>UTTARAKHAND</b>	<b>THERMAL</b>	<b>450</b>	<b>798.7</b>
	<b>HYDRO</b>	<b>3756.35</b>	<b>10669.62</b>
<b>UTTARAKHAND Total</b>		<b>4206.35</b>	<b>11468.32</b>
<b>CHHATTISGARH</b>	<b>THERMAL</b>	<b>22968</b>	<b>79208.32</b>
	<b>HYDRO</b>	<b>120</b>	<b>216.02</b>
<b>CHHATTISGARH Total</b>		<b>23088</b>	<b>79424.34</b>
<b>GOA</b>	<b>THERMAL</b>	<b>48</b>	<b>0</b>
<b>GOA Total</b>		<b>48</b>	<b>0</b>
<b>GUJARAT</b>	<b>THERMAL</b>	<b>23043.41</b>	<b>60391.86</b>
	<b>NUCLEAR</b>	<b>440</b>	<b>343.92</b>
	<b>HYDRO</b>	<b>1990</b>	<b>590.66</b>
<b>GUJARAT Total</b>		<b>25473.41</b>	<b>61326.44</b>
<b>MADHYA PRADESH</b>	<b>THERMAL</b>	<b>18325</b>	<b>78125.85</b>
	<b>HYDRO</b>	<b>2395</b>	<b>2239.12</b>
<b>MADHYA PRADESH Total</b>		<b>20720</b>	<b>80364.97</b>
<b>MAHARASHTRA</b>	<b>THERMAL</b>	<b>28433.08</b>	<b>81951.64</b>
	<b>NUCLEAR</b>	<b>1400</b>	<b>7118.45</b>
	<b>HYDRO</b>	<b>2887</b>	<b>3672.66</b>
<b>MAHARASHTRA Total</b>		<b>32720.08</b>	<b>92742.75</b>
<b>ANDHRA PRADESH</b>	<b>THERMAL</b>	<b>16507.2</b>	<b>41398.12</b>
	<b>HYDRO</b>	<b>1150</b>	<b>952.75</b>
<b>ANDHRA PRADESH Total</b>		<b>17657.2</b>	<b>42350.87</b>
<b>KARNATAKA</b>	<b>THERMAL</b>	<b>9633.12</b>	<b>18696.76</b>
	<b>NUCLEAR</b>	<b>880</b>	<b>4969.27</b>
	<b>HYDRO</b>	<b>3657.4</b>	<b>7576.88</b>
<b>KARNATAKA Total</b>		<b>14170.52</b>	<b>31242.91</b>

<b>KERALA</b>	<b>THERMAL</b>	<b>693.54</b>	<b>1.26</b>
	<b>HYDRO</b>	<b>1881.5</b>	<b>5640.69</b>
<b>KERALA Total</b>		<b>2575.04</b>	<b>5641.95</b>
<b>PUDUCHERRY</b>	<b>THERMAL</b>	<b>32.5</b>	<b>166.87</b>
<b>PUDUCHERRY Total</b>		<b>32.5</b>	<b>166.87</b>
<b>TAMIL NADU</b>	<b>THERMAL</b>	<b>14188.88</b>	<b>46144.38</b>
	<b>NUCLEAR</b>	<b>2440</b>	<b>5268.4</b>
	<b>HYDRO</b>	<b>2203.2</b>	<b>3958.72</b>
<b>TAMIL NADU Total</b>		<b>18832.08</b>	<b>55371.5</b>
<b>TELANGANA</b>	<b>THERMAL</b>	<b>6682.5</b>	<b>31806.39</b>
	<b>HYDRO</b>	<b>2865.6</b>	<b>2132.27</b>
<b>TELANGANA Total</b>		<b>9548.1</b>	<b>33938.66</b>
<b>ANDAMAN NICOBAR</b>	<b>THERMAL</b>	<b>40.05</b>	<b>97.38</b>
<b>ANDAMAN NICOBAR Total</b>		<b>40.05</b>	<b>97.38</b>
<b>BIHAR</b>	<b>THERMAL</b>	<b>5480</b>	<b>20656.18</b>
<b>BIHAR Total</b>		<b>5480</b>	<b>20656.18</b>
<b>DVC</b>	<b>THERMAL</b>	<b>7090</b>	<b>23775.6</b>
	<b>HYDRO</b>	<b>143.2</b>	<b>165.36</b>
<b>DVC Total</b>		<b>7233.2</b>	<b>23940.96</b>
<b>JHARKHAND</b>	<b>THERMAL</b>	<b>2250</b>	<b>9034.54</b>
	<b>HYDRO</b>	<b>130</b>	<b>102.71</b>
<b>JHARKHAND Total</b>		<b>2380</b>	<b>9137.25</b>
<b>ORISSA</b>	<b>THERMAL</b>	<b>7680</b>	<b>26360.35</b>
	<b>HYDRO</b>	<b>2142.25</b>	<b>5103.97</b>
<b>ORISSA Total</b>		<b>9822.25</b>	<b>31464.32</b>
<b>SIKKIM</b>	<b>HYDRO</b>	<b>2169</b>	<b>7756.49</b>
<b>SIKKIM Total</b>		<b>2169</b>	<b>7756.49</b>
<b>WEST BENGAL</b>	<b>THERMAL</b>	<b>9605</b>	<b>34263.99</b>
	<b>HYDRO</b>	<b>1278</b>	<b>2244.37</b>
<b>WEST BENGAL Total</b>		<b>10883</b>	<b>36508.36</b>
<b>ARUNACHAL PRADESH</b>	<b>HYDRO</b>	<b>515</b>	<b>1284.4</b>
<b>ARUNACHAL PRADESH Total</b>		<b>515</b>	<b>1284.4</b>
<b>ASSAM</b>	<b>THERMAL</b>	<b>1119.21</b>	<b>3563.87</b>
	<b>HYDRO</b>	<b>325</b>	<b>1267.59</b>
<b>ASSAM Total</b>		<b>1444.21</b>	<b>4831.46</b>
<b>MANIPUR</b>	<b>THERMAL</b>	<b>36</b>	<b>0</b>
	<b>HYDRO</b>	<b>105</b>	<b>508.27</b>
<b>MANIPUR Total</b>		<b>141</b>	<b>508.27</b>
<b>MEGHALAYA</b>	<b>HYDRO</b>	<b>372</b>	<b>985.9</b>
<b>MEGHALAYA Total</b>		<b>372</b>	<b>985.9</b>
<b>MIZORAM</b>	<b>HYDRO</b>	<b>60</b>	<b>137.32</b>
<b>MIZORAM Total</b>		<b>60</b>	<b>137.32</b>
<b>NAGALAND</b>	<b>HYDRO</b>	<b>75</b>	<b>215.62</b>
<b>NAGALAND Total</b>		<b>75</b>	<b>215.62</b>
<b>TRIPURA</b>	<b>THERMAL</b>	<b>1132.1</b>	<b>4258.9</b>
<b>TRIPURA Total</b>		<b>1132.1</b>	<b>4258.9</b>
<b>Bhutan (IMP)</b>	<b>Bhutan (IMP) Total</b>		<b>4353.62</b>
<b>Bhutan (IMP) Total</b>			<b>4353.62</b>
<b>Grand Total</b>		<b>274640.27</b>	<b>849202.43</b>

**\* PROVISIONAL BASED ON ACTUAL-CUM-ASSESSMENT**

**Note. 1. Gross Generation from conventional sources (Thermal, Hydro and Nuclear) stations of 25 MW and above only.**

**2. Figures given above indicate gross generation of all power stations (Central, State & Private Sector) located geographically in the respective State/UT.**

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**ANNEX REFERRED TO IN PARTS (a) TO (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 337 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING POWER GENERATION.**

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**Installed Capacity and Generation Performance from Renewable Sources**

Sl. No.	Region / State	Installed Capacity as on 30-November, 2018	Generation during April-November, 2018
		(MW)	(MU)
1	Chandigarh	30	10.15
2	Delhi	122	198.43
3	Haryana	412	417.76
4	Himachal Pradesh	862	1,989.26
5	Jammu & Kashmir	189	242.03
6	Punjab	1,282	1,544.73
7	Rajasthan	7,425	7,912.68
8	Uttar Pradesh	2,722	2,554.50
9	Uttarakhand	590	754.69
	<b>Northern Region</b>	<b>13,634</b>	<b>15,624.22</b>
10	Chhattisgarh	535	674.57
11	Gujarat	7,544	9,670.07
12	Madhya Pradesh	4,166	5,406.34
13	Maharashtra	8,759	9,811.79
14	Daman & Diu	13	3.41
15	D.N.Haveli	5	11.60
16	Goa	1	
	<b>Western Region</b>	<b>21,024</b>	<b>25,577.78</b>
17	Andhra Pradesh	7,229	10,602.81
18	Telangana	3,801	4,503.35
19	Karnataka	12,912	14,734.92
20	Kerala	413	571.67
21	Tamil Nadu	11,614	14,073.94
22	Puducherry	2	1.66
23	Lakshadweep	1	0.83
	<b>Southern Region</b>	<b>35,972</b>	<b>44,489.17</b>
24	Bihar	326	198.25
25	DVC	0	1.81
26	Jharkhand	36	12.52
27	Odisha	233	422.90
28	West Bengal	436	1,093.37
29	Sikkim	52	22.32
30	Andaman- Nicobar	12	15.88
	<b>Eastern Region</b>	<b>1,095</b>	<b>1,767.05</b>
31	Arunachal Pradesh	112	1.12
32	Assam	47	14.34
33	Manipur	8	0.73
34	Meghalaya	31	37.56
35	Mizoram	37	25.26
36	Nagaland	32	75.20
37	Tripura	21	27.32
	<b>North-Eastern</b>	<b>287</b>	<b>181.53</b>
38	Others		1,305.58
	<b>All India</b>	<b>72,013</b>	<b>88,945.34</b>

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**ANNEX REFERRED TO IN PARTS (a) TO (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 337 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING POWER GENERATION.**

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**Power Supply Position for 2018-19 (Provisional)**

State / System / Region	Energy				Peak			
	April, 2018 - November,2018				April, 2018 - November,2018			
	Energy Requirement ( MU )	Energy Supplied ( MU )	Energy not Supplied ( MU )	( % )	Peak Demand ( MW )	Peak Met ( MW )	Demand not Met ( MW )	( % )
Chandigarh	1,147	1,147	0	0	369	369	0	0
Delhi	24,375	24,361	15	0.1	7,016	7,016	0	0.0
Haryana	38,786	38,786	0	0.0	10,270	10,270	0	0.0
Himachal Pradesh	6,483	6,276	207	3.2	1,605	1,547	58	3.6
Jammu & Kashmir	12,479	10,083	2,396	19.2	2,951	2,361	590	20.0
Punjab	42,016	42,003	13	0.0	12,638	12,638	0	0.0
Rajasthan	52,067	51,907	160	0.3	11,809	11,809	0	0.0
Uttar Pradesh	83,883	83,148	735	0.9	20,498	20,062	436	2.1
Uttarakhand	9,390	9,303	87	0.9	2,143	2,143	0	0.0
<b>Northern Region</b>	<b>270,628</b>	<b>267,015</b>	<b>3,612</b>	<b>1.3</b>	<b>63,166</b>	<b>61,726</b>	<b>1,440</b>	<b>2.3</b>
Chhattisgarh	18,531	18,502	29	0.2	4,416	4,270	146	3.3
Gujarat	79,312	79,297	15	0.0	17,053	16,963	90	0.5
Madhya Pradesh	48,046	48,044	2	0.0	12,425	12,416	9	0.1
Maharashtra	108,546	108,410	136	0.1	23,864	23,254	610	2.6
Daman & Diu	1,717	1,717	0	0.0	357	356	1	0.2
Dadar Nagar Haveli	4,169	4,169	0	0.0	816	815	1	0.1
Goa	2,860	2,857	3	0.1	596	596	0	0.0
<b>Western Region</b>	<b>263,180</b>	<b>262,996</b>	<b>184</b>	<b>0.1</b>	<b>56,675</b>	<b>55,821</b>	<b>853</b>	<b>1.5</b>
Andhra Pradesh	42,725	42,677	49	0.1	9,459	9,453	6	0.1
Telangana	43,612	43,560	52	0.1	10,815	10,815	0	0.0
Karnataka	45,227	45,169	58	0.1	11,185	11,185	0	0.0
Kerala	16,335	16,230	105	0.6	4,050	3,997	53	1.3
Tamil Nadu	73,534	73,448	86	0.1	15,029	14,981	47	0.3
Puducherry	1,855	1,846	8	0.4	420	400	19	4.6
Lakshadweep	31	31	0	0	8	8	0	0
<b>Southern Region</b>	<b>223,289</b>	<b>222,930</b>	<b>359</b>	<b>0.2</b>	<b>45,946</b>	<b>45,684</b>	<b>262</b>	<b>0.6</b>
Bihar	21,247	21,041	206	1.0	5,115	5,084	31	0.6
DVC	14,955	14,646	309	2.1	2,893	2,874	19	0.7
Jharkhand	5,790	5,675	115	2.0	1,339	1,284	55	4.1
Odisha	22,867	22,837	30	0.1	5,357	5,357	0	0.0
West Bengal	37,123	36,981	141	0.4	9,130	9,123	7	0.1
Sikkim	324	323	0	0.1	108	108	0	0.0
Andaman- Nicobar	231	215	15	7	58	54	4	7
<b>Eastern Region</b>	<b>102,306</b>	<b>101,503</b>	<b>802</b>	<b>0.8</b>	<b>23,141</b>	<b>22,733</b>	<b>408</b>	<b>1.8</b>
Arunachal Pradesh	568	561	7	1.3	138	133	5	3.7
Assam	6,846	6,579	267	3.9	1,865	1,809	56	3.0
Manipur	562	554	8	1.4	193	189	4	2.0
Meghalaya	1,203	1,202	1	0.0	371	368	2	0.7
Mizoram	430	424	6	1.4	103	102	1	0.6
Nagaland	602	535	67	11.1	156	138	18	11.7
Tripura*	1,195	1,176	20	1.7	298	293	5	1.7
<b>North-Eastern Region</b>	<b>11,407</b>	<b>11,032</b>	<b>375</b>	<b>3.3</b>	<b>2,967</b>	<b>2,850</b>	<b>117</b>	<b>3.9</b>
<b>All India</b>	<b>870,809</b>	<b>865,476</b>	<b>5,334</b>	<b>0.6</b>	<b>177,022</b>	<b>175,528</b>	<b>1,494</b>	<b>0.8</b>

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

\* Excludes the supply to Bangladesh.

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**ANNEX REFERRED TO IN PART (d) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 337 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING POWER GENERATION.**

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**State wise and Station wise generation during 2014-15 to 2016-17**

State	NAME OF THE STATION	Generation (Million Unit)		
		2016-17	2015-16	2014-15
<b>BBMB</b>	<b>BHAKRA H P S</b>	<b>5168.27</b>	<b>5892.62</b>	<b>5268.15</b>
	<b>DEHAR H P S</b>	<b>3184.68</b>	<b>3339.14</b>	<b>3151.06</b>
	<b>GANGUWAL HPS</b>	<b>416.54</b>	<b>421.93</b>	<b>422.89</b>
	<b>KOTLA HPS</b>	<b>430.58</b>	<b>430.45</b>	<b>430.32</b>
	<b>PONG H P S</b>	<b>1369.93</b>	<b>1734.76</b>	<b>1327.36</b>
<b>BBMB Total</b>		<b>10570</b>	<b>11818.9</b>	<b>10599.78</b>
<b>DELHI</b>	<b>BADARPUR TPS</b>	<b>1704.85</b>	<b>2241.44</b>	<b>3281.21</b>
	<b>I.P.CCPP</b>	<b>695.52</b>	<b>467.17</b>	<b>936.07</b>
	<b>PRAGATI CCGT-III</b>	<b>2047.49</b>	<b>1911.55</b>	<b>2235.07</b>
	<b>PRAGATI CCPP</b>	<b>1805.4</b>	<b>1539.34</b>	<b>1846.94</b>
	<b>RAJGHAT TPS</b>	<b>0</b>	<b>46.6</b>	<b>423.54</b>
	<b>RITHALA CCPP</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>DELHI Total</b>		<b>6253.26</b>	<b>6206.1</b>	<b>8722.83</b>
<b>HARYANA</b>	<b>FARIDABAD CCPP</b>	<b>1034.05</b>	<b>1100.64</b>	<b>1571.43</b>
	<b>INDIRA GANDHI STPP</b>	<b>5473.77</b>	<b>5798.2</b>	<b>7022.93</b>
	<b>MAHATMA GANDHI TPS</b>	<b>2895.7</b>	<b>4952.22</b>	<b>6537.48</b>
	<b>PANIPAT TPS</b>	<b>2205.93</b>	<b>1704.89</b>	<b>4403.69</b>
	<b>RAJIV GANDHI TPS</b>	<b>3856.75</b>	<b>4634.49</b>	<b>5697.39</b>
	<b>YAMUNA NAGAR TPS</b>	<b>3424.24</b>	<b>4056.7</b>	<b>3515.69</b>
<b>HARYANA Total</b>		<b>18890.44</b>	<b>22247.14</b>	<b>28748.61</b>
<b>HIMACHAL PRADESH</b>	<b>ALLAIN DUHANGAN HPS</b>	<b>679.12</b>	<b>724.96</b>	<b>677.78</b>
	<b>BAIRA SIUL HPS</b>	<b>669.33</b>	<b>745.59</b>	<b>796.67</b>
	<b>BASPA HPS</b>	<b>1342.75</b>	<b>1304.5</b>	<b>1252.58</b>
	<b>BASSI HPS</b>	<b>297.76</b>	<b>315.9</b>	<b>295.01</b>
	<b>BUDHIL HPS</b>	<b>261.25</b>	<b>287.85</b>	<b>235.83</b>
	<b>CHAMERA- I HPS</b>	<b>2224.39</b>	<b>2623.7</b>	<b>2551.8</b>
	<b>CHAMERA- II HPS</b>	<b>1443.93</b>	<b>1523.98</b>	<b>1498.71</b>
	<b>CHAMERA-III HPS</b>	<b>917.09</b>	<b>1043.62</b>	<b>1020.78</b>
	<b>CHANJU-I HPS</b>	<b>11.29</b>		
	<b>GIRI BATA HPS</b>	<b>140.6</b>	<b>189.06</b>	<b>199.82</b>
	<b>KARCHAM WANGTOO HPS</b>	<b>4372.29</b>	<b>4726.32</b>	<b>4240.43</b>
	<b>KASHANG INTEGRATED HPS</b>	<b>56.09</b>		
	<b>KOLDAM HPS</b>	<b>3225.16</b>	<b>2308.6</b>	<b>0.25</b>
	<b>LARJI HPS</b>	<b>611.66</b>	<b>656.85</b>	<b>609.69</b>
	<b>MALANA HPS</b>	<b>353.79</b>	<b>341.94</b>	<b>328.43</b>
	<b>MALANA-II HPS</b>	<b>366.54</b>	<b>354.42</b>	<b>250.41</b>
	<b>NATHPA JHAKRI HPS</b>	<b>7050.64</b>	<b>7313.79</b>	<b>6837.5</b>
	<b>PARBATI-III HPS</b>	<b>682.48</b>	<b>643</b>	<b>660.78</b>
	<b>RAMPUR HPS</b>	<b>1960.42</b>	<b>1983.41</b>	<b>1317.57</b>
	<b>SAINJ HPS</b>	<b>0</b>		
<b>SANJAY HPS</b>	<b>187.4</b>	<b>0</b>	<b>545.09</b>	
<b>HIMACHAL PRADESH Total</b>		<b>26853.98</b>	<b>27087.49</b>	<b>23319.13</b>
<b>JAMMU AND KASHMIR</b>	<b>BAGLIHAR HPS</b>	<b>2184.56</b>	<b>3000.14</b>	<b>2939.91</b>
	<b>BAGLIHAR II HPS</b>	<b>1758.98</b>	<b>55.6</b>	
	<b>CHUTAK HPS</b>	<b>44.12</b>	<b>36.91</b>	<b>35.5</b>
	<b>DULHASTI HPS</b>	<b>2280.02</b>	<b>2361.48</b>	<b>2176.43</b>
	<b>KISHENGANGA HPS</b>	<b>0</b>		
	<b>LOWER JHELM HPS</b>	<b>483.15</b>	<b>666.21</b>	<b>600.87</b>
	<b>NIMMO BAZGO HPS</b>	<b>95.21</b>	<b>90.51</b>	<b>75.55</b>
	<b>PAMPURE GPS (Liq.)</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>SALAL HPS</b>	<b>3423.09</b>	<b>3591.36</b>	<b>3491.58</b>
	<b>SEWA-II HPS</b>	<b>470.61</b>	<b>597.07</b>	<b>597.06</b>

	<b>UPPER SINDH-II HPS</b>	<b>362.91</b>	<b>258.35</b>	<b>303.32</b>
	<b>URI-I HPS</b>	<b>2803.1</b>	<b>3282.97</b>	<b>3076.62</b>
	<b>URI-II HPS</b>	<b>1471.94</b>	<b>1195.55</b>	<b>1188.18</b>
<b>JAMMU AND KASHMIR Total</b>		<b>15377.69</b>	<b>15136.15</b>	<b>14485.02</b>
<b>PUNJAB</b>	<b>ANANDPUR SAHIB HPS</b>	<b>673.87</b>	<b>668.54</b>	<b>617.5</b>
	<b>GH TPS (LEH.MOH.)</b>	<b>2736.39</b>	<b>3138.22</b>	<b>4507.89</b>
	<b>GND TPS(BHATINDA)</b>	<b>698.58</b>	<b>918.3</b>	<b>1432.72</b>
	<b>GOINDWAL SAHIB TPP</b>	<b>223.91</b>	<b>54.39</b>	<b>0</b>
	<b>MUKERIAN HPS</b>	<b>1083.51</b>	<b>1169.46</b>	<b>1050.95</b>
	<b>RAJPURA TPP</b>	<b>9441.76</b>	<b>7703.31</b>	<b>5727.31</b>
	<b>RANJIT SAGAR HPS</b>	<b>1306.08</b>	<b>1957.27</b>	<b>1862.8</b>
	<b>ROPAR TPS</b>	<b>2776.36</b>	<b>3959.03</b>	<b>5731.21</b>
	<b>SHANAN HPS</b>	<b>472.88</b>	<b>532.57</b>	<b>507.82</b>
	<b>TALWANDI SABO TPP</b>	<b>7078.84</b>	<b>3241.8</b>	<b>1522.7</b>
<b>PUNJAB Total</b>		<b>26492.18</b>	<b>23342.89</b>	<b>22960.9</b>
<b>RAJASTHAN</b>	<b>ANTA CCPP</b>	<b>695.18</b>	<b>941.97</b>	<b>1653.45</b>
	<b>BARSINGSAR LIGNITE</b>	<b>1463.25</b>	<b>1285.56</b>	<b>1380.66</b>
	<b>CHHABRA TPP</b>	<b>6826.93</b>	<b>4472.07</b>	<b>4684.34</b>
	<b>DAE (RAJASTHAN)</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>DHOLPUR CCPP</b>	<b>124.84</b>	<b>328.38</b>	<b>878.32</b>
	<b>GIRAL TPS</b>	<b>0</b>	<b>275.15</b>	<b>357.24</b>
	<b>JALIPA KAPURDI TPP</b>	<b>6622.49</b>	<b>7215.82</b>	<b>7351.81</b>
	<b>JAWAHAR SAGAR HPS</b>	<b>307.55</b>	<b>349.35</b>	<b>296.17</b>
	<b>KALISINDH TPS</b>	<b>5944.12</b>	<b>5982.76</b>	<b>1209.12</b>
	<b>KAWAI TPS</b>	<b>8289.27</b>	<b>8684.82</b>	<b>7866.36</b>
	<b>KOTA TPS</b>	<b>7486.79</b>	<b>7789.95</b>	<b>8905.89</b>
	<b>MAHI BAJAJ HPS</b>	<b>209.66</b>	<b>166.35</b>	<b>185.84</b>
	<b>R P SAGAR HPS</b>	<b>448.78</b>	<b>518.1</b>	<b>381.32</b>
	<b>RAJASTHAN A.P.S.</b>	<b>7472.6</b>	<b>8419.24</b>	<b>7722.39</b>
	<b>RAMGARH CCPP</b>	<b>1425.72</b>	<b>1564.51</b>	<b>1218.94</b>
	<b>SURATGARH TPS</b>	<b>4474.99</b>	<b>5953.32</b>	<b>10094.07</b>
<b>RAJASTHAN Total</b>		<b>51792.17</b>	<b>53947.35</b>	<b>54185.92</b>
<b>UTTAR PRADESH</b>	<b>ANPARA C TPS</b>	<b>8451.36</b>	<b>8638.3</b>	<b>8340.24</b>
	<b>ANPARA TPS</b>	<b>15219.41</b>	<b>12168.82</b>	<b>10587.13</b>
	<b>AURAIYA CCPP</b>	<b>535.67</b>	<b>1511.32</b>	<b>1664.09</b>
	<b>BARKHERA TPS</b>	<b>391.92</b>	<b>340.33</b>	<b>561.95</b>
	<b>DADRI (NCTPP)</b>	<b>8765.46</b>	<b>10047.65</b>	<b>12284.72</b>
	<b>DADRI CCPP</b>	<b>2236.96</b>	<b>2999.99</b>	<b>2530.19</b>
	<b>HARDUAGANJ TPS</b>	<b>3825.11</b>	<b>3786.35</b>	<b>3601.08</b>
	<b>KHAMBARKHERA TPS</b>	<b>375.3</b>	<b>320.78</b>	<b>527.56</b>
	<b>KHARA HPS</b>	<b>268.93</b>	<b>321.06</b>	<b>363.92</b>
	<b>KUNDARKI TPS</b>	<b>460.8</b>	<b>374.44</b>	<b>536.81</b>
	<b>LALITPUR TPS</b>	<b>3953.51</b>	<b>27.76</b>	
	<b>MAQSOODPUR TPS</b>	<b>417.24</b>	<b>312.59</b>	<b>527.59</b>
	<b>MATATILA HPS</b>	<b>122.68</b>	<b>79.01</b>	<b>80.54</b>
	<b>MEJA STPP</b>			
	<b>NARORA A.P.S.</b>	<b>3378.89</b>	<b>3432.6</b>	<b>2890.54</b>
	<b>OBRA HPS</b>	<b>216.71</b>	<b>160.09</b>	<b>229</b>
	<b>OBRA TPS</b>	<b>3842.06</b>	<b>3959.86</b>	<b>3593.23</b>
	<b>PANKI TPS</b>	<b>762.6</b>	<b>535.99</b>	<b>981.96</b>
	<b>PARICHHA TPS</b>	<b>6139.11</b>	<b>6767.63</b>	<b>6335.09</b>
	<b>PRAYAGRAJ TPP</b>	<b>4468.48</b>	<b>234.78</b>	
	<b>RIHAND HPS</b>	<b>567.24</b>	<b>374.92</b>	<b>574.23</b>
	<b>RIHAND STPS</b>	<b>21959.62</b>	<b>21054.66</b>	<b>21261.88</b>
	<b>ROSA TPP Ph-I</b>	<b>7913.9</b>	<b>7059.64</b>	<b>8591.61</b>
	<b>SINGRAULI STPS</b>	<b>15219.06</b>	<b>16270.51</b>	<b>14516.26</b>
	<b>TANDA TPS</b>	<b>3241.42</b>	<b>3125.98</b>	<b>3161.39</b>
	<b>UNCHAHAH TPS</b>	<b>6993.65</b>	<b>7013.1</b>	<b>7621.55</b>
	<b>UTRAULA TPS</b>	<b>415.02</b>	<b>411.37</b>	<b>539.18</b>
<b>UTTAR PRADESH Total</b>		<b>120142.11</b>	<b>111329.53</b>	<b>111901.74</b>
<b>UTTARAKHAND</b>	<b>CHIBRO (YAMUNA) HPS</b>	<b>714</b>	<b>813.78</b>	<b>872.1</b>
	<b>CHILLA HPS</b>	<b>769.35</b>	<b>753.67</b>	<b>800.49</b>
	<b>DHAKRANI HPS</b>	<b>120.19</b>	<b>136.86</b>	<b>149.41</b>

	<b>DHALIPUR HPS</b>	<b>180.4</b>	<b>205.06</b>	<b>231.14</b>
	<b>DHAULI GANGA HPS</b>	<b>956.13</b>	<b>1089.63</b>	<b>743.49</b>
	<b>GAMA CCPP</b>	<b>492.43</b>		
	<b>KASHIPUR CCPP</b>	<b>476.58</b>		
	<b>KHATIMA HPS</b>	<b>180.14</b>	<b>120.45</b>	<b>45.18</b>
	<b>KHODRI HPS</b>	<b>333.29</b>	<b>375.94</b>	<b>406.99</b>
	<b>KOTESHWAR HPS</b>	<b>1224.55</b>	<b>1248.05</b>	<b>1210.17</b>
	<b>KULHAL HPS</b>	<b>122.2</b>	<b>138.98</b>	<b>156.16</b>
	<b>MANERI BHALI - I HPS</b>	<b>349.22</b>	<b>486.53</b>	<b>379.14</b>
	<b>MANERI BHALI - II HPS</b>	<b>1251.71</b>	<b>1229.06</b>	<b>888.92</b>
	<b>RAMGANGA HPS</b>	<b>180.94</b>	<b>502.53</b>	<b>269.83</b>
	<b>SRINAGAR HPS</b>	<b>1280.75</b>	<b>901.37</b>	<b>0</b>
	<b>TANAKPUR HPS</b>	<b>430.29</b>	<b>452.36</b>	<b>446.71</b>
	<b>TEHRI ST-1 HPS</b>	<b>3146.32</b>	<b>3101</b>	<b>3023.55</b>
	<b>VISHNU PRAYAG HPS</b>	<b>2042.05</b>	<b>1210.65</b>	<b>1815.94</b>
<b>UTTARAKHAND Total</b>		<b>14250.54</b>	<b>12765.92</b>	<b>11439.22</b>
<b>CHHATTISGARH</b>	<b>AKALTARA TPS</b>	<b>6732.49</b>	<b>6367.66</b>	<b>3305.03</b>
	<b>AVANTHA BHANDAR</b>	<b>2819.44</b>	<b>1054.81</b>	<b>0</b>
	<b>BALCO TPS</b>	<b>3193.38</b>	<b>1580.97</b>	<b>0</b>
	<b>BANDAKHAR TPP</b>	<b>1405.4</b>	<b>216.22</b>	
	<b>BARADARHA TPS</b>	<b>7188.39</b>	<b>2477.12</b>	<b>292.36</b>
	<b>BHILAI TPS</b>	<b>3651.19</b>	<b>3549.63</b>	<b>3241.1</b>
	<b>BINJKOTE TPP</b>	<b>0</b>		
	<b>CHAKABURA TPP</b>	<b>242.94</b>	<b>259.93</b>	<b>223.09</b>
	<b>DSPM TPS</b>	<b>3982.4</b>	<b>3985.52</b>	<b>3748.91</b>
	<b>HASDEOBANGO HPS</b>	<b>153.76</b>	<b>323.3</b>	<b>258.18</b>
	<b>KASAIPALLI TPP</b>	<b>2012.43</b>	<b>1906.35</b>	<b>1774.95</b>
	<b>KATGHORA TPP</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>KORBA STPS</b>	<b>20364.88</b>	<b>20429.17</b>	<b>20060.75</b>
	<b>KORBA-II</b>	<b>893.64</b>	<b>794.47</b>	<b>950.22</b>
	<b>KORBA-III</b>	<b>1396.99</b>	<b>1444.23</b>	<b>1261.16</b>
	<b>KORBA-WEST TPS</b>	<b>9235.86</b>	<b>9045.59</b>	<b>9632.12</b>
	<b>LARA TPP</b>			
	<b>MARWA TPS</b>	<b>2554.67</b>	<b>10.69</b>	<b>0</b>
	<b>NAWAPARA TPP</b>	<b>714.27</b>		
	<b>OP JINDAL TPS</b>	<b>4482.79</b>	<b>5146.22</b>	<b>8112.66</b>
	<b>PATHADI TPP</b>	<b>4448.61</b>	<b>2984.65</b>	<b>2239.46</b>
	<b>RAIKHEDA TPP</b>	<b>763.34</b>	<b>790.23</b>	<b>21.65</b>
	<b>RATIJA TPS</b>	<b>432.03</b>	<b>272.67</b>	<b>268.94</b>
	<b>SALORA TPP</b>	<b>0</b>	<b>0</b>	<b>137.12</b>
	<b>SIPAT STPS</b>	<b>23778.93</b>	<b>22286.31</b>	<b>21773.08</b>
	<b>SVPL TPP</b>	<b>303.06</b>	<b>59.03</b>	<b>0</b>
	<b>SWASTIK KORBA TPP</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>TAMNAR TPP</b>	<b>4797.7</b>	<b>4405.48</b>	<b>2409.79</b>
	<b>UCHPINDA TPP</b>	<b>137.59</b>	<b>123.04</b>	
<b>CHHATTISGARH Total</b>		<b>105686.18</b>	<b>89513.29</b>	<b>79710.57</b>
<b>GOA</b>	<b>GOA CCPP (Liq.)</b>	<b>0</b>	<b>0</b>	<b>12.61</b>
<b>GOA Total</b>		<b>0</b>	<b>0</b>	<b>12.61</b>
<b>GUJARAT</b>	<b>AKRIMOTA LIG TPS</b>	<b>1392.9</b>	<b>1427.42</b>	<b>1358.77</b>
	<b>BARODA CCPP</b>	<b>135.09</b>	<b>235.87</b>	<b>38.24</b>
	<b>BHAVNAGAR CFBC TPP</b>	<b>55.47</b>		
	<b>DGEN MEGA CCPP</b>	<b>1.02</b>	<b>2731.31</b>	<b>0</b>
	<b>DHUVARAN CCPP</b>	<b>306.76</b>	<b>416.44</b>	<b>153.03</b>
	<b>ESSAR CCPP</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>GANDHAR CCPP</b>	<b>2358.82</b>	<b>961.51</b>	<b>1608.53</b>
	<b>GANDHI NAGAR TPS</b>	<b>2172.33</b>	<b>2731.94</b>	<b>3390.7</b>
	<b>GIPCL. GT IMP</b>	<b>203.42</b>	<b>181.59</b>	<b>182.63</b>
	<b>HAZIRA CCPP</b>	<b>24.32</b>	<b>143.53</b>	<b>214.73</b>
	<b>HAZIRA CCPP EXT</b>	<b>230.06</b>	<b>0</b>	<b>0</b>
	<b>KADANA HPS</b>	<b>339.01</b>	<b>289.91</b>	<b>211.53</b>
	<b>KAKRAPARA</b>	<b>0</b>	<b>2028.17</b>	<b>3529.4</b>
	<b>KAWAS CCPP</b>	<b>1718.18</b>	<b>1212.39</b>	<b>1741.22</b>
	<b>KUTCH LIG. TPS</b>	<b>1483.92</b>	<b>1621.38</b>	<b>1632.63</b>



	<b>MUNDRA TPS</b>	<b>30298.43</b>	<b>32992.96</b>	<b>30323.97</b>
	<b>MUNDRA UMTTP</b>	<b>27460.24</b>	<b>25679.75</b>	<b>26577.6</b>
	<b>PEGUTHAN CCPP</b>	<b>280.62</b>	<b>898.37</b>	<b>298.44</b>
	<b>PIPAVAV CCPP</b>	<b>229.99</b>	<b>114.75</b>	<b>0</b>
	<b>S SAROVAR CHPH HPS</b>	<b>876.34</b>	<b>704.55</b>	<b>611.67</b>
	<b>S SAROVAR RBPH HPS</b>	<b>2332.87</b>	<b>1465.88</b>	<b>2297.75</b>
	<b>SABARMATI (C STATION)</b>	<b>0</b>	<b>51.81</b>	<b>356.31</b>
	<b>SABARMATI (D-F STATIONS)</b>	<b>2759.1</b>	<b>2389.46</b>	<b>2626.57</b>
	<b>SALAYA TPP</b>	<b>5213.21</b>	<b>4985.84</b>	<b>6609.27</b>
	<b>SIKKA REP. TPS</b>	<b>2148.22</b>	<b>1203.75</b>	<b>945.92</b>
	<b>SUGEN CCPP</b>	<b>4771.5</b>	<b>3512.11</b>	<b>2600.64</b>
	<b>SURAT LIG. TPS</b>	<b>3178.22</b>	<b>3077.99</b>	<b>3266.61</b>
	<b>UKAI HPS</b>	<b>395.66</b>	<b>491.51</b>	<b>690.63</b>
	<b>UKAI TPS</b>	<b>5296.15</b>	<b>5555.01</b>	<b>6703.61</b>
	<b>UNOSUGEN CCPP</b>	<b>0</b>	<b>876.14</b>	<b>0</b>
	<b>UTRAN CCPP</b>	<b>157.14</b>	<b>1271.97</b>	<b>133.53</b>
	<b>WANAKBORI TPS</b>	<b>3929.62</b>	<b>5663.95</b>	<b>7434.61</b>
<b>GUJARAT Total</b>		<b>99748.61</b>	<b>104917.26</b>	<b>105538.54</b>
<b>MADHYA PRADESH</b>	<b>AMARKANTAK EXT TPS</b>	<b>1481.04</b>	<b>1785.72</b>	<b>2264.09</b>
	<b>ANUPPUR TPP</b>	<b>3760.16</b>	<b>2890.72</b>	
	<b>BANSAGAR TONS-I HPS</b>	<b>1239.02</b>	<b>574.48</b>	<b>1081.36</b>
	<b>BANSAGAR TONS-II HPS</b>	<b>109.73</b>	<b>107.48</b>	<b>86.09</b>
	<b>BANSAGAR TONS-III HPS</b>	<b>53.48</b>	<b>39.88</b>	<b>121.05</b>
	<b>BARGI HPS</b>	<b>445.47</b>	<b>328.1</b>	<b>498.46</b>
	<b>BINA TPS</b>	<b>812.85</b>	<b>1307.77</b>	<b>2444.91</b>
	<b>GANDHI SAGAR HPS</b>	<b>351</b>	<b>383.05</b>	<b>272.15</b>
	<b>INDIRA SAGAR HPS</b>	<b>3320.79</b>	<b>1974.21</b>	<b>2541.9</b>
	<b>MADHIKHERA HPS</b>	<b>147.21</b>	<b>92.16</b>	<b>97.16</b>
	<b>MAHAN TPP</b>	<b>2629.2</b>	<b>0</b>	<b>450.69</b>
	<b>NIGRI TPP</b>	<b>7266.96</b>	<b>5346.18</b>	<b>1758.18</b>
	<b>NIWARI TPP</b>	<b>237.26</b>	<b>141.96</b>	<b>337.16</b>
	<b>OMKARESHWAR HPS</b>	<b>1427.7</b>	<b>955.01</b>	<b>1128.92</b>
	<b>PENCH HPS</b>	<b>360.14</b>	<b>378.51</b>	<b>390.13</b>
	<b>RAJGHAT HPS</b>	<b>62.26</b>	<b>36.94</b>	<b>82.53</b>
	<b>SANJAY GANDHI TPS</b>	<b>6843.25</b>	<b>7052.76</b>	<b>6823</b>
	<b>SASAN UMTTP</b>	<b>29414.72</b>	<b>31262.34</b>	<b>17273.83</b>
	<b>SATPURA TPS</b>	<b>3644.9</b>	<b>5508.86</b>	<b>6161.43</b>
	<b>SEIONI TPP</b>	<b>311.25</b>	<b>3.96</b>	
	<b>SHREE SINGHAJI TPP</b>	<b>2474.65</b>	<b>4250.48</b>	<b>1825.7</b>
	<b>VINDHYACHAL STPS</b>	<b>32206.94</b>	<b>31319.93</b>	<b>29573.73</b>
<b>MADHYA PRADESH Total</b>		<b>98599.98</b>	<b>95740.5</b>	<b>75212.47</b>
<b>MAHARASHTRA</b>	<b>AMARAVATI TPS</b>	<b>1874.7</b>	<b>6179.55</b>	<b>2142.32</b>
	<b>BELA TPS</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>BHANDARDHARA HPS ST-II</b>	<b>47.12</b>	<b>82.55</b>	<b>65.4</b>
	<b>BHIRA HPS</b>	<b>379.14</b>	<b>316.33</b>	<b>330.91</b>
	<b>BHIRA PSS HPS</b>	<b>572.49</b>	<b>324.01</b>	<b>506.16</b>
	<b>BHIRA TAIL RACE HPS</b>	<b>101.58</b>	<b>73.87</b>	<b>91.25</b>
	<b>BHIVPURI HPS</b>	<b>206.59</b>	<b>196.92</b>	<b>300.68</b>
	<b>BHUSAWAL TPS</b>	<b>6120.56</b>	<b>8086.67</b>	<b>5893.09</b>
	<b>BUTIBORI TPP</b>	<b>3742.52</b>	<b>4030.17</b>	<b>3644.48</b>
	<b>CHANDRAPUR (MAHARASHTRA) STPS</b>	<b>14941.77</b>	<b>12361.37</b>	<b>12507.39</b>
	<b>DAHANU TPS</b>	<b>3742.55</b>	<b>3824.84</b>	<b>3997.22</b>
	<b>DHARIWAL TPP</b>	<b>1541.71</b>	<b>369.16</b>	<b>475.68</b>
	<b>GEPL TPP Ph-I</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>GHATGHAR PSS HPS</b>	<b>383.87</b>	<b>301.86</b>	<b>320.25</b>
	<b>GMR WARORA TPS</b>	<b>3703.42</b>	<b>4006.78</b>	<b>3614.9</b>
	<b>JSW RATNAGIRI TPP</b>	<b>6681.86</b>	<b>8395.1</b>	<b>7639.71</b>
	<b>KHAPARKHEDA TPS</b>	<b>7714.77</b>	<b>8157.5</b>	<b>8260.6</b>
	<b>KHOPOLI HPS</b>	<b>307.24</b>	<b>261.23</b>	<b>303.75</b>
	<b>KORADI TPS</b>	<b>5853.85</b>	<b>3041.69</b>	<b>2330.88</b>

	<b>KOYNA DPH HPS</b>	<b>156.02</b>	<b>136.47</b>	<b>93.41</b>
	<b>KOYNA-I HPS</b>	<b>640.51</b>	<b>615.27</b>	<b>580.72</b>
	<b>KOYNA-II HPS</b>	<b>649.7</b>	<b>624.35</b>	<b>582.72</b>
	<b>KOYNA-III HPS</b>	<b>614.14</b>	<b>534.04</b>	<b>588.21</b>
	<b>KOYNA-IV HPS</b>	<b>1245.48</b>	<b>1066.69</b>	<b>1206.74</b>
	<b>MANGAON CCPP</b>	<b>215.44</b>		
	<b>MAUDA TPS</b>	<b>4305.65</b>	<b>1875.66</b>	<b>2310.91</b>
	<b>MIHAN TPS</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>NASIK (P) TPS</b>	<b>0.72</b>	<b>0</b>	<b>0</b>
	<b>NASIK TPS</b>	<b>3328.71</b>	<b>4327.81</b>	<b>4202.05</b>
	<b>PARAS TPS</b>	<b>2988.82</b>	<b>3512.44</b>	<b>2930.31</b>
	<b>PARLI TPS</b>	<b>1627.09</b>	<b>1320.21</b>	<b>4583.14</b>
	<b>RATNAGIRI CCPP</b>			
	<b>RATNAGIRI CCPP II</b>	<b>2438.41</b>	<b>765.81</b>	<b>0</b>
	<b>RATNAGIRI CCPP III</b>	<b>2119.31</b>	<b>467.86</b>	<b>0</b>
	<b>SHIRPUR TPP</b>			
	<b>SOLAPUR</b>	<b>0</b>		
	<b>TARAPUR</b>	<b>10860.2</b>	<b>10389.14</b>	<b>10269.89</b>
	<b>TILLARI HPS</b>	<b>106.16</b>	<b>44.16</b>	<b>113.86</b>
	<b>TIRORA TPS</b>	<b>17642.56</b>	<b>20079.7</b>	<b>16470.15</b>
	<b>TROMBAY CCPP</b>	<b>1413.14</b>	<b>1179.74</b>	<b>1148.5</b>
	<b>TROMBAY TPS</b>	<b>4980.93</b>	<b>5428.92</b>	<b>4860.42</b>
	<b>URAN CCPP</b>	<b>3294.56</b>	<b>2886.5</b>	<b>3567.16</b>
	<b>VAITARNA HPS</b>	<b>153.52</b>	<b>122.62</b>	<b>203.82</b>
	<b>WARDHA WARORA TPP</b>	<b>1394.9</b>	<b>1857.44</b>	<b>1172.53</b>
<b>MAHARASHTRA Total</b>		<b>118091.71</b>	<b>117244.43</b>	<b>107309.21</b>
<b>ANDHRA PRADESH</b>	<b>DAMODARAM SANJEEVAIAH TPS</b>	<b>8804.65</b>	<b>5013.38</b>	<b>1082.2</b>
	<b>Dr. N.TATA RAO TPS</b>	<b>11652.38</b>	<b>12072.53</b>	<b>12788.66</b>
	<b>GAUTAMI CCPP</b>	<b>0</b>	<b>104.33</b>	<b>0</b>
	<b>GMR Energy Ltd - Kakinada</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>GODAVARI CCPP</b>	<b>1008.75</b>	<b>552.67</b>	<b>546.21</b>
	<b>GREL CCPP (Rajahmundry)</b>	<b>643.51</b>	<b>589.64</b>	
	<b>JEGURUPADU CCPP</b>		<b>869.66</b>	<b>589.73</b>
	<b>JEGURUPADU PHASE I CCPP</b>	<b>924.13</b>		
	<b>JEGURUPADU PHASE II CCPP</b>	<b>75.08</b>		
	<b>KONASEEMA CCPP</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>KONDAPALLI EXTN CCPP .</b>	<b>157.32</b>	<b>972.02</b>	<b>0</b>
	<b>KONDAPALLI CCPP</b>	<b>850.27</b>	<b>484.5</b>	<b>574.71</b>
	<b>KONDAPALLI ST-3 CCPP</b>	<b>1266.11</b>	<b>615.55</b>	
	<b>LVS POWER DG</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>NAGARJUN SGR TPD HPS</b>	<b>7.35</b>	<b>0</b>	<b>0</b>
	<b>NAGARJUN SGR RBC HPS</b>	<b>4.15</b>	<b>0</b>	<b>187.29</b>
	<b>PAINAMPURAM TPP</b>	<b>9059.4</b>	<b>6889.03</b>	<b>5.6</b>
	<b>PEDDAPURAM CCPP</b>	<b>0</b>	<b>25</b>	<b>186.59</b>
	<b>RAYALASEEMA TPS</b>	<b>6711.64</b>	<b>7292.52</b>	<b>7163.71</b>
	<b>SGPL TPP</b>	<b>1658.6</b>		
	<b>SIMHADRI</b>	<b>14173.49</b>	<b>14469.64</b>	<b>15025.53</b>
	<b>SIMHAPURI TPS</b>	<b>1617.72</b>	<b>4122.85</b>	<b>3203.71</b>
	<b>SRISAILAM HPS</b>	<b>640.61</b>	<b>206.05</b>	<b>1152.73</b>
	<b>THAMMINAPATNAM TPS</b>	<b>1373.63</b>	<b>1699.09</b>	<b>1552.46</b>
	<b>UPPER SILERU HPS</b>	<b>340.41</b>	<b>465.28</b>	<b>522.46</b>
	<b>VEMAGIRI CCPP</b>	<b>305.33</b>	<b>620.46</b>	<b>0</b>
	<b>VIJESWARAM CCPP</b>	<b>691.1</b>	<b>701.68</b>	<b>663.83</b>
	<b>VIZAG TPP</b>	<b>3282.53</b>	<b>464.71</b>	<b>0</b>
<b>ANDHRA PRADESH Total</b>		<b>65248.16</b>	<b>58230.59</b>	<b>45245.42</b>
<b>KARNATAKA</b>	<b>ALMATTI DPH HPS</b>	<b>404.05</b>	<b>145.16</b>	<b>483.01</b>
	<b>BELLARY DG</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>BELLARY TPS</b>	<b>6402.37</b>	<b>6133.82</b>	<b>5807.03</b>
	<b>BHADRA HPS</b>	<b>27.06</b>	<b>40.08</b>	<b>50.59</b>
	<b>GERUSUPPA HPS</b>	<b>276.6</b>	<b>303.19</b>	<b>556.9</b>
	<b>GHAT PRABHA HPS</b>	<b>48.74</b>	<b>31.94</b>	<b>66.04</b>

	<b>HAMPI HPS</b>	<b>0.1</b>	<b>8.42</b>	<b>2.05</b>
	<b>JOG HPS</b>	<b>288.25</b>	<b>318.36</b>	<b>346.89</b>
	<b>KADRA HPS</b>	<b>176.42</b>	<b>220.48</b>	<b>405.14</b>
	<b>KAIGA</b>	<b>6533.49</b>	<b>7672.71</b>	<b>6462.17</b>
	<b>KALINADI HPS</b>	<b>1344.82</b>	<b>1948.48</b>	<b>3255.42</b>
	<b>KALINADI SUPA HPS</b>	<b>239.2</b>	<b>324.94</b>	<b>453.32</b>
	<b>KODASALI HPS</b>	<b>154.16</b>	<b>203.26</b>	<b>385.76</b>
	<b>KUDGI STPP</b>	<b>25.49</b>		
	<b>LIGANAMAKKI HPS</b>	<b>105.64</b>	<b>118.94</b>	<b>256.27</b>
	<b>MUNIRABAD HPS</b>	<b>31.49</b>	<b>61.83</b>	<b>107.2</b>
	<b>RAICHUR TPS</b>	<b>11495.67</b>	<b>11423.63</b>	<b>10979.42</b>
	<b>SHARAVATHI HPS</b>	<b>2708.77</b>	<b>2664.5</b>	<b>5255.46</b>
	<b>SIVASAMUNDRUM HPS</b>	<b>145.14</b>	<b>216.46</b>	<b>221.92</b>
	<b>T B DAM HPS</b>	<b>81.16</b>	<b>120.94</b>	<b>182.6</b>
	<b>TORANGALLU TPS(SBU-I)</b>	<b>1714.95</b>	<b>2184.71</b>	<b>2228.52</b>
	<b>TORANGALLU TPS(SBU-II)</b>	<b>2700.39</b>	<b>4571.51</b>	<b>5111.28</b>
	<b>UDUPI TPP</b>	<b>7875.42</b>	<b>8086.45</b>	<b>6414.58</b>
	<b>VARAHI HPS</b>	<b>740.75</b>	<b>752.39</b>	<b>1131.72</b>
	<b>YELHANKA (DG)</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>YERMARUS TPP</b>	<b>246.54</b>	<b>1.05</b>	
<b>KARNATAKA Total</b>		<b>43766.67</b>	<b>47553.25</b>	<b>50163.29</b>
<b>KERALA</b>	<b>BRAMHAPURAM DG</b>	<b>5.53</b>	<b>13.57</b>	<b>8.42</b>
	<b>COCHIN CCPP (Liq.)</b>	<b>0</b>	<b>0</b>	<b>154.71</b>
	<b>IDAMALAYAR HPS.</b>	<b>171.72</b>	<b>273</b>	<b>372.66</b>
	<b>IDUKKI HPS.</b>	<b>1380.06</b>	<b>2372.4</b>	<b>2494.2</b>
	<b>KAKKAD HPS.</b>	<b>131.68</b>	<b>184.22</b>	<b>192.94</b>
	<b>KOZHICODE DG</b>	<b>42.19</b>	<b>133.27</b>	<b>199.27</b>
	<b>KUTTIYADI HPS.</b>	<b>327.24</b>	<b>559.24</b>	<b>740.47</b>
	<b>KUTTIYADI ADDL. EXTN. HPS</b>	<b>151.48</b>	<b>18.81</b>	<b>0</b>
	<b>LOWER PERIYAR HPS.</b>	<b>307.23</b>	<b>510.72</b>	<b>577.15</b>
	<b>NARIAMANGLAM HPS</b>	<b>197.3</b>	<b>350.5</b>	<b>343.3</b>
	<b>PALLIVASAL HPS.</b>	<b>166.05</b>	<b>218.69</b>	<b>211.66</b>
	<b>PANNIAR HPS.</b>	<b>62.33</b>	<b>174.3</b>	<b>154.9</b>
	<b>PORINGALKUTTU HPS.</b>	<b>91.1</b>	<b>159.7</b>	<b>151.02</b>
	<b>R. GANDHI CCPP (Liq.)</b>	<b>15.4</b>	<b>142.75</b>	<b>819.12</b>
	<b>SABARIGIRI HPS.</b>	<b>798.79</b>	<b>1171.17</b>	<b>1224.73</b>
	<b>SENGULAM HPS.</b>	<b>115.66</b>	<b>160.99</b>	<b>151.37</b>
	<b>SHOLAYAR HPS.</b>	<b>166.85</b>	<b>210.01</b>	<b>238.25</b>
<b>KERALA Total</b>		<b>4130.61</b>	<b>6653.34</b>	<b>8034.17</b>
<b>PUDUCHERRY</b>	<b>KARAIKAL CCPP</b>	<b>246.84</b>	<b>227.59</b>	<b>102.14</b>
<b>PUDUCHERRY Total</b>		<b>246.84</b>	<b>227.59</b>	<b>102.14</b>
<b>TAMIL NADU</b>	<b>ALIYAR HPS.</b>	<b>61.73</b>	<b>152.96</b>	<b>158.35</b>
	<b>B. BRIDGE D.G</b>	<b>0</b>	<b>2.14</b>	<b>576.26</b>
	<b>BASIN BRIDGE GT (Liq.)</b>	<b>10.98</b>	<b>8.72</b>	<b>2.85</b>
	<b>BHAWANI BARRAGE- III HPS</b>	<b>17.47</b>	<b>5.68</b>	<b>0</b>
	<b>BHAWANI BARRAGE-II HPS</b>	<b>19.83</b>	<b>7.03</b>	<b>137.56</b>
	<b>BHAWANI KATTAL</b>	<b>20.59</b>	<b>156.51</b>	<b>67.9</b>
	<b>ENNORE TPS</b>	<b>191.99</b>	<b>442.31</b>	<b>621.52</b>
	<b>ITPCL TPP</b>	<b>4975.7</b>	<b>1131.38</b>	
	<b>KADAMPARI HPS.</b>	<b>289.39</b>	<b>412.63</b>	<b>502.5</b>
	<b>KARUPPUR CCPP</b>	<b>478.97</b>	<b>632.85</b>	<b>578.81</b>
	<b>KODAYAR HPS.</b>	<b>169.43</b>	<b>278.58</b>	<b>202.02</b>
	<b>KOVIKALPAL CCPP</b>	<b>348</b>	<b>399.1</b>	<b>413.72</b>
	<b>KUDANKULAM</b>	<b>6466.02</b>	<b>2261.26</b>	<b>2610.52</b>
	<b>KUNDAH HPS.</b>	<b>815.61</b>	<b>1372.44</b>	<b>1550.67</b>
	<b>KUTTALAM CCPP</b>	<b>380.17</b>	<b>564.24</b>	<b>497.35</b>
	<b>LOWER METTUR HPS.</b>	<b>92.27</b>	<b>223.37</b>	<b>266.7</b>
	<b>MADRAS A.P.S.</b>	<b>3204.67</b>	<b>3210.5</b>	<b>2616.63</b>
	<b>METTUR DAM HPS.</b>	<b>44.75</b>	<b>92.44</b>	<b>107</b>
	<b>METTUR TPS</b>	<b>9177.43</b>	<b>9903.94</b>	<b>9232.89</b>
	<b>METTUR TUNNEL HPS.</b>	<b>80.73</b>	<b>248.99</b>	<b>335.62</b>
	<b>MOYAR HPS</b>	<b>61.52</b>	<b>103.64</b>	<b>144.73</b>
	<b>MUTHIARA TPP</b>	<b>3749.1</b>	<b>2788.76</b>	<b>1092.69</b>

	<b>NEYVELI ( EXT) TPS</b>	<b>3328.33</b>	<b>3269.52</b>	<b>3385.03</b>
	<b>NEYVELI TPS- I</b>	<b>3696.52</b>	<b>3161.04</b>	<b>3631.34</b>
	<b>NEYVELI TPS(Z)</b>	<b>1078.69</b>	<b>1476.81</b>	<b>1828.12</b>
	<b>NEYVELI TPS-II</b>	<b>11052.08</b>	<b>10582.62</b>	<b>11131.39</b>
	<b>NEYVELI TPS-II EXP</b>	<b>1373.25</b>	<b>851.13</b>	<b>180.08</b>
	<b>NORTH CHENNAI TPS</b>	<b>10092.3</b>	<b>10947.51</b>	<b>9850.57</b>
	<b>P.NALLUR CCPP</b>	<b>189.35</b>	<b>150.76</b>	<b>1171.37</b>
	<b>PAPANASAM HPS.</b>	<b>66.54</b>	<b>116.57</b>	<b>118.23</b>
	<b>PARSON'S VALLEY HPS.</b>	<b>23.95</b>	<b>25.63</b>	<b>34.83</b>
	<b>PERIYAR HPS.</b>	<b>93.91</b>	<b>504.78</b>	<b>527.56</b>
	<b>PYKARA HPS.</b>	<b>12.74</b>	<b>56.89</b>	<b>39</b>
	<b>PYKARA ULTMATE HPS.</b>	<b>192.55</b>	<b>280.56</b>	<b>367.03</b>
	<b>SAMALPATTI DG</b>	<b>0</b>	<b>37.39</b>	<b>224.36</b>
	<b>SAMAYANALLUR DG</b>	<b>12.01</b>	<b>36.7</b>	<b>245.35</b>
	<b>SARKARPATHY HPS.</b>	<b>63.29</b>	<b>79.28</b>	<b>134.24</b>
	<b>SHOLAYAR(TN) HPS.</b>	<b>228.11</b>	<b>263.79</b>	<b>261.58</b>
	<b>SURULIYAR HPS.</b>	<b>42.71</b>	<b>92.5</b>	<b>103.43</b>
	<b>TUTICORIN (JV) TPP</b>	<b>6252.04</b>	<b>3558.11</b>	<b>6.79</b>
	<b>TUTICORIN (P) TPP</b>	<b>23.62</b>	<b>800.4</b>	<b>1428.17</b>
	<b>TUTICORIN TPS</b>	<b>5547.59</b>	<b>7082.47</b>	<b>7673.24</b>
	<b>VALANTARVY CCPP</b>	<b>378.18</b>	<b>195.09</b>	<b>378.8</b>
	<b>VALLUR TPP</b>	<b>9210.86</b>	<b>7716.79</b>	<b>5912.65</b>
	<b>VALUTHUR CCPP</b>	<b>966.71</b>	<b>721.02</b>	<b>1068.96</b>
<b>TAMIL NADU Total</b>		<b>84581.68</b>	<b>76406.83</b>	<b>71418.41</b>
<b>TELANGANA</b>	<b>KAKATIYA TPS</b>	<b>6578.52</b>	<b>3632</b>	<b>4106.3</b>
	<b>KOTHAGUDEM TPS</b>	<b>3964.11</b>	<b>4433.29</b>	<b>4428.57</b>
	<b>KOTHAGUDEM TPS (NEW)</b>	<b>6586.16</b>	<b>6636.28</b>	<b>7331.6</b>
	<b>LOWER JURALA HPS</b>	<b>176.34</b>	<b>8.98</b>	<b>0</b>
	<b>LOWER SILERU HPS</b>	<b>831.9</b>	<b>1233.14</b>	<b>1287.11</b>
	<b>NAGARJUN SGR HPS</b>	<b>186.15</b>	<b>88.15</b>	<b>1032.63</b>
	<b>NAGARJUN SGR LBC HPS</b>	<b>0</b>	<b>0</b>	<b>42.07</b>
	<b>POCHAMPAD HPS</b>	<b>75.29</b>	<b>0</b>	<b>12.87</b>
	<b>PRIYADARSHNI JURALA HPS</b>	<b>211.99</b>	<b>30.42</b>	<b>224.65</b>
	<b>PULICHINTALA HPS</b>	<b>13</b>		
	<b>RAMAGUNDEM - B TPS</b>	<b>453.7</b>	<b>399.4</b>	<b>193.4</b>
	<b>RAMAGUNDEM STPS</b>	<b>19597.52</b>	<b>20250.59</b>	<b>20441.18</b>
	<b>SINGARENI TPP</b>	<b>4099.33</b>	<b>1.17</b>	
	<b>SRISAILAM LB HPS</b>	<b>617.22</b>	<b>154.78</b>	<b>1801.59</b>
<b>TELANGANA Total</b>		<b>43391.23</b>	<b>36868.2</b>	<b>40901.97</b>
<b>ANDAMAN NICOBAR</b>	<b>AND. NICOBAR DG</b>	<b>215.56</b>	<b>182.85</b>	<b>153.76</b>
<b>ANDAMAN NICOBAR Total</b>		<b>215.56</b>	<b>182.85</b>	<b>153.76</b>
<b>BIHAR</b>	<b>BARAUNI TPS</b>	<b>131.42</b>	<b>0</b>	<b>0</b>
	<b>BARH II</b>	<b>7642.01</b>	<b>4769.88</b>	<b>1758.05</b>
	<b>KAHALGAON TPS</b>	<b>15947.93</b>	<b>15275.13</b>	<b>15618.7</b>
	<b>MUZAFFARPUR TPS</b>	<b>793.49</b>	<b>781.87</b>	<b>895.52</b>
	<b>NABI NAGAR TPP</b>	<b>0</b>	<b>0.13</b>	
<b>BIHAR Total</b>		<b>24514.85</b>	<b>20827.01</b>	<b>18272.27</b>
<b>DVC</b>	<b>BOKARO `B` TPS</b>	<b>1456.68</b>	<b>1859.93</b>	<b>1634.38</b>
	<b>BOKARO TPS `A` EXP</b>	<b>208</b>	<b>0.3</b>	
	<b>CHANDRAPURA(DVC) TPS</b>	<b>5642.7</b>	<b>5078.72</b>	<b>4977.56</b>
	<b>DURGAPUR STEEL TPS</b>	<b>6655.77</b>	<b>4440.54</b>	<b>3862.72</b>
	<b>DURGAPUR TPS</b>	<b>592.72</b>	<b>904.28</b>	<b>1301.68</b>
	<b>KODARMA TPP</b>	<b>3801.77</b>	<b>3326.82</b>	<b>1856.38</b>
	<b>MAITHON HPS.</b>	<b>122.03</b>	<b>107.54</b>	<b>138.04</b>
	<b>MEJIA TPS</b>	<b>12936.78</b>	<b>11985.29</b>	<b>11638.82</b>
	<b>PANCHET HPS.</b>	<b>133.51</b>	<b>68.97</b>	<b>129.26</b>
	<b>RAGHUNATHPUR TPP</b>	<b>2016.51</b>	<b>257.54</b>	<b>12.27</b>
<b>DVC Total</b>		<b>33566.47</b>	<b>28029.93</b>	<b>25551.11</b>
<b>JHARKHAND</b>	<b>JOJOBERA TPS</b>	<b>2274.02</b>	<b>2519.59</b>	<b>2537.54</b>
	<b>MAHADEV PRASAD STPP</b>	<b>3257.47</b>	<b>2925.9</b>	<b>2212.58</b>
	<b>MAITHON RB TPP</b>	<b>7356.63</b>	<b>7206.18</b>	<b>6684.08</b>

	<b>PATRATU TPS</b>	<b>385.88</b>	<b>594.02</b>	<b>773.68</b>
	<b>SUBERNREKHA HPS.</b>	<b>30.13</b>	<b>51.24</b>	<b>33.73</b>
	<b>TENUGHAT TPS</b>	<b>1423.3</b>	<b>2636.74</b>	<b>2380.27</b>
<b>JHARKHAND Total</b>		<b>14727.43</b>	<b>15933.67</b>	<b>14621.88</b>
<b>ORISSA</b>	<b>BALIMELA HPS.</b>	<b>1001.38</b>	<b>622.02</b>	<b>1339.23</b>
	<b>DERANG TPP</b>	<b>6515.3</b>	<b>6243.6</b>	<b>515.45</b>
	<b>HIRAKUD HPS</b>	<b>716.97</b>	<b>683.88</b>	<b>887.1</b>
	<b>IB VALLEY TPS</b>	<b>3235.67</b>	<b>3117.33</b>	<b>2798.93</b>
	<b>ICCL (IMFA) IMP</b>	<b>320.25</b>	<b>620.83</b>	<b>290.34</b>
	<b>KAMALANGA TPS</b>	<b>5932.79</b>	<b>6235.01</b>	<b>4838.77</b>
	<b>MACHKUND HPS</b>	<b>700.31</b>	<b>477.47</b>	<b>519.79</b>
	<b>NALCO IMP</b>	<b>315.43</b>	<b>298.8</b>	<b>256.44</b>
	<b>RENGALI HPS.</b>	<b>553.56</b>	<b>599.46</b>	<b>742.46</b>
	<b>STERLITE TPP</b>	<b>7801.53</b>	<b>8077.03</b>	<b>8230.49</b>
	<b>TALCHER (OLD) TPS</b>	<b>3759.53</b>	<b>3730.75</b>	<b>3783.88</b>
	<b>TALCHER STPS</b>	<b>22847.48</b>	<b>23966.53</b>	<b>23698.65</b>
	<b>UPPER INDRAVATI HPS.</b>	<b>1521.64</b>	<b>1760.44</b>	<b>2696.43</b>
	<b>UPPER KOLAB HPS.</b>	<b>619.34</b>	<b>767.07</b>	<b>734.48</b>
	<b>UTKAL TPP(IND BARATH)</b>	<b>0</b>	<b>21.58</b>	<b>0</b>
<b>ORISSA Total</b>		<b>55841.18</b>	<b>57221.8</b>	<b>51332.44</b>
<b>SIKKIM</b>	<b>CHUZACHEN HPS</b>	<b>494.75</b>	<b>421.43</b>	<b>430.86</b>
	<b>DIKCHU HPS</b>			
	<b>JORETHANG LOOP</b>	<b>405.63</b>	<b>75.06</b>	<b>0</b>
	<b>RANGIT HPS</b>	<b>347.14</b>	<b>345.27</b>	<b>327.68</b>
	<b>TASHIDING HPS</b>	<b>0</b>		
	<b>TEESTA V HPS</b>	<b>2773.46</b>	<b>2710.16</b>	<b>2586.75</b>
	<b>TEESTA-III HPS</b>	<b>309.42</b>	<b>0</b>	<b>0</b>
<b>SIKKIM Total</b>		<b>4330.4</b>	<b>3551.92</b>	<b>3345.29</b>
<b>WEST BENGAL</b>	<b>BAKRESWAR TPS</b>	<b>7050.54</b>	<b>6669.45</b>	<b>8010.81</b>
	<b>BANDEL TPS</b>	<b>1885.02</b>	<b>1108.02</b>	<b>1094.79</b>
	<b>BUDGE BUDGE TPS</b>	<b>5410.75</b>	<b>5793.34</b>	<b>5852.54</b>
	<b>D.P.L. TPS</b>	<b>2143.41</b>	<b>1983.35</b>	<b>1408.04</b>
	<b>FARAKKA STPS</b>	<b>13743.98</b>	<b>12360.43</b>	<b>13378.93</b>
	<b>HALDIA GT (Liq.)</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>HALDIA TPP</b>	<b>4015.49</b>	<b>3633.26</b>	<b>356.23</b>
	<b>HIRANMAYE TPP</b>			
	<b>JALDHAKA HPS ST-I</b>	<b>205.46</b>	<b>173.37</b>	<b>109.42</b>
	<b>KASBA GT (Liq.)</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>KOLAGHAT TPS</b>	<b>6038</b>	<b>5766.12</b>	<b>7199.03</b>
	<b>NEW COSSIPORE TPS</b>	<b>0</b>	<b>0</b>	<b>68.95</b>
	<b>PURULIA PSS HPS.</b>	<b>1106.97</b>	<b>1064.56</b>	<b>1408.85</b>
	<b>RAMMAM HPS.</b>	<b>248.42</b>	<b>253.77</b>	<b>237.35</b>
	<b>SAGARDIGHI TPS</b>	<b>4877.43</b>	<b>2715.22</b>	<b>4104.27</b>
	<b>SANTALDIH TPS</b>	<b>3667.33</b>	<b>3697.01</b>	<b>3444.17</b>
	<b>SOUTHERN REPL. TPS</b>	<b>410.68</b>	<b>531.26</b>	<b>990.2</b>
	<b>TEESTA LOW DAM-III HPS</b>	<b>553.87</b>	<b>514.86</b>	<b>394.19</b>
	<b>TEESTA LOW DAM-IV HPS</b>	<b>602.53</b>	<b>18.77</b>	<b>0</b>
	<b>TITAGARH TPS</b>	<b>232.81</b>	<b>663.83</b>	<b>1684.25</b>
<b>WEST BENGAL Total</b>		<b>52192.69</b>	<b>46946.62</b>	<b>49742.02</b>
<b>ARUNACHAL PRADESH</b>	<b>PARE HPS</b>	<b>0</b>		
	<b>RANGANADI HPS.</b>	<b>1249.01</b>	<b>1280.25</b>	<b>1109.48</b>
<b>ARUNACHAL PRADESH Total</b>		<b>1249.01</b>	<b>1280.25</b>	<b>1109.48</b>
<b>ASSAM</b>	<b>BONGAIGAON TPP</b>	<b>1680.27</b>	<b>117.12</b>	
	<b>KARBI LANGPI HPS.</b>	<b>396.59</b>	<b>408.88</b>	<b>402.43</b>
	<b>KATHALGURI CCPP</b>	<b>1572.63</b>	<b>1758.83</b>	<b>1741.04</b>
	<b>KOPILI HPS.</b>	<b>1088.27</b>	<b>781.8</b>	<b>629.46</b>
	<b>LAKWA GT</b>	<b>888.73</b>	<b>947.86</b>	<b>935.26</b>
	<b>LRPP GT</b>			
	<b>NAMRUP CCPP</b>	<b>354.88</b>	<b>507.63</b>	<b>515.14</b>
	<b>NAMRUP ST</b>			<b>76.51</b>
<b>ASSAM Total</b>		<b>5981.37</b>	<b>4522.12</b>	<b>4299.84</b>

<b>MANIPUR</b>	<b>LEIMAKHONG DG</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>LOKTAK HPS.</b>	<b>741.07</b>	<b>536.64</b>	<b>372.44</b>
<b>MANIPUR Total</b>		<b>741.07</b>	<b>536.64</b>	<b>372.44</b>
<b>MEGHALAYA</b>	<b>KHONDONG HPS.</b>	<b>197.1</b>	<b>175.05</b>	<b>87.86</b>
	<b>KYRDEMKULAI HPS.</b>	<b>65.29</b>	<b>117.51</b>	<b>113.1</b>
	<b>MYNTDU(LESHKA) St-1 HPS</b>	<b>391.65</b>	<b>444.35</b>	<b>408.98</b>
	<b>NEW UMTRU HPS</b>	<b>0</b>	<b>0</b>	
	<b>UMIAM HPS ST-I</b>	<b>96.65</b>	<b>114.09</b>	<b>90.46</b>
	<b>UMIAM HPS ST-IV</b>	<b>166.01</b>	<b>184.99</b>	<b>162.75</b>
<b>MEGHALAYA Total</b>		<b>916.7</b>	<b>1035.99</b>	<b>863.15</b>
<b>MIZORAM</b>	<b>TUIRIAL HPS</b>			
<b>MIZORAM Total</b>				
<b>NAGALAND</b>	<b>DOYANG HPS.</b>	<b>258.94</b>	<b>163.14</b>	<b>165.15</b>
<b>NAGALAND Total</b>		<b>258.94</b>	<b>163.14</b>	<b>165.15</b>
<b>TRIPURA</b>	<b>AGARTALA GT</b>	<b>904.58</b>	<b>763.64</b>	<b>627.84</b>
	<b>BARAMURA GT</b>	<b>188.25</b>	<b>232.92</b>	<b>306.03</b>
	<b>MONARCHAK CCPP</b>	<b>172.05</b>	<b>127.06</b>	<b>0.7</b>
	<b>ROKHIA GT</b>	<b>435.94</b>	<b>506.3</b>	<b>420.43</b>
	<b>TRIPURA CCPP</b>	<b>4173.07</b>	<b>3479.46</b>	<b>2469.44</b>
<b>TRIPURA Total</b>		<b>5873.89</b>	<b>5109.38</b>	<b>3824.44</b>
<b>Bhutan (IMP)</b>	<b>Bhutan (IMP)</b>	<b>5617.34</b>	<b>5244.21</b>	<b>5007.74</b>
<b>Bhutan (IMP) Total</b>		<b>5617.34</b>	<b>5244.21</b>	<b>5007.74</b>
<b>Grand Total</b>		<b>1160140.94</b>	<b>1107822.28</b>	<b>1048672.96</b>

**1. Gross Generation from conventional sources (Thermal, Hydro and Nuclear) stations of 25 MW and above only.**

**2. Figures given above indicate gross generation of all power stations (Central, State& Private Sector) located geographically in the respective State/UT.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
STARRED QUESTION NO.338  
ANSWERED ON 03.01.2019**

**STREET LIGHTING NATIONAL PROGRAMME**

**\*338. SHRIMATI ANJU BALA:  
SHRI L.R. SHIVARAME GOWDA:**

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

**(a) whether the Government is implementing the Street Lighting National Programme (SLNP) to promote the use of LED lights in place of conventional Street lights in the country and if so, the details of the scheme along with the number of streetlights installed, since its inception, State-wise;**

**(b) whether SLNP is currently being implemented only in a few selected States and if so, the details thereof and the reasons therefor;**

**(c) the total number of Local Bodies which have entered into contract with Energy Efficiency Services Ltd. (EESL) for replacement of street lights with LED lights under SLNP so far, State-wise;**

**(d) whether the Government has made any study on the implementation of the project and if so, the details thereof; and**

**(e) the steps being taken by the Government for effective implementation of SLNP?**

**A N S W E R**

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

**( SHRI R.K. SINGH )**

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

**\*\*\*\*\***

**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.338 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING STREET LIGHTING NATIONAL PROGRAMME.**

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(a) to (e) : Hon'ble Prime Minister, on 5<sup>th</sup> January, 2015, launched Street Lighting National Programme (SLNP) to replace 1.34 crore conventional street lights with energy efficient LED street lights by March, 2019. SLNP is being implemented by Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power. Till date, EESL has installed over 76.77 lakh LED street lights in 28 States/UTs.

2. SLNP is voluntary in nature and runs without any budgetary support from Government of India. The entire investment in supply, installation and maintenance of LED Street Lights is made by EESL. Payment to EESL is made by Urban Local Bodies (ULBs) from the resultant savings achieved in terms of reductions in electricity bills and maintenance cost, in respect of the street lights covered under the programme, over a period of seven years.

3. SLNP is implemented in States/ULBs, which have signed the implementation agreement with EESL. As on date, it is implemented in all ULBs of 13 States and 1 Union Territory (Annexure-I) and partially in 11 other states and 3 UTs (Annexure-II), including States/UTs where demonstration projects have been successfully completed.

4. SLNP has not been implemented so far in the states of Arunachal Pradesh, Manipur, Mizoram, Nagaland and Meghalaya and Union Territories of Daman & Diu, Dadra and Nagar Haveli and Lakshadweep.

5. Till date, total 1,492 ULBs have signed the implementation agreement with EESL for replacement of conventional street lights with LED street lights. Out of these ULBs, installation work in 712 ULBs has been completed. States/UTs wise number of ULBs which have signed the implementation agreement with EESL for this programme is at Annexure-III.

6. EESL has conducted the studies on the implementation of SLNP in the states of Himachal Pradesh and Rajasthan. The gist of findings emerging from these studies is at Annexure IV.

7. For effective implementation of SLNP as well as for expediting the implementation in remaining states/UTs, the following steps have been taken by ESSL/Government:

- (i) EESL has submitted proposals for replacement of Conventional street lights with LED street to the remaining States/UTs
- (ii) Letters have been issued by Secretary (Power) to all the Chief Secretaries of all the States/UTs for implementation of SLNP Programme in their respective states
- (iii) Real time monitoring is done of performance of the installed Street Lights by Centralised Control and Monitoring System (CCMS).

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**ANNEXURE-I**

**ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 338 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING STREET LIGHTING NATIONAL PROGRAMME.**

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**List of States where SLNP has been implemented in all ULBs as per implementation agreement signed with EESL**

<b>S. No.</b>	<b>States</b>	<b>No. of LED Street Lights installed till date</b>
1.	Andhra Pradesh	21,81,615
2.	Bihar	1,50,203
3.	Chhattisgarh	3,47,251
4.	Goa	2,06,790
5.	Gujarat	8,83,097
6.	Himachal Pradesh	52,404
7.	Jharkhand	93,742
8.	Maharashtra	1,75,146
9.	Odisha	2,70,271
10.	Rajasthan	9,61,229
11.	Telangana	8,17,878
12.	Tripura	75,376
13.	Uttar Pradesh	7,74,549

**List of UT where SLNP has been implemented in all ULBs as per implementation agreement signed with EESL**

<b>Sl. No.</b>	<b>UT</b>	<b>No. of LED Street Lights installed till date</b>
1.	Chandigarh	41,942

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## ANNEXURE-II

### ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 338 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING STREET LIGHTING NATIONAL PROGRAMME.

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List of States where SLNP has been partially implemented in some ULBs as per implementation agreement signed with EESL

S. No.	States	No. of LED Street Lights installed till date
1.	Assam	23,651
2.	Haryana	61,500
3.	Jammu & Kashmir	11,991
4.	Karnataka	9,882
5.	Kerala	38,301
6.	Madhya Pradesh	81,095
7.	Punjab	46,780
8.	Sikkim	868
9.	Tamil Nadu	6,689
10.	Uttarakhand	30,619
11.	West Bengal	15,307

List of UTs where SLNP has been partially implemented in some ULBs as per implementation agreement signed with EESL

Sl. No.	UTs	No. of LED Street Lights installed till date
1.	Delhi	3,05,082
2.	Andaman & Nicobar	13,500
3.	Puducherry	450

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**ANNEXURE-III****ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 338 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING STREET LIGHTING NATIONAL PROGRAMME.**

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**States/UTs wise details ULBs, which have signed the implementation agreement with EESL for replacement of conventional street lights with LED street lights**

<b>Sl. No.</b>	<b>States/UTs</b>	<b>Number of ULBs signed till date</b>
1.	Andaman & Nicobar	1
2.	Andhra Pradesh	108
3.	Assam	3
4.	Bihar	143
5.	Chandigarh	1
6.	Chhattisgarh	168
7.	Goa	14
8.	Gujarat	148
9.	Haryana	1
10.	Himachal Pradesh	48
11.	Jharkhand	43
12.	Kerala	4
13.	Madhya Pradesh	2
14.	Maharashtra	351
15.	New Delhi	1
16.	Odisha	109
17.	Punjab	16
18.	Rajasthan	191
19.	Telangana	76
20.	Tripura	20
21.	Uttar Pradesh	43
22.	Uttarakhand	1
	<b>Total</b>	<b>1,492</b>

**In some States/ UTs demonstration projects have been successfully completed- notably in Jammu & Kashmir, Karnataka, Puducherry, Sikkim, Tamil Nadu and West Bengal.**

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**ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 338 ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING STREET LIGHTING NATIONAL PROGRAMME.**

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The gist of the findings of the case studies on the implementation of LED street lights projects in Himachal Pradesh and Rajasthan are as follows:-

1. Himachal Pradesh: The energy & monetary savings achieved through implementation of Street Light National Program in Himachal Pradesh as per survey conducted by EESL, on sample basis, is as follows:-

Sl. No	City	Total Inst. Lights	Monthly Energy Consumption with Conventional lights (in kWh)	Monthly Energy Consumption with LED (in kWh)	Monthly Energy Saving (in kWh)	% Saving	Monetary Saving Per Month (in INR)
1	Shimla	8516	358082	158199	199883	56%	9,89,419
2	Dharamshala	2910	120345	52495	67850	56%	3,35,859
3	Mandi	2189	80003	34917	45086	56%	2,23,174
4	Sundernagar	1821	62822	27023	35799	57%	1,77,205
5	Paonta Sahib	1948	114525	50654	63871	56%	3,16,159
6	Ghumarwin	608	22645	9911	12734	56%	63,033
7	Manali	798	40912	18876	22036	54%	1,09,079
<b>Total</b>		<b>18790</b>	<b>799334</b>	<b>352075</b>	<b>447258</b>	<b>56%</b>	<b>22,13,928</b>

(Average operating hours per day considered as 11; Monetary saving calculation is based on Deemed saving approach, considering unit rate of INR 4.95/kWh).

2. Rajasthan:

- (i) **Jhalawar Street Light Project:-** The energy savings achieved through implementation of Street Light National Programme in Jhalawar as per survey conducted by EESL, on sample basis, is as follows:-

Total Inventory of Conventional Street Lights			
Sr. No.	Earlier Wattage of Lamp (W)	Quantity	Total kW
1	High Pressure Sodium Vapour - 400	36	16
2	High Pressure Sodium Vapour - 250	120	33
3	High Pressure Sodium Vapour - 150	140	23
4	High Pressure Sodium Vapour - 70	157	13
5	Fluorescent Tube Light - 40W	1624	78
6	Compact Fluorescent Lamp - 20W	372	7
<b>Total kW</b>			<b>170</b>
Total Inventory after Installation of LED Street Lights			
Sr. No.	Wattage of LED Light	Quantity	Total kW
1	190	36	7
2	120	120	14
3	72	140	10
4	40	157	6
5	18	1624	29
6	12	372	4
<b>Total kW (New)</b>			<b>71</b>

<b>Estimates of energy saving potential</b>	
<b>Earlier Load (in kW)</b>	<b>170</b>
<b>New Load (in kW)</b>	<b>71</b>
<b>Reduction in Load after Installation (in kW)</b>	<b>99</b>
<b>Annual Energy Saving in kWh</b>	<b>395863</b>
<b>Annual Energy saving in MU's</b>	<b>0.396</b>
<b>% reduction in Load</b>	<b>58%</b>

(Average operating hours per day considered as 11 and operating days considered as 365).

Implementation of the LED street light project in Jhalawar has resulted in reduction of the street lighting load from 170 kW to 71 kW.

(ii) **Mount Abu Street Light Project:-** The energy savings achieved through implementation of Street Light National Programme in Mount Abu as per survey conducted by EESL, on sample basis is as follows:-

<b>Total Inventory of Conventional Street Lights</b>			
<b>Sl. No.</b>	<b>Earlier Wattage of Lamp (W)</b>	<b>Quantity</b>	<b>Total kW</b>
1	High Pressure Sodium Vapour – 400	106	42.4
2	High Pressure Sodium Vapour – 250	43	10.8
3	High Pressure Sodium Vapour – 150	492	73.8
4	High Pressure Sodium Vapour – 70	144	10.1
5	Fluorescent Tube Light – 40 W	508	20.3
6	Compact Fluorescent Lamp – 36 W	202	7.3
7	Compact Fluorescent Lamp – 72 W	6	0.432
8	Compact Fluorescent Lamp – 15 W	3	0.045
9	Compact Fluorescent Lamp – 11 W	26	0.286
<b>Total kW</b>			<b>165.4</b>
<b>Total Inventory after Installation of LED Street Lights</b>			
<b>Sr. No</b>	<b>Wattage of LED Light</b>	<b>Quantity</b>	<b>Total kW</b>
1	120	76	9.12
2	70	669	46.83
3	15	737	11.055
<b>Total kW (New)</b>			<b>67</b>

<b>Estimates of energy saving potential</b>	
<b>Earlier Load (in kW)</b>	<b>165.4</b>
<b>New Load (in kW)</b>	<b>67</b>
<b>Reduction in Load after Installation (in kW)</b>	<b>98.4</b>
<b>Annual Energy Saving in kWh</b>	<b>394996</b>
<b>Annual Energy saving in MU's</b>	<b>395</b>
<b>% reduction in Load</b>	<b>59%</b>

(Average operating hours per day considered as 11 and operating days considered as 365). The implementation of LED street light project in Mount Abu has resulted in reduction of the street lighting load from 165.4 kW to 67 kW.

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3689  
ANSWERED ON 03.01.2019**

**STATUS OF IPDS**

**3689. DR. HEENA VIJAYKUMAR GAVIT:**

**SHRI SATAV RAJEEV:**

**SHRI MOHITE PATIL VIJAYSINH SHANKARRAO:**

**SHRIMATI SUPRIYA SULE:**

**SHRI DHANANJAY MAHADIK:**

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

- (a) the present status of National Integrated Power Development Scheme (IPDS) along with the aims and objectives;**
- (b) whether the IPDS is progressing successfully and the Government has been able to achieve its objective, if so, the details thereof;**
- (c) whether this scheme will strengthen the transmission and distribution (T&D) networks, 100 percent metering of urban areas and smarten it with information technology, if so, the details thereof;**
- (d) whether some State Governments have not joined the scheme, if so, the name of such States and the steps taken by the Government to make them join the scheme and the quantum of funds released and utilized, State-wise; and**
- (e) the other steps taken by the Government to provide quality and reliable power supply in the urban areas?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) to (c) : The Integrated Power Development Scheme (IPDS) was approved by the Government of India on 20.11.2014 with the aim to provide quality and reliable power supply in the urban areas with the following components:**

- i) Strengthening of Sub-transmission and Distribution network in urban areas;**
- ii) Metering of feeders/distribution transformers/consumers in urban areas; and**

**iii) IT enablement of distribution sector and strengthening of distribution network, being undertaken under R-APDRP.**

**The Scheme has a total outlay of Rs. 32,612 crore including a budgetary support of Rs. 25,354 crore. Projects worth Rs. 31,945 crore have been sanctioned in 546 circles of 32 states/UTs and Rs. 7116 crore have been disbursed. The sanctioned projects include Rs. 28,234 Cr for System strengthening, Rs. 985 Cr. For IT Phase-II projects, Rs.834 Cr. for Smart Metering, Rs.747 Cr. for ERP, Rs.165 Cr. for RT-DAS & Rs.978 Cr. for GIS s/s. The Projects are under various stages of implementation and are progressing successfully, having achieved 49% progress as reported by the Utilities.**

**(d) : All States have joined the scheme. The details of funds sanctioned and released are placed at Annexure.**

**(e) : Distribution of electricity falls under the purview of States and Distribution Utilities and ensuring the quality and reliable power supply is the responsibility of States and concerned Utility. However, Government of India has launched several schemes such as Integrated Power Development Scheme (IPDS), Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Ujwal DISCOM Assurance Yojana (UDAY) to enable States to improve their Distribution Infrastructure. Under IPDS/DDUGJY schemes, central funding is being provided for strengthening of sub-transmission and distribution networks in the urban & rural areas and Metering of distribution transformers/feeders/ consumers for reduction of T&D losses. Funds have also been sanctioned under IPDS for Under Ground (UG) cabling and Aerial Bunched (AB) cables for quality and reliable power supply.**

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## ANNEXURE

### ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 3689 ANSWERED IN THE LOK SABHA ON 03.01.2019

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State-wise details of projects sanctioned and disbursed under IPDS as on 15.12.2018

Sl. No.	State/ UTs	ST&D				IT Enablement/ERP/ Smart meter		Total	
		Circle	Town	Approved Cost (crore)	Disb. (crore)	Approved Cost (crore)	Disb. (crore)	Approved Cost (crore)	Disb. (crore)
1	A&N	1	1	18	1	0	0	18	1
2	AP	13	90	690	347	120	2	810	349
3	Arunachal P	3	9	151	13	8	0	159	13
4	Assam	19	88	691	151	26	1	717	152
5	Bihar	16	130	2,220	363	226	0	2446	363
6	Chhattisgarh	15	182	529	67	117	4	647	71
7	Delhi	1	1	198	33	0	0	198	33
8	Goa	2	14	32	2	0	0	32	2
9	Gujarat	24	166	1,127	453	207	0	1334	453
10	Haryana	18	47	391	66	37	0	428	66
11	HP	12	54	111	28	66	4	178	32
12	J&K	12	85	447	38	21	0	468	38
13	Jharkhand	15	40	755	292	34	0	790	292
14	Karnataka	28	223	1,198	475	254	0	1452	475
15	Kerala	26	64	600	108	131	0	731	108
16	Maharashtra	46	255	2,417	427	217	6	2634	433
17	Manipur	3	18	134	32	20	0	154	32
18	Meghalaya	6	9	62	15	19	0	81	15
19	Mizoram	1	12	90	15	19	0	109	15
20	MP	43	311	1,557	272	179	0	1736	272
21	Nagaland	2	12	119	17	18	1	137	18
22	Odisha	21	112	1,083	183	142	7	1225	190
23	Puducherry	1	6	22	4	0	0	22	4
24	Punjab	20	102	332	58	125	6	457	64
25	Rajasthan	35	185	1,350	229	190	0	1540	229
26	Sikkim	6	8	101	1	0	0	101	1
27	Tamil Nadu	37	522	1,704	279	56	0	1,761	279
28	Telangana	14	67	692	186	69	4	761	190
29	Tripura	9	20	203	17	18	0	221	17
30	UP	67	637	5,140	2333	181	0	5321	2333
31	Uttarakhand	11	38	600	50	34	5	634	55
32	West Bengal	19	122	2,940	519	32	0	2972	519
<b>Total</b>		<b>546</b>	<b>3,630</b>	<b>27,706</b>	<b>7075</b>	<b>2,566</b>	<b>41</b>	<b>30,273*</b>	<b>7,116</b>

Source: PFC

\*In addition to above, Monitoring Committee in its 13th Meeting approved Additional System Strengthening Projects worth Rs 525.97 crore, RT-DAS Projects worth Rs 164.82 crore and GIS Projects worth Rs 973.49 crore. Hence, total sanctions are Rs.31,945 cr.

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3694  
ANSWERED ON 03.01.2019**

**POLLUTION BY POWER PLANTS**

**3694. KUNWAR HARIBANSH SINGH:**

**SHRI SUDHEER GUPTA:**

**SHRI S.R. VIJAYAKUMAR:**

**SHRI ASHOK SHANKARRAO CHAVAN:**

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

- (a) the details of coal-based power projects running at present near major Metro Cities and in the NCR region, which badly pollute air of these Metro Cities;**
- (b) the number of coal-based power projects converted from the coal based to Hydro or other pollution free power generating contents so far;**
- (c) the time by which all coal based power projects will be closed to provide healthy air to citizens of Delhi and other metro cities; and**
- (d) the steps taken/being taken by his Ministry for strict compliance of norms with regard to emission of sulphur dioxide and other gases emitting from coal-based power plants?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) : The details of coal based power projects running at present in and around major Metro Cities and NCR region are annexed.**

**(b) : No coal based power project has been converted from the coal based to hydro or any other type of power generating plant.**

(c) & (d) : There are two coal based thermal power plants located in Delhi. They are Badarpur TPS (3x95 + 2x210 MW) of NTPC and Rajghat TPS (2 x 67.5 MW) of IPGCL. Badarpur TPS has been closed in October 2018 and Rajghat TPS which is not in operation has submitted the closure report to Govt. of NCT of Delhi. Ennore TPS (2x60 MW + 2x110 MW) located near Chennai have been closed in the year 2017. Presently there is no plan to close down the power plants as Annexed.

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

<b>Emission parameter</b>	<b>TPPs (units) installed before 31<sup>st</sup> December, 2003</b>	<b>TPPs (units) installed after 31<sup>st</sup> December 2003 and upto 31<sup>st</sup> December 2016</b>	<b>TPPs (units) to be installed from 1<sup>st</sup> January 2017</b>
<b>Particulate Matter</b>	<b>100 mg/Nm<sup>3</sup></b>	<b>50 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>
<b>Sulphur Dioxide (SO<sub>2</sub>)</b>	<b>600 mg/Nm<sup>3</sup> for units less than 500MW capacity  200 mg/Nm<sup>3</sup> for units 500MW and above capacity</b>	<b>600 mg/Nm<sup>3</sup> for units less than 500MW capacity  200 mg/Nm<sup>3</sup> for units 500MW and above capacity</b>	<b>100 mg/Nm<sup>3</sup></b>
<b>Oxides of Nitrogen (NO<sub>x</sub>)</b>	<b>600 mg/Nm<sup>3</sup></b>	<b>300 mg/Nm<sup>3</sup></b>	<b>100 mg/Nm<sup>3</sup></b>
<b>Mercury</b>	<b>0.03 mg/Nm<sup>3</sup> (for unit size 500 MW and above)</b>	<b>0.03 mg/Nm<sup>3</sup></b>	<b>0.03 mg/Nm<sup>3</sup></b>

To ensure uninterrupted power supply position in the country, a phased implementation plan (to be implemented before 2022) for installation of Flue Gas De-Sulphurization (FGD) in plants for a capacity of 1,61,402 MW (414 Units) and upgradation of Electrostatic Precipitator in plants for a capacity of 64,525 MW (222 units) was prepared by Central Electricity Authority (CEA) in consultation with the stakeholders and this plan was submitted to MoEF&CC on 13.10.2017. The Central Pollution Control Board (CPCB) has issued directions to Thermal Power Plants including those mentioned in the annexure, to ensure compliance as per the plan prepared by CEA.

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**ANNEXURE**

**ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 3694 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**List of Coal Based Thermal Power Plants in NCR Region:**

<b>Sl. No.</b>	<b>Name of Thermal Power Station</b>
<b>1</b>	<b>Dadri (NCTPP), (4x210 MW + 2x490 MW)</b>
<b>2</b>	<b>IGSTPP, Jhajjar, (3x500 MW)</b>
<b>3</b>	<b>MGSTPP, CLP Jhajjar,(2x660 MW)</b>
<b>4</b>	<b>Panipat, Haryana, Unit Nos. 6, 7 &amp; 8 (1x210 MW + 2x250 MW)</b>

**List of Coal Based Thermal Power Plants near Chennai:**

<b>Sl. No.</b>	<b>Name of Thermal Power Station</b>
<b>1</b>	<b>North Chennai TPS, (3x210 MW) North Chennai TPS Ext., (2x600 MW)</b>
<b>2</b>	<b>Vallur TPS, (3x500 MW)</b>

**List of Coal Based Thermal Power Plants near Kolkata:**

<b>S. N.</b>	<b>Name of Thermal Power Station</b>
<b>1</b>	<b>Budge- Budge TPS, (3x250 MW)</b>

**List of Coal Based Thermal Power Plants in Mumbai:**

<b>Sl. No.</b>	<b>Name of Thermal Power Station</b>
<b>1</b>	<b>Trombay TPS, (1x250 MW + 1x500 MW)</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3705  
ANSWERED ON 03.01.2019**

**AMENDMENT IN ELECTRICITY ACT, 2003**

**3705. SHRI KONAKALLA NARAYANA RAO:  
SHRI GUTHA SUKENDER REDDY:**

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

- (a) whether the Government is planning to amend the present Electricity Act, 2003 with a view to make it more transparent and effective;**
- (b) if so, the details thereof and if not, the reasons therefor;**
- (c) whether the Government has taken the views of the State Governments in this regard;**
- (d) if so, the details thereof; and**
- (e) the time by which this new Electricity Bill is likely to come into force?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) to (e) : The Central Government is planning to bring amendments to the present Electricity Act 2003 with a view to make it more transparent and effective. In this regard Electricity (Amendment) Bill 2014 was introduced in the Lok Sabha on 19.12.2014. The Bill was subsequently referred to the Standing Committee on Energy for examination. The Standing Committee has submitted its report on 7.5.2015. Based on the observations/recommendations of the Standing Committee on Energy and further consultation/deliberations with State Governments and other stakeholders, some more amendments have been proposed. Accordingly, a revised draft for amendment in Electricity Act, 2003 was circulated on 7th September, 2018 for seeking comments of various stakeholders including that of State Governments. The last date for submitting comments of Stakeholders including State Governments was 5th November, 2018. Further a detailed discussion was held on 3<sup>rd</sup> November 2018 by Ministry of Power with State Governments to discuss the proposed amendments to Electricity Act, 2003.**

**We have received comments of more than one hundred Stakeholders, which are under examination. After examination of stakeholder views, the amendments in Electricity Act 2003 will be finalised and official Amendments to Electricity (Amendment) Bill 2014 shall be tabled in Parliament.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3715  
ANSWERED ON 03.01.2019**

**PROGRESS OF RURAL ELECTRIFICATION**

**3715. SHRI PRAHLAD SINGH PATEL:**

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

- (a) whether the Union Government has sought information from State Governments about the progress of the rural electrification in their respective State;**
- (b) if so, the details of reports submitted by the State Governments in this regard;**
- (c) the details of funds allocated to each State for rural electrification during the last three years;**
- (d) whether the State Governments have asked additional help to meet the target of rural electrification; and**
- (e) if so, the details thereof?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) & (b) : As reported by the States, all inhabited census villages across the country were electrified as on 28.04.2018.**

**In order to ensure close monitoring and smooth implementation, the progress of rural electrification schemes namely Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) is updated by the respective State DISCOMs/Implementing agencies on online web portal [www.ddugjy.gov.in](http://www.ddugjy.gov.in) and [www.saubhagya.gov.in](http://www.saubhagya.gov.in), respectively.**

**(c) : Funds are released against sanctioned projects in installments based on the utilisation of amount released earlier and fulfillment of stipulated conditions under DDUGJY and Saubhagya. Grant of Rs.21,527 crore and Rs.1,541 crore has been disbursed under DDUGJY and Saubhagya respectively. The State-wise details are given at Annexure-I and Annexure-II respectively.**

**(d) & (e) : Based on the requests received from the States, an additional amount of Rs.11,996 crore has been sanctioned for States under DDUGJY for creation of additional infrastructure to cater the need of household electrification under Saubhagya scheme.**

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**ANNEXURE-I****ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3715 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**State-wise grant disbursed during the last three years under DDUGJY including RE Component**

(Rs. in crore)

Sl.	Name of the State	2015-16	2016-17	2017-18	Total
1	Andhra Pradesh	31	128	165	324
2	Arunachal Pradesh	31	101	81	213
3	Assam	338	598	401	1,337
4	Bihar	710	1,292	763	2,765
5	Chhattisgarh	279	126	552	957
6	Gujarat	58	110	143	312
7	Haryana	-	-	45	45
8	Himachal Pradesh	28	-	-	28
9	J&K	-	-	65	65
10	Jharkhand	-	327	862	1,189
11	Karnataka	44	145	204	393
12	Kerala	-	134	87	221
13	Madhya Pradesh	439	421	598	1,457
14	Maharashtra	43	257	143	443
15	Manipur	7	36	33	76
16	Meghalaya	-	26	58	83
17	Mizoram	19	14	42	75
18	Nagaland	48	21	24	93
19	Orissa	514	1,079	366	1,959
20	Punjab	-	-	15	15
21	Rajasthan	253	349	782	1,383
22	Sikkim	-	-	18	18
23	Tamil Nadu	77	110	2	189
24	Telangana	5	27	60	93
25	Tripura	49	78	62	189
26	Uttar Pradesh	1,249	2,262	3,149	6,660
27	Uttarakhand	71	16	33	121
28	West Bengal	305	273	241	819
29	Puducherry	-	1	-	1
30	Andaman & Nicobar	-	-	1	1
<b>Grand Total</b>		<b>4599</b>	<b>7932</b>	<b>8995</b>	<b>21527</b>

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**ANNEXURE-II****ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3715 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**State-wise grant released under Saubhagya scheme during the FY 2017-18 (since inception on 11.10.2017)**

<b>Sl. No.</b>	<b>Name of the State</b>	<b>(Rs. in Crore)</b>
<b>1</b>	<b>Assam</b>	<b>42</b>
<b>2</b>	<b>Bihar</b>	<b>115</b>
<b>3</b>	<b>Chhattisgarh</b>	<b>43</b>
<b>4</b>	<b>J&amp;K</b>	<b>2</b>
<b>5</b>	<b>Jharkhand</b>	<b>70</b>
<b>6</b>	<b>Kerala</b>	<b>15</b>
<b>7</b>	<b>Madhya Pradesh</b>	<b>260</b>
<b>8</b>	<b>Maharashtra</b>	<b>15</b>
<b>9</b>	<b>Manipur</b>	<b>6</b>
<b>10</b>	<b>Nagaland</b>	<b>5</b>
<b>11</b>	<b>Odisha</b>	<b>76</b>
<b>12</b>	<b>Uttar Pradesh</b>	<b>864</b>
<b>13</b>	<b>Uttarakhand</b>	<b>13</b>
<b>14</b>	<b>West Bengal</b>	<b>14</b>
	<b>Total</b>	<b>1,541</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3720  
ANSWERED ON 03.01.2019**

**ELECTRICITY TO HOUSEHOLDS UNDER SAUBHAGYA SCHEME**

**†3720. SHRI BIDYUT BARAN MAHATO:  
SHRI SUMEDHANAND SARSWATI:  
SHRI NARANBHAI KACHHADIYA:  
SHRI CHANDRA PRAKASH JOSHI:**

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

- (a) whether the Government has fixed target to provide electricity to 100 percent households under 'Saubhagya' scheme;**
- (b) if so, the percentage of households provided electricity so far under the said scheme along with the details thereof, State- wise;**
- (c) whether the Government has allocated funds to State Governments for the said scheme; and**
- (d) if so, the details of the said allocation, State-wise?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) & (b) : Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana - Saubhagya with the aim to achieve universal household electrification by providing electricity connections to all households in rural and all poor households in urban areas by March, 2019.**

**As informed by the States, 99.53% of total households were electrified as on 31.12.2018 since launch of Saubhagya. The State-wise details are given at Annexure-I.**

**(c) & (d) : Under Saubhagya funds are released against sanctioned projects in installments, based on the reported utilisation of amount in the previous installment(s) and fulfillment of stipulated conditionalities. Accordingly, grant of Rs.2958 crore has been disbursed to the States under Saubhagya Scheme up to 30.11.2018. State-wise details are present at Annexure-II.**

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**ANNEXURE-I****ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3720 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**Status of Household Electrification under Saubhagya****As on 31.12.2018**

<b>Sl. No.</b>	<b>State</b>	<b>Households electrified w.e.f. 11.10.2017 (Since launch of Saubhagya)</b>	<b>Household Electrification (%)</b>
1	Andhra Pradesh	1,56,072	100.00%
2	Arunachal Pradesh	42,608	100.00%
3	Assam	13,16,135	91.87%
4	Bihar	32,59,041	100.00%
5	Chhattisgarh	6,84,262	99.38%
6	Goa	-	100.00%
7	Gujarat	41,317	100.00%
8	Haryana	52,774	100.00%
9	Himachal Pradesh	12,891	100.00%
10	Jammu & Kashmir	3,77,578	100.00%
11	Jharkhand	13,55,930	100.00%
12	Karnataka	3,02,204	100.00%
13	Kerala	-	100.00%
14	Madhya Pradesh	19,84,264	100.00%
15	Maharashtra	10,96,642	100.00%
16	Manipur	1,02,217	100.00%
17	Meghalaya	94,942	83.05%
18	Mizoram	27,803	100.00%
19	Nagaland	1,32,507	100.00%
20	Odisha	23,99,186	100.00%
21	Puducherry	912	100.00%
22	Punjab	386	100.00%
23	Rajasthan	15,48,126	97.52%
24	Sikkim	14,900	100.00%
25	Tamil Nadu	2,170	100.00%
26	Telangana	4,46,020	100.00%
27	Tripura	1,36,408	100.00%
28	Uttar Pradesh	74,06,767	100.00%
29	Uttarakhand	2,17,292	100.00%
30	West Bengal	7,32,290	100.00%
	<b>Total</b>	<b>2,39,43,644</b>	<b>99.53%</b>

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**ANNEXURE-II****ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 3720 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**State-wise Grant disbursed under Saubhagya  
(since its inception on 11.10.2018)****As on 30.11.2018**

<b>Sl. No.</b>	<b>Name of the State</b>	<b>Grant disbursed (Rs. in Crore)</b>
<b>1</b>	<b>Arunachal Pradesh</b>	<b>151</b>
<b>2</b>	<b>Assam</b>	<b>328</b>
<b>3</b>	<b>Bihar</b>	<b>115</b>
<b>4</b>	<b>Chhattisgarh</b>	<b>196</b>
<b>5</b>	<b>Himachal Pradesh</b>	<b>1</b>
<b>6</b>	<b>J&amp;K</b>	<b>53</b>
<b>7</b>	<b>Jharkhand</b>	<b>143</b>
<b>8</b>	<b>Kerala</b>	<b>15</b>
<b>9</b>	<b>Madhya Pradesh</b>	<b>407</b>
<b>10</b>	<b>Maharashtra</b>	<b>67</b>
<b>11</b>	<b>Manipur</b>	<b>6</b>
<b>12</b>	<b>Meghalaya</b>	<b>27</b>
<b>13</b>	<b>Mizoram</b>	<b>29</b>
<b>14</b>	<b>Nagaland</b>	<b>34</b>
<b>15</b>	<b>Odisha</b>	<b>76</b>
<b>16</b>	<b>Rajasthan</b>	<b>23</b>
<b>17</b>	<b>Tripura</b>	<b>102</b>
<b>18</b>	<b>Uttar Pradesh</b>	<b>1,124</b>
<b>19</b>	<b>Uttarakhand</b>	<b>13</b>
<b>20</b>	<b>West Bengal</b>	<b>47</b>
<b>Total</b>		<b>2,958</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3721  
ANSWERED ON 03.01.2019**

**SAUBHAGYA**

**3721. KUMARI SUSHMITA DEV:**

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

- (a) the details of urban electrification achieved under the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) from 2017 to 2018, State-wise;**
- (b) the details of rural electrification achieved under the said scheme from 2017 to 2018;**
- (c) the details of urban and rural electrification under Saubhagya in Assam from 2017 to 2018, district-wise; and**
- (d) the details of funds allocated, funds released and funds utilised under the said scheme in Assam from 2017 to 2018, district-wise?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) to (c) : As informed by the States, under Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya), 8,44,670 urban households and 2.31 crore rural households have been electrified upto 31.12.2018 since the launch of the scheme. State-wise details of urban and rural household electrification under the scheme are given at Annexure-I and Annexure-II, respectively.**

**As reported by Assam, 13.16 lakh (13,10,947 rural + 5,188 urban) households have been electrified in Assam upto 31.12.2018 since launch of Saubhagya on 11<sup>th</sup> October, 2017. The district-wise details are given at Annexure-III.**

**(d) : Funds are released against sanctioned project in 51 installments 51 based on the reported utilisation of amount in the previous 51 installment(s) and fulfilment of stipulated conditionalities. Accordingly, grant of Rs.681.78 crore has been released for Assam under Saubhagya, upto 31.12.2018 since launch of the scheme.**

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**ANNEXURE-I****ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 3721 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**Details of Urban Electrification achieved under Saubhagya from 2017 to 2018  
(as on 31.12.2018)**

<b>Sl. No.</b>	<b>State</b>	<b>Household Electrified w.e.f 11th Oct,2017</b>
1	Andhra Pradesh	46,055
2	Arunachal Pradesh	3,866
3	Assam	5,188
4	Bihar	31,208
5	Chhattisgarh	21,439
6	Gujarat	
7	Haryana	875
8	Himachal Pradesh	85
9	Jammu & Kashmir	15,994
10	Jharkhand	40
11	Karnataka	2,000
12	Kerala	
13	Madhya Pradesh	45,293
14	Maharashtra	2,83,365
15	Manipur	4,400
16	Meghalaya	2,725
17	Mizoram	3,351
18	Nagaland	8,519
19	Odisha	2,02,598
20	Rajasthan	13,648
21	Telangana	70
22	Uttar Pradesh	1,27,449
23	Uttarakhand	26,502
	<b>Total</b>	<b>8,44,670</b>

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**ANNEXURE-II****ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 3721 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**Details of Rural Electrification achieved under Saubhagya from 2017 to 2018  
(as on 31.12.2018)**

<b>Sl. No.</b>	<b>State</b>	<b>Household Electrified w.e.f 11th Oct,2017</b>
1	Andhra Pradesh	1,10,023
2	Arunachal Pradesh	38,742
3	Assam	13,10,947
4	Bihar	32,27,833
5	Chhattisgarh	6,62,823
6	Goa	
7	Gujarat	41,317
8	Haryana	51,899
9	Himachal Pradesh	12,806
10	Jammu & Kashmir	3,61,584
11	Jharkhand	13,55,890
12	Karnataka	3,00,204
13	Kerala	
14	Madhya Pradesh	19,38,971
15	Maharashtra	8,13,277
16	Manipur	97,817
17	Meghalaya	92,217
18	Mizoram	24,452
19	Nagaland	1,23,988
20	Odisha	21,96,588
21	Puducherry	912
22	Punjab	386
23	Rajasthan	15,34,478
24	Sikkim	14,900
25	Tamil Nadu	2,170
26	Telangana	4,45,950
27	Tripura	1,36,408
28	Uttar Pradesh	72,79,318
29	Uttarakhand	1,90,790
30	West Bengal	7,32,290
	<b>Total</b>	<b>2,30,98,980</b>

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**ANNEXURE-III****ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 3721 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**District-wise details of urban and rural electrification under Saubhagya in Assam from 2017 to 2018 (as on 31.12.2018)**

<b>District</b>	<b>Household Electrified w.e.f 11<sup>th</sup> Oct,2017</b>	
	<b>Rural</b>	<b>Urban</b>
<b>Nagaon</b>	<b>71039</b>	<b>0</b>
<b>Dhubri</b>	<b>81005</b>	<b>1908</b>
<b>Kamrup Metropolitan</b>	<b>8371</b>	<b>85</b>
<b>Barpeta</b>	<b>94913</b>	<b>480</b>
<b>Dibrugarh</b>	<b>48249</b>	<b>0</b>
<b>Cachar</b>	<b>73267</b>	<b>140</b>
<b>Kamrup</b>	<b>52769</b>	<b>0</b>
<b>Tinsukia</b>	<b>66385</b>	<b>0</b>
<b>Jorhat</b>	<b>27707</b>	<b>0</b>
<b>Goalpara</b>	<b>71713</b>	<b>0</b>
<b>Sonitpur</b>	<b>48309</b>	<b>322</b>
<b>Karbi Anglong</b>	<b>43419</b>	<b>0</b>
<b>Karimganj</b>	<b>40079</b>	<b>116</b>
<b>Golaghat</b>	<b>23475</b>	<b>167</b>
<b>Marigaon</b>	<b>41509</b>	<b>339</b>
<b>Sibsagar</b>	<b>40879</b>	<b>0</b>
<b>Lakhimpur</b>	<b>49922</b>	<b>0</b>
<b>Udalguri</b>	<b>59003</b>	<b>0</b>
<b>Darrang</b>	<b>63955</b>	<b>740</b>
<b>Baksa</b>	<b>66516</b>	<b>115</b>
<b>Kokrajhar</b>	<b>43695</b>	<b>87</b>
<b>Bongaigaon</b>	<b>21328</b>	<b>52</b>
<b>Nalbari</b>	<b>36917</b>	<b>20</b>
<b>Hailakandi</b>	<b>49010</b>	<b>95</b>
<b>Dhemaji</b>	<b>41133</b>	<b>0</b>
<b>Chirang</b>	<b>31462</b>	<b>522</b>
<b>Dima Hasao</b>	<b>14918</b>	<b>0</b>
<b>Total</b>	<b>13,10,947</b>	<b>5,188</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3734  
ANSWERED ON 03.01.2019**

**PERFORMANCE REVIEW**

**3734. SHRI OM BIRLA:**

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

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

**A N S W E R**

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

**( SHRI R. K. SINGH )**

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

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

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3735  
ANSWERED ON 03.01.2019**

**COSTLIER COAL IMPORTS**

**3735. SHRI A. ARUNMOZHITHEVAN:**

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

- (a) whether the recent rise in energy demand in the country has improved off take from the power generators but has also resulted in higher dependence on costlier coal imports as the supply of the dry fuel from domestic sources was insufficient;**
- (b) whether the all India electricity growth remained steady at 5.6 per cent during the first five months period of financial year 2018-2019, if so, the details thereof;**
- (c) whether the increased demand is being met from higher generation by both thermal and renewable energy plants; and**
- (d) if so, the details thereof?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) & (b) : There is an average growth of 5.8% in all India energy supplied during 2018-19 (upto September, 2018) as compared to 2017-18 (upto September, 2017).**

**The electricity growth during September, October and November, 2018 has been 7.1%, 11.8% and 5.2% respectively and during the current year 2018-19 (upto November, 18) has increased to 6.6%.**

**Thus, the recent rise in energy demand in the country has improved off take from power generation. But due to improved availability of coal from domestic sources, the dependence on coal imports have not increased and remained almost same as last year.**

**The import of coal for blending with domestic coal during current year 2018-19 (upto November, 2018) was 39.1 Million Tonne (MT) which was almost same as the import of 38.8 MT during the same period last year.**

**(c) & (d) : Yes, Madam. The generation from thermal and renewable energy sources during current year, 2018-19 (upto November, 2018) was 715.418 Billion Unit (BU) and 81.149 BU respectively as compared to 681.284 BU and 70.022 BU respectively during the same period last year.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3742  
ANSWERED ON 03.01.2019**

**DEPENDENCE ON COAL**

**3742. DR. UDIT RAJ:**

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

- (a) whether the country's power generation over the next few decades will continue to depend heavily on coal and if so, the details thereof;**
- (b) whether an advanced ultra super critical technology project has been approved by Government for coal based power plants; and**
- (c) if so, the objectives and the progress made in implementation of the project?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) : As per National Electricity Plan, 2018, all India coal based generation by the year 2021-22 is estimated to be around 63% of the total energy generated from all sources. Similarly, by the year 2026-27, all India coal based generation is estimated to be around 55.7% of the total energy generation. Thus, country's power generation over next decade will continue to depend on coal based generation.**

**(b) & (c) : The Government has approved the Research and Development (R&D) Project (Phase-I) for development of Advanced Ultra Super Critical (AUSC) technology for Thermal Power Plants.**

**The objective of the R&D project is to develop coal fired power plants with Advanced Ultra Supercritical Technology (AUSC) for 800 MW with targeted efficiency of about 46%.**

**Phase-I of the R&D project is being executed by a consortium comprising of Indira Gandhi Centre for Atomic Research (IGCAR), NTPC and BHEL under the Chairmanship of Principal Scientific Advisor (PSA) to the Government. A dedicated Mission Directorate has been established to co-ordinate the R&D activities. Phase-II of R&D project envisages installation of an 800 MW AUSC Technology Demonstration Plant based on the technology developed under phase-I.**

**The status of progress made in implementation of the milestones for Advanced Ultra supercritical R&D Project is given at Annex. On completion of the R&D project, 800 MW capacity demonstration plant will be set up by NTPC at the existing Sipat site.**

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**ANNEX REFERRED TO IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO. 3742 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**Status of Milestones for AUSC R&D Project (Phase-I)**

<b>Sl. No.</b>	<b>Major Milestones</b>	<b>Present Status (December 2018)</b>
<b>1</b>	<b>Development of New materials and manufacturing processes and technologies</b>	<b>Material selection, material procurement technical specifications, and manufacturing procedures for major components have been completed. Forming and welding of boiler tubes made of Alloy 617M, has been used for the first time. High temperature/high pressure main safety valve in Alloy 617M has been manufactured and tested. Material data required for design has been finalized. Procurement of Materials and equipment has been finalised.</b>
<b>2</b>	<b>Optimised Thermal Cycles</b>	<b>The optimisation process has been completed.</b>
<b>3</b>	<b>Establishment of Fire Side Corrosion Test Rig</b>	<b>Manufacturing has been completed. Site activities at Dadri plant of NTPC in progress and is envisaged to be completed shortly.</b>
<b>4</b>	<b>Establishment of a Rotor Test Rig</b>	<b>Procurement has been finalized for testing in July, 2019.</b>
<b>5</b>	<b>Design of major equipment's - Boiler, Steam turbine, Generator, Valves, Piping</b>	<b>External design review has been completed for boiler, valves and turbine foundation. Currently design review of turbine is under progress and is scheduled to be completed by May, 2019.</b>
<b>6</b>	<b>Complete design of an 800 MW AUSC Thermal Power Plant</b>	<b>Design documents released on system engineering, piping, feed water heaters and condenser.</b>
<b>7</b>	<b>Overall layout of Plan</b>	<b>The overall layout plan has been completed for demonstration plant at Sipat.</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3749  
ANSWERED ON 03.01.2019**

**CONSERVATION OF ELECTRICITY**

**3749. SHRI DEVUSINH CHAUHAN:**

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

- (a) the trend of power consumed in the domestic and industrial sector witnessed during the last three years along with the schemes under implementation for Demand Side Management including saving/conservation of electricity, if so, the details thereof;
- (b) whether the Government is aware that a significant amount of electricity is being wasted in the domestic sector on account of faulty appliances, leakages and usage of energy inefficient electric devices, if so, the details thereof along with the corrective action taken thereon;
- (c) whether any target was fixed for promoting energy efficient appliances and gadgets, conservation and saving of electricity during the last three years; and
- (d) if so, the details thereof along with the action taken in this regard and the achievements made as a result thereof?

**A N S W E R**

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

**( SHRI R. K. SINGH )**

(a): The major demand side management schemes/programmes under implementation are (i) Standards & Labeling Programme, (ii) Perform, Achieve and Trade Scheme, (iii) National Energy Conservation Awards, (iv) Energy Efficiency in Small and Medium Enterprises and (v) National LED programme launched by Hon'ble Prime Minister in January 2015 comprising (a) Unnat Jyoti by Affordable LEDs for All (UJALA) to provide LED bulbs to domestic consumers; and (b) Street Lighting National Programme (SLNP). The trend of power consumed in the domestic and industrial sector witnessed during the last three years as per data made available by Central Electricity Authority (CEA) including energy savings due to implementation of Demand Side Management schemes/programmes mentioned at (i) to (iv) above is given at Annexure-I.

As regards the programme mentioned at (v) above, Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power, which is the implementation agency of the programme, has, till date, distributed over 31.77 crore LED bulbs and installed over 76.77 lakh LED street lights in the country. This has resulted in estimated energy savings of 46.42 billion kWh per year with avoided peak demand of 9,111 MW.

**(b) : Government is aware of the electricity wastage in the domestic sector on account of inefficiencies of electrical appliances and equipment. Accordingly, Ministry of Power, Government of India, through Bureau of Energy Efficiency (BEE), is implementing Standards and Labelling programme (S&L) with the following objectives:-**

- (i) Creating awareness among the consumers on cost and energy savings resulting from use of energy efficient appliances to enable them to make informed decisions at the time of purchase;**
- (ii) Transforming the appliance/equipment market towards energy efficiency through Star Labelling of appliances/equipment on a scale of 1 to 5 stars based on its annual energy performance, 5 star rated appliance/equipment being the most efficient ones;**

**At present, 22 appliances are covered under S&L Programme, out of which 10 are in mandatory category and 12 in voluntary category, as under:-**

<b>Appliances covered under mandatory category</b>	<b>Appliances covered under voluntary category</b>
<b>1. Frost Free Refrigerator</b>	<b>1. Induction Motors</b>
<b>2. Tubular Fluorescent lamp</b>	<b>2. Agricultural Pump sets</b>
<b>3. Room Air Conditioners</b>	<b>3. LPG stoves</b>
<b>4. Room Air Conditioner (Cassette, Floor Standing Tower, Ceiling, Corner AC)</b>	<b>4. Computers (Notebooks/Laptops)</b>
<b>5. Color Television</b>	<b>5. Office Equipment (printers, copier, and scanner)</b>
<b>6. Direct Cool Refrigerator</b>	<b>6. Ceiling Fans</b>
<b>7. Inverter AC</b>	<b>7. Diesel Engine Driven Monoset Pumps for Agricultural Purposes</b>
<b>8. LED lamps</b>	<b>8. Solid State Inverter</b>
<b>9. Distribution Transformers</b>	<b>9. Generator</b>
<b>10. Electric Water Heaters</b>	<b>10. Ballast (Electronic/Magnetic)</b>
	<b>11. Washing Machine</b>
	<b>12. Chillers</b>

**(c) & (d) : Under the S&L programme, during the last three years, the Government has introduced four appliances under voluntary category and brought six appliances from voluntary to mandatory category. The targets fixed for promoting energy efficient appliances and gadgets, conservation and saving of electricity during the last three years and the achievements are at Annexure-II.**

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**ANNEXURE-I****ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3749 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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<b>Electricity Consumption in India during 2014-15, 2015-16 &amp; 2016-17 (Million Unit)</b>				
<b>Financial Year</b>	<b>Domestic</b>	<b>% Growth</b>	<b>Industrial</b>	<b>% Growth</b>
<b>2014-15</b>	<b>217404.72</b>	<b>8.79</b>	<b>418346.16</b>	<b>8.83</b>
<b>2015-16</b>	<b>238875.69</b>	<b>9.88</b>	<b>423522.94</b>	<b>1.24</b>
<b>2016-17</b>	<b>255826.01</b>	<b>7.10</b>	<b>440205.52</b>	<b>3.94</b>

<b>Energy savings (both thermal energy and electricity) due to implementation of Demand Side Management schemes (Million units)</b>			
<b>Schemes</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>
<b>Standards &amp; Labeling Programme</b>	<b>33765.17</b>	<b>36899.74</b>	<b>41422.76</b>
<b>Perform, Achieve &amp; Trade Scheme</b>	<b>101050.57</b>	<b>101050.57</b>	<b>101050.57</b>
<b>National Energy Conservation Awards</b>	<b>5197</b>	<b>2598</b>	<b>7378</b>
<b>Small &amp; Medium Enterprises</b>	<b>12.70</b>	<b>72.10</b>	<b>72.10</b>
<b>Total</b>	<b>140025.4</b>	<b>140620.4</b>	<b>149923.4</b>

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**ANNEXURE-II****ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 3749 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**1. Energy saving targets and achievements under Standards & Labeling Scheme for Appliances:**

<b>XII Plan saving targets and achievements from appliance and equipment under Standards &amp; Labeling scheme (in Billion Units)</b>			
<b>Sl. No</b>	<b>Year</b>	<b>Targets</b>	<b>Achievements</b>
<b>1</b>	<b>2014-15</b>	<b>11.08</b>	<b>33.765</b>
<b>2</b>	<b>2015-16</b>	<b>11.97</b>	<b>36.899</b>
<b>3</b>	<b>2016-17</b>	<b>13.01</b>	<b>41.422</b>

**2. Action taken by Government towards energy savings in Appliances**

<b>Launch of Voluntary Performance Standards in last 3 years</b>		
<b>Sl. No</b>	<b>Appliance Name</b>	<b>Year of voluntary launch</b>
<b>1</b>	<b>Variable Capacity Inverter Air Conditioners</b>	<b>2015</b>
<b>2</b>	<b>LED Lamps</b>	<b>2015</b>
<b>3</b>	<b>Solid State Inverter</b>	<b>2016</b>
<b>4</b>	<b>Chillers</b>	<b>2018</b>

<b>Voluntary to Mandatory transition of Performance Standards in last 3 years</b>		
<b>Sl. No</b>	<b>Appliance Name</b>	<b>Year of Mandatory transition</b>
<b>1</b>	<b>Cassette Air Conditioner</b>	<b>2015</b>
<b>2</b>	<b>Direct Cool Refrigerator</b>	<b>2016</b>
<b>3</b>	<b>Color Television</b>	<b>2016</b>
<b>4</b>	<b>Electric Water Heater (Geyser)</b>	<b>2016</b>
<b>5</b>	<b>Variable Capacity Inverter Air Conditioners</b>	<b>2018</b>
<b>6</b>	<b>LED Lamps</b>	<b>2018</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3757  
ANSWERED ON 03.01.2019**

**LED BULB**

**†3757. SHRIMATI RANJANBEN BHATT:**

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

- (a) whether the Government is contemplating to sell LED bulbs and electric fans through post offices under UJALA scheme, if so, the details thereof;**
- (b) whether the Government has taken decision to sell these items through post offices in the State of Gujarat also and if so, the details thereof and the district-wise names of these post offices; and**
- (c) if not, the reasons therefor?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) to (c) : Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power, has signed a Memorandum of Undertaking (MoU) with Department of Posts (DoP) on 13<sup>th</sup> October, 2018 for distribution of energy efficient appliances under Unnat Jyoti by Affordable LED for All (UJALA) programme. As per this MoU, EESL will distribute LED bulbs, LED tube lights and energy efficient fans through DoP's network of post offices in a phased manner across India, including in the state of Gujarat.**

**Further, in order to finalize the number and locations of post offices in various states, under the above-mentioned arrangement, EESL has to sign state-specific agreements with DoP.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3762  
ANSWERED ON 03.01.2019**

**POWER GENERATION AND CONSUMPTION**

**3762. SHRI K.N. RAMACHANDRAN:**

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

- (a) the steps taken by the Government in last three years to increase the generation of electricity, the details thereof;**
- (b) the number of power houses established in last three years, the details of the coal, gas, water and nuclear based power plants; and**
- (c) the details of the consumption and generation of electricity at present and last three years, if so, the details thereof?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) : The following steps has been taken by Government of India to increase the generation of electricity:**

- (i) During last three years 2015-16 to 2017-18 and current year 2018 (upto November, 2018),the Generation capacity of 83,519 MW comprising of 49,161 MW from the conventional sources and 34,358 MW from renewable sources have been added.**
- (ii) During last three years 2015-16 to 2017-18 and current year 2018 (upto November, 2018), 90,767ckm of transmission lines and 2,76,338 MVA of transformation capacity have been completed. This has facilitated evacuation of power from Generating Stations to the consumers. The inter-regional transmission capacity of 52,700 MW has been added during last three years 2015-16 to 2017-18 and current year 2018 (upto November, 2018). Due to this, electricity can now be seamlessly transferred from anywhere to anywhere in the country.**



**(iii) Government of India is assisting states through schemes like Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) Integrated Power Development Scheme (IPDS) and Saubhagya etc. for strengthening of sub-transmission and distribution networks and for segregation of agricultural feeders to give adequate and reliable supply of power to consumers.**

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

**(b) : The details of power projects commissioned during last three years i.e. 2015-16, 2016-17, 2017-18 and current year 2018 (upto November, 2018) are given at Annexure-I.**

**(c) : The details of generation and electrical energy supplied during last three years are given at Annexure-II.**

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## ANNEXURE-I

## ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 3762 ANSWERED IN THE LOK SABHA ON 03.01.2019.

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## LIST OF PROJECTS COMMISSIONED DURING 2015-16

Sl. No.	PROJECT NAME	TYPE	CAPACITY (MW)
	<b>THERMAL PROJECTS</b>		
1	Anuppur TPP U-1,2	Coal	1200
2	Bandakhar TPP U-1	Coal	300
3	Balco TPP U-1,2	Coal	600
4	Anpara D TPP U-6,7	Coal	1000
5	Kalisindhi STPP U-2	Coal	600
6	Bongaigaon TPP U-1	Coal	250
7	TUTICORIN JV U-2	Coal	500
8	Kondapalli Stg III-A (U-1,2)	Gas	742
9	Vindhyachalstppst-V U-13	Coal	500
10	PAINAMPURAM TPP U-2	Coal	660
11	GMR RAJAHMUNDRY ENERGY LTD. BLOCK-1,2	GAS	768
12	SIKKA TPS EXTN. U-4	Coal	250
13	Uchpinda TPP,U-1,2	Coal	720
14	Talwandi Sabo U-2,3	Coal	1320
15	ITPCL TPP Unit-I	Coal	600
16	Kakatiya TPP St-II U-I	Coal	600
17	Sagardighi TPP EXTN. U-3	Coal	500
18	Prayagraj (Bara)TPP U-I	Coal	660
19	Vizag TPP U-1,2	Coal	1040
20	Tripura CCGT, Monarchak	GAS	35.6
21	Raghunathpur TPP Ph-I U-2	Coal	600
22	Mutiara TPP ,U-2	Coal	600
23	Lalitpur TPP U-1,2	Coal	1320
24	Goindwal Sahib TPP U-1,2	Coal	540
25	Ind Barath Energy Pvt. Ltd. TPP U1	Coal	350
26	NABI NAGAR TPP EXP. U-1	Coal	250
27	BOKARAO TPS "A"EXP U-1	Coal	500
28	MOUDA STPP-II U-3	Coal	660
29	BELLARY TPP ST-III U-3	Coal	700
30	CHANDRAPUR TPS EXTN. U-9	Coal	500
31	KORADI TPS EXPN. U-9	Coal	660
32	SINGARENI TPP U-1	Coal	600
33	YERMARUS TPP U-1	Coal	800
34	PARLI TPS U-8	Coal	250
35	RAIKHEDA TPP U-2	Coal	685
36	SEIONI TPP PH-I U-1	Coal	600
	<b>TOTAL (THERMAL)</b>		<b>22460.6</b>
	<b>HYDRO PROJECTS</b>		
37	KOLDAM U-3,4	HYDRO	400
38	SRINAGAR U-1,2,3,4	HYDRO	330
39	BAGHLIHAR STAGE -II U-1,2	HYDRO	300
40	JORETHANG LOOP U-1,2	HYDRO	96
41	LOWER JURALA U-1,2,3,4	HYDRO	160
42	BAGLIHAR STAGE-II U-3	HYDRO	150
43	TEESTA LOW DAM STAGE-IV U-1,2	HYDRO	80
	<b>TOTAL (HYDRO)</b>		<b>1516</b>
	<b>GRAND TOTAL (THERMAL+HYDRO)</b>		<b>23976.6</b>

**PROJECTS COMMISSIONED DURING THE YEAR 2016-17**

<b>Sl. No.</b>	<b>PROJECT NAME</b>	<b>TYPE</b>	<b>Capacity (MW)</b>
	<b>THERMAL PROJECTS</b>		
1	Lalitpur STPP U-3	COAL	660
2	CUDDALORE Itpcl Tpp U-2	COAL	600
3	Bhavnagar Lignite Based Tpp U-1, 2	COAL	500
4	Gama CCGP, Block-I	GAS	225
5	Mangaon CCGP	GAS	388
6	Marwa TPP U-2	COAL	500
7	Nawapara U-1	COAL	300
8	Agartala Gas Based Power Project ST-1	GAS	25.5
9	BARA TPP U-2	COAL	660
10	Sembcorp Gayatri Pvt. Ltd. U-1, 2	COAL	1320
11	Ratija TPP U-2	COAL	50
12	Kashipur Ccpp Block-1	GAS	225
13	Singareni U-2	COAL	600
14	Sagardighi TPS-II U-4	COAL	500
15	Koradi TPP U-10	COAL	660
16	Kudgi TPP U-1, 2	COAL	1600
17	Namrup CCGT	GAS	62.25
18	NASIK TPP PH-I,U-2	COAL	270
19	Mauda STPP-II U-4	COAL	660
20	Bongaigaon TPP U-2	COAL	250
21	Kanti TPS U-2	COAL	195
22	Yermarus TPP U-2	COAL	800
23	Unchahar TPS ST-Iv U-6	COAL	500
	<b>Total (Thermal)</b>		<b>11550.75</b>
	<b>HYDRO PROJECTS</b>		
24	Teesta Low Dam IV U-3, 4	HYDRO	80
25	Lower Jurala U-5, 6	HYDRO	80
26	Kashang HEP-II & III U-1, 2	HYDRO	130
27	Pulichintala U-1	HYDRO	30
28	Teesta-III U-1,2,3,4,5,6	HYDRO	1200
29	Kasang HEP-II & III U-2	HYDRO	65
30	NagarjunaSagar TR U-1, 2	HYDRO	50
31	CHANJU-I U-1,2	HYDRO	24
	<b>TOTAL (HYDRO)</b>		<b>1659</b>
	<b>NUCLEAR PROJECTS</b>		
32	KUDANKULAM U-2	NUCLEAR	1000
	<b>GRAND TOTAL (Thermal + Hydro + Nuclear)</b>		<b>14209.75</b>

**PROJECTS COMMISSIONED DURING THE YEAR 2017-18**

SI. No	PROJECT NAME	FUEL TYPE	CAPACITY (MW)
1	PULICHINTALA U-2 & U-3	HYDRO	60
2	RAYAL SEEMA TPP UNIT 6	Coal	600
3	BARAUNI EXT TPP UNIT 9	Coal	250
4	BTPS EXTN UNIT 8	Coal	250
5	NABI NAGAR TPP U-2	Coal	250
6	Akaltara (nariyara)	Coal	600
7	BINJKOTE TPP U-1 & U-2	Coal	600
8	LARA TPP UNIT 1	Coal	800
9	NAWAPARA TPP U-2	Coal	300
10	UCHPINDA TPP U-3	Coal	360
11	CHANJU-I U-3	HYDRO	12
12	SAINJ HEP U-1 & U-2	HYDRO	100
13	KISHAN GANGA HEP U 1 to U-3	HYDRO	330
14	KUDGI STPP PH-I, UNIT 3	Coal	800
15	NASIK TPP PH-I U-3 to U 5	Coal	810
16	SHIRPUR TPP U-1	Coal	150
17	SOLAPUR STPP U-1	Coal	660
18	NEW UMTRU U-1 & U-2	HYDRO	40
19	TUIRIAL HEP U-1 & U-2	HYDRO	60
20	CHHABRA SCTPP U-5	Coal	660
21	DIKCHU U-1 & U-2	HYDRO	96
22	TASHIDING U-1 & U-2	HYDRO	97
23	BARA TPP U-3	Coal	660
24	MEJA STPP UNIT 1	Coal	660
25	Haldia, IPCL Unit 2	Coal	150
26	INDIA POWER TPP (HALDIA) U-1	Coal	150
<b>TOTAL (2017-18)</b>			<b>9505</b>

**PROJECTS COMMISSIONED DURING THE YEAR 2018-19 (upto November, 2018)**

SI. No	PROJECT NAME	FUEL TYPE	CAPACITY (MW)
1	PARE, U 1 & U 2	HYDRO	110
2	LAKWA REPLACEMENT POWER PROJECT U 1-7	Gas	69.755
3	MAHAN TPP, UNIT-2	Coal	600
4	SHREE SINGHAJI TPP (PHASE-II) U-3	Coal	660
5	PULICHINTALA HEP, U-4	HYDRO	30
<b>TOTAL (2018-19) (As on 30.11.2018)</b>			<b>1469.755</b>

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**ANNEXURE-II**

**ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3762 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**All India Generation in Billion Units (BU) during last three Years:**

	<b>Electricity Generation (In BU)</b>			
	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19 (upto November)</b>
<b>Conventional sources</b>	<b>1107.822</b>	<b>1160.140</b>	<b>1206.306</b>	<b>849.202</b>
<b>Renewable Energy Sources</b>	<b>65.78085</b>	<b>815.4821</b>	<b>101.839</b>	<b>88.945</b>
<b>Total</b>	<b>1173.60313</b>	<b>1241.689</b>	<b>1308.146</b>	<b>938.148</b>

**\*Generation data from Renewable Energy sources is Provisional.**

**All India electrical energy supplied in Billion Units (BU) during last three years:**

<b>Year</b>	<b>Electricity Supplied (In BU)</b>
<b>2014-15</b>	<b>1,030.785</b>
<b>2015-16</b>	<b>1,090.850</b>
<b>2016-17</b>	<b>1,135.332</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3768  
ANSWERED ON 03.01.2019**

**IPDS SCHEME IN ASSAM**

**3768. SHRI BADRUDDIN AJMAL:**

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

- (a) whether State of Assam has been covered under IPDS scheme, if so, the details thereof, District-wise along with the commencement of the scheme in Assam;**
- (b) the details of completion of work in Assam, State-wise along with the percentage of work completion in different towns;**
- (c) if so, the details thereof along with the quantity of amount earmarked under IPDS and allocated in which scheme or plan; and**
- (d) the details of amount released already under this scheme?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) to (d) : Yes, Madam. The State of Assam has been covered under the Integrated Power Development Scheme (IPDS).**

**The sanctions under the IPDS scheme are made circle-wise. The circle-wise details of progress of System Strengthening Works in Assam worth Rs.691.44 Crores sanctioned under IPDS is enclosed in Annexure. IT Projects worth Rs.26.02 Crores, GIS Sub-stations worth Rs.19.76 Crores, and Reliability measurement works worth Rs.4.77 crores have been sanctioned and are in various stages of public procurement. Funds to the tune of Rs. 172.73 crores have already been released.**

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**ANNEXURE****ANNEXURE REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3768 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**Details of progress in various Circles of Assam under IPDS**

<b>Sl. No.</b>	<b>Circle</b>	<b>Sanctions (Rs.cr)</b>	<b>Physical Progress</b>
<b>1</b>	<b>Sivsagar</b>	<b>23.16</b>	<b>15.32%</b>
<b>2</b>	<b>Golaghat</b>	<b>40.63</b>	<b>12.15%</b>
<b>3</b>	<b>Tinsukia</b>	<b>27.06</b>	<b>15.13%</b>
<b>4</b>	<b>Dibrugarh</b>	<b>24.74</b>	<b>18.02%</b>
<b>5</b>	<b>Jorhat</b>	<b>83.92</b>	<b>14.27%</b>
<b>6</b>	<b>Morigaon</b>	<b>9.92</b>	<b>36.14%</b>
<b>7</b>	<b>Tezpur</b>	<b>16.59</b>	<b>29.81%</b>
<b>8</b>	<b>Badarpur</b>	<b>22.26</b>	<b>13.07%</b>
<b>9</b>	<b>Cachar</b>	<b>21.38</b>	<b>19.53%</b>
<b>10</b>	<b>North Lakhimpur</b>	<b>36.03</b>	<b>21.93%</b>
<b>11</b>	<b>Nagaon</b>	<b>48.4</b>	<b>29.78%</b>
<b>12</b>	<b>Kanch</b>	<b>50.95</b>	<b>36.14%</b>
<b>13</b>	<b>Rangia</b>	<b>14.44</b>	<b>35.02%</b>
<b>14</b>	<b>Guwahati-II</b>	<b>15.21</b>	<b>100%</b>
<b>15</b>	<b>Bongaigaon</b>	<b>34.30</b>	<b>38.8%</b>
<b>16</b>	<b>Mangaldai</b>	<b>18.39</b>	<b>11.47%</b>
<b>17</b>	<b>Barpeta</b>	<b>50.91</b>	<b>43.33%</b>
<b>18</b>	<b>Kokrajhar</b>	<b>46.71</b>	<b>33.23%</b>
<b>19</b>	<b>Guwahati</b>	<b>103.00</b>	<b>21.16%</b>
	<b>Overall Average</b>	<b>688.00</b>	<b>25.88%</b>
	<b>Project Management Associate</b>	<b>3.44</b>	
	<b>TOTAL</b>	<b>691.44</b>	

**Source: PFC**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3775  
ANSWERED ON 03.01.2019**

**AGRICULTURAL WASTE**

**†3775. SHRI KUNWAR PUSHPENDRA SINGH CHANDEL:**

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

- (a) whether any scheme has been chalked out for use of agricultural waste in the power plants;**
- (b) if so, the details thereof;**
- (c) whether any guidelines have been issued by the Government to NTPC for use of agricultural products and wastes and if so, the details thereof; and**
- (d) whether the plants have derived any financial benefits through the use of these products and if so, the details thereof?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) to (d): Central Electricity Authority (CEA) has issued an advisory dated 17 Nov 2017 to all the coal based power plants to use 5-10% of agro residue based pellets along with coal. CEA has also issued technical specification for pellets/torrefied pellets. In line with above advisory, NTPC has floated tender for procurement of 1000 metric tonnes per day (MTPD) of agro residue based pellets/torrefied pellets for NTPC Dadri. Out of total requirement of 1000 MTPD, purchase order for 200 metric tonnes per day of agro residue based pellets/torrefied pellets has been placed on three companies with supply duration of 2 years.**

**As per NTPC, use of farm stubble in its power plants will increase the cost of power generation. The increase in variable charge of electricity will depend on difference in price of biomass and coal, increase in heat rate and increase in auxiliary power consumption. The increase in fixed charges will depend as per additional capital expenditure required for biomass material handling infrastructure.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3789  
ANSWERED ON 03.01.2019**

**COAL PRICE**

**†3789. SHRI DHARMENDRA YADAV:  
DR. PRITAM GOPINATH MUNDE:  
SHRI ANANDRAO ADSUL:  
SHRI ADHALRAO PATIL SHIVAJIRAO:**

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

- (a) whether coal based power plants are facing the heat of increased prices of thermal grade coal and cost of railway freight;**
- (b) if so, whether the Investment Information and Credit Rating Agency of India has done any study in this regard;**
- (c) if so, the details thereof;**
- (d) whether the percentage of price of thermal grade coal and the percentage of cost of freight has increased recently;**
- (e) if so, the impact of the cost of the said thermal power plants on the increase in production;**
- (f) whether the thermal power plants were operating with low production due to rising demand of non-renewable energy; and**
- (g) if so, the details thereof?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) & (d) : Coal India Limited, vide notification dated 08.01.2018, has revised the price of all grades of non-coking coal produced by coal companies of CIL superseding their earlier price notification dated 29.5.2016. The price of higher grade of coal (G1 to G5) has been reduced by 0-5% whereas the price for other grades (G6-G14) has been increased in the range of 3 to 22%.**

The details of coal freight rate per tonne from 2014 to 2018 is as under:

Distance (in KM)	25.06.2014	01.04.2015	22.08.2016	26.07.2017	15.01.2018	01.11.2018
	Freight rate per tonne (in Rs.)					
100	193.40	164.50	164.50	179.00	198.70	216.00
500	660.60	702.40	712.00	817.60	969.80	1054.70
1000	1269.20	1349.50	1349.50	1455.10	1739.60	1891.80
1500	1873.40	1992.00	1961.20	2066.80	2478.20	2695.00
2000	2350.80	2499.70	2243.40	2349.00	2819.00	3065.70

**(b) & (c) :** The report titled *“Revision in domestic coal prices and railway freight rates to raise power procurement cost by 11 paise per unit for distribution utilities”* available in ICRA website concludes that:

**“Assuming the average AT&C loss level at around 23% in the country, the impact of the revision in coal prices and railway freight on cost of power supply per unit sold and retail tariffs (assuming full pass through by state regulators) is estimated at around 14 paise per unit or 2.3% tariff hike. However, the state-wise extent of an increase in the cost of power supply and hence, in retail tariff for a distribution utility would be dependent upon the mix of coal based generation in its overall power procurement.”**

**(e) :** The thermal power plants are operating consistently at Plant Load Factor (PLF) of about 61% during 2017-18 as well as during 2018-19 (April-November, 2018). Moreover, the generation from coal based thermal power plants has increased by about 5.5% during April-November, 2018 as compared to same period last year.

**(f) & (g) :** The PLF of the stations varies from 94.86% to 0 during 2018-19 (upto Nov. 18). The PLF of the station depends on number of factors like the outages for planned maintenance, forced outages on account of equipment failures, coal shortages etc. and actual dispatch to the station by the beneficiaries. The actual dispatch depends on the prevailing electricity demand, availability of electricity from other different sources like hydro, nuclear and renewable etc. and merit order of the station based on its variable cost of supply.

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3795  
ANSWERED ON 03.01.2019**

**COMPENSATION PAID BY NTPC**

**3795. SHRIMATI SUPRIYA SULE:**

**SHRI SATAV RAJEEV:**

**DR. HEENA VIJAYKUMAR GAVIT:**

**SHRI MOHITE PATIL VIJAYSINH SHANKARRAO:**

**SHRI DHANANJAY MAHADIK:**

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

- (a) the quantum of compensation paid to the displaced/affected persons due to a power project by PSU like NTPC, PGCIL during the last three years and the current year;**
- (b) whether the Government has framed any policy in regard to pay compensation to displaced/affected persons, if so, the details thereof and if not, the reasons therefor;**
- (c) whether the present amount of compensation paid to affected persons is very less, if so, the corrective steps taken by the Government in this regard;**
- (d) whether many cases of compensation to displaced/affected persons are pending, if so, the details thereof and the reasons therefor; and**
- (e) the corrective steps taken by the Government to resolve the problem?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) : NTPC deposits the required amount for land compensation with District Administration/State Authority, as decided and demanded by them, after which the concerned District Administration/State Authority disburses the land compensation to the eligible persons. As informed by NTPC, as of now, entire amount as demanded by concerned District Administration/State Authority has been deposited by NTPC with them; the details for the last three years and the current year are placed at Annexure.**

**As informed by PGCIL, no physical displacement has taken place in POWERGRID's projects in last three years and current year. Further, no compensation has been paid to the displaced persons during the last three years and the current year by PGCIL.**

**(b) & (c) : As regards NTPC, private land for the project is acquired by the respective State Governments/State Authorities, on request of NTPC, as per the extant Govt. of India (GOI) Land Acquisition Act/special Acts of respective States. The land rate/compensation is decided by the concerned State Govt./ State Authority as per provisions of the prevailing Land Acquisition Act of GOI/ respective State Govt.**

**POWERGRID is securing land for its substations through direct purchase on "Willing Buyer Willing Seller" basis on market/negotiated rate as per provisions under Section-46 of "Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013".**

**(d) & (e) : As informed by NTPC and PGCIL, no case of compensation is pending with them.**

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**ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3795 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**Compensation deposited for land acquisition with various District Administration/State Authorities**

<b>SN</b>	<b>Name of Project</b>	<b>State</b>	<b>Year</b>	<b>Compensation deposited by NTPC (Rs. Crore)</b>
<b>1</b>	<b>Gadarwara</b>	<b>MP</b>	<b>2015-16</b>	<b>14.34</b>
			<b>2016-17</b>	<b>0.51</b>
			<b>2017-18</b>	<b>0</b>
			<b>2018-19</b>	<b>4.56</b>
<b>2</b>	<b>Khargone</b>	<b>MP</b>	<b>2015-16</b>	<b>0</b>
			<b>2016-17</b>	<b>123.26</b>
			<b>2017-18</b>	<b>0</b>
			<b>2018-19</b>	<b>0.57</b>
<b>3</b>	<b>Kahalgaon</b>	<b>Bihar</b>	<b>2015-16</b>	<b>0</b>
			<b>2016-17</b>	<b>2.66</b>
			<b>2017-18</b>	<b>0.54</b>
			<b>2018-19</b>	<b>21.04</b>
<b>4</b>	<b>BRBCL (JV)</b>	<b>Bihar</b>	<b>2015-16</b>	<b>40.25</b>
			<b>2016-17</b>	<b>0.00</b>
			<b>2017-18</b>	<b>0.00</b>
			<b>2018-19</b>	<b>0.00</b>
<b>5</b>	<b>Mouda</b>	<b>Maharashtra</b>	<b>2015-16</b>	<b>0.00</b>
			<b>2016-17</b>	<b>0.00</b>
			<b>2017-18</b>	<b>66.76</b>
			<b>2018-19</b>	<b>0.00</b>
<b>6</b>	<b>Rammam</b>	<b>WB</b>	<b>2015-16</b>	<b>2.32</b>
			<b>2016-17</b>	<b>0.00</b>
			<b>2017-18</b>	<b>0.00</b>
			<b>2018-19</b>	<b>0.00</b>
<b>7</b>	<b>Lara</b>	<b>Chhattisgarh</b>	<b>2015-16</b>	<b>0.00</b>
			<b>2016-17</b>	<b>0.00</b>
			<b>2017-18</b>	<b>0.46</b>
			<b>2018-19</b>	<b>0.59</b>
<b>8</b>	<b>Darlipali</b>	<b>Odisha</b>	<b>2015-16</b>	<b>4.14</b>
			<b>2016-17</b>	<b>0.00</b>
			<b>2017-18</b>	<b>3.24</b>
			<b>2018-19</b>	<b>37.16</b>
<b>Total</b>				<b>322.39</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3825  
ANSWERED ON 03.01.2019**

**DE-ALLOCATION OF POWER**

**3825. SHRI NAGENDRA KUMAR PRADHAN:**

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

- (a) whether the Government will notify the de-allocation of allocated power from the upcoming NTPC stations located outside Odisha except the allocation from North Karanpura Super Thermal Power Station; and**
- (b) if so, the details thereof?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) & (b) : Based on the consent given by the states, NTPC has commissioned power stations for the benefit of its beneficiary states. Accordingly, Power Purchase Agreements have been signed between the States including Odisha and NTPC. Government of Odisha, vide letter dated 28<sup>th</sup> June, 2014 has surrendered power from NTPC stations located outside the States.**

**The request of Government of Odisha had been sent to all the States for availing this power and the letter has also been posted on the website of Ministry of Power with a request that the willing States may give their consent to avail such power. As per CERC regulations, the surrendered power can be re-allocated to other beneficiaries if they give their consent to avail such power.**

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

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3833  
ANSWERED ON 03.01.2019**

**BURNING OF FARM STUBBLE**

**3833. SHRI SHRIRANG APPA BARNE:  
DR. PRITAM GOPINATH MUNDE:  
SHRI ANANDRAO ADSUL:  
DR. SHRIKANT EKNATH SHINDE:  
SHRI ADHALRAO PATIL SHIVAJIRAO:**

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

- (a) whether a large number of farmers particularly from Punjab and Haryana are burning the farm stubble/straw in the absence of viable alternatives, if so, the details thereof;**
- (b) whether the Union Government has implemented plan for mixing of farm stubble pellets up to 10% of the total fuel in a power plant, if so, the details thereof;**
- (c) whether State-run NTPC would float a tender to buy farm stubble at Rs. 5,500 per tonne for power plants to restrict farmers from burning, if so, the details thereof;**
- (d) whether mixing of farm stubble pellets will affect the efficiency in terms of gross calorific value, if so, the extent to which it will affect the efficiency;**
- (e) whether the NTPC has completed test runs, if so, the details and present status thereof;**
- (f) whether the NTPC has planned to expand scheme of mixing of farm stubble pellets gradually in its all plants, if so, the details thereof; and**
- (g) whether the use of farm stubble in power plants will increase the power generation cost and if so, the details thereof?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) : Central Pollution Control Board (CPCB) has informed that they receive information from Punjab Remote Sensing Centre (PRSC) and Haryana Space Applications Centre, Hisar about active fire incidence counts in Punjab and Haryana respectively. In Punjab 43686 and 49905 active fire incidences were reported in 2017 and 2018 respectively while in Haryana 12564 and 10192 incidences were reported in 2017 and 2018 respectively.**

**(b) : An advisory dated 24.11.2017 was issued by Central Electricity Authority, Ministry of Power regarding utilization of 5-10% agro residue based pellets along with coal in coal fired power plant through biomass co-firing. NTPC has test fired up to 10% biomass pellets along with coal at its NTPC Dadri plant.**

**However, there is not enough infrastructure for collection and processing of agro residue to pellets. This advisory shall create a large market for agro residue based pellets in power sector. NTPC has already placed an order for supply of 200 Tonnes per day of agro residue based pellets/torrefied pellets for NTPC Dadri plant.**

**Further, NTPC has invited expression of interest from interested parties for production and supply of paddy straw and agro residue based pellets/torrefied pellets to all the power plants of NTPC.**

**(c) : NTPC has invited expression of interest (EOI) dated 26.12.2018 from interested parties for production and supply of paddy straw and agro residue based pellets/torrefied pellets to all the power plants of NTPC.**

**Based on response received in EOI, tender shall be floated. In NTPC's earlier tender, the ceiling price of Rs. 5500 per tonne failed to attract more investors in this sector and will be done away with in future tenders and price shall be discovered through competitive bidding.**

**(d) : Biomass test firing in Dadri was for short duration of time. To establish effect on efficiency, prolonged biomass co-firing is required which is going to start in Dadri soon. Conclusive data regarding effect on efficiency will be available once biomass co-firing is done on prolonged basis.**

**(e) : Test run was conducted in Dadri from September 2017 onwards with 100 Metric tonnes of biomass pellets after making suitable modification in one unit of 200 MW. Now, NTPC is moving forward to start commercial scale biomass co-firing for which a purchase order for 200 metric tonnes per day of pellets/ torrefied pellets has already been placed. Delivery of 20 metric tonnes per day material has been started and rest is likely to start soon.**

**(f) : NTPC has invited expression of interest (EOI) dated 26.12.2018 from interested parties for production and supply of paddy straw and other agro residue based pellets/ torrefied pellets to all the power plants of NTPC. Based on the response received in EOI, tender shall be floated.**

**(g) : Use of farm stubble based pellets/ torrefied pellets in power plants will increase the generation cost. The increase in variable charge of electricity shall depend upon difference of price between biomass and coal and thus it shall be different for different plants (price of agro residue based biomass pellets/ torrefied biomass pellets/briquettes will be discovered through tender). In addition to this, there shall be a slight increase in fixed charge due to additional capital expenditure required for biomass material handling infrastructure.**



**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3844  
ANSWERED ON 03.01.2019**

**INCREASE IN POWER TARRIF**

†3844. SHRIMATI VEENA DEVI:

Will the Minister of POWER  
be pleased to state:

- (a) whether the consumer tariff of power generated by projects fuelled by imported coal have been increased in certain States of the country;
- (b) if so, the facts in this regard and the place-wise names of these projects; and
- (c) the project-wise increased consumer tariff fixed?

**A N S W E R**

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

**( SHRI R. K. SINGH )**

(a) to (c) : The generation tariff of some of the major Thermal Power Stations fueled by imported coal from various states of the Country for the year 2015-16 and 2016-17 is given below:

Sl. No.	Name of Thermal Power Station	Capacity (MW)	Location	Rate of sale of power (paisa/kWh)	
				2015-16	2016-17
1	Sikka TPS	500	Gujarat	529	588
2	Trombay TPS	500	Maharashtra	404	440
		800		401	440
3	Ratnagiri TPS	300	Maharashtra	286	265
		900		360	390
4	Torangullu SBU-I	260	Karnataka	503	433
5	Torangullu SBU-II	600	Karnataka	504	428
6	Mundra TPS	1320	Gujarat	285	286.71
		1320		235	234.95
		1980		323	320.90
7	Udupi TPP	1200	Karnataka	423	425
8	Mundra UMPP	4000	Gujarat	232.8	239
9	ESSAR (Salaya)	1200	Gujarat	286	360
10	Simhapuri TPS	600	Andhra Pradesh	514	391
11	Thaminapattnam TPS	300	Andhra Pradesh	471	499.40

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3859  
ANSWERED ON 03.01.2019**

**INSTALLATION OF LED AT AIRPORTS**

**3859. KUNWAR HARIBANSH SINGH:  
SHRI SUDHEER GUPTA:  
SHRI ASHOK SHANKARRAO CHAVAN:**

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

- (a) whether Energy Efficiency Services Limited (EESL) has signed a Memorandum of Understanding (MoU) with the Airports Authority of India (AAI) for installing energy efficient LED lights at Airports, building and facilities owned by AAI across India;**
- (b) if so, the details thereof and the investment involved on the said project and the time by which it is likely to be installed;**
- (c) the details of institutions with which EESL has signed to replace inefficient lighting and cooling appliances with efficient equipment so far;**
- (d) the details of cost saving of power by EESL through installed/ replaced inefficient lighting and cooling appliance with efficient equipment so far; and**
- (e) the other steps taken/being taken by the Government to transform multiple private/Government commercial building in India into energy efficient complexes?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) & (b) : Energy Efficiency Services Ltd. (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power has signed a Memorandum of Understanding (MoU) with the Airports Authority of India (AAI) on 28<sup>th</sup> February, 2018 for installing energy efficient LED lights at airports, buildings and facilities owned by AAI across India. The entire project is estimated to cost approximately INR 24.41 crore. EESL is expected to complete the installation of LED lights in AAI buildings by 15<sup>th</sup> January, 2019.**

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**(c) & (d) : EESL has signed MoUs with Railways, PWD in Maharashtra, Delhi Metro Rail Corporation (DMRC), AAI, Andhra Pradesh District Courts, South Delhi Municipal Corporation (SDMC) schools, Bank of Baroda, Mahindra & Mahindra (M&M) in Maharashtra and Central/State Government to replace inefficient lighting and cooling appliances with efficient equipment.**

**Till date, EESL has completed building energy efficiency projects in 10,088 buildings including Railway stations. Energy Audits show energy saving potential to the tune of up to 30-50% in these buildings. This has resulted in estimated energy savings of 82.76 million kWh/Year and estimated cost savings of INR 66.21 crore per year.**

**(e) : Other steps taken/being taken by the Government to transform multiple private/Government commercial buildings in India into energy efficient complexes are as follows:-**

- (i) Government of India has issued instruction to all Government Ministries and Departments in August 2017 to ensure that all buildings occupied by them and organizations under their administrative control are made energy efficient.**
- (ii) Bureau of Energy Efficiency (BEE) has developed two initiatives to promote energy efficiency in commercial buildings, namely Energy Conservation Building Code (ECBC) and Building Star Labelling Programme.**
- (iii) With an objective to promote energy conservation in space cooling, BEE has developed voluntary guidelines, recommending air conditioning temperature setting at an optimal level of 24- 26 °C, for implementation in large commercial establishments such as Hotels, Airports, public office complexes of public and large institutions.**
- (iv) EESL is implementing the Buildings Energy Efficiency Programme (BEEP) to retrofit energy efficient appliances in commercial buildings.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3865  
ANSWERED ON 03.01.2019**

**POWER GENERATION COST**

**†3865. SHRIMATI RITI PATHAK:  
SHRI JUGAL KISHORE:**

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

- (a) whether there is huge difference between power generation cost and the distribution cost at which power is provided to the customers in the country;**
- (b) if so, the details thereof, State- wise along with the reasons therefor; and**
- (c) the steps taken by the Government to reduce gap between per unit power generation cost and the cost at which power is provided to the customers?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) & (b) : The difference between cost of power generation and the cost of supply of power to the end consumer is due to the fact that the cost of supply to the end consumers includes the transmission charges, transmission losses, distribution network charges, distribution losses and commercial losses etc. in addition to the power generation cost. As reported by the generating companies and the distribution companies to Central Electricity Authority, the average power generation cost & average cost of supply of Distribution Companies during the last three years is at Annex.**

**(c) : Through appropriate policy framework and programmes, the Central Government is promoting efficiency in generation, transmission and distribution and also supporting strengthening of the distribution and transmission infrastructure for reducing technical losses. The Tariff Policy notified by Central Government which provides that the future procurement of power by Discom needs to be through competitive bidding route only, will contribute towards lowering of tariff rates. It also lays emphasis on reduction in Aggregate Technical & Commercial (AT&C) losses and theft to reduce the operating costs of Discoms. These measures are expected to reduce the gap between per unit power generation cost and the cost at which power is provided to the customers.**

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**ANNEX**

**ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3865 ANSWERED IN THE LOK SABHA ON 03.01.2019.**

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**The average power generation cost & average cost of supply of Distribution Companies during the last three years is as follows:**

<b>Description</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
<b>Average generation cost (Rs/kWh)</b>	<b>3.45</b>	<b>3.67</b>	<b>4.43</b>
<b>Average cost of supply of Distribution companies (Rs/kWh)</b>	<b>5.19</b>	<b>5.21</b>	<b>5.43</b>

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3879  
ANSWERED ON 03.01.2019**

**THERMAL UTILITIES**

**3879. SHRI VINCENT H. PALA:**

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

- (a) whether the report of Water Resources Institute (WRI), States that more than 70 percent of India's existing thermal utilities are likely to experience an increased level of water competition from agricultural, urban and other industrial demands by 2033, if so, the details thereof;
- (b) whether diluting the rules on the amount of water that the new plants installed after January 1, 2017, if so, the details thereof; and
- (c) the details of the total extra water consumption of the new plants from 2017-18?

**A N S W E R**

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

**( SHRI R. K. SINGH )**

(a) : The World Resource Institute in one of its Working Paper has stated that more than 70 percent of India's existing thermal utilities are likely to experience an increased level of water competition from agricultural, urban and other industrial demands by 2030. The report also mentioned that India's thermal power sector is very dependent on water and has been suffering from water shortages.

(b) & (c) : Government of India, Ministry of Environment, Forest and Climate Change (MoEF&CC) notified following new norms for water consumption for Thermal Power Plants on 7<sup>th</sup> December 2015 and amended vide Notification on 28.06.2018.

- i. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption of 3.5 m<sup>3</sup>/MWh within 2 years of Notification dated 07.12.2015.

- ii. **All existing CT based plants shall reduce specific water consumption up-to maximum of 3.5 m<sup>3</sup>/MWh within a period of 2 years of Notification.**
- iii. **New plants to be installed after 1<sup>st</sup> January 2017 shall have to meet specific water consumption of 3.0 m<sup>3</sup>/MWh and achieve zero water discharge.**

**The aforesaid Water Consumption Limit shall not be applicable for Thermal Power plants using sea water.**

**Total Thermal Capacity added during year 2017-18 & 2018-19 (upto November, 2018) is 10039.72 MW and power generated from this capacity during year 2017-18 & 2018-19 (upto November, 2018) is 29777.3 MU. Total water consumed by Thermal Power Plants on per day basis across the country is not monitored by Ministry of Power/Central Electricity Authority.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3888  
ANSWERED ON 03.01.2019**

**STRENGTHENING OF TRANSMISSION AND DISTRIBUTION**

**3888. SHRI MAHEISH GIRRI:**

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

- (a) whether the Government has taken any landmark decisions in thermal power generation, hydel, solar, wind and other green energy, strengthening of transmission and distribution, separation of feeder and metering of power to consumers;**
- (b) if so, the details thereof;**
- (c) whether the Government has launched any scheme aiming to provide quality and reliable 24x7 power supply in the urban area; and**
- (d) if so, the details thereof?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) & (b) : The Government has taken a number of policy decisions for integrated development of Power Sector. These include flexibility in utilization of domestic coal amongst power generating stations and third party sampling of quality of coal utilized by power plants, to reduce the cost of Thermal power generation, excluding hydro power from competitive bidding up to 2022, encouraging solar energy by providing fiscal and promotional incentives, strengthening of Transmission and Distribution network through Schemes such as Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), Integrated Power Development Scheme (IPDS) and Ujwal DISCOM Assurance Yojana (UDAY) for financial turnabout of DISCOMs.**

**(c) & (d) : Government of India has taken a joint initiative with all the States/UTs for providing 24X7 power for all households, industrial & commercial consumers and adequate supply of power to agriculture consumers as per State policy. All the State Governments and Union Territories have signed the "24 X 7 Power for All" to provide electricity to all from 1<sup>st</sup> April, 2019. The Government would be supplementing their efforts through its schemes including DDUGJY, IPDS, Sahaj Bijli Har Ghar Yojana (Saubhagya) and UDAY.**

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3893  
ANSWERED ON 03.01.2019**

**IMPLEMENTATION OF DDUGJY**

**3893. SHRI GUTHA SUKENDER REDDY:**

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

- (a) whether the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) is not being implemented in the ground level properly, if so, the details thereof and the reasons therefor;
- (b) whether the DDUGJY Scheme is suffering from lack of sufficient funds for its implementation if so, the details thereof; and
- (c) the steps being taken by the Government for release of sufficient funds to the scheme for its proper implementation?

**A N S W E R**

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

**( SHRI R. K. SINGH )**

(a) to (c) : Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) is being implemented well across the country. Under DDUGJY, 4505 new projects of Rs.42676.67 crore have been sanctioned. An additional amount of Rs.11,996 crore have also been sanctioned for 14 States under DDUGJY for creation of additional infrastructure to cater to the requirement of households electrification being done under Saubhagya. Funds are released based on the utilization of funds already released and physical progress as per the guidelines of the scheme. During the last four years (2014-15 to 2017-18) an amount of Rs.25,135 crore has been disbursed to States under DDUGJY including RE Component.

As per the information furnished by the States, all the un-electrified inhabited census villages stand electrified on 28.04.2018. The works of feeder separation, system strengthening, metering and intensive electrification of electrified villages, is under implementation to help the States achieving the universal electrification and 24x7 power for all across the country.

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**GOVERNMENT OF INDIA  
MINISTRY OF POWER**

**LOK SABHA  
UNSTARRED QUESTION NO.3907  
ANSWERED ON 03.01.2019**

**COST OVERRUN OF POWER PROJECTS**

**3907. ADV. NARENDRA KESHAV SAWAIKAR:**

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

- (a) whether the Government is aware that a large number of power projects have reported cost overruns as per the recent report released by the Ministry of Statistics and Programme Implementation;**
- (b) if so, the details thereof along with the reaction of the Government thereto;**
- (c) whether the Government monitors the execution of these projects from time to time;**
- (d) if so, the details thereof; and**
- (e) whether some of the power projects are not executed properly and if so, the details thereof along with the remedial action taken/being taken by the Government in this regard?**

**A N S W E R**

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

**( SHRI R. K. SINGH )**

**(a) to (e): As per the recent report (September, 2018) released by the Ministry of Statistics and Programme Implementation (MoSPI), 105 central sector power projects are under monitoring through Online Computerised Monitoring System (OCMS). Out of 105 projects, 43 central sector power projects have reported cost overruns.**

**The delayed power projects are monitored rigorously at various levels in Ministry of Power (MOP) and Central Electricity Authority (CEA). The OCMS of MoSPI also envisages monitoring of milestones of the various infrastructure projects. The concerned Central Power Sector Undertakings (CPSUs) under MOP are regularly updating the milestones set for each project, to facilitate better monitoring.**

**Following mechanism is in place to ensure the timely commissioning of power projects:**

- **The CEA monitors the progress of under construction power projects through frequent site visits and interaction with the developers, equipment suppliers and other stakeholders to identify the issues critical for commissioning of projects and help in resolving them.**
- **MOP also reviews the progress of ongoing power projects regularly with the concerned officers of CEA, equipment manufacturers, State Utilities/ CPSUs/ Project developers, etc.**
- **Issues are also raised in PRAGATI, for proactive problem solving and timely implementation, as and when required.**
- **The Project Monitoring Group (PMG) in the Prime Minister's Office also reviews the issues relating to pending projects. The developers of the projects can raise the project specific issues on PMG portal for their resolution with the concerned agencies/ departments.**
- **Time bound appraisal norms have been evolved in CEA for examination of DPRs of Hydroelectric projects.**
- **The project Implementation parameters/ milestones are incorporated in the annual Memorandum of Understanding (MoU) signed between respective power CPSU's and MOP and the same are monitored during the quarterly performance review meeting of CPSU's and other meetings held in MOP/CEA.**
- **Matters are taken up with State Government/District Administration and they are extending help to the project implementing agencies in resolving Right of Way (ROW) issues.**