

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.864
TO BE ANSWERED ON 20.07.2017**

POWER DEMAND BY 2020

864. SHRI KESINENI NANI:

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

- (a) the number of power plants across the country currently under development, State-wise;**
- (b) the expected power demand in the country by 2020;**
- (c) whether the country has enough power generation to meet the requirements;**
- (d) whether the country is currently importing electricity from other countries, if so, the details thereof;**
- (e) the details of power deficit States in the country; and**
- (f) the steps being taken by the Government to improve the power generation in the country?**

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) : The details of power plants that are under construction (State-wise) are given at Annex-I.

(b) : As per the 19th Electric Power Survey (EPS) Report, the projected electrical energy requirement and peak electricity demand (utilities) on all India basis in the year 2019-20 is 1400 BU and 2,00,696 MW, respectively.

(c) & (d) : There is enough power generation capacity available in the Country to meet the requirements. The country is importing power from Bhutan and at the same time exporting power to Bangladesh, Nepal and Myanmar. The details of import and export of power are as under:

(In MU)

Year	Import	Export			Net Export
	Bhutan	Bangladesh	Nepal	Myanmar	
2017-18 (upto May, 2017)	526	858	447	0.8	780
2016-17	5,864	4,420	2,021	3	580

(e) & (f) : At present, enough generation capacity is available to meet the electricity demand of the country. However, there could be demand supply gap which is on account of factors other than non-availability of power in the country. The Power Supply Position in terms of energy requirement and peak demand during last year (2016-17) and during current year 2017-18 (upto June'17) are furnished at Annex-II.

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 864 TO BE ANSWERED IN THE LOK SABHA ON 20.07.2017.

Details of Under Construction Power Projects in the country					
Sl. No	State	Project Name	Fuel	Unit	Capacity (In MW)
1	Arunachal Pradesh	Gongri	Hydro	U-1 to	144
		2x72= 144 MW		U-2	
2	Arunachal Pradesh	Subansiri Lower	Hydro	U-1 to	2000
		8x250= 2000 MW		U-8	
3	Arunachal Pradesh	Kameng	Hydro	U-1 to	600
		4x150= 600 MW		U-4	
4	Arunachal Pradesh	Pare	Hydro	U-1 to	110
		2x55= 110 MW		U-2	
					2854
5	Assam	Namrup CCGT	Thermal	ST	36.15
6	Assam	Bongaigaon TPP	Thermal	U-3	250
					286.15
7	Andhra Pradesh	Dr.Narla Tata Rao TPS St-V	Thermal	U-1	800
8	Andhra Pradesh	Sri Damodaran Sanjeevaiah TPP St-II	Thermal	U-1	800
9	Andhra Pradesh	Rayalaseema TPP St-IV	Thermal	U-6	600
10	Andhra Pradesh	Bhavanapadu TPP Ph-I	Thermal	U-1	660
11	Andhra Pradesh			U-2	660
12	Andhra Pradesh	Thamminapatnam TPP stage -II	Thermal	U-3	350
13	Andhra Pradesh			U-4	350
14	Andhra Pradesh	Polavaram	Hydro	U-1 to	960
		12x80= 960 MW		U-12	
					5180
15	Bihar	Barauni TPS Extn.	Thermal	U-8	250
				U-9	250
16	Bihar	Siriya TPP (Jas Infra. TPP)	Thermal	U-1	660
				U-2	660
				U-3	660
				U-4	660
17	Bihar	Barh STPP-I	Thermal	U-1	660
				U-2	660
				U-3	660
18	Bihar	Nabi Nagar TPP	Thermal	U-3	250
				U-4	250
19	Bihar	New Nabi Nagar TPP	Thermal	U-1	660
				U-2	660
				U-3	660
					7600
20	Chhattisgarh	Lara TPP	Thermal	U-1	800
				U-2	800
21	Chhattisgarh	Akaltara TPP (Naiyara)	Thermal	U-3	600
				U-4	600
				U-5	600
				U-6	600
22	Chhattisgarh	Binjkote TPP	Thermal	U-2	300
				U-3	300
				U-4	300
23	Chhattisgarh	Lanco Amarkantak TPP-II	Thermal	U-3	660
				U-4	660
24	Chhattisgarh	Singhitarai TPP	Thermal	U-1	600
				U-2	600
25	Chhattisgarh	Uchpinda TPP	Thermal	U-3	360
				U-4	360

26	Chhattisgarh	Salora TPP	Thermal	U-2	135
27	Chhattisgarh	Deveri (Visa) TPP	Thermal	U-1	600
					8875
28	Gujarat	Wanakbori TPS Extn.	Thermal	U-8	800
29	Gujarat	KAPP	Nuclear		1400
					2200
30	Jammu and Kashmir	Kishanganga 3x110= 330 MW	Hydro	U-1 to U-3	330
31	Jammu and Kashmir	Parnai 3x12.5= 37.5 MW	Hydro	U-1 to U-3	37.5
32	Jammu and Kashmir	Lower Kalnai 2x24= 48 MW	Hydro	U-1 to U-2	48
33	Jammu and Kashmir	Ratle 4x205+1x30= 850 MW	Hydro	U-1 to U-5	850
					1265.5
34	Jharkhand	North Karanpura TPP	Thermal	U-1 U-2 U-3	660 660 660
35	Jharkhand	Matrishri Usha TPP Ph-I	Thermal	U-1 U-2	270 270
36	Jharkhand	Matrishri Usha TPP Ph-II	Thermal	U-3 U-4	270 270
37	Jharkhand	Tori TPP Ph-I	Thermal	U-1 U-2	600 600
38	Jharkhand	Tori TPP Ph-II	Thermal	U-3	600
					4860
39	Himachal Pradesh	Uhl-III 3x33.33= 100 MW	Hydro	U-1 to U-3	100
40	Himachal Pradesh	Sainj 2X50=100 MW	Hydro	U- 1 & U- 2	100
41	Himachal Pradesh	Sawra Kuddu 3x37= 111 MW	Hydro	U-1 to U-3	111
42	Himachal Pradesh	Shongtong Karcham 3x150= 450 MW	Hydro	U-1 to U-3	450
43	Himachal Pradesh	Parbati St. II 4x200= 800 MW	Hydro	U-1 to U-4	800
44	Himachal Pradesh	Sorang 2x50= 100 MW	Hydro	U-1 & U-2	100
45	Himachal Pradesh	Tangnu Romai- I 2x22= 44 MW	Hydro	U-1 to U-2	44
46	Himachal Pradesh	Bajoli Holi 3x60= 180 MW	Hydro	U-1 to U-3	180
47	Himachal Pradesh	Chanju-I 3x12= 36 MW (2 Units Comm.)	Hydro	U-3	12
48	Himachal Pradesh	Tidong-I 2x50= 100 MW	Hydro	U-1 to U-2	100
					1997
49	Karnataka	Yelahanka CCPP	Thermal	GT+ST	370
50	Karnataka	Kudgi STPP Ph-I	Thermal	U-3	800
					1170
51	Kerala	Pallivasal 2x30= 60 MW	Hydro	U-1 to U-2	60
52	Kerala	Thottiyar 1x30 + 1x10= 40 MW	Hydro	U-1 to U-2	40
					100
53	Maharashtra	Solapur STPP	Thermal	U-2	660
54	Maharashtra	Amravati TPP Ph-II	Thermal	U-1 U-2 U-3 U-4 U-5	270 270 270 270 270

55	Maharashtra	Lanco Vidarbha TPP	Thermal	U-1	660
				U-2	660
56	Maharashtra	Nasik TPP Ph-II	Thermal	U-1	270
				U-2	270
				U-3	270
				U-4	270
				U-5	270
57	Maharashtra	Bijora Ghanmukh TPP	Thermal	U-1	300
				U-2	300
58	Maharashtra	Shirpur TPP	Thermal	U-1	150
				U-2	150
59	Maharashtra	Koyna Left Bank PSS	Hydro	U-1 to	80
		2x40= 80 MW		U-2	
					5660
60	Madhya Pradesh	Shri Singhaji TPP St-II	Thermal	U-3	660
				U-4	660
61	Madhya Pradesh	Gadarwara TPP	Thermal	U-1	800
				U-2	800
62	Madhya Pradesh	Khargone TPP	Thermal	U-1	660
				U-2	660
63	Madhya Pradesh	Mahan TPP	Thermal	U-2	600
64	Madhya Pradesh	Gorgi TPP	Thermal	U-1	660
65	Madhya Pradesh	Niwari TPP	Thermal	U-2	45
66	Madhya Pradesh	Maheshwar	Hydro	U-1 to U-10	400
		10x40= 400 MW			
					5945
67	Mizoram	Tuirial	Hydro	U-1 to	60
		2x30= 60 MW		U-2	
					60
68	Odisha	Ib valley TPP	Thermal	U-3	660
				U-4	660
69	Odisha	Darlipalli STPP	Thermal	U-1	800
				U-2	800
70	Odisha	Ind Barath TPP (Odisha)	Thermal	U-2	350
71	Odisha	KVK Nilanchal TPP	Thermal	U-1	350
				U-2	350
				U-3	350
72	Odisha	Lanco Babandh TPP	Thermal	U-1	660
				U-2	660
73	Odisha	Malibrahmani TPP	Thermal	U-1	525
				U-2	525
					6690
74	Punjab	Shahpurkandi	Hydro	U-1 to	206
		3x33+3x33+1x8= 206 MW		U-7	
					206
75	Rajasthan	Chhabra TPP	Thermal	U-6	660
76	Rajasthan	Suratgarh SCTPP	Thermal	U-7	660
				U-8	660
77	Rajasthan	RAPP	Nuclear		1400
					3380
78	Sikkim	Teesta- VI	Hydro	U-1 to	500
		4x125= 500 MW		U-4	
79	Sikkim	Rangit-IV	Hydro	U-1 to	120
		3x40= 120 MW		U-3	
80	Sikkim	Bhasmey	Hydro	U-1 to	51
		2x25.5= 51 MW		U-2	
81	Sikkim	Tashiding	Hydro	U-1 to	97
		2x48.5= 97 MW		U-2	
82	Sikkim	Rangit-II	Hydro	U-1 to	66
		2x33= 66 MW		U-2	

83	Sikkim	Rongnichu	Hydro	U-1 to	96
		2x48= 96 MW		U-2	
84	Sikkim	Panan	Hydro	U-1 to	300
		4x75= 300 MW		U-4	
					1230
85	Telangana	Kothagudem TPS St-VII	Thermal	U-1	800
86	Telangana	Bhadradri TPP	Thermal	U-1	270
				U-2	270
				U-3	270
				U-4	270
87	Telangana	Telangana Ph- I	Thermal	U-1	800
				U-2	800
88	Telangana	Pulichintala	Hydro	U-2 to	90
		4x30= 120 MW (30 MW Comm.)		U-4	
					3570
89	Tamil Nadu	Ennore exp. SCTPP	Thermal	U-1	660
90	Tamil Nadu	Ennore SCTPP	Thermal	U-1	660
				U-2	660
91	Tamil Nadu	North Chennai TPP St-III	Thermal	U-1	800
92	Tamil Nadu	Uppur Super Critical TPP	Thermal	U-1	800
				U-2	800
93	Tamil Nadu	Neyveli New TPP	Thermal	U-1	500
				U-2	500
94	Tamil Nadu	Tuticorin TPP (Ind- Barath)	Thermal	U-1	660
95	Tamil Nadu	Tuticorin TPP St-IV	Thermal	U-1	525
96	Tamil Nadu	BHAVINI	Nuclear		500
					7065
97	Uttarakhand	Vyasi	Hydro	U- 1 &	120
		2X60=120 MW		U- 2	
98	Uttarakhand	Tapovan Vishnugad	Hydro	U-1 to	520
		4x130=520 MW		U-4	
99	Uttarakhand	Tehri PSS	Hydro	U-1 to	1000
		4x250= 1000 MW		U-4	
100	Uttarakhand	Lata Tapovan	Hydro	U-1 to	171
		3x57= 171 MW		U-3	
101	Uttarakhand	Vishnugad Pipalkoti	Hydro	U-1 to	444
		4x111= 444 MW		U-4	
102	Uttarakhand	Phata Byung	Hydro	U-1 to	76
		2x38= 76 MW		U-2	
103	Uttarakhand	Singoli Bhatwari	Hydro	U-1 to	99
		3x33= 99 MW		U-3	
					2430
104	Uttar Pradesh	Harduaganj TPS Exp-II	Thermal	U-1	660
105	Uttar Pradesh	Jawaharpur STPP	Thermal	U-1	660
				U-2	660
106	Uttar Pradesh	Obra-C STPP	Thermal	U-1	660
				U-2	660
107	Uttar Pradesh	Meja STPP	Thermal	U-1	660
				U-2	660
108	Uttar Pradesh	Ghatampur TPP	Thermal	U-1	660
				U-2	660
				U-3	660
109	Uttar Pradesh	Tanda TPP	Thermal	U-1	660
				U-2	660
					7920
110	West Bengal	Rammam III	Hydro	U-1 to	120
		3x40=120 MW		U-3	
111	West Bengal	India Power TPP	Thermal	U-2	150
				U-3	150
					420
					80963.65

ANNEX-II

ANNEX REFERRED TO IN REPLY TO PARTS (e) & (f) OF UNSTARRED QUESTION NO. 864 TO BE ANSWERED IN THE LOK SABHA ON 20.07.2017.

Power Supply Position for 2016-17

State / System / Region	Energy				Peak			
	April, 2016 - March, 2017				April, 2016 - March, 2017			
	Energy Requirement	Energy Supplied	Energy not Supplied		Peak Demand	Peak Met	Demand not Met	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	1,645	1,645	0	0	361	361	0	0
Delhi	30,829	30,797	32	0.1	6,342	6,261	81	1.3
Haryana	48,895	48,895	0	0.0	9,262	9,262	0	0.0
Himachal Pradesh	8,831	8,779	52	0.6	1,499	1,499	0	0.0
Jammu & Kashmir	17,398	14,194	3,204	18.4	2,675	2,140	535	20.0
Punjab	53,098	53,098	0	0.0	11,408	11,408	0	0.0
Rajasthan	67,838	67,415	423	0.6	10,613	10,348	265	2.5
Uttar Pradesh	107,569	105,701	1,868	1.7	17,183	16,110	1,073	6.2
Uttarakhand	13,069	12,986	83	0.6	2,037	2,037	0	0.0
Northern Region	349,172	343,513	5,659	1.6	53,372	52,612	760	1.4
Chhattisgarh	23,750	23,697	53	0.2	3,875	3,851	25	0.6
Gujarat	103,706	103,705	1	0.0	14,724	14,719	5	0.0
Madhya Pradesh	65,759	65,758	1	0.0	11,512	11,501	11	0.1
Maharashtra	139,295	139,228	67	0.0	22,516	22,207	309	1.4
Daman & Diu	2,398	2,398	0	0.0	334	334	0	0.0
Dadra Nagar Haveli	6,021	6,021	0	0.0	784	784	0	0.0
Goa	4,319	4,317	2	0.0	546	531	14	2.6
Western Region	345,247	345,127	120	0.0	48,531	48,313	218	0.4
Andhra Pradesh	54,300	54,257	43	0.1	7,969	7,965	4	0.1
Telangana	53,030	53,018	12	0.0	9,187	9,187	0	0.0
Karnataka	66,899	66,537	362	0.5	10,261	10,242	19	0.2
Kerala	24,296	24,261	35	0.1	4,132	3,996	135	3.3
Tamil Nadu	104,511	104,487	24	0.0	14,823	14,823	0	0.0
Puducherry	2,548	2,545	3	0.1	371	368	3	0.7
Lakshadweep#	48	48	0	0	8	8	0	0
Southern Region	305,588	305,106	482	0.2	42,232	42,232	0	0.0
Bihar	25,711	25,130	581	2.3	3,883	3,759	125	3.2
DVC	18,929	18,791	138	0.7	2,721	2,721	0	0.0
Jharkhand	7,960	7,906	54	0.7	1,498	1,498	0	0.0
Odisha	26,758	26,756	2	0.0	4,012	4,012	0	0.0
West Bengal	47,948	47,807	141	0.3	7,931	7,886	45	0.6
Sikkim	475	475	0	0.0	112	112	0	0.0
Andaman- Nicobar#	240	180	60	25	40	32	8	20
Eastern Region	127,783	126,867	916	0.7	18,908	18,788	120	0.6
Arunachal Pradesh	729	714	15	2.1	148	140	8	5.4
Assam	9,020	8,694	326	3.6	1,673	1,633	40	2.4
Manipur	764	740	24	3.1	163	163	0	0.2
Meghalaya	1,715	1,715	0	0.0	331	331	0	0.0
Mizoram	514	501	13	2.5	98	98	0	0.0
Nagaland	757	745	12	1.6	148	147	1	0.7
Tripura	1,644	1,621	23	1.4	284	284	0	0.0
North-Eastern Region	15,140	14,720	420	2.8	2,487	2,475	12	0.5
All India	1,142,928	1,135,332	7,596	0.7	159,542	156,934	2,608	1.6

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

Power Supply Position for 2017-18 (Provisional)

State / System / Region	Energy				Peak			
	April, 2017 - June,2017				April, 2017 - June,2017			
	Energy Requirement	Energy Supplied	Energy not Supplied		Peak Demand	Peak Met	Demand not Met	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
Chandigarh	487	478	9	2	340	340	0	0
Delhi	9,345	9,338	7	0.1	6,553	6,526	27	0.4
Haryana	12,875	12,875	0	0.0	8,912	8,912	0	0.0
Himachal Pradesh	2,326	2,317	9	0.4	1,377	1,377	0	0.0
Jammu & Kashmir	4,597	3,669	928	20.2	2,768	2,214	554	20.0
Punjab	14,015	14,015	0	0.0	10,786	10,786	0	0.0
Rajasthan	16,829	16,723	106	0.6	10,347	10,347	0	0.0
Uttar Pradesh	31,942	31,575	367	1.1	18,827	18,061	766	4.1
Uttarakhand	3,500	3,493	7	0.2	2,027	2,027	0	0.0
Northern Region	95,915	94,481	1,434	1.5	53,382	52,429	953	1.8
Chhattisgarh	6,829	6,829	0	0.0	3,888	3,887	1	0.0
Gujarat	29,192	29,192	0	0.0	15,693	15,693	0	0.0
Madhya Pradesh	16,166	16,166	0	0.0	8,402	8,402	0	0.0
Maharashtra	40,054	40,003	51	0.1	22,542	22,494	48	0.2
Daman & Diu	630	630	0	0.0	342	342	0	0.0
Dadra Nagar Haveli	1,525	1,525	0	0.0	771	771	0	0.0
Goa	1,036	1,036	0	0.0	558	557	1	0.2
Western Region	95,433	95,382	51	0.1	49,860	49,788	72	0.1
Andhra Pradesh	14,384	14,377	7	0.0	8,024	8,000	24	0.3
Telangana	13,291	13,286	5	0.0	9,009	9,001	8	0.1
Karnataka	16,640	16,634	6	0.0	9,992	9,987	5	0.1
Kerala	6,394	6,388	6	0.1	3,889	3,862	27	0.7
Tamil Nadu	27,986	27,977	9	0.0	15,001	14,975	26	0.2
Puducherry	703	703	0	0.0	388	387	0	0.1
Lakshadweep#	12	12	0	0	8	8	0	0
Southern Region	79,399	79,365	34	0.0	42,770	42,535	235	0.5
Bihar	6,797	6,606	191	2.8	4,122	4,021	101	2.5
DVC	5,230	5,221	9	0.2	2,770	2,770	0	0.0
Jharkhand	1,969	1,962	7	0.4	1,211	1,211	0	0.0
Odisha	7,285	7,283	2	0.0	4,227	4,227	0	0.0
West Bengal	13,627	13,571	56	0.4	7,828	7,828	0	0.0
Sikkim	106	106	0	0.0	91	91	0	0.0
Andaman- Nicobar#	60	45	15	25	40	32	8	20
Eastern Region	35,015	34,751	264	0.8	19,238	19,191	47	0.2
Arunachal Pradesh	183	180	3	1.6	145	145	0	0.2
Assam	2,227	2,111	116	5.2	1,744	1,623	121	6.9
Manipur	184	181	3	1.6	163	161	2	1.2
Meghalaya	407	407	0	0.0	304	304	0	0.1
Mizoram	124	122	2	1.6	86	85	1	0.8
Nagaland	187	184	3	1.6	147	146	1	0.7
Tripura	605	592	13	2.1	280	276	4	1.4
North-Eastern Region	3,918	3,777	141	3.6	2,499	2,391	108	4.3
All India	309,680	307,755	1,925	0.6	159,816	158,393	1,423	0.9

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