

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

STARRED QUESTION NO:126
ANSWERED ON:11.03.2005
POWER GENERATION
Gao Shri Tapir;Kaswan Shri Ram Singh

Will the Minister of POWER be pleased to state:

- (a) whether there is an acute shortage of power in the country;
- (b) if so, the details thereof along with per capita demand and supply of power in each State;
- (c) the reasons for shortage of power;
- (d) the shortfall registered in power generation capacity during the last three years, State-wise;
- (e) whether the Government is contemplating to allocate more funds to power deficit States;
- (f) if so, the details thereof;
- (g) the target fixed and achievement made in adding power generation capacity during the last three years, State-wise; and
- (h) the target fixed for the Tenth Five Year Plan and achievements made in this regard so far, State-wise?

Answer

THE MINISTER OF POWER (SHRI P.M. SAYEED)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (h) OF STARRED QUESTION NO. 126 TO BE ANSWERED IN THE LOK SABHA ON 11.03.2005 REGARDING POWER GENERATION.

(a) : There is an overall power shortage in the country. The shortages vary from State to State, region to region, season to season and hour-to-hour. The average energy shortage in the country declined from 8.8% in 2002-03 to 7.1% in 2003-04 and 6.8% in 2004-05 till December, 2004.

(b) : State-wise power supply position in the country during April- December, 2004 is given at Annexure-I. State-wise annual per capita energy requirement and energy availability during the year 2004-05 (upto December` 04) is given at Annexure-II.

(c) : The main reasons for shortage of power are:-

(i) Growth in demand for power outstripping the growth in generation and capacity addition.

(ii) Shortage of peaking power in the grid.

(iii) Low Plant Load Factor of a number of thermal generating units mostly in the State sector.

(iv) Inadequate sub-transmission and distribution network in some States.

(v) High Transmission and Distribution losses.

(vi) Poor financial position of State Utilities which does not enable them to raise the resources necessary for making required investments to create adequate generation capacity.

(vii) Low hydro generation in the Northern Region, this year, mainly due to reduced inflows and relatively less snowfall/snowmelt in the catchment areas.

(d) : The targets and achievement of capacity addition during the last three years are as follows:

(Figures in MW)

2002-03 2003-04 2004-05 (Upto Feb., 2005)

Target 4109 5202 5246
Achievement 2872## 3952## 3644###

Shortfall is mainly due to non-commissioning of Dabhol Project (1444 MW)

Shortfall is mainly due to non-commissioning of Hydro projects Dulhasti (390 MW) and Tehri HEP (1000 MW).

Shortfall is mainly due to non-commissioning of Akrimota Thermal Power Project (250 MW), Dulhasti Hydro Electric Project (390 MW) and Tehri Hydro Electric Project (750 MW).

State-wise shortfall vis-à-vis target of capacity addition during the last three years is given at Annexure-III.

(e) & (f) : Planning Commission allocates funds on power sector as proposed by the State Governments on their Annual Plans for on-going power development programmes such as generation, transmission, distribution, renovation & modernization, rural electrification etc. It does not allocate funds merely based on power deficit for the States. However, the Ministry of Power has initiated various steps to revive the poor financial health of SEBs/Power Utilities. The Ministry of Power has signed Memorandum of Understanding (MoU)/Memorandum of Agreement (MoA) with States on power sector reform envisaging support of Central Government subject to States progressing satisfactorily on agreed reform agenda. The Union Government, in order to help the State Utilities is providing funds under the Accelerated Power Development and Reforms Programme (APDRP) for investment in identified distribution areas for, inter-alia, reducing technical losses and improving the quality of supply and also for incentivising, reduction of cash losses through grants. Public Sector Undertakings under the administrative control of the Ministry of Power like Power Finance Corporation, Rural Electrification Corporation provide funds for investments in the Power Sector.

(g) : State-wise target fixed and achievement made in adding power generation capacity during the last three years is given at Annexure-III.

(h) : A capacity addition target of 41,110 MW has been set for the 10th Plan. The details are given in the table below:

(Figures in MW)

Source Central State Private Total

Hydro	8742	4481	1170	14393
Thermal	12790	6676	5951	25417
Nuclear	1300	-	-	1300
Total	22832	11157	7121	41110

As against the above target, a capacity of 10468 MW has been added till 28.02.2005. The details are given in the table below:

(Figures in MW)

Source	Central	State	Private	Total
Hydro	2700	1074	300	4074
Thermal	4130	1846	418	6394
Nuclear	0	0	0	0
Total	6830	2920	718	10468

State - wise target fixed and capacity added in the 10th Plan is given at Annexure-III.

ANNEXURE-I

ANNEXURE REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO.126 TO BE ANSWERED IN THE LOK SABHA ON 11.03.2005 REGARDING POWER GENERATION.

Actual Power Supply Position (Fig. In MW net)

State	December, 2004	April - December, 2004
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System/Region	Requirement	Availability	Surplus/Deficit (-)	Requirement	Availability	Surplus/Deficit (-)
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(MU) (MU) (MU) (%) (MU) (MU) (MU) (%)

Chandigarh	89	86	-3	-3.4	899	895	-4	-0.4
Delhi	1596	1578	-18	-1.1	16509	16362	-147	-0.9
Haryana	1802	1655	-147	-8.2	16980	16012	-968	-5.7
Himachal Pradesh	348	328	-20	-5.7	2986	2953	-33	-1.1
Jammu & Kashmir	733	642	-91	-12.4	5930	5573	-357	-6.0
Punjab	2396	2070	-326	-13.6	26941	24570	-2371	-8.8
Rajasthan	2760	2754	-6	-0.2	21198	21116	-82	-0.4
Uttar Pradesh	4504	3452	-1052	-23.4	39177	31217	-7960	-20.3
Uttaranchal	424	386	-38	-9.0	3461	3362	-99	-2.9
Northern Region	14652	12951	-1701	-11.6	134081	122060	-12021	-9.0
Chhattisgarh	997	949	-48	-4.8	8706	8578	-128	-1.5
Gujarat	5511	4745	-766	-13.9	44541	39200	-5341	-12.0
Madhya Pradesh	3759	2979	-780	-20.8	24685	22070	-2615	-10.6
Maharashtra	8596	7066	-1530	-17.8	67663	60526	-7137	-10.5
Daman & Diu	97	97	0	0.0	830	830	0	0.0
Dagar Nagar Haveli	177	177	0	0.0	1321	1321	0	0.0

Goa	188	188	0	0.0	1576	1576	0	0.0
Western Region	19325	16201	-3124	-16.2	149322	134101	-15221	-10.2
Andhra Pradesh	4165	4104	-61	-1.5	37214	37049	-165	-0.4
Karnataka	3246	3029	-217	-6.7	25307	24151	-1156	-4.6
Kerala	1127	1111	-16	-1.4	9372	9271	-101	-1.1
Tamil Nadu	4116	4062	-54	-1.3	34512	34368	-144	-0.4
Pondicherry	129	129	0	0.0	1153	1153	0	0.0
Lakshadweep	2	2	0	0.0	17	17	0	0.0
Southern Region	12783	12435	-348	-2.7	107558	105992	-1566	-1.5
Bihar	655	524	-131	-20.0	5371	4969	-402	-7.5
DVC	812	798	-14	-1.7	6801	6739	-62	-0.9
Jharkhand	326	320	-6	-1.8	2672	2620	-52	-1.9
Orissa	1203	1183	-20	-1.7	10395	10339	-56	-0.5
West Bengal + Sikkim	1732	1678	-54	-3.1	17431	17190	-241	-1.4
A & Nicobar Islands	16	14	-2	-12.5	146	122	-24	-16.4
Eastern Region	4728	4503	-225	-4.8	42670	41857	-813	-1.9
Arunachal Pradesh	14	14	0	0.0	118	118	0	0.0
Assam	310	292	-18	-5.8	2889	2739	-150	-5.2
Manipur	50	49	-1	-2.0	417	408	-9	-2.2
Meghalaya	124	112	-12	-9.7	1031	929	-102	-9.9
Mizoram	23	22	-1	-4.3	174	163	-11	-6.3
Nagaland	29	29	0	0.0	248	244	-4	-1.6
Tripura	58	51	-7	-12.1	538	494	-44	-8.2
North Eastern Region	605	565	-40	-6.6	5412	5091	-321	-5.9
All India	52093	46655	-5438	-10.4	439043	409101	-29942	-6.8

Note : As Lakshadweep and A & N Islands system are stand alone, the figures in respect of these are not included in the regional as well as All India

Peak Demand / Peak Met (Fig. In MW net)

State December, 2004 April - December, 2004

System/Region Peak Demand Peak Surplus/Deficit(-) Peak Peak Surplus/Deficit (-)
Met Demand Met

(MW) (MW) (MW) (%) (MW) (MW) (MW) (%)

Chandigarh	175	163	-12	-6.9	224	224	0	0.0
Delhi	3168	3064	-104	-3.3	3558	3490	-68	-1.9
Haryana	3512	3111	-401	-11.4	4037	3621	-416	-10.3
Himachal Pr.	678	609	-69	-10.2	678	615	-63	-9.3
Jammu & Kashmir	1235	1085	-150	-12.1	1251	1151	-100	-8.0
Punjab	5073	3817	-1256	-24.8	7122	5559	-1563	-21.9
Rajasthan	4244	4244	0	0.0	4414	4414	0	0.0
Uttar Pradesh	7059	5523	-1536	-21.8	7877	6268	-1609	-20.4
Uttaranchal	802	780	-22	-2.7	846	794	-52	-6.1
Northern Region	25373	22764	-2609	-10.3	26834	24125	-2709	-10.1
Chhattisgarh	1727	1564	-163	-9.4	1789	1670	-119	-6.7
Gujarat	9319	7122	-2197	-23.6	10162	7427	-2735	-26.9
Madhya Pradesh	5944	4420	-1524	-25.6	5944	4846	-1098	-18.5
Maharashtra	14600	11295	-3305	-22.6	14708	11709	-2999	-20.4
Daman & Diu	155	155	0	0.0	200	200	0	0.0
D & N Haveli	281	281	0	0.0	391	391	0	0.0
Goa	349	349	0	0.0	356	356	0	0.0
Western Region	31085	23400	-7685	-24.7	31085	24049	-7036	-22.6
Andhra Pradesh	6989	6867	-122	-1.7	7957	7843	-114	-1.4
Karnataka	5815	5099	-716	-12.3	5927	5360	-567	-9.6
Kerala	2387	2279	-108	-4.5	2427	2292	-135	-5.6
Tamil Nadu	7257	7129	-128	-1.8	7365	7275	-90	-1.2
Pondicherry	200	200	0	0.0	230	230	0	0.0
Lakshadweep	6	6	0	0.0	6	6	0	0.0
Southern Region	21842	20622	-1220	-5.6	23075	21928	-1147	-5.0
Bihar	905	805	-100	-11.0	980	980	0	0.0
DVC	1315	1315	0	0.0	1347	1315	-32	-2.4
Jharkhand	550	550	0	0.0	572	555	-17	-3.0
Orissa	2135	2135	0	0.0	2195	2150	-45	-2.1
W.B. + Sikkim	3923	3823	-100	-2.5	3923	3823	-100	-2.5
A & N Islands	35.5	31	-4.5	-12.7	35.5	31	-4.5	-12.7
Eastern Region	8445	8250	-195	-2.3	8445	8320	-125	-1.5
Arunachal Pr.	52	52	0	0.0	54	54	0	0.0

Assam	620	565	-55	-8.9	659	621	-38	-5.8
Manipur	101	97	-4	-4.0	103	103	0	0.0
Meghalaya	264	180	-84	-31.8	264	207	-57	-21.6
Mizoram	65	64	-1	-1.5	69	64	-5	-7.2
Nagaland	74	71	-3	-4.1	74	71	-3	-4.1
Tripura	146	110	-36	-24.7	188	159	-29	-15.4
N.E. Region	1161	1045	-116	-10.0	1247	1128	-119	-9.9
All India	87906	76081	-11825	-13.5	87906	77281	-10625	-12.1

Note : As Lakshadweep and A&N Island Systems are stand alone, the figures in respect of these are not included in the regional as well as All India figures.

ANNEXURE- II

ANNEXURE REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO.126 TO BE ANSWERED IN THE LOK SABHA ON 11.03.2005 REGARDING POWER GENERATION.

Per Capita Energy Requirement and Availability During April 04-December 04
 State / System Per-capita Energy Requirement Per-capita Energy Availability
 April - December, 2004
 (kWh) (kWh)

Chandigarh	936	932	
Delhi	1,105	1,095	
Haryana	767	723	
Himachal Pradesh	477	471	
Jammu & Kashmir	549	516	
Punjab	1,069	975	
Rajasthan	355	354	
Uttar Pradesh	224	178	
Uttaranchal	390	379	
Chhattisgarh	399	393	
Gujarat	843	742	
Madhya Pradesh	388	347	
Maharashtra	672	601	
Daman & Diu	4,911	4,911	
Dadra & Nagar Haveli	5,621	5,621	
Goa	1,098	1,098	
Andhra Pradesh	476	474	
Karnataka	464	443	
Kerala	287	283	
Tamilnadu	541	539	
Pondicherry	1,144	1,144	
Lakshadweep	266	266	
Bihar	62	57	
Jharkhand	260	256	
Orissa	274	273	
W.Bengal + Sikkim	234	231	
A & N Islands	389	325	
Arunachal Pradesh	104	104	
Assam	104	98	
Manipur	168	164	
Meghalaya	430	387	
Mizoram	188	176	
Nagaland	119	117	
Tripura	163	149	

ANNEXURE- III

ANNEXURE REFERRED TO IN PARTS (d), (g) & (h) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO.126 TO BE ANSWERED IN THE LOK SABHA ON 11.03.2005 REGARDING POWER GENERATION.

State - wise 10th Plan capacity addition target vis-À-vis achievements

(Figures in MW)

Region / State 10th Plan 2002-03 2003 - 04

Target Target Achie- Excess (+) Target Achie- Excess (+)
vement Shortfall(-) vement Shortfall(-)

NORTHERN REGION

NHPC	1,090	-	-	0	690	300	-390
NJPC	1,900	-	-	0	1,500	1,500	-
NTPC	1,700	-	-	0	-	-	-
THDC	2,400	250	-	-250	1,000	-	-1,000
NLC	250	-	-	0	-	-	-
DELHI	226	226	226	0	-	-	-
HARYANA	500	-	-	0	-	-	-
HIMACHAL PRADESH	562	-	-	200	+200	100	100
JAMMU & KASHMIR	450	-	-	0	-	-	-
PUNJAB	1,168	-	-	0	-	-	-
RAJASTHAN	660	75	75	0	445	445	-
UTTARANCHAL	704	-	-	0	-	-	-
UTTAR PRADESH	710	-	-	0	-	-	-

TOTAL (NR) 12,320 551 501 -50 3,735 2,345 -1,390

WESTERN REGION

NPC	1,080	-	-	-	-	-	-
NTPC	2,480	-	-	-	-	-	-
NHPC	37	-	-	-	-	-	-
NHDC	1,520	-	-	-	250	500	+250
GUJARAT	2,382	125	100	-25	107	107	-
MAHARASHTRA	1,944	1,444	-	-1,444	-	-	-
MADHYA PRADESH	1,573	35	35	-	-	-	-
CHHATTISGARH	420	-	-	-	-	-	-

TOTAL (WR) 11,436 1,604 135 -1,469 357 607 +250

SOUTHERN REGION

NLC	920	420	210	-210	210	210	-
NPC	220	-	-	-	-	-	-
NTPC	1,000	500	500	-	-	-	-
ANDHRA PRADESH	3,055	378	378	-	150	150	-
KARNATAKA	1,297	210	210	-	-	15	+15
KERALA	100	-	-	-	-	-	-
TAMILNADU	684	344	344	-	203	100	-103
PONDICHERRY	100	-	-	-	-	-	-
LAKSHADWEEP	0	0	0	0	0	0	0

TOTAL (SR) 7,376 1,852 1,642 -210 563 475 -88

EASTERN REGION

DVC	1,960	-	-	-	-	-	-
NHPC	1,710	-	-	-	-	-	-
NTPC	3,980	-	500	+500	500	500	-

BIHAR	135	-	-	-	-	-	-
JHARKHAND	330	8	-	-8	-	-	-
ORISSA	150	6	6	-	-	-	-
WEST BENGAL	670	-	-	-	-	-	-

TOTAL (ER) 8,935 14 506 +492 500 500 -

NORTH EASTERN REGION

NEEPCO	585	-	-	-	25	25	-
ASSAM	138	-	-	-	-	-	-
MEGHALAYA	132	-	-	-	-	-	-
MANIPUR	18	18	18	-	-	-	-
MIZORAM	103	-	-	-	23	-	-23
NAGALAND	-	8	8	-	-	-	-
TRIPURA	42	42	42	-	-	-	-
TOTAL (NER)	1,018	68	68	-	48	25	-23
A & N ISLAND	25	20	20	-	-	-	-

TOTAL (ALL INDIA) 41,110 4,109 2,872 -1,237 5,202 3,952 -1,250

April, 2004 - February, 2005

Up to February, 2005

(Annexure-III continued....)

(Figures in MW)

Region / State 2004 - 05 # 2002-05 ##

Target	Achievement	Excess Shortfall	(+) (-)	Total	Total	Excess Shortfall	(+) (-)
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NORTHERN REGION

NHPC	670	-670	1,360	300	-1,060
NJPC		1,500	1,500	-	
NTPC	500	+500	0	500	+500
THDC	750	-750	2,000	-	-2,000
NLC		0	-	-	
DELHI		226	226	-	
HARYANA	500	500	500	500	-
HIMACHAL PRADESH			100	300	+200
JAMMU & KASHMIR			0	0	-
PUNJAB		0	0	-	
RAJASTHAN			520	520	-
UTTARANCHAL		0	-	-	
UTTAR PRADESH		0	-	-	

TOTAL (NR) 1,920 1,000 -920 6,206 3,846 -2,360

WESTERN REGION

NPC	-	-	-	-	-	-
NTPC	-	-	-	-	-	-
NHPC	-	-	-	-	-	-
NHDC	500	375	-125	750	875	+125
GUJARAT	600	350	-250	832	557	-275
MAHARASHTRA	-	-	-	1,444	-	-1,444
MADHYA PRADESH	-	-	-	35	35	-
CHHATTISGARH	-	-	-	0	-	-

TOTAL (WR) 1,100 725 -375 3,061 1,467 1,594

SOUTHERN REGION

NLC	-	-	-	630	420	-210
NPC	-	-	-	0	0	-
NTPC	500	500	-	1,000	1,000	-
ANDHRA PRADESH	-	-	-	528	528	-
KARNATAKA	165	110	-55	375	335	-40
KERALA	-	-	-	0	0	-
TAMILNADU	323	70	-253	869	514	-355
PONDICHERRY	-	-	-	0	-	-
LAKSHADWEEP	0	0	0	0	0	0

TOTAL (SR) 988 680 -308 3,402 2,797 -605

EASTERN REGION

DVC	210	210	-	210	210	-
NHPC	-	-	-	0	0	-
NTPC	1,000	1,000	-	1,500	2,000	+500
BIHAR	-	-	-	0	0	-
JHARKHAND	-	-	-	8	0	-8
ORISSA	-	-	-	6	6	-
WEST BENGAL	-	-	-	0	0	-

TOTAL (ER) 1,210 1,210 - 1,724 2,216 +492

NORTH EASTERN REGION

NEEPCO	-	-	-	25	25	-
ASSAM	-	-	-	0	0	-
MEGHALAYA	-	-	-	0	0	-
MANIPUR	-	-	-	18	18	-
MIZORAM	23	23	-	46	23	-23
NAGALAND	-	-	-	8	8	-
TRIPURA	-	-	-	42	42	-
TOTAL (NER)	23	23	-	139	116	-23
A & N ISLAND	5	6	+1	25	26	+1

TOTAL (ALL INDIA) 5,246 3,644 -1,602 14,557 10,468 -4,089

= April, 2004 - February, 2005
= Up to February, 2005