

Indian Electricity Sector

Capacity Addition scenario 11th Plan

Country is facing power shortage in terms of energy and peak demand, the energy shortage being 8% while peaking capacity shortage is about 12%. Government of India has plan to wipe out the shortage by the end of 2011-12 i.e. by the end of 11th Plan and also to provide 5% spinning reserve and ensure uninterrupted quality power at affordable cost. The National Electricity policy has targeted for providing power to all by 2011-12. Accordingly, 68500 MW need-based capacity addition plan has been worked out to be accomplished by March, 2012.

Thermal generation constitutes more than 80% of total energy generation. The coal based power plant is the backbone of the Indian Power Sector and will continue to be a major source of electricity generation in the country. During the 11th Plan, capacity addition of about 40200 MW coal based plant is planned. To improve the thermal efficiency of coal based plants, super critical technology has been introduced and 6 numbers of 660 MW units are under advance stage of construction. In addition 36 numbers of 800 MW super critical units have been planned to be commissioned during 11th & 12th Five Year Plans of which 8 numbers of 800 MW units are planned to be commissioned during 11th Plan. The introduction of super critical technology in thermal power station would address the problem of environmental degradation and green house gases. In addition the efficient technology would help in conserving limited fossil fuel resources apart from providing reliability in power supply.

Presently power sector is dominated by public sector having about 89% share in the total installed capacity. Government of India through various measures encourages private sector participation and has accordingly planned to develop five ultra mega power projects of 4000 MW capacity each and offer these for construction in private sector. More than 20% share from private enterprises is expected to be constructed during 11th Plan.

The salient features of the 11th Plan are given below:

Sector wise / Prime mover wise plan of capacity addition

	Hydro	Thermal	Nuclear	Total
State Sector	3957	15538		19495
Central Sector	11080	19880	3160	34120
Private Sector	3744	11145		14889
Total	18781	46563	3160	68504

Price Rs. 700.00



अखिल भारतीय विद्युत सांख्यिकी All India Electricity Statistics

सामान्य पुनर्विलोकन 2006
(2004-05 के आंकड़े समाविष्ट)
General Review 2006
(Contain data for the year 2004-05)



भारत
INDIA

भारत सरकार
विद्युत मंत्रालय
केन्द्रीय विद्युत प्राधिकरण
नई दिल्ली
मार्च 2006

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MINISTRY OF POWER
CENTRAL ELECTRICITY AUTHORITY
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All India Electricity Statistics 2006

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सत्यमेव जयते

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केन्द्रीय विद्युत प्राधिकरण
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अध्यक्ष, केन्द्रीय विद्युत प्राधिकरण
तथा पदेन सचिव, भारत सरकार



सत्यमेव जयते

प्राक्कथन

केन्द्रीय विद्युत प्राधिकरण विद्युत अधिनियम, 2003 के प्रावधानों के अनुरूप विद्युत के उत्पादन, संचारण, विपणन, वितरण तथा समुपयोजन से संबंधित सांख्यिकी को समय-समय पर सर्वविदित करता है। हसामान्य पुनर्विलोकनह प्रकाशन में देश में विभिन्न क्षेत्रों द्वारा विद्युत का उत्पादन तथा उपभोग से संबंधित अखिल भारत सांख्यिकी निहित हैं। वर्तमान प्रकाशन में विद्युत विपणन के आंकड़े दर्शाते हुए विद्युत विपणन पर एक नया अध्याय जोड़ा गया है।

हसामान्य पुनर्विलोकनह के लिए आंकड़े भारतीय विद्युत क्षेत्र की उपयोगी तथा गैर-उपयोगी संस्थाओं से और विद्युत उपभोक्ताओं की विशिष्ट श्रेणियों से एकत्रित किया गया है। अपेक्षित सूचना समय पर प्रस्तुत करने के लिए जिन प्रतिष्ठानों/संगठनों ने सहयोग दिया है, उनके हम आभारी हैं। समय पर प्रस्तुत न कर सकने वाली कुछ यूटिलिटियों के डाटा को इस पुस्तक में सम्मिलित नहीं किया जा सका है। विद्युत क्षेत्र में सभी संगठन जिन्होंने सूचना प्रस्तुत की है तथा विशेष रूप से वे संगठन जो समय पर सूचना प्रस्तुत नहीं कर सके हैं, से अनुरोध है कि विनिर्धारित अवधि के भीतर पूर्ण सूचना उपलब्ध करवाकर इस प्रकाशन के अगले अंक को समय पर प्रकाशित करने के हमारे प्रयास को सबल बनाएं।

मुझे उम्मीद है कि 'सामान्य पुनर्विलोकन 2004-05' भारत में विद्युत क्षेत्र के विकास में जुटे सभी जनों की प्रत्याशा को पूर्ण करेगा।

दिनांक 08 मार्च, 2006

(राकेश नाथ)



सत्यमेव जयते

RAKESH NATH
Chairperson, CEA

FOREWORD

Central Electricity Authority makes public from time to time, the Statistics concerning the generation, transmission, trading, distribution & utilization of electricity as per the provisions of the Electricity Act, 2003. The publication "General Review" contains All India Statistics pertaining to generation and consumption of electricity by different sectors in the country. A new chapter on Power Trading has been added in the present publication showing data on energy trading.

The data for "General Review" are collected from Utilities & Non-utilities of the Indian Electricity Sector and specific categories of electricity consumers. The cooperation of all utilities/organizations who have timely furnished the requisite information is gratefully acknowledged. All the organizations in the power sector who furnished the information and specially those who could not furnish the information on time are requested to strengthen our endeavour in bringing out next issue of this publication in time by providing complete information within the stipulated period.

I hope that General Review 2004-05 will fulfill the expectations of all stakeholders who are involved in the development of electricity sector in India.

Dated the 8th March, 2006

(RAKESH NATH)
Chairperson
Central Electricity Authority &
Ex-Officio Secretary To Govt. of India



वी.एस.वर्मा,
सदस्य (योजना)
केन्द्रीय विद्युत प्राधिकरण एवं
पदेन अपर सचिव, भारत सरकार



सत्यमेव जयते

भूमिका

भारतीय विद्युत क्षेत्र ने गत पाँच दशकों में विद्युत के उत्पादन, संचारण, वितरण तथा समुपयोजन के क्षेत्र में असाधारण प्रगति की है। हालांकि, विद्युत की माँग आपूर्ति से अधिक ही रही है। इस प्रकाशन के वर्तमान संस्करण में 'विद्युत विपणन' पर एक नया अध्याय शामिल किया गया है जो विद्युत विपणन कंपनियों के माध्यम से विद्युत की खरीद पर घाटे वाले राज्यों की आवश्यकता को पूरा करने के लिए उपयोगी होगा।

विद्युत अधिनियम, 2003 के अधीन अपने उत्तरदायित्व को पूरा करने के लिए के.वि.प्रा. द्वारा किया जा रहा वार्षिक सांख्यिकी का एकत्रण, जाँच, समेकन, तथा प्रकाशन एक महत्वपूर्ण कार्य है। इस रिपोर्ट में 165 उपयोगी स्रोतों तथा एक में.वा. तथा अधिक की माँग वाले 4500 एच.टी. उद्योगों से संबंधित आंकड़े शामिल हैं।

आवश्यक सूचना को प्रस्तुत करने के लिए गैर-उपयोगी की प्रतिक्रियाओं को बढ़ावा देने की आवश्यकता है। जहाँ वर्ष 2004-05 के लिए आंकड़े प्राप्त नहीं हुए हैं उनका अनुमान लगाया गया है।

वर्ष 2004-05 का समान्य पुनर्विलोकन 30 नवम्बर, 2005 तक प्राप्त आंकड़ों/सूचनाओं के आधार पर समेकित किया गया है। मुझे विश्वास है कि इस प्रकाशन में निहित सूचना भारत के विद्युत क्षेत्र में संलग्न सभी के लिए उनके क्रियाकलापों की भावी योजनाओं के निर्माण में अत्यंत महत्वपूर्ण सिद्ध होगी। कृपया इस प्रकाशन में प्रस्तुत सूचना में सुधार के लिए टिप्पणियाँ/प्रेक्षण/सुझाव सचिव, केन्द्रीय विद्युत प्राधिकरण को प्रेषित किए जाएँ ताकि वर्ष 2005-06 के आगामी संस्करण में इन्हें शामिल किया जा सके।

(वी. एस. वर्मा)

दिनांक 08 मार्च, 2006



सत्यमेव जयते

V.S. VERMA
Member Planning, CEA

PREFACE

The Indian Electricity Sector has made remarkable progress during the last five decades in the field of generation, transmission, distribution & utilization of electricity. However, the demand of electricity has always been overstepping the supply. The present issue of this publication has incorporated a new Chapter on Power Trading which will be useful for meeting the requirement of deficit States on competitive purchase of power through Power Trading Companies.

Collection, scrutiny, compilation and publication of annual electricity statistics has been an important task being accomplished by CEA in fulfillment of its obligation under the Electricity Act, 2003. Data pertaining to 165 utility sources and 4500 HT Industries having demand of 1 MW & above have been included.

The response from the Non-utilities in furnishing of the requisite information rather needs boosting up. Where ever the data for 2004-05 has not been received, the same was estimated.

The General Review for 2004-05 has been compiled based on the data/information received till 30th November, 2005. I am sure that the information contained in the publication shall be of immense importance to all those who are involved in Power Sector of India for future planning of their activities. The comments/observations/suggestions for improvement of the information presented may kindly be forwarded to the Secretary, Central Electricity Authority, so that these could be taken care of in our next issue of 2005-06.

(V.S. VERMA)
Member Planning
Central Electricity Authority & Ex-officio
Additional Secretary
To Govt of India

Dated the 8th March, 2006

REVIEW

OF

GROWTH OF INDIAN ELECTRICITY

SECTOR



CHAPTER-0

REVIEW OF GROWTH OF INDIAN ELECTRICITY SECTOR

Power development in India commenced at the end of 19th century with the Commissioning of first unit of 130 k W generators at Sidrapong in Darjeeling during 1897, followed by first steam driven power plant rated 1000 kW two years later at Calcutta in 1899 by CESC. In the pre- independence era, the power supply was mainly in the hands of Private Sector that too restricted to the urban areas. After independence, the Government of India felt the need for broadening electricity supply industry with a view to rationalize its growth all over the country.

With the formation of State Electricity Boards in the various parts of the country in the early 50s, a significant step was taken in bringing out systematic growth of power supply industry all over the country. A number of multipurpose hydro projects and installation of thermal and nuclear stations were taken up and power generation activity started increasing significantly. The Central participation in power generation Programme started with the creation of two generating corporations viz. National Thermal Power Corporation and National Hydro Power Corporation during the year 1975, which gave a fillip to the growth of power sector in the country. The setting up of Nuclear Power Corporation and Power Grid Corporation of India Ltd. gave further boost to the power development programme. The Government has historically played lead role in providing for energy needs of the nation. In the recent times there has been growing realization of necessity to involve private enterprises in the development of industry. The Government owned Power Trading Corporation of India Ltd. was established in April, 1999 out of the need of an institution which would provide credit risk mitigation to power project developers. Major growth analyses of the power sector in the country from 1950 up to 31st March, 2005 is reviewed below:

1. INSTALLED ELECTRICITY GENERATION CAPACITY

The installed capacity which was only 1713 MW as on 31.12.1950 rose to 105046 MW at the end of 9th Plan (31.03.2002), constituting 74429 MW thermal, 26269 MW hydel, 2720 MW nuclear and 1628 MW wind. The All India generation capacity has increased to 118426 MW consisting of 30942 MW hydro, 84714 MW thermal including Renewable Energy Sources & 2770 MW Nuclear as on 31.03.2005 taking into account the addition of new capacity and upration of existing capacity during the first three years of 10th Plan.

The total capacity of captive power plants having more than or equal to 1 MW capacity, at the end of the fiscal year 2004-05 has grown to 19103 MW out of which the contribution of Hydro was 59 MW, Steam 8903 MW, Diesel 7127 MW, Gas 2867 MW, and wind 147 MW.

2. GROSS ELECTRICITY GENERATION

The All India gross electricity generation excluding that of the captive generating plants which was 5107 GWh during the year ending 31.12.1950 grew to 594456 GWh during the



year 2004- 05 (3rd year of 10th Plan) constituting 84610 GWh Hydel, 492835 GWh Thermal including Renewable Energy Sources, and 17011 GWh Nuclear. Electricity generated from the captive electricity generation plants during the fiscal year 2004-05 was 71417 GWh, constituting 113 GWh from Hydro, 44017 GWh from Steam, 12040 GWh from Diesel, 15052 GWh from Gas turbine and 195 GWh from Wind.

3. ELECTRICITY CONSUMPTION

The consumption of electricity of 4157 GWh as on 31.12.1950 rose to 322459 GWh during the year 2001-02 the last year of the 9th Plan. It further increased to 386134 GWh during the year 2004-05 i.e. the 3rd year of 10th Plan. There has been substantial growth in the consumption of electricity during every plan. The industrial, domestic and agricultural categories constitute the major consumers of electricity, constituting about 35.63%, 24.77% and 22.93% respectively of the total consumption.

4. RURAL ELECTRIFICATION

The total number of villages electrified as on 31.3.1951 was 3061. The total number of villages electrified as on 31.3.2005 rose to 439800 representing 74.10 % of the total number of villages so far. As per the information received from the States/Union Territories, 10 numbers of States/ Union Territories have electrified 100% of their villages as per 2001 census.

5. TRANSMISSION & DISTRIBUTION LINES

The length of transmission and distribution lines which was 29271 Ckt. Kms as on 31.12.1950 raised to 6570823 Ckt. Kms as on 31st March 2005 i.e. the end of 3rd year of 10th plan.

6. PER CAPITA ELECTRICITY CONSUMPTION

The per capita electricity consumption which was 18.17 kWh during 1950 increased to 559 kWh during the year 2001-02, the last year of 9th plan. This has further increased to 613 kWh during the year 2004-05 i.e. 3rd year of 10th plan.

Key indices of plan-wise growth of the Indian Electricity Sector are given in the tables contained in the next part of this Chapter.



Table No. 0.0
OVERVIEW CAPACITY, GENERATION AND PERCAPITA CONSUMPTION
DURING 2005-06 AS ON 31.03.06

A Installed Capacity as on 31.03.06 [§]								
(i) Utilities								
Sector	Hvdro	Thermal			Total thermal	Nuclear	RES*	Grand Total
		Steam	Gas	Diesel				
1	2	3	4	5	6 (3+4+5)	7	8	9 (2+6+8)
State Sector	25247.61	38305.00	3499.72	604.61	42409.33	0.00	67.90	67724.84
Central Sector	6172.00	25972.50	4419.00	0.00 30	391.50	3360.00	0.00	39923.50
Private Sector	906.15	4241.38	4771.20	597.14	9609.72	0.00	6122.96	16638.83
All India Total	32325.76	68518.88	12689.92	1201.75	82410.55	3360.00	6190.86	124287.17
(ii) Non-Utilities'-								19484.62
(iii) Total All India InstaliedCapacitv (Utilities + Non-Utilities)								143771.79
B Generation for 2005-06 [§]								
(i) Utilities								
Sector	Hydro	Thermal	Nuclear	Sub - Total	RES**	Grand Total		
1	2	3	4	5 (2+3+4)	6	7 (5+6)		
State Sector	63857.45	240799.92	0.00	304657.37	184.28	304841.65		
Central Sector	33967.75	208282.04	17312.85	259562.64	0.00	259562.64		
Private Sector	2057.04	50762.27	0.00	52819.31	5996.56	109578.14		
All India Total	99882.24	499844.23	17312.85	617039.32	6180.84	623220.16		
(ii) Non-Utilities						74130.54		
(iii) All India Total Generation (Utilities + Non-Utilities)						697350.70		
(iv) Net Import from outside the Country						1764.12		
(v) Total Power available in the Country						699114.82		
C Percapita Consumption for 2005-06 (KWh)						631.50		
D Growth								
	2003-04		2004-05		2005-06 [§]			
	value	% growth	value	% growth	value	% growth		
1. Installed Capacity (MW)	112683.50	4.46	118425.70	5.10	124287.17	4.95		
2. Generation (GWh)	565101.69	6.08	594456.20	5.19	623220.16	4.84		
3. Percapita Consumption (KWh)	592.00	4.46	612.50	3.46	631.50	3.10		

Note: (i) * Installed Capacity of RES is 7239.81 MW including 1826.03 MW SHP; 1048.95 MW SHP has been considered in Hydro Projects.

(ii) RES=Renewable Energy Sources

(iii) ** Figures for RES generation are estimated based on 4year's CAGR

(iv) # Figures for Non-Utilities are estimated based on 4year's CAGR

(v) % Growth is calculated over previous year (vi) \$ Provisional (vi) [§] Provisional



Growth of Per Capita Consumption (KWh) 1995-96 to 2004-05

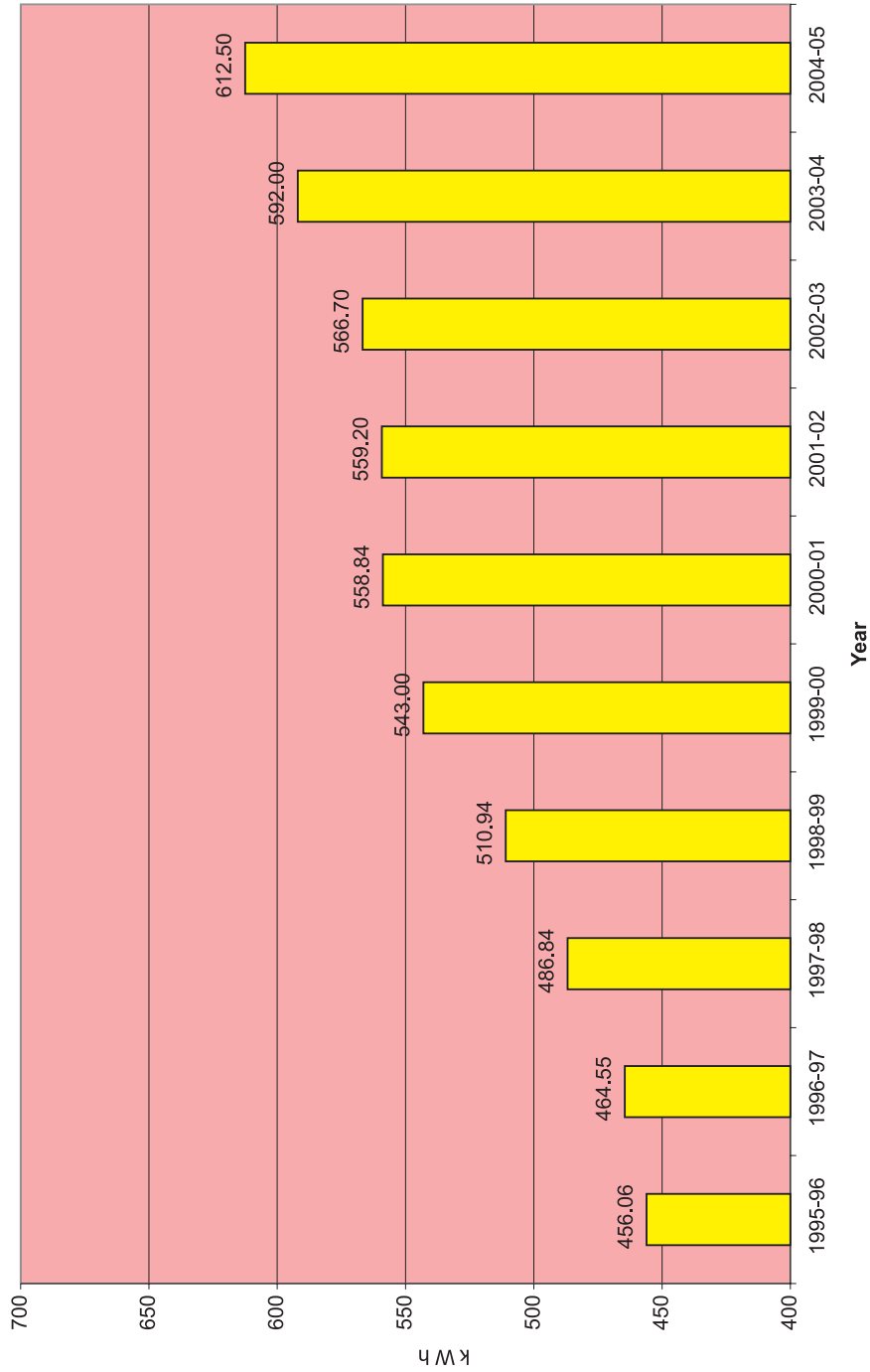




Table No. 0.1
PLANWISE GROWTH OF ELECTRICITY SECTOR

S No.	As on	Installed Capacity(MW) Utilities	Installed Capacity(MW) Non-Utilities	No.of villages electrified	Length of T & D Lines (CKt. Kms.)	Per capita consumption (kWh)
1	31.12.50	1713	588	3061	29271	18.17
2	31.03.56 (End of the 1st Plan)	2886	760	7294	85427	30.88
3	31.03.61 (End of the 2nd Plan)	4653	1001	21754	157887	45.94
4	31.03.66 (End of the 3rd Plan)	9027	1146	45148	541704	73.90
5	31.03.69 (End of the 3 Annual Plan)	12957	1339	73739	886301	97.90
6	31.03.74 (End of the 4th Plan)	16664	1793	156729	1546097	126.24
7	31.03.79 (End of the 5th Plan)	26680	2618	232770	2145919	171.59
8	31.03.80 (End of the Annual Plan)	28448	2860	249799	2351609	172.41
9	31.03.85 (End of the 6th Plan)	42585	5120	370332	3211956	228.70
10	31.03.90 (End of the 7th Plan)	63636	8116	470838	4407501	329.21
11	31.03.92 (End of the 2 Annual Plans)	69065	9301	487170	4574200	347.51
12	31.03.97 (End of the 8th Plan)	85795	12079	498836	5140993	464.55
13	31.03.2002 (End of the 9th Plan)	105046	17145	512153	6030148	559.2
14	31.03.2003	107877	18362	492325	6553261	566.7
15	31.03.2004	112684	18740	495031	6344858	592.0
16	31.03.2005	118426	19103	439800*	6570819	612.5

*As per new definition of village electrification



Table No. 0.2
GROWTH OF INSTALLED ELECTRICITY GENERATION
CAPACITY - PRIMEMOVERWISE (Utilities Only)

<i>(in MW)</i>					
S. No.	As on	HYDRO	THERMAL (including Steam, Gas, Diesel & R.E.S.)	NUCLEAR	TOTAL
1	31.12.50	560	1153	0	1713
2	31.03.56 (End of the 1st Plan)	1061	1825	0	2886
3	31.03.61 (End of the 2nd Plan)	1917	2736	0	4653
4	31.03.66 (End of the 3rd Plan)	4124	4903	0	9027
5	31.03.69 (End of the 3 Annual Plan)	5907	7050	0	12957
6	31.03.74 (End of the 4th Plan)	6966	9058	640	16664
7	31.03.79 (End of the 5th Plan)	10833	15207	640	26680
8	on 31.03.80 (End of the Annual Plan)	11384	16424	640	28448
9	31.03.85 (End of the 6th Plan)	14460	27030	1095	42585
10	31.03.90 (End of the 7th Plan)	18307	43764	1565	63636
11	31.03.92 (End of the 2 Annual Plans)	19194	48086	1785	69065
12	31.03.97 (End of the 8th Plan)	21658	61912	2225	85795
13	31.03.2002 (End of the 9th Plan)	26269	76057	2720	105046
14	31.03.2003	26767	78390	2720	107877
15	31.03.2004	29507	80457	2720	112684
16	31.03.2005	30942	84714	2770	118426

R.E.S : Renewable Energy Sources. Includes Wind, Biomass, Biomass Gassifier & Urban & Industrial Waste.



Table No. 0.3
GROWTH OF GROSS ELECTRICITY GENERATION-
PRIMEMOVERWISE (Utilities Only)

S. No.	As on	<i>GWh (MU)</i>			
		HYDRO	THERMAL (including Steam, Gas, Diesel & R.E.S.)	NUCLEAR	TOTAL
1	31.12.50	2519	2587	0	5106
2	31.03.56 (End of the 1st Plan)	4295	5367	0	9662
3	31.03.61 (End of the 2nd Plan)	7837	9100	0	16937
4	31.03.66 (End of the 3rd Plan)	15225	17765	0	32990
5	31.03.69 (End of the 3 Annual Plan)	20723	26711	0	47434
6	31.03.74 (End of the 4th Plan)	28972	35321	2396	66689
7	31.03.79 (End of the 5th Plan)	47159	52594	2770	102523
8	on 31.03.80 (End of the Annual Plan)	45478	56273	2876	104627
9	31.03.85 (End of the 6th Plan)	53948	98836	4075	156859
10	31.03.90 (End of the 7th Plan)	62116	178697	4625	245438
11	31.03.92 (End of the 2 Annual Plans)	72757	208747	5525	287029
12	31.03.97 (End of the 8th Plan)	68901	317918	9071	395889
13	31.03.2002 (End of the 9th Plan)	73579	424385	19475	517439
14	31.03.2003	64014	449289	19390	532693
15	31.03.2004	75242	472080	17780	565102
16	31.03.2005	84610	492835	17011	594456



Table No. 0.4
GROWTH OF ELECTRICITY CONSUMPTION PATTERN
(Utilities Only)

<i>GWh (MU)</i>								
S. No.	As on	Dome- stic	Commer- cial	Indus- trial	Traction	Agri- culture	Misc.	Total
1	2	3	4	5	6	7	8	9
1	31.12.50	525	309	2604	308	162	249	4157
2	31.03.56 (End of the 1st Plan)	934	546	5323	405	316	435	7959
3	31.03.61 (End of the 2nd Plan)	1492	848	9584	454	833	630	13841
4	31.03.66 (End of the 3rd Plan)	2355	1650	18876	1057	1892	905	26735
5	31.03.69 (End of the 3 Annual Plan)	3184	2126	25891	1247	3465	1439	37352
6	31.03.74 (End of the 4th Plan)	4645	2988	32481	1531	6310	2292	50247
7	31.03.79 (End of the 5th Plan)	7576	4330	47728	2186	12028	3445	77293
8	on 31.03.80 (End of the Annual Plan)	8402	4657	45956	2301	13452	3316	78084
9	31.03.85 (End of the 6th Plan)	15506	6937	63019	2880	20961	4765	114068
10	31.03.90 (End of the 7th Plan)	29577	9548	80694	4070	44056	7474	175419
11	31.03.92 (End of the 2 Annual Plans)	35854	12032	87288	4520	58557	9394	207645
12	31.03.97 (End of the 8th Plan)	55267	17519	104165	6594	84019	12642	280206
13	31.03.2002 (End of the 9th Plan)	79694	24139	107296	8106	81673	21551	322459
14	31.03.2003	83355	25437	114959	8797	84486	22564	339598
15	31.03.2004	89736	28201	124573	9210	87089	22128	360937
16	31.03.2005	95659	31381	137589	9495	88555	23455	386134
17	Percentage of Total (As on 31.3.2005)	25	8	36	2	23	6	100



Table No. 0.5
GROWTH OF INSTALLED CAPACITY OF CAPTIVE
ELECTRICITY GENERATION UNITS-MODEWISE

<i>(MW)</i>									
S. No.	As on	HYDRO	STEAM	DIESEL	GAS	Wind	SUB - TOTAL	RAIL-WAYS	Total
1	2	3	4	5	6	7	8	9	10
1	31.12.50*						587.85		587.85
2	31.03.56* (End of the 1st Plan)						759.65		759.65
3	31.03.61* (End of the 2nd Plan)						1001.37		1001.37
4	31.03.66* (End of the 3rd Plan)						1082.36		1082.36
5	31.03.69 * (End of the 3 Annual Plan)						1277.47		1277.47
6	31.03.74 * (End of the 4th Plan)						1732.70		1732.70
7	31.03.79 (End of the 5 th Plan)	2.61	1949.23	559.17	44.27	0.00	2555.28	62.31	2617.59
8	31.03.80 (End of the Annual Plan)	2.61	2021.61	720.58	54.27	0.00	2799.07	60.44	2859.51
9	31.03.85 (End of the 6th Plan)	2.91	2803.18	2077.06	155.31	0.00	5038.46	81.80	5120.26
10	31.03.90 (End of the 7th Plan)	3.60	4822.85	2754.48	425.51	0.00	8006.44	109.29	8115.73
11	31.03.92 (End of the 2 Annual Plans)	4.30	5377.10	3291.06	495.72	0.00	9168.18	133.23	9301.41
12	31.03.97 (End of the 8 th Plan)	3.50	6151.69	4529.91	1166.38	64.83	11916.31	162.62	12078.93
13	31.03.2002 (End of the 9th Plan)	51.10	8354.03	6521.95	2125.91	92.21	17145.20	NIL	17145.20
14	31.03.2003	51.10	9094.16	6736.10	2385.15	95.11	18361.62	NIL	18361.62
15	31.03.2004	61.97	8585.28	7195.47	2745.74	151.85	18740.31	NIL	18740.31
16	31.03.2005	58.93	8903.16	7126.86	2866.40	147.22	19102.57	NIL	19102.57

*BREAK UP NOT AVAILABLE



Table No. 0.6
GROWTH OF ELECTRICAL ENERGY GENERATED BY CAPTIVE ELECTRICITY
GENERATION UNITS-MODEWISE

<i>GWh (MU)</i>									
S. No.	As on	HYDRO	STEAM	DIESEL	GAS	Wind	SUB - TOTAL	RAIL-WAYS	Total
1	2	3	4	5	6	7	8	9	10
1	1950-51*	-	-	-	-	-	1467.81		1467.81
2	1955-56*	-	-	-	-	-	2184.82		2184.82
3	1960-61*	-	-	-	-	-	3186.10		3186.10
4	1965-66*	-	-	-	-	-	3733.19		3733.19
5	1968-69*	-	-	-	-	-	4136.06		4136.06
6	1973-74*	-	-	-	-	-	6067.47		6067.47
7	1978-79	13.22	7211.30	299.13	48.97	0.00	7572.62	34.47	7607.09
8	1979-80	15.06	7225.60	825.71	90.67	0.00	8157.04	35.67	8192.71
9	1984-85	18.29	9966.55	2001.18	317.03	0.00	12303.05	42.80	12345.85
10	1989-90	15.83	19110.46	2757.27	1313.29	0.00	23196.85	29.07	23225.92
11	1991-92	17.57	23409.35	3247.81	1905.24	0.00	28579.97	22.52	28602.49
12	1996-97	28.84	29127.94	6573.38	5039.22	45.63	40815.01	25.07	40840.08
13	2000-01	99.85	40256.24	11397.99	7782.34	101.54	59637.96	NIL	59637.96
14	2001-02	116.59	41853.85	10719.66	8835.19	155.53	61680.82	NIL	61680.82
15	2002-03	90.32	42229.66	11155.33	10198.16	1176.43	63849.90	NIL	63849.90
16	2003-04	97.49	39610.29	13403.31	14874.38	187.65	68173.12	NIL	68173.12
17	2004-05	112.77	44016.99	12039.86	15052.05	194.95	71416.62	NIL	71416.62

Note: * BREAK UP NOT AVAILABLE



Table No. 0.7
GROWTH OF TOTAL ELECTRICAL ENERGY CONSUMPTION BY ULTIMATE CONSUMERS STATEWISE (UTILITIES ONLY)

State/U.Ts.	<i>GWh (MU)</i>					
	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
Haryana	9597.74	10051.01	10534.76	11721.70	12915.72	13807.14
Himachal Pradesh	2188.05	2213.87	2351.86	2529.03	2736.92	2954.16
Jammu & Kashmir	2652.68	2867.45	2992.03	3325.20	3534.20	3877.00
Punjab	21194.29	19440.91	20008.88	21113.41	22125.30	22526.11
Rajasthan	16338.85	16793.65	13586.66	14569.32	14691.24	16682.55
Uttar Pradesh	23469.39	25743.05	25230.22	25184.36	26659.62	27939.25
Uttaranchal	(A)	(A)	2182.65	2464.00	2662.45	3163.15
Chandigarh	722.62	721.00	747.81	804.49	816.41	918.29
Delhi	8879.20	9539.20	9798.50	10706.35	11903.26	12773.39
Sub-Total (NR)	85042.82	87370.14	87433.37	92417.86	98045.12	104641.04
Gujarat	33048.90	33621.47	33769.44	34427.76	37971.72	36983.39
Madhya Pradesh	23297.68	18479.91	14509.30	15175.99	15907.83	17201.89
Chhattisgarh	(B)	(B)	5300.50	6334.11	5420.83	8050.58
Maharashtra	48900.01	47188.18	46330.71	49944.33	51823.90	55457.02
Goa	1000.31	1077.11	1245.35	1376.74	1376.66	1800.40
Daman & Diu	549.83	635.60	739.66	821.22	917.35	1001.81
D. & N. Haveli	652.35	726.00	800.00	898.50	1546.52	1768.21
Sub-Total (WR)	107449.08	101728.27	102694.96	108978.65	114964.81	122263.30
Andhra Pradesh	26220.97	27105.10	31481.59	31345.30	34165.97	38677.24
Karnataka	16663.40	18550.18	19840.02	21698.23	23143.17	24781.59
Kerala	9730.33	10254.16	8622.39	8783.12	9093.10	9347.88
Tamil Nadu	31056.15	34265.11	35922.93	36961.93	39240.21	41285.97
Pondicherry	1239.70	1402.70	1562.87	1547.21	1794.47	1819.09
Lakshadweep	17.12	17.38	17.43	18.23	18.96	19.98
Sub-Total (SR)	84927.67	91594.63	97447.23	100354.02	107455.88	115931.75
Bihar	11423.38	11459.63	2904.43	3612.85	3730.34	3951.97
Jharkhand	(C)	(C)	6778.14	6920.09	7774.11	8380.48
Orissa	5679.00	6080.00	5773.16	6800.95	7157.48	7814.53
West Bengal	15072.25	14961.75	16003.37	16763.65	17815.87	19087.13
A. & N. Islands	83.55	89.11	91.15	108.24	113.21	109.96
Sikkim	105.81	103.15	123.32	73.27	182.24	226.70
Sub-Total (ER)	32363.99	32693.64	31673.57	34279.05	36773.25	39570.77
Assam	1808.98	1911.19	1817.98	1960.81	1920.38	1837.98
Manipur	173.05	176.94	168.72	178.55	175.38	177.59
Meghalaya	386.44	417.19	550.72	712.98	797.02	855.87
Nagaland	138.20	165.46	117.24	126.52	136.24	183.18
Tripura	356.13	303.00	348.00	362.97	414.26	380.01
Arunachal Pradesh	80.95	102.35	75.16	79.21	125.00	166.50
Mizoram	113.77	136.80	132.38	147.65	129.90	125.67
Sub-Total (NER)	3057.52	3212.93	3210.20	3568.69	3698.18	3726.80
Total (All India)	312841.08	316599.61	322459.33	339598.27	360937.24	386133.66

Note:- A= Included under Uttar Pradesh.
B= Included under Madhya Pradesh.
C= Included under Bihar.

CHAPTER -1

**ORGANISATIONAL STRUCTURE
OF ELECTRICITY SUPPLY
INDUSTRY IN INDIA**



CHAPTER-1

ORGANISATIONAL STRUCTURE OF ELECTRICITY SUPPLY INDUSTRY IN INDIA

REVIEW

As on 31st March, 2005, there were 13 (thirteen) State Electricity Boards existing in the country. There are 71 (Seventy one) companies, Power Corporations, Management Board under Central, State or Joint partnership existing in the country which are engaged in generation, transmission and distribution apart from 13 (thirteen) Electricity Department in the States and Union Territories. There are 13 (Thirteen) Power Trading Companies existing in the country as on 31.03.2005. There are 65 (sixty five) numbers of private licensees which includes 18 Electric Supply Co-operative Societies. There are 3 (three) Municipal licensees existing at the end of the year 2004-05.

During the year 2004-05 the distribution system in Uttar Pradesh was further unbundled and four distribution undertakings namely Purvanchal, Madhyanchal, Paschimanchal & Dakshinanchal Vidyut Vitran Nigam Ltd were formed. A new Undertaking as Power Transmission Corporation of Uttaranchal has been formed in the State of Uttaranchal. Also formation of a new generating undertaking viz. GMD Corporation in Gujarat was reported. A new generating private licensee has also been added in the State of Tamil Nadu during the year 2004-05.

The various tables under this Chapter give a brief account of various utilities in the public as well as in the private sector responsible for electricity generation, transmission, distribution and trading in the country.



TABLE NO.1.1
“STATE ELECTRICITY BOARDS” EXISTING IN
THE COUNTRY AS ON
31.03.2005

Sl. No.	Name of the State	Name of the State Electricity Board	Date of Establishment
NORTHERN REGION			
1	Himachal Pradesh	Himachal Pradesh S.E.B., Shimla	31.08.1971
2	Punjab	Punjab S.E.B., Patiala	01.02.1959
WESTERN REGION			
3	Gujarat	Gujarat Elec. Board, Vadodara	01.05.1960
4	Madhya Pradesh	Madhya Pradesh S.E.B., Jabalpur	01.04.1957
5	Chhattisgarh	Chhattisgarh S.E.B., Raipur	15.11.2000
6	Maharashtra	Maharashtra S.E.B., Mumbai	20.06.1960
SOUTHERN REGION			
7	Kerala	Kerala S.E.B., Thiruvananthapuram	31.03.1957
8	Tamil Nadu	Tamil Nadu Elec. Board, Chennai	01.07.1957
EASTERN REGION			
9	Bihar	Bihar State Elec. Board, Patna	01.04.1958
10	Jharkhand	Jharkhand S.E.B., Ranchi	15.11.2000
11	West Bengal	West Bengal State Elec. Board, Kolkata	01.05.1956
NORTH-EASTERN REGION			
12	Assam	Assam S.E.B., Guwahati	01.06.1958
13	Meghalaya	Meghalaya S.E.B., Shillong	21.01.1975

S.E.B. = State Electricity Board



Table No. 1.2
COMPANIES, POWER CORPORATIONS, MANAGEMENT BOARDS UNDER
CENTRAL, STATE OR JOINT PARTNERSHIP EXISTING IN THE COUNTRY
AS ON 31.3.2005 FOR ELECTRICITY GENERATION/TRANSMISSION/
DISTRIBUTION

Sl.No	Name	Head Quarter	Ownership by Govt.
(A) GENERATION/TRANSMISSION/DISTRIBUTION UNDERTAKINGS			
1	Andhra Pradesh Power Generation Corpn. Ltd.	Hyderabad	A. P.
2	A.P. Gas Power Corporation Ltd.	Hyderabad	J.V. of APSEB & Pvt. Inds.*
3	Ajmer Vidyut Vitran Nigam Ltd.	Ajmer	Rajasthan
4	Bhakra Beas Management Board	Chandigarh	Punjab, Haryana & Rajasthan
5	Bihar-State Hydro Electric Power Corporation Ltd.	Patna	Bihar
6	Bangalore Electric Supply Co.Ltd.	Bangalore	Karnataka
7	Central Power Distribution Co. of A.P.Ltd.	Hyderabad	A.P.
8	Dakshiananchal Vidyut Vitran Nigam Ltd.	Agra	Uttar Pradesh
9	Damodar Valley Corporation.	Kolkata	Central
10	Durgapur Projects Ltd.	Durgapur	West Bengal
11	Dakshin Haryana Bijli Vitran Nigam Ltd.	Hisar	Haryana
12	Delhi Transco Ltd.	Delhi	Delhi
13	Eastern Power Distribution Co. of A.P. Ltd.,	Hyderabad	A.P.
14	Gujarat Energy Transmission Corp. Ltd	Vadodra	Gujarat
15	Gujarat State Energy Generation Company Ltd.	Vadodra	Gujarat
16	Gujrat Energy Development Agency	Vadodra	Gujarat
17	Grid Corpn. of Orissa Ltd.(GRIDCO)	Bhubaneshwar	Orissa
18	Gujarat State Electricity Corp. Ltd.	Vadodra	Gujarat
19	GMD Corpration		Gujarat
20	Gulbarga Electricity Supply Co. Ltd.	Gulbarga	Karnataka
21	Haryana Power Generation Corp. Ltd.	Panchkula	Haryana
22	Haryana Vidyut Prasaran Nigam Ltd.	Panchkula	Haryana

*Joint Venture of APSEB & Pot Industries.



Table No. 1.2 (Contd.)
COMPANIES, POWER CORPORATIONS, MANAGEMENT BOARDS UNDER
CENTRAL, STATE OR JOINT PARTNERSHIP EXISTING IN THE COUNTRY
AS ON 31.3.2005 FOR ELECTRICITY GENERATION/TRANSMISSION/DISTRIBUTION

Sl.No	Name	Head Quarter	Ownership by Govt.
23	Hubli Electricity Supply Co. Ltd.	Hubli	Karnataka
24	Indraprastha Power Generation Co. Ltd.	Delhi	Delhi
25	Jodhpur Vidyut Vitran Nigam Ltd.	Jodhpur	Rajasthan
26	Jaipur Vidyut Vitran Nigam Ltd.	Jaipur	Rajasthan
27	KESCO Vidyut Vitran Co.	Kanpur	Uttar Pradesh
28	Karnataka Power Transmission Corp. Ltd.	Bangalore	Karnataka
29	Karnataka Power Corp. Ltd.	Bangalore	Karnataka
30	Machkund Hydro Electric Project	Vishakhapatnam	A.P./Orissa
31	Madhyanchal Vidyut Vitran Nigam Ltd.	Lucknow	Uttar Pradesh
32	M.P. Power Generating Corp. Ltd.	Jabalpur	M.P.
33	M.P. Power Transmission Corp. Ltd.	Jabalpur	M.P.
34	M.P. Poorv Kshetra Vidyut Vitran Corp. Ltd.	Jabalpur	M.P.
35	M.P. Madhya Kshetra Vidyut Vitran Corp. Ltd.	Bhopal	M.P.
36	M.P. Pashchim Kshetra Vidyut Vitran Corp. Ltd.	Indore	M.P.
37	Mangalore Electricity Supply Co. Ltd.	Mangalore	Karnataka
38	National Thermal Power Corp. Ltd.	New Delhi	Central
39	National Hydro Development Corporation	Bhopal	Central
40	National Hydro Electric Power Corp. Ltd.	New Delhi	Central
41	North-Eastern Electric Power Corpn. Ltd.	Shillong	Central
42	Neyveli Lignite Corporation Ltd.	Neyveli	Central
43	Northern Power Distribution Corpn. of A.P. Ltd.	Hyderabad	A.P.
44	Nuclear Power Corporation of India Ltd.	Mumbai	Central
45	Orissa Power Generation Corpn. Ltd.	Bhubaneswar	Orissa
46	Orissa Hydro Power Corpn. Ltd.	Bhubaneswar	Orissa
47	Pench Hydrel Power Station	Totladoh	M.P. & Maharashtra



Table No. 1.2 (Contd.)
COMPANIES, POWER CORPORATIONS, MANAGEMENT BOARDS UNDER
CENTRAL, STATE OR JOINT PARTNERSHIP EXISTING IN THE COUNTRY
AS ON 31.3.2005 FOR ELECTRICITY GENERATION/TRANSMISSION/DISTRIBUTION

Sl.No	Name	Head Quarter	Ownership by Govt.
48	Power Grid Corporation of India Ltd.	New Delhi	Central
49	Pondicherry Power Corporation Ltd.	Pondicherry	Pondicherry
50	Pragati Power Corporation Ltd.	Delhi	Delhi
51	Purvamnchal Vidyut Vitran Nigam Ltd.	Varanasi	Uttar Pradesh
52	Paschimamnchal Vidyut Vitran Nigam Ltd.	Meerut	Uttar Pradesh
53	Power Transmission Corporation of Uttaranchal Ltd.	Dehradun	Uttaranchal
54	Rajasthan State Power Corporation Ltd. (Rajasthan Renewable Energy Corpn.)	Jaipur	Rajasthan
55	Rajasthan Vidyut Utpadan Nigam Ltd.	Jaipur	Rajasthan
56	Rajasthan Vidyut Prasaran Nigam Ltd.	Jaipur	Rajasthan
57	Satluj Jal Vidyut Nigam Ltd.	Shimla	Central/ H.P. Govt
58	Southern Power Distribution Co. of A.P. Ltd.	Hyderabad	A.P.
59	Tungabhadra H E Scheme Tungabhadra Board	Ballary	A.P/Karnataka
60	Tenughat Vidyut Nigam Ltd.	Patna	Bihar
61	Transmission Corp. of Andhra Pradesh Ltd.	Hyderabad	Andhra Pradesh
62	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd.	Luchnow	U.P.
63	Uttaranchal Power Corporation Ltd.	Dehradun	Uttaranchal
64	Uttaranchal Jal Vidyut Nigam Ltd.	Dehradun	Uttaranchal
65	Uttar Prapdes Power Corp. Ltd.	Lucknow	U.P.
66	Uttar Pradesh Jal Vidyut Nigam Ltd.	Lucknow	U.P.
67	Uttar Haryana Bijli Vitran Nigam Ltd.	Panchkula	Haryana
68	Vishwesharaiah Vidyut Nigam Ltd.	Bangalore	Karnataka
69	West Bengal Power Development Corpn. Ltd.	Kolkata	W.B. Govt.
70	West Bengal Rural Energy Development Corpn.	Kolkata	W.B. Govt.
71	Tripura State Electricity Corporation Limited	Agartala	Tripura



Table No. 1.2 (Contd.)
COMPANIES, POWER CORPORATIONS, MANAGEMENT BOARDS UNDER
CENTRAL, STATE OR JOINT PARTNERSHIP EXISTING IN THE COUNTRY
AS ON 31.3.2005 FOR ELECTRICITY GENERATION/TRANSMISSION/DISTRIBUTION

Sl.No	Name	Head Quarter	Ownership by Govt.
(B) STATES ELECTRICITY DEPARTMENTS			
1	Arunachal Pradesh	Itanagar	State
2	Goa	Panaji	State
3	Jammu & Kashmir	Srinagar/Jammu	State
4	Manipur	Imphal	State
5	Mizoram	Aizawal	State
6	Nagaland	Kohima	State
7	Sikkim	Gangtok	State
(C) UNION TERRITORIES ELECTRICITY DEPARTMENTS			
1	Andaman & Nicobar Islands	Port Blair	Electricity Deptt
2	Chandigarh	Chandigarh	Electricity Deptt.
3	Dadra & Nagar Haveli	Silvassa	Electricity Deptt.
4	Daman & Diu	(Daman)	Electricity Deptt.
5	Lakshadweep	Kavaratti	Electricity Deptt.
6	Pondicherry	Pondicherry	Electricity Deptt.



Table No. 1.3
CLASSIFICATION OF LICENSEES AS ON 31.3.2005.

<i>Sl. No.</i>	<i>Name of the State</i>	<i>No. of Companies & Co-operatives</i>			<i>Total</i>
		<i>Generation & Distribution</i>	<i>Generation, Purchase & Distribution</i>	<i>Purchase & Distribution</i>	
(A) NORTHERN REGION					
1.	Himachal Pradesh	2	0	0	2
2.	Punjab	1	0	0	1
3.	Delhi	0	0	3	3
4.	Uttar Pradesh	0	0	1	1
(B) WESTERN REGION					
1.	Goa	1	0	0	1
2.	Gujarat	4	2	0	6
3.	Madhya Pradesh	0	0	6	6
4.	Maharashtra	1	2	1	4
(C) SOUTHERN REGION					
1.	Andhra Pradesh	3	2	9	14
2.	Karnataka	4	0	1	5
3.	Kerala	3	0	1	4
4.	Tamil Nadu	6	0	0	6
(D) EASTERN REGION					
1.	Jharkhand	1	0	0	1
2.	Orissa	0	0	4	4
3.	West Bengal	0	4	1	5
4.	A & N Islands	1	0	0	1
(E) NORTH -EASTERN REGION					
	Assam	1	0	0	1
Total (ALL INDIA)		28	10	27	65



Table No. 1.4
CLASSIFICATION OF MUNICIPAL UNDERTAKINGS AS ON 31.3.2005

Sl. No.	Name of the State	Number of Municipalities			Total
		Generation & Distribution	Generation, Purchase & Distribution	Purchase & Distribution	
1	Delhi	0	0	1	1
2	Maharashtra	0	0	1	1
3	Kerala	0	0	1	1
Total All India		0	0	3	3



Table No. 1.5
ACQUISITION OF ELECTRICITY SUPPLY UNDERTAKINGS DURING 2004-05

Sl.No.	Name of the Undertaking	Prior ownership	Present ownership
NIL		NIL	NIL



Table No. 1.6
NEW ELECTRICITY SUPPLY UNDERTAKINGS
REPORTED/CONSTITUTED DURING 2004-05

Sl. No.	New Undertaking	Name of State	Union Territory
A. STATE GOVT.UNDERTAKING			
1	Power Transmission Corporation of Uttaranchal Ltd.	Uttaranchal	NORTHERN REGION
2	G.M.D.Corporation	Gujarat	WESTERN REGION



Table No. 1.7
NAME OF POWER TRADING COMPANIES EXISTING AS ON 31.03.2005
ELECTRICITY TRADING DURING 2004-05

Sr. No	Name of the Trading Licensee	Date of Licence issued	Category of Licence
1	Adani Exports Ltd	09.06.2004	F
2	Chattisgarh Electricity Company Ltd	03.11.2004	A
3	DLF Power Ltd	02.11.2004	C
4	GMR Ltd	09.11.2004	A
5	Jindal Steel & Power	02.11.2004	A
6	Karam Chand Thapar & Bros Ltd	27.01.2005	A
7	Lanco Electric Utility Ltd	23.07.2004	A
8	MMTC Ltd	23.07.2004	C
9	NTPC Vidyut Vyapar Nigam Ltd	23.07.2004	F
10	PTC India Limited	30.06.2004	F
11	Reliance Energy Trading (P) Ltd	30.06.2004	A
12	Sumex Organics (P) Ltd	12.07.2004	B
13	Tata Power Trading Company (P) Ltd	09.06.2004	A

Trading Limit (Category of Licence)

A- Upto 100 MU

B- From 100 MU to 200 MU

C- From 200 MU to 500 MU

D- From 500 MU to 700 MU

E- From 700 MU to 1000 MU

F- Above 1000 MU

Source - As reported by CERC.

CHAPTER - 2

**INSTALLED ELECTRICITY
GENERATION CAPACITY**

UTILITIES



CHAPTER-2

INSTALLED ELECTRICITY GENERATION CAPACITY

REVIEW :

The total Installed capacity in the country including captive power plants increased to 137528.26 MW as on 31-3-2005 as compared to 131423.81 MW as on 31-3-2004. The net addition in generating capacity amounted to 6104.45 MW (Hydro 1432.36 MW, Thermal 3303.84 MW & Nuclear 50.00 MW). The total percentage increase in installed capacity including captive power plants over last year was 4.64%

UTILITIES

Installed capacity (Utilities) in the country increased to 118425.70 MW as on 31.3.2005 as compared to 112683.50 MW as on 31.03.2004 registering an increase of 5.10% over the previous year.

The net addition in generating capacity amounted to 5742.20 MW (Hydro 1435.40 MW, Thermal 2933.92 MW & Nuclear 50 MW). This year addition of installed capacity from renewable energy sources other than Wind has also been taken into account as per the data received from Ministry of Non Conventional Energy Sources. The addition from renewable energy sources in the installed capacity had been 1322.88 MW (wind 491.57 MW, biomass 727.53 MW, biomass gasifier 61.80 MW, and urban & industrial waste 41.98 MW). The net addition included capacity addition from conventional and non conventional energy sources and uprating of hydro (420.40 MW) and nuclear (50.00 MW) Power Plant. Installed capacity of thermal generation continued to form the largest share of the installed generating capacity followed by hydro. The relative percentage of capacity of hydro, thermal, nuclear & non conventional energy sources has been 26.13%, 68.31% , 2.34% and 3.22% respectively during the year.



NON-UTILITIES

Installed capacity (Non-Utilities) in the country increased to 19102.57 MW as on 31.3.2005 as compared to 18740.31 MW as on 31.03.2004 registering an increase of 1.93% over the previous year. In the total capacity of Non- Utilities, the contribution of hydro, steam, diesel, gas and wind capacity had been 0.31%, 46.61%, 37.31%, 15.00% and 0.77% respectively.

The various tables in this Chapter give the salient features of the Installed capacity of electricity generation system in the country as on 31st March, 2005.



Total - 118425.70 MW Installed Capacity (Utilities) As on 31.03.05

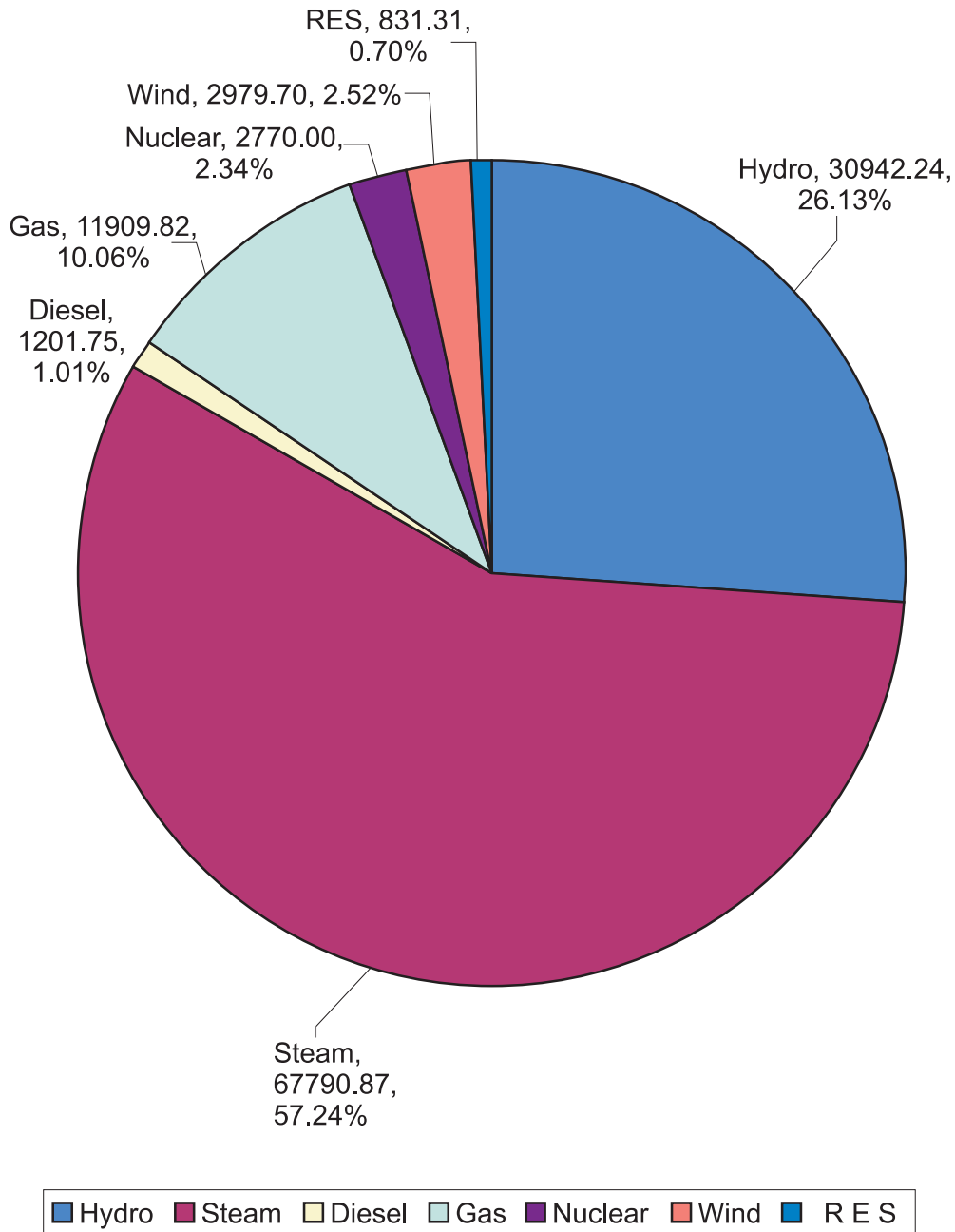




Table 2.1
ALL INDIA INSTALLED ELECTRICITY GENERATION CAPACITY
(UTILITIES AND NON-UTILITIES)-PRIMEMOVERWISE
AS ON 31ST MARCH 2005. (Fig in MW)

Year ending with	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources				Total
						Wind	Biomass Power	Biomass Gasifier	U & I	
(i) Installed Capacity:Utilities										
31.3.2005	30942.24	67790.87	1201.75	11909.82	2770.00	2979.70	727.53	61.80	41.98	118425.70
31.3.2004	29506.84	64955.88	1172.83	11839.82	2720.00	2488.13	0.00	0.00	0.00	112683.50
% Increase	4.86	4.36	2.47	0.59	1.84	19.76	*	*	*	5.10
(ii) Installed Capacity : Non-Utilities										
31.3.2005	58.93	8903.16	7126.86	2866.40	0.00	147.22	0.00	0.00	0.00	19102.57
31.3.2004	61.97	8585.28	7195.47	2745.74	0.00	151.85	0.00	0.00	0	18740.31
% Increase	-4.91	3.70	-0.95	4.39	0.00	-3.05	0.00	0.00	0.00	1.93
(iii) Installed Capacity : Total (i+ii)										
31.3.2005	31001.17	76694.03	8328.61	14776.22	2770.00	3126.92	727.53	61.80	41.98	137528.26
31.3.2004	29568.81	73541.16	8368.30	14585.56	2720.00	2639.98	0.00	0.00	0.00	131423.81
% Increase	4.84	4.29	-0.47	1.31	1.84	18.44	*	*	*	4.64

(*) Included from this year

Note: Total may not tally at second place of decimal due to rounding off by computer.



Table 2.2
ALL INDIA INSTALLED ELECTRICITY GENERATION CAPACITY
(UTILITIES ONLY) OWNERSHIPWISE AND PRIMEMOVER
AS ON 31.3.2005 (Figs in MW)

S.No. State/U.Ts.	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources			U & I	Total
						Wind	Biomass Power	Biomass Gasifier		
1.1 State Electricity Board	11512.02	20445.00	286.81	1614.50	0.00	29.64	0.00	0.00	0.00	33887.97
1.2 Elect. Deptt./ Govt. Utg/	12776.07	20404.50	317.80	1735.92	0.00	38.26	0.00	0.00	0.00	35272.55
1.3 Corpns./Joint Central Sector	5748.00	22700.00	0.00	4329.00	2770.00	0.00	0.00	0.00	0.00	35547.00
Sub-total Public	30036.09	63549.50	604.61	7679.42	2770.00	67.90	0.00	0.00	0.00	104707.52
2 Sector Private Sector										
2.1 Private Companies	906.15	4241.38	597.14	4230.40	0.00	2911.80	727.53	61.80	41.98	13718.18
Sub total Private Sector	906.15	4241.38	597.14	4230.40	0.00	2911.80	727.53	61.80	41.98	13718.18
Total All India	30942.24	67790.88	1201.75	11909.82	2770.00	2979.70	727.53	61.80	41.98	118425.70

Note: Figures may not tally at second place of decimal due to rounding off by computer.



Table 2.3
INSTALLED ELECTRICITY GENERATION CAPACITY(UTILITIES ONLY)
STATEWISE AS ON 31ST MARCH 2005

<i>STATE/Uts</i>	<i>31.3.2005</i>	<i>31.3.2004</i>	<i>% Increase</i>
Haryana	2545.72	1990.28	27.91
Himachal Pradesh	709.14	709.13	0.00
Jammu & Kashmir	493.21	493.09	0.02
Punjab	4629.17	4532.17	2.14
Rajasthan	3813.86	3681.05	3.61
Uttar Pradesh	4706.07	4620.60	1.85
Uttranchal	986.85	986.85	0.00
Chandigarh	2.00	2.00	0.00
Delhi	932.47	932.41	0.01
Central Sector NR	13660.00	13142.00	3.94
Sub- Total	32478.49	31089.58	4.47
Gujrat	7678.87	7463.40	2.89
Madhya Pradesh	3323.77	3111.57	6.82
Chattisgarh	1411.51	1400.00	0.82
Maharashtra	13368.59	13188.56	1.37
Goa*	48.02	48.22	-0.41
Central Sector WR	7412.00	6912.00	7.23
Sub- Total	33242.76	32123.75	3.48
Andhra Pradesh	8072.09	7786.62	3.67
Karnataka	5934.80	5367.12	10.58
Kerala	2241.77	2240.07	0.08
Tamil Nadu	8315.26	7750.64	7.28
Lakshdweep	9.97	9.97	0.00
Pondicherry	32.50	32.50	0.00
Central Sector SR	7270.00	6720.00	8.18
Sub- Total	31876.39	29906.92	6.59
Bihar	598.42	598.40	0.00
Jharkhand	1630.08	1630.00	0.00
Orissa	2320.02	2300.91	0.83
West Bengal	4787.81	4782.48	0.11
D.V.C	3081.50	2871.50	7.31
A & N Islands	65.47	59.30	10.40
Sikkim	37.00	37.00	0.00
Central Sector ER	5970.00	4970.00	20.12
Sub- Total	18490.30	17249.59	7.19
Assam	621.81	621.69	0.02
Manipur	46.91	46.91	0.00
Meghalaya	187.57	187.57	0.00
Nagaland*	27.50	27.82	-1.15
Tripura	128.35	127.35	0.79
Arunachal Pradesh	34.56	34.38	0.52
Mizoram	56.06	32.94	70.19
Central SectorNER	1235.00	1235.00	0.00
Sub- Total	2337.76	2313.66	1.04
Total (All India)	118425.70	112683.50	5.10

*Negative figures in case of Goa and Nagaland are due to reconciliation of installed capacity with MNES.

Note: Total may not tally at second place of decimal due to rounding off by computer.



Table No. 2.4
INSTALLED ELECTRICITY GENERATION CAPACITY(UTILITIES ONLY)
PRIMEMOVERWISE/STATEWISE AS ON 31ST MARCH 2005

State/U.Ts.	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources				Total
						Wind	Biomass Power	Biomass Gasifier	U & I	
Haryana	932.24	1602.50	3.92	0.00	0.00	0.00	6.00	1.06	0.00	2545.72
Himachal Pradesh	709.00	0.00	0.13	0.00	0.00	0.00	0.00	0.01	0.00	709.14
Jammu & Kashmir	309.15	0.00	8.94	175.00	0.00	0.00	0.00	0.12	0.00	493.21
Punjab	2474.72	2130.00	0.00	0.00	0.00	0.00	22.00	0.70	1.75	4629.17
Rajasthan	1008.84	2420.00	0.00	113.80	0.00	263.20	7.80	0.22	0.00	3813.86
Uttar Pradesh	518.60	4102.00	0.00	0.00	0.00	0.00	73.00	4.47	8.00	4706.07
Uttaranchal	986.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	986.85
Chandigarh	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Delhi	0.00	320.00	0.00	612.40	0.00	0.00	0.00	0.07	0.00	932.47
Central Sector NR3828.00	6340.00	0.00	2312.00	1180.00	0.00	0.00	0.00	0.00	0.00	13660.00
Sub-Total (N R)	10767.40	16914.50	14.99	3213.20	1180.00	263.20	108.80	6.65	9.75	32478.49
Gujarat	617.00	4944.00	17.48	1863.72	0.00	219.90	0.50	13.32	2.95	7678.87
Madhya Pradesh	1130.66	2157.50	0.00	0.00	0.00	27.60	1.00	4.73	2.28	3323.77
Chhattisgarh	120.00	1280.00	0.00	0.00	0.00	0.00	11.00	0.51	0.00	1411.51
Maharashtra	3008.67	8075.00	0.00	1832.00	0.00	411.20	36.00	3.82	1.90	13368.59
Goa	0.00	0.00	0.00	48.00	0.00	0.00	0.00	0.02	0.00	48.02
D. & N. Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Sector WR1000.00	4360.00	0.00	1292.00	760.00	0.00	0.00	0.00	0.00	0.00	7412.00
Sub-Total (W R)	5876.33	20816.50	17.48	5035.72	760.00	658.70	48.50	22.40	7.13	33242.76
Andhra Pradesh	3586.37	2952.50	36.80	1112.40	0.00	101.30	245.25	15.38	22.09	8072.09
Karnataka	3317.90	1730.00	234.42	220.00	0.00	276.00	151.98	4.50	0.00	5934.80
Kerala	1807.60	0.00	256.44	174.00	0.00	2.00	0.00	0.73	1.00	2241.77
Tamil Nadu	1995.85	3220.00	411.66	831.50	0.00	1677.40	173.00	3.87	1.98	8315.26
Lakshadweep	0.00	0.00	9.97	0.00	0.00	0.00	0.00	0.00	0.00	9.97
Pondicherry	0.00	0.00	0.00	32.50	0.00	0.00	0.00	0.00	0.00	32.50
Central Sector SR	6090.00	0.00	350.00	830.00	0.00	0.00	0.00	0.00	0.00	7270.00
Sub-Total (S R)	10707.72	13992.50	949.29	2720.40	830.00	2056.70	570.23	24.48	25.07	31876.39
Bihar	44.90	553.50	0.00	0.00	0.00	0.00	0.00	0.02	0.00	598.42
Jharkhand	130.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	1630.08
Orissa	1899.92	420.00	0.00	0.00	0.00	0.00	0.00	0.07	0.03	2320.02
West Bengal	161.70	4506.38	12.20	100.00	0.00	1.10	0.00	6.43	0.00	4787.81
D.V.C.	144.00	2847.50	0.00	90.00	0.00	0.00	0.00	0.00	0.00	3081.50
A. & N. Islands	5.25	0.00	60.05	0.00	0.00	0.00	0.00	0.17	0.00	65.47
Sikkim	32.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	37.00
Central Sector ER	60.00	5910.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5970.00
Sub-Total (E R)	2477.77	15737.38	77.25	190.00	0.00	1.10	0.00	6.77	0.03	18490.30
Assam	2.00	330.00	20.69	269.00	0.00	0.00	0.00	0.12	0.00	621.81
Manipur	1.50	0.00	45.41	0.00	0.00	0.00	0.00	0.00	0.00	46.91
Meghalaya	185.52	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.00	187.57
Nagaland	25.50	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	27.50
Tripura	16.00	0.00	4.85	106.50	0.00	0.00	0.00	1.00	0.00	128.35
Arunachal Pradesh	18.50	0.00	15.88	0.00	0.00	0.00	0.00	0.18	0.00	34.56
Mizoram	4.00	0.00	51.86	0.00	0.00	0.00	0.00	0.20	0.00	56.06
Central Sector NER 860.00	0.00	0.00	375.00	0.00	0.00	0.00	0.00	0.00	0.00	1235.00
Sub-Total (N E R)	1113.02	330.00	142.74	750.50	0.00	0.00	0.00	1.50	0.00	2337.76
Central Sector										
All India	5748.00	22700.00	0.00	4329.00	2770.00	0.00	0.00	0.00	0.00	35547.00
Total All India	30942.24	67790.88	1201.75	11909.82	2770.00	2979.70	727.53	61.80	41.98	118425.70

(^): Includes the Capacity of Small Hydro Projects.

Note: Total may not tally at second place of decimal due to rounding off by computer.



Table No. 2.5
INSTALLED ELECTRICITY GENERATION CAPACITY OF STATE ELECTRICITY
BOARDS-PRIME MOVERWISE AS ON 31ST MARCH 2005

State/U.Ts.	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources				Total
						Wind	Biomass Power	Biomass Gasifier	U & I	
Himachal Pradesh	323.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	323.13
Punjab	2470.52	2130.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4600.52
Sub Total NR	2793.52	2130.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	4923.65
Gujarat	617.00	3759.00	17.28	27.00	0.00	1.20	0.00	0.00	0.00	4421.48
Madhya Pradesh	1117.16	2157.50	0.00	0.00	0.00	0.60	0.00	0.00	0.00	3275.26
Chhattisgarh	120	1280.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1400.00
Maharashtra	2561.67	6425.00	0.00	912.00	0.00	6.44	0.00	0.00	0.00	9905.11
Sub Total WR	4415.83	13621.50	17.28	939.00	0.00	8.24	0.00	0.00	0.00	19001.85
Kerala	1807.60	0.00	234.60	0.00	0.00	2.00	0.00	0.00	0.00	2044.20
Tamil Nadu	1995.85	2970.00	0.00	331.00	0.00	19.40	0.00	0.00	0.00	5316.25
Sub Total SR	3803.45	2970.00	234.60	331.00	0.00	21.40	0.00	0.00	0.00	7360.45
Bihar	20.00	553.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	573.50
Jharkhand	130.00	840.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	970.00
West Bengal	161.70	0.00	12.06	100.00	0.00	0.00	0.00	0.00	0.00	273.76
Sub Total ER	311.70	1393.50	12.06	100.00	0.00	0.00	0.00	0.00	0.00	1817.26
Assam	2.00	330.00	20.69	244.50	0.00	0.00	0.00	0.00	0.00	597.19
Meghalaya	185.52	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.00	187.57
Sub Total NER	187.52	330.00	22.74	244.50	0.00	0.00	0.00	0.00	0.00	784.76
Total (All Boards)	11512.02	20445.00	286.81	1614.50	0.00	29.64	0.00	0.00	0.00	33887.97

Note: Total may not tally at second place of decimal due to rounding off by computer.



Table No.2.6
INSTALLED ELECTRICITY GENERATION CAPACITY OF ELECTRICITY
DEPARTMENTS/GOVT. UNDERTAKINGS AND PRIVATE SECTOR
PRIME OVERWISE/STATEWISE AS ON 31ST MARCH 2005

State/U.Ts.	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources			U & I	(IN MW)
						Wind	Biomass Power	Biomass Gasifier		Total
ELECTRICITY DEPARTMENTS/GOVERNMENT UNDERTAKINGS/CORPORATIONS/CENTRAL SECTOR										
Haryana	932.24	1602.50	3.92	0.00	0.00	0.00	0.00	0.00	0.00	2538.66
Rajasthan	1008.84	2420.00	0.00	113.80	0.00	6.40	0.00	0.00	0.00	3549.04
Jammu & Kashmir	309.15	0.00	8.94	175.00	0.00	0.00	0.00	0.00	0.00	493.09
Uttar Pradesh	518.60	4102.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4620.60
Uttaranchal	986.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	986.85
Delhi	0.00	320.00	0.00	612.40	0.00	0.00	0.00	0.00	0.00	932.40
Chandigarh	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Central Sector(NR)	3828.00	6340.00	0.00	2312.00	1180.00	0.00	0.00	0.00	0.00	13660.00
Sub Total (NR)	7583.68	14784.50	14.86	3213.20	1180.00	6.40	0.00	0.00	0.00	26782.64
Gujarat	0.00	545.00	0.00	406.72	0.00	16.30	0.00	0.00	0.00	968.02
Madhya Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	0.00	0.00	0.00	0.00	0.00	1.96	0.00	0.00	0.00	1.96
Goa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Sector (WR)	1000.00	4360.00	0.00	1292.00	760.00	0.00	0.00	0.00	0.00	7412.00
Sub Total (WR)	1000.00	4905.00	0.00	1698.72	760.00	18.26	0.00	0.00	0.00	8381.98
Andhra Pradesh	3582.62	2952.50	0.00	99.00	0.00	5.40	0.00	0.00	0.00	6639.52
Karnataka	3266.20	1470.00	127.92	0.00	0.00	7.10	0.00	0.00	0.00	4871.22
Tamil Nadu	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	100.00
Lakshadweep	0.00	0.00	9.97	0.00	0.00	0.00	0.00	0.00	0.00	9.97
Pondicherry	0.00	0.00	0.00	32.50	0.00	0.00	0.00	0.00	0.00	32.50
Central Sector (SR)	0.00	6090.00	0.00	350.00	830.00	0.00	0.00	0.00	0.00	7270.00
Sub Total (SR)	6848.82	10512.50	137.89	581.50	830.00	12.50	0.00	0.00	0.00	18923.21
Bihar	24.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.90
Jharkhand	0.00	420.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	420.00
Orissa	1899.92	420.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2319.92
West Bengal	0.00	3305.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	3306.10
Sikkim	32.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	37.00
D.V.C.	144.00	2847.50	0.00	90.00	0.00	0.00	0.00	0.00	0.00	3081.50
A. & N. Islands	5.25	0.00	40.05	0.00	0.00	0.00	0.00	0.00	0.00	45.30
Central Sector (ER)	60.00	5910.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5970.00
Sub Total (ER)	2166.07	12902.50	45.05	90.00	0.00	1.10	0.00	0.00	0.00	15204.72



**Table No. 2.6 (contd.)
INSTALLED ELECTRICITY GENERATION CAPACITY OF ELECTRICITY
DEPARTMENTS/GOVT. UNDERTAKINGS AND PRIVATE SECTOR
PRIMEMOVERWISE/STATEWISE AS ON 31ST MARCH 2005**

State/U.Ts.	(IN MW)									
	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources			Total	
						Wind	Biomass Power	Biomass Gasifier	U & I	
Manipur	1.50	0.00	45.41	0.00	0.00	0.00	0.00	0.00	0.00	46.91
Nagaland	25.50	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	27.50
Tripura	16.00	0.00	4.85	106.50	0.00	0.00	0.00	0.00	0.00	127.35
Arunachal Pradesh	18.50	0.00	15.88	0.00	0.00	0.00	0.00	0.00	0.00	34.38
Mizoram	4.00	0.00	51.86	0.00	0.00	0.00	0.00	0.00	0.00	55.86
Central Sector (NER)	860.00	0.00	0.00	375.00	0.00	0.00	0.00	0.00	0.00	1235.00
Sub Total (NER)	925.50	0.00	120.00	481.50	0.00	0.00	0.00	0.00	0.00	1527.00
Total-I, (All India)	18524.07	43104.50	317.80	6064.92	2770.00	38.26	0.00	0.00	0.00	70819.55
PRIVATE SECTOR										
Haryana	0.00	0.00	0.00	0.00	0.00	0.00	6.00	1.06	0.00	7.06
Himachal Pradesh	386.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	386.01
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Punjab	4.20	0.00	0.00	0.00	0.00	0.00	22.00	0.70	1.75	28.65
Rajasthan	0.00	0.00	0.00	0.00	0.00	256.80	7.80	0.22	0.00	264.82
Uttar Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	73.00	4.47	8.00	85.47
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.07
Gujarat	0.00	640.00	0.20	1430.00	0.00	202.40	0.50	13.32	2.95	2289.37
Madhya Pradesh	13.50	0.00	0.00	0.00	0.00	27.00	1.00	4.73	2.28	48.51
Chhattisgarh	0.00	0.00	0.00	0.00	0.00	0.00	11.00	0.51	0.00	11.51
Maharashtra	447.00	1650.00	0.00	920.00	0.00	402.80	36.00	3.82	1.90	3461.52
Goa	0.00	0.00	0.00	48.00	0.00	0.00	0.00	0.02	0.00	48.02
Andhra Pradesh	3.75	0.00	36.80	1013.40	0.00	95.90	245.25	15.38	22.09	1432.57
Karnataka	51.70	260.00	106.50	220.00	0.00	268.90	151.98	4.50	0.00	1063.58
Kerala	0.00	0.00	21.84	174.00	0.00	0.00	0.00	0.73	1.00	197.57
TamilNadu	0.00	250.00	411.66	400.50	0.00	1658.00	173.00	3.87	1.98	2899.01
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Jharkhand	0.00	240.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	240.08
Orissa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.03	0.10
West Bengal	0.00	1201.38	0.14	0.00	0.00	0.00	0.00	6.43	0.00	1207.95
A&N Islands	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.17	0.00	20.17
Assam	0.00	0.00	0.00	24.50	0.00	0.00	0.00	0.12	0.00	24.62
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20
Total-II, (All India)	906.15	4241.38	597.14	4230.40	0.00	2911.80	727.53	61.80	41.98	13718.18
All India Total (I+II)	19430.22	47345.88	914.94	10295.32	2770.00	2950.06	727.53	61.80	41.98	84537.73

Note: Total may not tally at second place of decimal due to rounding off by computer.



Table No.2.7
ADDITION IN ELECTRICITY GENERATION CAPACITY (UTILITIES ONLY)
DURING THE YEAR 2004-05

S.No.	Station name Unit No.	State/UT Owner	Date of Addition	No. of Sets	Capacity of each set (MW)	Total capacity added (MW)
A. HYDRO						
1	Indira Sagar H.E. Project Unit-5	Madhya Pradesh N.H.D.C. (Central Sector)	23.07.04	1	125	125.00
2	Sardar Sarovar H.E. Project	Gujarat SSNNL (Jt. Sector)	03.09.04	1	50	50.00
3	Sardar Sarovar H.E. Project Jt. Sector	Gujarat SSNNL	7.10.04	1	50	50.00
4	Indira Sagar H.E. Project Unit-6	Madhya Pradesh N.H.D.C. (Central Sector)	27.10.04	1	125	125.00
5	Almatti Dam P. House Unit - 2	Karnataka (KPCL)	04.11.04	1	55	55.00
6	Sardar Sarovar H.E. Project	Gujarat SSNNL (Jt. Sector)	15.12.04	1	50	50.00
7	Indira Sagar H.E. Project Unit-7	Madhya Pradesh N.H.D.C.(Central Sector)	29.12.04	1	125	125.00
8	Almatti Dam P. House Unit - 3	Karnataka (KPCL)	13.01.05	1	55	55.00
9	Sardar Sarovar RBPH Unit No.1	Gujarat SSNNL (Jt. Sector)	01.02.05	1	200	200.00
10	Indira Sagar H.E. Project Unit-8	Madhya Pradesh N.H.D.C.(Central Sector)	23.03.05	1	125	125.00
11	Almatti Dam P. House Unit - 4	Karnataka (KPCL)	26.03.05	1	55	55.00
Total Hydro				11		1015.00



Table No.2.7 (Contd.)
ADDITION IN ELECTRICITY GENERATION CAPACITY (UTILITIES ONLY)
DURING THE YEAR 2004-05

S.No.	Station name Unit No.	State/UT Owner	Date of Addition	No. of Sets	Capacity of each set (MW)	Total capacity added (MW)
B. Steam						
1	Talcher STPS - II Unit-5	Orissa NTPC	31.05.04	1	500	500.00
2	Ramagundam S.T.P.S. Unit No.	Andhra Pradesh NTPC	31.08.04	1	500	500.00
3	Tau Devi Lal T.P.S. Unit - VII	Haryana HPGCL	28.09.04	1	250	250.00
4	Mejia T.P.S. Extn. Unit - 4	West Bengal DVC	12.10.04	1	210	210.00
5	Tau Devi Lal T.P.S. Unit - VIII	Haryana HPGCL	28.01.05	1	250	250.00
6	Rihand S.T.P.S. Unit No-8	Uttar Pradesh N.T.P.C.	31.01.05	1	500	500.00
7	Talcher STPS - II Unit-6	Orissa NTPC	06.02.05	1	500	500.00
8	Akrimota T.P.S.	Gujarat GMDCL	31.03.05	1	125	125.00
Total Steam				8		2835.00
C. Gas						
	Karrupur CCPP Gas Turbine	Tamil Nadu Aban power Co.Ltd.(private)	19.02.05	1	70	70.00
D. Diesel						
	Bairabi DGPP	Mizoram Govt. Electricity Dept.	15.05.04	4	5.73	22.92
	Rangat Bay DGPP	A&N Island A&N Admn.	22.02.05	5	1.2	6.00
Total Diesel				9		28.92
Total Thermal (B+C+D)				18		2933.92
Total Hydro+Thermal				29		3948.92



Table No.2.7 (Contd.)
ADDITION IN ELECTRICITY GENERATION CAPACITY (UTILITIES ONLY)
DURING THE YEAR 2004-05

S.No.	Name of the Project	Name of Utility/State	Type	Upated Benefit (MW)
(E) Capacity Addition due to Upgradation				
1	Bhakra (RB)	BBMB	Hydro	125
2	Pong	BBMB	Hydro	36
3	Baira Siul	NHPC	Hydro	18
4	Koyna I & II	MSEB	Hydro	40
5	Kalindi Nagjhari	KPCL	Hydro	45
6	Sharavathy	KPCL	Hydro	115.2
7	Jog Fall	VVNL	Hydro	19.2
8	Hirakund I & II	OHPC	Hydro	22
9	Kalpakkam, MAPS	NPC	Nuclear	50
Total				470.40
F	Total Addition (A+B+C+D+E) in MW			4419.32
G	Renewable Energy Sources			CapacityAddition(MW)
1	Wind			491.57
2	Biomass			727.53
3	Biomass Gasifier			61.80
4	U & I			41.98
Total				1322.88
Grand Total (F+G)				5742.20



Table No.2.8
ADDITION OF ELECTRICITY GENERATION CAPACITY
PRIMEMOVERWISE REGIONWISE DURING THE YEAR 2004-05

State/U.Ts.						Renewable Energy Sources				Total
	Hydro	Steam	Diesel	Gas	Nuclear	Wind	Biomass Power	Biomass Gasifier	U & I	
Haryana		500.00					6.00	1.06		507.06
Himaachal Pradesh								0.01		0.01
Jammu & Kashmir								0.12		0.12
Punjab							22.00	0.70	1.75	24.45
Rajasthan						84.70	7.80	0.22		92.72
Uttar Pradesh							73.00	4.47	8.00	85.47
Uttaranchal										0.00
Delhi							0.07		0.07	
Chandigarh										0.00
Central Sector (NR)		500.00								500.00
Sub Total (NR)	0.00	1000.00	0.00	0.00	0.00	84.70	108.80	6.65	9.75	1209.90
Gujarat	350.00	125.00				17.71	0.50	13.32	2.95	509.48
Madhya Pradesh						4.73	1.00	4.73	2.28	12.74
Chhattisgarh							11.00	0.51		11.51
Maharashtra						3.80	36.00	3.82	1.90	45.52
Goa							0.02		0.02	
D. & N. Haveli										0.00
Daman & Diu										0.00
Central Sector(WR)	500.00									500.00
Sub Total (WR)	850.00	125.00	0.00	0.00	0.00	26.24	48.50	22.40	7.13	1079.27
Andhra Pradesh						2.50	245.25	15.38	22.09	285.22
Karnataka	165.00					66.80	151.98	4.50		388.28
Kerala						-0.03		0.73	1.00	1.70
Tamil Nadu				70.00		315.77	173.00	3.87	1.98	564.62
Lakshadweep										0.00
Pondicherry										0.00
Central Sector (SR)		500.00								500.00
Sub Total (SR)	165.00	500.00	0.00	70.00	0.00	385.04	570.23	24.48	25.07	1739.82
Bihar							0.02		0.02	
Jharkhand								0.08		0.08
Orissa						-2.98		0.07	0.03	-2.88
West Bengal						-1.10		6.43		5.33
Sikkim										0.00
D.V.C.		210.00								210.00
A. & N. Islands			6.00					0.17		6.17
Central Sector (ER)		1000.00								1000.00
Sub Total (ER)	0.00	1210.00	6.00	0.00	0.00	-4.08	0.00	6.77	0.03	1218.72
Assam								0.12		0.12
Manipur										0.00
Meghalaya										0.00
Nagaland						-0.33				-0.33
Tripura								1.00		1.00
Arunachal Pradesh								0.18		0.18
Mizoram			22.92					0.20		23.12
Central Sector (NER)										0.00
Sub Total (NER)	0.00	0.00	22.92	0.00	0.00	-0.33	0.00	1.50	0.00	24.09
Total (All India)	1015.00	2835.00	28.92	70.00	0.00	491.57	727.53	61.80	41.98	5271.80

Note:- In addition to above there has been Upgradation of 420.40 MW of Hydro and 50 MW of Nuclear. Negative figure due to reconciliation with MNES figures over last year



Table No. 2.9
DETAILS OF INSTALLED CAPACITY RETIRED/ DERATED
STATEWISE/PRIMEMOVERWISE DURING THE YEAR 2004-05

(IN MW)

Name of State/U.Ts.	Owner ship	Name of the Station	Hydro	Steam	Diesel	Gas	Nuclear	Wind	Renewable Energy Sources		U & I	Total
									Biomass Power	Biomass Gasifier		
Nil			0	0	0	0	0	0	0	0	0	0
Net Deletion			0	0	0	0	0	0	0	0	0	0



Table No. 2.10
NET ADDITION/DELETION OF PLANT CAPACITY ELECTRICITY GENERATION
PRIMEWISE DURING THE YEAR 2004-05

State/U.Ts.	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources			U & I	Total
						Wind	Biomass Power	Biomass Gasifier		
Gross Addition	1015.00	2835.00	28.92	70.00	0.00	491.57	727.53	61.80	41.98	5271.80
Deletion/ Retirement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reporting Differ- ence/Up-rating	420.40	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	470.40
Net Addition	1435.40	2835.00	28.92	70.00	50.00	491.57	727.53	61.80	41.98	5742.20



Table No. 2.11
SHARE OF PARTICIPATING STATES IN JOINTLY OWNED
POWER STATIONS DURING 2004-05

<i>Name of the Power Station</i>	<i>Name of the participating States</i>	<i>Share of the Participating States</i>		<i>Total capacity (MW)</i>
		<i>%age</i>	<i>(MW)</i>	
BHAKRA BEAS MANAGEMENT MANAGEMENT BOARD				
Bhakra Nangal Complex (Hydro)*	Haryana	33.91	501.70	1479.50
	Punjab	50.87	752.62	
	Rajasthan	15.22	225.18	
Dehar (Hydro)	Haryana	32.00	316.80	990.00
	Punjab	48.00	475.20	
	Rajasthan	20.00	198.00	
Pong (Hydro)	Haryana	16.60	65.74	396.00
	Punjab	24.90	98.60	
	Rajasthan	58.50	231.66	
INDRAPRASTHA EXTN. (Coal)				
	Delhi	66.67	125.00	187.50
	Haryana	33.33	62.50	
CHAMBAL PROJECTS				
Gandhi Sagar (Hydro)	Madhya Pradesh	50.00	57.50	115.00
	Rajasthan	50.00	57.50	
Jawahar Sagar (Hydro)	Madhya Pradesh	50.00	49.50	99.00
	Rajasthan	50.00	49.50	
Rana Pratap Sagar (Hydro)	Madhya Pradesh	50.00	86.00	172.00
	Rajasthan	50.00	86.00	
SATPURA (Coal)	Madhya Pradesh	60.00	187.50	312.50
	Rajasthan	40.00	125.00	
MACHKUND (Hydro)	Andhra Pradesh	70.00	80.33	114.75
	Orissa	30.00	34.42	
TUNGABHADRA DAM & HAMPI (Hydro)	Andhra Pradesh	80.00	57.60	72.00
	Karnataka	20.00	14.40	
PENCH (Hydro)	Madhya Pradesh	66.67	106.66	160.00
	Maharashtra	33.33	53.34	
SARDAR SAROVAR (Hydro)	Gujarat	16.00	72.00	450.00
	Madhya Pradesh	57.00	256.50	
	Maharashtra	27.00	121.50	

* It comprises of capacity of Gangerwal = 77.25 MW, Kotla = 77.25 MW. Bhakra left Bank 540 MW & Bhakra Right Bank 785 MW.

CHAPTER - 3

ELECTRICITY GENERATION



CHAPTER -3

ELECTRICITY GENERATION

REVIEW

TOTAL GENERATION (UTILITIES + NON-UTILITIES)

Total electricity produced in the country including that from captive plants during the year 2004-05 was 665873 GWh as compared to 633275 GWh during the year 2003-04. The total generation has registered a growth of 5.15% over generation during previous year.

GENERATION (UTILITIES)

The All India gross electricity generation by the Public Utilities during the year 2004-05 was 594456 GWh as compared to 565102 GWh during 2003-04. The All India generation from utilities has shown a growth of 5.19%.

The generation from Hydro, Thermal, Nuclear and Non Conventional Energy Sources has been 84610 GWh, 488329 GWh, 17011 GWh and 4506 GWh respectively during the year 2004-05. The respective percentage of this generation with respect to gross generation from above sources has been 14.23%, 82.15%, 2.86% and 0.76%.

The Gross Generation during 2004-05 in Central, State and Private Sector was 220475, 315365 and 58616 GWh constituting 37.09%, 53.05% and 9.86% respectively.

GENERATION (NON-UTILITIES)

Besides electricity generation by the Public Utilities, during the year under review captive electricity generating plants of industries having captive generation of 1 MW & above has produced 71417 GWh comprising 44017GWh from Steam, 113 GWh from Hydro, 12040 GWh from diesel, 15052 GWh from Gas and 195 GWh from wind respectively. The captive generation has registered a growth of 4.76% over generation during previous year.

Various tables that appear in this Chapter give break-up details of electrical energy generation primemover-wise, State-wise, Region-wise and Sector-wise.



Table No. 3.1
GROSS ELECTRICAL ENERGY GENERATION IN THE COUNTRY (UTILITIES & NON-UTILITIES) PRIMEMOVERWISE DURING THE YEAR 2004-05

Gross Electrical Energy Generation (GWh)						
Year	Hydro	Steam	Diesel & RES (Including Wind)	Gas	Nuclear	Total
(I) Utilities Gross Electrical Energy Generation						
2004-05	84610.38	424244.06	7066.10	61524.66	17011.00	594456.20
2003-04	75242.48	407283.83	6866.95	57928.43	17780.00	565101.69
% increase	12.45	4.16	2.90	6.21	-4.33	5.19
(II) Non-Utilities Gross Electrical Energy Generation						
2004-05	112.77	44016.99	12234.81	15052.05	0.00	71416.62
2003-04	97.49	39610.29	13590.96	14874.38	0.00	68173.12
% increase	15.67	11.13	-9.98	1.19	0.00	4.76
(III) Total Gross Electrical Energy Generation						
2004-05	84723.15	468261.05	19300.91	76576.71	17011.00	665872.82
2003-04	75339.97	446894.12	20457.91	72802.81	17780.00	633274.81
% increase	12.45	4.78	-5.66	5.18	0.00	5.15



Gross Energy Generation (Utilities) during 2004-05 Total - 594456.20 GWh (MU)

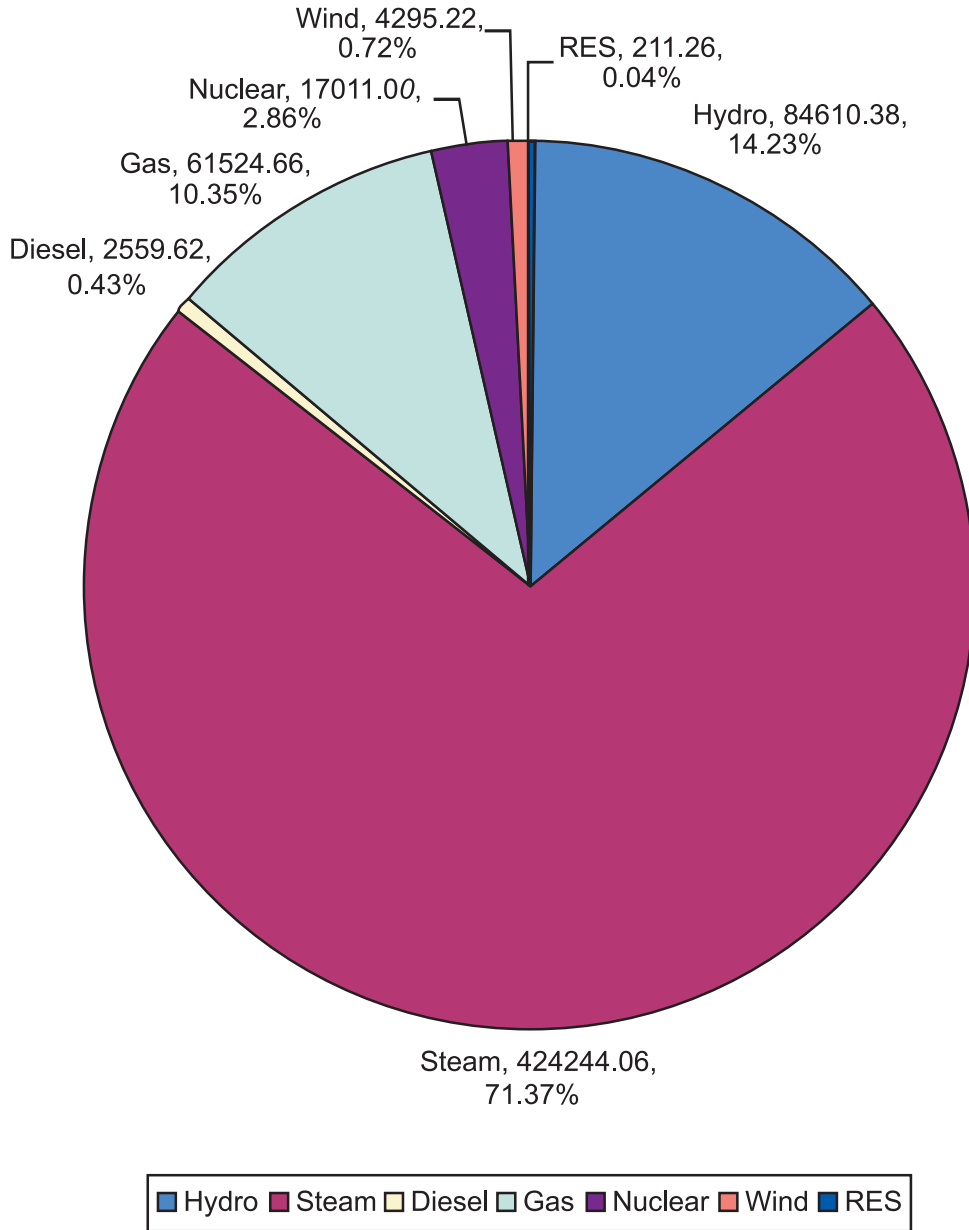




TABLE No. 3.2
ALL INDIA GROSS ELECTRICITY GENERATION (UTILITIES ONLY)
OWNERSHIPWISE AND PRIMEMOVER WISE DURING 2004-05

(IN GWh)

S. No.	State/U.Ts.	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources				Total
							Wind	Biomass Power	Biomass Gasifier	U & I	
1.1	State Electricity Board	28205.79	121705.05	296.95	8750.88	0.00	19.89	0.00	0.00	0.00	158978.56
1.2	Elect. Deptt./ Govt. Utg/ Corpns./Joint	32540.18	115052.21	329.28	8374.41	0.00	90.62	0.00	0.00	0.00	156386.70
1.3	Central Sector	20795.15	157481.48	0.00	25187.05	17011.00	0.00	0.00	0.00	0.00	220474.68
Sub-total Public Sector		81541.12	394238.74	626.23	42312.34	17011.00	110.51	0.00	0.00	0.00	535839.94
2 Private Sector											
2.1	Private Companies	3069.26	30005.32	1933.39	19212.32	0.00	4184.71	211.26	0.00	0.00	58616.26
Sub total Private Sector		3069.26	30005.32	1933.39	19212.32	0.00	4184.71	211.26	0.00	0.00	58616.26
Total All India		84610.38	424244.06	2559.62	61524.66	17011.00	4295.22	211.26	0.00	0.00	594456.20



TABLE No. 3.3
ALL INDIA GROSS ELECTRICAL ENERGY GENERATION
(UTILITIES ONLY) DURING 2004-05

State/U. Ts.	2003-04	2004-05	(GWh) % INCREASE
Haryana	10865.37	9847.31	-9.37
Himachal Pradesh	2810.95	2754.36	-2.01
Jammu & Kashmir	920.00	710.72	-22.75
Punjab	24047.89	21677.55	-9.86
Rajasthan	18614.08	20985.80	12.74
Uttar Pradesh	22835.51	20911.42	-8.43
Uttaranchal	4514.77	3113.13	-31.05
Chandigarh	0.00	0.00	0.00
Delhi	4906.69	5476.41	11.61
Central Sector NR	78147.73	84667.00	8.34
Sub-Total (N R)	167662.99	170143.70	1.48
Gujarat	38269.84	44230.80	15.58
Madhya Pradesh	15802.08	15975.24	1.10
Chhattisgarh	7916.43	8307.60	4.94
Maharashtra	66390.48	67078.27	1.04
Goa	202.27	336.16	66.19
D. & N. Haveli	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00
Central Sector WR	45494.61	48156.34	5.85
Sub-Total (W R)	174075.71	184084.41	5.75
Andhra Pradesh	32913.93	37305.14	13.34
Karnataka	22996.43	23515.43	2.26
Kerala	5629.02	6514.95	15.74
Tamil Nadu	30353.93	32229.72	6.18
Lakshadweep	21.87	22.61	3.38
Pondicherry	275.42	275.41	0.00
Central Sector SR	47260.52	46623.64	-1.35
Sub-Total (S R)	139451.12	146486.90	5.05
Bihar	447.38	206.99	-53.73
Jharkhand	4438.83	4168.29	-6.09
Orissa	9119.33	10307.96	13.03
West Bengal	23508.42	24888.26	5.87
D.V.C.	10014.79	10845.28	8.29
A. & N. Islands	157.61	129.60	-17.77
Sikkim	36.00	58.83	63.42
Central Sector ER	29527.42	35203.03	19.22
Sub-Total (E R)	77249.78	85808.24	11.08
Assam	848.27	903.24	6.48
Manipur	0.00	1.32	0.00
Meghalaya	597.03	637.65	6.80
Nagaland	23.55	3.50	-85.14
Tripura	501.48	554.76	10.62
Arunachal Pradesh	29.00	2.00	-93.10
Mizoram	10.56	5.81	-44.98
Central Sector NER	4652.20	5824.67	25.20
Sub-Total (N E R)	6662.09	7932.95	19.08
Central Sector All India	220474.68	220474.68	0.00
Total All India	565101.69	594456.20	5.19



TABLE NO.3.4
GROSS ELECTRICAL ENERGY GENERATION (UTILITIES ONLY)
PRIMEMOVERWISE, REGIONWISE/STATEWISE DURING 2004-05

(GWh)

State/U.Ts.	Renewable Energy Sources									Total
	Hydro	Steam	Diesel	Gas	Nuclear	Wind	Biomass Power	Biomass Gasifier	U & I	
Haryana	2990.43	6856.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9847.31
Himachal Pradesh	2754.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2754.36
Jammu & Kashmir	686.98	0.00	0.00	23.74	0.00	0.00	0.00	0.00	0.00	710.72
Punjab	7293.15	14384.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21677.55
Rajasthan	2623.96	17641.59	0.00	353.85	0.00	331.53	34.87	0.00	0.00	20985.80
Uttar Pradesh	1207.62	19703.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20911.42
Uttaranchal	3113.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3113.13
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delhi	0.00	1385.21	0.00	4091.20	0.00	0.00	0.00	0.00	0.00	5476.41
Central Sector NR	15457.90	46183.90	0.00	15522.20	7503.00	0.00	0.00	0.00	0.00	84667.00
Sub-Total (N R)	36127.53	106155.78	0.00	19990.99	7503.00	331.53	34.87	0.00	0.00	170143.70
Gujarat	872.75	30122.16	0.00	12885.89	0.00	350.00	0.00	0.00	0.00	44230.80
Madhya Pradesh	2433.88	13502.60	0.00	0.00	0.00	38.76	0.00	0.00	0.00	15975.24
Chhattisgarh	382.61	7924.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8307.60
Maharashtra	5588.48	55544.24	0.00	5450.19	0.00	495.36	0.00	0.00	0.00	67078.27
Goa	0.00	0.00	0.00	336.16	0.00	0.00	0.00	0.00	0.00	336.16
D. & N. Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Sector WR	1331.85	34870.38	0.00	6854.11	5100.00	0.00	0.00	0.00	0.00	48156.34
Sub-Total (W R)	10609.57	141964.37	0.00	25526.35	5100.00	884.12	0.00	0.00	0.00	184084.41
Andhra Pradesh	5514.76	23359.70	0.00	8269.89	0.00	160.79	0.00	0.00	0.00	37305.14
Karnataka	8935.47	12697.68	554.96	661.40	0.00	489.53	176.39	0.00	0.00	23515.43
Kerala	6081.50	0.00	312.06	118.89	0.00	2.50	0.00	0.00	0.00	6514.95
Tamil Nadu	4419.31	21358.71	1544.30	2481.10	0.00	2426.30	0.00	0.00	0.00	32229.72
Lakshadweep	0.00	0.00	22.61	0.00	0.00	0.00	0.00	0.00	0.00	22.61
Pondicherry	0.00	0.00	0.00	275.41	0.00	0.00	0.00	0.00	0.00	275.41
Central Sector SR	0.00	41593.90	0.00	621.74	4408.00	0.00	0.00	0.00	0.00	46623.64
Sub-Total (S R)	24951.04	99009.99	2433.93	12428.43	4408.00	3079.12	176.39	0.00	0.00	146486.90
Bihar	153.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	206.99	
Jharkhand	148.74	4019.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4168.29
Orissa	7142.54	3165.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10307.96
West Bengal	530.39	24356.79	0.63	0.00	0.00	0.45	0.00	0.00	0.00	24888.26
D.V.C.	259.91	10585.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10845.28
A. & N. Islands	6.80	0.00	122.80	0.00	0.00	0.00	0.00	0.00	0.00	129.60
Sikkim	58.67	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	58.83
Central Sector ER	369.73	34833.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35203.03
Sub-Total (E R)	8570.28	77113.92	123.59	0.00	0.00	0.45	0.00	0.00	0.00	85808.24
Assam	0.00	0.00	0.00	903.24	0.00	0.00	0.00	0.00	0.00	903.24
Manipur	0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.00	0.00	1.32
Meghalaya	637.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	637.65
Nagaland	3.40	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	3.50
Tripura	68.11	0.00	0.00	486.65	0.00	0.00	0.00	0.00	0.00	554.76
Arunachal Pradesh	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Mizoram	5.13	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00	5.81
Central Sector NER	3635.67	0.00	0.00	2189.00	0.00	0.00	0.00	0.00	0.00	5824.67
Sub-Total (N E R)	4351.96	0.00	2.10	3578.89	0.00	0.00	0.00	0.00	0.00	7932.95
Central Sector										
All India	20795.15	157481.48	0.00	25187.05	17011.00	0.00	0.00	0.00	0.00	220474.68
Total All India	84610.38	424244.06	2559.62	61524.66	17011.00	4295.22	211.26	0.00	0.00	594456.20

(^): Includes the generation of Small Hydro Projects.



TABLE No.3.5
GROSS ELECTRICAL ENERGY GENERATION BY STATE ELECTRICITY
BOARDS PRIME-MOVERWISE DURING 2004-2005.

State/U.Ts.										<i>(IN GWh)</i>
							Renewable Energy Sources			Total
	Hydro	Steam	Diesel	Gas	Nuclear	Wind	Biomass Power	Biomass Gasifier	U & I	
Himachal Pradesh	1287.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1287.26
Punjab	7289.51	14384.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21673.91
Sub Total NR	8576.77	14384.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22961.17
Gujarat	872.75	22062.63	0.00	1876.18	0.00	0.00	0.00	0.00	0.00	24811.56
Madhya Pradesh	2404.13	13502.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15906.73
Chhattisgarh	382.61	7924.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8307.60
Maharashtra	4149.94	42929.40	0.00	4115.17	0.00	0.00	0.00	0.00	0.00	51194.51
Sub Total WR	7809.43	86419.62	0.00	5991.35	0.00	0.00	0.00	0.00	0.00	100220.40
Kerala	6081.50	0.00	296.32	0.00	0.00	2.25	0.00	0.00	0.00	6380.07
Tamil Nadu	4419.31	20004.00	0.00	2003.10	0.00	17.64	0.00	0.00	0.00	26444.05
Sub Total SR	10500.81	20004.00	296.32	2003.10	0.00	19.89	0.00	0.00	0.00	32824.12
Bihar	2.00	153.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	155.49
Jharkhand	148.74	743.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	892.28
West Bengal	530.39	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	531.02
Sub Total ER	681.13	897.03	0.63	0.00	0.00	0.00	0.00	0.00	0.00	1578.79
Assam	0.00	0.00	0.00	756.43	0.00	0.00	0.00	0.00	0.00	756.43
Meghalaya	637.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	637.65
Sub Total NER	637.65	0.00	0.00	756.43	0.00	0.00	0.00	0.00	0.00	1394.08
Total (All Boards)	28205.79	121705.05	296.95	8750.88	0.00	19.89	0.00	0.00	0.00	158978.56



TABLE No.3.6
GROSS ELECTRICAL ENERGY GENERATION BY ELECTRICITY
DEPARTMENTS,GOVT. UNDERTAKINGS,CENTRAL SECTOR,MUNICIPALITIES AND
PRIVATE SECTOR-PRIME MOVER-WISE DURING 2004-05

State/U.Ts.	(IN GWh)									Total
	Hydro	Steam	Diesel	Gas	Nuclear	Renewable Energy Sources			U & I	
Wind						Biomass Power	Biomass Gasifier			
Haryana	2990.43	6856.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9847.31
Rajasthan	2623.96	17641.59	0.00	353.85	0.00	48.76	0.00	0.00	0.00	20668.16
Jammu & Kashmir	686.98	0.00	0.00	23.74	0.00	0.00	0.00	0.00	0.00	710.72
Uttar Pradesh	1207.62	19703.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20911.42
Uttaranchal	3113.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3113.13
Delhi	0.00	1385.21	0.00	4091.20	0.00	0.00	0.00	0.00	0.00	5476.41
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Sector(NR)	15457.90	46183.90	0.00	15522.20	7503.00	0.00	0.00	0.00	0.00	84667.00
Sub Total (NR)	26080.02	91771.38	0.00	19990.99	7503.00	48.76	0.00	0.00	0.00	145394.15
Gujarat	0.00	3217.57	0.00	1151.19	0.00	25.00	0.00	0.00	0.00	4393.76
Madhya Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Goa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Central Sector (WR)	1331.85	34870.38	0.00	6854.11	5100.00	0.00	0.00	0.00	0.00	48156.34
Sub Total (WR)	1331.85	38087.95	0.00	8005.30	5100.00	25.00	0.00	0.00	0.00	52550.10
Andhra Pradesh	5514.76	23359.70	0.00	1992.37	0.00	1.36	0.00	0.00	0.00	30868.19
Karnataka	8805.24	10730.91	271.14	0.00	0.00	15.05	0.00	0.00	0.00	19822.34
Lakshadweep	0.00	0.00	22.61	0.00	0.00	0.00	0.00	0.00	0.00	22.61
Pondicherry	0.00	0.00	0.00	275.41	0.00	0.00	0.00	0.00	0.00	275.41
Central Sector (SR)	0.00	41593.90	0.00	621.74	4408.00	0.00	0.00	0.00	0.00	46623.64
Sub Total (SR)	14320.00	75684.51	293.75	2889.52	4408.00	16.41	0.00	0.00	0.00	97612.19
Bihar	51.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.50
Jharkhand	0.00	1326.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1326.20
Orissa	7142.54	3165.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10307.96
West Bengal	0.00	17079.56	0.00	0.00	0.00	0.45	0.00	0.00	0.00	17080.01
Sikkim	58.67	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	58.83
D.V.C.	259.91	10585.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10845.28
A. & N. Islands	6.80	0.00	33.27	0.00	0.00	0.00	0.00	0.00	0.00	40.07
Central Sector (ER)	369.73	34833.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35203.03
Sub Total (ER)	7889.15	66989.85	33.43	0.00	0.00	0.45	0.00	0.00	0.00	74912.88
Manipur	0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.00	0.00	1.32
Nagaland	3.40	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	3.50
Tripura	68.11	0.00	0.00	486.65	0.00	0.00	0.00	0.00	0.00	554.76
Arunachal Pradesh	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
Mizoram	5.13	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00	5.81
Central Sector (NER)	3635.67	0.00	0.00	2189.00	0.00	0.00	0.00	0.00	0.00	5824.67
Sub Total (NER)	3714.31	0.00	2.10	2675.65	0.00	0.00	0.00	0.00	0.00	6392.06
Total-I, (All India)	53335.33	272533.69	329.28	33561.46	17011.00	90.62	0.00	0.00	0.00	376861.38



TABLE No.3.6 (Contd.)
GROSS ELECTRICAL ENERGY GENERATION BY ELECTRICITY
DEPARTMENTS,GOVT. UNDERTAKINGS,CENTRAL SECTOR,MUNICIPALITIES AND
PRIVATE SECTOR-PRIME MOVER-WISE DURING 2004-05

State/U.Ts.										(IN GWh)
							Renewable Energy Sources			Total
	Hydro	Steam	Diesel	Gas	Nuclear	Wind	Biomass Power	Biomass Gasifier	U & I	
PRIVATE SECTOR										
Haryana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Himachal Pradesh	1467.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1467.10
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Punjab	3.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.64
Rajasthan	0.00	0.00	0.00	0.00	0.00	282.77	34.87	0.00	0.00	317.64
Uttar Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gujarat	0.00	4841.96	0.00	9858.52	0.00	325.00	0.00	0.00	0.00	15025.48
Madhya Pradesh	29.75	0.00	0.00	0.00	0.00	38.76	0.00	0.00	0.00	68.51
Chhattisgarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maharashtra	1438.54	12614.84	0.00	1335.02	0.00	495.36	0.00	0.00	0.00	15883.76
Goa	0.00	0.00	0.00	336.16	0.00	0.00	0.00	0.00	0.00	336.16
Andhra Pradesh	0.00	0.00	0.00	6277.52	0.00	159.43	0.00	0.00	0.00	6436.95
Karnataka	130.23	1966.77	283.82	661.40	0.00	474.48	176.39	0.00	0.00	3693.09
Kerala	0.00	0.00	15.74	118.89	0.00	0.25	0.00	0.00	0.00	134.88
TamilNadu	0.00	1354.71	1544.30	478.00	0.00	2408.66	0.00	0.00	0.00	5785.67
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	0.00	1949.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1949.81
Orissa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Bengal	0.00	7277.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7277.23
A&N Islands	0.00	0.00	89.53	0.00	0.00	0.00	0.00	0.00	0.00	89.53
Assam	0.00	0.00	0.00	146.81	0.00	0.00	0.00	0.00	0.00	146.81
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total-II, (All India)	3069.26	30005.32	1933.39	19212.32	0.00	4184.71	211.26	0.00	0.00	58616.26
All India Total (I+II)	56404.59	302539.01	2262.67	52773.78	17011.00	4275.33	211.26	0.00	0.00	435477.64

CHAPTER - 4

**CAPTIVE ELECTRICITY
GENERATION PLANTS**



CHAPTER - 4

CAPTIVE ELECTRICITY GENERATION PLANTS (Non-utilities)

REVIEW:

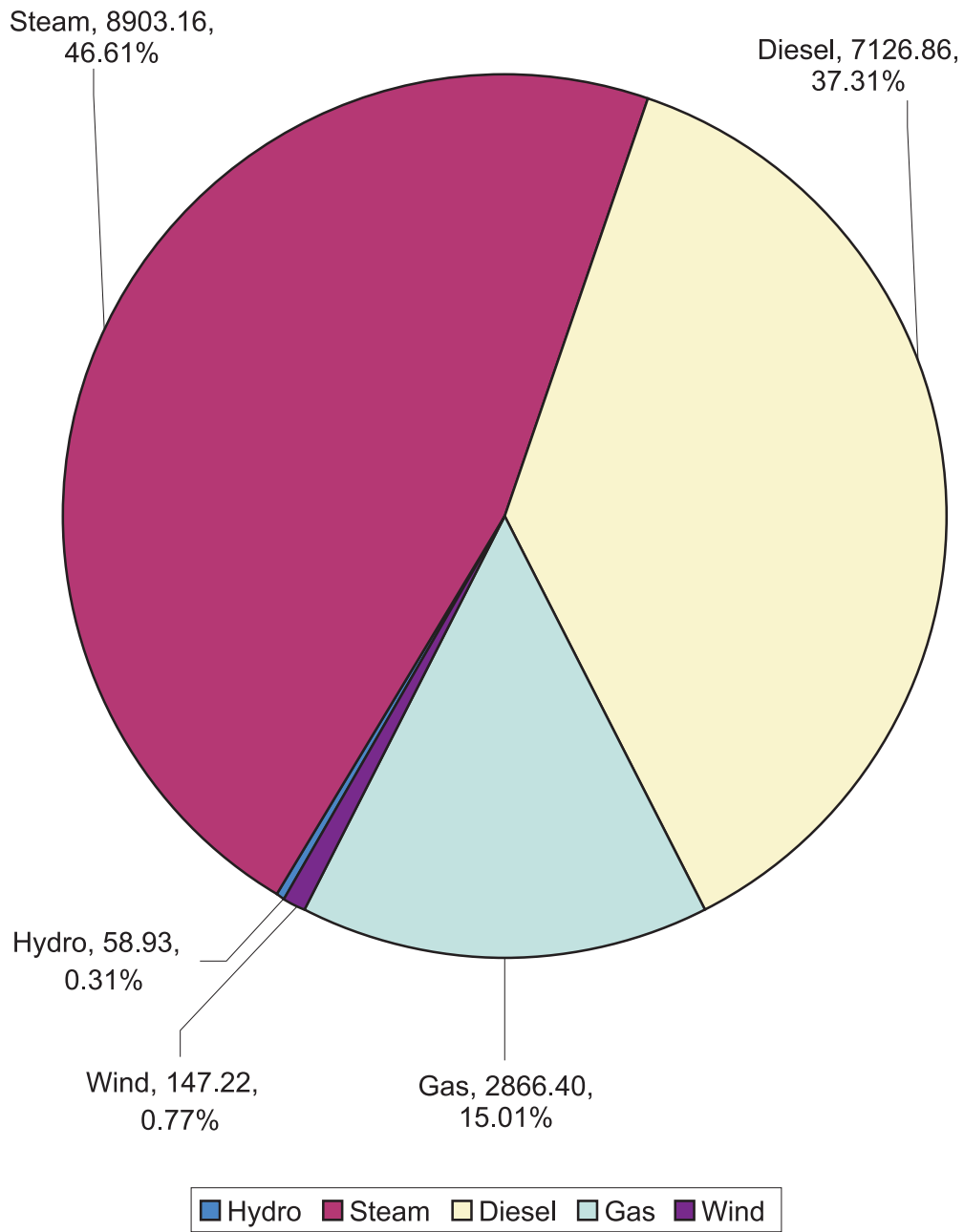
Industrial Sector is the largest consumer of energy it consumes about 35.63% of total electricity consumption in the country. Mostly the industries representing producers of Aluminum, Cement, Chemicals, Fertilizers, Iron & Steel, Paper and Sugar etc. have their own captive power plants either to supplement the electricity purchased from the Utilities or for emergency use in case of power failure/cut. Energy is also produced as a by-product of certain industrial process. The information has been collected from the industries having their own captive power plants with a total installed capacity of 1 MW and above. The same has been compiled in this section of the book.

As per the details received, there are 2098 Industrial units having generating plant installed capacity of 1 MW and above. The installed capacity of captive generating power plants was 19102.57 MW as on 31.03.2005. The installed capacity has registered growth of 1.93% over the installed captive power plant capacity of 18740.31 MW as on 31.3.2004. The contribution of hydro, steam, diesel, gas and wind capacity had been 0.31%, 46.61%, 37.31%, 15.00% and 0.77% respectively in the total capacity. The captive power plant had generated 71414.62 GWh during 2004-05 and registered growth of 4.75% in generation over generation of 68173.12 GWh during 2003-04. The contribution of hydro, steam, diesel, gas and wind generation had been 0.16%, 61.63%, 16.86%, 21.08% and 0.27% respectively in the total generation.

The tables that appear in this Chapter give the details of captive electricity generation, electrical energy consumption and Installed Capacity of Captive electricity generation plants mode-wise, industry-wise & State-wise.



Installed Capacity (Non-Utilities) As on 31.03.05 Total - 19102.57 MW





Gross Energy Generation (Non-Utilities) during 2004-05 Total - 71416.62 GWh (MU)

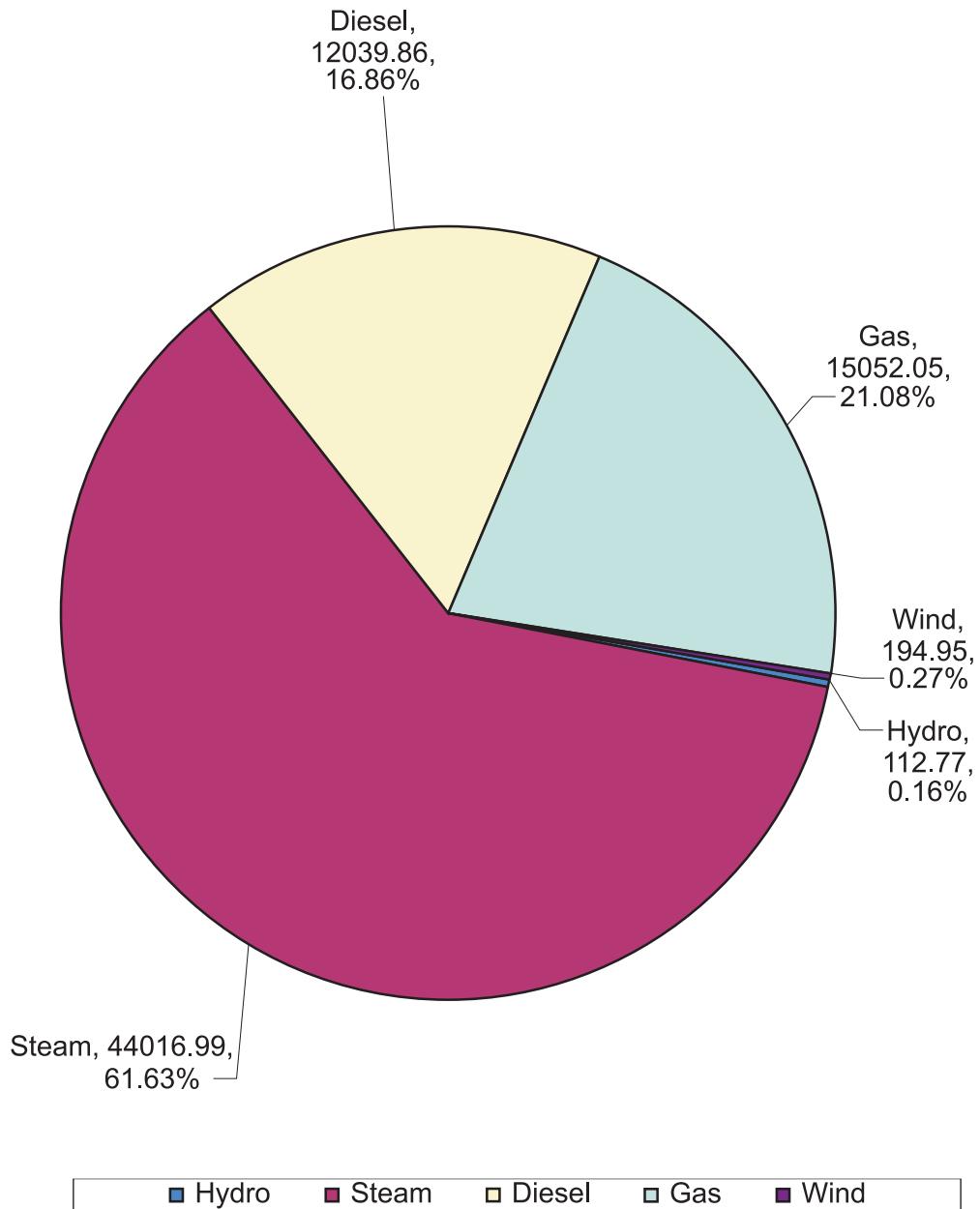




Table No.4.1
INDUSTRY-WISE BREAK-UP OF INSTALLED GENERATING CAPACITY, ENERGY GENERATION AND ENERGY CONSUMPTION OF ELECTRICITY DURING 2004-05

Name of Industry	Installed Generating Capacity (MW)	Energy Generation (GWh)	Energy Consumption (GWh)
Aluminium	2023.21	14361.14	12481.98
Automobiles	215.69	260.70	484.05
Cement	1863.68	6386.80	9883.07
Chemicals,Mineral oils & Petroleum	4600.96	18895.90	20220.20
Fertilizers	1012.32	3847.73	5138.61
Food Products	95.36	62.76	224.23
Heavy & Light Engg	852.57	968.01	3519.05
Iron & Steel	2690.16	12648.50	19705.59
Mining & Quarrying	100.44	69.68	296.33
Non-Ferrous	318.67	1251.81	1853.06
Paper	819.47	3506.12	3986.47
Sugar	917.22	2323.97	1330.86
Textiles	1726.20	3732.15	8619.55
Other Industries	1866.63	3101.34	6105.86
All India(Non-Utilities)	19102.57	71416.62	93848.90



TABLE NO.4.2
INSTALLED GENERATING CAPACITY OF CAPTIVE POWER PLANTS
(1MW & ABOVE) AS ON 31ST MARCH, 2005

States / UTs	(kW)							
	Alumi- nium	Auto- mobiles	Cement	Chemi- cals	Collie- ries	Electrical Engin- eering	Fertili- zer	Food Products
1	2	3	4	5	6	7	8	9
Harayana	0	83050	1700	6166	0	57464	30000	3230
Himachal Pradesh	0	0	44838	0	0	0	0	0
Jammu & Kashmir	0	0	0	0	0	0	0	0
Punjab	0	1590	0	8021	0	1880	34275	10073
Rajasthan	0	0	279480	0	0	4505	95925	0
Uttar Pradesh	828206	38400	1260	64588	0	21500	148990	17978
Chandigarh	0	0	0	0	0	0	0	0
Delhi	0	0	0	0	0	0	0	0
Uttaranchal	0	0	0	0	0	18776	0	0
Sub-Total(NR)	828206	123040	327278	78774	0	104124	309190	31281
Gujarat	1275	0	168868	1169708	0	4468	200320	8073
Madhya Pradesh	0	4838	302895	262383	0	30261	0	3490
Maharashtra	0	24529	77600	498794	0	24381	48000	0
Goa	0	0	0	4310	0	0	13575	3854
Daman & Diu	0	0	0	0	0	0	0	0
Dadra & Nagar Haveli	2400	0	0	2550	0	0	0	0
Chhattisgarh	0	0	170265	0	0	62000	0	0
Sub-Total(WR)	3675	29367	719628	1937745	0	121110	261895	15417
Andhra Pradesh	2400	2661	285851	198125	31600	5832	52892	14928
Karnataka	7180	1600	217028	77555	0	25776	48000	13858
Kerala	0	0	5086	22437	0	4526	46835	0
Tamil Nadu	79688	43469	235650	312905	0	1581	49416	9095
Pondicherry	0	0	0	16362	0	0	0	0
Lakshadweep	0	0	0	0	0	0	0	0
Sub-Total(SR)	89268	47730	743615	627384	31600	37715	197143	37881
Bihar	0	0	19760	8650	0	0	0	0
Orissa	1089268	0	20900	0	0	0	177240	0
West Bengal	4292	15555	0	16300	169240	4240	39850	10776
Andaman & Nicobar	0	0	0	0	0	0	0	0
Sikkim	0	0	0	0	0	0	0	0
Jharkhand	8500	0	28500	30000	0	0	0	0
Sub-Total(ER)	1102060	15555	69160	54950	169240	4240	217090	10776
Assam	0	0	4000	3600	0	0	27000	0
Manipur	0	0	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0	0	0
Tripura	0	0	0	0	0	0	0	0
Arunachal Pradesh	0	0	0	0	0	0	0	0
Mizoram	0	0	0	0	0	0	0	0
Sub-Total(NER)	0	0	4000	3600	0	0	27000	0
Total (All India)	2023209	215692	1863681	2702452	200840	267189	1012318	95355



**Table No. 4.2 (Contd.)
INSTALLED GENERATING CAPACITY OF CAPTIVE POWER PLANTS
(1MW & ABOVE) AS ON 31ST MARCH, 2005**

States / UTs	Heavy Engin- eering	Iron & Steel	Jute	Light Engin- eering	Mineral Oil & Petroleum	Mining & quarring	Miscella- neous
	10	11	12	13	14	15	16
Harayana	10389	21939	0	12181	14191	0	165592
Himachal Pradesh	0	2023	0	1496	0	0	20733
Jammu & Kashmir	0	1010	0	0	0	0	0
Punjab	9473	16898	0	40202	0	0	54247
Rajasthan	0	0	0	0	0	28801	228942
Uttar Pradesh	7820	34473	3672	25056	156048	3112	111833
Chandigarh	0	0	0	0	0	2112	5092
Delhi	0	0	0	0	0	0	0
Uttaranchal	0	1530	0	1600	0	0	30880
Sub-Total(NR)	27682	77871	3672	80534	170239	34025	617319
Gujarat	2250	181870	0	22406	748080	0	87710
Madhya Pradesh	1600	33771	0	0	0	7680	73107
Maharashtra	25180	87329	0	49435	122810	0	142707
Goa	3825	23630	0	0	0	0	12180
Daman & Diu	0	0	0	0	0	0	0
Dadra & Nagar Haveli	0	0	0	0	0	0	0
Chhattisgarh	0	712105	0	0	0	0	18925
Sub-Total(WR)	32855	1038705	0	71841	870890	7680	334629
Andhra Pradesh	3725	410590	2810	13682	57360	0	126788
Karnataka	22951	60569	0	121088	118500	6100	93019
Kerala	2125	22110	0	0	38505	0	28397
Tamil Nadu	1802	47083	0	146385	132324	0	130876
Pondicherry	0	0	0	0	0	0	17932
Lakshadweep	0	0	0	0	0	0	0
Sub-Total(SR)	30603	540352	2810	281155	346689	6100	397012
Bihar	0	0	2990	5250	76500	0	0
Orissa	0	286640	0	1260	1840	3900	1955
West Bengal	15520	189468	131724	18478	197800	0	64628
Andaman & Nicobar	0	0	0	0	0	0	0
Sikkim	0	0	0	0	0	0	0
Jharkhand	15420	557125	0	4780	0	30740	5480
Sub-Total(ER)	30940	1033233	134714	29768	276140	34640	72063
Assam	0	0	0	0	234550	18000	0
Manipur	0	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0	0
Tripura	0	0	0	0	0	0	0
Arunachal Pradesh	0	0	0	0	0	0	0
Mizoram	0	0	0	0	0	0	0
Sub-Total(NER)	0	0	0	0	234550	18000	0
Total (All India)	122080	2690161	141196	463298	1898508	100445	1421023



**Table No. 4.2 (Contd.)
INSTALLED GENERATING CAPACITY OF CAPTIVE POWER PLANTS
(1MW & ABOVE) AS ON 31ST MARCH, 2005**

States / UTs							(kW)
	Non-Ferrous	Paper	Plastic	Rubber	Sugar	Textile	Total (2 to 22)
	17	18	19	20	21	22	23
Harayana	0	6800	0	1360	25628	37742	477431
Himachal Pradesh	0	0	0	0	0	48813	117903
Jammu & Kashmir	0	0	0	0	0	8517	9527
Punjab	0	16963	0	6796	33883	117994	352292
Rajasthan	34000	3188	0	11105	1594	119049	806588
Uttar Pradesh	0	73127	0	2160	73310	127619	1739150
Chandigarh	0	0	0	0	0	0	7204
Delhi	0	0	0	0	0	0	0
Uttaranchal	0	37853	0	0	0	2500	93139
Sub-Total(NR)	34000	137930	0	21421	134414	462234	3603233
Gujarat	79800	72795	0	0	0	222064	2969687
Madhya Pradesh	30000	70042	0	10750	0	136475	967292
Maharashtra	0	44913	0	0	0	48394	1194072
Goa	0	0	0	5200	0	0	66574
Daman & Diu	0	0	0	0	0	0	0
Dadra & Nagar Haveli	0	3200	0	0	0	30682	38832
Chhattisgarh	0	3185	0	0	0	12000	978480
Sub-Total(WR)	109800	194135	0	15950	0	449615	6214936
Andhra Pradesh	11220	126673	0	7480	200489	105859	1660965
Karnataka	0	85888	0	0	217966	41708	1158786
Kerala	10353	26031	0	13125	0	31651	251181
Tamil Nadu	0	105880	0	18087	342015	558618	2214874
Pondicherry	0	0	2550	2125	5844	8520	53333
Lakshadweep	0	0	0	0	0	0	0
Sub-Total(SR)	21573	344472	2550	40817	766314	746356	5339138
Bihar	0	0	0	1000	0	0	114150
Orissa	137500	63685	0	6250	16490	10800	1817728
West Bengal	0	19250	0	15580	0	57192	969893
Andaman & Nicobar	0	0	0	0	0	0	0
Sikkim	0	0	0	0	0	0	0
Jharkhand	15800	0	0	0	0	0	696345
Sub-Total(ER)	153300	82935	0	22830	16490	67992	3598116
Assam	0	60000	0	0	0	0	347150
Manipur	0	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0	0
Tripura	0	0	0	0	0	0	0
Arunachal Pradesh	0	0	0	0	0	0	0
Mizoram	0	0	0	0	0	0	0
Sub-Total(NER)	0	60000	0	0	0	0	347150
Total (All India)	318673	819472	2550	101018	917218	1726196	19102573



Table No. 4.3
GROSS ENERGY GENERATION OF CAPTIVE POWER PLANTS
(1MW & ABOVE) DURING 2004-05

<i>(GWh)</i>								
States / UTs	Alumi- nium	Auto- mobiles	Cement	Chem- icals	Collie- ries	Electrical Engin- eering	Fertili- zer	Food Products
1	2	3	4	5	6	7	8	9
Harayana	0.00	148.72	0.00	6.04	0.00	128.83	166.70	5.02
Himachal Pradesh	0.00	0.00	42.24	0.00	0.00	0.00	0.00	0.00
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Punjab	0.00	0.95	0.00	1.59	0.00	0.68	164.18	6.83
Rajasthan	0.00	0.00	990.67	0.00	0.00	30.79	834.72	0.00
Uttar Pradesh	6422.57	55.08	0.25	227.07	0.00	35.50	667.71	8.47
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttaranchal	0.00	0.00	0.00	0.00	0.00	56.28	0.00	0.00
Sub-Total(NR)	6422.57	204.75	1033.16	234.70	0.00	252.08	1833.31	20.32
Gujarat	0.28	0.00	938.85	5778.16	0.00	0.07	924.09	0.32
Madhya Pradesh	0.00	4.07	1182.87	922.76	0.00	53.90	0.00	0.49
Maharashtra	0.00	2.94	498.37	2162.59	0.00	18.45	204.48	0.00
Goa	0.00	0.00	0.00	0.73	0.00	0.00	90.41	1.99
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dadra & Nagar Haveli	0.27	0.00	0.00	0.37	0.00	0.00	0.00	0.00
Chhattisgarh	0.00	0.00	644.77	0.00	0.00	204.61	0.00	0.00
Sub-Total(WR)	0.55	7.00	3264.85	8864.60	0.00	277.03	1218.98	2.80
Andhra Pradesh	0.12	0.11	426.29	544.51	96.09	0.10	267.82	2.28
Karnataka	5.88	1.80	926.23	291.96	0.00	1.81	237.96	29.43
Kerala	0.00	0.00	2.28	50.89	0.00	0.04	83.19	0.00
Tamil Nadu	743.35	47.04	676.91	1259.33	0.00	0.50	113.36	7.93
Pondicherry	0.00	0.00	0.00	49.48	0.00	0.00	0.00	0.00
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(SR)	749.35	48.95	2031.71	2196.17	96.09	2.45	702.33	39.64
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	7150.01	0.00	12.15	0.00	0.00	0.00	0.00	0.00
West Bengal	0.00	0.00	0.00	0.00	61.10	0.00	2.88	0.00
Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	38.67	0.00	44.93	215.40	0.00	0.00	0.00	0.00
Sub-Total(ER)	7188.67	0.00	57.08	215.40	61.10	0.00	2.88	0.00
Assam	0.00	0.00	0.00	5.19	0.00	0.00	90.23	0.00
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	0.00	0.00	5.19	0.00	0.00	90.23	0.00
Total (All India)	14361.14	260.70	6386.80	11516.07	157.19	531.56	3847.73	62.76



Table No. 4.3 (Contd.)
GROSS ENERGY GENERATION OF CAPTIVE POWER PLANTS
(1MW & ABOVE) DURING 2004-05

States / UTs	(GWh)						
	Heavy Engin- eering	Iron & Steel	Jute	Light Engin- eering	Mineral Oil & Petroleum	Mining & quarring	Miscella- neous
	10	11	12	13	14	15	16
Harayana	2.60	33.28	0.00	5.45	3.38	0.00	291.35
Himachal Pradesh	0.00	1.21	0.00	0.74	0.00	0.00	9.34
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Punjab	0.72	2.15	0.00	21.92	0.00	0.00	103.67
Rajasthan	0.00	0.00	0.00	0.00	0.00	63.16	1020.98
Uttar Pradesh	4.90	146.49	1.17	15.22	774.18	2.87	98.99
Chandigarh	0.00	0.00	0.00	0.00	0.00	2.30	4.49
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttaranchal	0.00	0.00	0.00	0.00	0.00	0.00	146.55
Sub-Total(NR)	8.22	183.13	1.17	43.33	777.56	68.33	1675.38
Gujarat	0.37	405.10	0.00	40.68	3673.58	0.00	186.27
Madhya Pradesh	0.13	50.01	0.00	0.00	0.00	0.19	96.46
Maharashtra	1.32	388.00	0.00	75.89	617.62	0.00	110.32
Goa	0.35	27.41	0.00	0.00	0.00	0.00	17.61
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dadra & Nagar Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chhattisgarh	0.00	3006.03	0.00	0.00	0.00	0.00	116.91
Sub-Total(WR)	2.17	3876.55	0.00	116.57	4291.20	0.19	527.56
Andhra Pradesh	0.01	2363.79	0.14	1.08	252.42	0.00	462.84
Karnataka	6.08	272.57	0.00	195.73	585.70	1.17	31.56
Kerala	1.63	17.35	0.00	0.00	195.70	0.00	3.07
Tamil Nadu	0.01	90.16	0.00	61.48	430.07	0.00	29.80
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	23.56
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(SR)	7.73	2743.87	0.14	258.29	1463.89	1.17	550.82
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	0.00	1410.85	0.00	0.00	0.00	0.00	0.00
West Bengal	0.03	1106.05	23.76	0.11	714.59	0.00	33.38
Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	0.01	3328.05	0.00	0.00	0.00	0.00	0.00
Sub-Total(ER)	0.04	5844.95	23.76	0.11	714.59	0.00	33.38
Assam	0.00	0.00	0.00	0.00	132.59	0.00	0.00
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	0.00	0.00	0.00	132.59	0.00	0.00
Total (All India)	18.16	12648.50	25.07	418.30	7379.83	69.68	2787.14



Table No. 4.3 (Contd.)
GROSS ENERGY GENERATION OF CAPTIVE POWER PLANTS
(1MW & ABOVE) DURING 2004-05

States / UTs	(GWh)						
	Non-Ferrous	Paper	Plastic	Rubber	Sugar	Textile	Total
	17	18	19	20	21	22	23
Harayana	0.00	3.07	0.00	0.37	43.64	225.30	1063.75
Himachal Pradesh	0.00	0.00	0.00	0.00	0.00	62.33	115.86
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.00	1.02	1.02
Punjab	0.00	69.28	0.00	3.33	29.01	299.89	704.19
Rajasthan	1.83	0.00	0.00	34.54	1.64	509.53	3487.85
Uttar Pradesh	0.00	197.05	0.00	3.52	174.79	386.46	9222.30
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	6.79
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttaranchal	0.00	200.74	0.00	0.00	0.00	0.25	403.82
Sub-Total(NR)	1.83	470.14	0.00	41.76	249.08	1484.78	15005.58
Gujarat	410.26	298.15	0.00	0.00	0.00	871.14	13527.31
Madhya Pradesh	1.19	258.77	0.00	39.26	0.00	381.91	2992.00
Maharashtra	0.00	274.83	0.00	0.00	0.00	113.43	4468.23
Goa	0.00	0.00	0.00	4.59	0.00	0.00	143.09
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dadra & Nagar Haveli	0.00	2.99	0.00	0.00	0.00	11.18	14.80
Chhattisgarh	0.00	20.09	0.00	0.00	0.00	14.40	4006.81
Sub-Total(WR)	411.45	854.83	0.00	43.85	0.00	1392.06	25152.24
Andhra Pradesh	0.17	541.35	0.00	31.16	448.64	129.99	5568.91
Karnataka	0.00	418.13	0.00	0.00	454.39	71.70	3532.10
Kerala	3.26	95.79	0.00	4.75	0.00	12.64	470.59
Tamil Nadu	0.00	543.91	0.00	7.38	1166.99	613.01	5791.23
Pondicherry	0.00	0.00	0.88	2.16	4.87	17.36	98.31
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(SR)	3.43	1599.18	0.88	45.45	2074.89	844.70	15461.13
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	825.19	186.51	0.00	0.00	0.00	10.45	9595.15
West Bengal	0.00	0.00	0.00	0.00	0.00	0.17	1942.07
Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	9.90	0.00	0.00	0.00	0.00	0.00	3636.96
Sub-Total(ER)	835.09	186.51	0.00	0.00	0.00	10.62	15174.19
Assam	0.00	395.46	0.00	0.00	0.00	0.00	623.48
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	395.46	0.00	0.00	0.00	0.00	623.48
Total (All India)	1251.81	3506.12	0.88	131.06	2323.97	3732.15	71416.62



Table No.4.4
INDUSTRY-WISE INSTALLED CAPACITY OF CAPTIVE POWER PLANTS
(1 MW & ABOVE) AS ON 31.03.2005

							(kW)
Name of Industry	No. of Industries covered	Hydro	Steam	Diesel	Gas	Wind	Total
1	2	3	4	5	6	7	8
Aluminium	16	0	1999394	23815	0	0	2023209
Automobiles	26	0	63750	151942	0	0	215692
Cement	135	0	708176	1086454	36460	32590	1863681
Chemicals	259	0	816966	860601	986362	38523	2702452
Collieries	11	0	131600	49240	20000	0	200840
Elect Engg	51	0	86750	175039	5400	0	267189
Fertilizers	41	0	638567	225133	148618	0	1012318
Food Products	39	0	15980	79375	0	0	95355
Heavy Engg	29	0	0	122080	0	0	122080
Iron & Steel	115	22110	1850708	422943	377400	17000	2690161
Jute	45	0	4000	137196	0	0	141196
Light Engg	144	17500	0	434711	0	11087	463298
Mineral Oil & Petroleum	45	0	504539	271499	1122470	0	1898508
Mining & Quarrying	17	0	20000	62445	18000	0	100445
Misc	381	6000	223289	1139377	19332	33025	1421023
Non-Ferrous	14	0	221600	77073	20000	0	318673
Paper	87	0	638513	179684	0	1275	819472
Plastic	1	0	0	2550	0	0	2550
Rubber	25	0	19181	77377	0	4460	101018
Sugar	138	0	873314	42841	1063	0	917218
Textiles	479	13324	86830	1505489	111299	9255	1726196
Total	2098	58934	8903158	7126863	2866403	147215	19102573



Table No. 4.5
INDUSTRY-WISE ELECTRICITY GENERATION AND CONSUMPTION
BY INDUSTRIES HAVING CAPTIVE POWER PLANTS
(1 MW & ABOVE) DURING 2004-05

(GWh)

<i>Name of Industry</i>	<i>ENERGY GENERATED</i>					<i>Total</i>
	<i>Hydro</i>	<i>Steam</i>	<i>Diesel</i>	<i>Gas</i>	<i>Wind</i>	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Aluminium	0.00	14354.59	6.55	0.00	0.00	14361.14
Automobiles	0.00	126.22	134.48	0.00	0.00	260.70
Cement	0.00	3304.06	2651.09	366.66	64.99	6386.80
Chemicals	0.00	3032.46	2163.43	6269.37	50.81	11516.07
Colleges	0.00	157.19	0.00	0.00	0.00	157.19
Elect Engg	0.00	270.15	242.10	19.31	0.00	531.56
Fertilizers	0.00	2387.60	625.74	834.39	0.00	3847.73
Food Products	0.00	4.02	58.74	0.00	0.00	62.76
Heavy Engg	0.00	0.00	18.16	0.00	0.00	18.16
Iron & Steel	17.35	9772.78	743.84	2094.71	19.82	12648.50
Jute	0.00	0.00	25.07	0.00	0.00	25.07
Light Engg	50.06	0.00	345.33	0.00	22.91	418.30
Mineral Oil & Petroleum	0.00	2239.16	317.52	4823.15	0.00	7379.83
Mining & Quarrying	0.00	0.00	69.68	0.00	0.00	69.68
Misc	20.17	1384.64	1281.60	91.66	9.09	2787.14
Non-Ferrous	0.00	1246.55	5.26	0.00	0.00	1251.81
Paper	0.00	3098.42	405.94	0.00	1.76	3506.12
Plastic	0.00	0.00	0.88	0.00	0.00	0.88
Rubber	0.00	71.90	56.31	0.00	2.85	131.06
Sugar	0.00	2307.69	15.46	0.82	0.00	2323.97
Textiles	25.19	259.57	2872.69	551.98	22.72	3732.15
Total	112.77	44016.99	12039.86	15052.05	194.95	71416.62



**Table No. 4.5 (Contd.)
INDUSTRY-WISE ELECTRICITY GENERATION AND
CONSUMPTION BY INDUSTRIES HAVING CAPTIVE
PLANTS (1 MW & ABOVE) DURING 2004-05**

<i>Name of Industry</i>	<i>(GWh)</i>					
	<i>Auxiliary Consumption</i>	<i>Net Generation (7-8)</i>	<i>Export to Utilities</i>	<i>Energy used in the industry out of self Generation (9-10)</i>	<i>Import from Utilities</i>	<i>Energy consumed in the industry (11+12)</i>
	8	9	10	11	12	13
Aluminium	1559.51	12801.64	708.04	12093.60	388.38	12481.9
Automobiles	11.35	249.36	13.26	236.10	247.95	484.05
Cement	440.77	5946.03	39.32	5906.70	3976.37	9883.07
Chemicals	564.97	10951.10	556.89	10394.20	2926.33	13320.54
Collieries	25.52	131.67	0.00	131.67	605.71	737.38
Elect Engg	42.32	489.24	2.60	486.64	508.00	994.64
Fertilizers	269.32	3578.41	59.52	3518.89	1619.72	5138.61
Food Products	2.41	60.35	0.00	60.35	163.88	224.23
Heavy Engg	1.17	16.99	0.10	16.89	628.31	645.20
Iron & Steel	1200.76	11447.75	459.73	10988.01	8717.58	19705.59
Jute	0.92	24.15	1.26	22.89	121.51	144.39
Light Engg	14.15	404.15	6.32	397.83	1481.39	1879.21
Mineral Oil & Petroleum	296.99	7082.85	352.79	6730.05	169.61	6899.66
Mining & Quarrying	0.93	68.75	0.00	68.75	227.58	296.33
Misc	130.59	2656.56	335.50	2321.05	2471.31	4792.36
Non-Ferrous	138.11	1113.70	510.57	603.13	1249.93	1853.06
Paper	277.79	3228.34	111.40	3116.94	869.54	3986.47
Plastic	0.04	0.84	0.00	0.84	9.07	9.91
Rubber	9.86	121.20	0.00	121.20	300.62	421.82
Sugar	239.48	2084.49	861.03	1223.46	107.41	1330.86
Textiles	183.19	3548.96	128.73	3420.23	5199.31	8619.55
Total	5410.12	66006.50	4147.07	61859.42	31989.48	93848.90



Table No.4.6
STATE-WISE INSTALLED CAPACITY OF CAPTIVE POWER PLANTS
(1 MW & ABOVE) AS ON 31.03.2005

(kW)

<i>INSTALLED CAPACITY AS ON 31.03.2005</i>							
<i>States / UTS</i>	<i>No. of Industries covered</i>	<i>Hydro</i>	<i>Steam</i>	<i>Diesel</i>	<i>Gas</i>	<i>Wind</i>	<i>Total</i>
1	2	3	4	5	6	7	8
Harayana	94	0	117575	359856	0	0	477431
Himachal Pradesh	21	0	0	117903	0	0	117903
Jammu & Kashmir	2	0	0	9527	0	0	9527
Punjab	84	0	93159	259133	0	0	352292
Rajasthan	81	0	319366	456597	30625	0	806588
Uttar Pradesh	105	0	1160866	521485	56800	0	1739150
Chandigarh	3	0	0	7204	0	0	7204
Delhi	0	0	0	0	0	0	0
Uttaranchal	12	0	49554	43585	0	0	93139
Sub-Total(NR)	402	0	1740520	1775289	87424	0	3603233
Gujarat	202	0	598310	741975	1616952	12450	2969687
Madhya Pradesh	116	0	405245	522197	39850	0	967292
Maharashtra	167	6000	256016	569106	332950	30000	1194072
Goa	20	0	10500	56074	0	0	66574
Daman & Diu	0	0	0	0	0	0	0
Dadra & Nagar Haveli	12	0	0	38832	0	0	38832
Chhattisgarh	27	0	605525	160455	210000	2500	978480
Sub-Total(WR)	544	6000	1875596	2088638	2199752	44950	6214936
Andhra Pradesh	216	5268	887780	642190	121172	4555	1660965
Karnataka	161	25556	601568	530599	1063	0	1158786
Kerala	45	22110	91321	116500	21250	0	251181
Tamil Nadu	491	0	773279	1277266	66619	97710	2214874
Pondicherry	16	0	5844	26416	21073	0	53333
Lakshadweep	0	0	0	0	0	0	0
Sub-Total(SR)	929	52934	2359792	2592971	231177	102265	5339138
Bihar	11	0	56350	17800	40000	0	114150
Orissa	37	0	1674400	143328	0	0	1817728
West Bengal	134	0	439200	422693	108000	0	969893
Andaman & Nicobar	0	0	0	0	0	0	0
Sikkim	0	0	0	0	0	0	0
Jharkhand	24	0	620800	75545	0	0	696345
Sub-Total(ER)	206	0	2790750	659366	148000	0	3598116
Assam	17	0	136500	10600	200050	0	347150
Manipur	0	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0	0
Tripura	0	0	0	0	0	0	0
Arunachal Pradesh	0	0	0	0	0	0	0
Mizoram	0	0	0	0	0	0	0
Sub-Total(NER)	17	0	136500	10600	200050	0	347150
Total (All India)	2098	58934	8903158	7126863	2866403	147215	19102573



Table No. 4.7
STATE-WISE ELECTRICITY GENERATION AND CONSUMPTION BY INDUSTRIES
HAVING CAPTIVE POWER PLANTS (1 MW & ABOVE) DURING 2004-05

(GWh)

States / UTs	ENERGY GENERATED					
	Hydro	Steam	Diesel	Gas	Wind	Total
1	2	3	4	5	6	7
Harayana	0.00	333.36	730.39	0.00	0.00	1063.75
Himachal Pradesh	0.00	0.00	115.86	0.00	0.00	115.86
Jammu & Kashmir	0.00	0.00	1.02	0.00	0.00	1.02
Punjab	0.00	357.58	346.62	0.00	0.00	704.19
Rajasthan	0.00	2003.40	1340.90	143.55	0.00	3487.85
Uttar Pradesh	0.00	7816.94	1187.85	217.50	0.00	9222.30
Chandigarh	0.00	0.00	6.79	0.00	0.00	6.79
Delhi	0.00	0.00	0.00	0.00	0.00	0.00
Uttaranchal	0.00	229.32	174.50	0.00	0.00	403.82
Sub-Total(NR)	0.00	10740.60	3903.93	361.05	0.00	15005.58
Gujarat	0.00	2104.76	1773.58	9629.63	19.35	13527.31
Madhya Pradesh	0.00	1661.74	1092.42	237.85	0.00	2992.00
Maharashtra	20.17	1216.50	1209.74	2012.76	9.07	4468.23
Goa	0.00	117.80	25.29	0.00	0.00	143.09
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00
Dadra & Nagar Haveli	0.00	0.00	14.80	0.00	0.00	14.80
Chhattisgarh	0.00	1858.16	418.50	1727.31	2.84	4006.81
Sub-Total(WR)	20.17	6958.95	4534.32	13607.55	31.26	25152.24
Andhra Pradesh	3.86	4437.51	532.44	589.19	5.91	5568.91
Karnataka	71.39	2411.21	1048.68	0.82	0.00	3532.10
Kerala	17.35	272.90	62.08	118.26	0.00	470.59
Tamil Nadu	0.00	3670.92	1890.14	72.38	157.78	5791.23
Pondicherry	0.00	4.87	13.46	79.98	0.00	98.31
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(SR)	92.60	10797.41	3546.80	860.63	163.69	15461.13
Bihar	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	0.00	9572.55	22.60	0.00	0.00	9595.15
West Bengal	0.00	1915.07	27.00	0.00	0.00	1942.07
Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	0.00	3636.94	0.02	0.00	0.00	3636.96
Sub-Total(ER)	0.00	15124.57	49.62	0.00	0.00	15174.19
Assam	0.00	395.46	5.19	222.82	0.00	623.48
Manipur	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	395.46	5.19	222.82	0.00	623.48
Total (All India)	112.77	44016.99	12039.86	15052.05	194.95	71416.62



Table No. 4.7(Contd.)
STATE-WISE ELECTRICITY GENERATION AND CONSUMPTION BY INDUSTRIES
HAVING CAPTIVE POWER PLANTS (1 MW & ABOVE) DURING 2004-05
(GWh)

<i>State/UTs</i>	<i>Auxiliary Consumption</i>	<i>Net Generation (7-8)</i>	<i>Export to Utilities</i>	<i>Energy used in the industry out of self Generation (9-10)</i>	<i>Import from Utilities</i>	<i>Energy consumed in the industry (11+12)</i>
	8	9	10	11	12	13
Harayana	45.89	1017.86	13.47	1004.38	501.08	1505.46
Himachal Pradesh	5.68	110.18	0.38	109.80	771.77	881.57
Jammu & Kashmir	0.00	1.02	0.00	1.02	86.60	87.62
Punjab	66.87	637.33	0.00	637.33	1651.30	2288.63
Rajasthan	202.10	3285.76	20.24	3265.52	1341.94	4607.46
Uttar Pradesh	874.66	8347.64	158.42	8189.22	1585.52	9774.74
Chandigarh	0.02	6.77	0.00	6.77	12.09	18.86
Delhi	0.00	0.00	0.00	0.00	0.00	0.00
Uttaranchal	21.81	382.01	0.00	382.01	122.91	504.92
Sub-Total(NR)	1217.02	13788.56	192.52	13596.05	6073.21	19669.26
Gujarat	645.65	12881.66	1126.21	11755.45	3689.49	15444.93
Madhya Pradesh	150.87	2841.13	0.00	2841.13	1204.33	4045.46
Maharashtra	160.60	4307.63	0.00	4307.63	4818.94	9126.57
Goa	5.52	137.56	0.00	137.56	221.93	359.49
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00
Dadra & Nagar Haveli	0.19	14.61	0.00	14.61	330.83	345.44
Chhattisgarh	144.89	3861.92	0.00	3861.92	1813.18	5675.10
Sub-Total(WR)	1107.73	24044.52	1126.21	22918.30	12078.69	34996.99
Andhra Pradesh	534.50	5034.41	749.21	4285.20	3825.44	8110.64
Karnataka	273.79	3258.31	175.86	3082.45	1398.79	4481.23
Kerala	25.18	445.41	2.36	443.05	975.10	1418.15
Tamil Nadu	437.64	5353.59	712.90	4640.69	4411.59	9052.28
Pondicherry	3.35	94.96	0.00	94.96	176.08	271.04
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(SR)	1274.46	14186.67	1640.33	12546.34	10787.00	23333.34
Bihar	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	1074.93	8520.22	1167.08	7353.14	1327.95	8681.08
West Bengal	170.96	1771.11	7.74	1763.37	601.62	2365.00
Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	519.26	3117.70	13.19	3104.52	1062.58	4167.10
Sub-Total(ER)	1765.15	13409.04	1188.01	12221.03	2992.15	15213.18
Assam	45.77	577.71	0.00	577.71	58.43	636.14
Manipur	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(NER)	45.77	577.71	0.00	577.71	58.43	636.14
Total (All India)	5410.12	66006.50	4147.07	61859.42	31989.48	93848.90



Table No. 4.8
ENERGY CONSUMPTION BY INDUSTRIES HAVING CAPTIVE POWER
PLANTS (1MW & ABOVE) DURING 2004-05

(GWh)								
States / UTs	Alumi- nium	Auto- mobiles	Cement	Chem- icals	Collie- ries	Electrical Engin- eering	Fertili- zer	Food Prod- ucts
1	2	3	4	5	6	7	8	9
Harayana	0.00	137.62	0.00	11.46	0.00	166.61	168.17	19.15
Himachal Pradesh	0.00	0.00	457.29	0.00	0.00	0.00	0.00	0.00
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Punjab	0.00	9.94	0.00	261.19	0.00	28.54	292.36	44.49
Rajasthan	0.00	0.00	1487.45	0.00	0.00	31.31	845.29	0.00
Uttar Pradesh	5614.56	49.68	20.43	280.71	0.00	146.11	1105.91	14.1
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttaranchal	0.00	0.00	0.00	0.00	0.00	79.90	0.00	0.00
Sub-Total(NR)	5614.56	197.24	1965.17	553.35	0.00	452.47	2411.72	77.80
Gujarat	4.62	0.00	950.70	5549.39	0.00	13.89	1005.32	23.81
Madhya Pradesh	0.00	18.78	1524.56	995.17	0.00	157.35	0.00	7.35
Maharashtra	0.00	162.34	546.65	2906.69	0.00	99.93	467.88	0.00
Goa	0.00	0.00	0.00	26.98	0.00	0.00	98.77	12.75
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dadra & Nagar Haveli	21.93	0.00	0.00	91.60	0.00	0.00	0.00	0.00
Chhattisgarh	0.00	0.00	997.50	0.00	0.00	193.43	0.00	0.00
Sub-Total(WR)	26.54	181.12	4019.41	9569.83	0.00	464.60	1571.97	43.91
Andhra Pradesh	7.90	6.93	1444.25	952.02	687.38	10.54	291.04	26.03
Karnataka	105.76	3.53	941.16	315.00	0.00	48.92	233.59	44.66
Kerala	0.00	0.00	55.73	98.54	0.00	8.89	216.75	0.00
Tamil Nadu	700.55	95.23	1269.82	1500.74	0.00	9.22	301.11	31.83
Pondicherry	0.00	0.00	0.00	126.50	0.00	0.00	0.00	0.00
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(SR)	814.21	105.69	3710.96	2992.80	687.38	77.57	1042.49	102.52
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	5991.71	0.00	147.62	0.00	0.00	0.00	0.00	0.00
West Bengal	0.00	0.00	0.00	0.00	50.00	0.00	5.38	0.00
Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	34.96	0.00	39.92	183.33	0.00	0.00	0.00	0.00
Sub-Total(ER)	6026.67	0.00	187.54	183.33	50.00	0.00	5.38	0.00
Assam	0.00	0.00	0.00	21.23	0.00	0.00	107.04	0.00
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	0.00	0.00	21.23	0.00	0.00	107.04	0.00
Total (All India)	12481.98	484.05	9883.07	13320.54	737.38	994.64	5138.61	224.23



Table No. 4.8 (Contd.)
ENERGY CONSUMPTION BY INDUSTRIES HAVING CAPTIVE POWER
PLANTS (1MW & ABOVE) DURING 2004-05

States / UTs	(GWh)						
	Heavy Engin- eering	Iron & Steel	Jute	Light Engin- eering	Mineral Oil & Petroleum	Mining & quarring	Miscella- neous
	10	11	12	13	14	15	16
Harayana	17.00	89.63	0.00	29.30	7.32	0.00	532.10
Himachal Pradesh	0.00	8.30	0.00	6.03	0.00	0.00	51.78
Jammu & Kashmir	0.00	3.05	0.00	0.00	0.00	0.00	0.00
Punjab	36.75	193.29	0.00	146.57	0.00	0.00	199.89
Rajasthan	0.00	0.00	0.00	0.00	0.00	147.73	1268.26
Uttar Pradesh	20.45	241.27	5.24	195.89	759.52	6.00	238.78
Chandigarh	0.00	0.00	0.00	0.00	0.00	6.60	12.26
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttaranchal	0.00	11.94	0.00	0.55	0.00	0.00	148.87
Sub-Total(NR)	74.21	547.48	5.24	378.35	766.85	160.33	2451.94
Gujarat	9.87	2527.77	0.00	108.69	3290.55	0.00	389.50
Madhya Pradesh	1.29	98.26	0.00	0.00	0.00	66.21	265.65
Maharashtra	263.79	2416.51	0.00	288.44	620.99	0.00	449.67
Goa	8.08	101.85	0.00	0.00	0.00	0.00	53.53
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dadra & Nagar Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chhattisgarh	0.00	4248.98	0.00	0.00	0.00	0.00	78.15
Sub-Total(WR)	283.02	9393.37	0.00	397.13	3911.53	66.21	1236.51
Andhra Pradesh	13.59	2374.37	10.79	49.55	247.15	0.00	356.83
Karnataka	182.17	456.22	0.00	430.92	537.55	69.79	250.39
Kerala	15.93	71.36	0.00	0.00	235.94	0.00	117.65
Tamil Nadu	0.04	281.16	0.00	545.70	372.45	0.00	263.69
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	80.76
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(SR)	211.73	3183.11	10.79	1026.17	1393.09	69.79	1069.31
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	0.00	1470.84	0.00	0.00	0.00	0.00	0.00
West Bengal	1.19	1329.86	128.36	77.57	707.59	0.00	34.60
Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	75.05	3780.92	0.00	0.00	0.00	0.00	0.00
Sub-Total(ER)	76.24	6581.62	128.36	77.57	707.59	0.00	34.60
Assam	0.00	0.00	0.00	0.00	120.60	0.00	0.00
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	0.00	0.00	0.00	120.60	0.00	0.00
Total (All India)	645.20	19705.59	144.39	1879.21	6899.66	296.33	4792.36



Table No. 4.8 (Contd.)
ENERGY CONSUMPTION BY INDUSTRIES HAVING CAPTIVE POWER
PLANTS (1MW & ABOVE) DURING 2004-05

States / UTs							(GWh)
	Non-Ferrous	Paper	Plastic	Rubber	Sugar	Textile	Total
	17	18	19	20	21	22	23
Harayana	0.00	24.80	0.00	1.95	43.56	256.79	1505.46
Himachal Pradesh	0.00	0.00	0.00	0.00	0.00	358.17	881.57
Jammu & Kashmir	0.00	0.00	0.00	0.00	0.00	84.57	87.62
Punjab	0.00	172.07	0.00	20.03	44.10	839.41	2288.63
Rajasthan	180.69	13.10	0.00	37.73	2.25	593.64	4607.46
Uttar Pradesh	0.00	215.22	0.00	11.65	135.70	713.45	9774.74
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	18.86
Delhi	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttaranchal	0.00	248.47	0.00	0.00	0.00	15.19	504.92
Sub-Total(NR)	180.69	673.67	0.00	71.36	225.61	2861.22	19669.26
Gujarat	448.66	371.45	0.00	0.00	0.00	992.94	15687.14
Madhya Pradesh	1.19	267.71	0.00	47.69	0.00	590.41	4041.62
Maharashtra	0.00	323.95	0.00	0.00	0.00	434.85	8981.69
Goa	0.00	0.00	0.00	57.53	0.00	0.00	359.49
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dadra & Nagar Haveli	0.00	7.66	0.00	0.00	0.00	224.26	345.44
Chhattisgarh	0.00	17.02	0.00	0.00	0.00	46.52	5581.61
Sub-Total(WR)	449.85	987.79	0.00	105.22	0.00	2288.98	34996.99
Andhra Pradesh	194.72	542.53	0.00	49.54	304.33	541.15	8110.64
Karnataka	0.00	451.64	0.00	0.00	269.23	140.71	4481.23
Kerala	119.08	205.77	0.00	110.23	0.00	162.28	1418.15
Tamil Nadu	0.00	543.17	0.00	74.98	525.31	2537.28	9052.28
Pondicherry	0.00	0.00	9.91	10.49	6.38	37.00	271.04
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(SR)	313.80	1743.11	9.91	245.24	1105.25	3418.42	23333.34
Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	855.80	194.64	0.00	0.00	0.00	20.48	8681.08
West Bengal	0.00	0.00	0.00	0.00	0.00	30.45	2365.00
Andaman & Nicobar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jharkhand	52.92	0.00	0.00	0.00	0.00	0.00	4167.10
Sub-Total(ER)	908.71	194.64	0.00	0.00	0.00	50.92	15213.18
Assam	0.00	387.27	0.00	0.00	0.00	0.00	636.14
Manipur	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	387.27	0.00	0.00	0.00	0.00	636.14
Total (All India)	1853.06	3986.47	9.91	421.82	1330.86	8619.55	93848.90



Table No 4.9
CLASSIFICATION OF CAPTIVE ELECTRICITY GENERATION PLANTS OF
INDUSTRIES CAPACITY-WISE DURING 2004-05

Range of Installed Capacity (MW)	No. of Generating Industries	Installed Capacity of the Group		Gross Energy Generation by the Group	
		Aggregate (MW)	% age of Total Capacity	Aggregate (GWh)	% age of Total Generation
1.00MW & Upto 10.00 MW	1749	5388382	28.21	7461.55	10.45
10.00MW & Upto 20.00 MW	157	2197350	11.50	6148.66	8.61
20.00MW & Upto 30.00 MW	79	1881470	9.85	5597.88	7.84
30.00MW & Upto 40.00 MW	37	1224309	6.41	5337.71	7.47
40.00MW & Upto 50.00 MW	17	751910	3.94	3254.42	4.56
50.00MW & Upto 100.00 MW	39	2567106	13.44	15060.92	21.09
Over 100.00MW	20	5092046	26.66	28555.49	39.98
Total	2098	19102573	100	71416.62	100



Table No.4.10
PROGRESS OF INSTALLED ELECTRICITY GENERATION CAPACITY OF
CAPTIVE PLANTS (1 MW & ABOVE) IN INDUSTRIES

Year Ending	HYDRO	STEAM	DIESEL@	GAS	RAILWAYS	TOTAL (MW)
Dec-48	*	*	*	*	0.00	409.52
Dec-49	*	*	*	*	0.00	544.40
Dec-50	*	*	*	*	0.00	587.85
Dec-51	*	*	*	*	0.00	627.98
Dec-52	*	*	*	*	0.00	670.16
Dec-53	*	*	*	*	0.00	663.53
Dec-54	*	*	*	*	0.00	685.31
Dec-55	*	*	*	*	0.00	723.51
Dec-56	*	*	*	*	0.00	759.65
31.03.58	*	*	*	*	0.00	769.44
31.03.59	*	*	*	*	0.00	812.42
31.03.60	*	*	*	*	0.00	935.37
31.03.61	*	*	*	*	0.00	1001.37
31.03.62	*	*	*	*	0.00	1011.79
31.03.63	*	*	*	*	0.00	1124.10
31.03.64	*	*	*	*	0.00	986.96
31.03.65	*	*	*	*	65.13	1061.39
31.03.66	*	*	*	*	63.64	1146.00
31.03.67	*	*	*	*	64.03	1283.92
31.03.68	*	*	*	*	62.05	1269.69
31.03.69	*	*	*	*	61.93	1339.40
31.03.70	*	*	*	*	45.14	1417.43
31.03.71	*	*	*	*	45.14	1562.01
31.03.72	*	*	*	*	58.53	1635.32
31.03.73	*	*	*	*	55.56	1708.33
31.03.74	*	*	*	*	59.81	1792.51
31.03.75	*	*	*	*	64.27	2028.57
31.03.76	*	*	*	*	60.63	2131.52
31.03.77	2.56	1783.66	423.47	15.37	61.84	2286.90
31.03.78	2.56	1879.12	517.84	44.27	62.37	2506.16
31.03.79	2.61	1949.23	559.17	44.27	62.31	2617.59
31.03.80	2.61	2021.61	720.58	54.27	60.44	2859.51
31.03.81	2.61	2116.55	867.70	54.27	61.24	3102.37
31.03.82	2.60	2263.67	1060.43	48.90	60.51	3436.11
31.03.83	2.60	2442.38	1306.84	54.27	65.57	3871.66



Table No.4.10 (Contd.)
PROGRESS OF INSTALLED ELECTRICITY GENERATION CAPACITY OF
CAPTIVE PLANTS (1 MW & ABOVE) IN INDUSTRIES

Year Ending	HYDRO	STEAM	DIESEL@	GAS	RAILWAYS	TOTAL (MW)
31.03.84	2.61	2633.02	1602.49	60.05	68.53	4366.70
31.03.85	2.91	2803.18	2077.06	155.31	81.80	5120.26
31.03.86	2.66	2881.62	2378.39	156.46	84.97	5504.10
31.03.87	3.60	3328.69	2090.39	205.86	86.00	5714.54
31.03.88	3.60	3732.23	2277.77	242.51	88.53	6344.64
31.03.89	3.60	4515.85	2581.33	319.11	103.60	7523.49
31.03.90	3.60	4822.85	2754.48	425.51	109.29	8115.73
31.03.91	3.60	4991.07	3031.67	475.25	110.76	8612.35
31.03.92	4.30	5377.10	3291.06	495.72	133.23	9301.41
31.03.93	4.30	5540.74	3728.66	630.81	140.03	10044.54
31.03.94	4.30	5792.99	4003.51	773.89	147.44	10722.13
31.03.95	4.30	6010.47	4193.53	807.74	148.01	11164.05
31.03.96	3.50	6305.30	4364.77	955.41	158.17	11787.15
31.03.97	3.50	6151.69	4594.74	1166.38	162.62	12078.93
31.03.98	20.75	6628.87	5023.87	1330.44	162.35	13166.28
31.03.99	23.69	6799.08	5432.94	1676.06	159.42	14091.19
31.3.2000	46.80	7675.66	5796.85	1816.89	0.00	15336.20
31.3.2001	46.72	7996.79	6289.54	1823.31	0.00	16156.36
31.3.2002	51.10	8354.03	6614.16	2125.91	0.00	17145.20
31.3.2003	51.10	9094.16	6831.21	2385.15	0.00	18361.62
31.3.2004	61.97	8585.28	7347.32	2745.74	0.00	18740.31
31.3.2005	58.93	8903.16	7274.08	2866.40	0.00	19102.57

@ includes Wind

*Breakup not available



Table No.4.11
PROGRESS OF ELECTRICAL ENERGY GENERATED OF CAPTIVE PLANTS
(1 MW & ABOVE) IN INDUSTRIES

	<i>(GWh)</i>					
During the year	HYDRO	STEAM	DIESEL@	GAS	RAILWAYS	TOTAL
1949	*	*	*	*	0.00	1299.56
1950	*	*	*	*	0.00	1467.81
1951	*	*	*	*	0.00	1655.57
1952	*	*	*	*	0.00	1883.58
1953	*	*	*	*	0.00	1983.91
1954	*	*	*	*	0.00	2054.64
1955	*	*	*	*	0.00	2184.82
1956	*	*	*	*	0.00	2209.51
1957-58	*	*	*	*	0.00	2288.29
1958-59	*	*	*	*	0.00	2420.68
1959-60	*	*	*	*	0.00	2760.88
1960-61	*	*	*	*	0.00	3186.10
1961-62	*	*	*	*	0.00	3287.21
1962-63	*	*	*	*	0.00	3862.30
1963-64	*	*	*	*	0.00	3394.20
1964-65	*	*	*	*	104.80	3570.32
1965-66	*	*	*	*	101.94	3835.13
1966-67	*	*	*	*	88.42	4136.60
1967-68	*	*	*	*	81.59	4120.20
1968-69	*	*	*	*	72.08	4208.14
1969-70	*	*	*	*	36.65	4554.71
1970-71	*	*	*	*	36.65	5383.89
1971-72	*	*	*	*	43.00	5458.72
1972-73	*	*	*	*	37.85	5969.60
1973-74	*	*	*	*	39.63	6107.10
1974-75	7.28	6158.53	269.91	15.93	36.30	6487.95
1975-76	8.92	6385.14	232.68	30.38	38.18	6695.30
1976-77	8.10	6897.70	294.79	39.75	41.16	7281.50
1977-78	11.75	7087.28	382.56	38.14	38.83	7558.56
1978-79	13.22	7211.30	299.13	48.97	34.47	7607.09
1979-80	15.06	7225.60	825.71	90.67	35.67	8192.71
1980-81	15.06	7202.77	1053.98	101.82	42.42	8416.05
1981-82	18.24	7737.33	1129.15	94.24	44.73	9023.69
1982-83	10.00	8497.05	1406.27	75.68	46.71	10035.71
1983-84	18.27	8927.59	1731.54	91.62	47.62	10816.64



Table No.4.11 (Contd.)
PROGRESS OF ELECTRICAL ENERGY GENERATED
OF CAPTIVE PLANTS (1 MW & ABOVE) IN INDUSTRIES

(GWh)

During the year	HYDRO	STEAM	DIESEL@	GAS	RAILWAYS	TOTAL
1984-85	18.29	9966.55	2001.18	317.03	42.80	12345.85
1985-86	18.29	10226.83	2350.92	401.31	42.97	13040.32
1986-87	18.09	10910.02	2258.28	341.79	36.60	13564.78
1987-88	18.09	13737.16	2595.97	504.22	35.10	16890.54
1988-89	16.45	16314.23	2686.13	864.13	30.51	19911.45
1989-90	15.83	19110.46	2757.27	1313.29	29.07	23225.92
1990-91	14.89	20005.67	3216.27	1844.98	28.82	25110.63
1991-92	17.57	23409.35	3247.81	1905.24	22.52	28602.49
1992-93	16.54	24679.89	3828.01	2803.31	23.76	31351.51
1993-94	14.89	25413.58	3684.64	3149.48	22.45	32285.04
1994-95	14.89	27387.92	4234.01	3407.04	22.70	35066.56
1995-96	17.39	28751.69	4796.89	4576.25	23.85	38166.07
1996-97	28.84	29127.94	6619.01	5039.22	25.07	40840.08
1997-98	78.84	30683.70	7512.43	5775.66	26.96	44077.59
1998-99	80.38	31198.19	8202.80	8871.96	26.20	48379.53
1999-2000	98.36	34813.90	10552.89	9932.01	0.00	55397.16
2000-01	99.85	40256.24	11499.53	7782.34	0.00	59637.96
2001-02	116.59	41853.85	10875.19	8835.19	0.00	61680.82
2002-03	90.32	42229.66	11331.76	10198.16	0.00	63849.90
2003-04	97.49	39610.29	13590.96	14874.38	0.00	68173.12
2004-05	112.77	44016.99	12234.81	15052.05	0.00	71416.62

@ includes Wind

*Breakup not available

CHAPTER – 5

**ELECTRIC POWER SUPPLY AND
SYSTEM LOSSES**



CHAPTER – 5

ELECTRIC POWER SUPPLY AND SYSTEM LOSSES

REVIEW:

During the year 2004-05 gross electricity generation was 594456.20 GWh, out of which 41590.21 GWh representing 7.00% of gross generation was consumed in power station auxiliaries. Thus net generation available at the bus-bar was 552865.99 GWh. Electricity purchased by Public Utilities from captive plants was 7107.74 GWh and electricity imported from Nepal & Bhutan was 1735.05 GWh. Thus the total electricity available for supply during the year was 561708.78 GWh as compared to 535030.44 GWh during the year 2003-04 representing a growth of 5%.

Electricity sold to various classes of consumers during the year 2004-05 was 386133.66 GWh and electricity exported outside the country i.e. to Nepal and Bhutan was 40.16 GWh. The electricity lost in transformation, transmission and distribution system and electricity unaccounted worked out to 175534.96 GWh representing 31.25% of the total available electricity. Amongst all the regions maximum percentage system losses were in North-Eastern Region i.e. 50.74%, followed by Northern Region with 36.19%, Western Region with 32.75%, Eastern Region with 32.29% and Southern Region with 22.63% losses. The percentage losses has been in transmission & distribution network corresponding to ultimate consumption within the State/UT based on net Import / Export.

The various tables in this Section represent the Region-wise, State-wise and Board-wise, Transmission & Distribution losses, transfer of electricity between different systems and electricity consumed in power auxiliaries.



Table No. 5.1
ELECTRICAL ENERGY GENERATED, PURCHASED, SOLD AND
LOST (ALL INDIA UTILITIES) DURING 2004-05

Sl. No.	Item	Energy (GWh)	% age of Item 1
1.	Energy generated (gross) (Utilities)	594456.20	100.00
2.	Energy used in power station auxiliaries	41590.21	7.00
3.	Energy generated (Net) at bus-bar i.e. (1) -(2)	552865.99	93.00
			% age of item 6
4.	Energy purchased from Non-Utilities	7107.74	1.27
5.	Energy imported from other countries (Nepal & Bhutan)	1735.05	0.31
6.	Energy available for supply i.e. (3)+(4)+(5)	561708.78	100.00
7.	Energy sold to ultimate consumers	386133.66	68.74
8.	Energy sold to other countries (Nepal & Bhutan)	40.16	0.01
9.	Total energy sold i.e. (7)+(8)	386173.82	68.75
10.	Energy lost in transformation, transmission and distribution and unaccounted for i.e. (10/6-8)	175534.96	31.25



Table No.5.2
ELECTRICAL ENERGY LOST IN TRANSMISSION AND DISTRIBUTION
SYSTEM REGIONWISE- DURING 2004-05

	<i>(GWh)</i>				
	<i>Northern Region</i>	<i>Western Region</i>	<i>Southern Region</i>	<i>Eastern Region</i>	<i>North Eastern Region</i>
I. ENERGY GENERATED (NET)	158835.99	171027.10	137025.18	78163.79	7813.93
II. ENERGY PURCHASED					
a) From Non-Utilities	1053.30	1634.37	3815.56	604.51	0.00
b) From other Regions	4481.51	9517.52	10291.38	145.19	120.36
c) From other countries	0.00	0.00	0.00	1735.05	0.00
Sub-Total	5534.81	11151.89	14106.94	2484.75	120.36
III. Total Energy available (I+II)	164370.80	182178.99	151132.12	80648.54	7934.29
IV. ENERGY SALES					
a) To Ultimate consumers	104641.04	122263.30	115931.75	39570.77	3726.80
b) To other Regions	308.39	376.15	1293.06	22209.17	369.19
c) To other Countries	40.16	0.00	0.00	0.00	0.00
Sub-Total IV	104989.59	122639.45	117224.81	61779.94	4095.99
V. ENERGY LOSS IN TRANSMISSION & DISTRIBUTION & UNACCOUNTED FOR	59381.21	59539.54	33907.31	18868.60	3838.30
VI. PERCENTAGE ENERGY LOSS (V/III-IV(b))	36.19	32.75	22.63	32.29	50.74

- NOTE:-
- (1) Net generation of jointly owned projects have been shown divided the partner States as per their theoretical shares.
 - (2) In the case of projects, jointly owned by States of different regions, excess/less drawal of energy than theoretical shares have been treated as inter-regional purchase/sales respectively
 - (3) % age losses (Col. VI) in Transmission & Distribution net work corresponding to ultimate consumption within the Region based on net Import/Export.



Table No.5.3
STATEWISE SYSTEM LOSSES DURING 2004-05

(GWh)

State/U.T.	Net Generation in own Power Houses (Other than jointly owned projects & Central Sector Projects)	ENERGY RECEIVED FROM			Energy Avail- able in the State (2+3+4+5)
		Jointly owned & Central Govt. projects except BBMB & DVC	Self Generating including Industries	From other States including BBMB& DVC including from outside the country	
1	2	3	4	5	6
Haryana	6183.69	9921.50	92.71	4205.03	20402.93
Himachal Pradesh	2745.94	2224.09	0.00	768.34	5738.37
Jammu & Kashmir	699.94	5637.32	0.00	359.20	6696.46
Punjab	16231.90	8688.97	113.81	5529.79	30564.47
Rajasthan	16174.98	11400.51	369.91	2213.15	30158.55
Uttar Pradesh	18866.83	23345.22	476.87	303.53	42992.45
Uttaranchal	3066.46	2245.56	0.00	191.67	5503.69
Chandigarh	0.00	791.94	0.00	526.94	1318.88
Delhi	4803.02	17553.17	0.00	1169.39	23525.58
B.B.M.B.	8568.00	0.00	0.00	0.00	8568.00
Gujarat	40988.35	11056.29	386.00	980.04	53410.68
Madhya Pradesh	12687.70	15251.19	12.00	1369.94	29320.83
Chhattisgarh	7522.46	2685.69	1036.37	525.64	11770.16
Maharashtra	62314.23	16899.07	200.00	2662.03	82075.33
Goa	329.16	2547.79	0.00	0.00	2876.95
D. & N.Haveli	0.00	1839.90	0.00	265.00	2104.90
Daman & Diu	0.00	1186.36	0.00	0.00	1186.36
Andhra Pradesh	34196.40	16976.01	65.84	70.87	51309.12
Karnataka	22253.71	8753.65	2234.92	281.64	33523.92
Kerala	6473.17	5740.79	70.80	0.00	12284.76
Tamil Nadu	30191.76	19624.37	1444.00	226.55	51486.68
Lakshadweep	22.25	0.00	0.00	0.00	22.25
Pondicherry	259.86	1596.91	0.00	365.61	2222.38
Bihar	174.20	5582.03	0.00	737.35	6493.58
Jharkhand	3457.31	1043.12	0.00	6653.67	11154.10
Orissa	9680.96	7539.03	604.51	658.72	18483.22
West Bengal	22484.03	3778.72	0.00	4611.70	30874.45
D.V.C.	9456.84	617.67	0.00	822.30	10896.81
A. & N. Islands	125.86	0.00	0.00	0.00	125.86
Sikkim	58.57	437.93	0.00	31.92	528.42
Assam	859.40	2870.96	0.00	131.66	3862.02
Manipur	1.29	602.96	0.00	0.00	604.25
Meghalaya	635.34	585.46	0.00	69.69	1290.49
Nagaland	3.24	350.79	0.00	0.00	354.03
Tripura	546.78	581.50	0.00	0.75	1129.03
Arunachal Pradesh	2.00	404.31	0.00	0.00	406.31
Mizoram	5.64	378.25	0.00	1.64	385.53

BBMB - Bhakra Beas Management Board.

D.V.C.=Damoder Valley Corporation

Note: System loss means electrical energy loss during transformation, transmission and distribution of electrical energy for ultimate consumption within the system of State/UT including component of electrical energy unaccounted for plus T&D losses corresponding to inter system transfer.



**Table No.5.3 (Contd.)
STATEWISE SYSTEM LOSSES DURING 2004-05**

(GWh)

State/U.Ts.	ENERGY SENT OUT TO/SOLD TO				
	Ultimate consumers within the State	Other States/ DVC including outside the country	Total (7+8)	Transformation Transmission & Distribution Losses & Energy unaccounted for	
				Quantum (GWh) (6-9)	%age \$ (10/6-8)
	7	8	9	10	11
Haryana	13807.14	65.87	13873.01	6529.92	32.11
Himachal Pradesh	2954.16	1583.34	4537.50	1200.87	28.90
Jammu & Kashmir	3877.00	116.50	3993.50	2702.96	41.08
Punjab	22526.11	359.90	22886.01	7678.46	25.42
Rajasthan	16682.55	0.00	16682.55	13476.00	44.68
Uttar Pradesh	27939.25	411.86	28351.11	14641.34	34.39
Uttaranchal	3163.15	292.66	3455.81	2047.88	39.30
Chandigarh	918.29	0.00	918.29	400.59	30.37
Delhi	12773.39	133.00	12906.39	10619.19	45.40
B.B.M.B.	0.00	8484.00	8484.00	84.00	0.98
Northern Region				59381.21	36.19
Gujarat	36983.39	247.79	37231.18	16179.50	30.43
Madhya Pradesh	17201.89	17.87	17219.76	12101.07	41.30
Chhattisgarh	8050.58	579.10	8629.68	3140.48	28.06
Maharashtra	55457.02	32.32	55489.34	26585.99	32.40
Goa	1800.40	65.29	1865.69	1011.26	35.97
D. & N.Haveli	1768.21	0.00	1768.21	336.69	16.00
Daman & Diu	1001.81	0.00	1001.81	184.55	15.56
Western Region				59539.54	32.75
Andhra Pradesh	38677.24	442.91	39120.15	12188.97	23.96
Karnataka	24781.59	0.59	24782.18	8741.74	26.08
Kerala	9347.88	226.55	9574.43	2710.33	22.48
Tamil Nadu	41285.97	340.00	41625.97	9860.71	19.28
Lakshadweep	19.98	0.00	19.98	2.27	10.20
Pondicherry	1819.09	0.00	1819.09	403.29	18.15
Southern Region				33907.31	22.63
Bihar	3951.97	28.10	3980.07	2513.51	38.88
Jharkhand	8380.48	727.88	9108.36	2045.74	19.62
Orissa	7814.53	4524.38	12338.91	6144.31	44.02
West Bengal	19087.13	4162.36	23249.49	7624.96	28.54
D.V.C.	0.00	10603.81	10603.81	293.00	2.69
A. & N. Islands	109.96	0.00	109.96	15.90	12.63
Sikkim	226.70	70.54	297.24	231.18	50.49
Eastern Region				18868.60	32.29
Assam	1837.98	51.79	1889.77	1972.25	51.76
Manipur	177.59	0.00	177.59	426.66	70.61
Meghalaya	855.57	96.45	952.02	338.47	28.35
Nagaland	183.18	0.00	183.18	170.85	48.26
Tripura	380.01	189.79	569.80	559.23	59.54
Arunachal Pradesh	166.50	114.43	280.93	125.38	42.96
Mizoram	125.67	14.40	140.07	245.46	66.14
North -Eastern Region				3838.30	50.74
All India				175534.96	31.25

\$-% losses (Col. 11) in Transmission & Distribution net work corresponding to ultimate consumption within the State/UT. based on net Import/Export.



TABLE NO.5.4
SYSTEM LOSSES BY STATE ELECTRICITY BOARDS,
D.V.C. & B.B.M.B. DURING 2004-05

(GWh)

Board/ Undertaking	Net Generation in own Power Houses(other than jointly owned and Central Sector Projects)	ENERGY RECEIVED FROM			Energy available for supply (including sales out- side the States) (2+3+4+5)
		Utilities within State/jointly owned /Central Sector Projects except DVC & BBMB	Energy received from self generating Industries	Other Board/ Electric Undertakings (including DVC & BBMB/ Other countries)	
1	2	3	4	5	6
Himachal Pradesh	1291.11	3463.76	0.00	768.34	5523.21
Punjab	16231.91	8688.97	113.81	5450.79	30485.48
B.B.M.B	8568.00	0.00	0.00	0.00	8568.00
Gujarat	19875.00	25858.94	386.00	980.04	47099.98
Madhya Pradesh	12835.51	15289.95	12.00	1369.94	29507.40
Chhattisgarh	7522.46	2685.69	1036.37	525.64	11770.16
Maharashtra	47169.43	17794.43	200.00	2662.03	67825.89
Kerala	6344.00	5867.77	70.80	0.00	12282.57
Tamil Nadu	24472.00	24065.07	1444.00	226.55	50207.62
Bihar	122.70	5633.53	0.00	737.35	6493.58
Jharkhand	820.90	1848.46	0.00	3084.87	5754.23
West Bengal	528.07	17796.57	0.00	1927.88	20252.52
D.V.C.	9456.84	617.67	0.00	822.30	10896.81
Assam	720.94	3009.42	0.00	131.66	3862.02
Meghalaya	635.34	585.46	0.00	69.69	1290.49

B.B.M.B. -Bhakra Beas Management Board

D.V.C.- Damodar Valley Corporation.



**TABLE NO.5.4 (Contd.)
SYSTEM LOSSES BY STATE ELECTRICITY BOARDS,
D.V.C. & B.B.M.B. DURING 2004-05**

Board/ Undertaking	ENERGY SOLD TO					(GWh)	
	Ultimate consumers	Licensees within the State	Other Boards/ Undertakings D.V.C./other countries	Total sold (7+8+9)	Transformation, Trans- mission & Distribution losses and energy unaccounted for	(GWh) (6-10)	% age \$ (11/6-9)
	7	8	9	10	11	12	
Himachal Pradesh	2954.16	0.00	1583.34	4537.50	985.71	25.02	
Punjab	22414.11	0.00	359.90	22774.01	7711.47	25.60	
B.B.M.B	0.00	0.00	8484.00	8484.00	84.00	0.98	
Gujarat	29258.00	3604.00	247.79	33109.79	13990.19	29.86	
Madhya Pradesh	16818.39	490.12	17.87	17326.38	12181.02	41.31	
Chhattisgarh	8050.58	0.00	579.10	8629.68	3140.48	28.06	
Maharashtra	42943.37	550.00	32.32	43525.69	24300.20	35.84	
Kerala	9247.31	125.37	226.55	9599.23	2683.34	22.26	
Tamil Nadu	40298.00	0.00	340.00	40638.00	9569.62	19.19	
Bihar	3951.97	0.00	28.10	3980.07	2513.51	38.88	
Jharkhand	3053.72	0.00	727.88	3781.60	1972.63	39.25	
West Bengal	9506.18	868.64	4319.30	14694.12	5558.40	34.89	
D.V.C.	0.00	0.00	10603.81	10603.81	293.00	2.69	
Assam	1837.98	0.00	51.79	1889.77	1972.25	51.76	
Meghalaya	855.57	0.00	96.45	952.02	338.47	28.35	

\$ -% losses (Col. 12) in Transmission & Distribution net work corresponding to ultimate consumption within the State/UT. based on net Import/Export.



Table No.5.5
AUXILIARY CONSUMPTION (UTILITIES ONLY)PRIMEOVERWISE
REGIONWISE/STATEWISE DURING 2004-05

<i>Name of the State/U.Ts.</i>	<i>Total Gross Generation (GWh)</i>	<i>Net Generation (GWh)</i>	<i>Total Auxiliary Consumption (GWh)</i>	<i>% of Gross Generation</i>
Haryana	9847.31	9075.58	771.73	7.84
Himachal Pradesh	2754.36	2745.94	8.42	0.31
Jammu & Kashmir	710.72	699.94	10.78	1.52
Punjab	21677.55	20268.76	1408.79	6.50
Rajasthan	20985.80	19281.14	1704.66	8.12
Uttar Pradesh	20911.42	18866.83	2044.59	9.78
Uttaranchal	3113.13	3066.46	46.67	1.50
Chandigarh	0.00	0.00	0.00	0.00
Delhi	5476.41	5204.69	271.72	4.96
Central Sector	84667.00	79626.65	5040.35	5.95
Sub-Total(NR)	170143.70	158835.99	11307.71	6.65
Gujarat	44230.80	41029.84	3200.96	7.24
Madhya Pradesh	15975.24	14636.41	1338.83	8.38
Chhattisgarh	8307.60	7522.46	785.14	9.45
Maharashtra	67078.27	62459.97	4618.30	6.88
Goa	336.16	329.16	7.00	0.00
D. & N. Haveli	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00
Central Sector	48156.34	45049.26	3107.08	6.45
Sub-Total(WR)	184084.41	171027.10	13057.31	7.09
Andhra Pradesh	37305.14	34943.38	2361.76	6.33
Karnataka	23515.43	22283.24	1232.19	5.24
Kerala	6514.95	6473.17	41.78	0.64
Tamil Nadu	32229.72	30191.76	2037.96	6.32
Lakshadweep	22.61	22.25	0.36	1.59
Pondicherry	275.41	259.86	15.55	5.65
Central Sector	46623.64	42851.52	3772.12	8.09
Sub-Total(SR)	146486.90	137025.18	9461.72	6.46
Bihar	206.99	174.20	32.79	15.84
Jharkhand	4168.29	3457.31	710.98	17.06
Orissa	10307.96	9950.46	357.50	3.47
West Bengal	24888.26	22484.03	2404.23	9.66
D.V.C.	10845.28	9456.84	1388.44	12.80
A. & N. Islands	129.60	125.86	3.74	2.89
Sikkim	58.83	58.57	0.26	0.44
Central Sector	35203.03	32456.52	2746.51	7.80
Sub-Total(ER)	85808.24	78163.79	7644.45	8.91
Assam	903.24	859.40	43.84	4.85
Manipur	1.32	1.29	0.03	0.00
Meghalaya	637.65	635.34	2.31	0.36
Nagaland	3.50	3.24	0.26	7.43
Tripura	554.76	546.78	7.98	1.44
Arunachal Pradesh	2.00	2.00	0.00	0.00
Mizoram	5.81	5.64	0.17	2.93
Central Sector	5824.67	5760.24	64.43	1.11
Sub-Total(NER)	7932.95	7813.93	119.02	1.50
Total (All India)	594456.20	552865.99	41590.21	7.00

Note: Gross generation of a State includes generation from own power houses within the State under State & Private Sectors and theoretical shares from jointly owned power projects & BBMB.



**Table No.5.5 (Contd.)
AUXILIARY CONSUMPTION (UTILITIES ONLY)PRIMEOVERWISE
REGIONWISE/STATEWISE DURING 2004-05**

Name of the State/U.Ts.	Hydro Gross Generation (GWh)	Net Generation (GWh)	Auxiliary Consumption (GWh)	% of Gross Generation
Haryana	2990.43	2979.01	11.42	0.38
Himachal Pradesh	2754.36	2745.94	8.42	0.31
Jammu & Kashmir	686.98	676.67	10.31	1.50
Punjab	7293.15	7223.77	69.38	0.95
Rajasthan	2623.96	2615.62	8.34	0.32
Uttar Pradesh	1207.62	1203.35	4.27	0.35
Uttaranchal	3113.13	3066.46	46.67	1.50
Chandigarh	0.00	0.00	0.00	0.00
Delhi	0.00	0.00	0.00	0.00
Central Sector	15457.90	15361.49	96.41	0.62
Sub-Total(NR)	36127.53	35872.31	255.22	0.71
Gujarat	872.75	865.46	7.29	0.84
Madhya Pradesh	2433.88	2428.77	5.11	0.21
Chhattisgarh	382.61	380.21	2.40	0.63
Maharashtra	5588.48	5547.38	41.10	0.74
Goa	0.00	0.00	0.00	0.00
D. & N. Haveli	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00
Central Sector	1331.85	1324.70	7.15	0.54
Sub-Total(WR)	10609.57	10546.52	63.05	0.59
Andhra Pradesh	5514.76	5489.70	25.06	0.45
Karnataka	8935.47	8818.87	116.60	1.30
Kerala	6081.50	6057.34	24.16	0.40
Tamil Nadu	4419.31	4399.91	19.40	0.44
Lakshadweep	0.00	0.00	0.00	0.00
Pondicherry	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(SR)	24951.04	24765.82	185.22	0.74
Bihar	53.50	51.50	2.00	3.74
Jharkhand	148.74	148.50	0.24	0.16
Orissa	7142.54	7112.26	30.28	0.42
West Bengal	530.39	527.46	2.93	0.55
D.V.C.	259.91	256.90	3.01	1.16
A. & N. Islands	6.80	6.46	0.34	5.00
Sikkim	58.67	58.42	0.25	0.43
Central Sector	369.73	368.99	0.74	0.20
Sub-Total(ER)	8570.28	8530.49	39.79	0.46
Assam	0.00	0.00	0.00	0.00
Manipur	0.00	0.00	0.00	0.00
Meghalaya	637.65	635.34	2.31	0.36
Nagaland	3.40	3.16	0.24	7.06
Tripura	68.11	67.43	0.68	1.00
Arunachal Pradesh	2.00	2.00	0.00	0.00
Mizoram	5.13	4.96	0.17	3.31
Central Sector	3635.67	3620.56	15.11	0.42
Sub-Total(NER)	4351.96	4333.45	18.51	0.43
Total (All India)	84610.38	84048.59	561.79	0.66



**Table No.5.5 (Contd.)
AUXILIARY CONSUMPTION (UTILITIES ONLY)PRIMEOVERWISE
REGIONWISE/STATEWISE DURING 2004-05**

Name of the State/U.Ts.	Steam Gross Generation (GWh)	Net Generation (GWh)	Auxiliary Consumption (GWh)	% of Gross Generation
Haryana	6856.88	6096.57	760.31	11.09
Himachal Pradesh	0.00	0.00	0.00	0.00
Jammu & Kashmir	0.00	0.00	0.00	0.00
Punjab	14384.40	13044.99	1339.41	9.31
Rajasthan	17641.59	15970.77	1670.82	9.47
Uttar Pradesh	19703.80	17663.48	2040.32	10.35
Uttaranchal	0.00	0.00	0.00	0.00
Chandigarh	0.00	0.00	0.00	0.00
Delhi	1385.21	1209.17	176.04	12.71
Central Sector	46183.90	42419.45	3764.45	8.15
Sub-Total(NR)	106155.78	96404.43	9751.35	9.19
Gujarat	30122.16	27142.46	2979.70	9.89
Madhya Pradesh	13502.60	12168.88	1333.72	9.88
Chhattisgarh	7924.99	7142.25	782.74	9.88
Maharashtra	55544.24	51092.13	4452.11	8.02
Goa	0.00	0.00	0.00	0.00
D. & N. Haveli	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00
Central Sector	34870.38	32491.74	2378.64	6.82
Sub-Total(WR)	141964.37	130037.46	11926.91	8.40
Andhra Pradesh	23359.70	21235.74	2123.96	9.09
Karnataka	12697.68	11627.92	1069.76	8.42
Kerala	0.00	0.00	0.00	0.00
Tamil Nadu	21358.71	19515.44	1843.27	8.63
Lakshadweep	0.00	0.00	0.00	0.00
Pondichery	0.00	0.00	0.00	0.00
Central Sector	41593.90	38347.02	3246.88	7.81
Sub-Total (SR)	99009.99	90726.12	8283.87	8.37
Bihar	153.49	122.70	30.79	20.06
Jharkhand	4019.55	3308.81	710.74	17.68
Orissa	3165.42	2838.20	327.22	10.34
West Bengal	24356.79	21955.51	2401.28	9.86
D.V.C.	10585.37	9199.94	1385.43	13.09
A. & N. Islands	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00
Central Sector	34833.30	32087.53	2745.77	7.88
Sub-Total(ER)	77113.92	69512.69	7601.23	9.86
Assam	0.00	0.00	0.00	0.00
Manipur	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	0.00	0.00	0.00
Total (All India)	424244.06	386680.70	37563.36	8.85



**Table No.5.5 (Contd.)
AUXILIARY CONSUMPTION (UTILITIES ONLY)PRIMEOVERWISE
REGIONWISE/STATEWISE DURING 2004-05**

Name of the State/U.Ts.	Diesel Gross Generation (GWh)	Net Generation (GWh)	Auxiliary Consumption (GWh)	% of Gross Generation
Haryana	0.00	0.00	0.00	0.00
Himachal Pradesh	0.00	0.00	0.00	0.00
Jammu & Kashmir	0.00	0.00	0.00	0.00
Punjab	0.00	0.00	0.00	0.00
Rajasthan	0.00	0.00	0.00	0.00
Uttar Pradesh	0.00	0.00	0.00	0.00
Uttaranchal	0.00	0.00	0.00	0.00
Chandigarh	0.00	0.00	0.00	0.00
Delhi	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(NR)	0.00	0.00	0.00	0.00
Gujarat	0.00	0.00	0.00	0.00
Madhya Pradesh	0.00	0.00	0.00	0.00
Chhattisgarh	0.00	0.00	0.00	0.00
Maharashtra	0.00	0.00	0.00	0.00
Goa	0.00	0.00	0.00	0.00
D. & N. Haveli	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(WR)	0.00	0.00	0.00	0.00
Andhra Pradesh	0.00	0.00	0.00	0.00
Karnataka	554.96	540.26	14.70	2.65
Kerala	312.06	300.64	11.42	3.66
Tamil Nadu	1544.30	1500.04	44.26	2.87
Lakshadweep	22.61	22.25	0.36	1.59
Pondicherry	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(SR)	2433.93	2363.19	70.74	2.91
Bihar	0.00	0.00	0.00	0.00
Jharkhand	0.00	0.00	0.00	0.00
Orissa	0.00	0.00	0.00	0.00
West Bengal	0.63	0.61	0.02	3.17
D.V.C.	0.00	0.00	0.00	0.00
A. & N. Islands	122.80	119.40	3.40	2.77
Sikkim	0.16	0.15	0.01	6.25
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(ER)	123.59	120.16	3.43	2.78
Assam	0.00	0.00	0.00	0.00
Manipur	1.32	1.29	0.03	2.27
Meghalaya	0.00	0.00	0.00	0.00
Nagaland	0.10	0.08	0.02	20.00
Tripura	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00
Mizoram	0.68	0.68	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(NER)	2.10	2.05	0.05	2.38
Total (All India)	2559.62	2485.40	74.22	2.90



**Table No.5.5 (Contd.)
AUXILIARY CONSUMPTION (UTILITIES ONLY)PRIMEOVERWISE
REGIONWISE/STATEWISE DURING 2004-05**

Name of the State/U.Ts.	Gas Gross Generation (GWh)	Net Generation (GWh)	Auxiliary Consumption (GWh)	% of Gross Generation
Haryana	0.00	0.00	0.00	0.00
Himachal Pradesh	0.00	0.00	0.00	0.00
Jammu & Kashmir	23.74	23.27	0.47	1.98
Punjab	0.00	0.00	0.00	0.00
Rajasthan	353.85	328.35	25.50	7.21
Uttar Pradesh	0.00	0.00	0.00	0.00
Uttaranchal	0.00	0.00	0.00	0.00
Chandigarh	0.00	0.00	0.00	0.00
Delhi	4091.20	3995.52	95.68	2.34
Central Sector	15522.20	15168.71	353.49	2.28
Sub-Total(NR)	19990.99	19515.85	475.14	2.38
Gujarat	12885.89	12671.92	213.97	1.66
Madhya Pradesh	0.00	0.00	0.00	0.00
Chhattisgarh	0.00	0.00	0.00	0.00
Maharashtra	5450.19	5325.10	125.09	2.30
Goa	336.16	329.16	7.00	2.08
D. & N. Haveli	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00
Central Sector	6854.11	6702.82	151.29	2.21
Sub-Total(WR)	25526.35	25029.00	497.35	1.95
Andhra Pradesh	8269.89	8057.15	212.74	2.57
Karnataka	661.40	630.27	31.13	4.71
Kerala	118.89	112.69	6.20	5.21
Tamil Nadu	2481.10	2350.07	131.03	5.28
Lakshadweep	0.00	0.00	0.00	0.00
Pondicherry	275.41	259.86	15.55	5.65
Central Sector	621.74	596.50	25.24	4.06
Sub-Total(SR)	12428.43	12006.54	421.89	3.39
Bihar	0.00	0.00	0.00	0.00
Jharkhand	0.00	0.00	0.00	0.00
Orissa	0.00	0.00	0.00	0.00
West Bengal	0.00	0.00	0.00	0.00
D.V.C.	0.00	0.00	0.00	0.00
A. & N. Islands	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(ER)	0.00	0.00	0.00	0.00
Assam	903.24	859.40	43.84	4.85
Manipur	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00
Tripura	486.65	479.35	7.30	1.50
Arunachal Pradesh	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00
Central Sector	2189.00	2139.68	49.32	2.25
Sub-Total(NER)	3578.89	3478.43	100.46	2.81
Total (All India)	61524.66	60029.82	1494.84	2.43



**Table No.5.5 (Contd.)
AUXILIARY CONSUMPTION (UTILITIES ONLY)PRIMEOVERWISE
REGIONWISE/STATEWISE DURING 2004-05**

Name of the State/U.Ts.	Nuclear Gross Generation (GWh)	Net Generation (GWh)	Auxiliary Consumption (GWh)	% of Gross Generation
Haryana	0.00	0.00	0.00	0.00
Himachal Pradesh	0.00	0.00	0.00	0.00
Jammu & Kashmir	0.00	0.00	0.00	0.00
Punjab	0.00	0.00	0.00	0.00
Rajasthan	0.00	0.00	0.00	0.00
Uttar Pradesh	0.00	0.00	0.00	0.00
Uttaranchal	0.00	0.00	0.00	0.00
Chandigarh	0.00	0.00	0.00	0.00
Delhi	0.00	0.00	0.00	0.00
Central Sector	7503.00	6677.00	826.00	11.01
Sub-Total(NR)	7503.00	6677.00	826.00	11.01
Gujarat	0.00	0.00	0.00	0.00
Madhya Pradesh	0.00	0.00	0.00	0.00
Chhattisgarh	0.00	0.00	0.00	0.00
Maharashtra	0.00	0.00	0.00	0.00
Goa	0.00	0.00	0.00	0.00
D. & N. Haveli	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00
Central Sector	5100.00	4530.00	570.00	11.18
Sub-Total(WR)	5100.00	4530.00	570.00	11.18
Andhra Pradesh	0.00	0.00	0.00	0.00
Karnataka	0.00	0.00	0.00	0.00
Kerala	0.00	0.00	0.00	0.00
Tamil Nadu	0.00	0.00	0.00	0.00
Lakshadweep	0.00	0.00	0.00	0.00
Pondicherry	0.00	0.00	0.00	0.00
Central Sector	4408.00	3908.00	500.00	11.34
Sub-Total(SR)	4408.00	3908.00	500.00	11.34
Bihar	0.00	0.00	0.00	0.00
Jharkhand	0.00	0.00	0.00	0.00
Orissa	0.00	0.00	0.00	0.00
West Bengal	0.00	0.00	0.00	0.00
D.V.C.	0.00	0.00	0.00	0.00
A. & N. Islands	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(ER)	0.00	0.00	0.00	0.00
Assam	0.00	0.00	0.00	0.00
Manipur	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	0.00	0.00	0.00
Total (All India)	17011.00	15115.00	1896.00	11.15



**Table No.5.5 (Contd.)
AUXILIARY CONSUMPTION (UTILITIES ONLY)PRIMEOVERWISE
REGIONWISE/STATEWISE DURING 2004-05**

<i>Name of the State/U.Ts.</i>	<i>Renewable Energy Sources Gross Generation (GWh)</i>	<i>Net Generation (GWh)</i>	<i>Auxiliary Consumption (GWh)</i>	<i>% of Gross Generation</i>
Haryana	0.00	0.00	0.00	0.00
Himachal Pradesh	0.00	0.00	0.00	0.00
Jammu & Kashmir	0.00	0.00	0.00	0.00
Punjab	0.00	0.00	0.00	0.00
Rajasthan	366.40	366.40	0.00	0.00
Uttar Pradesh	0.00	0.00	0.00	0.00
Uttaranchal	0.00	0.00	0.00	0.00
Chandigarh	0.00	0.00	0.00	0.00
Delhi	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(NR)	366.40	366.40	0.00	0.00
Gujarat	350.00	350.00	0.00	0.00
Madhya Pradesh	38.76	38.76	0.00	0.00
Chhattisgarh	0.00	0.00	0.00	0.00
Maharashtra	495.36	495.36	0.00	0.00
Goa	0.00	0.00	0.00	0.00
D. & N. Haveli	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(WR)	884.12	884.12	0.00	0.00
Andhra Pradesh	160.79	160.79	0.00	0.00
Karnataka	665.92	665.92	0.00	0.00
Kerala	2.50	2.50	0.00	0.00
Tamil Nadu	2426.30	2426.30	0.00	0.00
Lakshadweep	0.00	0.00	0.00	0.00
Pondichery	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(SR)	3255.51	3255.51	0.00	0.00
Bihar	0.00	0.00	0.00	0.00
Jharkhand	0.00	0.00	0.00	0.00
Orissa	0.00	0.00	0.00	0.00
West Bengal	0.45	0.45	0.00	0.00
D.V.C.	0.00	0.00	0.00	0.00
A.& N. Islands	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(ER)	0.45	0.45	0.00	0.00
Assam	0.00	0.00	0.00	0.00
Manipur	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00
Central Sector	0.00	0.00	0.00	0.00
Sub-Total(NER)	0.00	0.00	0.00	0.00
Total (All India)	4506.48	4506.48	0.00	0.00



Table No. 5.6
ENERGY OFFTAKES BY STATES IN JOINTLY OWNED POWER STATIONS DURING 2004-05

<i>Name of the Power Station</i>	<i>Energy Generated</i>		<i>Energy offtake by States*</i>	
	<i>Gross</i>	<i>Net</i>		
Bhakra Nangal Complex (Hydro)	4550.00	4539.00	Haryana	2386.00
			Punjab SEB	3425.00
Dehar (hydro)	3152.00	3137.00	Rajasthan	1875.00
			Jammu & Kashmir	0.00
			Himachal Pradesh	204.00
Pong (Hydro)	894.00	892.00	Chandigarh	515.00
			Irrigation Wing	43.00
Total (BBMB)	8596.00	8568.00	N.F.L	36.00
			BBMB(system Losses)	84.00
			Total (BBMB)	8568.00
INDRAPRASTHA EXTN.				
(Steam) (2,3,4)	687.89	602.48	Delhi	401.67
			Haryana	200.81
CHAMBAL PROJECTS				
Gandhi Sagar (Hydro)	343.02	342.12		
Jawahar Sagar(Hydro)	280.28	279.94		
Rana Pratap Sagar(Hydro)	377.28	376.74	Madhya Pradesh	1649.45
Total Chambal Projects	1000.58	998.80	Rajasthan	1266.10
Satpura(Steam)	2121.37	1916.75		
Machkund(Hydro)	900.64	898.36	Andhra Pradesh	506.97
			Orissa	391.39
Tungabhadra Dam & Hampi(Hydro)	148.32	147.66	Andhra Pradesh	120.64
			Karnataka	27.02
Pench(Hydro)	227.60	227.17	Madhya Pradesh	151.45
			Maharashtra	75.72
Sardar Sarovar	260.70	259.32	Gujarat	56.85
			Madhya Pradesh	145.62
			Maharashtra	56.85

* Including losses & excluding BBMB System.
BBMB: Bhakra Beas Management Board.
NFF: National Fertilizer Factory, Nangal Dam.



Table No.5.7
ENERGY OFFTAKES BY STATES FROM CENTRAL
SECTOR PLANTS, DVC & STATE GOVT. PLANTS DURING 2004-05

<i>Name of the Power Station</i>	<i>Installed capacity (MW)</i>	<i>Energy generated (GWh)</i>		<i>Energy Offtake by States including losses (GWh)</i>	
		<i>Gross</i>	<i>Net</i>		
Dadri(gas)	817.00	5456.65	5319.02	Haryana	320.86
				Himachal Pradesh	166.90
				Jammu & Kashmir	483.16
				Punjab	771.27
				Rajasthan	543.07
				Uttar Pradesh	1865.54
				Chandigarh	55.31
				Delhi	562.55
				Uttaranchal	132.39
				N.Railway	417.97
Tanakpur (Hydro)	120.00	495.17	492.02	Haryana	28.12
				Jammu & Kashmir	35.45
				Punjab	79.91
				Rajasthan	52.38
				Uttar Pradesh	101.52
				Delhi	57.72
				Himachal Pradesh	17.10
				Chandigarh	5.15
				Uttaranchal	74.51
				Nepal	40.16
Chamera H.E.P	840.00	3452.29	3441.19	Haryana	358.64
				Himachal Pradesh	491.34
				Jammu & Kashmir	116.96
				Punjab	612.24
				Rajasthan	677.41
				Uttar Pradesh	534.85
				Delhi	473.10
				Chandigarh	102.46
				Uttaranchal	74.19
				Uri HEPS	480.00
Himachal Pradesh	59.44				
Jammu & Kashmir	746.04				
Punjab	301.41				
Rajasthan	196.56				
Uttar Pradesh	439.30				
Delhi	242.92				
Chandigarh	12.82				
Uttaranchal	76.93				



**Table No.5.7 (Contd.)
ENERGY OFFTAKES BY STATES FROM CENTRAL
SECTOR PLANTS, DVC & STATE GOVT. PLANTS DURING 2004-05**

<i>Name of the Power Station</i>	<i>Installed capacity (MW)</i>	<i>Energy generated (GWh)</i>		<i>Energy Offtake by States including losses (GWh)</i>	
		<i>Gross</i>	<i>Net</i>		
Satluj Jal Vidyut (Nathpa Jhakri)	1500.00	5170.83	5108.78	Haryana	957.59
				Himachal Pradesh	482.64
				Jammu & Kashmir	109.43
				Punjab	657.43
				Rajasthan	758.23
				Uttar Pradesh	837.28
				Delhi	1273.61
				Chandigarh	32.57
National Capital TPP	840.00	6831.29	6329.20	Rajasthan	187.55
				Uttar Pradesh	843.15
				Delhi	5298.50
Badarpur TPS	720.00	5462.59	4916.43	Delhi	4916.43
Baira Siul(Hydro)	180.00	689.68	687.21	Delhi	76.52
				Himachal Pradesh	84.02
				Haryana	208.69
				Punjab	317.98
Singrauli (STPS)	2000.00	15803.29	14703.97	Jammu & Kashmir	317.00
				Haryana	1954.97
				Rajasthan	2630.27
				Delhi	1257.22
				Uttar Pradesh	5897.37
				Himachal Pradesh	84.30
				Chandigarh	111.16
				Punjab	1702.87
				Uttaranchal	748.81
Salal (Hydro (St.I+II)	690.00	3443.28	3437.98	Himachal Pradesh	33.71
				Punjab	914.33
				Haryana	516.06
				Delhi	398.51
				Jammu & Kashmir	1185.07
				Rajasthan	100.58
				Uttar Pradesh	238.91
				Chandigarh	8.50
Uttaranchal	42.31				



**Table No.5.7 (Contd.)
ENERGY OFFTAKES BY STATES FROM CENTRAL
SECTOR PLANTS, DVC & STATE GOVT. PLANTS DURING 2004-05**

<i>Name of the Power Station</i>	<i>Installed capacity (MW)</i>	<i>Energy generated (GWh)</i>		<i>Energy Offtake by States including losses (GWh)</i>	
		<i>Gross</i>	<i>Net</i>		
Rihand (STPS)	1000.00	7988.11	7350.95	Haryana	720.35
				Himachal Pradesh	299.16
				Jammu & Kashmir	672.53
				Punjab	919.32
				Rajasthan	911.45
				Uttar Pradesh	2573.98
				Delhi	815.24
				Chandigarh	129.52
				Uttaranchal	309.40
R.A.P.P.(Nuclear)	740.00	4743.00	4237.00	Haryana	270.00
				Himachal Pradesh	0.00
				Jammu & Kashmir	514.00
				Punjab	470.00
				Rajasthan	2209.00
				Uttar Pradesh	282.00
				Delhi	218.00
				Chandigarh	19.00
				Uttaranchal	0.00
Unchahar (Steam)	840.00	6781.09	6199.39	MPSEB(WR)	255.00
				Haryana	386.67
				Himachal Pradesh	161.48
				Jammu & Kashmir	416.38
				Punjab	769.13
				Rajasthan	548.04
				Uttar Pradesh	2890.97
				Delhi	567.68
				Chandigarh	69.07
Uttaranchal	389.97				
Anta (Gas)	413.00	2785.30	2710.17	Haryana	234.40
				Himachal Pradesh	107.14
				Jammu & Kashmir	276.65
				Punjab	339.71
				Rajasthan	587.40
				Uttar Pradesh	715.07
				Delhi	291.10
				Chandigarh	55.29
				Uttaranchal	103.41



**Table No.5.7 (Contd.)
ENERGY OFFTAKES BY STATES FROM CENTRAL
SECTOR PLANTS, DVC & STATE GOVT. PLANTS DURING 2004-05**

Name of the Power Station	Installed capacity (MW)	Energy generated (GWh)		Energy Offtake by States including losses (GWh)	
		Gross	Net		
Auraiya (Gas)	652.00	4118.50	4039.98	Haryana	311.94
				Himachal Pradesh	143.84
				Jammu & Kashmir	367.98
				Punjab	518.36
				Rajasthan	420.47
				Uttar Pradesh	1470.08
				Delhi	414.41
				Chandigarh	53.96
				Uttaranchal	155.48
				Bihar	0.00
				Madhya Pradesh	0.00
				N.Railway	183.46
				N.A.P.P.(Nuclear)	440.00
Himachal Pradesh	93.00				
Jammu & Kashmir	236.00				
Punjab	315.00				
Rajasthan	312.00				
Uttar Pradesh	818.00				
Delhi	288.00				
Chandigarh	46.00				
Uttaranchal	98.00				
T.A.P.P.(Nuclear)	420.00	2587.00	2352.00	Gujarat	1152.00
				Maharashtra	1152.00
				HWP	48.00
Kakrapar(Nuclear)	340.00	2513.00	2178.00	Gujarat	681.00
				Chhattisgarh	72.00
				Maharashtra	1067.00
				Daman & Diu	43.00
				Dadra & Nagar	77.00
				Madhya Pradesh	238.00
Gandhar(CCGT&CCST)	648.00	4031.71	3949.69	Gujarat	1558.60
				Madhya Pradesh	827.12
				Maharashtra	1340.58
				D & Nagar Haveli	136.26
				Daman & Diu	71.98
				Chhattisgarh	15.15



**Table No.5.7 (Contd.)
ENERGY OFFTAKES BY STATES FROM CENTRAL
SECTOR PLANTS, DVC & STATE GOVT. PLANTS DURING 2004-05**

<i>Name of the Power Station</i>	<i>Installed capacity (MW)</i>	<i>Energy generated (GWh)</i>		<i>Energy Offtake by States including losses (GWh)</i>	
		<i>Gross</i>	<i>Net</i>		
Kayamkulam	350.00	621.74	596.50	Kerala	54.26
				Tamil Nadu	542.24
Tanda	440.00	3317.58	2919.56	Uttar Pradesh	2919.56
Faridabad(CCGT)	430.00	3161.73	3099.49	Haryana	3099.49
Kaiga APP	440.00	2926.00	2608.00	Karnataka	779.00
				Kerala	341.00
				Tamil Nadu	1418.00
				Pondicherry	70.00
Korba STPS	2100.00	17049.53	15925.27	Madhya Pradesh	3077.31
				Maharashtra	5124.72
				Gujarat	3065.10
				Chhattisgarh	2074.38
				Goa	1599.31
				D. & N Haveli	482.17
				Daman & Diu	502.28
Vindhyachal STPS	2260.00	17820.85	16566.47	Gujarat	3934.33
				Madhya Pradesh	5079.01
				Chhattisgarh	398.10
				Maharashtra	5919.50
				Goa	348.75
				Daman & Diu	306.84
				Dadra & Nagar Haveli	579.94
Kawas	644.00	2822.40	2753.13	Gujarat	176.19
				Madhya Pradesh	757.32
				Chhattisgarh	22.83
				Maharashtra	1420.45
				Goa	0.00
				Daman & Diu	77.72
				Dadra & Nagar Haveli	298.62
Indira Sagar(NHDC)	1000.00	1331.85	1324.70	Madhya Pradesh	1324.70
Ramagundam S.T.P.S.	2100.00	16725.78	15621.84	Andhra Pradesh	5106.39
				Karnataka	3086.18
				Kerala	2290.15
				Tamil Nadu	3901.66
				Goa (WR)	599.72
				Pondicherry	500.58
				Daman & Diu	27.30
				Dadra & Nagar Haveli	109.86



**Table No.5.7 (Contd.)
ENERGY OFFTAKES BY STATES FROM CENTRAL
SECTOR PLANTS, DVC & STATE GOVT. PLANTS DURING 2004-05**

Name of the Power Station	Installed capacity (MW)	Energy generated (GWh)		Energy Offtake by States including losses (GWh)	
		Gross	Net		
Neyveli-I (Steam)	600.00	4259.05	3772.88	Tamil Nadu	3772.88
Neyveli-II(Steam)	1470.00	9248.44	8343.73	Andhra Pradesh	1557.47
				Karnataka	1925.47
				Kerala	994.83
				Tamil Nadu	3344.05
				Pondicherry	521.91
Kalpakkam (Nuclear)	340.00	1482.00	1300.00	Andhra Pradesh	113.00
				Karnataka	92.00
				Kerala	76.00
				Tamil Nadu	1002.00
				Pondicherry	17.00
A.P.Gas Power Corpn.	99.00	1992.37	1940.40	Andhra Pradesh	1940.40
Neyveli TPS Expn.-1	210.00	3237.92	2944.83	Kerala	468.68
				Tamil Nadu	1606.47
				Karnataka	755.00
				Pondicherry	114.68
Sone East&West Canal	9.90	26.50	25.60	Bihar	25.60
E.Gandak Canal	15.00	25.00	24.00	Bihar	24.00
Tenughat(Jharkhand)	420.00	1325.50	1206.20	Jharkhand	1206.20
I.B.Valley(OPGC)	420.00	3165.42	2838.20	Orissa	2838.20
NTPC's Stations in Eastern Region	4910.00	34833.30	32087.53	Bihar	5479.27
				Orissa	6987.50
				West Bengal	3649.65
				Kerala	1515.87
				D.V.C	781.86
				Gujarat	432.24
				Andhra Pradesh	1907.80
				Assam	13.99
				Madhya Pradesh	1746.20
				Maharashtra	694.25
				Karnataka	2088.98
				Uttar Pradesh	316.14
				Tamil Nadu	4037.07
				Pondicherry	372.74
				Jammu & Kashmir	160.67
				Chandigarh	91.14
				Jharkhand	1022.67
				Sikkim	372.96
				D N & H	156.05
				Daman & Diu	157.24
				Chhattisgarh	103.24



**Table No.5.7 (Contd.)
ENERGY OFFTAKES BY STATES FROM CENTRAL
SECTOR PLANTS, DVC & STATE GOVT. PLANTS DURING 2004-05**

Name of the Power Station	Installed capacity (MW)	Energy generated		Energy Offtake by States including losses (GWh)	
		Energy (GWh) Gross	Net		
Karaikal(PPCL)	32.50	275.41	259.86	Poncicherry	259.86
Simhadri STPS	1000.00	8122.71	7663.74	Andhra Pradesh	7663.74
Durgapur Projects Ltd.	395.00	2028.80	1836.06	West Bengal	1836.06
WBPDC	2910.00	15050.76	13486.40	West Bengal	13486.40
D.V.C.	2871.50	10845.28	9456.84(A)	Orissa	416.00
				Jharkhand	6443.36
				West Bengal	3423.46
				N.T.P.C./PGCIL	464.03
				Haryana	37.46
				Punjab	64.40
				Rajasthan	91.70
				Chandigarh	10.67
				Gujarat	115.38
				Madhya Pradesh	217.72
				Chhattisgarh	40.16
				Maharashtra	173.00
				Andhra Pradesh	41.79
				Karnataka	12.30
Rangit	60.00	369.73	368.99	Bihar	102.76
				WBSEB	129.07
				Sikkim	64.97
				D.V.C.	51.74
				Jharkhand	20.45
N E E P C O	1105.00	5195.00	5133.04	Assam	2695.37
				Manipur	455.31
				Meghalaya	522.34
				Nagaland	310.33
				Tripura	494.72
				Mizoram	337.44
				Arunachal Pradesh	317.53
Loktak (Hydro)	105.00	629.67	627.20	Assam.	161.60
				Manipur	206.96
				Nagaland	40.46
				Tripura	86.78
				Arunachal Pradesh	27.47
				Mizoram	40.81
				Meghalaya	63.12

Note:- (A) Net generation does not tally with the total energy offtake by states as it includes energy purchase.



Table No. 5.8
INTER-STATE TRANSFERS OF ELECTRICAL ENERGY
DURING 2004-05

<i>Name of the supplier</i>	<i>Name of the Purchaser</i>	<i>Energy Transferred (GWh)</i>
NORTHERN REGION		
Haryana V.P.N.L	Himachal Pradesh S.E.B.	11.87
Haryana V.P.N.L	Delhi Transco Limited	54.00
Himachal Pradesh S.E.B.	Haryana V.P.N	316.94
Himachal Pradesh S.E.B.	Delhi Transco Limited	1107.00
Himachal Pradesh S.E.B.	Punjab S.E.B.	159.40
J&K S.E.B.	Punjab S.E.B.	116.50
Punjab S.E.B.	Himachal Pradesh S.E.B.	174.60
Punjab S.E.B.	Uttaranchal Power Corpn.	185.30
Uttaranchal Power Corpn.	Punjab S.E.B.	233.10
Delhi Transco Limited	Haryana V.P.N	133.00
Uttar Pradesh Power Corpn	Himachal Pradesh S.E.B.	377.87
WESTERN REGION		
Gujarat Electy. Board	M.P.E.B.	80.69
Gujarat Electy. Board	Maharashtra S.E.B.	19.80
Gujarat Electy. Board	ChhattisgarhS.E.B.	27.54
ChhattisgarhS.E.B.	Gujarat Electy. Board	90.80
M.P.E.B.	Gujarat Electy. Board	9.36
ChhattisgarhS.E.B.	Dadra & Nagar Haveli	265.00
Maharashtra S.E.B.	M.P.E.B.	7.75
Goa	Gujarat Electy. Board	17.91
Goa	M.P.E.B.	47.38
SOUTHERN REGION		
Kerala S.E.B.	Tamil Nadu SEB	200.94
Tamil Nadu S.E.B.	Pondicherry	340.00
Kerala S.E.B.	Pondicherry	25.61
AP TRANSCO	KPTCL	9.30
EASTERN REGION		
GRIDCO	Jharkhand S.E.B.	142.04
GRIDCO	West Bengal S.E.B.	44.75
Jharkhand S.E.B.	Bihar SEB	287.20
Jharkhand S.E.B.	Damodar Valley Corpn.	440.68
GRIDCO	Damodar Valley Corpn.	23.98
Tata Power	DVC	104.85
West Bengal S.E.B.	Damodar Valley Corpn.	156.94
DSP(Wheeling)	Damodar Valley Corpn.	95.85
Damodar Valley Corpn.	GRIDCO	416.00
Damodar Valley Corpn.	Jharkhand S.E.B.	2779.49
Damodar Valley Corpn.	West Bengal S.E.B. & DPL	1203.67
Damodar Valley Corpn.	Licencees in West Bengal	610.59
Damodar Valley Corpn.	Direct to consumersin Jharkhand area	3584.21
Damodar Valley Corpn.	Direct to consumersin West Bengal area	1545.82
Damodar Valley Corpn.	N.T.P.C.	464.03



**Table No.5.8 (Contd.)
INTER-STATE TRANSFERS OF ELECTRICAL ENERGY
DURING 2004-05**

<i>Name of the Supplier</i>	<i>Name of the Purchaser</i>	<i>Energy Transferred (GWh)</i>
NORTH EASTERN REGION		
Meghalaya S.E.B.	Assam S.E.B.	7.40
Meghalaya S.E.B.	Tripura	0.75
Tripura	Mizoram	1.64
Tripura	Assam S.E.B.	47.90
Tripura	Meghalaya S.E.B.	37.19
Arunachal Pradesh	Meghalaya S.E.B.	2.79
INTER-REGIONAL TRANSFER OF ENERGY		
NORTHERN REGION		
UPPCL	WESTERN REGION	
Uttaranchal Power Corpn.	M.P.S.E.B.	33.99
	Gujarat Electricity Board	19.40
WESTERN REGION		
Gujarat Electricity Board	NORTHERN REGION	
Gujarat Electricity Board	Haryana V.P.N.L.	20.98
M.P.S.E.B.	Punjab SEB	96.38
Chhattisgarh SEB	Punjab SEB	8.51
Maharashtra SEB	Haryana V.P.N.L.	223.30
	Rajasthan VPNL	24.57
WESTERN REGION		
Gujarat Electricity Board	SOUTHERN REGION	
	KPTCL	2.40
SOUTHERN REGION		
A.P.TRANSKO	NORTHERN REGION	
A.P.TRANSKO	Haryana V.P.N.L.	3.50
A.P.TRANSKO	Punjab SEB	97.81
A.P.TRANSKO	Rajasthan VPNL	10.12
A.P.TRANSKO	Delhi Transco Limited	8.39
KPTCL	Punjab SEB	0.59
SOUTHERN REGION		
A.P.TRANSKO	WESTERN REGION	
A.P.TRANSKO	Gujarat Electricity Board	16.40
A.P.TRANSKO	MPSEB	100.63
A.P.TRANSKO	Maharashtra S.E.B.	90.19
A.P.TRANSKO	Chhattisgarh SEB	100.44
SOUTHERN REGION		
A.P.TRANSKO	EASTERN REGION	
	Jharkhand SEB	6.13



Table No.5.8 (Contd.)
INTER-STATE TRANSFERS OF ELECTRICAL ENERGY
DURING 2004-05

<i>Name of the Supplier</i>	<i>Name of the Purchaser</i>	<i>Energy Transferred (GWh)</i>
EASTERN REGION		
GRIDCO	Haryana V.P.N.L	830.40
GRIDCO	J&K PDC	294.40
Bihar SEB	UPPCL	28.10
GRIDCO	Punjab SEB	456.90
GRIDCO	Rajasthan SEB	17.20
West BengalSEB	Haryana V.P.N.L	136.26
West BengalSEB	J&K PDC	64.80
West BengalSEB	Punjab SEB	744.51
West BengalSEB	Rajasthan VPNL	186.95
West BengalSEB	UPPCL	275.43
West BengalSEB	Uttaranchal Power Corpn	6.37
West BengalSEB	Chandigarh	1.27
EASTERN REGION		
GRIDCO	Gujarat Electricity Board	164.23
GRIDCO	Maharashtra S.E.B.	2066.27
GRIDCO	Chhattisgarh SEB	287.68
West BengalSEB	Gujarat Electricity Board	544.62
West BengalSEB	MPSEB	762.02
West BengalSEB	Maharashtra S.E.B.	194.40
West BengalSEB	Chhattisgarh SEB	59.82
Sikkim	Gujarat Electricity Board	1.94
Sikkim	MPSEB	68.60
EASTERN REGION		
GRIDCO	A.P.TRANSKO	1.30
GRIDCO	KPTCL	120.56
GRIDCO	Tamil Nadu S.E.B.	5.61
West BengalSEB	APTRANSKO	27.78
West BengalSEB	KPTCL	137.08
EASTERN REGION		
GRIDCO	Assam SEB	19.24
GRIDCO	Meghalaya SEB	2066.27
West BengalSEB	Assam SEB	26.84
West BengalSEB	Meghalaya SEB	10.47



Table No.5.8 (Contd.)
INTER-STATE TRANSFERS OF ELECTRICAL ENERGY
DURING 2004-05

<i>Name of the Supplier</i>	<i>Name of the Purchaser</i>	<i>Energy Transferred (GWh)</i>
NORTH-EASTERN REGION		
NORTHERN REGION		
Assam SEB	Punjab SEB	47.69
Meghalaya SEB	Haryana V.P.N.L	17.33
Meghalaya SEB	Rajasthan VPNL	7.61
Tripura	Haryana V.P.N.L	75.48
Arunachal Pradesh	Haryana V.P.N.L	24.38
NORTH-EASTERN REGION		
WESTERN REGION		
Assam SEB	Chhattisgarh SEB	4.10
Meghalaya SEB	Maharashtra SEB	63.36
Tripura	MPSEB	4.50
Tripura	Chhattisgarh SEB	5.90
Arunachal Pradesh	MPSEB	32.25
Arunachal Pradesh	Maharashtra SEB	55.01
Mizoram	MPSEB	14.40
NORTH-EASTERN REGION		
EASTERN REGION		
Tripura	West Bengal SEB	17.18
OUT SIDE THE COUNTRY		
EXPORT		
Tanakpur CGP	Nepal	40.16
Sub-Total		40.16
IMPORT		
Bhutan	D.V.C.	294.27
Bhutan	Bihar S.E.B.	450.15
Bhutan	West Bengal S.E.B.	662.28
Bhutan	Sikkim	31.92
Bhutan	GRIDCO	242.72
Bhutan	Jharkhand S.E.B.	53.71
Sub-Total		1735.05

Note:- 1) D.V.C. is being treated as a separate entity for the purpose of this table.

H.V.P.N:	Haryana Vidyut Prasaran Nigam..
GRIDCO:	Grid Power Corporation of Orissa Ltd.
A.P TRANSCO -	Transmission Corp. of A.P. Limited.
CGP-	Central Government Project.
KPTCL :	Karnataka Power Transmission Corpn. Ltd.
RRVPN :	Rajasthan Rajya Vidhyut Prasaran Nigam
UPPCL :	Uttar Pradesh Power Corpn. Ltd.
WBPDCC :	West Bengal Power Development Corporation

CHAPTER - 6

OPERATING DATA (UTILITIES)



CHAPTER - 6

OPERATING DATA (UTILITIES)

REVIEW

FUEL CONSUMPTION:

The coal consumption in various coal fired thermal power stations in the country during the year 2004-05 was 278.58 million tons. Consumption of Furnace oil and Diesel oil during the reported period was 1193126 KL and 249752 KL respectively. The consumption of Lignite & LSHS recorded during the year was 24.73 Million Metric tons and 579.98 Million Liters respectively. The specific coal consumption during the year 2004-05 was of the order of 0.7 kg/per unit of electricity generated.

THERMAL EFFICIENCY:

The total numbers of Steam Power Stations ending March 2005 were 95 having an aggregate installed capacity of 67791 MW. Out of total 95 Steam Stations 89 were coal fired Steam Turbine Power Stations and five numbers of Lignite fired and one number of multi fuel fired station.

Out of total 95 steam turbine power stations, 26 power stations having aggregate Installed capacity of 7336.88 MW reported an overall thermal efficiency of less than 25% during 2004-05. These 26 power stations produced 19085.27 GWh i.e. 4.50% of the total electrical energy produced by the steam turbine power stations.

20 power stations with an aggregate Installed capacity of 13490.00 MW reported an overall thermal efficiency ranging between 25% to 30% and generated 74913.61 GWh. i.e. 17.66% of total electrical energy generation from steam turbine power plants in the country during 2004-05.

49 Power Stations with an aggregate Installed capacity of 46964.00 MW had an overall thermal efficiency above 30% and produced 330283.19 GWh representing 77.85% of total electrical energy produced during 2004-05.



PLANT LOAD FACTOR:

All India PLF of coal based steam power stations in the country was 74.8%. Under Private Sector, Dhanu Power Station recorded the highest PLF of 101.4%. All India Plant Load factors of Central Sector Thermal Power Stations were 81.7% and the all India Plant Load Factors of State and Private Sector of Thermal Power Stations were 69.6% & 85.1% respectively. Tarapur Atomic Power Station under Central Sector recorded the highest PLF of 92.3% while the All India PLF of all Nuclear Power Stations in the country was 70.7%.

MANPOWER:

Amongst State Electricity Boards and Corporations that have reported the engaged manpower, Maharashtra State Electricity Board had the highest manpower engaged as regular & non- regular which was followed by Punjab and Tamil Nadu State Electricity Boards.

The tables that follow in this Chapter give figures of fuel consumption, thermal efficiency based classification of steam stations, specific coal consumption, Plant Load Factor, Manpower, peak demand met, etc.



TABLE NO.6.1
CONSUMPTION OF FOSSIL FUELS FOR ELECTRICITY GENERATION FOR
THERMAL POWER STATIONS (BY KIND OF FUELS) DURING 2004-05

State/U.Ts.	STEAM STATIONS						GROSS GENE RATION (GWh)
	COAL (000' MT)	FURNACE OIL(KL)	LIGHT DIESEL OIL/HSD (KL)	LSHS/ HHS (KL)	GAS (MT)	LIGNITE (000' MT)	
NORTHERN REGION							
Haryana	5126	0	26348	0	0	0	6624.48
Himachal Pradesh	0	0	0	0	0	0	0.00
Jammu & Kashmir	0	0	0	0	0	0	0.00
Punjab	9444	12568	0	0	0	0	14384.40
Rajasthan	10936	12139	604	0	0	0	16793.04
Uttar Pradesh	15556	0	46099	0	0	0	19703.78
Uttarnanchal	0	0	0	0	0	0	0.00
Delhi	1420	0	9906	3126	0	0	1617.61
Central Sector(NR)	30461	1364	11251	0	0	0	46183.85
Sub Total (NR)	72943	26071	94208	3126	0	0	105307.16
Gujarat	16687	7185	72	574238	0	2609	30122.16
Madhya Pradesh	11921	28634	7257	0	0	0	14351.15
Chhattisgarh	6302	10852	2153	0	0	0	7924.99
Maharashtra	35968	1015016	486	0	39012	0	55544.24
Goa	0	0	0	0	0	0	0.00
D. & N. Haveli	0	0	0	0	0	0	0.00
Daman & Diu	0	0	0	0	0	0	0.00
Central Sector(WR)	23245	4544	60	0	0	0	34870.38
Sub Total (WR)	94123	1066231	10028	574238	39012	2609	142812.92
Andhra Pradesh	15888	9559	2025	0	0	0	23359.70
Karnataka	7162	0	6849	0	1710347	0	12697.68
Kerala	0	0	0	0	0	0	0.00
Tamil Nadu	14467	25720	1664	1534	0	1370	21358.74
Lakshadweep	0	0	0	0	0	0	0.00
Pondicherry	0	0	0	0	0	0	0.00
Central Sector (SR)	15627	10569	13792	1078	0	20751	41593.90
Sub Total (SR)	53144	45848	24330	2612	1710347	22121	99010.02
Bihar	169	3132	0	0	0	0	153.49
Jharkhand	2932	0	36493	0	0	0	4019.55
Orissa	2640	0	2064	0	0	0	3165.42
West Bengal	16192	14698	33472	0	0	0	24394.89
DVC	7664	0	46768	0	0	0	10585.37
A. & N. Islands	0	0	0	0	0	0	0.00
Sikkim	0	0	0	0	0	0	0.00
Central Sector (ER)	28775	37146	2389	0	0	0	34833.25
Sub Total (ER)	58372	54976	121186	0	0	0	77151.97
Assam	0	0	0	0	0	0	0.00
Manipur	0	0	0	0	0	0	0.00
Meghalaya	0	0	0	0	0	0	0.00
Nagaland	0	0	0	0	0	0	0.00
Tripura	0	0	0	0	0	0	0.00
Arunachal Pradesh	0	0	0	0	0	0	0.00
Mizoram	0	0	0	0	0	0	0.00
Central Sector (NER)	0	0	0	0	0	0	0.00
Sub Total (NER)	0	0	0	0	0	0	0.00
Total (All India)	278582	1193126	249752	579976	1710347*	24730	424282.07
							.+39012

Note: MT: _ Metric Tonne
*:- Unit in Knm3-Corex Gas.
+ Unit in MT



TABLE NO.6.1 (Contd.)
CONSUMPTION OF FOSSIL FUELS FOR ELECTRICITY GENERATION FOR
THERMAL POWER STATIONS (BY KIND OF FUELS) DURING 2004-05

State/U.Ts.	GAS STATIONS				DIESEL STATIONS		
	Natural Gas (MMSCM)	H.S.D. (Kilo Ltrs.)	Naptha (Kilo Ltrs.)	Gene-ration (GWH)	LSHS (KL)	Diesel Oil (Kilo Ltrs.)	Gene-ration (GWH)
NORTHERN REGION							
Haryana	0	0	0	0.00	0	0	0.00
Himachal Pradesh	0	0	0	0.00	0	0	0.00
Jammu & Kashmir	0	5209	0	23.74	0	0	0.00
Punjab	0	0	0	0.00	0	0	0.00
Rajasthan	220	4083	0	353.85	0	0	0.00
Uttar Pradesh	0	0	0	0.00	0	0	0.00
Uttarnanchal	0	0	0	0.00	0	0	0.00
Delhi	968	11	0	4091.19	0	0	0.00
Central Sector (NR)	2870	265744	243961	15522.14	0	0	0.00
Sub Total (NR)	4058	275047	243961	19990.92	0	0	0.00
Gujarat	2635	932	92964	12885.89	0	0	0.00
Madhya Pradesh	0	0	0	0.00	0	0	0.00
Chhattisgarh	0	0	0	0.00	0	0	0.00
Maharashtra	1153(A)	0	0	5450.19	0	0	0.00
Goa	0	0	65252	336.16	0	0	0.00
D. & N. Haveli	0	0	0	0.00	0	0	0.00
Daman & Diu	0	0	0	0.00	0	0	0.00
Central Sector (WR)	879	693	618692	6854.11	0	0	0.00
Sub Total (WR)	4667	1625	776908	25526.35	0	0	0.00
Andhra Pradesh	1724	268	41595	8269.89	0	0	0.00
Karnataka	0	0	108935	661.40	84162	52105	554.96
Kerala	0	86	20042	118.89	75185	3348	311.94
Tamil Nadu	412	80655	11070	2481.10	305873	0	1544.30
Lakshadweep	0	0	0	0.00	0	7586	22.61
Pondicherry	67	0	0	275.41	0	0	0.00
Central Sector (SR)	0	245	107809	621.74	0	0	0.00
Sub Total (SR)	2203	81254	289451	12428.43	465220	63039	2433.81
Bihar	0	0	0	0.00	0	0	0.00
Jharkhand	0	0	0	0.00	0	0	0.00
Orissa	0	0	0	0.00	0	0	0.00
West Bengal	0	0	0	0.00	219	0	0.63
DVC	0	0	0	0.00	0	0	0.00
A. & N. Islands	0	0	0	0.00	0	29858	122.80
Sikkim (R)	0	0	0	0.00	0	22	0.16
Central Sector (ER)	0	0	0	0.00	0	0	0.00
Sub Total (ER)	0	0	0	0.00	219	29880	123.59
Assam	342	0	0	903.24	0	0	0.00
Manipur	0	0	0	0.00	0	311	1.30
Meghalaya	0	0	0	0.00	0	0	0.00
Nagaland	0	0	0	0.00	0	35	0.10
Tripura	244	0	0	486.65	0	0	0.00
Arunachal Pradesh	0	0	0	0.00	0	0	0.00
Mizoram	0	0	0	0.00	0	7	0.10
Central Sector (NER)	723	0	0	2189.00	0	0	0.00
Sub Total (NER)	1309	0	0	3578.89	0	353	1.50
Total (All India)	12237	357926	1310320	61524.59	465439	93272	2558.90

MMSCM:-Million Metric Standard Cubic Metre.

(A):- Includes 204 Thousand Metric Tonne of Gas.



Table No.6.2
CLASSIFICATION OF STEAM TYPE ELECTRICITY GENERATION
STATIONS EFFICIENCYWISE DURING 2004-05

Thermal Efficiency	No. of Generating Stations	Installed Capacity (MW)	Energy Generated (GWh)
Up to 15%	9	826.88	0.00
Above 15%&Up to 20%	5	1788.00	2061.27
Above 20%&Up to 25%	12	4722.00	17024.00
Above 25% & Up to 30%	20	13490.00	74913.61
Above 30%	49	46964.00	330283.19
Total	95	67790.88	424282.07

Note:- The above classification includes steam type electricity generation of plants below 20 MW



Table NO 6.3
SALIENT OPERATING DATA FOR STEAM TYPE ELECTRICITY
GENERATION STATIONS (UTILITIES) DURING 2004-05

S. No.	Item	Coal	Lignite	Furnance Oil	Diesel	LSHS & HHS
1	Total Consumption Stations. (Million Metric Tonnes)	279	23	1193126 (K.Ltrs.)	242513 (K.Ltrs.)	579976 (K.Ltrs.)
2	Average calorific value	3755	2724	10433	10270	10423
3	Specific Coal Consumption Kg/Kwh	0.7	1.1	N.A.	N.A.	N.A.



Table No. 6.4
PEAK DEMAND/ PEAK MET DURING THE YEAR 2004-05.

State/U.Ts.	Statewise / Regionwise		(Figures in net MW)	
	Peak Demand (MW)	Peak Met (MW)	Surplus/Deficit(-) (MW)	%
NORTHERN REGION				
Haryana	4037	3621	-416	-10.3
Himachal Pradesh	678	671	-7	-1.0
Jammu & Kashmir	1316	1166	-150	-11.4
Punjab	7122	5559	-1563	-21.9
Rajasthan	4786	4414	-372	-7.8
Uttar Pradesh	7877	6268	-1609	-20.4
Uttarnanchal	846	794	-52	-6.1
Chandigarh	224	224	0	0
Delhi	3558	3490	-68	-1.9
NORTHERN REGION	26834	24125	-2709	-10.1
WESTERN REGION				
Gujarat	10162	7578	-2584	-25.4
Madhya Pradesh	5944	4846	-1098	-18.5
Chhattisgarh	1893	1749	-144	-7.6
Maharashtra	14986	12464	-2522	-16.8
Goa	356	356	0	0
Daman & Diu	200	200	0	0
Dadra & Nagar Haveli	391	391	0	0
WESTERN REGION	31085	24128	-6957	-22.4
SOUTHERN REGION				
Andhra Pradesh	8093	7903	-190	-2.3
Karnataka	5927	5612	-315	-5.3
Kerala	2451	2420	-31	-1.3
Tamil Nadu	7647	7555	-92	-1.2
Pondicherry	240	240	0	0
SOUTHERN REGION	23075	22364	-711	-3.1
EASTERN REGION				
Bihar	980	980	0	0
Jharkhand	600	590	-10	-1.7
Orissa	2220	2220	0	0
West Bengal+Sikkim	4117	3965	-152	-3.7
DVC	1400	1400	0	0
EASTERN REGION	8816	8533	-283	-3.2
NORTH EAST REGION				
Assam	659	621	-38	-5.8
Manipur	103	103	0	0
Meghalaya	264	207	-57	-21.6
Nagaland	74	71	-3	4.1
Tripura	188	159	-29	-15.4
Arunachal Pradesh	63	62	-1	-1.6
Mizoram	69	67	-2	-2.9
NORTH EAST REGION	1272	1128	-144	-11.3
ALL INDIA	87906	77652	-10254	-11.7



Table No.6.5
MANPOWER ENGAGED IN STATE ELECTRICITY BOARDS,DVC & POWER
CORPORATIONS AS ON 31.3.2005.(AS REPORTED)

Name of the Board/ Undertaking	REGULAR					Total (2to6)
	Managerial and higher executive	Technical & Scientific Officers	Technical Super- visory Staff	Technicians & Operating Staff	Non- Technical	
1	2	3	4	5	6	7
NORTHERN REGION						
(1) Haryana						
(a) HPGCL	8	418	722	2275	1206	4629
(b) HVPNL	4	286	2858	0	2216	5364
(2) Himachal PradeshSEB	21	917	2202	14380	9438	26958
(3) J&K PDC(R)	N.A.	N.A.	N.A.	48	N.A	48
(4) Punjab SEB	2463	(A)	68812	(A)	N.A	71275
(5) Rajasthan						
(a) RRVUNL	4	750	221	1326	450	2751
(b) RVPNL	Not	Reported				0
(6) Uttar Pradesh						
(a) UPRVUNL	Not	Reported				0
(b) UPJVUNL	Not	Reported				0
(c) UPPCL	60	2581	1870	11681	10090	26282
(7) Uttaranchal						
(a) UJVNL	14	473	0	1627	642	2756
(b) PTCUL	3	56	55	356	114	584
(c) UPCL	9	282	302	3371	1568	5532
(8) Delhi						
(a) IPGCL+PPCL	9	271	63	834	1033	2210
(b) Delhi Transco Ltd.	8	231	164	1091	601	2095
WESTERN REGION						0
(9) Gujarat Electy. Board.	22	2748	2701	29665	17014	52150
(10) Madhya Pradesh						
(a) M.PSEB	52	3591	3479	44888	22639	74649
(b) MPPGCL	11	822	543	3659	1675	6710
(c) MPPTCL	6	415	167	2980	1298	4866
(11) Maharashtra SEB(R)	48	1012	8130	62981	20981	93152
(12) ChattisgarhSEB	12	955	825	10188	4746	16726

N.A:- Information not available.

R :- Repeated. Manpower details of Discoms are not included in states.

A :- Included under Technical Supervisory Staff.



Table No.6.5 (Contd)
MANPOWER ENGAGED IN STATE ELECTRICITY BOARDS,DVC & POWER
CORPORATIONS AS ON 31.3.2005.(AS REPORTED)

Name of the Board/ Undertaking	REGULAR					Total (2to6)
	Managerial and higher executive	Technical & Scientific Officers	Technical Super- visory Staff	Technicians & Operating Staff	Non- Technical	
1	2	3	4	5	6	7
SOUTHERN REGION						
(13) Andhra Pradesh						
(a) APPGCL	25	2378	418	6560	1920	11301
(b) APTRANSCO	40	2093	4040	40753	16166	63092
(14) Karnataka						
(a) VVNL	Not	Reported				0
(b) KPTCL	23	653	1225	1761	1892	5554
(15) keralaSEB	12	2880	2609	18059	1698	25258
(16) Tamil NaduSEB	37	7741	9544	39788	22663	79773
EASTERN REGION						
(17) Bihar SEB	19	847	249	3880	11612	16607
(18) Orissa						0
(a) GRIDCO						0
(b) OPGCL	2	132	17	296	160	607
(c) OHPCL	5	331	1771	0	634	2741
(19) West Bengal						0
(a) WBSEB	13	2327	791	15882	10087	29100
(b) WBPDCL	8	830	1100	1314	689	3941
(20) D.V.C.	32	1386	766	2776	362	5322
NORTH EASTERN REGION						
(21) Assam SEB	11	708	900	8098	5610	15327
(22) MeghalayaSEB	114	265	827	2087	411	3704



Table No.6.5 (Contd)
MANPOWER ENGAGED IN STATE ELECTRICITY BOARDS,DVC & POWER
CORPORATIONS AS ON 31.3.2005.(AS REPORTED)

Name of the Board/ Undertaking	NON - REGULAR			Total Non- Regular (8+9+11)	Total Regular & Non- Regular (7+12)
	Technical Trainees and Apprentices	Worked Charged Staff	Casual		
8	9	10	11	12	13
NORTHERN REGION					
(1) Haryana					
(a) HPGCL	0	0	0	0	4629
(b) HVPNL	10	9	3	22	5386
(2) Himachal PradeshSEB	0	252	1694	1946	28904
(3) J&K (R)	14	0	0	14	62
(4) Punjab SEB	1773	7835	716	10324	81599
(5) Rajasthan	177	0	153	330	330
(a) RRVUNL	77	49	356	482	3233
(b) RVPNL				0	0
(6) Uttar Pradesh	N.A.	N.A.	N.A.	0	0
(a) UPRVUNL				0	0
(b) UPJVUNL				0	0
(c) UPPCL	0	0	0	0	26282
(7) Uttaranchal					
(a) UJVNL	0	0	0	0	2756
(b) PTCUL	12	6	2	20	604
(c) UPCL	0	0	0	0	5532
(8) Delhi					
(a) IPGCL+PPCL	50	111	7	168	2378
(b) Delhi Transco Ltd.	0	46	0	46	2141
WESTERN REGION					
(9) Gujarat Electy. Board.	0	0	0	0	52150
(10) Madhya Pradesh					
(a) M.PSEB	0	0	0	0	74649
(b) MPPGCL	0	98	1	99	6809
(c) MPPTCL	0	60	11	71	4937
(11) Maharashtra SEB(R)	N.A.	N.A.	N.A.	0	93152
(12) ChattisgarhSEB	738	470	4	1212	17938



Table No.6.5 (Contd)
MANPOWER ENGAGED IN STATE ELECTRICITY BOARDS,DVC & POWER
CORPORATIONS AS ON 31.3.2005.(AS REPORTED)

Name of the Board/ Undertaking	NON - REGULAR			Total Non- Regular (8+9+11)	Total Regular & Non- Regular (7+12)
	Technical Trainees and Apprentices	Worked Charged Staff	Casual		
8	9	10	11	12	13
SOUTHERN REGION					
(13) Andhra Pradesh					
(a) APPGCL	0	0	0	0	11301
(b) APTRANSCO	2842	40	0	2882	65974
(14) Karnataka					
(a) VVNL				0	0
(b) KPTCL	679	491	0	1170	6724
(15) keralaSEB	N.A.	N.A.	N.A.	0	25258
(16) Tamil NaduSEB	N.A.	N.A.	N.A.	0	79773
EASTERN REGION					
(17) Bihar SEB	0	0	0	0	16607
(18) Orissa				0	0
(a) GRIDCO				0	0
(b) OPGCL	0	13	0	13	620
(c) OHPCL	0	0	245	245	2986
(19) West Bengal				0	0
(a) WBSEB	0	0	0	0	29100
(b) WBPCL	243	0	0	243	4184
(20) D.V.C.	N.A.	6062	N.A.	6062	11384
NORTH EASTERN REGION					
(21) Assam SEB	N.A.	N.A.	N.A.	0	15327
(22) MeghalayaSEB	N.A.	N.A.	N.A.	0	3704



Table No. 6.6
PLANT LOAD FACTOR OF THERMAL/NUCLEAR
ELECTRICITY GENERATION PLANTS DURING 2004-05
(Figs in %age)

State/U.Ts.	Central sector		State Sector	Private Sector
	Thermal	Nuclear	Thermal	Thermal
NORTHERN REGION				
Haryana	0.00	0.00	69.00	0.00
Himachal Pradesh	0.00	0.00	0.00	0.00
Jammu & Kashmir	0.00	0.00	0.00	0.00
Punjab	0.00	0.00	77.50	0.00
Rajasthan	0.00	70.60	85.11	0.00
Uttar Pradesh	90.80	78.70	57.40	0.00
Uttarnanchal	0.00	0.00	0.00	0.00
Chandigarh	0.00	0.00	0.00	0.00
Delhi	88.50	0.00	48.30	0.00
WESTERN REGION				
Gujarat	0.00	65.20	69.03	89.00
Madhya Pradesh	90.00		72.10	0.00
Chhattisgarh	92.70	0.00	73.00	0.00
Maharashtra	0.00	92.30	76.60	66.97
Goa	0.00	0.00	0.00	0.00
D. & N. Haveli	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00
SOUTHERN REGION				
Andhra Pradesh	91.10	0.00	90.60	0.00
Karnataka	0.00	75.90	83.20	0.00
Kerala	0.00	0.00	0.00	0.00
Tamil Nadu	76.80	49.70	76.90	0.00
Lakshadweep	0.00	0.00	0.00	0.00
Pondicherry	0.00	0.00	0.00	0.00
EASTERN REGION				
Bihar	82.70	0.00	3.30	0.00
Jharkhand	0.00	0.00	15.24	0.00
Orissa	81.50	0.00	86.00	0.00
West Bengal	69.20	0.00	45.46	80.10
D.V.C.	46.40	0.00	0.00	0.00
A. & N. Islands	0.00	0.00	0.00	0.00
Sikkim	0.00	0.00	0.00	0.00
NORTH-EASTERN REGION				
Assam	0.00	0.00	15.00	0.00
Manipur	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00
Tripura	0.00	0.00	0.00	0.00
Arunachal Pradesh	0.00	0.00	0.00	0.00
Mizoram	0.00	0.00	0.00	0.00
Total (All India)	81.70	70.70	69.60	85.10



Table No.- 6.7

COAL CONSUMPTION IN THERMAL ELECTRICITY GENERATION PLANTS DURING 2004-05

QUANTITY IN 000 T

SL. NO.	Name of TPS	LINKAGE*			RECEIPT*				CONSU. MPTION Qty	Closing STOCKS	
		Rail QTY	Other mode	Total QTY	Rail QTY	Other mode	Total QTY	% of 5		STOCKS Qty	In Days
1	2	3	4	5	6	7	8	9	10	11	12
NORTHERN REGION											
DELHI											
1	Badarpur	4530	0	4530	3907	0	3907	86	3732	192	15
2	I.P.Stn.	1020	0	1020	801	0	801	79	789	76	33
3	Rajghat	840	0	840	573	0	573	68	541	60	26
HARYANA											
4	Faridabad	1035	0	1035	847	0	847	82	822	64	21
5	Panipat	5850	0	5850	4745	0	4745	81	4447	351	21
PUNJAB											
6	Bhatinda	1875	0	1875	1540	0	1540	82	1469	84	18
7	Lehra Mohabbat	2550	0	2550	2051	0	2051	80	1995	136	20
8	Roper	6900	0	6900	6396	0	6396	93	6056	410	24
RAJASTHAN											
9	Kota	6045	0	6045	5327	0	5327	88	5213	279	16
10	Suratgarh	7050	0	7050	6324	0	6324	90	5920	314	16
UTTAR PRADESH											
11	Anpara	990	7440	8430	260	8161	8421	100	8339	497	20
12	Harduaganj	975	0	975	783	0	783	80	670	118	44
13	Obra	5610	0	5610	4652	0	4652	83	4761	211	12
14	Panki Extn.	1095	0	1095	928	0	928	85	913	50	17
15	Paricha	1065	0	1065	960	0	960	90	876	81	27
16	Tanda (NTPC)	3205	0	3205	2625	0	2625	82	2596	52	6
17	Unchahar (NTPC)	4995	0	4995	4859	0	4859	97	4604	258	19
18	Rihand STPS	0	5196	5196	0	4610	4610	89	4768	153	8
19	Singrauli(STPS)	0	9411	9411	0	10153	10153	108	10336	301	10
20	NCTPP(Dadri)	5085	0	5085	4765	0	4765	94	4432	306	23
TOTAL N. R.		60715	22047	82762	52343	22924	75267	91	73279	3993	17
WESTERN REGION											
GUJARAT											
21	Ahmedabad	1410	0	1410	1174	0	1174	83	1651	35	14
22	Gandhinagar	3120	0	3120	2809	0	2809	90	3158	250	30
23	Sikka	1080	0	1080	985	0	985	91	1000	9	3
24	Ukai	3681	0	3681	3468	0	3468	94	3440	105	10
25	Wanakbori	8460	0	8460	7620	0	7620	90	7404	124	5
MADHYAPRADESH											
26	Amarkantak	0	1170	1170	0	1060	1060	91	1052	50	14
27	Birsingpur	4785	0	4785	4129	0	4129	86	4047	205	15
28	Satpura	4710	2970	7680	4179	2772	6951	91	6753	202	9
29	Vindhyachal STPS	0	10200	10200	0	10660	10660	105	10860	430	21
CHHATTISGARH											
30	Korba East	0	2745	2745	0	2356	2356	86	2237	210	26
31	Korba West	0	4830	4830	0	4098	4098	85	4053	373	27
32	Korba STPS	0	10890	10890	0	12057	12057	111	12388	63	2
MAHARASHTRA											
33	Bhusawal	2445	0	2445	2205	0	2205	90	2342	119	18
34	Chandrapur	9735	3855	13590	9361	3270	12631	93	12234	439	11
35	Koradi	4290	1005	5295	4264	770	5034	95	4973	136	9
36	Khaperkheda	4860	150	5010	4757	49	4806	96	4909	117	8
37	Nasik	4320	0	4320	3558	0	3558	82	3654	288	24
38	Parli	3417	0	3417	3335	0	3335	98	3314	56	6
39	Paras	360	0	360	348	0	348	97	324	30	26
40	Trombay	0	0	0	0	0	0	0	0	0	11
41	Dhanu	3090	0	3090	2155	0	2155	70	1993	179	20
TOTAL W.R.		59763	37815	97578	54347	37092	91439	94	91786	3420	12

(* = Only for power stations monitored by OM Division of CEA)



Table No.- 6.7
COAL CONSUMPTION IN THERMAL ELECTRICITY GENERATION PLANTS DURING 2004-05

		QUANTITY IN 000 T									
SL. NO.	Name of TPS	LINKAGE*			RECEIPT*				CONSU. MPTION Qty	Closing STOCKS	
		Rail QTY	Other mode	Total QTY	Rail QTY	Other mode	Total QTY	% of		STOCKS Qty	In Days
1	2	3	4	5	6	7	8	9	10	11	12
SOUTHERN REGION											
ANDHRA PRADESH											
42	Kothagudem	5865	600	6465	5871	464	6335	98	6316	201	11
43	Ramagundam B	0	330	330	0	318	318	96	317	5	5
44	Vijayawada	7800	0	7800	6951	0	6653	85	6863	235	11
45	Ramagundam STPS	1410	9570	10980	714	9725	10439	95	10490	448	13
46	Nellore	171	0	171	146	0	146	85	150	3	6
47	Rayalaseema	2490	0	2490	2187	0	10585	425	2149	74	10
48	Simhadri	5130	0	5130	5302	0	5302	103	5556	19	1
KARNATAKA											
49	Raichur	9090	0	9090	7632	0	7632	84	6936	257	10
TAMIL NADU											
50	Ennore	1830	0	1830	1095	0	1095	60	1156	14	4
51	Mettur	5235	0	5235	4644	0	4644	89	4852	61	4
52	Tuticorin	5685	0	5685	5378	0	5739	101	5563	97	6
53	North Madras	3720	0	3720	2807	0	2807	75	2816	90	9
TOTAL S.R.		48426	10500	58926	42727	10507	53234	90	53164	1504	9
EASTERN REGION											
BIHAR											
54	Barauni	450	0	450	172	0	172	38	169	6	6
55	Muzaffarpur	60	0	60	0	0	0	0	0	26	0
56	Kahalgau STPS	2220	3330	5550	2715	2768	5483	99	5524	7	0
JHARKHAND											
57	Patratu	1470	0	1470	713	0	713	49	715	51	12
58	Tenughat	0	1050	1050	0	747	747	71	902	173	52
59	Bokaro (DVC)	1605	345	1950	1213	756	1969	101	2067	190	34
60	Chandrapura (DVC)	360	660	1020	526	905	1431	140	1457	172	43
WEST BENGAL											
61	Durgapur (DVC)	1185	180	1365	916	106	1022	75	1049	49	12
62	Mejia (DVC)	3510	615	4125	2331	886	3217	78	3124	50	4
63	Bandel	1605	0	1605	1357	0	1357	85	1311	84	19
64	Santalidih	1035	0	1035	955	0	955	92	938	26	9
65	Kolaghat	5880	0	5880	5326	0	5326	91	5296	119	7
66	Bakreswar	2415	0	2415	2260	0	2260	94	2258	59	9
67	Calcutta(CESC)	465	0	465	431	0	431	93	431	6	5
68	Titagarh(CESC)	1140	0	1140	1068	0	1068	94	1171	29	9
69	S. G.St(CESC)	735	0	735	693	0	693	94	688	22	11
70	Budge Budge(CESC)	2055	0	2055	1935	0	1935	94	2220	39	8
71	Durgapur(DPL)	1830	0	1830	1660	0	1660	91	1668	19	3
72	Farakka STPS	3810	6204	10014	3669	5244	8913	89	8895	20	1



Table No.- 6.7

COAL CONSUMPTION IN THERMAL ELECTRICITY GENERATION PLANTS DURING 2004-05

SL. NO.	Name of TPS	QUANTITY IN 000 T									
		LINKAGE*			RECEIPT*				CONSU. MPTION Qty	Closing STOCKS	
		Rail QTY	Other mode	Total QTY	Rail QTY	Other mode	Total QTY	% of 5		Qty	Qty
1	2	3	4	5	6	7	8	9	10	11	12
ORISSA											
73	Talcher Old	0	2400	2400	0	2609	2609	109	2577	86	13
74	Talcher STPS	0	13620	13620	0	11542	11542	85	12028	3	0
75	Ib Valley	0	2760	2760	0	2631	2631	95	2641	102	13
TOTAL E.R.		31830	31164	62994	27940	28194	56134	89	57129	1338	7
N.E.Region/ASSAM											
76	Bongaigaon	0	0	0	0	0	0		0	0	22
TOTAL ALL India (Indigenous coal)		200734	101526	302260	177357	98717	276074	91	275358	10255	12
Imported coal											
	Ahemedabad	540	0	540	465	0	465	86			
	Gandhinagar	960	0	960	665	0	665	69			
	Budge Budge(CESC)	270	0	270	285	0	285	106			
	Kota	0	0	0	34	0	34	0			
	Suratgarh	0	0	0	39	0	39				
	Wanakbori	0	0	0	0	0	0	0			
	Titagarh(CESC)	120	0	120	123	0	123	103			
	Dahanu	90	0	90	426	0	426	0	421	180	180
	Nasik	0	0	0	339	0	339	0			
	Bhusawal	0	0	0	144	0	144				
	North Chennai	0	0	0	17	0	17				
	Trombay	0	0	0	1990	0	1990	0	1956	64	
Total Imported		1980	0	1980	4527	0	4527	363	2377	244	
All INDIA TOTAL		202714	101526	304240	181884	98717	280601	92	277735	10499	12

Note:-Coal consumption and stock figure includes imported coal.

CHAPTER – 7
ELECTRICITY TRANSMISSION AND
DISTRIBUTION SYSTEM



CHAPTER - 7

ELECTRICITY TRANSMISSION AND DISTRIBUTION SYSTEM

REVIEW:

I. Transmission and Distribution

An extensive network of Transmission and Distribution lines has been developed over the years for evacuating power produced by different electricity generating stations and distributing the same to the consumers. Depending upon the quantum of power and the distance involved, lines of appropriate voltages are laid. The nominal Extra High Voltage lines in vogue are \pm 500 kV HVDC & 765kV, 400 kV, 230/220 kV, 110 kV and 66 kV AC lines. These have been installed by all the SEBs, and by Generation, Transmission & Distribution utilities including those in Central Sector.

The standard voltage of operation on the distribution side are 33 kV, 22 kV, 11kV, 400/230 Volts besides 6.6 kV, 3.3 kV and 2.2 kV. The low voltage system has 3 phase 4 wires supply giving 400/420 volts between 2 phases and 230/240 volts between phase and neutral. This has been adopted throughout the country.

The following table depicts the length of lines operating at various voltages as on 31.03.2005 with percentage increase over previous year.

Sr No	Voltages	Length of Lines (Ckt.Kms.)		
		31.03.05	31.03.04	% Growth
1	800 kV	563	563	0.00
2	HVDC	6841	5876	16.42
3	400 kV	57185	53616	6.66
4	230/220 kV	104758	101667	3.04
5	132/110/90 kV	124344	121925	1.98
6	78/66 kV	45884	43297	5.98
7	33/22 kV	299639	283240	5.79
8	15/11 kV	1971722	1869371	5.48
9	6.6/3.3/2.2 kV Distribution lines	6431	6362	1.08
10	Up to 500 volts	3953456	3859504	2.43
Total (All India)		6570823	6345421	3.55



The State of Andhra Pradesh has the largest Transmission and Distribution network of 749791 Ckt. Kms in the country. Apart from Andhra Pradesh the States of Maharashtra, Tamil Nadu, Karnataka, Madhya Pradesh, Uttar Pradesh, and Rajasthan & Gujarat have more than 4 lakh Ckt. Kms. of T&D Lines.

Due to non-receipt of data in respect of States of J&K, Dadra & Nagar Haveli, A&N Island, Sikkim & Arunachal Pradesh figures of previous year's (2003-04) has been repeated for these States. Similarly, data in respect of Bihar and Jharkhand State concerning below 132 kV voltage classes has been repeated due to non-furnishing of data by the concerned entity.

II. Transformers

The total number of step -up transformers installed at various electricity generating stations and sub- stations in the country as on 31st March, 2005 were 2535 having aggregate capacity of 146338.4 MVA. The total numbers of step -down and distribution transformers were 35290 and 2916588 with aggregate capacity of 523698.7 and 236070.4 MVA respectively.



Table No. 7.1
LENGTH OF TRANSMISSION AND DISTRIBUTION LINES
STATEWISE - AS ON 31ST MARCH, 2005.

(Ckt. Kms.)

Name of the State/U.Ts.	HVDC (O.H.)	800 kV (O.H.)	400 kV (O.H.)	230 kV (O.H.)	220 kV (O.H.)	132 kV (O.H.)	110/90 kV (O.H.)
Haryana	0	0	0	0	2192	2692	0
Himachal Pradesh	0	0	55	0	421	1374	0
Jammu & Kashmir	0	0	0	0	224	659	0
Punjab	0	0	574	0	7110	3050	0
Rajasthan	0	0	620	0	7492	11466	0
Uttar Pradesh	409	0	3555	0	6490	11310	0
Uttaranchal	0	0	0	0	0	0	0
Chandigarh	0	0	0	0	54	0	0
Delhi	0	0	227	0	498	0	0
Central Sector (NR)	1634	563	8252	0	4289	58	0
Sub-Total (NR)	2043	563	13283	0	28770	30609	0
Gujarat	0	0	1776	0	11107	4654	0
Madhya Pradesh	0	0	2314	0	6880	10055	0
Chhattishgarh	360	0	277	0	1657	3388	0
Maharashtra	1504	0	6376	0	12225	9793	3032
Goa	0	0	0	0	419	0	405
D&N Haveli	0	0	0	0	12	0	0
Daman & Diu	0	0	0	0	19	0	0
Central Sector (WR)	0	0	9142	0	1012	0	0
Sub-Total (WR)	1864	0	19885	0	33331	27890	3437
Andhra Pradesh	196	0	2033	0	11680	13351	0
Karnataka	0	0	1978	0	8351	0	7183
Kerala	0	0	0	0	2597	0	3760
Tamil Nadu	0	0	0	6613	0	0	12707
Lakshadweep	0	0	0	0	0	0	0
Pondicherry	0	0	0	135	0	36	206
Central Sector (SR)	2738	0	10103	0	366	0	0
Sub-Total (SR)	2934	0	14114	6748	22994	13387	23856
Bihar	0	0	75	0	957	3649	0
Jharkhand	0	0	135	0	712	1867	0
Orissa	0	0	461	0	4163	4475	0
West Bengal	0	0	758	0	2307	5066	0
D.V.C.	0	0	0	0	1352	3420	0
A. & N. Islands	0	0	0	0	0	0	0
Sikkim	0	0	0	0	0	0	0
Central Sector (ER)	0	0	6603	0	1488	302	0
Sub-Total (ER)	0	0	8032	0	10979	18779	0
Assam	0	0	0	0	1385	2063	0
Manipur	0	0	0	0	0	376	0
Meghalaya	0	0	0	0	0	684	0
Nagaland	0	0	0	0	0	370	0
Tripura	0	0	0	0	0	388	0
Arunachal Pradesh	0	0	0	0	0	0	0
Mizoram	0	0	0	0	0	740	0
Central Sector (NER)	0	0	1871	0	551	1765	0
Sub-Total (NER)	0	0	1871	0	1936	6386	0
Total Central Sector	4372	563	35971	0	7706	2125	0
Total (ALL INDIA)	6841	563	57185	6748	98010	97051	27293

Note:- Certain figures have come down when compared with previous year due to reconciliation done by Data Supplying Organisation(s).



Table No. 7.1 (Contd.)
LENGTH OF TRANSMISSION AND DISTRIBUTION LINES
STATEWISE - AS ON 31ST MARCH, 2005.

(Ckt. Kms.)

Name of the State/U.Ts.	78/66 kV		33 kV		22/20 kV		15/11 kV	
	(O.H.)	(O.H.)	(U.G.)	(O.H.)	(U.G.)	(O.H.)	(U.G.)	
Haryana	1847	3966	0	0	0	65638	0	
Himachal Pradesh	363	2514	4	5483	0	16422	91	
Jammu & Kashmir	0	1693	0	0	0	11428	0	
Punjab	5246	1648	0	0	0	109525	0	
Rajasthan	303	29781	0	0	0	184994	0	
Uttar Pradesh	3321	29141	18	0	0	206741	82	
Uttanchal	0	3022	0	0	0	24781	0	
Chandigarh	89	28	0	0	0	772	0	
Delhi	762	501	783	0	0	4208	4726	
Central Sector (NR)	0	0	0	0	0	12	0	
Sub-Total (NR)	11931	72294	805	5483	0	624521	4899	
Gujarat	16043	71	17	5708	0	169199	3699	
Madhya Pradesh	61	30790	0	642	0	173929	0	
Chhattishgarh	0	9813	0	0	0	46340	0	
Maharashtra	3268	26539	399	21263	1129	159355	4319	
Goa	0	1138	0	0	0	3140	232	
D&N Haveli	112	0	0	0	0	562	0	
Daman & Diu	81	0	0	0	0	285	30	
Central Sector (WR)	0	0	0	0	0	0	0	
Sub-Total (WR)	19565	68351	416	27613	1129	552810	8280	
Andhra Pradesh	146	33580	0	0	0	202568	0	
Karnataka	7348	7242	0	0	0	167921	3040	
Kerala	2948	516	0	121	0	34188	23	
Tamil Nadu	1464	5405	370	35301	16	86112	1955	
Lakshadweep	0	0	0	0	0	47	0	
Pondicherry	0	0	0	760	0	326	0	
Central Sector (SR)	0	0	0	0	0	0	0	
Sub-Total (SR)	11906	46743	370	36182	16	491162	5018	
Bihar	0	6347	0	0	0	54755	0	
Jharkhand	0	2517	0	0	0	19809	0	
Orissa	40	11026	0	0	0	61920	0	
West Bengal	528	9186	1025	0	50	76301	3634	
D.V.C.	0	1490	0	0	0	0	0	
A. & N. Islands	0	321	0	0	0	671	0	
Sikkim	273	0	0	0	0	2109	24	
Central Sector (ER)	37	0	0	0	0	60	0	
Sub-Total (ER)	878	30887	1025	0	50	215625	3658	
Assam	727	467	0	0	0	32159	0	
Manipur	0	607	0	0	0	4772	0	
Meghalaya	0	1273	0	0	0	7766	0	
Nagaland	392	1216	0	0	0	5079	0	
Tripura	380	680	0	0	0	6592	0	
Arunachal Pradesh	0	3222	0	0	0	4006	0	
Mizoram	105	810	0	0	0	5375	0	
Central Sector (NER)	0	0	0	0	0	0	0	
Sub-Total (NER)	1604	8275	0	0	0	65749	0	
Total Central Sector	37	0	0	0	0	72	0	
Total (ALL INDIA)	45884	226550	2616	69278	1195	1949867	21855	

Note:- Certain figures have come down when compared with previous year due to reconciliation done by Data Supplying Organisation(s).



Table No. 7.1 (Contd.)
LENGTH OF TRANSMISSION AND DISTRIBUTION LINES
STATEWISE - AS ON 31ST MARCH, 2005.

Name of the State/U.Ts.	6.6 kV		3.3/2.2 kV		Distribution lines upto 500 volts	Total
	(O.H.)	(U.G.)	(O.H.)	(U.G.)		
Haryana	0	0	0	0	111150	187485
Himachal Pradesh	0	0	46	0	49213	75986
Jammu & Kashmir	0	0	0	0	27770	41774
Punjab	0	0	0	0	167866	295019
Rajasthan	0	0	0	0	232820	467476
Uttar Pradesh	0	0	0	0	239342	500409
Uttanchal	0	0	0	0	37061	64864
Chandigarh	0	0	0	0	1187	2130
Delhi	0	0	0	0	18048	29753
Central Sector (NR)	0	0	0	0	0	14808
Sub-Total (NR)	0	0	46	0	884457	1679704
Gujarat	0	0	5	27	235338	447644
Madhya Pradesh	0	0	0	0	369756	594427
Chhattishgarh	0	0	0	0	64760	126595
Maharashtra	187	1644	0	0	457071	708104
Goa	0	0	0	0	9364	14698
D&N Haveli	0	0	0	0	1656	2342
Daman & Diu	0	0	0	0	697	1112
Central Sector (WR)	0	0	0	0	0	10154
Sub-Total (WR)	187	1644	5	27	1138642	1905076
Andhra Pradesh	0	0	0	0	486237	749791
Karnataka	0	0	0	0	417605	620668
Kerala	0	0	0	0	206475	250628
Tamil Nadu	0	0	0	0	487451	637394
Lakshadweep	0	0	19	0	217	283
Pondicherry	0	0	0	0	4541	6004
Central Sector (SR)	0	0	0	0	0	13207
Sub-Total (SR)	0	0	19	0	1602526	2277975
Bihar	0	0	0	0	66506	132289
Jharkhand	4365	0	0	0	19904	49309
Orissa	0	0	0	0	58755	140840
West Bengal	77	0	12	34	93068	192046
D.V.C.	0	0	0	0	0	6262
A. & N. Islands	0	0	0	0	2310	3302
Sikkim	0	0	15	0	2735	5156
Central Sector (ER)	0	0	0	0	0	8490
Sub-Total (ER)	4442	0	27	34	243278	537694
Assam	0	0	0	0	42554	79355
Manipur	0	0	0	0	6711	12466
Meghalaya	0	0	0	0	6949	16672
Nagaland	0	0	0	0	7252	14309
Tripura	0	0	0	0	6198	14238
Arunachal Pradesh	0	0	0	0	6988	14216
Mizoram	0	0	0	0	7901	14931
Central Sector (NER)	0	0	0	0	0	4187
Sub-Total (NER)	0	0	0	0	84553	170374
Total Central Sector	0	0	0	0	0	50846
Total (ALL INDIA)	4629	1644	97	61	3953456	6570823

Note:- Certain figures have come down when compared with previous year due to reconciliation done by Data Supplying Organisation(s).



Table No. 7.2
LENGTH OF TRANSMISSION AND DISTRIBUTION LINES IN
STATE ELECTRICITY BOARDS - AS ON 31ST MARCH,2005

(Ckt.Kms.)

Name of the Board	500kV HVDC (O.H.)	400 kV (O.H.)	230 kV (O.H.)	220 kV (O.H.)	132 kV (O.H.)	110/90 kV (O.H.)
Himachal Pradesh	0	0	0	421	1350	0
Punjab	0	0	0	4112	3032	0
Sub-Total (NR)	0	0	0	4533	4382	0
Gujarat	0	1776	0	11057	4550	0
Madhya Pradesh	0	2314	0	6880	10055	0
Chhattisgarh	360	277	0	1657	3388	0
Maharashtra	1504	6376	0	11382	9793	2307
Sub-Total (WR)	1864	10743	0	30976	27786	2307
Kerala	0	0	0	2597	0	3760
Tamil Nadu	0	0	6613	0	0	12707
Sub-Total (SR)	0	0	6613	2597	0	16467
Bihar	0	75	0	957	3649	0
Jharkhand	0	135	0	477	1847	0
West Bengal	0	755	0	2305	4754	0
Sub-Total (ER)	0	965	0	3739	10250	0
Assam	0	0	0	1385	2063	0
Meghalaya	0	0	0	0	684	0
Sub-Total (NER)	0	0	0	1385	2747	0
Total (All Boards)	1864	11708	6613	42320	45165	18774

Note:- Certain figures have come down when compared with previous year due to reconciliation done by Data Supplying Organisation(s).



Table No. 7.2 (Contd.)
LENGTH OF TRANSMISSION AND DISTRIBUTION LINES IN
STATE ELECTRICITY BOARDS - AS ON 31ST MARCH,2005

Name of the Board	<i>(Ckt.Kms.)</i>							
	78/66 kV		33 kV		22/20 kV		15/11 kV	
	(O.H.)	(O.H.)	(U.G.)	(O.H.)	(U.G.)	(O.H.)	(U.G.)	
Himachal Pradesh	363	2422	0	5483	0	16422	91	
Punjab	5101	1648	0	0	0	109525	0	
Sub-Total (NR)	5464	4070	0	5483	0	125947	91	
Gujarat	15896	69	0	5708	0	168733	0	
Madhya Pradesh	61	30790	0	0	0	163081	0	
Chhattisgarh	0	9813	0	0	0	46340	0	
Maharashtra	3268	26093	57	21075	350	159308	1844	
Sub-Total (WR)	19225	66765	57	26788	350	537462	1844	
Kerala	2948	516	0	121	0	33998	0	
Tamil Nadu	1464	5405	370	35281	16	85910	1955	
Sub-Total (SR)	4412	5921	370	35402	16	119908	1955	
Bihar	0	6347	0	0	0	54755	0	
Jharkhand	0	2517	0	0	0	19809	0	
West Bengal	528	9047	0	0	0	74438	0	
Sub-Total (ER)	528	17911	0	0	0	149002	0	
Assam	727	467	0	0	0	32159	0	
Meghalaya	0	1273	0	0	0	7766	0	
Sub-Total (NER)	727	1740	0	0	0	39925	0	
Total (All Boards)	30356	96407	427	67668	366	972244	3890	

Note:- Certain figures have come down when compared with previous year due to reconciliation done by Data Supplying Organisation(s).



Table No. 7.2 (Contd.)
LENGTH OF TRANSMISSION AND DISTRIBUTION LINES IN
STATE ELECTRICITY BOARDS - AS ON 31ST MARCH, 2005

(Ckt.Kms.)

Name of the Board	6.6 kV		3.3/2.2 kV		Distribution line upto	Total
	(O.H.)	(U.G.)	(O.H.)	(U.G.)		
Himachal Pradesh	0	0	46	0	49213	75811
Punjab	0	0	0	0	167866	291284
Sub-Total (NR)	0	0	46	0	217079	367095
Gujarat	0	0	0	0	223395	431184
Madhya Pradesh	0	0	0	0	337021	550202
Chhattisgarh	0	0	0	0	64760	126595
Maharashtra	0	0	0	0	444618	687975
Sub-Total (WR)	0	0	0	0	1069794	1795956
Kerala	0	0	0	0	206128	250068
Tamil Nadu	0	0	0	0	476886	626607
Sub-Total (SR)	0	0	0	0	683014	876675
Bihar	0	0	0	0	66506	132289
Jharkhand	4365	0	0	0	19904	49054
West Bengal	0	0	0	0	81540	173367
Sub-Total (ER)	4365	0	0	0	167950	354710
Assam	0	0	0	0	42554	79355
Meghalaya	0	0	0	0	6949	16672
Sub-Total (NER)	0	0	0	0	49503	96027
Total (All Boards)	4365	0	46	0	2187340	3490463

Note:- Certain figures have come down when compared with previous year due to reconciliation done by Data Supplying Organisation(s).



Table No. 7.3
NUMBER OF TRANSFORMERS AND THEIR AGGREGATE CAPACITY
(UTILITIES ONLY) STATEWISE AS ON 31.3.2005

Name of the State/U.Ts.	STEP UP		STEP DOWN	
	Number Capacity (kVA)	Aggregate Capacity (kVA)	Number	Aggregate
Haryana	19	2495000	1084	18648770
Himachal Pradesh	80	619257	378	2545388
Jammu & Kashmir	58	341000	116	609950
Punjab	114	6768797	1216	28188600
Rajasthan	36	3167905	4063	32359120
Uttar Pradesh	69	5220980	3587	46114540
Uttaranchal	40	1168500	320	1548300
Chandigarh	1	1500	44	614000
Delhi	27	2162000	547	16894000
Central Sector(NR)	146	18070020	200	18309200
Sub-Total (NR)	590	40014959	11555	165831868
Gujarat	86	10245000	1930	42561850
Madhya Pradesh	212	3858457	5515	39835350
Chhattisgarh	20	2160300	739	8340300
Maharashtra	117	12203825	1844	59070920
Goa	2	106000	94	1415100
D. & N. Haveli	0	0	20	255000
Daman & Diu	0	0	21	262000
Central Sector(WR)	30	7841000	52	8645000
Sub-Total (WR)	467	36414582	10215	160385520
Andhra Pradesh	202	10000260	4285	47195440
Karnataka	123	7829350	1624	27444500
Kerala	94	2601626	636	12354100
Tamil Nadu	195	8098162	2133	34387180
Lakshadweep	19	7890	71	5749
Pondicherry	2	30000	43	14890
Central Sector(SR)	269	9666097	140	15403200
Sub-Total (SR)	904	38233385	8932	136805059
Bihar	14	594000	108	3444600
Jharkhand	20	2321500	359	3201250
Orissa	115	6427600	939	8447090
West Bengal	82	7505502	1448	21265900
D.V.C.	36	4831200	77	3501890
A.& N. Islands	32	112190	5	18550
Sikkim	34	38125	19	59750
Central Sector(ER)	34	5945000	129	14875800
Sub-Total (ER)	367	27775117	3084	54814830
Assam	39	852980	32	1667500
Manipur	8	51800	57	403250
Meghalaya	12	228600	102	508370
Nagaland	18	23250	72	274850
Tripura	15	169140	98	552950
Arunachal Pradesh	21	19710	60	61115
Mizoram	27	21390	1054	997409
Central Sector(NER)	67	2533470	29	1396000
Sub-Total (NER)	207	3900340	1504	5861444
Total Central Sector	546	44055587	550	58629200
Total (All India)	2535	146338383	35290	523698721



**Table No. 7.3 (Contd.)
NUMBER OF TRANSFORMERS AND THEIR AGGREGATE CAPACITY
(UTILITIES ONLY) STATEWISE AS ON 31.3.2005**

Name of the State/U.Ts.	DISTRIBUTION	
	Number Capacity (kVA)	Aggregate
Haryana	146810	10306617
Himachal Pradesh	16949	1260296
Jammu & Kashmir	5661	883910
Punjab	217275	14410015
Rajasthan	303700	13956805
Uttar Pradesh	354708	19556036
Uttaranchal	3494	1656989
Chandigarh	1271	500653
Delhi	18844	7938924
Central Sector(NR)	463	514173
Sub-Total (NR)	1069175	70984418
Gujarat	263184	24130513
Madhya Pradesh	307952	28047304
Chhattisgarh	39016	2944967
Maharashtra	212203	26053467
Goa	3643	459397
D. & N. Haveli	731	141854
Daman & Diu	424	93834
Central Sector(WR)	0	0
Sub-Total (WR)	827153	81871336
Andhra Pradesh	405997	22495826
Karnataka	214442	18773263
Kerala	36319	4787398
Tamil Nadu	161143	20326123
Lakshadweep	71	5749
Pondicherry	1649	295636
Central Sector(SR)	280	302510
Sub-Total (SR)	819901	66986505
Bihar	37208	3014718
Jharkhand	11484	1118787
Orissa	34424	2643156
West Bengal	82097	5613889
D.V.C.	146	167038
A. & N. Islands	469	61783
Sikkim	1274	63337
Central Sector(ER)	86	91600
Sub-Total (ER)	167188	12774308
Assam	19084	1799580
Manipur	2603	292844
Meghalaya	2583	345819
Nagaland	1192	345819
Tripura	5105	436491
Arunachal Pradesh	1607	117946
Mizoram	997	115319
Central Sector(NER)	0	0
Sub-Total (NER)	33171	3453818
Total Central Sector	829	908283
Total (All India)	2916588	236070385



Table No. 7.4
NUMBER OF TRANSFORMERS AND THEIR AGGREGATE CAPACITY
IN STATE ELECTRICITY BOARDS AS ON 31ST MARCH, 2005

Name of the Board	STEP UP		STEP DOWN	
	Number	Aggregate Capacity (kVA)	Number	Aggregate Capacity
Himachal Pradesh	67	404257	373	2542288
Punjab	68	3198797	1138	23495000
Sub-Total (NR)	135	3603054	1511	26037288
Gujarat	47	6652000	1780	38754500
Madhya Pradesh	212	3858457	3426	34037950
Chhattisgarh	20	2160300	739	8340300
Maharashtra	88	8908025	1543	47453820
Sub-Total (WR)	367	21578782	7488	128586570
Kerala	90	2366626	632	12294100
Tamil Nadu	183	6743162	2084	33841670
Sub-Total (SR)	273	9109788	2716	46135770
Bihar	5	533000	105	3440400
Jharkand	15	1431500	349	2781250
West Bengal	26	241002	1192	15015400
Sub-Total (ER)	46	2205502	1646	21237050
Assam	38	840480	32	1667500
Meghalaya	12	228600	102	508370
Sub-Total (NER)	50	1069080	134	2175870
Total (All Boards)	871	37566206	13495	224172548



Table No. 7.4 (Contd.)
NUMBER OF TRANSFORMERS AND THEIR AGGREGATE CAPACITY
IN STATE ELECTRICITY BOARDS AS ON 31ST MARCH, 2005

Name of the Board	DISTRIBUTION	
	Number	Aggregate Capacity (kVA)
Himachal Pradesh	16949	1260296
Punjab	217275	14410015
Sub-Total (NR)	234224	15670311
Gujarat	256976	18732633
Madhya Pradesh	176007	16016456
Chhattisgarh	39016	2944967
Maharashtra	205561	21264082
Sub-Total (WR)	677560	58958138
Kerala	36062	4722598
Tamil Nadu	161092	20287143
Sub-Total (SR)	197154	25009741
Bihar	37208	3014718
Jharkand	11432	1074382
West Bengal	76320	3714140
Sub-Total (ER)	124960	7803240
Assam	19082	1797080
Meghalaya	2583	345819
Sub-Total (NER)	21665	2142899
Total (All Boards)	1255563	109584329

CHAPTER - 8

ELECTRICITY UTILISATION



CHAPTER - 8 ELECTRICITY UTILISATION

REVIEW:

I. Electrical Energy Consumption

Electricity consumption by various categories of consumers served by utilities during the year under review was 386133.66GWh registering an increase of 6.98% over previous year.

As in the preceding year, the major portion of electricity viz. 338386.87 GWh representing 87.63% of the total energy consumption was distributed by the Public Sector and remaining 12.37% was distributed by the private sector. Out of 87.63% of energy distributed by the Public Sector, the 13 State Electricity Boards supplied 49.51% and the Municipalities and Electricity Departments of the States and Union Territories supplied balance 38.12%. Out of 12.37% of energy distributed by the Private Sector (including Co-operative Societies) the four major private licensees viz. TATA Electric Companies, Calcutta Electric Supply Corporation, Torrent Power AEC Ltd and BSES Ltd. distributed 0.59%, 1.52% 0.88% and 3.74% of total energy to its consumers respectively. The details of energy sold by various agencies during 2004-05 are tabulated below:-

Sl. No.	Agency	Electrical Energy sold to ultimate consumers		
		Quantum (GWh)	% to total Consumption	% increase over 2003-04
1.	State Elect. Boards	191189.64	49.51	5.80
2.	Elect. Depts. of States & Union Territories.	142625.06	36.94	9.61
3.	Municipalities	4572.17	1.18	4.91
4.	Private Licensees (including Co-op.Societies)	47746.79	12.37	4.37
Total		386133.66	100.00	6.98

As regards the energy consumed by various classes of consumers, the Industrial category of consumers, as usual consumed highest energy i.e. 35.63% of total energy sold by Public Utilities as compared to 34.51% during 2003-04. The energy sales to Industrial consumers registered an increase of 10.45% over the previous year.



Agricultural consumers attained the third largest category amongst the consumers of electricity consuming 22.93% of total energy sales as compared to 24.13% during the previous year. However, that the consumption of energy by this Sector increased by 1.68% over the previous year.

II. Per Capita Electricity Consumption

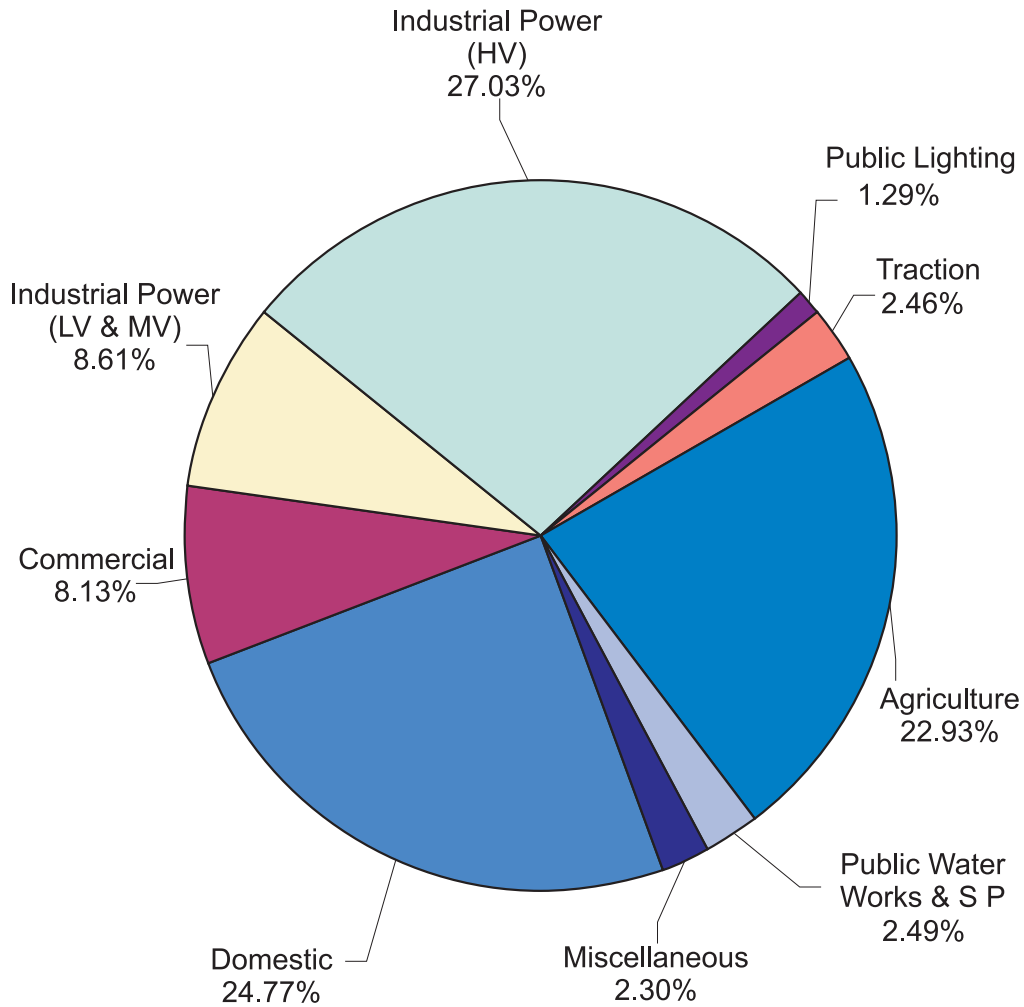
The per capita consumption of electricity on All India basis based on UN practice works out 612.50 kWh for the year 2004-05. As per U.N. practice Per Capita Electricity Consumption is worked out on the basis of the gross electricity during the year.

III. Electrical Accidents

To the extent the information was made available for the year 2004-05 total number of electrical accidents reported was 8277 which comprised of 3174 human fatal accidents, 2309 human non fatal accidents, 2444 animal fatal accidents and 350 animal non fatal accidents.



Electricity Consumption Pattern During 2004-05 (Utilities)





Electricity Consumption Pattern During 2004-05 (Utilities & Non-Utilities)

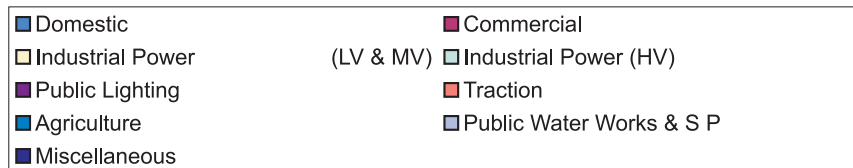
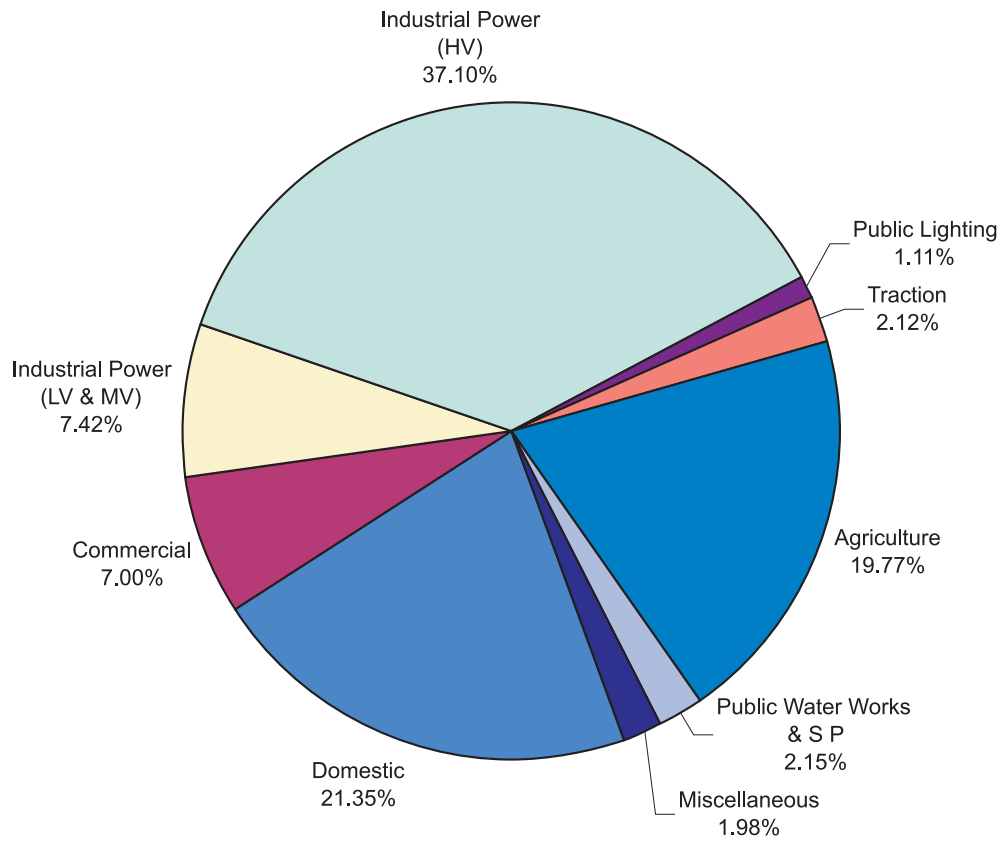




Table No. 8.1
ALL INDIA ENERGY SALES (UTILITIES ONLY) DURING 2004-05

Category	<i>(GWh)</i>				
	Energy Sold % to during 2004-05	total sale in 2004-05	Energy Sold during 2003-04	% to total sale in 2003-04	% increase in sale over previous year 2003-04
Domestic	95659.47	24.77	89735.78	24.86	6.60
Commercial	31381.23	8.13	28201.49	7.81	11.28
Industrial Power	137589.25	35.63	124573.07	34.51	10.45
Public Lighting	4967.58	1.29	4426.10	1.23	12.23
Railway/ Tramways	9495.33	2.46	9210.11	2.55	3.10
Agriculture	88555.35	22.93	87089.25	24.13	1.68
Public Water Works & Sewage Pumping	9618.49	2.49	9218.95	2.55	4.33
Miscellaneous	8866.96	2.30	8482.49	2.35	4.53
Total	386133.66	100.00	360937.24	100.00	6.98



Table No. 8.2
ENERGY SALES TO ULTIMATE CONSUMERS (UTILITIES ONLY)
OWNERSHIPWISE/STATEWISE
DURING THE YEAR 2004-05

State / Uts					(GWh)
	S.E.B.s	Municipalities	Govt.Deptts./ Undertakings/ Corporations	Private Sector	Total
Haryana	0.00	0.00	13807.14	0.00	13807.14
Himachal Pradesh	2954.16	0.00	0.00	0.00	2954.16
Jammu & Kashmir	0.00	0.00	3877.00	0.00	3877.00
Punjab	22414.11	0.00	112.00	0.00	22526.11
Rajasthan	0.00	0.00	16682.55	0.00	16682.55
Uttar Pradesh	0.00	0.00	27655.25	284.00	27939.25
Uttaranchal	0.00	0.00	3163.15	0.00	3163.15
Chandigarh	0.00	0.00	918.29	0.00	918.29
Delhi	0.00	970.49	159.00	11643.90	12773.39
Sub-Total (NR)	25368.27	970.49	66374.38	11927.90	104641.04
Gujarat	29258.00	0.00	0.00	7725.39	36983.39
Madhay Pradesh	16818.39	0.00	0.00	383.50	17201.89
Chhattisgarh	8050.58	0.00	0.00	0.00	8050.58
Maharashtra	42943.37	3535.04	0.00	8978.61	55457.02
Goa	0.00	0.00	1800.40	0.00	1800.40
Daman & Diu	0.00	0.00	1001.81	0.00	1001.81
D & N Haveli	0.00	0.00	1768.21	0.00	1768.21
Sub-Total (WR)	97070.34	3535.04	4570.42	17087.50	122263.30
Andhra Pradesh	0.00	0.00	37729.24	948.00	38677.24
Karnataka	0.00	0.00	23208.59	1573.00	24781.59
Kerala	9247.31	66.64	0.00	33.93	9347.88
Tamil Nadu	40298.00	0.00	987.97	0.00	41285.97
Pondicherry	0.00	0.00	1819.09	0.00	1819.09
Lakshadweep	0.00	0.00	19.98	0.00	19.98
Sub-Total (SR)	49545.31	66.64	63764.87	2554.93	115931.75
Bihar	3951.97	0.00	0.00	0.00	3951.97
Jharkhand	3053.72	0.00	3584.21	1742.55	8380.48
Orissa	0.00	0.00	0.00	7814.53	7814.53
West Bengal	9506.18	0.00	2961.57	6619.38	19087.13
A & N Islands	0.00	0.00	109.96	0.00	109.96
Sikkim	0.00	0.00	226.70	0.00	226.70
Sub-Total (ER)	16511.87	0.00	6882.44	16176.46	39570.77
Assam	1837.98	0.00	0.00	0.00	1837.98
Manipur	0.00	0.00	177.59	0.00	177.59
Meghalaya	855.87	0.00	0.00	0.00	855.87
Nagaland	0.00	0.00	183.18	0.00	183.18
Tripura	0.00	0.00	380.01	0.00	380.01
Arunachal Pradesh	0.00	0.00	166.50	0.00	166.50
Mizoram	0.00	0.00	125.67	0.00	125.67
Sub-Total (NER)	2693.85	0.00	1032.95	0.00	3726.80
Total(All India)	191189.64	4572.17	142625.06	47746.79	386133.66



Table No. 8.3
ENERGY SALES TO ULTIMATE CONSUMERS (UTILITIES ONLY)
CATEGORYWISE/STATEWISE DURING THE YEAR 2004-05

State / Uts	Domestic	Commercial	Industrial		Public Lighting
			Power (Low & Med.Voltage)	Power (High Voltage)	
Haryana	2841.89	755.33	948.22	2531.32	38.30
Himachal Pradesh	809.79	244.37	144.36	1347.49	10.87
Jammu & Kashmir	1525.60	465.24	771.52	A	49.24
Punjab	5063.26	1292.34	1878.79	6840.40	108.03
Rajasthan	3375.96	1088.85	1484.54	3717.89	114.42
Uttar Pradesh	10327.12	2094.39	2385.71	4174.32	328.13
Uttaranchal	1010.39	573.17	92.91	795.91	46.38
Chandigarh	356.83	224.95	115.60	128.72	14.98
Delhi	6263.81	3561.04	1616.59	321.16	223.14
Sub-Total (NR)	31574.65	10299.68	9438.24	19857.21	933.49
Gujarat	5434.31	2035.87	5935.65	9931.60	186.14
Madhay Pradesh	3832.24	815.43	689.08	4023.37	129.92
Chhattisgarh	1385.74	242.24	328.14	3985.31	47.08
Maharashtra	12662.35	5353.84	4817.72	17862.62	632.36
Goa	303.64	118.58	63.57	955.32	30.40
Daman & Diu	41.98	23.55	133.78	790.82	3.48
D & N Haveli	30.06	15.90	125.00	1580.50	8.00
Sub-Total (WR)	23690.32	8605.41	12092.94	39129.54	1037.38
Andhra Pradesh	7879.17	1865.73	2494.00	9113.43	1398.64
Karnataka	4923.79	1925.48	1448.51	5021.96	582.64
Kerala	4292.16	1310.79	700.97	2307.67	186.95
Tamil Nadu	11083.00	3769.00	4512.00	9605.97	380.00
Pondicherry	286.46	84.77	102.62	1187.52	15.57
Lakshadweep	14.12	4.35	0.40	0.00	1.11
Sub-Total (SR)	28478.70	8960.12	9258.50	27236.55	2564.91
Bihar	1209.30	301.14	140.06	679.04	29.24
Jharkhand \$	840.48	160.69	115.64	6274.92	56.35
Orissa	2663.18	534.80	270.85	3314.15	47.26
West Bengal \$	5618.78	2089.46	1729.03	6871.21	214.92
A & N Islands	60.30	24.50	4.25	0.00	5.71
Sikkim	98.50	56.00	27.00	0.00	45.20
Sub-Total (ER)	10490.54	3166.59	2286.83	17139.32	398.68
Assam	722.05	227.54	85.52	505.49	5.90
Manipur	113.42	12.30	7.11	0.93	3.17
Meghalaya	171.58	38.53	5.28	485.54	1.48
Nagaland	120.02	18.29	3.65	A	0.69
Tripura	148.47	32.74	50.17	A	7.32
Arunachal Pradesh	65.00	13.50	4.50	A	8.75
Mizoram	84.72	6.53	1.93	0.00	5.81
Sub-Total (NER)	1425.26	349.43	158.16	991.96	33.12
Total(All India)	95659.47	31381.23	33234.67	104354.58	4967.58

Note:- \$ -Includes DVCs sales to ultimate consumers in Jharkhand & West Bengal area
A - Included in industrial (Low & Medium Voltages)
C - Included under Industrial category



Table No. 8.3 (Contd.)
ENERGY SALES TO ULTIMATE CONSUMERS (UTILITIES ONLY)
CATEGORYWISE/STATEWISE DURING THE YEAR 2004-05

State / Uts	Traction	Agriculture	Public Water Works & Sewage Pumping	Miscellaneous	Total
Haryana	208.54	5682.49	315.60	485.45	13807.14
Himachal Pradesh	0.00	25.26	270.51	101.51	2954.16
Jammu & Kashmir	0.00	127.55	314.04	623.81	3877.00
Punjab	114.58	6468.31	285.06	475.34	22526.11
Rajasthan	235.87	5322.13	942.68	400.21	16682.55
Uttar Pradesh	627.09	4865.83	576.49	2560.17	27939.25
Uttaranchal	0.00	487.96	155.59	0.84	3163.15
Chandigarh	0.00	1.76	C	75.45	918.29
Delhi	125.16	71.65	311.55	279.29	12773.39
Sub-Total (NR)	1311.24	23052.94	3171.52	5002.07	104641.04
Gujarat	477.00	12055.46	790.45	136.91	36983.39
Madhay Pradesh	1337.84	5848.78	510.23	15.00	17201.89
Chhattisgarh	586.21	1047.50	77.49	350.87	8050.58
Maharashtra	1849.49	10733.31	1545.33	0.00	55457.02
Goa	0.00	15.93	305.13	7.83	1800.40
Daman & Diu	0.00	2.61	1.13	4.46	1001.81
D & N Haveli	0.00	5.50	3.25	0.00	1768.21
Sub-Total (WR)	4250.54	29709.09	3233.01	515.07	122263.30
Andhra Pradesh	1162.26	14160.72	C	603.29	38677.24
Karnataka	34.95	9323.81	1403.68	116.77	24781.59
Kerala	43.55	200.25	86.04	219.50	9347.88
Tamil Nadu	440.00	9766.00	723.00	1007.00	41285.97
Pondicherry	0.00	118.36	23.79	0.00	1819.09
Lakshadweep	0.00	0.00	0.00	0.00	19.98
Sub-Total (SR)	1680.76	33569.14	2236.51	1946.56	115931.75
Bihar	334.74	1060.50	190.05	7.90	3951.97
Jharkhand \$	754.03	60.65	73.94	43.78	8380.48
Orissa	334.07	183.11	141.63	325.48	7814.53
West Bengal \$	829.95	833.48	426.00	474.30	19087.13
A & N Islands	0.00	0.00	0.90	14.30	109.96
Sikkim	0.00	0.00	0.00	0.00	226.70
Sub-Total (ER)	2252.79	2137.74	832.52	865.76	39570.77
Assam	0.00	14.31	30.23	246.94	1837.98
Manipur	0.00	0.22	8.58	31.86	177.59
Meghalaya	0.00	0.93	24.63	127.90	855.87
Nagaland	0.00	0.00	0.19	40.34	183.18
Tripura	0.00	70.98	55.52	14.81	380.01
Arunachal Pradesh	0.00	0.00	7.75	67.00	166.50
Mizoram	0.00	0.00	18.03	8.65	125.67
Sub-Total (NER)	0.00	86.44	144.93	537.50	3726.80
Total(All India)	9495.33	88555.35	9618.49	8866.96	386133.66



Table No. 8.3 (a)
CATEGORYWISE/STATEWISE ENERGY CONSUMPTION BY ULTIMATE CONSUMERS
INCLUDING (UTILITIES & NON-UTILITIES) DURING THE YEAR 2004-05
(GWh)

State / Uts	Domestic	Commercial	Industrial Power (LV & MV)	Industrial Power (HV)	Public Lighting
Haryana	2841.89	755.33	948.22	3535.70	38.30
Himachal Pradesh	809.79	244.37	144.36	1457.29	10.87
Jammu & Kashmir	1525.60	465.24	771.52	1.02	49.24
Punjab	5063.26	1292.34	1878.79	7477.73	108.03
Rajasthan	3375.96	1088.85	1484.54	6983.41	114.42
Uttar Pradesh	10327.12	2094.39	2385.71	12363.54	328.13
Uttaranchal	1010.39	573.17	92.91	1177.92	46.38
Chandigarh	356.83	224.95	115.60	135.49	14.98
Delhi	6263.81	3561.04	1616.59	321.16	223.14
Sub-Total (NR)	31574.65	10299.68	9438.24	33453.26	933.49
Gujarat	5434.31	2035.87	5935.65	21687.05	186.14
Madhy Pradesh	3832.24	815.43	689.08	6864.50	129.92
Chhattisgarh	1385.74	242.24	328.14	7847.23	47.08
Maharashtra	12662.35	5353.84	4817.72	22170.25	632.36
Goa	303.64	118.58	63.57	1092.88	30.40
Daman & Diu	41.98	23.55	133.78	790.82	3.48
D & N Haveli	30.06	15.90	125.00	1595.11	8.00
Sub-Total (WR)	23690.32	8605.41	12092.94	62047.84	1037.38
Andhra Pradesh	7879.17	1865.73	2494.00	13398.63	1398.64
Karnataka	4923.79	1925.48	1448.51	8104.41	582.64
Kerala	4292.16	1310.79	700.97	2750.72	186.95
Tamil Nadu	11083.00	3769.00	4512.00	14246.66	380.00
Pondicherry	286.46	84.77	102.62	1282.48	15.57
Lakshadweep	14.12	4.35	0.40	0.00	1.11
Sub-Total (SR)	28478.70	8960.12	9258.50	39782.90	2564.91
Bihar	1209.30	301.14	140.06	679.04	29.24
Jharkhand \$	840.48	160.69	115.64	9379.44	56.35
Orissa	2663.18	534.80	270.85	10667.29	47.26
West Bengal \$	5618.78	2089.46	1729.03	8634.58	214.92
A & N Islands	60.30	24.50	4.25	0.00	5.71
Sikkim	98.50	56.00	27.00	0.00	45.20
Sub-Total (ER)	10490.54	3166.59	2286.83	29360.35	398.68
Assam	722.05	227.54	85.52	1083.20	5.90
Manipur	113.42	12.30	7.11	0.93	3.17
Meghalaya	171.58	38.53	5.28	485.54	1.48
Nagaland	120.02	18.29	3.65	A	0.69
Tripura	148.47	32.74	50.17	A	7.32
Arunachal Pradesh	65.00	13.50	4.50	A	8.75
Mizoram	84.72	6.53	1.93	0.00	5.81
Sub-Total (NER)	1425.26	349.43	158.16	1569.67	33.12
Total(All India)	95659.47	31381.23	33234.67	166214.02	4967.58

Note:- \$ - Includes DVCs sales to ultimate consumers in Jharkhand & West Bengal area

A - Included in industrial (Low & Medium Voltages)

C - Included under Industrial category



Table No. 8.3 (a) (Contd.)
CATEGORYWISE/STATEWISE ENERGY CONSUMPTION BY ULTIMATE CONSUMERS
INCLUDING (UTILITIES & NON-UTILITIES) DURING THE YEAR 2004-05

State / Uts	Traction	Agriculture	Public Water Works & Sewage Pumping	Miscellaneous Energy	Total Sold
Haryana	208.54	5682.49	315.60	485.45	14811.52
Himachal Pradesh	0.00	25.26	270.51	101.51	3063.96
Jammu & Kashmir	0.00	127.55	314.04	623.81	3878.02
Punjab	114.58	6468.31	285.06	475.34	23163.44
Rajasthan	235.87	5322.13	942.68	400.21	19948.07
Uttar Pradesh	627.09	4865.83	576.49	2560.17	36128.47
Uttaranchal	0.00	487.96	155.59	0.84	3545.16
Chandigarh	0.00	1.76	C	75.45	925.06
Delhi	125.16	71.65	311.55	279.29	12773.39
Sub-Total (NR)	1311.24	23052.94	3171.52	5002.07	118237.09
Gujarat	477.00	12055.46	790.45	136.91	48738.84
Madhay Pradesh	1337.84	5848.78	510.23	15.00	20043.02
Chhattisgarh	586.21	1047.50	77.49	350.87	11912.50
Maharashtra	1849.49	10733.31	1545.33	0.00	59764.65
Goa	0.00	15.93	305.13	7.83	1937.96
Daman & Diu	0.00	2.61	1.13	4.46	1001.81
D & N Haveli	0.00	5.50	3.25	0.00	1782.82
Sub-Total (WR)	4250.54	29709.09	3233.01	515.07	145181.60
Andhra Pradesh	1162.26	14160.72	C	603.29	42962.44
Karnataka	34.95	9323.81	1403.68	116.77	27864.04
Kerala	43.55	200.25	86.04	219.50	9790.93
Tamil Nadu	440.00	9766.00	723.00	1007.00	45926.66
Pondicherry	0.00	118.36	23.79	0.00	1914.05
Lakshadweep	0.00	0.00	0.00	0.00	19.98
Sub-Total (SR)	1680.76	33569.14	2236.51	1946.56	128478.10
Bihar	334.74	1060.50	190.05	7.90	3951.97
Jharkhand \$	754.03	60.65	73.94	43.78	11485.00
Orissa	334.07	183.11	141.63	325.48	15167.67
West Bengal \$	829.95	833.48	426.00	474.30	20850.50
A & N Islands	0.00	0.00	0.90	14.30	109.96
Sikkim	0.00	0.00	0.00	0.00	226.70
Sub-Total (ER)	2252.79	2137.74	832.52	865.76	51791.80
Assam	0.00	14.31	30.23	246.94	2415.69
Manipur	0.00	0.22	8.58	31.86	177.59
Meghalaya	0.00	0.93	24.63	127.90	855.87
Nagaland	0.00	0.00	0.19	40.34	183.18
Tripura	0.00	70.98	55.52	14.81	380.01
Arunachal Pradesh	0.00	0.00	7.75	67.00	166.50
Mizoram	0.00	0.00	18.03	8.65	125.67
Sub-Total (NER)	0.00	86.44	144.93	537.50	4304.51
Total(All India)	9495.33	88555.35	9618.49	8866.96	447993.10



Table No. 8.4
ENERGY SALES BY ELECTRICITY BOARDS CATEGORYWISE &
STATEWISE DURING THE YEAR 2004-05

Electricity Board	(GWh)				
	Domestic	Commercial	Industrial Power (Low & Med.voltage)	Industrial Power (High Voltage)	Public Lighting
Himachal Pradesh	809.79	244.37	144.36	1347.49	10.87
Punjab	5063.26	1292.34	1878.79	6772.40	108.03
Sub-Total (NR)	5873.05	1536.71	2023.15	8119.89	118.90
Gujarat	3839.00	1249.00	3643.00	7176.00	145.00
Madhay Pradesh	3762.24	799.43	667.08	4023.37	127.92
Chhattisgarh	1385.74	242.24	328.14	3985.31	47.08
Maharashtra	7674.05	1965.54	3792.39	16042.46	539.41
Sub-Total (WR)	16661.03	4256.21	8430.61	31227.14	859.41
Kerala	4262.30	1286.30	696.90	2273.90	182.75
Tamil Nadu	11083.00	3769.00	4512.00	8618.00	380.00
Sub-Total (SR)	15345.30	5055.30	5208.90	10891.90	562.75
Bihar	1209.30	301.14	140.06	679.04	29.24
Jharkhand	840.48	160.64	115.64	1349.76	56.35
West Bengal	3077.17	905.82	619.16	2891.44	80.00
Sub-Total (ER)	5126.95	1367.60	874.86	4920.24	165.59
Assam	722.05	227.54	85.52	505.49	5.90
Meghalaya	171.58	38.53	5.28	485.54	1.48
Sub-Total (NER)	893.63	266.07	90.80	991.03	7.38
Total(All BOARDS)	43899.96	12481.89	16628.32	56150.20	1714.03



**Table No. 8.4 (Contd.)
ENERGY SALES BY ELECTRICITY BOARDS CATEGORYWISE &
STATEWISE DURING THE YEAR 2004-05**

Electricity Board	Traction	Agriculture	Public Water Works & Sewage Pumping	Miscellaneous	(GWh)
					Total Energy
Himachal Pradesh	0.00	25.26	270.51	101.51	2954.16
Punjab	114.58	6468.31	285.06	431.34	22414.11
Sub-Total (NR)	114.58	6493.57	555.57	532.85	25368.27
Gujarat	477.00	12041.00	670.00	18.00	29258.00
Madhay Pradesh	1337.84	5598.78	501.73	0.00	16818.39
Chhattisgarh	586.21	1047.50	77.49	350.87	8050.58
Maharashtra	1067.75	10363.97	1497.80	0.00	42943.37
Sub-Total (WR)	3468.80	29051.25	2747.02	368.87	97070.34
Kerala	43.55	200.12	86.04	215.45	9247.31
Tamil Nadu	440.00	9766.00	723.00	1007.00	40298.00
Sub-Total (SR)	483.55	9966.12	809.04	1222.45	49545.31
Bihar	334.74	1060.50	190.05	7.90	3951.97
Jharkhand	396.26	60.65	73.94	0.00	3053.72
West Bengal	602.62	814.59	140.29	375.09	9506.18
Sub-Total (ER)	1333.62	1935.74	404.28	382.99	16511.87
Assam	0.00	14.31	30.23	246.94	1837.98
Meghalaya	0.00	0.93	24.63	127.90	855.87
Sub-Total (NER)	0.00	15.24	54.86	374.84	2693.85
Total(All BOARDS)	5400.55	47461.92	4570.77	2882.00	191189.64



Table No. 8.5
ENERGY SALES BY PRIVATE LICENSEES CATEGORYWISE &
STATEWISE DURING THE YEAR 2004-05

State / Uts	Domestic	Commercial	Industrial		Public Lighting
			Power (Low & Med. Voltage)	Power (High Voltage)	
Uttar Pradesh	42.34	4.72	16.28	189.59	6.60
Delhi	6026.81	2841.04	1616.10	321.16	214.14
Sub-Total (NR)	6069.15	2845.76	1632.38	510.75	220.74
Gujarat	1595.31	786.87	2292.65	2755.60	41.14
Madhya Pradesh	70.00	16.00	22.00	0.00	2.00
Maharashtra	3398.29	1841.40	819.34	1695.50	60.46
Sub-Total (WR)	5063.60	2644.27	3133.99	4451.10	103.60
Andhra Pradesh	150.00	20.00	48.00	0.00	6.50
Karnataka	15.25	2.04	3.29	1451.86	1.61
Kerala	6.56	1.86	0.00	21.26	0.20
Sub-Total (SR)	171.81	23.90	51.29	1473.12	8.31
Jharkhand	0.00	0.00	0.00	1742.55	0.00
Orissa	2663.18	534.80	270.85	3314.15	47.26
West Bengal	2502.63	1175.59	1102.65	1243.49	132.00
Sub-Total (ER)	5165.81	1710.39	1373.50	6300.19	179.26
Assam	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00
Sub-Total (NER)	0.00	0.00	0.00	0.00	0.00
Total (All India)	16470.37	7224.32	6191.16	12735.16	511.91



**Table No. 8.5 (Contd.)
ENERGY SALES BY PRIVATE LICENSEES CATEGORYWISE &
STATEWISE DURING THE YEAR 2004-05**

State / Uts	Traction	Agriculture	Public Water Works & Sewage Pumping	Miscellaneous	(GWh)
					Total Energy Sold
Uttar Pradesh	0.00	12.37	2.07	10.03	284.00
Delhi	125.16	71.65	311.55	116.29	11643.90
Sub-Total (NR)	125.16	84.02	313.62	126.32	11927.90
Gujarat	0.00	14.46	120.45	118.91	7725.39
Madhya Pradesh	0.00	250.00	8.50	15.00	383.50
Maharashtra	781.74	369.34	12.54	0.00	8978.61
Sub-Total (WR)	781.74	633.80	141.49	133.91	17087.50
Andhra Pradesh	0.00	720.00	0.00	3.50	948.00
Karnataka	0.00	92.42	6.45	0.08	1573.00
Kerala	0.00	0.00	0.00	4.05	33.93
Sub-Total (SR)	0.00	812.42	6.45	7.63	2554.93
Jharkhand	0.00	0.00	0.00	0.00	1742.55
Orissa	334.07	183.11	141.63	325.48	7814.53
West Bengal	76.00	18.74	269.83	98.45	6619.38
Sub-Total (ER)	410.07	201.85	411.46	423.93	16176.46
Assam	0.00	0.00	0.00	0.00	0.00
Meghalaya	0.00	0.00	0.00	0.00	0.00
Sub-Total (NER)	0.00	0.00	0.00	0.00	0.00
Total (All India)	1316.97	1732.09	873.02	691.79	47746.79



Table No. 8.6
ENERGY SALES BY ULTIMATE CONSUMERS BY ELECTRICITY
DEPARTMENTS,CENTRAL SECTOR,CORPORATIONS/GOVT.
UNDERTAKINGS AND MUNICIPALITIES CATEGORYWISE &
STATEWISE DURING THE YEAR 2004-05

State / Uts	Domestic	Commercial	Industrial		Public Lighting
			Power (Low & Med. Voltage)	Power (High Voltage)	
<i>(GWh)</i>					
I. MUNICIPALITIES					
NDMC (Delhi)	237.00	720.00	0.49	0.00	9.00
Maharashtra	1590.01	1546.90	205.99	124.66	32.49
Kerala	23.30	22.63	4.07	12.51	4.00
Sub-Total	1850.31	2289.53	210.55	137.17	45.49
II. GOVT. DEPTT. / CENTRAL SECTOR UNDERTAKINGS / CORPORATIONS					
Haryana	2841.89	755.33	948.22	2531.32	38.30
Delhi (MES)	0.00	0.00	0.00	0.00	0.00
Punjab (B.B.M.B.)	0.00	0.00	0.00	68.00	0.00
Rajasthan(RVPNL)	3375.96	1088.85	1484.54	3717.89	114.42
Rapp	0.00	0.00	0.00	0.00	0.00
Chandigarh	356.83	224.95	115.60	128.72	14.98
U.P. Power corp. Ltd.	10284.78	2089.67	2369.43	3984.73	321.53
Uttaranchal Power Corp.	1010.39	573.17	92.91	795.91	46.38
J & K Power Dev. Corp.	1525.60	465.24	771.52	0.00	49.24
Goa	303.64	118.58	63.57	955.32	30.40
Daman & Diu	41.98	23.55	133.78	790.82	3.48
D & N Haveli	30.06	15.90	125.00	1580.50	8.00
A.P. Transco.	7729.17	1845.73	2446.00	9113.43	1392.14
A.P.G.C.LTD.	0.00	0.00	0.00	0.00	0.00
Pondicherry	286.46	84.77	102.62	1187.52	15.57
Lakshadweep	14.12	4.35	0.40	0.00	1.11
T.N.(Neyveli-I&II &MAPS)	0.00	0.00	0.00	987.97	0.00
Karnataka	4908.54	1923.44	1445.22	3570.10	581.03
DVC in Jharkhand	0.00	0.05	0.00	3182.61	0.00
DVC in West Bengal	0.00	0.08	0.00	1394.41	0.00
West Bengal (DPL)	38.98	7.97	7.22	1341.87	2.92
A. & N. Islands	60.30	24.50	4.25	0.00	5.71
Sikkim	98.50	56.00	27.00	0.00	45.20
Manipur	113.42	12.30	7.11	0.93	3.17
Nagaland	120.02	18.29	3.65	0.00	0.69
Tripura	148.47	32.74	50.17	0.00	7.32
Arunachal Pradesh	65.00	13.50	4.50	0.00	8.75
Mizoram	84.72	6.53	1.93	0.00	5.81
Sub-Total	33438.83	9385.49	10204.64	35332.05	2696.15
Total (I & II)	35289.14	11675.02	10415.19	35469.22	2741.64



Table No. 8.6 (Contd.)
ENERGY SALES BY BY ULTIMATE CONSUMERS BY ELECTRICITY
DEPARTMENTS,CENTRAL SECTOR,CORPORATIONS/GOVT.
UNDERTAKINGS AND MUNICIPALITIES CATEGORYWISE &
STATEWISE DURING THE YEAR 2004-05

State / Uts	Traction	Agriculture	Public Water Works & Sewage Pumping	Miscellaneous	Total Energy Sold
<i>(GWh)</i>					
I. MUNICIPALITIES					
NDMC (Delhi)	0.00	0.00	0.00	4.00	970.49
Maharashtra	0.00	0.00	34.99	0.00	3535.04
Kerala	0.00	0.13	0.00	0.00	66.64
Sub-Total	0.00	0.13	34.99	4.00	4572.17
II. GOVT. DEPTT. / CENTRAL SECTOR UNDERTAKINGS / CORPORATIONS					
Haryana	208.54	5682.49	315.60	485.45	13807.14
Delhi (MES)	0.00	0.00	0.00	159.00	159.00
Punjab (B.B.M.B.)	0.00	0.00	0.00	44.00	112.00
Rajasthan(RVPNL)	235.87	5322.13	942.68	400.21	16682.55
Rapp	0.00	0.00	0.00	0.00	0.00
Chandigarh	0.00	1.76	0.00	75.45	918.29
U.P. Power corp. Ltd.	627.09	4853.46	574.42	2550.14	27655.25
Uttaranchal Power Corp.	0.00	487.96	155.59	0.84	3163.15
J & K Power Dev. Corp.	0.00	127.55	314.04	623.81	3877.00
Goa	0.00	15.93	305.13	7.83	1800.40
Daman & Diu	0.00	2.61	1.13	4.46	1001.81
D & N Haveli	0.00	5.50	3.25	0.00	1768.21
A.P. Transco.	1162.26	13440.72	0.00	599.79	37729.24
A.P.G.C.LTD.	0.00	0.00	0.00	0.00	0.00
Pondicherry	0.00	118.36	23.79	0.00	1819.09
Lakshadweep	0.00	0.00	0.00	0.00	19.98
T.N.(Neyveli-I&II &MAPS)	0.00	0.00	0.00	0.00	987.97
Karnataka	34.95	9231.39	1397.23	116.69	23208.59
DVC in Jharkhand	357.77	0.00	0.00	43.78	3584.21
DVC in West Bengal	151.33	0.00	0.00	0.00	1545.82
West Bengal (DPL)	0.00	0.15	15.88	0.76	1415.75
A. & N. Islands	0.00	0.00	0.90	14.30	109.96
Sikkim	0.00	0.00	0.00	0.00	226.70
Manipur	0.00	0.22	8.58	31.86	177.59
Nagaland	0.00	0.00	0.19	40.34	183.18
Tripura	0.00	70.98	55.52	14.81	380.01
Arunachal Pradesh	0.00	0.00	7.75	67.00	166.50
Mizoram	0.00	0.00	18.03	8.65	125.67
Sub-Total	2777.81	39361.21	4139.71	5289.17	142625.06
Total (I & II)	2777.81	39361.34	4174.70	5293.17	147197.23



Table No. 8.7
PATTERN OF ENERGY SALES (UTILITIES ONLY) CATEGORYWISE & STATEWISE DURING THE YEAR 2004-05

State / Uts	% age of total				
	Domestic	Commercial	Industrial Power (Low & Med. Voltage)	Industrial Power (High Voltage)	Public Lighting
Haryana	20.58	5.47	6.87	18.33	0.28
Himachal Pradesh	27.41	8.27	4.89	45.61	0.37
Jammu & Kashmir	39.35	12.00	19.90	0.00	1.27
Punjab	22.48	5.74	8.34	30.37	0.48
Rajasthan	20.24	6.53	8.90	22.29	0.69
Uttar Pradesh	36.96	7.50	8.54	14.94	1.17
Uttaranchal	31.94	18.12	2.94	25.16	1.47
Chandigarh	38.86	24.50	12.59	14.02	1.63
Delhi	49.04	27.88	12.66	2.51	1.75
Sub-Total (NR)	30.17	9.84	9.02	18.98	0.89
Gujarat	14.69	5.50	16.05	26.85	0.50
Madhay Pradesh	22.28	4.74	4.01	23.39	0.76
Chhattisgarh	17.21	3.01	4.08	49.50	0.58
Maharashtra	22.83	9.65	8.69	32.21	1.14
Goa	16.87	6.59	3.53	53.06	1.69
Daman & Diu	4.19	2.35	13.35	78.94	0.35
D & N Haveli	1.70	0.90	7.07	89.38	0.45
Sub-Total (WR)	19.38	7.04	9.89	32.00	0.85
Andhra Pradesh	20.37	4.82	6.45	23.56	3.62
Karnataka	19.87	7.77	5.85	20.26	2.35
Kerala	45.92	14.02	7.50	24.69	2.00
Tamil Nadu	26.84	9.13	10.93	23.27	0.92
Pondicherry	15.75	4.66	5.64	65.28	0.86
Lakshadweep	70.67	21.77	2.00	0.00	5.56
Sub-Total (SR)	24.57	7.73	7.99	23.49	2.21
Bihar	30.60	7.62	3.54	17.18	0.74
Jharkhand	10.03	1.92	1.38	74.88	0.67
Orissa	34.08	6.84	3.47	42.41	0.60
West Bengal	29.44	10.95	9.06	36.00	1.13
A & N Islands	54.84	22.28	3.87	0.00	5.19
Sikkim	43.45	24.70	11.91	0.00	19.94
Sub-Total (ER)	26.51	8.00	5.78	43.31	1.01
Assam	39.28	12.38	4.65	27.50	0.32
Manipur	63.87	6.93	4.00	0.52	1.79
Meghalaya	20.05	4.50	0.62	56.73	0.17
Nagaland	65.52	9.98	1.99	0.00	0.38
Tripura	39.07	8.62	13.20	0.00	1.93
Arunachal Pradesh	39.04	8.11	2.70	0.00	5.26
Mizoram	67.41	5.20	1.54	0.00	4.62
Sub-Total (NER)	38.24	9.38	4.24	26.62	0.89
Total(All India)	24.77	8.13	8.61	27.03	1.29



**Table No. 8.7(Contd.)
PATTERN OF ENERGY SALES (UTILITIES ONLY) CATEGORYWISE &
STATEWISE DURING THE YEAR 2004-05**

State / Uts	% age of total				Total Energy Sold
	Traction	Agriculture	Public Water Works & Sewage Pumping	Miscellaneous	
Haryana	1.51	41.16	2.29	3.52	13807.14
Himachal Pradesh	0.00	0.86	9.16	3.44	2954.16
Jammu & Kashmir	0.00	3.29	8.10	16.09	3877.00
Punjab	0.51	28.71	1.27	2.11	22526.11
Rajasthan	1.41	31.90	5.65	2.40	16682.55
Uttar Pradesh	2.24	17.42	2.06	9.16	27939.25
Uttaranchal	0.00	15.43	4.92	0.03	3163.15
Chandigarh	0.00	0.19	0.00	8.22	918.29
Delhi	0.98	0.56	2.44	2.19	12773.39
Sub-Total (NR)	1.25	22.03	3.03	4.78	104641.04
Gujarat	1.29	32.60	2.14	0.37	36983.39
Madhy Pradesh	7.78	34.00	2.97	0.09	17201.89
Chhattisgarh	7.28	13.01	0.96	4.36	8050.58
Maharashtra	3.33	19.35	2.79	0.00	55457.02
Goa	0.00	0.88	16.95	0.43	1800.40
Daman & Diu	0.00	0.26	0.11	0.45	1001.81
D & N Haveli	0.00	0.31	0.18	0.00	1768.21
Sub-Total (WR)	3.48	24.30	2.64	0.42	122263.30
Andhra Pradesh	3.01	36.61	0.00	1.56	38677.24
Karnataka	0.14	37.62	5.66	0.47	24781.59
Kerala	0.47	2.14	0.92	2.35	9347.88
Tamil Nadu	1.07	23.65	1.75	2.44	41285.97
Pondicherry	0.00	6.51	1.31	0.00	1819.09
Lakshadweep	0.00	0.00	0.00	0.00	19.98
Sub-Total (SR)	1.45	28.96	1.93	1.68	115931.75
Bihar	8.47	26.83	4.81	0.20	3951.97
Jharkhand	9.00	0.72	0.88	0.52	8380.48
Orissa	4.27	2.34	1.81	4.17	7814.53
West Bengal	4.35	4.37	2.23	2.48	19087.13
A & N Islands	0.00	0.00	0.82	13.00	109.96
Sikkim	0.00	0.00	0.00	0.00	226.70
Sub-Total (ER)	5.69	5.40	2.10	2.19	39570.77
Assam	0.00	0.78	1.64	13.44	1837.98
Manipur	0.00	0.12	4.83	17.94	177.59
Meghalaya	0.00	0.11	2.88	14.94	855.87
Nagaland	0.00	0.00	0.10	22.02	183.18
Tripura	0.00	18.68	14.61	3.90	380.01
Arunachal Pradesh	0.00	0.00	4.65	40.24	166.50
Mizoram	0.00	0.00	14.35	6.88	125.67
Sub-Total (NER)	0.00	2.32	3.89	14.42	3726.80
Total(All India)	2.46	22.93	2.49	2.30	386133.66



Table No. 8.8
ANNUAL PER CAPITA CONSUMPTION OF ELECTRICITY (UTILITIES + NON-UTILITIES) CATEGORYWISE/STATEWISE DURING THE YEAR 2004-05

(KWh)

State / Uts	Population* (Million)	Per Capita Consumption Of Electricity (As Per CEA Practice)					
		Domestic	Commercial	Industrial Power (Low & Med.Voltage)	Industrial Power (High Voltage)	Public Traction Lighting	
Haryana	22.51	126.25	33.56	42.12	112.45	1.70	9.26
Himachal Pradesh	6.33	127.93	38.61	22.81	212.87	1.72	0.00
Jammu & Kashmir	11.12	137.19	41.84	69.38	0.00	4.43	0.00
Punjab	25.53	198.33	50.62	73.59	267.94	4.23	4.49
Rajasthan	60.80	55.53	17.91	24.42	61.15	1.88	3.88
Uttar Pradesh	178.83	57.75	11.71	13.34	23.34	1.83	3.51
Uttaranchal	9.01	112.14	63.61	10.31	88.34	5.15	0.00
Chandigarh	0.98	364.11	229.54	117.96	131.35	15.29	0.00
Delhi	15.39	407.01	231.39	105.04	20.87	14.50	8.13
Sub-Total (NR)	330.50	95.54	31.16	28.56	60.08	2.82	3.97
Gujarat	53.67	101.25	37.93	110.60	185.05	3.47	8.89
Madhay Pradesh	64.99	58.97	12.55	10.60	61.91	2.00	20.59
Chhattisgarh	22.26	62.25	10.88	14.74	179.03	2.12	26.33
Maharashtra	102.10	124.02	52.44	47.19	174.95	6.19	18.11
Goa	1.47	206.56	80.67	43.24	649.88	20.68	0.00
Daman & Diu	0.17	248.40	139.35	791.60	4679.41	20.59	0.00
D & N Haveli	0.24	127.91	67.66	531.91	6725.53	34.04	0.00
Sub-Total (WR)	244.89	96.74	35.14	49.38	159.78	4.24	17.36
Andhra Pradesh	79.10	99.61	23.59	31.53	115.21	17.68	14.69
Karnataka	55.21	89.18	34.88	26.24	90.96	10.55	0.63
Kerala	33.07	129.79	39.64	21.20	69.78	5.65	1.32
Tamil Nadu	64.39	172.12	58.53	70.07	149.18	5.90	6.83
Pondicherry	1.02	280.84	83.11	100.61	1164.24	15.26	0.00
Lakshadweep	0.06	220.63	67.97	6.25	0.00	17.34	0.00
Sub-Total (SR)	232.85	122.30	38.48	39.76	116.97	11.02	7.22
Bihar	88.69	13.64	3.40	1.58	7.66	0.33	3.77
Jharkhand	28.56	29.43	5.63	4.05	219.71	1.97	26.40
Orissa	38.41	69.34	13.92	7.05	86.28	1.23	8.70
West Bengal	84.23	66.71	24.81	20.53	81.58	2.55	9.85
A & N Islands	0.38	160.80	65.33	11.33	0.00	15.23	0.00
Sikkim	0.57	172.81	98.25	47.37	0.00	79.30	0.00
Sub-Total (ER)	240.84	43.56	13.15	9.50	71.17	1.66	9.35
Assam	28.33	25.49	8.03	3.02	17.84	0.21	0.00
Manipur	2.52	45.01	4.88	2.82	0.37	1.26	0.00
Meghalaya	2.43	70.61	15.86	2.17	199.81	0.61	0.00
Nagaland	2.10	57.15	8.71	1.74	0.00	0.33	0.00
Tripura	3.36	44.19	9.74	14.93	0.00	2.18	0.00
Arunachal Pradesh	1.15	56.52	11.74	3.91	0.00	7.61	0.00
Mizoram	0.94	90.13	6.95	2.05	0.00	6.18	0.00
Sub-Total (NER)	40.83	34.91	8.56	3.87	24.29	0.81	0.00
Total(All India)	1089.91	87.77	28.79	30.49	95.75	4.56	8.71

Source of population: Office of Registrar General Of India as on 1st October 2004. (Mid Financial Year)



Table No. 8.8 (Contd.)
ANNUAL PER CAPITA CONSUMPTION OF ELECTRICITY (UTILITIES + NON-UTILITIES) CATEGORYWISE/STATEWISE DURING THE YEAR 2004-05

(KWh)

State / Uts	Per Capita Consumption of Electricity (As Per CEA Practice)					
	Agriculture	Public Water Works & Sewage Pumping	Miscellaneous	Utilities	Total Non-Utilities	Total Utilities & Non-Utilities
Haryana	252.44	14.02	21.57	613.38	44.62	658.00
Himachal Pradesh	3.99	42.73	16.04	466.69	17.35	484.04
Jammu & Kashmir	11.47	28.24	56.10	348.65	0.09	348.74
Punjab	253.36	11.17	18.62	882.34	24.96	907.30
Rajasthan	87.54	15.50	6.58	274.38	53.71	328.09
Uttar Pradesh	27.21	3.22	14.32	156.23	45.79	202.03
Uttaranchal	54.16	17.27	0.09	351.07	42.40	393.47
Chandigarh	1.80	0.00	76.99	937.03	6.91	943.94
Delhi	4.66	20.24	18.15	829.98	0.00	829.98
Sub-Total (NR)	69.75	9.60	15.13	316.61	41.14	357.75
Gujarat	224.62	14.73	2.55	689.09	219.03	908.12
Madhay Pradesh	90.00	7.85	0.23	264.69	43.72	308.40
Chhattisgarh	47.06	3.48	15.76	361.66	173.49	535.15
Maharashtra	105.13	15.14	0.00	543.16	42.19	585.35
Goa	10.84	207.57	5.33	1224.76	93.58	1318.34
Daman & Diu	15.44	6.69	26.39	5927.87	0.00	5927.87
D & N Haveli	23.40	13.83	0.00	7524.30	62.17	7586.47
Sub-Total (WR)	121.31	13.20	2.10	499.25	93.58	592.83
Andhra Pradesh	179.02	0.00	7.63	488.97	54.17	543.14
Karnataka	168.88	25.42	2.12	448.86	55.83	504.69
Kerala	6.06	2.60	6.64	282.67	13.40	296.07
Tamil Nadu	151.67	11.23	15.64	641.19	72.07	713.26
Pondicherry	116.04	23.32	0.00	1783.42	93.10	1876.52
Lakshadweep	0.00	0.00	0.00	312.19	0.00	312.19
Sub-Total (SR)	144.16	9.60	8.36	497.87	53.88	551.75
Bihar	11.96	2.14	0.09	44.56	0.00	44.56
Jharkhand	2.12	2.59	1.53	293.43	108.70	402.14
Orissa	4.77	3.69	8.47	203.45	191.44	394.89
West Bengal	9.90	5.06	5.63	226.61	20.94	247.54
A & N Islands	0.00	2.40	38.13	293.23	0.00	293.23
Sikkim	0.00	0.00	0.00	397.72	0.00	397.72
Sub-Total (ER)	8.88	3.46	3.59	164.31	50.74	215.05
Assam	0.51	1.07	8.72	64.88	20.39	85.27
Manipur	0.09	3.40	12.64	70.47	0.00	70.47
Meghalaya	0.38	10.14	52.63	352.21	0.00	352.21
Nagaland	0.00	0.09	19.21	87.23	0.00	87.23
Tripura	21.13	16.52	4.41	113.10	0.00	113.10
Arunachal Pradesh	0.00	6.74	58.26	144.78	0.00	144.78
Mizoram	0.00	19.18	9.20	133.69	0.00	133.69
Sub-Total (NER)	2.12	3.55	13.16	91.28	14.15	105.43
Total (All India)	81.25	8.83	8.14	354.28	56.76	411.04



Table No. 8.9
ENERGY CONSUMPTION PER SQUARE KILOMETER AND PERTHOUSAND
POPULATION (UTILITIES ONLY) STATEWISE DURING 2004-05.

Name of the State/ U.T.s	Population* (Million)	Area in 1000Sq. Kms. \$	Total Energy Sold (GWh)	Energy Consumed per thousand population (kwh)	Energy Consumed per sq. Kms. (kwh)
Haryana	22.51	44.21	13807.14	613378	312308
Himachal Pradesh	6.33	55.67	2954.16	466692	53066
Jammu & Kashmir	11.12	222.24	3877.00	348651	17445
Punjab	25.52	50.36	22526.11	882339	447302
Rajasthan	60.80	342.24	16682.55	274384	48745
Uttar Pradesh	178.83	240.93	27939.25	156234	115964
Uttaranchal	9.01	53.48	3163.15	351071	59146
Chandigarh	0.98	0.11	918.29	937031	8348091
Delhi	15.39	1.48	12773.39	829980	8630669
Sub-Total (NR)	330.50	1010.72	104641.04	316614	103531
Gujarat	53.67	196.02	36983.39	689089	188672
Madhay Pradesh	64.99	308.25	17201.89	264685	55805
Chhattisgarh	22.26	135.19	8050.58	361661	59550
Maharashtra	102.10	307.71	55457.02	543164	180225
Goa	1.48	3.7	1800.40	1224762	486595
Daman & Diu	0.17	0.11	1001.81	5927870	9107364
D & N Haveli	0.24	0.49	1768.21	7524298	3608592
Sub-Total (WR)	244.89	951.47	122263.30	499250	128499
Andhra Pradesh	79.09	275.05	38677.24	488966	140619
Karnataka	55.21	191.79	24781.59	448861	129212
Kerala	33.07	38.86	9347.88	282669	240553
Tamil Nadu	64.39	130.06	41285.97	641186	317438
Pondicherry	1.02	0.49	1819.09	1783422	3712429
Lakshadweep	0.06	0.03	19.98	312188	666000
Sub-Total (SR)	232.85	636.28	115931.75	497873	182202
Bihar	88.69	94.16	3951.97	44559	41971
Jharkhand	28.55	79.71	8380.48	293434	105137
Orissa	38.41	155.71	7814.53	203450	50186
West Bengal	84.23	88.75	19087.13	226607	215066
A & N Islands	0.38	8.25	109.96	293227	13328
Sikkim	0.57	7.1	226.70	397719	31930
Sub-Total (ER)	240.84	433.68	39570.77	164307	91244
Assam	28.33	78.44	1837.98	64878	23432
Manipur	2.52	22.33	177.59	70472	7953
Meghalaya	2.43	22.43	855.87	352210	38157
Nagaland	2.10	16.58	183.18	87229	11048
Tripura	3.35	10.49	380.01	113098	36226
Arunachal Pradesh	1.15	83.74	166.50	144783	1988
Mizoram	0.94	21.08	125.67	133691	5962
Sub-Total (NER)	40.83	255.09	3726.80	91276	14610
Total(All India)	1089.91	3287.24	386133.66	354279	117464

* Source of Population : Office of Registrar General of India as on 1st Oct, 2004 (Mid Financial Year)



Table No. 8.10
GROSS ANNUAL PER CAPITA CONSUMPTION OF ELECTRICITY
DURING THE YEAR 2004-05

Name of the State /U.T.s	Population (Million)	Gross Generation* (\$ (GWh)	Actual Drawal incl. Aux. Share from CSPs/DVC	Total Gross Gen.by Utilities (3+4)	Gross Gen.by self generating Industries (GWh)
1	2	3	4	5	6
Haryana	22.51	9847.31	10489.05	20336.36	1063.75
Himachal Pradesh	6.33	2754.36	2390.68	5145.04	115.86
Jammu & Kashmir	11.12	710.72	6059.57	6770.29	1.02
Punjab	25.53	21677.55	9409.01	31086.56	704.19
Rajasthan	60.80	20985.80	10992.06	31977.86	3487.85
Uttar Pradesh	178.83	20911.42	25093.82	46005.24	9222.30
Uttaranchal	9.01	3113.13	2413.76	5526.89	403.82
Chandigarh	0.98	0.00	862.73	862.73	6.79
Delhi	15.39	5476.41	18436.18	23912.59	0.00
Sub-Total (NR)	330.50	85476.70	86146.85	171623.55	15005.58
Gujarat	53.67	44230.80	11947.34	56178.14	13527.31
Madhya Pradesh	64.99	15975.24	14535.25	30510.49	2992.00
Chhattisgarh	22.26	8307.60	2930.02	11237.62	4006.81
Maharashtra	102.10	67078.27	18208.29	85286.56	4468.23
Goa	1.47	336.16	2738.62	3074.78	143.09
Daman & Diu	0.17	0.00	1275.22	1275.22	0.00
D. & N Haveli	0.24	0.00	1977.71	1977.71	14.80
Sub-Total (WR)	244.89	135928.07	53612.45	189540.52	25152.24
Andhra Pradesh	79.10	37305.14	17617.84	54922.98	5568.91
Karnataka	55.21	23515.43	9393.49	32908.92	3532.10
Kerala	33.07	6514.95	6170.79	12685.74	470.59
Tamil Nadu	64.39	32229.72	21094.27	53323.99	5791.23
Lakshadweep	0.06	22.61	0.00	22.61	0.00
Pondicherry	1.02	275.41	1716.52	1991.93	98.31
Sub-Total (SR)	232.85	99863.26	55992.91	155856.17	15461.14
Bihar	88.69	206.99	6000.13	6207.12	0.00
Jharkhand	28.56	4168.29	7593.60	11761.89	3636.96
Orissa	38.41	10307.96	8104.49	18412.45	9595.15
West Bengal	84.23	24888.26	7192.06	32080.32	1942.07
A. & N. Islands	0.38	129.60	0.00	129.60	0.00
Sikkim	0.57	58.83	470.73	529.56	0.00
Sub-Total (ER)	240.84	39759.93	29361.02	69120.95	15174.18
Assam	28.33	903.24	3086.00	3989.24	623.48
Manipur	2.52	1.32	648.12	649.44	0.00
Meghalaya	2.43	637.65	629.31	1266.96	0.00
Nagaland	2.10	3.50	377.06	380.56	0.00
Tripura	3.36	554.76	625.06	1179.82	0.00
Arunachal Pradesh	1.15	2.00	434.59	436.59	0.00
Mizoram	0.94	5.81	406.58	412.39	0.00
Sub-Total(NER)	40.83	2108.28	6206.73	8315.01	623.48
Total (All India)	1089.91	363136.24	231319.96	594456.20	71416.62

\$ Source of Population : Office of Registrar General of India as on I-10-2004 (Mid Financial Year)

* Excludes Gross Generation from Central Sector Projects & DVC.

CSPs - CentralSector Projects, DVC - Damodar Valley Corpn.



Table No. 8.10 (Contd.)
GROSS ANNUAL PER CAPITA CONSUMPTION OF ELECTRICITY
DURING THE YEAR 2004-05

Name of the State /U.T.s	Import from Other Countries	Export to Other Countries	Total (5to7-8)	Per Capita Consumption* (kWh)
	7	8	9	10
Haryana	0	0	21400.11	950.69
Himachal Pradesh	0	0	5260.90	831.11
Jammu & Kashmir	0	0	6771.31	608.93
Punjab	0	0	31790.75	1245.23
Rajasthan	0	0	35465.71	583.32
Uttar Pradesh	0	0	55227.54	308.83
Uttaranchal	0	40.16	5890.55	653.78
Chandigarh	0	0	869.52	887.26
Delhi	0	0	23912.59	1553.77
Sub-Total(NR)	0	40.16	186588.97	564.57
Gujarat	0	0	69705.45	1298.78
Madhya Pradesh	0	0	33502.49	515.50
Chhattisgarh	0	0	15244.43	684.84
Maharashtra	0	0	89754.79	879.09
Goa	0	0	3217.87	2189.03
Daman & Diu	0	0	1275.22	7545.68
D. & N Haveli	0	0	1992.51	8478.77
Sub-Total(WR)	0	0	214692.76	876.68
Andhra Pradesh	0	0	60491.89	764.75
Karnataka	0	0	36441.02	660.04
Kerala	0	0	13156.33	397.83
Tamil Nadu	0	0	59115.22	918.08
Lakshadweep	0	0	22.61	376.83
Pondicherry	0	0	2090.24	2049.26
Sub-Total(SR)	0	0	171317.31	735.74
Bihar	450.15	0	6657.27	75.06
Jharkhand	200.84	0	15599.69	546.21
Orissa	242.72	0	28250.32	735.49
West Bengal	809.42	0	34831.81	413.53
A. & N. Islands	0	0	129.60	345.60
Sikkim	31.92	0	561.48	985.06
Sub-Total(ER)	1735.05	0	86030.18	357.22
Assam	0	0	4612.72	162.82
Manipur	0	0	649.44	257.72
Meghalaya	0	0	1266.96	521.38
Nagaland	0	0	380.56	181.22
Tripura	0	0	1179.82	351.14
Arunachal Pradesh	0	0	436.59	379.65
Mizoram	0	0	412.39	438.71
Sub-Total(NER)	0	0	8938.49	218.92
Total (All India)	1735.05	40.16	667567.71	612.50

* As per UN methodology : Per Capita Consumption equal to gross generation (col. No. 9)/population (col. No. 2).



Table No. 8.11
ELECTRICAL ACCIDENTS DURING 2004-05

	Generating Stations/Transmission & Distribution				Industrial Installations of Consumers	
	Human		Animals		Human	
	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal
Andhra Pradesh	31	75	0	0	0	0
Assam	NA	NA	NA	NA	NA	NA
Bihar	NA	NA	NA	NA	NA	NA
Goa	8	23	53	0	9	7
Gujarat	264	317	219	263	0	0
Haryana	59	95	213	0	1	0
Himachal Pradesh	25	77	8	0	2	0
Jammu & Kashmir	NA	NA	NA	NA	NA	NA
Karnataka	307	364	485	0	0	0
Kerala	99	35	45	0	42	14
Madhya Pradesh	357	206	380	0	0	0
Maharashtra	139	119	217	0	5	1
Manipur	12	11	8	31	0	0
Meghalaya	11	7	22	0	0	0
Nagaland	1	3	0	0	0	0
Orissa (A)	31	15	34	0	0	0
Punjab	96	110	38	0	0	1
Rajasthan	178	148	202	0	5	7
Sikkim	NA	NA	NA	NA	NA	NA
Tamil Nadu	333	267	46	0	17	0
Tripura	3	8	3	2	0	0
Uttar Pradesh	NA	NA	NA	NA	NA	NA
West Bengal	69	59	10	0	0	0
Arunchal Pradesh	NA	NA	NA	NA	NA	NA
Delhi	9	2	1	0	0	
Mizoram	3	8	1	0	0	0
Chhattisgarh	136	82	191	0	2	2
Uttaranchal	52	33	0	53	0	0
Jharkhand	NA	NA	NA	NA	NA	NA
Mines	NA	NA	NA	NA	NA	NA
Central Govt. Installn.	12	0	0	0	0	0
Railwaya	NA	NA	NA	NA	NA	NA
UNION Territories						
A & N Islands	NA	NA	NA	NA	NA	NA
Chandigarh	3	3	0	0	0	0
D.&N. Haveli	NA	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA	NA
Lakshadweep	NIL	NIL	NIL	NIL	NIL	NIL
Pondicherry	5	2	0	0	0	0
Total (All India)	2243	2069	2176	349	83	32

NA - Not Available.



Table No. 8.11
ELECTRICAL ACCIDENTS DURING 2004-05

	Industrial Installation of Consumers		Installations of Consumers Other than Industrial				Total
	Animals		Human		Animals		
	Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal	
Andhra Pradesh	0	0	675	148	192	0	1121
Assam	NA	NA	NA	NA	NA	NA	NA
Bihar	NA	NA	NA	NA	NA	NA	NA
Goa	12	0	0	0	0	0	112
Gujarat	0	0	0	0	0	0	1063
Haryana	2	0	0	3	0	0	373
Himachal Pradesh	0	0	3	0	0	0	115
Jammu & Kashmir	NA	NA	NA	NA	NA	NA	NA
Karnataka	0	0	30	31	14	0	1231
Kerala	0	0	0	0	0	0	235
Madhya Pradesh	0	0	0	0	0	0	943
Maharashtra	0	0	106	8	9	0	604
Manipur	0	0	0	0	0	0	62
Meghalaya	0	0	0	0	0	0	40
Nagaland	0	0	0	0	0	0	4
Orissa	0	0	0	0	0	0	80
Punjab	0	0	3	1	2	1	252
Rajasthan	12	0	1	0	0	0	553
Sikkim	NA	NA	NA	NA	NA	NA	NA
Tamil Nadu	0	0	3	7	0	0	673
Tripura	0	0	0	0	0	0	16
Uttar Pradesh	NA	NA	NA	NA	NA	NA	NA
West Bengal	0	0	0	0	0	0	138
Arunachal Pradesh	NA	NA	NA	NA	NA	NA	NA
Delhi	0	0	0	0	0	0	12
Mizoram	0	0	0	0	0	0	12
Chhattisgarh	1	0	27	10	24	0	475
Uttaranchal	0	0	0	0	0	0	138
Jharkhand	NA	NA	NA	NA	NA	NA	NA
Mines	NA	NA	NA	NA	NA	NA	NA
Central Govt. Installn.	0	0	0	0	0	0	12
Railwaya	NA	NA	NA	NA	NA	NA	NA
UNION Territories							
A & N Islands	NA	NA	NA	NA	NA	NA	NA
Chandigarh	0	0	0	0	0	0	6
D&N Haveli	NA	NA	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA	NA	NA
Lakshadweep	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Pondicherry	0	0	0	0	0	0	7
Total (All India)	27	0	848	208	241	1	8277*

NA - Not Available.

* - Includes total Human Fatal Accidents(3174), Human Non Fatal Accidents(2309) Animal Fatal Accidents(2444) and Animal Non Fatal Accidents(350).

CHAPTER – 9

**ELECTRICITY CONSUMERS AND
CONNECTED LOAD**



CHAPTER 9 ELECTRICITY CONSUMERS AND CONNECTED LOAD

REVIEW:

During the year 2004-05, 4.25 million additional electric connections were given to different categories of consumers, bringing the total number of consumers to 137.82 millions up to 31st March, 2005. The connected load of all categories of consumers as on 31.3.2005 was 267571 MW as compared to 248660 MW as on 31.3.2004.

Domestic category continued to have maximum number of consumers benefited from electricity followed by commercial and agricultural categories. The domestic consumers had the maximum connected load of 101429 MW followed by total industrial (LV, MV & HV) and agricultural sectors having connected load of 70099 MW and 56509 MW respectively.

The table of this section shows the details of consumers and connected load of different categories in various States/Union Territories.



Table No.9.1
CLASSIFICATION OF CONSUMERS AND CONNECTED LOAD (UTILITIES)
REGIONWISE/STATEWISE AS ON 31.3.2005

State/U.Ts.	Domestic		Commercial		Industrial (LV&MV)	
	Connected load(KW)	Consumers	Connected load(KW)	Consumers	Connected load(KW)	Consumers
Haryana	3118511	3022856	527515	375599	2429559	66407
Himachal Pradesh	1808135	1462387	447303	202831	271947	32056
Jammu & Kashmir (R)	190973	578708	56798	78886	94615	7000
Punjab	7261629	4154647	1790888	719762	1856684	97099
Rajasthan	3595440	4614829	1190220	770811	1528876	157635
Uttar Pradesh	10180267	6979710	1748064	807457	1551331	147011
Uttaranchal	987231	842980	325318	101183	103737	6612
Chandigarh	479444	172653	212588	21428	48515	2128
Delhi	4195532	2209791	1906442	546737	1371037	81274
Sub-Total (NR)	31817162	24038561	8205136	3624694	9256301	597222
Gujarat	6173358	8072101	1953239	1410744	3348198	265321
Madhya Pradesh	2090178	4786627	738429	601682	776230	85255
Chattisgarh	582080	1950444	176670	163198	318340	20595
Maharashtra	13803459	12635871	4090519	1625831	4457303	344106
Goa	757240	357436	233580	66275	249864	7176
Daman & Diu	46915	38354	31702	8026	146070	3128
Dadra & N. Haveli (R)	14096	37953	6561	4412	93334	3124
Sub-Total (WR)	23467326	27878786	7230700	3880168	9389339	728705
Andhra Pradesh	8395359	12975912	1496866	1228996	6260676	204366
Karnataka	9311490	10175255	1676050	1044261	2087850	234391
Kerala	6290794	6173716	1348333	1137445	1215373	115870
Tamil Nadu	11567146	12477961	2831582	1992241	4843075	406834
Pondicherry	163545	213423	49602	33428	86775	5227
Lakshadweep	17947	15806	9927	3170	2508	264
Sub-Total (SR)	35746281	42032073	7412360	5439541	14496257	966952
Bihar	1521527	1733195	1186339	266672	1118367	68098
Jharkhand	601245	678860	561236	64703	461707	13309
Orissa (R)	1561501	1573743	270182	183316	267289	21784
West Bengal	5052065	6073492	1491305	902195	1067877	126816
A&N Island (R)	34569	50990	12732	12082	5790	482
Sikkim (R)	18300	49049	7600	5846	8000	204
Sub-Total (ER)	8789207	10159329	3529394	1434814	2929030	230693
Assam	991226	948101	242802	130584	387692	9361
Manipur	88874	159773	12821	8951	14444	1897
Meghalaya	161250	179847	53080	17445	9945	891
Nagaland	50138	143250	18579	15868	68449	1381
Tripura	129070	255669	437016	26886	55233	3398
Arunachal Pradesh (R)	45668	93221	9719	9154	3516	156
Mizoram	142856	123259	18063	3342	4685	379
Sub-Total (NER)	1609082	1903120	792080	212230	543964	17463
Total (All India)	101429058	106011869	27169670	14591447	36614891	2541035

(R):- Figures have been repeated due to non furnishing of information by the Deptt.

(E):- Connected Load have been estimated in r/o Bihar, Jharkhand and D & N Haveli



Table No. 9.1 (Contd.)
CLASSIFICATION OF CONSUMERS AND CONNECTED LOAD (UTILITIES)
REGIONWISE/STATEWISE AS ON 31.3.2005

State/UTs	Industrial(H.V.)		Public Lighting		Traction	
	Connected load(KW)	Consumers	Connected load(KW)	Consumers	Connected load(KW)	Consumers
Haryana	705635	1817	10929	999	67084	5
Himachal Pradesh	430942	509	2926	527	0	0
Jammu & Kashmir (R)	42000	100	22000	150	0	0
Punjab	3166822	4462	26925	1937	71460	18
Rajasthan	1413059	2689	348101	8750	93500	8
Uttar Pradesh	1510322	4833	89211	10468	255125	9
Uttaranchal	210908	295	7969	213	0	0
Chandigarh	60852	97	3608	513	0	0
Delhi	162126	649	19806	15	55992	3
Sub-Total (NR)	7702666	15451	531475	23572	543161	43
Gujarat	2945374	5614	104820	19329	115977	22
Madhya Pradesh	1343736	1992	52724	14957	528250	32
Chattisgarh	1087584	587	11570	4985	203490	21
Maharashtra	8657526	10144	352566	68830	517600	475
Goa	268879	440	5311	895	0	0
Daman & Diu	272800	789	1360	136	0	0
Dadra & N. Haveli (R)	181038	593	151	199	0	0
Sub-Total (WR)	14756937	20159	528502	109331	1365317	550
Andhra Pradesh	0	0	614927	104233	427000	40
Karnataka	1752320	3277	330160	53148	0	0
Kerala	651794	1128	84980	2326	25000	4
Tamil Nadu	4048667	5272	157282	175136	92000	10
Pondicherry	370404	346	4559	40033	0	0
Lakshadweep	0	0	201	947	0	0
Sub-Total (SR)	6823185	10023	1192109	375823	544000	54
Bihar	280807	861	3687	1500	92601	12
Jharkhand	1395701	881	3846	814	139468	16
Orissa (R)	717338	572	10226	1369	134178	15
West Bengal	1379933	2885	122238	1079	578000	57
A&N Island (R)	0	0	35	276	0	0
Sikkim (R)	0	0	8000	200	0	0
Sub-Total (ER)	3773779	5199	148032	5238	944247	100
Assam	240225	1306	2988	542	0	0
Manipur	1768	12	955	340	0	0
Meghalaya	185623	112	330	102	0	0
Nagaland	0	0	116	888	0	0
Tripura	0	0	39757	458	0	0
Arunachal Pradesh (R)	0	0	4011	133	0	0
Mizoram	0	0	1913	4	0	0
Sub-Total (NER)	427616	1430	50070	2467	0	0
Total (All India)	33484183	52262	2450188	516431	3396725	747

Contd.

Note -: The figure ' 0 ' for HV data means that it is not actually 'zero' but included in LV & MV data because

CHAPTER - 10

**URBAN & RURAL
ELECTRIFICATION**



CHAPTER -10

URBAN & RURAL ELECTRIFICATION

REVIEW:

High Priority continued to be attached to the implementation of rural electrification work. The programme included among other measures, maximization of electricity generation, electrification of all villages and rural house holds as speedily as possible and improve irrigation through energisation of pump sets. Rural electrification is the responsibility of States Govt. / State Electricity Boards which own & operate the distribution system in the State. Rural electrification scheme are formulated and implemented by the State Govt. according to the priorities fixed by them depending upon the availability of financial resources & other inputs. The fund for Rural Electrification programme are provided by the Planning Commission under various scheme and supplemented by financial institutions like REC etc.

The prevailing definition of village electrification states:

“A village would be declared as electrified if:

Electricity is provided to public places like Schools, panchayat Office, Health Centers, Dispensaries, Community centers etc. and the number of households electrified should be at least 10% of the total number of households in the village.”

As per the information received from the States/UTs, the total number of villages electrified was 439800 as on 31st March, 2005 representing 74.1 % of the total number of villages in the country as per census 2001. In the states/ UTs of Haryana, Punjab, Delhi, Goa, Kerala, Chandigarh, Daman & Diu, Dadra & Nagar Haveli, Pondicherry, Lakshadweep Islands 100% villages have been electrified.

On the regional basis, the Southern Region tops with 98.1% of villages electrified followed by Western Region 90.6 %, North Eastern Region 71.0 %, Northern Region 68.4 % and Eastern Region 57.1%. All the towns in the country stand electrified.

The total number of energized irrigation pumpsets/tube wells in the country was 14445014 as on 31st March, 2005. Maharashtra has maximum number of energized pump sets (2572815) followed by Andhra Pradesh (2374365). The average capacity and electricity consumption per



pumpset was 3.91 kW and 6131 kWh per annum respectively. The electricity consumption during 2004-05 in agriculture sector is third highest being 22.93% of total consumption of electricity of 360937 GWh in the country during 2004-05.

The salient features of Rural Electrification are covered in various tables of this section.



TABLE NO. 10.1
TOWNS ELECTRIFIED AS ON 31.03.2005

Name of the State/U.T.	Total no. of Towns as per 2001 Census	Towns Electrified
Haryana	106	106
Himachal Pradesh	57	57
Jammu & Kashmir	75	75
Punjab	157	157
Rajasthan	222	222
Uttar Pradesh	704	704
Uttaranchal	86	86
Chandigarh	1	1
Delhi	62	62
Sub-Total (NR)	1470	1470
Gujarat	242	242
Madhya Pradesh	394	394
Chhattisgarh	97	97
Maharashtra	378	378
Goa	44	44
D. & N Haveli	2	2
Daman & Diu	2	2
Sub-Total(WR)	1159	1159
Andhra Pradesh	210	210
Karnataka	270	270
Kerala	159	159
Tamil Nadu	832	832
Lakshadweep	3	3
Pondicherry	6	6
Sub-Total(SR)	1480	1480
Bihar	130	130
Jharkhand	152	152
Orissa	138	138
West Bengal	375	375
A. & N. Islands	3	3
Sikkim	9	9
Sub-Total(ER)	807	807
Assam	125	125
Manipur	33	33
Meghalaya	16	16
Nagaland	9	9
Tripura	23	23
Arunachal Pradesh	17	17
Mizoram	22	22
Sub-Total (NER)	245	245
Total (All India)	5161	5161



TABLE NO. 10.2

**VILLAGES ELECTRIFIED IN VARIOUS POPULATION GROUPS (2001 CENSUS)
AND RURAL POPULATION BENEFITTED BY ELECTRICITY
STATEWISE AS ON 31ST MARCH ,2005**

Name of the State State/U.T.	Villages		Electrified (P) in various Population Groups					
	Total No. of Villages	Below 500	500 to 999	1000 to 1999	2000 to 4999	5000 to 9999	10000 & above	
Haryana	6764	1083	3566	0	1702	364	44	
Himachal Pradesh	17495	Break up	not available					
Jammu & Kashmir	6417	Break up	not available					
Punjab	12278	3839	3611	3130	1626	208	14	
Rajasthan	39753	Break up	not available					
Uttar Pradesh	97942	Break up	not available					
Uttaranchal	15761	Break up	not available					
Chandigarh	23	5	2	6	8	3	1	
Delhi	158	16	13	44	86	19	21	
Sub-Total (NR)	196591							
Gujarat	18066	3806	10065	0	3419	575	75	
Madhya Pradesh	52117	Break up	not available					
Chattisgarh	19744	Break up	not available					
Maharashtra	41095	Break up	not available					
Goa	347	92	64	78	94	31	1	
D. & N Haveli	70	12	15	17	25	1	1	
Daman & Diu	23	3	6	6	6	2	1	
Sub-Total (WR)	131462							
Andhra Pradesh	26613	Break up	not available					
Karnataka	27481	Break up	not available					
Kerala	1364	6	3	18	98	255	1004	
Tamil Nadu	15400	2064	2851	4625	4764	1247	271	
Lakshadweep	8	2	0	0	0	4	1	
Pondicherry	92	99	75	48	38	3	0	
Sub-Total (SR)	70958							
Bihar	39015	Break up	not available					
Jharkhand	29354	Break up	not available					
Orissa	47529	Break up	not available					
West Bengal	37945	Break up	not available					
A. & N. Islands	501	377	65	44	15	0	0	
Sikkim	450	135	159	79	29	3	0	
Sub-Total (ER)	154794							
Assam	25124	Break up	not available					
Manipur	2315	Break up	not available					
Meghalaya	5782	Break up	not available					
Nagaland	1278	660	275	168	105	8	0	
Tripura	858	Break up	not available					
Arunachal Pradesh	3863	Break up	not available					
Mizoram	707	432	181	60	19	3	0	
Sub-Total (NER)	39927							
Total (All India)	593732							

Note: The break-up in respect of figures of 2001 Census are not available, figures shown are based on earlier data.



**TABLE NO. 10.2 (Contd.)
VILLAGES ELECTRIFIED IN VARIOUS POPULATION GROUPS
(2001 CENSUS) AND RURAL POPULATION BENEFITED BY
ELECTRICITY STATEWISE AS ON 31ST MARCH ,2005**

Name of the State/U.T.	Total No. of Villages	Villages electrified	% age Villages electrified
Haryana	6764	6764	100.0
Himachal Pradesh	17495	11950	68.3
Jammu & Kashmir \$	6417	6304	98.2
Punjab	12278	12278	100.0
Rajasthan	39753	25385	63.9
Uttar Pradesh \$	97942	56977	58.2
Uttaranchal	15761	14534	92.2
Chandigarh	23	23	100.0
Delhi	158	158	100.0
Sub-Total (NR)	196591	134373	68.4
Gujarat	18066	17823	98.7
Madhya Pradesh	52117	50213	96.3
Chattisgarh	19744	15119	76.6
Maharashtra	41095	35541	86.5
Goa	347	347	100.0
D. & N Haveli	70	70	100.0
Daman & Diu	23	23	100.0
Sub-Total (WR)	131462	119136	90.6
Andhra Pradesh	26613	26565	99.8
Karnataka	27481	26971	98.1
Kerala	1364	1364	100.0
Tamil Nadu	15400	14621	94.9
Lakshadweep	8	8	100.0
Pondicherry	92	92	100.0
Sub-Total (SR)	70958	69621	98.1
Bihar \$	39015	20006	51.3
Jharkhand	29354	9239	31.5
Orissa	47529	26235	55.2
West Bengal	37945	32190	84.8
A.& N. Islands	501	219	43.7
Sikkim	450	425	94.4
Sub-Total (ER)	154794	88314	57.1
Assam	25124	19342	77.0
Manipur	2315	1903	82.2
Meghalaya	5782	3328	57.6
Nagaland	1278	855	66.9
Tripura	858	491	57.2
Arunachal Pradesh	3863	1867	48.3
Mizoram	707	570	80.6
Sub-Total (NER)	39927	28356	71.0
Total (All India)	593732	439800	74.1

\$ = Data are tentative.



TABLE NO. 10.3
IRRIGATION PUMPSETS/TUBEWELLS ENERGISED-REGIONWISE/STATEWISE
AS ON 31ST MARCH,2005

Name of the State/U.T.	No. of Pumpsets Energised	Agricultural Consumption	
		Quantum (GWh)	% to total consumption in the State
Haryana	462635	5682.49	41.16
Himachal Pradesh	9196	25.26	0.86
Jammu & Kashmir	9714	127.55	3.29
Punjab	912889	6468.31	28.71
Rajasthan	741124	5322.13	31.90
Uttar Pradesh	844964	4865.83	17.42
Uttaranchal	17719	487.96	15.43
Chandigarh	623	1.76	0.19
Delhi	25883	71.65	0.56
Sub-Total (NR)	3024747	23052.94	22.03
Gujarat	807681	12055.46	32.60
Madhya Pradesh	1329388	5848.78	34.00
Chattisgarh	106749	1047.50	13.01
Maharashtra	2572815	10733.31	19.35
Goa	7485	15.93	0.88
D. & N Haveli	953	5.50	0.31
Daman & Diu	1006	2.61	0.26
Sub-Total (WR)	4826077	29709.09	24.30
Andhra Pradesh	2374365	14160.72	36.61
Karnataka	1434060	9323.81	37.62
Kerala	446366	200.25	2.14
Tamil Nadu	1854471	9766.00	23.65
Lakshadweep	0	0.00	0.00
Pondicherry	10538	118.36	6.51
Sub-Total (SR)	6119800	33569.14	28.96
Bihar	270392	1060.50	26.83
Jharkhand	8735	60.65	0.72
Orissa	74625	183.11	2.34
West Bengal	113563	833.48	4.37
A.& N. Islands	1	0.00	0.00
Sikkim	0	0.00	0.00
Sub-Total (ER)	467316	2137.74	5.40
Assam	3675	14.31	0.78
Manipur	45	0.22	0.12
Meghalaya	65	0.93	0.11
Nagaland	194	0.00	0.00
Tripura	3095	70.98	18.68
Arunachal Pradesh	0	0.00	0.00
Mizoram	0	0.00	0.00
Sub-Total(NER)	7074	86.44	2.32
Total (All India)	14445014	88555.35	22.93



**TABLE NO. 10.3 (Contd.)
IRRIGATION PUMPSETS/TUBEWELLS ENERGISED-REGIONWISE/STATEWISE
AS ON 31ST MARCH,2005**

Name of the State/U.T.	Agricultural Connected Load (KW)	Average.Capacity pumpset (KW)	Av. Consumption per pumpset (kWh)
Haryana	2553886	5.52	12283
Himachal Pradesh	58130	6.32	2747
Jammu & Kashmir	114375	11.77	13131
Punjab	4308919	4.72	7086
Rajasthan	4749030	6.41	7181
Uttar Pradesh	3506307	4.15	5759
Uttaranchal	113238	6.39	27539
Chandigarh	1024	1.64	2825
Delhi	73774	2.85	2768
Sub-Total (NR)	15478683	5.12	7621
Gujarat	5444963	6.74	14926
Madhya Pradesh	3316962	2.50	4400
Chhattisgarh	356903	3.34	9813
Maharashtra	7363661	2.86	4172
Goa	38229	5.11	2128
D. & N Haveli	2970	3.12	5771
Daman & Diu	4190	4.17	2594
Sub-Total (WR)	16527878	3.42	6156
Andhra Pradesh	8835098	3.72	5964
Karnataka	6403550	4.47	6502
Kerala	734103	1.64	449
Tamil Nadu	6772970	3.65	5266
Lakshadweep	0	0.00	0
Pondicherry	44560	4.23	11232
Sub-Total (SR)	22790281	3.72	5485
Bihar	716905	2.65	3922
Jharkhand	136788	15.66	6943
Orissa	189808	2.54	2454
West Bengal	521438	4.59	7339
A.& N. Islands	1460	1460.00	0
Sikkim	0	0.00	0
Sub-Total (ER)	1566399	3.35	4575
Assam	57393	15.62	3894
Manipur	558	12.40	4889
Meghalaya	306	8.58	14308
Nagaland	1080	1.58	0
Tripura	86034	0.35	22934
Arunachal Pradesh	0	0.00	0
Mizoram	0	0.00	0
Sub-Total (NER)	145371	20.55	12219
Total (All India)	56508612	3.91	6131

Note:- Connected load figures have not been furnished by J&K, D & N Haveli, A&N Island, and Arunachal Pradesh and as such the earlier figures have been taken. Pradesh and as such the earlier figures have been taken.

CHAPTER - 11

POWER TRADING



CHAPTER -11 POWER TRADING

REVIEW:

Power Trading has been instituted with incorporation of Power Trading Corporation of India in the year 1999. Enactment of Electricity Act, 2003 paved a way for developing market for optimal utilisation of energy; promote exchange of power with the neighbouring countries and easy access for exchange of power within the country from surplus to deficit system. The Chapter on Power Trading has been introduced in the General Review with a view that it may be useful to the utilities for entering into power exchange.

Thirteen (13) numbers of trading companies have been issued trading license as on 31-03-2005. These trading companies have been classified as per the volume of trade permitted during the year, based on A to F category of licence for trading. During the year 2004-05 only four companies had been engaged in power trading. The total volume of electrical energy traded by these companies was 11846.53 GWh which constitute 1.99% of the total generation from utilities.

This Chapter brings out the salient feature of state wise import/export of traded electrical energy, state wise mode wise electrical energy sales figures indicating period of trading, state wise trader wise import and export of electrical energy and trader wise state wise electrical energy sales during the year 2004-05.

Out of total volume of trade of 11846.53 GWh, Power Trading Corporation has traded 8358.26 GWh constituting 70.55% of total volume of trade followed by NTPC VIDYUT VYAPAR NIGAM LTD. which has traded 2616.26 GWh with a percentage share of 22.08% in the total volume of trade. The State of Maharashtra has imported 2878.23 GWh through trading companies which is maximum import by any State constituting 24.30% of total volume. The State of Orissa has exported 4520.40 GWh through trading companies which is maximum export by any State constituting 38.16% of total volume.



Table No. 11.1
Name of Power Trading Companies existing as on 31.03.2005

Electricity Trading During 2004-05			
Sr. No	Name of the Trading Licensee	Date of Licence issued	Category of Licence
1	Adani Exports Ltd	09.06.2004	F
2	Chattisgarh Electricity Company Ltd	03.11.2004	A
3	DLF Power Ltd	02.11.2004	C
4	GMR Ltd	09.11.2004	A
5	Jindal Steel & Power	02.11.2004	A
6	Karam Chand Thapar & Bros Ltd	27.01.2005	A
7	Lanco Electric Utility Ltd	23.07.2004	A
8	MMTC Ltd	23.07.2004	C
9	NTPC Vidyut Vyapar Nigam Ltd	23.07.2004	F
10	PTC India Limited	30.06.2004	F
11	Reliance Energy Trading (P) Ltd	30.06.2004	A
12	Sumex Organics (P) Ltd	12.07.2004	B
13	Tata Power Trading Company (P) Ltd	09.06.2004	A

Trading Limit (Category of Licence)

A- Upto 100 MU

B- From 100 MU to 200 MU

C- From 200 MU to 500 MU

D- From 500 MU to 700 MU

E- From 700 MU to 1000 MU

F- Above 1000 MU

Source - As reported by CERC.



Table 11.2
State wise Import/Export of Traded Energy During 2004-05

States	Import Gwh	Export Gwh
Haryana	1371.192	0.000
J & K	359.200	0.000
Punjab	1536.163	0.000
Rajasthan	376.074	0.000
UP	303.534	0.000
Chandigarh	11.933	0.000
Delhi	8.390	0.000
Uttranchal	6.844	19.400
Northern Region	3973.330	19.400
Gujrat	889.238	247.790
Madhya Pradesh	1335.951	17.861
Maharashtra	2878.232	32.320
Goa	0.000	65.288
Chhatisgarh	569.937	263.605
Western Region	5673.358	626.863
Andhra Pradesh	70.869	446.910
Karnataka	281.636	0.585
Kerla	0.000	200.941
Tamil Nadu	226.551	0.000
Southern Region	579.056	648.436
Bihar	334.033	30.200
Orissa	180.072	4520.396
West Bengal	535.542	3187.064
Jharkhand	159.939	0.000
Eastern Region	1209.586	7737.660
Assam	124.559	51.790
Arunachal	0.000	114.425
Mizoram	0.000	14.400
Meghalaya	69.694	88.303
Sikkim	22.768	286.740
Tripura	0.000	188.158
N E Region	217.021	743.815
Central Sector	194.183	862.358
Other Country	0.000	1208.002
All India	11846.534	11846.534



TABLE 11.3
State-wise mode-wise Energy sales figures during 2004-05 in Gwh

States	RTC	OP	P	A & W	NIGHT	Total
Uttanchal	0.000	19.400	0.000	0.000	0.000	19.400
Gujrat	66.478	41.434	26.748	32.270	80.860	247.790
Madhya Pradesh	0.000	17.861	0.000	0.000	0.000	17.861
Maharashtra	0.000	0.000	0.000	32.320	0.000	32.320
Goa	47.375	17.913	0.000	0.000	0.000	65.288
Chhatisgarh	263.605	0.000	0.000	0.000	0.000	263.605
Andhra Pradesh	0.000	166.776	192.100	10.115	77.919	446.910
Karnataka	0.000	0.000	0.585	0.000	0.000	0.585
Kerla	200.941	0.000	0.000	0.000	0.000	200.941
Tamil Nadu	0.000	0.000	0.000	0.000	0.000	0.000
Bihar	0.000	30.200	0.000	0.000	0.000	30.200
Orissa	1516.991	1943.832	1059.573	0.000	0.000	4520.396
West Bengal	8.428	2978.365	81.171	0.000	119.100	3187.064
Assam	0.000	51.790	0.000	0.000	0.000	51.790
Arunachal	69.405	7.200	37.820	0.000	0.000	114.425
Mizoram	0.000	0.000	0.000	14.400	0.000	14.400
Meghalaya	0.000	47.850	40.453	0.000	0.000	88.303
Sikkim	284.796	1.943	0.000	0.000	0.000	286.740
Tripura	75.480	89.186	23.492	0.000	0.000	188.158
Central Sector	0.000	657.488	147.088	57.782	0.000	862.358
Other Country	1208.002	0.000	0.000	0.000	0.000	1208.002
Total						11846.534

RTC :-Round the clock

OP :- Off Peak

P :- Peak

A & W :- As and when required



TABLE 11.4
State-wise Trader-wise Import Export of Energy during 2004-05 in Gwh

States	Import	Export	Trader
Haryana	24.375	0.000	ADANI
	806.950	0.000	PTC
	539.868	0.000	NTPC
J & K	359.200	0.000	PTC
	949.414	0.000	PTC
Punjab	586.749	0.000	NTPC
	223.900	0.000	PTC
	117.489	0.000	NTPC
Rajasthan	34.685	0.000	TPTC
	303.534	0.000	PTC
	11.933	0.000	PTC
UP	8.390	0.000	TPTC
Chandigarh	0.000	19.400	PTC
Delhi	6.844	0.000	NTPC
Uttranchal			
Northern Region	3973.330	19.400	
Gujrat	1.943	32.270	ADANI
	757.784	109.692	PTC
	129.510	105.828	NTPC
Madhya Pradesh	242.010	0.000	ADANI
	684.337	17.861	PTC
	383.234	0.000	NTPC
	26.370	0.000	TPTC
Maharashtra	531.456	0.000	ADANI
	1990.159	0.000	PTC
	356.617	0.000	NTPC
	0.000	32.320	TPTC
Goa	0.000	65.288	PTC
Chhatisgarh	380.439	263.605	PTC
	189.498	0.000	NTPC
Western Region	5673.358	626.863	
Andhra Pradesh	69.569	383.266	PTC
	1.300	40.919	NTPC
	0.000	22.725	TPTC
Karnataka	276.001	0.000	PTC
	5.635	0.585	NTPC
	0.000	200.941	NTPC
Kerla	226.551	0.000	NTPC
Tamil Nadu			
Southern Region	579.056	648.436	
Bihar	334.033	30.200	PTC
Orissa	180.072	3421.436	PTC
	0.000	1098.960	NTPC
West Bengal	0.000	32.080	ADANI
	520.580	2162.961	PTC
	14.962	992.024	NTPC
Jharkhand	154.164	0.000	PTC
	5.775	0.000	NTPC
Eastern Region	1209.586	7737.660	



Assam	120.840	51.790	PTC
	3.719	0.000	NTPC
Arunachal	0.000	114.425	ADANI
Mizoram	0.000	14.400	TPTC
Meghalaya	2.790	63.360	ADANI
	18.400	0.000	PTC
	48.504	24.943	NTPC
Sikkim	0.000	286.740	ADANI
	22.768	0.000	PTC
Tripura	0.000	93.884	PTC
	0.000	94.274	NTPC
N E Region	217.021	743.815	
Central Sector	0.000	273.700	ADANI
	194.183	530.877	PTC
	0.000	57.782	NTPC
Central Sector	194.183	862.358	
Other Country	0.000	1208.002	PTC
All India	11846.534	11846.534	



Table 11.5
Trader-wise State-wise Energy sales during 2004-05 in Gwh

Trader	Sales to	Sales vol	% vol
ADANI	Haryana	24.375	
	Gujrat	1.943	
	Madhya Pradesh	242.010	
	Maharashtra	531.456	
	Meghalaya	2.790	
Total Adani		802.575	6.77%
NTPC	Haryana	539.868	
	Punjab	586.749	
	Rajasthan	117.489	
	Uttanchal	6.844	
	Gujrat	129.510	
	Madhya Pradesh	383.234	
	Maharashtra	356.617	
	Chhatisgarh	189.498	
	Andhra Pradesh	1.300	
	Karnataka	5.635	
	Tamil Nadu	226.551	
	West Bengal	14.962	
	Jharkhand	5.775	
	Assam	3.719	
Meghalaya	48.504		
Total NTPC		2616.255	22.08%
PTC	Haryana	806.950	
	J & K	359.200	
	Punjab	949.414	
	Rajasthan	223.900	
	UP	303.534	
	Chandigarh	11.933	
	Gujrat	757.784	
	Madhya Pradesh	684.337	
	Maharashtra	1990.159	
	Chhatisgarh	380.439	
	Andhra Pradesh	69.569	
	Karnataka	276.001	
	Bihar	334.033	
	Orissa	180.072	
	West Bengal	520.580	
	Jharkhand	154.164	
	Assam	120.840	
	Meghalaya	18.400	
	Sikkim	22.768	
Central Sector	194.183		
Total PTC		8358.260	70.55%
TPTC	Rajasthan	34.685	
	Delhi	8.390	
	Madhya Pradesh	26.370	
Total TPTC		69.445	0.59%