GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.1503 TO BE ANSWERED ON 26.07.2018

POTENTIAL OF HYDRO AND THERMAL POWER

1503. SHRI MALLIKARJUN KHARGE:

Will the Minister of POWER be pleased to state:

- (a) the details of the thermal and hydro power generated during each of the last three years;
- (b) the details of the quantity of coal imported and indigenously produced during each of the last three years and likely to be imported and domestically produced in the next three years, State-wise;
- (c) whether the Government has adopted new hydropower projects in the country; and
- (d) if so, the details thereof and the reasons therefor along with the steps taken to tap the potential of hydro and thermal power generation in the country?

ANSWER

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

(SHRI R. K. SINGH)

- (a): The details of the thermal and hydro power generated during each of the last three years is given at Annexure-I.
- (b): The quantity of coal imported by power plants and domestic coal used by power plants is given below:

Year	Imported coal (MT)	Domestic Coal (MT)
2015-16	80.6	481
2016-17	66.1	495
2017-18	56.4	539

The quantity of coal likely to be imported by power plants and domestic coal planned to be used by power plants is given below:

Year	Imported coal (MT)	Domestic Coal (MT)
2018-19	50.0	615
2019-20	50.0	653
2020-21	50.0	693

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The State-wise / utility-wise receipt of imported coal during last three years is at Annexure-II.

State wise details of likely domestic coal production from the coal blocks allocated to the Power Utilities during the current year (2018-19) and in the next three years (2019-20, 2020-21, 2021-22) is given as Annexure-III.

- (c): Presently, there are 38 no. of hydro projects (8637 MW) under Survey & Investigation in the country, 41 nos. of Detailed Project Report (DPRs) of Hydroelectric Projects with aggregate installed capacity of 26,460 MW have been concurred by Central Electricity Authority (CEA) and are yet to be taken up for construction due to various reasons. These projects are pending for want of Environmental/Forest clearance and other related issues. Also, 7 Nos. of DPRs of Hydroelectric Projects with aggregate installed capacity of 1654 MW are under examination in various appraising groups of CEA / CWWC / GSI / CSMRS / MoWR, RD&GR. In addition, presently 38 nos. hydro- electric projects (above 25 MW) totaling to Installed capacity of 12208.5 MW are under-construction in the country.
- (d): Government has taken following steps to tap the potential of Hydro and thermal power generation in the country.

Thermal Power Generation:

- i. After the enactment of Electricity Act, 2003 Thermal Generation has been delicensed and the power plant developers may take independent decision to set up the power plant.
- ii. Allocation of Coal Blocks to power plants.
- iii. Ministry of Coal had issued policy guidelines for grant of bridge linkage to end use plants of Central and State public sector undertakings which have been allocated Coal mines/Coal blocks. Based on the policy guidelines for Bridge Linkage 27 Nos. Thermal Projects totaling to 33,320 MW were granted bridge linkage.
- iv. A new and more transparent coal allocation policy for power sector, 2017 – SHAKTI (Scheme for Harnessing and Allocating Koyala (coal) Transparently in India) has been issued by Ministry of Coal in May, 2017. This new coal linkage policy would ensure a proper mechanism for sourcing coal by the power plants as per their schedules and would ensure that all projects are supplied coal as per their entitlement.

Hydro Power Generation:

- i. The Government has taken several policy initiatives in the past to tap the hydro potential and to boost hydropower development in the country.
- ii. In order to expedite construction and commissioning of these projects, various monitoring mechanisms at the level of CEA, Ministry of Power are in place.

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1503 TO BE ANSWERED IN THE LOK SABHA ON 26.07.2018.

Thermal & Hydro Generation during last three years

			MU = Million Unit
CATEGORY	Generation 2017-18 (in MUs)	Generation 2016-17 (in MUs)	Generation 2015-16 (in MUs)
THERMAL	1037059.10	994230.17	943787.70
HYDRO	126122.70	122377.56	121376.75
Grand Total	1163181.80	1116607.73	1065164.45

* PROVISIONAL BASED ON ACTUAL-CUM-ASSESMENT

Note: 1. Gross Generation from Thermal and Hydro Generating stations of 25 MW and above only.

ANNEX REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1503 TO BE ANSWERED IN THE LOK SABHA ON 26.07.2018.

POWER UTILITY-WISE DETAILS OF IMPORTED COAL FOR THE LAST THREE YEARS

SI. No.	Power Utility	2015-16	2016-17	2017-18
1101		Million	Million	Million
		Tonnes	Tonnes	Tonnes
Α	Power Plants designed on domestic coal			
	STATE SEC	TOR		
1	HPGCL	0.20	0.00	0.00
2	PSPCL	0.50	0.00	0.00
3	RVUNL	0.26	0.00	0.00
4	UPRVUNL	0.00	0.00	0.0
5	MPPGCL	0.38	0.05	0.0
6	GSECL	0.84	0.13	0.8
7	MSPGCL	1.18	0.39	0.0
8	AP GENCO	0.23	0.00	0.0
9	APPDCL (Damodaran Sanjeevaiah)	0.10	0.77	0.3
10	TANGEDCO	5.71	3.99	1.7
11	WRRDCI	0.54	0.45	0.0
12	WBPDCL Total-State Sector	0.00 9.93	0.00 5.77	2.9
	CENTRAL SE		5.77	2.3
13	NTPC CENTRAL SE	9.45	1.03	0.3
14	NTPC-JV (Indira Gandhi)	0.32	0.00	0.0
15	NTECL (Vallur-JV of NTPC &TN)	1.86	1.92	0.3
16	NTPL (Tuticorin-JV of NLC &TN)	1.29	2.17	0.4
17	NTPC SAIL (Bhilai)	0.06	0.00	0.0
18	DVC	0.00	0.00	0.0
	Total-Central Sector	12.98	5.11	1.0
	PRIVATE SECT			
19	TORRENT (Sabarmati C)	0.59	0.41	0.4
20	RELIANCE (Dahanu)	0.42	0.11	0.4
21	VEDANTA (Jharsuguda)	0.33	0.18	0.0
22	RELIANCE (Rosa)	0.16	0.00	0.0
23	TATA (Maithon RB)	0.00	0.00	0.0
24	JPL (Mahatma Gandhi)	0.50	0.07	0.0
25	LANCO (Anpara)	0.29	0.00	0.0
26	LANCO (Pathadi)	0.00	0.00	0.0
27	J P BINA	0.00	0.00	0.0
28	TSPL (Talwandi Sabo)	0.23	0.47	0.8
29	APML(Tirora)	1.94	0.05	1.2
30	MOSER BEAR (Annuppur)	0.00	0.00	0.0
31	GMR Warora Energy	0.04	0.00	0.0
32	GMR (Kamalanga)	0.75	0.43	0.3
33	WPCL (Warora)	0.03	0.00	0.0
34	BAJAJ ENERGY	0.00	0.00	0.0
35	APRL (Kawai)	3.50	2.81	1.6
36	JINDAL POWER (Tamnar & OP JINDAL)	0.35	0.06	0.0
37	HALDIA ENERGY	0.53	0.38	0.0

38	VIPL (Butibori)	0.56	0.17	0.08
39	THERMAL POWERTECH (Painampuram)	2.10	2.65	2.87
40	KSK (Akaltara)	0.09	0.05	0.04
41	NABHA POWER (Rajpura)	0.35	0.42	0.51
42	RATTANTATA (Amarvati)	1.07	0.19	0.11
43	ADHUNIK POWER (Mahadev Prasad)	0.07	0.01	0.00
44	LPGCL (Lalitpur)	0.10	0.02	0.00
45	HNPCL (Vizag)	0.10	0.19	0.09
46	MCCPL (Bandakhar)	-	0.01	0.00
47	CESC	0.26	0.22	0.02
48	Sambocorp Gayatri Power Ltd. (SGPL)	-	-	4.30
	Total-Private Sector	14.36	8.87	13.08
	Sub Total (A)	37.27	19.76	17.04
В	Power Plants designe	ed on imported	coal	
	STATE SECT	OR		
47	GSECL (Sikka)#	0	1.08	1.33
	Total-State Sector	0	1.081	1.325
	Total-State Sector PRIVATE SECTO		1.081	1.325
48			1.081 2.45	1.325 2.49
48	PRIVATE SECTO	R (IPP)		
	PRIVATE SECTO TATA POWER (Trombay)	R (IPP)	2.45	2.49
49	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu)	R (IPP) 2.70 5.66	2.45 4.26	2.49 3.97
49 50	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)*	2.70 5.66 16.77	2.45 4.26 15.67	2.49 3.97 10.97
49 50 51	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi)	2.70 5.66 16.77 3.37	2.45 4.26 15.67 3.47	2.49 3.97 10.97 2.49
49 50 51 52	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi) COASTAL GUJARAT (Mundra UMPP)	2.70 5.66 16.77 3.37 9.30	2.45 4.26 15.67 3.47 10.99	2.49 3.97 10.97 2.49 11.14
49 50 51 52 53	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi) COASTAL GUJARAT (Mundra UMPP) ESSAR (Salaya)	2.70 5.66 16.77 3.37 9.30 2.02	2.45 4.26 15.67 3.47 10.99 2.49	2.49 3.97 10.97 2.49 11.14 1.17
49 50 51 52 53 54	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi) COASTAL GUJARAT (Mundra UMPP) ESSAR (Salaya) SIMHAPURI ENERGY (Simhapuri)	2.70 5.66 16.77 3.37 9.30 2.02 2.57	2.45 4.26 15.67 3.47 10.99 2.49 0.80	2.49 3.97 10.97 2.49 11.14 1.17
49 50 51 52 53 54 55	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi) COASTAL GUJARAT (Mundra UMPP) ESSAR (Salaya) SIMHAPURI ENERGY (Simhapuri) MEENAKSHI ENERGY (Thaminapattnam)	2.70 5.66 16.77 3.37 9.30 2.02 2.57	2.45 4.26 15.67 3.47 10.99 2.49 0.80 0.92	2.49 3.97 10.97 2.49 11.14 1.17 0.07
49 50 51 52 53 54 55 56	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi) COASTAL GUJARAT (Mundra UMPP) ESSAR (Salaya) SIMHAPURI ENERGY (Simhapuri) MEENAKSHI ENERGY (Thaminapattnam) IND BARATH (Tuticorin)	2.70 5.66 16.77 3.37 9.30 2.02 2.57 1.12	2.45 4.26 15.67 3.47 10.99 2.49 0.80 0.92 0.00	2.49 3.97 10.97 2.49 11.14 1.17 0.07 0.36
49 50 51 52 53 54 55 56	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi) COASTAL GUJARAT (Mundra UMPP) ESSAR (Salaya) SIMHAPURI ENERGY (Simhapuri) MEENAKSHI ENERGY (Thaminapattnam) IND BARATH (Tuticorin) COSTAL ENERGEN (Mutiara)	2.70 5.66 16.77 3.37 9.30 2.02 2.57 1.12 0.00 0.00	2.45 4.26 15.67 3.47 10.99 2.49 0.80 0.92 0.00 2.40	2.49 3.97 10.97 2.49 11.14 1.17 0.07 0.36 0.00 2.39
49 50 51 52 53 54 55 56	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi) COASTAL GUJARAT (Mundra UMPP) ESSAR (Salaya) SIMHAPURI ENERGY (Simhapuri) MEENAKSHI ENERGY (Thaminapattnam) IND BARATH (Tuticorin) COSTAL ENERGEN (Mutiara) IL & FS (ITPCL-Cuddalore)	2.70 5.66 16.77 3.37 9.30 2.02 2.57 1.12 0.00 0.00	2.45 4.26 15.67 3.47 10.99 2.49 0.80 0.92 0.00 2.40 1.77	2.49 3.97 10.97 2.49 11.14 1.17 0.07 0.36 0.00 2.39 3.01
49 50 51 52 53 54 55 56	PRIVATE SECTO TATA POWER (Trombay) JSW ENERGY (Ratnagiri & Torangullu) ADANI POWER (Mundra)* ADANI (Uduppi) COASTAL GUJARAT (Mundra UMPP) ESSAR (Salaya) SIMHAPURI ENERGY (Simhapuri) MEENAKSHI ENERGY (Thaminapattnam) IND BARATH (Tuticorin) COSTAL ENERGEN (Mutiara) IL & FS (ITPCL-Cuddalore) Total-Private Sector	2.70 5.66 16.77 3.37 9.30 2.02 2.57 1.12 0.00 0.00 0.00 43.50	2.45 4.26 15.67 3.47 10.99 2.49 0.80 0.92 0.00 2.40 1.77 45.22	2.49 3.97 10.97 2.49 11.14 1.17 0.07 0.36 0.00 2.39 3.01 38.04

^{*}Includes Mundra Stage - III (1980 MW) designed on 70 domestic : 30 Import basis.

ANNEX REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1503 TO BE ANSWERED IN THE LOK SABHA ON 26.07.2018.

State Wise Coal likely to be produced during the current year and next Three Years from coal Blocks allocated to Power Utilities

				FIGURES IN MTPA			
SI. No.	State	Name of Coal Block	Organization	2018-19	2019-20	2020-21	2021-22
1	Odisha	Dulanga	NTPC Limited	1.5	2.5	4.5	7
2	Odisha	Manoharpur and dip side Manoharpur coal block	OCPL	0	1	2.5	5
3	Chhattisgarh	Talaipalli	NTPC Limited	1.5	4	5	6
4	Chhattisgarh	Gare Palma sector-III coal block	CSPGCL	0.5	1.5	3	4
56	Chhattisgarh	Gidhmuri and Paturia coal block	CSPGCL	2.2	4	5.6	5.6
78	Chhattisgarh	ParsaEast and Kanta Basan	RVUNL	10	10	10	10
9	Chhattisgarh	Parsa	Rajasthan Rajya Vidyut Utpadan Nigam Limited	0	1.5	3	5
1011	Jharkhand	Chatti Bariatu, Chatti Bariatu South	NTPC Limited	1	3	4	5
12	Jharkhand	Kerandari	NTPC Limited	-	0.3	1	1.5
13	Jharkhand	Pakri-Barwadih	NTPC Limited	6.25	6.25	6.25	6.25
14	Jharkhand	Tubed	DVC	-	-	1	2.15
15	Jharkhand	Pachhwara Central Coal Mine	PSPCL	1.75	7	7	7
16	Jharkhand	Pachhwara North	WBPDCL	2	6	10	15
17	Jharkhand	Jitpur	Adani Power Limited	0	1	2.5	2.5
18	West Bengal	Khagra Joydev	Damodar Valley Corporation	-	1	2	3
19	West Bengal	Trans Damodar coal Mine /	The Durgapur Projects Ltd.	0.5	1	1	1
20	West Bengal	Barjora North	WBPDCL	1.5	2.5	3	-
21	West Bengal	Barjora	WBPDCL	0.5	0.5	0.5	-
2223	West Bengal	Gangaramchak & Gangaramchak Bhadulia	WBPDCL	0	0.5	0.5	0.5
24	West Bengal	Sarisatolli	CESC Limited	2	2	2	2
25	Madhya Pradesh	Amelia North	Jaiprakash Power Ventures Limited	2.8	2.8	2.8	2.8
2627	Madhya Pradesh	Moher, Moher Amlohri extension	Reliance Power	17	17	17	17
28	Telangana	Tadicherla-I	TSGENCO	0	0.8	1.8	2.5
2934	Maharashtra	Baranj I to IV,Kiloni,Manora Deep	KPCL	2.5	3.75	5	5
			Total Expected Coal Production (MTPA)	53.5	79.9	100.95	115.8
