

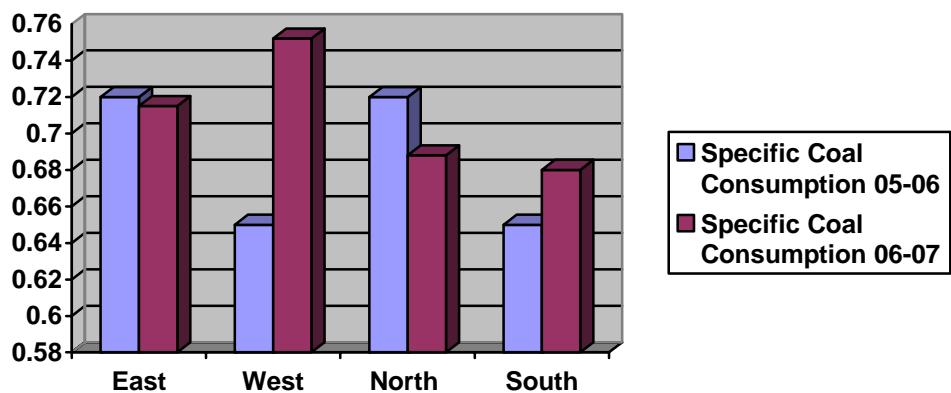
Section-9

COAL SUPPLY TO VARIOUS POWER STATIONS

- 9.1** 79 thermal power stations have been considered in this review. Out of which 75 are coal based thermal stations and four, viz., Neyveli, Giral,Akrimota and Kutch are using lignite as primary fuel to generate power.

9.2 SPECIFIC COAL CONSUMPTION

The All India specific coal consumption in thermal power stations during 2006-07 was 0.70 Kw/kwh. Region wise break up of Sp. Coal consumption are given below:



REGION	SP. COAL CONSUMPTION (Kg/kWh)	
	2005-06	2006-07
NORTHERN REGION	0.691	0.688
WESTERN REGION	0.724	0.752
SOUTHERN REGION	0.654	0.680
EASTERN REGION	0.719	0.733
NORTH EASTERN REGION	-	-
ALL INDIA	0.70	0.715

Power stations in the states of Western and Eastern Region have registered higher Sp. Consumption of coal than the All India average of the same. Station wise details are given in Annexure – 9.1

9.3. LOSS OF GENERATION DUE TO SHORT SUPPLY OF COAL

There was not any generation loss reported due to coal shortage by the power utilities during 2006-07.

9.4 Coal Quality Issues and Coal Washerries:

Many instances of supply of oversized/ lumpy coal were reported by TPSs, which affected unloading and handling of coal. Ministry of Coal impressed upon all the collieries to install sufficient capacity of crushers and ensure supply of sized coal to TPSs. Receipts of wet, sticky and muddy coal, especially from WCL mines, was also being reported by a few TPSs.

The other issues in respect of quality of coal supplied to thermal power stations were higher ash content, lower volatile matters, presence of stone and other extraneous matters. As the quality of coal used vary widely from design parameters, the energy generated and peaking generating capacity are affected adversely and outages of power stations, particularly owing to tube leakage increased considerably. The maintenance expenditure goes up apart from expenditure on disposal of ash and stone. The consumption of Secondary Fuel Oil (SFO) also increases as the coal quality lowers.

The implementation of MOEF notification w.e.f. 1st June 2002 in respect of use of coal having less than 34% ash by 35 identified coal based TPSs was being constantly monitored by CEA. These stations were given quarterly linkage of raw coal and washed coal in some cases, from various sources as per the decision taken in the Standing Linkage Committee (Short-term) taking into consideration of the matrix of source of supply prepared to ensure an annual weighted average of less than 34% ash in the coal used by each TPS. Availability of washed/beneficiated coal was inadequate to meet the requirement of all the 35 TPSs. Raw coal of appropriate grade was, therefore, linked for blending. In a few instances the beneficiated coal also contained high percentage of ash.

CEA has been reminding the CIL every month to ensure despatch of coal from different sources in such proportion that the annual weighted average ash content of the coal supplied to these TPSs would be within the stipulated limit.

9.5 COAL LINKAGE AND RECEIPTS AT VARIOUS POWER STATIONS DURING THE YEAR 2006-07

Power station wise break up of coal linkages, receipts and consumption at various power stations for the last three years is given in Annexure – 9.2.

9.6 GAS SUPPLY TO VARIOUS GAS BASED POWER STATIONS DURING THE YEAR 2006-07

9.6.1 Gas Supply and Requirement

The production and supply of gas has not been keeping pace with the growing demand of gas of gas in the country, including for that of power sector. Even the commitments of gas allocations made to power stations were not fulfilled. Power Station- wise details of requirement and supply of gas to power plants during the year 2006-07 are given in Annexure- 9.3.

9.6.2 Generation Loss due to gas shortage

There has been shortage in availability of gas. This results in loss of generation of power. In case of gas based power stations having provision for the use of alternate fuels, such as naphtha, HSD, generation has been augmented by use of such fuels. The actual generation using liquid fuels has, however, been dependent upon the requirement/acceptance by the beneficiaries on account of the prevailing high costs of these fuels resulting in high cost of generation.

Loss of generation due to shortage of gas, as reported to CEA, for the year 2006-07 was 8062.62 Million Units. The station wise details are given in Annexure – 9.4.

9.7 SPECIFIC SECONDARY FUEL OIL CONSUMPTION

57 TPS only furnished the data regarding secondary fuel oil consumption. The details of specific fuel oil consumption in the power stations are given in Annexure 9.5.

ANNEXURE - 9.1**SP. COAL CONSUMPTION FOR THE YEAR 2005-06&2006-07**

S N	NAME OF TPS	CAP.IN MW AS ON 31.3.2007	SPCC KG/KWH 2005-06	*CONSUMP. IN '000T 2006-07	SPCC KG/KWH 2006-07
NORTHERN REGION					
1	DELHI				
1	Badarpur	720	0.70	3739	0.70
2	I.P. Stn.	248	0.95	946	0.99
3	Rajghat	135	0.88	529	0.83
	Sub-Total	1103	0.75	5214	0.76
HARYANA					
4	Faridabad	180	1.01	663	1.08
5	Panipat	1360	0.71	6852	0.69
	Sub-Total	1540	0.74	7515	0.71
PUNJAB					
6	Bhatinda	440	0.75	1615	0.73
7	Lehra Mahabbat	420	0.58	2009	0.58
8	Ropar	1260	0.66	6494	0.66
	Sub-Total	2120	0.66	10118	0.66
RAJASTHAN					
9	Kota	1045	0.64	5445	0.67
10	Suratgarh	1250	0.61	6372	0.62
	Sub-Total	2295	0.63	11817	0.64
UTTAR PRADESH					
11	Anpara	1630	0.74	8757	0.71
12	Harduaganj	340	1.02	754	1.00
13	Obra	1550	0.87	4785	0.91
14	Panki	220	0.89	871	0.94
15	Paricha	640	0.92	1808	0.82
16	Tanda	440	0.77	2670	0.76
17	Unchahar	1050	0.67	5022	0.66
18	Rihand	2000	0.63	10247	0.64
19	Singrauli	2000	0.67	9783	0.67

ANNEXURE - 9.1**SP. COAL CONSUMPTION FOR THE YEAR 2005-06&2006-07**

S N	NAME OF TPS	CAP.IN MW AS ON 31.3.2007	SPCC KG/KWH 2005-06	*CONSUMP. IN '000T 2006-07	SPCC KG/KWH 2006-07
20	Dadri(NCTPP)	840	0.63	4324	0.61
	Sub-Total	10710	0.70	49021	0.70
	TOTAL NR	17768	0.69	83685	0.69

WESTERN REGION

	GUJARAT				
21	TORRENT POWER	390	0.46	1801	0.49
22	Gandhinagar	870	0.86	3148	0.60
23	Sikka	240	0.67	978	0.58
24	Ukai	850	0.66	3200	0.67
25	Wanakbori	1470	0.81	7350	0.66
	Sub-Total	3820	0.71	16477	0.86
	MADHYA PRADESH				
26	Amarkantak	300	0.89	1063	0.85
27	Birsingpur	840	0.77	4027	0.74
28	Satpura	1142	0.90	6610	0.90
29	VindhyaChal	3260	0.64	13101	0.65
	Sub-Total	5542	0.73	24801	0.73
	CHHATTISGARH				
30	Korba East	690	0.89	2705	0.82
31	Korba West	840	0.75	4451	0.75
32	Korba STPS	2100	0.71	11789	0.71
	Sub-Total	3630	0.75	18945	0.74
	MAHARASTRA				
33	Bhusawal	482	0.71	2400	0.75
34	Chandrapur	2340	0.73	10194	0.77
35	Koradi	1100	0.76	5480	0.81
36	Khaperkheda	840	0.78	4856	0.74
37	Nasik	910	0.66	4626	0.71
38	Parli	690	0.74	3420	0.75
39	Paras	63	0.81	351	0.85

ANNEXURE - 9.1**SP. COAL CONSUMPTION FOR THE YEAR 2005-06&2006-07**

S N	NAME OF TPS	CAP.IN MW AS ON 31.3.2007	SPCC KG/KWH 2005-06	*CONSUMP. IN '000T 2006-07	SPCC KG/KWH 2006-07
40	Dahanu	500	0.54	2338	0.52
41	Trombay*	0	0.00	1978	0.00
	Sub-Total	6925	0.72	35643	0.74
	TOTAL WR	19917	0.72	95866	0.75

SOUTHERN REGION

	ANDHRA PRADESH				
42	Kothagudem	1180	0.74	6433	0.76
43	Ramagundam	62	0.71	255	0.77
44	Vijayawada	1260	0.70	6937	0.70
45	R-gundam STP	2600	0.60	12502	0.62
46	RAYALSEEMA	630	0.65	2226	0.67
47	Simhadri	1000	0.66	5488	0.68
	Sub-Total	6732	0.64	33841	0.67
	KARNATAKA				
48	Raichur	1470	0.66	7529	0.66
	Sub-Total	1470	0.66	7529	0.66
	TAMIL NADU				
49	Ennore	450	0.96	1291	0.90
50	Mettur	840	0.64	4603	0.68
51	Tuticorin	1050	0.74	5903	0.73
52	North CHENNAI	630	0.62	3282	0.67
	Sub-Total	2970	0.69	15079	0.71
	TOTAL SR	11172	0.65	56449	0.68

EASTERN REGION

	BIHAR				
53	Barauni	320	1.08	42	1.28
54	Muzaffarpur	220	0.00	0	0.00
55	Kahalgaon	1340	0.89	5579	0.85
	Sub-Total	1880	0.89	5621	0.85
	JHARKHAND				

ANNEXURE - 9.1**SP. COAL CONSUMPTION FOR THE YEAR 2005-06&2006-07**

S N	NAME OF TPS	CAP.IN MW AS ON 31.3.2007	SPCC KG/KWH 2005-06	*CONSUMP. IN '000T 2006-07	SPCC KG/KWH 2006-07
56	Patratu	840	0.96	588	0.95
57	Tenughat	420	0.70	1769	0.65
58	Bokaro	630	0.76	2490	0.75
59	Chandrapur	750	0.74	1542	0.72
	Sub-Total	2640	0.76	6389	0.73
	WEST BENGAL				
60	Durgapur	350	0.67	1349	0.65
61	Mejia	1090	0.63	4044	0.65
62	Bandel	450	0.60	997	0.64
63	Santaldih	480	0.69	1048	0.71
64	Kolaghat	1260	0.69	5820	0.76
65	Barkeshwar	630	0.57	2986	0.61
66	NEW COSSIPORE	160	0.89	431	0.89
67	Titagarh	240	0.64	1155	0.63
68	SOUTHERN	135	0.69	697	0.69
69	Budge Budge	500	0.58	2520	0.58
70	Durgapur(DPL)	395	0.80	1473	0.83
71	Farakka STPS	1600	0.82	9626	0.84
	Sub-Total	7290	0.69	32146	0.72
	ORISSA				
72	Talcher	470	0.80	2838	0.80
73	Talcher STPS	3000	0.67	16806	0.71
74	Ib Valley	420	0.84	2739	0.83
	Sub-Total	3890	0.71	22383	0.73
	TOTAL ER	15700	0.72	66539	0.73
75	Bongaigaon	240	0.00	0	0.00
	TOTAL ALL	64797	0.7	302539	0.715

* Multifuel TPS

Annexure-9.2

YEARWISE COAL LINKAGES, RECEIPTS AND CONSUMPTION Fig. in '000 Tonnes													
Sl No.	Name of TPS	2004-05				2005-06				2006-07			
		Linkage	Receipt	Consum ption	C/Stock	Linkage	Receipt	Consum ption	C/Stock	Linkage	Receipt	Consum ption	C/Stock
Imported Coal													
1	I.P.Stn.					0	4			0	0	4	0
2	Panipat					240	132			360	245		0
3	Roper	0	0			150	95			306	95		0
4	Ahemedabad	540	465			600	604	588	18	465	551	535	34
5	Gandhinagar	960	665			960	679	718	6	1020	732	721	13
6	Budge Budge	270	285			295	360			345	308		0
7	Lehra Mohabbat	0	0			60	63			186	99		0
8	Ukai	0	0			0	0	0		0	0	0	0
9	Wanakbori	0	0			20	95	71	25	0	53	76	0
10	Nasik	0	339			420	538			420	279		0
11	Trombay	0	1990	1956	64	0	1911	1802	171	0	1884	1978	74
12	Dahanu	90	426	421	180	405	595	522	217	420	469	586	122
13	Mettur	0	0	0		360	631	632	0	0	326	321	2
14	Tuticorin	0	0	0		0	42	25		0	431	387	43
15	North Chennai	0	17			360	409	365	14	0	320	324	9
16	Raichur	0	0			240	112			0	239		0
17	Kota	0	34			240	155			0	24		0
18	Suratgarh	0	39			330	228	155	30	0	181	218	0
19	Titagarh(CESC)	120	123			45	196	0		90	49		0
20	Sikka					210	168	128	41	360	234	246	28

Annexure-9.2

Sl No.	Name of TPS	YEARWISE COAL LINKAGES, RECEIPTS AND CONSUMPTION						Fig. in '000 Tonnes					
		2004-05				2005-06				2006-07			
		Linkage	Receipt	Consumption	C/Stock	Linkage	Receipt	Consumption	C/Stock	Linkage	Receipt	Consumption	C/Stock
21	Bhusawal					240	290			210	173		0
22	khaperkheda					0	38	49		300	353	263	1
23	NCTPP(Dadri)					300	135	129	3	135	279	301	1
24	Talcher STPS					1200	1604	1490	54	900	732	784	0
25	Simhadri					330	556	470	36	210	213	251	0
26	Farakka STPS					570	609	611	9	900	542	554	0
27	Ramagundam STPS					225	125	77	40	0	95	139	0
28	Kahalgaon STPS					170	69	52	17	540	233	201	13
29	Vijayawada					250	0	0	0	0	0	0	0
30	Kolaghat					180	0	0	0	360	30		0
31	Durgapur(DPL)					30	0	0	0	0	0	0	0
32	Rihand STPS									450	116	90	27
33	Vindhyachal STPS									300	133	115	18
34	Parli									360	246		0
TOTAL Imported coal		1980	4527	2377	244	8430	10443	7884	681	8637	9664	8094	385
ALL INDIA TOTAL		304240	280601	277735	10499	317406	292628	281336	18174	338553	303301	302539	14122

Annexure-9.2

Annexure-9.2

YEARWISE COAL LINKAGES, RECEIPTS AND CONSUMPTION Fig. in '000 Tonnes													
Sl No.	Name of TPS	2004-05				2005-06				2006-07			
		Linkage	Receipt	Consumption	C/Stock	Linkage	Receipt	Consumption	C/Stock	Linkage	Receipt	Consumption	C/Stock
11	Anpara	8430	8421	8339	497	8625	8371	8497	371	9105	8729	8757	308
12	Harduaganj	975	783	670	118	885	492	533	82	765	713	754	53
13	Obra	5610	4652	4761	211	5550	4875	4821	205	6105	4966	4785	350
14	Panki Extn.	1095	928	913	50	1140	867	848	82	1095	901	871	90
15	Paricha	1065	960	876	81	1215	714	704	70	2940	1693	1808	20
16	Tanda (NTPC)	3205	2625	2596	52	2970	2692	2567	206	2700	2602	2670	137
17	Unchahar (NTPC)	4995	4859	4604	258	4785	4767	4736	280	5730	4929	5022	172
18	Rihand STPS	5196	4610	4768	153	7491	6992	6696	449	10266	10035	10157	422
19	Singrauli(STPS)	9411	10153	10336	301	9546	10467	10394	365	10215	9838	9783	407
20	NCTPP(Dadri)	5085	4765	4432	306	4275	4149	4159	311	4125	3983	4023	322
	Total	45067	42756	42295	2027	46482	44386	43955	2421	53046	48389	48630	2281
	TOTAL N. R.	82762	75267	73279	3993	84432	77266	76837	4792	92055	82502	83072	4332
WESTERN REGION													
GUJARAT													
21	Ahemedabad	1410	1174	1651	35	1455	1244	1186	59	1530	1278	1266	49
22	Gandhinagar	3120	2809	3158	250	2610	2511	2455	102	2895	2711	2427	106
23	Sikka	1080	985	1000	9	960	870	813	61	780	717	732	40
24	Ukai	3681	3468	3440	105	4020	3861	3561	154	3990	3775	3200	248
25	Wanakbori	8460	7620	7404	124	8655	7252	6787	207	8730	7989	7274	195
	Total	17751	16056	16653	523	17700	15738	14802	583	17925	16470	14899	638
MADHYAPRADESH													
26	Amarkantak	1170	1060	1052	50	1200	976	980	40	1350	1109	1063	88

Annexure-9.2

Sl No.	Name of TPS	YEARWISE COAL LINKAGES, RECEIPTS AND CONSUMPTION								Fig. in '000 Tonnes			
		2004-05				2005-06				2006-07			
		Linkage	Receipt	Consum ption	C/Stock	Linkage	Receipt	Consum ption	C/Stock	Linkage	Receipt	Consum ption	C/Stock
27	Birsingpur	4785	4129	4047	205	4680	3923	3717	345	4815	3890	4027	86
28	Satpura	7680	6951	6753	202	7995	7273	6852	337	8280	6725	6610	364
29	VindhyaChal STPS	10200	10660	10860	430	10200	11751	11678	472	13116	12871	12986	373
	Total	23835	22800	22712	887	24075	23923	23227	1194	27561	24595	24686	911
CHHATTISGARH													
30	Korba East	2745	2356	2237	210	2895	2729	2845	111	3090	2810	2705	199
31	Korba West	4830	4098	4053	373	4620	4483	4314	507	4410	4407	4451	401
32	Korba STPS	10890	12057	12388	63	12015	12337	11408	753	11580	11701	11789	633
	Total	18465	18511	18678	646	19530	19549	18567	1371	19080	18918	18945	1233
MAHARASHTRA													
33	Bhusawal	2445	2205	2342	119	2280	2131	2393	152	2430	2190	2400	96
34	Chandrapur	13590	12631	12234	439	11985	10729	10260	632	11130	10601	10194	195
35	Koradi	5295	5034	4973	136	5640	5099	4915	257	6045	5655	5480	208
36	Khaperkheda	5010	4806	4909	117	5745	4727	4420	423	4650	4371	4593	152
37	Nasik	4320	3558	3654	288	3570	3148	3808	171	3990	4493	4626	222
38	Parli	3417	3335	3314	56	3684	3928	3799	187	4125	3140	3420	108
39	Paras	360	348	324	30	360	383	389	23	375	364	351	17
40	Trombay	0	0	0	0	0	0	0	0	0	0	0	0
41	Dahanu	3090	2155	1993	179	2760	1874	1790	183	2775	2037	1752	180
	Total	37527	34072	33743	1364	36024	32019	31774	2028	35520	32851	32816	1178
	TOTAL W.R.	97578	91439	91786	3420	97329	91229	88370	5176	100086	92834	91346	3960

Annexure-9.2

Annexure-9.2

YEARWISE COAL LINKAGES, RECEIPTS AND CONSUMPTION Fig. in '000 Tonnes													
Sl No.	Name of TPS	2004-05				2005-06				2006-07			
		Linkage	Receipt	Consumption	C/Stock	Linkage	Receipt	Consumption	C/Stock	Linkage	Receipt	Consumption	C/Stock
BIHAR													
54	Barauni	450	172	169	6	330	162	131	30	420	46	42	35
55	Muzaffarpur	60	0	0	26	0	0	0	26	330	0	0	26
56	Kahalgaon STPS	5550	5483	5524	7	5655	6151	5773	377	6900	5294	5378	384
	Total	6060	5655	5693	39	5985	6313	5904	433	7650	5340	5420	445
JHARKHAND													
57	Patratu	1470	713	715	51	1440	799	810	39	1410	589	588	40
58	Tenughat	1050	747	902	173	1590	1239	1068	277	2280	1748	1769	236
59	Bokaro (DVC)	1950	1969	2067	190	2250	2092	2018	208	2850	2588	2490	209
	Chandrapura (DVC)												
60		1020	1431	1457	172	1680	1448	1495	10	1965	1389	1542	50
	Total	5490	4860	5141	586	6960	5578	5391	534	8505	6314	6389	535
WEST BENGAL													
61	Durgapur (DVC)	1365	1022	1049	49	1650	1286	1213	90	1815	1280	1349	64
62	Mejia (DVC)	4125	3217	3124	50	5055	3816	3718	20	5775	4315	4044	114
63	Bandel	1605	1357	1311	84	1680	1328	1284	85	1275	1059	997	87
64	Santaldih	1035	955	938	26	1065	908	842	80	1350	1049	1048	51
65	Kolaghat	5880	5326	5296	119	6090	5163	5086	188	6195	5754	5820	147
66	Bakreswar	2415	2260	2258	59	2760	2563	2489	96	3300	3048	2986	126
67	Calcutta(CESC)	465	431	431	6	435	416	400	22	450	431	431	21
68	Titagarh(CESC)	1140	1068	1171	29	1155	1127	1163	56	1110	1075	1155	45
69	S. G.St(CESC)	735	693	688	22	720	698	681	39	750	698	697	38

Annexure-9.2

Sl No.	Name of TPS	YEARWISE COAL LINKAGES, RECEIPTS AND CONSUMPTION								Fig. in '000 Tonnes			
		2004-05				2005-06				2006-07			
		Linkage	Receipt	Consumption	C/Stock	Linkage	Receipt	Consumption	C/Stock	Linkage	Receipt	Consumption	C/Stock
70	Budge Budge(CESC)	2055	1935	2220	39	2310	2226	2517	107	2280	2214	2520	104
71	Durgapur(DPL)	1830	1660	1668	19	2025	1704	1744	39	1980	1546	1473	45
72	Farakka STPS	10014	8913	8895	20	10515	9673	8830	764	11265	8878	9072	535
	Total	32664	28837	29049	522	35460	30908	29967	1586	37545	31347	31592	1377
	ORISSA												
73	Talcher Old	2400	2609	2577	86	2790	3051	2837	295	2880	2746	2838	203
74	Talcher STPS	13620	11542	12028	3	15555	13210	12676	654	17850	15609	16022	319
75	Ib Valley	2760	2631	2641	102	3060	2610	2607	105	3150	2725	2739	83
	Total	18780	16782	17246	191	21405	18871	18120	1054	23880	21080	21599	605
	TOTAL E.R.	62994	56134	57129	1338	69810	61670	59382	3607	77580	64081	65000	2962
	N.E.Region/ASSAM												
76	Bongaigaon	0	0	0	0	0	0	0	0	0	0	0	0
	Total All India Indigenous coal	302260	276074	275358	10255	308976	282185	273452	17493	329916	293637	294445	13737

Annexure-9.3
**GAS CONSUMED AT GAS BASED POWER STATIONS FOR THE YEAR 2006-07
(AS REPORTED TO CEA)**

S.N o.	Name of Power Station	Capacity (MW)	Located in the State	*Gas requirement at 90% PLF (As on 31.03.2007) (MMSCMD)	Gas Consumption (MMSCMD)
CENTRAL SECTOR					
1	Faridabad CCGT	430	Haryana	2.06	1.52
2	Anta CCGT	413	Rajasthan	1.98	1.54
3	Auraiya CCGT	652	U.P.	3.13	2.51
4	Dadri CCGT	817	U.P.	3.92	2.75
5	Kawas CCGT	644	Gujarat	3.09	1.71
6	Gandhar CCGT	648	Gujarat	3.11	2.58
7	Kathalguri CCGT (AGBPP)	291	Assam	1.40	1.44
8	Agartala GT	84	Tripura	0.58	0.73
9	Ratnagiri CCGT@	1480	Maharashtra	7.10	0.00
Sub Total (CS)		5459		26.38	14.78
STATE SECTOR					
1	I.P. CCGT	282	Delhi	1.35	1.13
2	Pragati CCGT	330.4	Delhi	1.59	1.37
3	Ramgarh CCGT	113.8	Rajasthan	1.18	0.66
4	Dholpur GT#	110	Rajasthan	0.77	-----
5	Utran CCGT	144	Gujarat	0.69	0.64
6	Hazira CCPP - (GSEG)	156.1	Gujarat	0.75	0.70
7	Dhuvaran CCPP (GSECL)	106.62	Gujarat	0.51	0.13
8	Dhuvaran CCPP (GSEL)	72	Gujarat	0.35	0.37
9	Uran CCGT	912	Maharashtra	4.38	2.56
10	Vijjeswaram CCGT	272	A. P.	1.31	0.83
11	Karaikal CCGT	32.5	Pondicherry	0.16	0.24
12	Narimanam GT	10	Tamil Nadu	Not in operation	
13	Kovilkalappal (Thirumakkottai) CCGT	107	Tamil Nadu	0.51	0.37
14	Valuthur CCGT	94	Tamil Nadu	0.45	0.41
15	Kuttalam CCGT	100	Tamil Nadu	0.48	0.24
16	Namrup CCGT	133.5	Assam	0.64	0.44
17	Lakwa GT	120	Assam	0.84	0.56
18	Mobile Gas T-G	21	Assam	Not in operation	
19	Baramura GT	37.5	Tripura	0.26	0.20
20	Rokhia GT	90	Tripura	0.63	0.39
Sub Total (SS)		3244.42		16.83	11.24

PRIVATE SECTOR(Licencies)				
1	Vatwa CCGT (AEC)	100	Gujarat	0.48
2	Trombay CCGT	180	Maharashtra	0.86
	Sub Total (PS)	280		1.34
	PRIVATE UTILITIES (IPPs)			1.07
1	GPEC Puguthan CCGT	655	Gujarat	3.14
2	GIPCL-Stage-II CCGT	160	Gujarat	0.77
3	Essar IMP CCGT	515	Gujarat	2.47
4	Godavari CCGT (Spectrum)	208	A. P.	1.00
5	Kondapalli CCGT	350	A. P.	1.68
6	Jegurupadu CCGT (GVK)	235.4	A. P.	1.13
7	Jegurupadu CCGT (GVK) Ext.	220	A. P.	1.06
8	Samikot CCPP/Peddapuram	220	A. P.	1.06
9	Vemagiri CCPP&	370	A. P.	1.78
10	P. Nallur CCGT	330.5	Tamil Nadu	1.59
11	KaruppurCCGT	119.8	Tamil Nadu	0.58
12	Valantharavai CCPP \$\$	52.8	Tamil Nadu	0.25
13	DLF Pvt. CCGT	24.5	Assam	0.12
	Sub Total (IPPs)	3461		16.61
	Total	12444.42		61.18
				35.10

* Normative gas requirement taking GCV of gas = 9000K.Cal/SCM (except for Ramgarh CCGT for which GCV is 4150 kCal/SCM, station heat rate-2900 Kcal/kwh for open cycle and 2000 Kcal /kwh for combined cycle.

110 MW (GT-1) Commissioned on 29.03.2007

@ Block II 740 MW GT Commissioned on 4/06 to 5/06

& 137 MW (ST) Commissioned on 8.06.2006

\$\$ 14.8 MW (ST) Commissioned on 15.04.2006

Annexure- 9.4

Generation loss due to shortage of gas for the year 2006-07
(As reported to CEA by Power Stations)

S.No.	Name of Power Station	Installed Capacity (MW)	Located in the State	Gen. loss (Mus)
	CENTRAL SECTOR			
1	Faridabad CCGT	430.00	Haryana	23.25
2	Anta CCGT	413.00	Rajasthan	55.04
3	Auraiya CCGT	652.00	U.P.	71.08
4	Dadri CCGT	817.00	U.P.	198.06
5	Kawas CCGT	644.00	Gujarat	0.00
6	Gandhar CCGT	648.00	Gujarat	216.16
7	Kathalguri CCGT (AGBPP)	291.00	Assam	456.45
8	Agartala GT	84.00	Tripura	0.00
9	Ratnagiri CCGT @	1480.00	Maharashtra	-----
	Sub Total (CS)	5459.00		1020.04
	STATE SECTOR			
1	I.P. CCGT	282.00	Delhi	138.65
2	Pragati CCGT	330.40	Delhi	283.63
3	Ramgarh CCGT	113.80	Rajasthan	0.00
4	Dholpur GT #	110.00	Rajasthan	-----
5	Utran CCGT	144.00	Gujarat	19.84
6	Hazira CCPP - (GSEG)	156.10	Gujarat	2.27
7	Dhuvaran CCPP (GSECL)	106.62	Gujarat	25.98
8	Dhuvaran CCPP (GSEL)	72.00	Gujarat	46.47
9	Uran CCGT	912.00	Maharashtra	3110.90
10	Vijeswaram CCGT	272.00	A. P.	662.51
11	Karaikal CCGT	32.50	Pondicherry	0.00
12	Narimanam GT	10.00	Tamil Nadu	Not in Operation
13	Kovilkalappal (Thirumakkottai) CCGT	107.00	Tamil Nadu	0.00
14	Valuthur CCGT	94.00	Tamil Nadu	0.00
15	Kuttalam CCGT	100.00	Tamil Nadu	0.00
16	Namrup CCGT	133.50	Assam	11.90
17	Lakwa GT	120.00	Assam	26.41

				Not in Operation
18	Mobile Gas T-G	21.00	Assam	
19	Baramura GT	37.50	Tripura	0.00
20	Rokhia GT	90.00	Tripura	0.00
	Sub Total (SS)	3244.42		4328.56
	PRIVATE SECTOR(Licencies)			
1	Vatwa CCGT (AEC)	100.00	Gujarat	241.35
2	Trombay CCGT	180.00	Maharashtra	111.64
	Sub Total (PS)	280.00		352.99
	PRIVATE UTILITIES (IPPs)			
1	GPEC Puguthan CCGT	655.00	Gujarat	0.00
2	GIPCL-Stage-II CCGT	160.00	Gujarat	66.06
3	Essar IMP CCGT	515.00	Gujarat	0.00
4	Godavari CCGT (Spectrum)	208.00	A. P.	186.22
5	Kondapalli CCGT	350.00	A. P.	981.60
6	Jegurupadu CCGT (GVK)	235.40	A. P.	432.93
7	Jegurupadu CCGT (GVK) Ext.	220.00	A. P.	0.00
8	Samlkot CCPP/Peddapuram	220.00	A. P.	642.00
9	Vemagiri CCPP&	370.00	A. P.	0.00
10	P. Nallur CCGT	330.50	Tamil Nadu	-----
11	KaruppurCCGT	119.80	Tamil Nadu	0.00
12	Valantharavai CCPP\$\$	52.80	Tamil Nadu	0.00
13	DLF Pvt. CCGT	24.50	Assam	52.22
	Sub Total (IPPs)	3461.00		2361.03
	Total	12444.42		8062.62

Data not available

- # 110 MW (GT-1) Commissioned on 29.03.2007
- @ Block II 740 MW GT Commissioned on 4/06 to 5/06
- & 137 MW (ST) Commissioned on 8.06.2006
- \$\$ 14.8 MW (ST) Commissioned on 15.04.2006

Annexure-9.5

Details of Specific Secondary Fuel Oil Consumption for the year 2006-07				
S.N.	Name of Station--No of Units with Installed Capacity (MW)	Sp. Sec. Fuel Oil Cons. (SFOC) (ml/kWh) on common base value GCV = 10000 kcal/litre	Actual GCV as given by Station (kcal/litre)	Remarks
	NORTHERN REGION.			
	DELHI			
1	I.P.STATION (Unit Nos. 2 to 5: 3*62.5+1*60)	10.43	10680	
2	RAJGHAT (2*67.50)	6.11	10398	
	HARYANA			
3	FARIDABAD EXTN. (3*60)	9.27	10000	
4	PANIPAT (4*110+2*210+2*250)	1.68	10056	
	PUNJAB			
5	GNDTP, BHATINDA (4*110)	1.49	10000	
6	GHTP, LEHRA MOHABAT (2*210)	0.33	10000	
7	ROPAR (6*210)	0.44	10000	
	RJASTHAN			
8	KOTA (2*110+3*210+1*195)	0.56	9852	
9	SURATGARH (5*250)	0.53	10000	
	UTTAR PRADESH			
10	H'GANJ B (2*50+4*60+1*110)	1.77	9450	
11	OBRA (Unit Nos. 1 to 13: 5*50+3*100+5*200)	11.85	10000	
12	PANKI, (Unit Nos. 3 & 4: 2*110)	3.64	9591	
13	PARICHHA (2*110)	11.88	9812	Based on 6 months data
	NORTHERN REGION	2.29	9987	
	WESTERN REGION			
	Chattisgarh			
14	KORBA EAST (4*50+2*120)	1.34	10000	
15	KORBA WEST (4*210)	2.55	10000	
	GUJARAT			
16	GANDHI NAGAR (2*120+2*210)	6.52	10439	
17	KUTCH LIG.(2*70+1*75)	3.36	10619	
18	SIKKA REP.(2*120)	2.97	10122	
19	SURAT LIGNITE, Private Sector (2*125)	1.07	9510	
20	TORRENT (2*30+2*110+ 1*120)	1.71	9762	
21	UKAI (2*120+2*200+1*210)	2.73	9868	
22	WANAKBORI (6*210)	0.76	10633	
	MADHYA PRADESH			
23	AMAR KANTAK EXT. (Unit Nos. 1 & 2: 2*120)	3.80	10691	

Details of Specific Secondary Fuel Oil Consumption for the year 2006-07				
S.N.	Name of Station--No of Units with Installed Capacity (MW)	Sp. Sec. Fuel Oil Cons. (SFOC) (ml/kWh) on common base value GCV = 10000 kcal/litre	Actual GCV as given by Station (kcal/litre)	Remarks
24	SATPURA (5*62.5+1*200+3*210)	2.77	9921	
25	BIRSINGHPUR (4*210)	1.17	10000	
	MAHARASTRA			
26	BHUSAWAL (1*62.5+2*210)	4.23	10470	
27	CHANDRAPUR (4*210+3*500)	0.89	9237	
28	DAHANU, Private Sector (2*250)	0.12	10500	
29	K' KHEDA - II (4*210)	0.65	9291	
30	KORADI (4*120+1*200+2*210)	2.84	10371	
31	NASIK (2*140+3*210)	2.54	10775	
32	PARAS (Unit 2: 1*62.5)	1.32	9407	
33	PARLI (2*30+3*210)	3.40	10207	
34	TROMBAY COAL BASED UNIT ONLY, Private Sector (Unit Nos: 1*500)	2.46	9146	
	WESTERN REGION	2.08	10015	
	SOUTHERN REGION			
	ANDHRA PRADESH			
35	K'GUDEM (4*60+4*110)	1.30	10400	
36	K'GUDEM (NEW), Stage-V (Unit 1 & 2: 2*250)	0.38	10693	
37	RAYAL SEEMA (2*210)	0.49	9633	
38	VIJAYWADA (6*210)	0.28	10000	
	KARNATAKA			
39	RAICHUR (7*210)	0.46	10264	
40	TORANGALLU IMP, Private Sector (2*130)	0.30	9500	
	TAMIL NADU			
41	ENNORE (2*60+3*110)	16.55	10470	
42	METTUR (4*210)	0.38	10049	
43	NEYVELI ST- I (6*50+3*100)	2.62	9100	
44	NEYVELI ST- II (7*210)	1.10	9776	
45	NEYVELI FST EXT (2*210)	0.25	10170	
46	NORTH CHENNAI (3*210)	0.79	9588	
47	TUTICORIN (5*210)	1.97	10710	
	SOUTHERN REGION	1.17	10019	
	EASTERN REGION			
	JHARKHAND			
48	BOKARO B , DVC (3*210)	3.45	9636	Based on 6 months data

Details of Specific Secondary Fuel Oil Consumption for the year 2006-07				
S.N.	Name of Station--No of Units with Installed Capacity (MW)	Sp. Sec. Fuel Oil Cons. (SFOC) (ml/kWh) on common base value GCV = 10000 kcal/litre	Actual GCV as given by Station (kcal/litre)	Remarks
49	CHANDRAPURA, DVC (3*140+3*120)	2.27	9395	Based on 8 months data
50	DURGAPUR (DVC) (1*140, 1*210)	2.98	9458	
51	JOJOBERA TPS, Private Sector (1*67.5+3*120)	0.53	9100	
	ORISSA			
52	I B VALLEY(2*210)	0.41	10600	
	WEST BENGAL			
53	KOLAGHAT (6*210)	1.26	9212	
54	BANDEL(4*82.5+1*210)	3.44	9242	
55	BUDGE BUDGE, CESC (2*250)	0.12	9545	
56	D.P.L. (2*30+1*70+2*75+1*110)	6.41	9486	
57	SANTALDIH (4*120)	4.03	8833	
	EASTERN REGION	1.78	9497	
	All India**	1.89	10027	

** Average Specific secondary oil consumption, Based on 57 stations data received

- Assumptions:
1. All Secondary Fuel Oil consumptions are based on GCV=10000 kcal/litre
 2. If GCV furnished was in kcal/kg that has been converted into kcal/litre
 3. Sp. Gravity as assumed are for LDO=0.835, FO= 0.9, HSD=0.85 and LSHS=0.95