



PUBLIC ELECTRICITY SUPPLY
ALL INDIA STATISTICS
1960—61

GENERAL REVIEW

(As compiled by the Central Water and Power Commission (Power Wing)
for and on behalf of the Central Electricity Authority)

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FOREWORD

Salient features of the Public Electricity Supply in the Republic of India for the year 1960-61 are summarised in this Review. While its presentation generally follows the same pattern as in the previous year, the following further information has been incorporated in this Review—

- (1) Table VIII indicating statewise installed generating capacity of and generation by different types of plant.
- (2) Tables XXVI and XXVII showing the aggregate maximum demand on statewise basis.

Although most of the State Electricity Boards, State Governments and privately owned Electricity Supply Undertakings have made available in time the data for compiling this Review, yet, some of them have failed to do so thereby leaving no alternative to this Commission but to resort to estimating it in their cases. As this publication is intended to present as far as possible a correct picture of the progress achieved by the Electricity Supply Industry in each state of the Republic, it is hoped that every co-operation would be extended to this Commission to achieve this objective.

Thanks are due to the Public Electricity Supply Undertakings for their whole-hearted co-operation without which it would not have been possible to complete this Review.

This Commission will be grateful if suggestions are made to improve the publication.

Every effort has been made to ensure the accuracy of the information presented in this publication but it has to be noted that the Government of India cannot accept responsibility for any errors or omissions.

CENTRAL WATER & POWER COMMISSION
(POWER WING)
"CLEREMONT" SIMLA-4
JANUARY, 1962.

S. S. KUMAR
Chairman

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(E N D O F P A R T A)

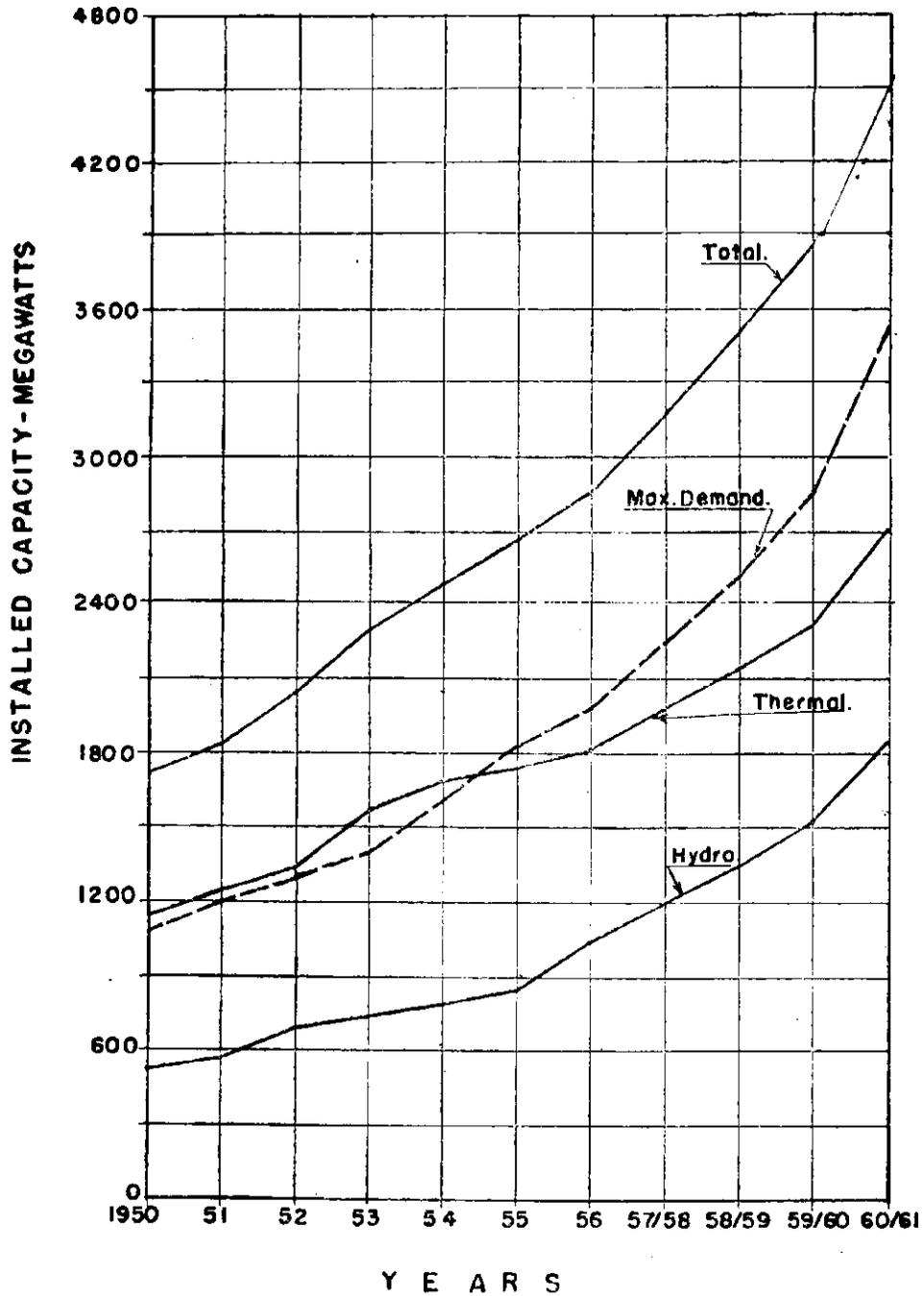
Page	Table/Para	Item	Please read	For
1.	2.	3.	4.	5.
4	Table I	Sales-Industrial Power Col.6	9,584.338	9,696.415
		Sales-Total Col.6	13,840.639	13,952.716
53	Table XXXVIII	Serial No. 6 Col. 3	13,840.639	13,952.716
		" " " Col.4	80.6	81.1
		" " 7 Col. 3	2,597.550	2,485.473
		" " " Col. 4	15.2	14.7
53	Table XXXIX	" " 3 Col. 3	9,584.338	9,696.415
		" " " Col. 6	11.3	14.4
		Total- Col. 3	13,840.639	13,952.716
		Total- Col. 6	11.1	12.1
53	Para 2	Line -5	11.3	14.4
		Line -6	11.1	12.1
54	Table XL	Serial no. 3 Col. 4	28.789	175.920
&		" " " Col. 7	457.839	481.943
55		" " " Col. 8	1,104.154	1,227.181
		" " " Col. 9	699.127	863.238
		" " " Col.11	889.205	1,053.316
		" " " Col.12	214.949	173.865
		" " 15 Col. 4	147.131	-
		" " " Col. 5	457.839	481.943
		" " " Col. 8	2,783.114	2,660.087
		" " " Col.10	2,276.974	2,224.940
		" " " Col.11	2,544.800	2,492.766
		" " " Col.12	238.314	167.321
		Total- Col. 5	921.379	945.483
		" Col. 7	921.379	945.483
		" Col. 9	8,375.401	8,539.512
		" Col.10	5,465.238	5,413.204
		" Col.11	13,840.639	13,952.716
		" Col.12	2,597.550	2,485.473
57	Table XLI	Serial No. 3 Col. 9	349.301	422.655
		" " Col.10	118.886	45.532
		Total- Col. 9	8,040.964	8,114.318
		" Col.10	1,670.351	1,596.997
58	Table XLII	Serial No. 3 Col. 3	889.205	1,053.316
&		" " " Col. 9	717.482	881.593
59		" " " Col.12	18.255	55
		" " 15 Col. 3	2,544.800	2,492.766
		" " " Col. 9	1,709.412	1,657.378
		Total- Col 3	13,840.639	13,952.716
		" Col. 9	7,943.210	8,055.287
		" Col.14	16,937.012	16,937.1

Contd.

1.	2.	3.	4.	5.
60	Para I	Line 1	31.60	31.85
		Line 3	37.9	38.2
60	Table	1960-61 Col.2	31.60	31.85
		1960-61 Col.3	37.90	38.11
60	Table XLIII	Serial -3 Col. 6	17.07	20.67
		Serial -3 Col. 9	14.14	22.74
		Serial -3 Col. 11	21.89	41.49
		Serial 15 Col. 6	58.66	57.36
		Serial 15 Col. 9	72.77	71.28
		Serial 15 Col. 11	85.19	83.89
		Total- (All India) Col.6	24.17	24.13
		" Col. 9	31.60	31.85
		" Col. 11	37.90	38.12
61	Table XLV(1)	1960-61 Col. 9	13,840.639	13,952.716
63	Table XLV(4)	Installed Capacity- Total Col. 6	350,893	93
		Sales- Industrial Power Col. 6	776.395	940.506
		Sales- Total Col. 6	889.205	1,053.316
69	Table XLV(16)	Sales- Industrial Power Col. 6	1,860.162	1,808.128
		Sales- Total Col. 6	2,544.800	2,492.766
70	Table XLVI	kwh sold- Industrial Col. 6	313.7	317.4
		Total-sold Col. 6	288.7	291.1

SECTION 1
PLANT DATA AND POWER GENERATION

GROWTH OF INSTALLED POWER PLANT CAPACITY
 OF
 THE ELECTRICITY SUPPLY UNDERTAKINGS.



PUBLIC ELECTRICITY SUPPLY ALL INDIA STATISTICS

GENERAL REVIEW

1·0 GENERAL POWER SUPPLY POSITION

During the year 1960-61, the total installed generating plant capacity in India rose to 4,579 Megawatts and the total generation increased to 16,937 million kWh. The installed plant capacity increased by 18·2 per cent and generation by 12·4 per cent and the number of consumers increased by 22·0 per cent over that in the previous year. Table I gives the summary of the salient features of power supply industry in India for a period of five years, 1956, 1957-58, 1958-59, 1959-60 and 1960-61.

The number of undertakings, their aggregate generating plant capacity, power production, fuel consumption, power sales, number of consumers, total connected load, the total number of electrified towns and villages and the capital expenditure of the entire power supply industry for the period are given in the table. Similar details in respect of each of the states has been given in Section 3 of this report.

TABLE I.—OUTSTANDING FEATURES OF THE ELECTRICITY SUPPLY INDUSTRY 1956 TO 1960-61
(All-India)

Year	1956	1957-58	1958-59	1959-60	1960-61
AUTHORISED UNDERTAKINGS—					
<i>(a) Generating—</i>					
(i) Public Sector (Nos.)	46	43	42	40	42
(ii) Private Sector (Nos.)	179	161	144	141	130
Total ..	225	204	186	181	172
<i>(b) Receiving Bulk Supply—</i>					
(i) Public Sector (Nos.)	23	24	27	31	32
(ii) Private Sector (Nos.)	122	130	140	138	133
Total ..	145	154	167	169	165
GRAND TOTAL ..	370	358	353	350	337
GENERATING CAPACITY (kW)—					
Steam Plant	1,596,412	1,763,257	1,879,653	2,047,011	2,436,255
Oil Plant	228,288	245,935	270,288	296,010	300,135
Hydro Plant	1,061,441	1,213,919	1,361,745	1,530,145	1,842,661
Total ..	2,886,141	3,223,111	3,511,686	3,873,166	4,579,051
OUTPUT (Million kWh)—					
Steam Plant	5,133·900	6,042·454	6,847·644	7,678·429	8,732·409
Oil Plant	233·356	254·447	298·140	327·100	368·022
Hydro-Plant	4,204·877	5,072·241	5,848·102	7,027·424	7,836·581
Total ..	9,662·133	11,369·142	12,993·886	15,032·953	16,937·012

TABLE—contd.

Year	1958	1957-58	1958-59	1959-60	1960-61
FUEL CONSUMPTION (Metric tons)—					
Coal	4,067,348	4,593,761	5,119,522	5,759,000	6,699,596
Diesel Oil	76,261	82,024	90,697	99,880	111,974
MAXIMUM DEMAND (kW.)	1,989,774	2,288,212	2,542,955	2,931,360	3,515,930
SALES (Million kWh)—					
Domestic light and small power ..	934.122	1,093.630	1,238.044	1,378.538	1,492.291
Commercial light and small power ..	545.851	609.814	682.818	766.184	847.735
Industrial Power	5,323.424	6,166.799	7,224.034	8,455.534	9,696.415
Irrigation	316.180	544.640	583.482	753.946	832.921
Other purposes	839.768	930.341	990.232	1,052.741	1,083.354
Total	7,959.345	9,345.224	10,718.610	12,406.943	13,952.716
CONSUMERS—					
Lighting and heating (domestic, commercial and public).	2,654,198	2,994,445	3,375,651	3,742,706	4,354,569
Industrial power including traction and water works.	198,756	125,414	135,860	150,789	178,692
Irrigation	62,848	87,649	106,117	136,245	195,902
Total	2,825,802	3,207,508	3,617,628	4,029,740	4,729,163
CONNECTED LOAD (kW)—					
Heating and lighting (domestic, commercial and public).	1,763,764	2,000,647	2,217,718	2,426,514	2,837,011
Industrial power (including traction and water works).	2,632,280	2,945,635	3,448,375	3,992,812	4,561,915
Irrigation	327,774	429,248	489,106	601,411	826,530
Total	4,723,818	5,375,530	6,155,199	7,020,537	8,225,456
ELECTRIFIED TOWNS AND VILLAGES ..	12,305	15,208	18,300	21,396	23,969
CAPITAL EXPENDITURE (Rs. crore) ..	516.9	509.3*	654.8	713.2	..

*The Andhra Pradesh and Assam State Electricity Boards and Orissa and Jammu and Kashmir Government Electricity Departments have not been included in this figure due to non-availability of data from them.

2.0 AUTHORISED UNDERTAKINGS

The total number of undertakings included in the review is 337 reckoned on the basis of ownership and their operating data has been based on 1,050 separate returns from reporting centres. Out of these 337 undertakings, 172 generated power and 165 were engaged in the retail distribution of bulk power purchased mostly from other public electric utility generating stations. A small amount of power was also purchased by them from the industry's power stations situated close by. The Inter-State sale of power between adjoining states formed an insignificant portion of the total power sales in the country.

Table II gives the classification of the undertakings according to ownership and source of power supply.

TABLE II—AUTHORISED UNDERTAKINGS (OWNERSHIPWISE)

Ownership	Number of undertakings		Total
	Generating	Distributing	
<i>(i) Public Sector—</i>			
(a) Governments, State Electricity Boards	16	4	20
(b) Power Corporation	2	..	2
(c) Municipality	24	28	52
Total	42	32	74
<i>(ii) Private Sector—</i>			
(a) Companies	130	133	263
Grand Total	172	165	337

The distribution of the undertakings in the different States is given in table III which indicates the extent to which the two sectors have participating interests in the development of electrical resources in each of the States.

TABLE III—STATEWISE DISTRIBUTION OF UNDERTAKINGS AND INSTALLED GENERATING PLANT CAPACITY

Serial No.	State and Union Territory	Public Sector						Private Sector		All-India Total			
		Government/State Electricity Board		Power Corporation		Municipality		Total		Company			
		Total number	Installed capacity kW	Total number	Installed capacity kW	Total number	Installed capacity kW	Total number	Installed capacity kW	Total number	Installed capacity kW		
1	Andhra Pradesh	1	269,673	..	..	2	..	3	269,673	2	165	5	269,838
2	Assam	1	14,820	..	..	..	..	1	14,820	6	4,610	7	19,430
3	Bihar	1	19,127	1*	299,000	..	..	2	318,127	10	32,766	12	350,893
4	Gujarat	1	143,390	..	..	14	2,481	15	145,871	45	187,396	60	333,267
5	Jammu & Kashmir	1	12,981	..	..	..	..	1	12,981	..	..	1	12,981
6	Kerala	1	137,262	..	..	1	..	2	137,262	5	..	7	137,262
7	Madhya Pradesh	1	242,872	..	..	1	330	2	243,202	19	24,335	21	267,537
8	Madras	1	517,466	..	..	5	..	6	517,466	8	..	14	517,466
9	Maharashtra ..	1	272,398	..	..	4	322	5	272,720	58	486,807	63	759,527
10	Mysore	1	186,129	..	..	1	34	2	186,163	17	4,913	19	191,076
11	Orissa	1	134,138	..	..	..	..	1	134,138	4	2,111	5	136,249
12	Punjab	1	269,888	..	..	3	3,660	4	273,548	14	3,529	18	277,077
13	Rajasthan	1	58,526	..	..	6	553	7	59,079	14	11,596	21	70,675
14	Uttar Pradesh ..	1	305,246	..	..	12	8,560	13	313,806	31	83,638	44	397,444
15	West Bengal ..	1	12,315	1*	225,000	1	2,640	3	239,955	26	513,701	29	753,656
16	Union Territories—												
	(a) Delhi .. .. .	..	..	..	..	2	76,228	2	76,228	2	75	4	76,303
	(b) Rest	5	8,370	..	..	..	..	5	8,370	2	..	7	8,370
	Total	20	2,604,601	2*	524,000	52	94,808	74	3,223,409	263	1,355,642	337†	4,579,051

*The Damodar Valley Corporation is reckoned as two undertakings as it has installations both in Bihar and West Bengal.

†This figure includes both the generating and distributing undertakings.

3-0 ACQUISITION OF ELECTRICITY SUPPLY UNDERTAKINGS

During the year 15 undertakings were acquired by the State Electricity Boards in the interest of rationalising the power supply in the licensees' areas. The names of the undertakings with their ownership prior to acquisition and the State Electricity Boards who acquired them are given below—

Name of undertaking	Prior ownership	Name of acquiring board
<i>A. Generating Power Systems—</i>		
Amreli	Company	Gujarat State Electricity Board.
Dwarka	Company	Gujarat State Electricity Board.
Manmad	Company	Maharashtra State Electricity Board.
Shajapur	Municipal	Madhya Pradesh Electricity Board.
Bhawaniwadi	Company	Rajasthan State Electricity Board.
Bundi	Company	Rajasthan State Electricity Board.
Nawalgarh	Company	Rajasthan State Electricity Board.
<i>B. Distributing Power Systems—</i>		
Annakapalle	Company	Andhra Pradesh Electricity Board.
Bobbili	Company	Andhra Pradesh Electricity Board
Chittoor	Company	Andhra Pradesh Electricity Board
Eluru	Company	Andhra Pradesh Electricity Board
Tarana	Company	Madhya Pradesh Electricity Board
Khamgaon	Company	Maharashtra State Electricity Board
Kolhapur	Company	Maharashtra State Electricity Board
Sambalpur	Company	Orissa State Electricity Board

The total generating plant capacity in the aforesaid undertakings was 2,256 kW. at the time of acquisition.

4-0. UNDERTAKINGS CHANGED OVER TO BULK POWER SUPPLY

Five undertakings are reported to have changed over to bulk power distribution during the year. Their names and their source of bulk power supply are given below—

Name of undertaking	Type of ownership	Name of State	Source of supply
1. Bajana	Company	Gujarat	Gujarat State Electricity Board
2. Seoni	Company	Madhya Pradesh	Madhya Pradesh Electricity Board
3. Tarana	Company	Madhya Pradesh	Madhya Pradesh Electricity Board
4. Pilani	Company	Rajasthan	Nangal Hydrel Scheme
5. Hanumangarh	Municipal	Rajasthan	Nangal Hydrel Scheme

The approximate reduction in effective plant capacity on account of changing over of the aforesaid undertakings is 778 kW. The corresponding reduction in capacity during the last 3 years is as follows—

1958-59	19,994 kW.
1959-60	1,451 kW.
1960-61	778 kW.

5.0 NEW GENERATING STATIONS WHICH COMMENCED POWER SUPPLY

The names of generating stations which commenced power supply during the period 1st April, 1960 to 31st March, 1961 are given below—

Kerala—State Electricity Boards' hydro station at Neriamangalam.

Madhya Pradesh—State Electricity Board's hydro and diesel station at Chambal.

Madras—State Electricity Board's Kundah hydro station stage II.

Maharashtra—State Electricity Board's steam station at Paras.

Punjab—State Electricity Board's hydro station at Bhakra left bank.

Uttar Pradesh—State Electricity Board's diesel station at Dhakrani.

West Bengal—Durgapur Steam Station by D.V.C.

6.0 PLANTS INSTALLATIONS, WITHDRAWAL, ETC.

The generating plant capacity added during the period 1-1-1960 to 31-3-1961 was 690,135 kW, as compared to 343,561 kW, in the corresponding period of the previous year. Out of this total added capacity 364,494 kW or about 52.8 per cent comprised steam plant, 4,125 kW, or 0.6 per cent diesel plant and 321,516 kW, or about 46.6 per cent hydro plant. The capacity added in the public sector i.e., in State-owned undertakings including the Electricity Boards, Power Corporations, and Municipalities was 635,257 kW, or about 92 per cent of the total capacity added during the year. The remaining 54,878 kW, or about 8 per cent was installed by the company-owned undertakings. The plant capacity in the public sector as compared with the previous year increased from 15.4 to 24.7 per cent, the corresponding additions in the private sector registered a rise from 0.4 to 4.2 per cent.

In some of the medium and large thermal stations, 13 turbo alternators of total capacity 387,500 kW and 10 boilers of aggregate evaporating capacity of 876,225 kilograms/hr. were added during the year. The number and capacity of the generating plants and boilers installed in these steam power stations are given below—

MAJOR STEAM TURBO ALTERNATORS INSTALLED DURING 1960-61

Serial No.	Installed at	State	Ownership	No. of units	Capacity of each unit (kW)	Total capacity
1	Porbandar ..	Gujarat ..	Board ..	1	5,000	5,000
2	Paras ..	Maharashtra ..	Board ..	1	30,000	30,000
3	Khaperkheda ..	Maharashtra ..	Board ..	1	30,000	30,000
4	Sholapur ..	Maharashtra ..	Board ..	1	3,000	3,000
5	Jaipur ..	Rajasthan ..	Board ..	1	5,000	5,000
6	Jodhpur ..	Rajasthan ..	Board ..	2	3,000	6,000
7	Kanpur ..	Uttar Pradesh ..	Board ..	1	15,000	15,000
8	Bokaro ..	Bihar ..	Power Corporation	1	75,000	75,000
9	Durgapur ..	West Bengal ..	Power Corporation	2	75,000	150,000
10	Trombay ..	Maharashtra ..	Companies ..	1	62,500	62,500
11	Agra ..	Uttar Pradesh ..	Companies ..	1	6,000	6,000

Boilers

Installed at	State	Ownership	No. of boilers	Evaporating capacity of each unit in 1,000 kilograms/hour	Steam conditions at the stop valve at	
					Pressure in kilograms, sq. cm.	Temperature °C
1. Bokaro ..	Bihar	Power Corporation	1	332·000	105	558
2. Paras ..	Maharashtra	State Electricity Board	1	81·650	61·52	496
3. Khaperkheda	Maharashtra	State Electricity Board	2	81·650	61·52	499
4. Sholapur ..	Maharashtra	State Electricity Board	1	22·650	24·5	390
5. Trombay	Maharashtra	State Electricity Board	1	272·155	93·0	513
6. Jaipur	Rajasthan ..	State Electricity Board	2	18·120	14·0	278
7. Kanpur ..	Uttar Pradesh	State Electricity Board	2	68·000	17·5	445

*1 kgm./sq.cm=14·21 lbs./sq.in.

It was reported that 10 water wheel alternator sets of aggregate capacity of 315,000kW. were installed during the year. The number and capacity of generating plants installed in some of the important hydro stations are given below—

Water Wheel Alternators

Serial No.	Installed at	State	Ownership	Number of units	Capacity of each unit kW	Total Capacity kW
1	Neriamanglam ..	Kerala ..	Board ..	1	15,000	15,000
2	Chambal (Gandhisagar)	Madhya Pradesh ..	Board ..	3	23,000	69,000
3	Kundah P.H.I. ..	Madras ..	Board ..	1	20,000	20,000
4	Kundah P.H. II ..	Madras ..	Board ..	3	35,000	105,000
5	Bhakra ..	Punjab ..	Board ..	2	53,000	106,000

In the diesel power stations, 26 (twenty-six) sets of total capacity of 8,885 kW were installed during the year. The number and capacity of the generating plants added in some of the important diesel power stations are given below—

Major Diesel Generators

Serial No.	Installed at	State	Ownership	No. of units	Capacity of each unit kW	Total capacity kW
1	Rajkot ..	Gujarat ..	Board ..	1	1,000	1,000
2	Chambal (Gandhisagar)	Madhya Pradesh ..	Board ..	5	500	2,500
3	Ratlam ..	Madhya Pradesh ..	Companies ..	1	300	300
4	Jalgaon ..	Maharashtra ..	Companies ..	1	394	394
5	Malegaon ..	Maharashtra ..	Companies ..	1	310	310
6	Nasik-Deolali ..	Maharashtra ..	Companies ..	1	825	825
7	Belgaum ..	Mysore ..	Companies ..	1	394	394
8	Agra ..	Uttar Pradesh ..	Companies ..	5	250	1,250

It is reported that an aggregate of 41,523 kW of generating capacity was withdrawn from service during the period 1st April, 1960 to 31st March, 1961. Out of the withdrawn plant 26,000 kW comprised steam plant and 15,523 kW diesel plant.

Installed plant capacity as at the end of the last year of report in some of the undertakings which were not correctly reported at the time of compilation have since been received. It is ascertained that the installed plant capacity as reported for the year 1959-60 has to be increased by 6,817 kW.

7.0 TOTAL POWER PLANT CAPACITY AND ELECTRICITY PRODUCTION

The total installed capacity of generating plant as on 31-3-1961 amounted to 4,579 million kW which includes 705,885 kW of plant added during the year of review. The capacity added in the year constituted 18.2 per cent of the total at the beginning of the year.

Total electricity production for the year 1960-61 was 16,937 million kWh and registered an increase of about 12.7 per cent over that in the year 1959-60.

Table IV gives the all-India installed plant capacity and electricity production classified according to the type of generating plant.

TABLE IV—INSTALLED CAPACITY AND GENERATION BY TYPES OF PLANTS

Type of plant	Installed capacity of Generators			Generation		
	As on 31-3-61	Percentage of total	Increase in 1960-61 as compared with 1959-60	kWh generated in 1960-61	Percentage of total	Increase in 1960-61 as compared with 1959-60
	kW	%	%	(Millions)	%	%
Steam	2,436,255	53.2	19.0	8,732.409	51.6	13.7
Oil	300,135	6.6	1.4	368.022	2.2	12.5
Hydro	1,842,661	40.2	20.4	7,836.581	46.2	11.5
Total	4,579,051	100.0	18.2	16,937.012	100.0	12.7

The steam power plant capacity during the year increased by 19.0 per cent while the corresponding electricity production rose by 13.7 per cent over that in the previous year. The hydro power plant, the capacity increased by 20.4 per cent and electricity production by 11.5 per cent.

The total steam power plant capacity constituted 53.2 per cent of the total installed power plant capacity and the energy output was 51.6 per cent of the total production in India. The corresponding figures for hydro plant were 40.2 per cent and 46.2 per cent respectively. The diesel plant represented 6.6 per cent of the total capacity and produced only 2.2 per cent of the total generation by all the undertakings.

8.0 CLASSIFICATION OF INSTALLED POWER PLANT ACCORDING TO TYPE OF GENERATION

Table V gives separately further details of the installed generating capacity of steam, oil and hydro plants classified under direct current and alternating current plants.

TABLE V—GENERATING PLANT—TYPE AND INSTALLED CAPACITY
(Analysis of type of prime movers and generating plant installed)

Type of prime movers and generating plant	Total			Division of Total							
				Public Sector						Private Sector	
	No. of sets installed	Aggregate capacity of sets (kW)	Percent. age of total plant installed capacity	Government and State Electricity Board		Power Corporation		Municipality		Company	
				No. of sets	Aggregate capacity (kW)	No. of sets	Aggregate capacity (kW)	No. of sets	Aggregate capacity (kW)	No. of sets	Aggregate capacity (kW)
(i) Steam turbines—											
A.C. generators	301	2,426,788	53.00	176	963,097	0	420,000	10	53,600	109	990,091
D.C. generators	..	..	..	..	..	..	..	..	..	..	..
Total steam turbo plant.	301	2,426,788	53.00	176	963,097	6	420,000	10	53,600	109	990,091
(ii) Reciprocating steam engines and											
A.C. generators	40	9,295	0.20	25	6,550	..	..	..	..	15	2,745
D.C. generators	7	172	0.00	7	172	..	..	..	..	..	..
Total reciprocating steam plant.	47	9,467	0.20	32	6,722	..	..	..	..	15	2,745
(iii) Oil engines—											
A.C. generators	1,817	277,396	6.06	1,201	170,018	..	..	92	32,607	524	74,771
D.C. generators	274	22,739	0.50	155	11,423	..	..	6	241	113	11,075
Total oil engines plant.	2,091	300,135	6.56	1,356	181,441	..	..	98	32,848	637	85,846
(iv) Water turbines—											
A.C. generators	208	1,842,540	40.24	156	1,453,220	6	104,000	21	8,360	25	276,960
D.C. generators	5	121	0.00	5	121	..	..	..	..	..	..
Total water power plant.	213	1,842,661	40.24	161	1,453,341	6	104,000	21	8,360	25	276,960
Grand Total—											
A.C. generators	2,366	4,556,019	99.50	1,558	2,592,885	12	524,000	123	94,567	673	1,344,567
D.C. generators	286	23,032	0.50	167	11,716	..	..	6	241	113	11,075
Total number of generators.	2,652	4,579,051	100.00	1,725	2,604,601	12	524,000	129	94,808	786	1,355,642

As will be seen from table V there were 2,652 generating sets of aggregate capacity 4,579,051 kW working in the electric utility power stations in India. Out of these, 301 were steam turbo-alternator sets, 47 reciprocating steam engine sets, 213 water wheels and 2,091 diesel engine sets. Among these 286 sets generated direct current and the remaining 2,366 generated alternating current. The A.C. Plant was 99.5 per cent of the total installed capacity.

9.0 CLASSIFICATION OF PLANT BY OWNERSHIP

Table VI gives the installed plant capacity and corresponding generation classified according to the ownership of the undertakings.

TABLE VI—INSTALLED CAPACITY AND GENERATION BY OWNERSHIP

Ownership	Number of undertakings owning generating stations	Installed capacity of generators			Generation		
		As on 31.3.61	Percentage of grand total	Increase in 1960-61 over 1959-60	kWh. generated in 1960-61	Percentage of grand total	Increase in 1960-61 over 1959-60
		kW	%	%	(Millions)	%	%
<i>(i) Public Sector—</i>							
(a) Government and State Electricity Board.	16	2,604,601	56.8	18.3	9,029.442	53.2	16.2
(b) Power corporation	2	524,000	11.4	89.5	1,635.848	9.7	12.2
(c) Municipality ..	24	94,808	2.1	0.0	350.569	2.1	5.7
<i>(ii) Private Sector—</i>							
(a) Company ..	130	1,355,642	29.6	4.2	5,921.153	35.0	7.5
Total ..	172	4,579,051	100.0	18.2	16,937.012	100.0	12.7

The installed plant capacity in the public sector (comprising Government/State Electricity Board, Power Corporation and Municipality) at the end of the year was 3,223,409 kW as compared to 1,355,642 kW in the private sector. The percentages of capacity installed in the two sectors were 70.4 per cent and 29.6 per cent respectively. The rate of plant installation in the public sector during the past few years has been relatively faster than in the private sector. In the public sector installed plant capacity increased by 25.3 per cent over that in the previous year as compared to 4.2 per cent in the private sector.

The public sector generated 11,015 million kWh or 65.0 per cent of the total production. In the private sector the production was 5,921 million kWh or 35.0 per cent of the total. The increase in production in the public sector was about 15.7 per cent and that in the private sector was 7.5 per cent over that in the previous year. The net increase in power production from both the sectors was 12.4 per cent over that in the previous year.

Table VII gives further details of the number of power stations, their installed plant capacity and generation classified according to the three main types of plant in each of the two sectors of the Electricity Supply Industry.

TABLE VII—INSTALLED CAPACITY AND GENERATION BY TYPE OF PLANTS AND OWNERSHIP

Type of plant and ownership	No. of undertakings owning generating stations	Installed capacity of generators		Generation	
		As on 31-3-61	Percentage of grand total	kWh generated	Percentage of grand total
		kW	%	Million	%
STEAM—					
<i>Public Sector—</i>					
(a) Government and State Electricity Board.	6	969,819	21.2	2,676.777	15.8
(b) Power Corporation	1	420,000	9.1	1,356.177	8.1
(c) Municipality	1	53,600	1.2	271.406	1.6
<i>Private Sector—</i>					
Company	17	992,836	21.7	4,428.049	26.1
Total for steam plant ..	25	2,436,255	53.2	8,732.409	51.6
OIL—					
<i>Public Sector—</i>					
(a) Government and State Electricity Board.	2	181,441	4.0	171.153	1.0
(b) Power Corporation .. .. .	..	..	..	..	..
(c) Municipality	19	32,848	0.7	52,095	0.3
<i>Private Sector—</i>					
Company	111	85,846	1.9	144.774	0.9
Total for oil plant ..	132	300,135	6.6	368.022	2.2
HYDRO—					
<i>Public Sector—</i>					
(a) Government and State Electricity Board.	8	1,453,341	31.7	6,181.512	36.4
(b) Power Corporation	1	104,000	2.3	279.871	1.6
(c) Municipality	4	8,360	0.2	27.068	0.2
<i>Private Sector—</i>					
Company	2	276,960	6.0	1,348.330	8.0
Total for Hydro Plant ..	15	1,842,661	40.2	7,836.581	46.2
GRAND TOTAL (Steam, Oil and Hydro) ..	172	4,579,051	100.0	16,937.012	100.0

In power systems of the Government, State Electricity Boards, Power Corporations and Municipalities the installed plant capacity represented 21·2 per cent 9·1 per cent and 1·2 per cent respectively of the total All-India capacity under the Steam Plant, 4·0 per cent, 0·0 per cent and 0·7 per cent respectively under the oil plant; 31·7 per cent, 2·3 per cent and 0·2 per cent respectively under the hydro plant.

The capacity of steam plant in the public sector expressed as percentage of the All-India total increased from 28·6 per cent in 1959-60 to 31·5 per cent in 1960-61. The percentage of hydro plant capacity increased from 32·4 per cent to 34·2 per cent in the corresponding period. In the company owned undertakings comprising the private sector, the steam plant capacity decreased from 24·4 per cent in 1959-60 to 21·7 per cent in 1960-61 and hydro plant decreased from 7·0 per cent to 6·0 per cent in the same period. The apparent decrease in the private sector is due to relatively faster rate of plant installation in the public sector.

10·0 SUMMARY OF INSTALLED PLANT CAPACITY AND GENERATION BY TYPE OF PLANT

Table VIII gives the summary of installed plant capacity in the country together with the generation by type of plant. The break-up of installed capacity by ownership i.e. State Governments, Electricity Boards, Municipalities, Power Corporations and Company owned Undertakings is given in Table VIII.

TABLE VIII—SUMMARY OF INSTALLED PLANT CAPACITY AND GENERATION BY DIFFERENT TYPE OF PLANT (Statewise)

Serial No.	State and Union Territory	Installed plant capacity in (kW)				Generation (million kWh)			
		Steam	Diesel	Hydro	Total	Steam	Diesel	Hydro	Total
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh ..	83,500	20,188	166,150	269,838	145·836	5·450	748·743	900·029
2	Assam .. ..	..	10,160	9,270	19,430	..	15·336	20·883	36·219
3	Bihar	288,520	18,373	44,000	350,893	1,408·554	44·624	143·655	1,596·833
4	Gujarat	280,900	52,367	..	333,267	1,209·144	62·083	..	1,271·227
5	Jammu & Kashmir ..	1,500	869	10,612	12,981	..	0·025	43·489	43·514
6	Kerala .. ..	..	4,762	132,500	137,262	..	..	581·818	581·818
7	Madhya Pradesh ..	169,798	28,739	69,000	267,537	429·677	24·049	23·240	476·966
8	Madras	101,500	516	415,450	517,466	416·171	..	1,797·645	2,213·716
9	Maharashtra	443,250	34,363	281,914	759,527	1,834·760	68·171	1,364·946	3,267·877
10	Mysore .. ..	..	12,876	178,200	191,076	..	19·242	1,038·756	1,057·998
11	Orissa	5,776	7,468	123,005	136,249	..	5·902	483·738	489·640
12	Punjab	7,876	16,725	252,476	277,077	6·658	8·093	988·887	4,003·638
13	Rajasthan	46,250	24,425	..	70,675	70·411	37·991	..	108·402
14	Uttar Pradesh ..	270,810	34,164	92,470	397,444	786·262	26·092	439·967	1,252·321
15	West Bengal ..	676,975	9,473	67,208	753,656	2,150·169	8·684	159·886	2,318·739
16	Union Territories—								
	(a) Delhi	53,600	22,703	..	76,303	271·406	39·350	..	310·756
	(b) Rest	6,000	1,964	406	8,370	3·361	2·930	1·028	7·319
	GRAND TOTAL ..	2,436,255	300,135	1,842,661	4,579,051	8,732·409	368·022	7,836·581	16,937·013

INSTALLED GENERATING PLANT AND POWER PRODUCTION IN THE RESPECTIVE STATES

The power production in the different states as classified according to ownership, i.e. public sector or private sector is given in the Table IX without further segregation in the source or nature of generation.

TABLE IX—SUMMARY OF GENERATION BY OWNERSHIP

(Million kWh)

Serial No.	State and Union Territory	Public Sector				Private Sector	Total
		Government	State Electricity Board	Power Corporation	Municipality	Company	
1	Andhra Pradesh .. ..	..	899·699	..	..	0·330	900·029
2	Assam .. ..	..	25·262	..	..	10·957	36·219
3	Bihar .. ..	..	29·406	1,442·275	..	125·152	1,596·833
4	Gujarat .. ..	..	393·225	..	4·719	873·283	1,271·227
5	Jammu & Kashmir	43·514	..	..	..	..	43·514
6	Kerala .. ..	..	581·818	..	..	..	581·818
7	Madhya Pradesh .. ..	..	405·214	..	..	71·752	476·966
8	Madras .. ..	..	2,213·716	..	..	..	2,213·716
9	Maharashtra .. ..	..	847·942	..	0·393	2,419·542	3,267·877
10	Mysore .. ..	..	1,048·050	..	0·026	9·922	1,057·998
11	Orissa .. ..	..	437·581	..	..	2·059	439·640
12	Punjab .. ..	..	938·744	..	13·589	1·305	1,003·638
13	Rajasthan .. ..	..	83·820	..	0·497	24·085	108·402
14	Uttar Pradesh .. ..	..	951·663	..	13·461	287·197	1,252·321
15	West Bengal .. ..	..	22·499	193·573	7·235	2,095·462	2,318·739
16	Union Territories—						
	(a) Delhi .. ..	..	..	..	310·649	0·107	310·756
	(b) Rest	7·319	..	..	..	..	7·319
	All-India Total ..	50·833	8,978·609	1,635·848	350·569	5,921·153	16,937·012

Tables X, XI and XII separately give the break-up of plant capacity installed under the categories Steam, Diesel and Hydro in different States in the country by public and private sectors respectively.

TABLE X—INSTALLED STEAM PLANT CAPACITY BY OWNERSHIP AS ON 31-3-1961

(Kilowatt)

Serial No.	State and Union Territory	Public Sector				Private Sector	Total
		Government	State Electricity Board	Power Corporation	Municipality	Company	
1	Andhra Pradesh .. ..	..	83,500	..	..	..	83,500
2	Assam .. .. .	..	..	..	..	..	..
3	Bihar .. .. .	..	5,750	255,000	..	27,770	288,520
4	Gujarat .. .. .	..	110,800	..	..	170,100	280,900
5	Jammu & Kashmir	1,500	..	..	..	..	1,500
6	Kerala .. .. .	..	..	..	..	..	..
7	Madhya Pradesh .. ..	..	149,982	..	..	19,816	169,798
8	Madras .. .. .	..	101,500	..	..	..	101,500
9	Maharashtra .. .. .	..	255,750	..	..	187,500	443,250
10	Mysore .. .. .	..	..	..	..	..	..
11	Orissa .. .. .	..	5,776	..	..	..	5,776
12	Punjab .. .. .	..	7,876	..	..	..	7,876
13	Rajasthan .. .. .	..	46,250	..	..	..	46,250
14	Uttar Pradesh .. .. .	..	194,285	..	..	76,525	270,810
15	West Bengal .. .. .	..	850	165,000	..	511,125	676,975
16	<i>Union Territories—</i>						
	(a) Delhi .. .. .	..	..	..	53,600	..	53,600
	(b) Rest	6,000	..	..	..	..	6,000
	Total	7,500	962,319	420,000	53,600	992,836	2,436,255

TABLE XI—INSTALLED OIL PLANT CAPACITY BY OWNERSHIP AS ON 31-3-1961

(Kilowatt)

Serial No.	State and Union Territory	Public Sector				Private Sector	Total
		Government	State Electricity Board	Power Corporation	Municipality	Company	
1	Andhra Pradesh .. ..	..	20,023	..	..	165	20,188
2	Assam .. .. .	..	6,420	..	..	3,740	10,160
3	Bihar .. .. .	..	13,377	..	..	4,996	18,373
4	Gujarat .. .. .	..	32,590	..	2,481	17,296	52,367
5	Jammu & Kashmir	869	..	..	..	..	869
6	Kerala .. .. .	..	4,762	..	..	..	4,762
7	Madhya Pradesh .. ..	..	23,890	..	330	4,519	28,739
8	Madras .. .. .	..	516	..	..	..	516
9	Maharashtra .. .. .	..	10,824	..	322	23,217	34,363
10	Mysore .. .. .	..	7,929	..	34	4,913	12,876
11	Orissa .. .. .	..	5,357	..	..	2,111	7,468
12	Punjab .. .. .	..	11,286	..	1,910	3,529	16,725
13	Rajasthan .. .. .	..	12,276	..	553	11,596	24,425
14	Uttar Pradesh .. .. .	..	23,141	..	3,910	7,113	34,164
15	West Bengal .. .. .	..	6,217	..	680	2,576	9,473
16	<i>Union Territories—</i>						
	(a) Delhi .. .. .	..	..	..	22,628	75	22,703
	(b) Rest	1,964	..	..	..	..	1,964
	Total	2,833	178,608	..	32,848	85,846	300,135

TABLE XII—INSTALLED HYDRO PLANT CAPACITY BY OWNERSHIP AS ON 31-3-1961

(Kilowatt)

Serial No.	State and Union Territory	Public Sector				Private Sector	Total
		Government	State Electricity Board	Power Corporation	Municipality	Company	
1	Andhra Pradesh .. ..	..	166,150	..	..	..	166,150
2	Assam .. .. .	..	8,400	..	..	870	9,270
3	Bihar .. .. .	..	..	44,000	..	..	44,000
4	Gujarat .. .. .	..	..	..	..	..	..
5	Jammu & Kashmir	10,612	..	..	..	..	10,612
6	Kerala .. .. .	..	132,500	..	..	..	132,500
7	Madhya Pradesh .. ..	..	69,000	..	..	..	69,000
8	Madras .. .. .	..	415,450	..	..	..	415,450
9	Maharashtra .. .. .	..	5,824	..	..	276,090	281,914
10	Mysore .. .. .	..	178,200	..	..	..	178,200
11	Orissa .. .. .	..	123,005	..	..	..	123,005
12	Punjab .. .. .	..	250,726	..	1,750	..	252,476
13	Rajasthan .. .. .	..	..	..	..	..	..
14	Uttar Pradesh .. .. .	..	87,820	..	4,650	..	92,470
15	West Bengal .. .. .	..	5,248	60,000	1,960	..	67,208
16	Union Territories—						
	(a) Delhi .. .. .	..	..	..	..	..	..
	(b) Rest	406	..	..	..	..	406
	Total	11,018	1,442,323	104,000	8,860	276,960	1,842,661

In West Bengal, Maharashtra, Bihar, Gujarat, Uttar Pradesh, Madhya Pradesh, Madras, Andhra Pradesh and Delhi States the aggregate steam plant capacity was 2,368,853 kW and accounted for about 97.2 per cent of the total installed steam plant capacity. The aggregate Diesel plant capacity in the states of Gujarat, Maharashtra, Uttar Pradesh, Madhya Pradesh, Rajasthan, Delhi, Andhra Pradesh, Bihar and Punjab was 252,047 kW representing about 84.0 per cent of the total oil plant capacity. The aggregate capacity of hydro plant in the states of Madras, Maharashtra, Mysore, Punjab, Andhra Pradesh, Kerala, Orissa, Uttar Pradesh, Madhya Pradesh and West Bengal was 1,778,373 kW or about 96.5 per cent of the total hydro installation in the country.

Tables XIII, XIV and XV separately give on statewise basis the generation by Steam, Diesel and Hydro plant respectively.

TABLE XIII—ELECTRICITY GENERATED BY STEAM PLANT DURING 1960-61

(Million kWh)

Serial No.	State and Union Territory	Public Sector				Private Sector	Total
		Government	State Electricity Board	Power Corporation	Municipality	Companies	
1	Andhra Pradesh .. ..	..	145-836	..	..	..	145-836
2	Assam .. .. .	..	..	..	..	..	..
3	Bihar .. .. .	..	1-028	1,298-620	..	108-906	1,408-554
4	Gujarat .. .. .	..	350-584	..	..	858-560	1,209-144
5	Jammu & Kashmir .. ..	..	..	..	..	..	..
6	Kerala .. .. .	..	..	..	..	..	..
7	Madhya Pradesh .. ..	..	363-809	..	..	65-868	429-677
8	Madras .. .. .	..	416-171	..	..	..	416-171
9	Maharashtra .. .. .	..	806-920	..	..	1,027-840	1,834-760
10	Mysore .. .. .	..	..	..	..	..	..
11	Orissa .. .. .	..	..	..	..	..	..
12	Punjab .. .. .	..	6-658	..	..	..	6-658
13	Rajasthan .. .. .	..	70-411	..	..	..	70-411
14	Uttar Pradesh .. .. .	..	511-999	..	..	274-263	786-262
15	West Bengal .. .. .	..	..	57-537	..	2,092-612	2,150-169
16	Union Territories—						
	(a) Delhi .. .. .	..	..	..	271-406	..	271-406
	(b) Rest	3-361	..	..	..	..	3-361
	Total (All-India) ..	3-361	2,873-416	1,356-177	271-406	4,428-049	8,732-409

TABLE XIV—ELECTRICITY GENERATED BY OIL PLANT DURING 1960-61

(Million kWh)

Serial No.	State and Union Territory	Public Sector				Private Sector	Total
		Government	State Electricity Board	Power Corporation	Municipality	Companies	
1	Andhra Pradesh .. ..	..	5·120	..	..	0·330	5·450
2	Assam .. ..	..	8·662	..	..	6·674	15·336
3	Bihar .. ..	..	28·378	..	..	16·246	44·624
4	Gujarat .. ..	..	42·641	..	4·719	14·723	62·083
5	Jammu & Kashmir	0·025	..	..	..	..	0·025
6	Kerala .. ..	..	..	..	..	..	..
7	Madhya Pradesh .. ..	..	18·165	..	..	5·884	24·049
8	Madras .. ..	..	..	..	..	..	..
9	Maharashtra .. ..	..	20·123	..	0·393	47·655	68·171
10	Mysore .. ..	..	9·294	..	0·026	9·922	19·242
11	Orissa .. ..	..	3·843	..	..	2·059	5·902
12	Punjab .. ..	..	4·360	..	2·428	1·305	8·093
13	Rajasthan .. ..	..	13·409	..	0·497	24·085	37·991
14	Uttar Pradesh .. ..	..	9·546	..	3·612	12·934	26·092
15	West Bengal .. ..	..	4·657	..	1·177	2·850	8·684
16	<i>Union Territories—</i>						
	(a) Delhi .. ..	..	..	..	39·243	0·107	39·350
	(b) Rest	2·930	..	..	..	..	2·930
	Total (All-India) ..	2·955	163·196	..	52·095	144·774	363·022

TABLE XV—ELECTRICITY GENERATED BY HYDRO PLANT DURING 1960-61

(Million kWh)

Serial No.	State and Union Territory	Public Sector				Private Sector	Total
		Government	State Electricity Board	Power Corporation	Municipality	Companies	
1	Andhra Pradesh .. ..	..	748·743	..	..	..	748·743
2	Assam .. .. .	..	16·600	..	..	4·283	20·883
3	Bihar .. .. .	..	..	143·655	..	..	143·655
4	Gujarat .. .. .	..	..	..	..	..	..
5	Jammu & Kashmir	43·489	..	..	..	..	43·489
6	Kerala .. .. .	..	581·818	..	..	..	581·818
7	Madhya Pradesh .. ..	..	23·240	..	..	..	23·240
8	Madras .. .. .	..	1,797·545	..	..	..	1,797·545
9	Maharashtra .. .. .	..	20·899	..	..	1,344·047	1,364·946
10	Myaore .. .. .	..	1,038·756	..	..	..	1,038·756
11	Orissa .. .. .	..	483·738	..	..	..	483·738
12	Punjab .. .. .	..	977·726	..	11·161	..	988·887
13	Rajasthan .. .. .	..	..	..	..	..	..
14	Uttar Pradesh .. .. .	..	430·118	..	9·849	..	439·967
15	West Bengal .. .. .	..	17·812	136·016	6·058	..	159·886
16	Union Territories—						
	(a) Delhi .. .. .	..	..	..	..	..	..
	(b) Rest	1·028	..	..	..	..	1·028
	Total (All-India) ..	44·517	6,136·995	279·671	27·068	1,348·330	7,836·581

Table XVI gives statewise the installed plant capacity and power generation on the basis of per square kilometre of area and per thousand of population.

During the year under review, the overall installed plant capacity per square kilometre of area works out to 1.40 kW as against 1.19 kW in the previous year. The electrical energy generated per square kilometre of area works out to 5,191 kWh as against 4,609 kWh in the previous year. The net increase in capacity per square kilometre was 17.9 per cent and the net increase in production per square kilometre was 12.7 per cent over the corresponding figure for the previous year.

The installed plant capacity per thousand of population was 10.4 kW as against 9.0 kW in the previous year whereas the power generated per thousand of population becomes 38,669 kWh as against 34,990 kWh.

TABLE XVI—PLANT CAPACITY AND kWh GENERATED IN DIFFERENT STATES PER SQUARE KILOMETRE AND PER THOUSAND OF POPULATION

Serial No.	State and Union Territory	Population (Million)	Area (Square Kilometre)	Total installed capacity kW	Generating Plant installed per 1,000 population kW	Generating Plant installed per square kilometre kW	Total kWh Generated (Million)	kWh generated per 1,000 of population	kWh generated per square kilometre
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh ..	35.98	273,763	269,838	7.500	0.986	900.029	25,015	3,288
2	Assam	11.86	220,311	19,430	1.638	0.088	36.219	3,054	164
3	Bihar	46.46	173,823	350,893	7.553	2.019	1,596.833	34,370	9,188
4	Gujarat	20.62	185,830	333,267	16.162	1.793	1,271.227	61,650	6,839
5	Jammu & Kashmir ..	3.58	222,380	12,981	3.626	0.058	43.514	12,155	196
6	Kerala	16.88	38,687	137,262	8.132	3.548	581.818	34,468	15,044
7	Madhya Pradesh ..	32.39	443,667	267,537	8.260	0.603	476.966	14,726	1,075
8	Madras	33.65	129,951	517,466	15.378	3.982	2,213.716	65,787	17,037
9	Maharashtra	39.50	308,000	759,527	19.229	2.466	3,267.877	82,731	10,610
10	Mysore	23.55	193,890	191,076	8.114	0.985	1,057.998	44,926	5,456
11	Orissa	17.56	156,047	136,249	7.759	0.873	489.640	27,884	3,138
12	Punjab	20.30	121,891	277,077	13.649	2.273	1,003.638	49,440	8,236
13	Rajasthan	20.15	342,134	70,675	35.07	0.207	108.402	5,380	316
14	Uttar Pradesh ..	73.75	293,765	397,444	5.389	1.356	1,252.321	16,981	4,272
15	West Bengal	34.97	87,762	753,656	21.552	8.587	2,318.739	66,307	26,423
16	<i>Union Territories—</i>								
	(a) Delhi	2.64	1,484	76,303	28.903	51.417	310.756	117,711	209,404
	(b) Pondicherry ..	4.16	69,489	8,370	2.012	0.120	7.319	1,759	105
	Total (All-India) ..	438.00	3,262,874	4,579,051	10.454	1.403	16,937.012	38,669	5,191

The plant capacity per square kilometre was 51.4 kW in Delhi State (comprising mainly Delhi City), 8.5 kW in West Bengal, 4.0 kW in Madras, 3.5 kW in Kerala, 2.5 kW in Maharashtra, 2.3 kW in Punjab, 2.0 kW in Bihar, 1.8 kW in Gujarat, 1.4 kW in Uttar Pradesh and 1.0 kW in Andhra Pradesh respectively. In the other States the installed plant capacity per square kilometre was less than one kW.

Power generated per thousand of population was 117,711 kWh in Delhi State (comprising mainly Delhi City), 82,731 kWh in Maharashtra, 66,307 kWh in West Bengal, 65,787 kWh in Madras, 61,650 kWh in Gujarat, 49,440 kWh in Punjab, 44,926 kWh in Mysore, 34,468 kWh in Kerala and 34,370 kWh in Bihar. In the other states generation per thousand of population was less than 28,000 kWh.

On the basis of the square kilometre of the area the power produced was 209,404 kWh in Delhi State (comprising mainly Delhi City), 26,423 kWh in West Bengal, 17,037 kWh in Madras State, 15,044 kWh in Kerala, 10,610 kWh in Maharashtra, 9,188 kWh in Bihar, 8,236 kWh in Punjab, 6,839 kWh in Gujarat, 5,456 kWh in Mysore and 4,272 kWh in Uttar Pradesh. In the other states power produced per square kilometre of area was below 3,300 kWh per annum.

11.0 CLASSIFICATION OF UNDERTAKINGS IN TERMS OF TOTAL INSTALLED PLANT CAPACITY

The distribution of undertakings according to installed plant capacity and the corresponding power generation are given in tables XVII and XVIII. The tables give the details separately for the public and private sectors of the industry.

TABLE XVII—CLASSIFICATION OF GENERATING UNDERTAKINGS OWNED BY DIFFERENT STATE GOVERNMENTS, STATE ELECTRICITY BOARDS, MUNICIPALITIES AND POWER CORPORATIONS ON THE BASIS OF TOTAL PLANT CAPACITY

Installed Plant Capacity (kW)	Government/State Electricity Board			Municipality			Power Corporation		
	Number of undertakings owning generating stations	Aggregate installed capacity (kW)	Total kWh generated by the group (Millions)	Number of undertakings owning generating stations	Aggregate installed capacity (kW)	Total kWh generated by the group (Millions)	Number of undertakings owning generating stations	Aggregate installed capacity (kW)	Total kWh generated by the group (Millions)
0 to 250 .. ..	..	..	..	13	1,486	1.542	..	..	..
251 to 500	1	456	1.350	2	614	..	..	..	..
501 to 750 .. ..	..	..	..	4	3,360	5.220	..	..	..
751 to 1,000	1	1,814	2.508	..	..	..	..	..	..
1,001 to 2,500	1	1,100	1.812	1	1,150	1.877	..	..	..
2,501 to 5,000 .. ..	..	5,000	1.849	2	6,300	20.824	..	..	..
5,001 to 10,000 .. ..	..	..	..	1	5,000	10.457	..	..	..
10,001 to 25,000	2	59,243	120.651	..	..	..	..	..	..
25,001 to 50,000 .. ..	..	..	..	..	..	..	..	..	..
50,001 to 100,000	1	58,528	88.820	1	76,228	310.649	..	..	..
100,001 and above	10	2,478,462	8,817.652	..	..	..	2	524,000	1,635.848
GRAND TOTAL	18	2,604,801	9,029.442	24	94,808	350.569	2	524,000	1,635.848

TABLE XVIII—CLASSIFICATION OF GENERATING UNDERTAKINGS OF PUBLIC AND PRIVATE SECTOR ON THE BASIS OF PLANT CAPACITY

Installed plant capacity (kW)	Public Sector			Private Sector			Total		
	Number of undertakings owning generating stations	Aggregate installed capacity	Total kWh generated by the group	Number of undertakings owning generating stations	Aggregate installed capacity	Total kWh generated by the group	Number of undertakings owning generating stations	Aggregate installed capacity	Total kWh generated by the group
		(kW)	(Millions)		(kW)	(Millions)		(kW)	(Millions)
1	2	3	4	5	6	7	8	9	10
0 to 250	15	1,496	1,542	45	7,354	5,644	60	8,850	7,186
251 to 500	1	1,070	1,350	22	12,481	13,285	23	13,551	14,635
501 to 750	4	3,360	5,220	18	12,044	13,796	22	15,404	19,016
751 to 1,000	1	1,814	2,508	7	9,412	24,020	8	11,226	26,528
1,001 to 2,500	2	2,250	3,489	16	32,542	61,629	18	34,792	65,118
2,501 to 5,000	2	11,300	22,873	9	24,984	58,026	11	36,284	80,899
5,001 to 10,000	1	5,660	10,457	1	13,575	46,513	2	19,235	56,970
10,001 to 25,000	2	59,243	120,651	8	135,500	485,678	10	194,743	606,329
25,001 to 50,000 .. ..	..	..	..	1	45,000	168,828	1	45,000	168,828
50,001 to 100,000	2	134,754	394,469	..	..	..	2	134,754	394,469
100,001 and above	12	3,002,462	10,453,500	3	1,062,750	5,043,734	15	4,065,212	15,497,234
GRAND TOTAL	42	3,223,409	11,015,859	130	1,355,642	5,921,153	172	4,579,051	16,937,012

In the public sector, 21 undertakings had installed capacity less than or equal to 1,000 kW each and these together constituted 0.24 per cent of the total plant capacity installed by public sector, similarly 5 undertakings with capacities each in the range from 1,001 to 10,000 kW formed 0.60 per cent and 16 undertakings each above 10,000 kW together represented 99.16 per cent of the total installed capacity.

In the private sector, 92 undertakings had installed capacity in the range upto 1,000 kW each, together forming 3.05 per cent of the total installation in that sector while in the capacity range 1,001 kW to 10,000 kW, 26 undertakings together formed 5.24 per cent and only 12 undertakings each having installed capacity in the range above 10,000 kW together constituted 91.71 per cent of the total installed plant capacity in the private sector.

The plant installed in 28 undertakings (16 in the public sector and 12 in the private sector) each of capacity in the range above 10,000 kW having an aggregate installed plant capacity of 4,439,709 kW constituted 96.95 per cent of the total installed capacity in the country. The corresponding generation by the plant falling in this group was 98.4 per cent of total generation by all electricity undertakings in the country. The rest of the undertakings produced only 1.6 per cent of the total generation.

12.0 SIZES OF INDIVIDUAL GENERATING SETS

The largest capacity of steam, oil and hydro sets in operation in India were 75,000 kW, 2,000 kW and 53,000/90,000 kW respectively. Taking hydrogen cooling into account the capacity of the largest turbo-alternator would be 82,500 kW.

Table XIX gives the number of generating sets in service classified according to capacity groups.

TABLE XIX—GENERATING PLANT UNIT SIZES (SUMMARY OF THE SIZES OF GENERATORS INSTALLED)—DIVISION OF TOTAL

Size of Generating Plant	Total		Percentage of total plant	Public Sector						Private Sector	
	Number of generating sets	Aggregate capacity of sets (kW)		Government and State Electricity Board		Power Corporation		Municipality		Company	
				No. of sets	Aggregate capacity (kW)	No. of sets	Aggregate capacity (kW)	No. of sets	Aggregate capacity (kW)	No. of sets	Aggregate capacity
1	2	3	4	5	6	7	8	9	10	11	12
<i>(1) A.C. Plant</i>											
Under 1,000 kW. ..	1,946	306,501	6.69	1,298	207,988	..	..	96	17,619	552	80,894
1,001 kW to 2,000 kW. ..	80	113,143	2.47	37	56,322	2	4,000	14	16,148	27	36,673
2,001 kW to 5,000 kW. ..	134	485,475	10.51	90	333,775	..	..	8	21,200	34	130,500
5,001 kW to 10,000 kW.	70	550,900	12.03	51	409,550	..	..	5	39,600	14	101,750
10,001 kW to 15,000 kW.	62	818,600	17.92	38	502,100	..	..	..	..	24	316,500
15,001 kW to 20,000 kW.	18	342,750	7.49	10	184,000	3	60,000	..	..	5	98,750
20,001 kW to 30,000 kW.	35	850,150	18.60	22	508,150	..	..	..	..	13	342,000
30,001 kW to 50,000 kW.	10	375,000	8.19	8	285,000	1	40,000	..	..	1	50,000
Over 50,000 kW ..	11	713,500	15.60	2	106,000	6	420,000	..	..	3	187,500
Sub-Total A.C. Plant : ..	2,366	4,556,019	99.50	1,558	2,592,885	12	524,000	123	94,667	673	1,344,567
<i>(2) D.C. Plant</i>											
Under 100 kW. ..	222	9,691	0.21	136	5,539	..	..	6	241	80	3,911
101 kW to 200 kW. ..	39	6,002	0.13	19	2,831	..	..	..	..	20	3,171
201 kW to 300 kW ..	24	6,839	0.15	12	3,346	..	..	..	..	12	3,493
Over 500 kW. ..	1	500	0.01	..	..	..	..	..	..	1	500
Sub. Total D.C. Plant ..	286	23,032	0.50	167	11,716	..	..	6	241	113	11,075
Total Generating Plant ..	2,652	4,579,051	100.00	1,725	2,604,601	12	524,000	129	94,808	786	1,355,642

Of the total installed capacity all the 2,366 A.C. sets of aggregate capacity of 4,556,019 kW and 286 D.C. generating sets of aggregate capacity 23,032 kW represented 99.50 per cent and 0.50 per cent respectively.

The table XIX also gives the distribution of generating sets according to capacity groups in respect of both the private and public sectors of the industry. In the public sector, there were 1,693 A.C. sets and 173 D.C. sets respectively. The corresponding number of sets in the private sector were 673 A.C. and 113 D.C. sets.

13.0 A.C. AND D.C. GENERATION

Out of 783 generating stations, 687 had A.C. generating plants, 80 had only D.C. generating plants and the remaining 16 had both A.C. and D.C. generating plants. The A.C. generating sets together produce 99.86 per cent of the total generation.

Table XX gives plant capacity and energy generation in terms of A.C. and D.C. plants.

TABLE XX—PLANT CAPACITY AND GENERATION BY A.C. AND D.C.

System of Generation adopted	Number of Generating Stations	Aggregate Installed Capacity of Generating Plants (kW)	Percentage of Grand Total	kWh Generated (Millions)	Percentage of Grand Total
Alternating Current only	687	4,545,691	99.27	16,887.737	99.71
Alternating Current and Direct Current	16 A.C.	10,328	0.23	26.284	0.15
	D.C.	2,873	0.06	1.433	0.01
Direct Current only	80	20,159	0.44	21.558	0.13
Total	783 A.C.	4,556,019	99.50	16,914.021	99.86
	D.C.	23,032	0.50	22.991	0.14
GRAND TOTAL	783	4,579,051	100.00	16,937.012	100.00

14.0 CLASSIFICATION OF POWER STATIONS ACCORDING TO THEIR INSTALLED PLANT CAPACITY

Table XXI gives the distribution of steam power stations according to their installed capacity.

TABLE XXI—CLASSIFICATION OF STEAM POWER STATIONS ON THE BASIS OF GENERATING PLANT CAPACITY, BOILER PLANT CAPACITY, AVERAGE OVERALL THERMAL EFFICIENCY & AVERAGE PLANT FACTOR ETC.

Generating Plant Capacity (kW)	Number of Generating Stations	Aggregate Installed Capacity (kW)	Total kWh Generated by the Group (Millions)	Capacity of Boilers in Metric Tons/hr	Average Capacity of the boiler in kg/kW of Generating Capacity	Average Overall thermal Efficiency	Average Plant Factor
Up to 250 ..	3	172	..	2.1	12.2	..	..
251 to 500 ..	4	1,245	1.501	14.2	11.4	4.8	13.8
501 to 750 ..	2	1,350	..	13.4	9.9	..	..
751 to 1,000 ..	4	3,800	3.261	53.6	14.1	5.2	9.8
1,001 to 2,500 ..	12	21,100	26.288	147.2	7.0	6.5	14.2
2,501 to 5,000 ..	11	44,450	73.167	310.9	7.0	9.9	18.8
5,001 to 10,000 ..	12	89,783	171.271	506.1	5.6	11.0	21.8
10,001 to 25,000 ..	25	405,205	1,233.983	2,348.1	5.8	13.9	34.8
25,001 to 50,000 ..	5	182,400	519.848	722.0	4.0	18.4	32.5*
Over 50,000 ..	15	1,686,750	6,703.090	8,820.7	5.2	22.9	45.4
Grand Total ..	93	2,436,255	8,732.409	12,938.3	5.3	19.9	40.9

*As Paras Station (Maharashtra) of 30,000 kW was commissioned at the end of the year the Plant Factor for this range works out low.

There were 45 stations with installed plant capacity above 10,000 kW and among them 15 stations had capacity each above 50,000 kW. A group of other 35 stations had installed capacity between 1,001 to 10,000 kW. The remaining 13 stations had capacity below 1,000 kW and among them 3 stations were of capacity less than or upto 250 kW each.

The 45 stations having capacity each above 10,000 kW accounted for 96.84 per cent of the total power generated by all the steam power stations. Out of this the 15 stations of a capacity above 50,000 kW each, produced by themselves 77 per cent of the total power produced by the steam power stations.

Whereas 35 stations in the installed capacity group of 1,001 kW to 10,000 kW together generated 3.1 per cent, the remaining 13 power stations each of capacity less than 1,000 kW generated in all only 0.06 per cent of the total power produced in all the steam stations in India.

In the last column of table XXI are given average steam capacity of boilers expressed in kilograms per kW of the installed generating plant capacity. For stations of capacity upto 1,000 kW the boiler capacity ranged from 14.1 kilograms to 9.9 kilograms per kW of generating plant installed. The higher range of steam capacity per kW is ascribed to a number of small reciprocating steam engine sets installed in some of the old power stations.

The table also gives the thermal efficiency and average plant factor under different capacity groups. The average overall thermal efficiency of all the steam power stations was 19.9 per cent. In the capacity range above 1,000 kW the boiler capacity varies from 7.0 kilograms to 4.0 kilograms per kW of generating plant installed. The steam pressure adopted in the power stations in India range from 7 kilograms per square centimetre to 105 kilograms per square centimetre. Only two stations i.e., Durgapur and Bokaro have adopted a pressure of 105 kilograms per square centimetre.

In the table XXII are classified the diesel power stations according to their installed plant capacity.

TABLE XXII—CLASSIFICATION OF DIESEL POWER STATIONS ON THE BASIS OF PLANT CAPACITY, SPECIFIC CONSUMPTION AND AVERAGE PLANT FACTOR ETC.

Installed Capacity (kW)	Number of Generating Stations	Aggregate Installed Capacity (kW)	Total kWb generated by the group (Million)	Fuel consumption in (Metric Tons)	Fuel consumption kilogram/kWh generated	Average Plant Factor per cent
Up to 250 ..	335	36,147	29.176	11,563.0	0.396	9.2
251 to 500 ..	130	45,815	49.314	17,734.4	0.360	12.3
501 to 750 ..	68	41,281	44.436	15,002.4	0.338	12.3
751 to 1,000 ..	28	24,428	40.494	11,086.2	0.274	18.9
1,001 to 2,500 ..	50	76,200	87.620	26,402.4	0.306	13.0
2,501 to 5,000 ..	10	33,934	58.050	15,312.7	0.264	19.5
Above 5,000 ..	6	42,330	59.532	14,873.1	0.250	16.1
Grand Total ..	627	300,135	368.622	111,974.2	0.304	14.0

335 stations out of a total of 627 had each capacity of or 250 kW or less and their aggregate capacity was 12.0 per cent of the total installed diesel plant capacity in the country. 276 stations each in the capacity range 251 to 2,500 kW and of aggregate capacity of 187,724 kW accounted for 62.6 per cent and 16 stations each of capacity above 2,500 kW together accounted for 25.4 per cent of total installed diesel plant capacity. The table also gives specific consumption for diesel power stations classified according to their installed capacity and fuel oil consumption.

Table XXIII gives the hydro stations arranged according to their installed plant capacities.

TABLE XXIII—CLASSIFICATION OF HYDRO POWER STATIONS ON THE BASIS OF PLANT CAPACITY

Installed Capacity (kW)		No. of Generating Stations	Aggregate Installed Capacity (kW)	Total kWh Generated by the Group (Million)	Aggregate Plant Factor %
Up	to 250	11	1,133	1.434	14.4
251	to 500	..	..	..	..
501	to 750	1	600	2.974	56.6
751	to 1,000	1	570	4.283	56.2
1,001	to 2,500	7	9,372	32.543	39.6
2,501	to 5,000	9	33,200	145.905	50.2
5,001	to 10,000	2	14,400	50.106	40.5
10,001	to 25,000	8	136,300	634.650	53.2
25,001	to 50,000	12	501,686	2,500.222	56.9
Over	50,000	12	1,145,100	4,464.464	44.5
GRAND TOTAL		63	1,842,661	7,836.581	48.5

There were only 12 stations each having installed capacity above 50,000 kW and totalling to an aggregate capacity of 1,145,100 kW which accounted for 62.3 per cent of the total installed hydro plant capacity and produced 57.1 per cent of the total hydro generation. 20 stations in the range 10,001 to 50,000 kW each and of aggregate capacity of 637,986 kW accounted for 34.5 per cent of total capacity and produced 40.1 per cent of the total hydro generation. As many as 31 other stations each of capacity in the range 10,000 kW and below totalling to an aggregate installed capacity of 59,575 kW represented only 3.2 per cent of the total hydro plant capacity and produced 2.8 per cent of the total hydro power.

The average plant factor of the hydro stations varied between 14.4 per cent to 56.9 per cent. The lowest plant factor was registered in stations of capacity 250 kW or below.

15.0 FUEL CONSUMPTION

Coal and diesel oil consumed in the steam and diesel power stations in the various States for the Year 1960-61 are given in table XXIV.

TABLE XXIV—STATEWISE FUEL CONSUMPTION

Serial No.	State and Union Territory	Steam Power Stations		Average fuel consumption in kgm/kWh generated	Oil Power Stations		Average fuel consumption in kgm/kWh generated
		Coal consumption (Metric Tons)	Generation (Million kWh)		Oil consumption (Metric Tons)	Generation (Million kWh)	
1	Andhra Pradesh ..	168,586.8	145.836	1.156	2,282.0	5.450	0.419
2	Assam ..	..	..	..	5,397.0	15.336	0.352
3	Bihar ..	799,512.2	1,408.554	0.568	12,285.1	44.624	0.275
4	Gujarat ..	919,996.8	1,209.144	0.762	18,307.6	62.083	0.296
5	Jammu & Kashmir	..	..	..	16.4	0.025	0.656
6	Kerala ..	..	..	..	..	..	..
7	Madhya Pradesh ..	487,031.0	429.677	1.133	8,895.9	24.049	0.370
8	Madras ..	358,380.0	416.171	0.861	..	..	..
9	Maharashtra ..	1,298,361.1	1,834.760	0.708	19,607.0	68.171	0.288
10	Mysore ..	..	..	..	6,087.6	19.242	0.316
11	Orissa ..	..	..	..	2,596.4	5.902	0.440
12	Punjab ..	13,830.0	6.658	2.077	2,574.7	8.093	0.318
13	Rajasthan ..	111,712.3	70.411	1.590	12,163.6	37.991	0.320
14	Uttar Pradesh ..	748,727.8	786.262	0.952	7,659.2	26.092	0.294
15	West Bengal ..	1,520,562.2	2,150.169	0.707	3,124.9	8.684	0.365
16	Union Territories—						
	(a) Delhi ..	264,025.6	271.406	0.973	10,035.8	39.350	0.255
	(b) Rest ..	6,864.3	3.361	2.637	941.0	2.930	0.321
	Total (All-India) ..	6,699,590.1	8,732.409	0.758	111,974.2	368.022	0.304

6,699,590 metric tons of fuel (mostly coal) and 111,974 metric tons of diesel oil were consumed in the steam and diesel stations respectively. The quantity of coal consumed in the steam power stations increased by 16.3 per cent over the consumption in the previous year.

The average coal consumption per kWh generated by steam plants (including reciprocating steam plants) was 0.758 kilograms which corresponds to the national average heat rate of about 4,547 kilocalories per kWh. There appears to be no significant improvement in the steam stations during the year. The lowest coal consumption was 0.52 kilograms/kWh and lowest heat rate registered was 2,865 kilocalories/kWh.

In the diesel stations, diesel oil consumption increased by 12.1 per cent and power production increased by 12.5 per cent. The national average oil consumption for the diesel power stations was 0.314 kilograms per kWh. There appears to be no significant improvement in the thermal efficiency of the station.

16.0 THERMAL EFFICIENCY OF STEAM POWER STATIONS

Table XXV shows the distribution of steam power stations classified according to their average overall thermal efficiency.

TABLE XXV—CLASSIFICATION OF STEAM POWER STATIONS IN TERMS OF OVERALL THERMAL EFFICIENCY

Overall Thermal Efficiency	No. of Generating Stations	Aggregate installed Capacity (kW)	kWh Generated by the group (Million)
Under 10%	30	130,067	152.296
Above 10% but below 12.5%	12	143,568	402.486
Above 12.5% but below 15.0%	11	202,170	511.807
Above 15.0% but below 17.5%	14	446,200	1,383.960
Above 17.5% but below 20.0%	6	255,750	931.001
Above 20.0% but below 22.5%	4	316,000	1,390.311
Above 22.5%	7	942,500	3,960.548
GRAND TOTAL ..	93	2,436,255	8,732.409

Out of the total of 93 steam stations, 39 stations operated with overall thermal efficiencies below 10 per cent but these stations together had only 5.3 per cent of the total steam power plant capacity and generated about 1.7 per cent of the total electricity produced by all the steam stations. Only 11 large stations which have aggregate 1,258,500 kW of plant capacity operated at thermal efficiencies above 20.0 per cent. The highest thermal efficiency registered was 30.0 per cent.

17.0 SUMMARY OF AGGREGATE GENERATING MAXIMUM DEMAND OF POWER SYSTEMS

The aggregate maximum demand of the States classified under ownership i.e., public and private sectors is given in table XXVI. The aggregate maximum demand in the Public Sector was 2,472,789 kW as compared to 1,073,141 kW in the private Sector.

TABLE XXVI—SUMMARY OF AGGREGATE GENERATING MAXIMUM DEMAND BY OWNERSHIP (kW)

Serial No.	State and Union Territory	Governments/ State Electricity Boards	Power Corporation	Municipalities	Companies	Total
1	Andhra Pradesh	186,237	..	..	136	186,373
2	Assam	7,124	..	..	3,746	10,870
3	Bihar	9,181	276,500	..	22,262	307,943
4	Gujarat	88,178	..	1,502	161,809	251,489
5	Jammu & Kashmir	8,450	..	..	..	8,450
6	Kerala	131,100	..	..	..	131,100
7	Madhya Pradesh	117,182	..	..	15,534	132,716
8	Madras	453,610	..	..	..	453,610
9	Maharashtra	206,720	..	214	412,087	619,021
10	Mysore	181,373	..	25	2,915	184,313
11	Orissa	82,562	..	..	965	83,527
12	Punjab	242,772	..	3,015	139	245,926
13	Rajasthan	18,607	..	267	6,976	25,850
14	Uttar Pradesh	208,659	..	5,040	53,611	267,310
15	West Bengal	6,884	165,000	2,476	392,920	567,280
16	Union Territories—					
	(a) Delhi .. .. .	..	..	66,030	41	66,071
	(b) Rest	4,081	..	..	..	4,081
	GRAND TOTAL	1,952,720	441,500	78,569	1,073,141	3,545,930

SUMMARY OF AGGREGATE GENERATING MAXIMUM DEMAND BY TYPE OF PLANT

Table XXVII gives the summary of aggregate maximum demand by type of plant. The aggregate maximum demand registered during 1960-61 was 3,545,930 kW comprising 1,812,430 kW of steam, 109,678 kW of oil and 1,623,822 kW of hydro stations.

TABLE XXVII—SUMMARY OF AGGREGATE GENERATING MAXIMUM DEMAND BY TYPE OF PLANT (kW)

Serial No.	State and Union Territory	Steam	Oil	Hydro	Grand Total
1	Andhra Pradesh	28,750	2,523	155,100	186,373
2	Assam .. .. .	..	5,967	4,903	10,870
3	Bihar	251,551	12,392	44,000	307,943
4	Gujarat	232,242	19,247	..	251,489
5	Jammu & Kashmir .. .. .	..	..	8,450	8,450
6	Kerala .. .. .	..	..	131,100	131,100
7	Madhya Pradesh	102,004	8,712	22,000	132,716
8	Madras	67,610	..	386,000	453,610
9	Maharashtra	373,430	21,461	224,130	619,021
10	Mysore .. .. .	..	6,013	178,300	184,313
11	Orissa .. .. .	..	2,327	81,200	83,527
12	Punjab	1,800	3,154	240,972	245,926
13	Rajasthan	15,636	10,214	..	25,850
14	Uttar Pradesh	180,165	12,705	74,440	267,310
15	West Bengal	490,800	3,500	72,980	567,280
16	Union Territories—				
	(a) Delhi	66,030	41	..	66,071
	(b) Rest	2,412	1,422	247	4,081
	All India Total ..	1,812,430	109,678	1,623,822	3,545,930

MAXIMUM DEMAND OF POWER SYSTEMS

Table XXVIII shows the undertakings arranged in groups according to the increasing order of their aggregate maximum demands.

The aggregate of the highest annual maximum demands on individual systems of public electric utilities amounted to 3,545,930 kW which was 77.4 per cent of the total plant capacity as compared with 75.8 per cent in the previous year. The aggregate demands in the public and private sectors were 76.7 and 79.2 per cent respectively of the installed capacity in each sector as against 75.0 per cent and 77.0 per cent respectively in the previous year.

TABLE XXVIII—CLASSIFICATION OF UNDERTAKINGS ON THE BASIS OF GENERATING MAXIMUM DEMAND

Maximum Demand on Generating Undertakings (kW)	Public Sector						Private Sector		Total	
	Government/ State Electricity Boards		Power Corporation		Municipality		Company			
	Number of undertakings owning Generating Stations	Aggregate Maximum Demand (kW)	Number of undertakings owning Generating Stations	Aggregate Maximum Demand (kW)	Number of undertakings owning Generating Stations	Aggregate Maximum Demand (kW)	Number of undertakings owning Generating Stations	Aggregate Maximum Demand (kW)	Number of undertakings owning Generating Stations	Aggregate Maximum Demand (kW)
Up to 50	..	..	..	..	9	97	23	221	32	318
51 to 250	..	..	..	..	5	724	44	5,812	49	6,536
251 to 500	1	412	..	..	5	1,787	21	6,990	27	9,189
501 to 1,000	2	1,669	..	..	1	520	13	8,955	16	11,144
1,001 to 2,500	..	2,000	..	..	1	2,476	15	22,983	16	27,459
2,501 to 5,000	..	..	..	..	2	6,935	2	10,310	4	17,245
5,001 to 10,000	2	31,639	..	..	..	..	4	41,870	6	73,509
10,001 to 25,000	1	18,607	..	..	..	..	4	50,800	5	69,407
25,001 to 50,000	..	..	..	..	..	..	1	26,000	1	26,000
50,001 to 100,000	2	170,740	..	..	1	66,030	..	..	3	236,770
Over 100,000	8	1,727,653	2	441,500	..	..	3	899,200	13	3,068,353
Total ..	16	1,952,720	2	441,500	24	78,569	130	1,073,141	172	3,545,930

108 out of the total 172 generating undertakings or 63 per cent registered annual maximum demands each of 500 kW or less. The annual maximum demands in excess of 10,000 kW were incident on only 22 undertakings (i.e., 14 in the public sector and 8 in the private sector) which together met about 95.8 per cent (68.3 per cent in public sector and 27.5 per cent in private sector) of the total demand for power in the country.

Out of these 22 undertakings, only 10 undertakings in the public sector and 3 in the private sector on which the incident demands were above 100,000 kW together met about 86.4 per cent of the total All India demand for power.

18·0 CLASSIFICATION OF UNDERTAKINGS ACCORDING TO POWER GENERATION

Table XXIX gives the classification of undertakings according to kWh generated and their ownership.

TABLE XXIX—CLASSIFICATION OF UNDERTAKINGS ACCORDING TO kWh GENERATED

kWh Generated Million	Government/States Electricity Board		Power Corporation		Municipality		Company		Total	
	Number of undertakings	Total kWh generated by the group	Number of undertakings	Total kWh generated by the group	Number of undertakings	Total kWh generated by the group	Number of undertakings	Total kWh generated by the group	Number of undertakings	Total kWh generated by the group
0 to 0·250	..	..	..	..	12	0·611	43	3·216	55	3·827
0·251 to 0·500	..	..	..	..	3	1·220	17	6·788	20	8·017
0·501 to 1·000	..	0·952	..	..	2	1·783	21	17·325	23	20·060
1·001 to 2·500	3	6·367	..	..	3	5·016	15	24·893	21	36·276
2·501 to 5·000	..	..	..	..	..	..	9	31·294	9	31·294
5·001 to 10·000	..	..	..	..	1	7·235	9	58·730	10	65·965
10·001 to 25·000	..	..	..	..	2	24·046	4	53·268	6	77·314
25·001 to 50·000	2	120·651	..	..	..	..	3	132·996	5	253·6
50·001 to 100·000	1	83·820	..	..	..	..	5	380·082	6	463·902
100·001 to 250·000	..	..	1	193·573	..	..	1	168·828	2	362·401
250·001 to 500·000	3	1,286·020	..	..	1	310·649	..	..	4	1,596·669
500·001 to 1,000·000	5	4,269·866	..	..	..	..	1	828·607	6	5,098·473
1,000·001 and above	2	3,261·766	1	1,442·275	..	..	2	4,215·127	5	8,919·168
GRAND TOTAL	16	9,029·442	2	1,635·848	24	350·569	130	5,921·153	172	16,937·012

Only 17 undertakings (4 in the private and 13 in the public sector generated each in excess of 100 million kWh and together accounted for about 94 per cent of total electricity produced in the country. The remaining 155 undertakings generated 6 per cent of the total energy output.

19·0 AVERAGE OUT-PUT, LOAD FACTOR ETC., FOR STEAM OIL AND HYDRO STATIONS

Table XXX gives the average energy output per kW of generating plant capacity, station load factor and plant demand factor for steam diesel and hydro stations.

TABLE XXX—AVERAGE OUTPUT, LOAD FACTOR AND DEMAND FACTOR

Type of Power Plant	Aggregate Installed capacity of Generating Plant (kW)	kWh Generated (Millions)	Aggregate Maximum Demands of Individual Generating Stations (kW)	kWh Generated per kW of Plant Capacity (kWh)	Combined load factor based on* Col. (3) and Col. (4)	Plant Demand Factor %
Steam	2,436,255	8,732·409	1,812,430	3,581	54·9	74·6
Oil	300,135	368·022	109,678	1,222	38·2	36·6
Hydro	1,842,661	7,836·581	1,623,822	4,250	55·1	88·1
Total	4,579,051	16,937·012	3,545,930	3,681	54·4	77·6

*The equivalent number of hours during which plants were run, on an average, at the full rated capacity.

The All-India average load factor for all the steam power stations has fallen from 57.7 per cent in the previous year to 54.9 per cent in 1960-61 and that for the hydro stations has fallen from 61.3 per cent in the previous year to 55.1 per cent in the current year. The fall in the load factor of the steam and hydro stations is due to part of the demand becoming incident in the later half of the year. A few large steam stations operated at load factors from 55 to 75 per cent whereas in hydro stations these ranged from 60 to 82 per cent.

The All-India average annual output per kW of installed plant capacity of hydro plant decreased from 4,593 kWh in 1959-60 to 4,250 during the year under review.

The All-India average plant demand factor in hydro stations was 88.1 per cent and continued to be higher than that in the steam stations. The plant demand factor in the steam stations improved from 74.2 per cent in 1959-60 to 74.6 in the current year.

20.0 VOLTAGE OF GENERATION

Generation voltages in India ranged from 230 volts to 33,000 volts in the stations generating A.C. power, D.C. power was generated at voltages from 110 volts to 500 volts.

In table XXXI the undertakings are classified according to their generation voltages separately for the public and private sectors of the industry. The majority of the undertakings generated A.C. power at the standard voltages, 11 kV, 6.6 kV, 3.3 kV and 400 volts. Only one undertaking generated power at 33 kV.

TABLE XXXI—CLASSIFICATION OF UNDERTAKINGS ACCORDING TO VOLTAGE OF GENERATION

Serial No.	A.C. or D.C.	Voltage of Generation	Public Sector						Private Sector		Total	
			Government/State Electricity Board		Power Corporation		Municipality		Company			
			No. of undertakings owning generating stations	Aggregate installed capacity	No. of undertakings owning generating stations	Aggregate installed capacity	No. of undertakings owning generating stations	Aggregate installed capacity	No. of undertakings owning generating stations	Aggregate installed capacity	No. of undertakings owning generating stations	Aggregate installed capacity
1	A.C. 3 Phase.	33 kV	..	..	..	..	..	..	1	280,000	1	280,000
2	A.C. 3 Phase.	11 kV	11	1,840,484	2	524,000	1	32,588	4	490,000	18	2,887,072
3	A.C. 3 Phase.	6 to 6.6 kV	9	341,539	..	..	2	47,140	9	247,540	20	636,219
4	A.C. 3 Phase.	5 to 5.5 kV	1	45,000	..	..	..	..	1	144,000	2	189,000
5	A.C. 3 Phase.	3 to 3.3 kV	13	150,145	..	..	4	4,434	37	133,386	54	287,965
6	A.C. 3 Phase.	2 to 2.35 kV	4	74,429	..	..	1	3,660	2	1,414	7	79,503
7	A.C. 3 Phase.	500 V	1	4,000	..	..	..	..	1	300	2	4,300
8	A.C. 3 Phase.	400 to 460 V	19	136,693	..	..	19	6,713	115	47,913	153	191,319
9	A.C. Single Phase.	230 V	7	595	..	..	1	32	1	14	9	641
10	D.C. 3 Wire.	400 to 500 V	11	8,407	..	..	1	195	24	10,611	36	19,303
11	D.C. 2 Wire.	110 to 250 V	7	3,219	..	..	2	46	7	464	16	3,729
GRAND TOTAL			83	2,604,601	2	524,000	31	94,808	202	1,355,642	318	4,579,051

21.0 FREQUENCY OF A.C. POWER SUPPLY

About 98 per cent of the total A.C. plant installed in the country generated power at 50 cycles frequency. The remaining 2 per cent of plant (owned by two undertakings only) generated power at frequencies other than 50 cycles. In the Mohora Power Station of the Kashmir Government and Shivasamudram and Shimshapura Power Stations of the Mysore State Electricity Board power is generated at 25 cycles only.

In table XXXII the electricity supply undertakings are classified according to the system of supply in the public as well as private sectors. 309 undertakings were supplying power at 50 cycles and 2 undertakings in the public sector at other than 50 cycles.

TABLE XXXII—CLASSIFICATION OF UNDERTAKINGS IN TERMS OF SYSTEMS OF SUPPLY A.C. & D.C.

System of Supply	Number of Undertakings	Division of Total	
		Public Authority Undertakings	Company Undertakings
A.C. only	286	57	229
A.C. and D.C.	23	13	10
D.C. only	28	4	24
Total ..	337	74	263
Standard frequency (50 cycles per second)	307	68	232
Non-standard frequency (25 cycles per second)	2	2	..
Grand Total ..	309	70	239

Although the total number of A.C. undertakings is only 309 (286 plus 23) there is an increase of two numbers due to the fact that Jammu and Kashmir and Mysore States have been counted twice as it had two different frequencies of supply respectively.

SECTION 2
TRANSFORMER-TRANSMISSION AND HIGH VOLTAGE
DISTRIBUTION LINES, CONSUMER-CONNECTED LOAD
DATA AND TOWNS AND VILLAGES ELECTRIFIED
ETC.

SECTION 2

TRANSFORMERS, TRANSMISSION AND HIGH VOLTAGE DISTRIBUTION LINES, CONSUMERS, CONNECTED LOAD AND TOWNS AND VILLAGES ELECTRIFIED ETC.

1.0 TRANSFORMERS

Table XXXIII gives the number of Power and Distribution transformers and their aggregate installed capacities in the different States. There were 824 step-up power Transformers of aggregate capacity of 4,644,325 kVA, 2,106 step down power transformers of aggregate capacity of 7,400,378 kVA and 57,314 Distribution Transformers of aggregate capacity of 3,726,925 kVA. The total transformer capacity installed in all the Power Systems in India amounted to 15.77 million kVA. Transformer capacity increased by 16.5 per cent over that in the previous year as compared to 17.80 per cent increase of generating plant capacity.

TABLE XXXIII—STATEWISE SUMMARY OF THE TRANSFORMERS DATA AS ON 31-3-1961

Serial No.	State and Union Territory	Step-up Transformers		Step-down Transformers		Distribution Transformers	
		No.	Aggregate kVA	No.	Aggregate kVA	No.	Aggregate kVA
1	Andhra Pradesh	29	477,125	206	277,975	4,232	320,975
2	Assam	15	22,125	18	7,600	75	9,337
3	Bihar	72	660,275	185	981,300	3,447	153,186
4	Gujarat	77	289,900	113	265,350	2,555	230,897
5	Jammu and Kashmir	10	12,050	23	19,800	473	32,916
6	Kerala	21	211,430	66	197,125	3,135	196,216
7	Madhya Pradesh	53	155,310	75	353,000	591	119,028
8	Maharashtra	92	791,455	181	1,184,085	2,780	473,248
9	Madras	59	808,480	409	1,318,590	10,741	828,191
10	Mysore	105	231,195	201	384,875	12,537	270,887
11	Orissa	33	150,775	35	299,350	226	34,548
12	Punjab	31	380,439	156	466,228	5,240	350,704
13	Rajasthan	45	18,258	31	9,867	414	44,806
14	Uttar Pradesh	118	323,668	231	428,203	9,528	392,564
15	West Bengal	50	125,413	135	1,051,600	701	118,919
	<i>Union Territories—</i>						
	(a) Delhi .. ..	..	..	36	144,730	423	145,872
	(b) Rest	14	6,427	5	10,700	216	4,631
	Grand Total ..	824	4,644,325	2,106	7,400,378	57,314	3,726,925

**IMPORTANT POWER TRANSFORMERS COMMISSIONED
DURING THE YEAR 1960-61**

ANDHRA PRADESH

3 × 500 kVA	33/11	kV Khammameth Operation Division	} Andhra Pradesh State Electricity Board.
1 × 1,000 kVA	33/11	kV Aragonda, Chittoor District	
1 × 1,500 kVA	33/11	kV Rayadurg, Anantapur District	
2 × 500 kVA	132/33	kV Krishna District.	

BIHAR

1 × 1,500 kVA	33/11	kV Sasaram.
1 × 1,500 kVA	33/11	kV Behar Shariff Sub-Division No. 1.
2 × 3,000 kVA	33/11	kV } Patna Electricity Supply Co. Ltd.
2 × 3,000 kVA	11/6·6	kV }
2 × 3,000 kVA	33/11	kV } Bihar State Electricity Board, Gomia Sub-Division.
3 × 3,000 kVA	33/11—3·3	kV }

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2 × 5,000 kVA	22/3·3	kV Surat Electricity Supply Co. Ltd.
2 × 600 kVA	22/3·3	kV Broach Electricity Supply Co. Ltd.
1 × 5,000 kVA	11/33	kV Sabarmati Division.
2 × 750 kVA	11/33	kV } Kutch Division.
1 × 500 kVA	33/11 3·3	kV }
1 × 500 kVA	33/3·3	kV }

MADHYA PRADESH

1 × 1,000 kVA	33/11	kV Korba Power Station, Madhya Pradesh Electricity Board.
2 × 4,000 kVA	11/6·9	kV } Indore Division.
3 × 1,000 kVA	33/11	kV }
1 × 750 kVA	11/6·6	kV }
1 × 1,000 kVA	33/11	kV }

MAHARASHTRA

1 × 10,000 kVA,	22/11	kV Bombay Suburban Electric Supply Co., Ltd.	
1 × 60,000 kVA,	13·2/100	kV Trombay.	} Tata Hydro Electric System.
1 × 30,000 kVA,	100/23·1	kV Parel	
3 × 30,000 kVA,	100/23·1	kV Sabselte	
1 × 4,000 kVA,	100/22	kV Panvel	

MADRAS

2× 500	kVA	11/6·6	kV	Tinnevely Tuticorin Electric Supply Co., Ltd.
2×50,000	kVA	230/110-11	kV	} Madras State Electricity Board.
2×10,000	kVA	110/33	kV	
6× 500	kVA	33/11	kV	

ORISSA

1×25,000	kVA	132/11	kV	} Hirakud Dam Project
1× 5,000	kVA	66/11	kV	

PUNJAB

2×110,000	kVA	11/66	kV	Bhakra left bank Power House
1× 5,000	kVA	132/33/11	kV	Moga
4× 3,900	kVA	33/11	kV	Mohindergarh.
				Sadhaura, Diand and Haripur.

} Punjab State Electricity Board.

RAJASTHAN

1× 500	kVA	33/11	kV	Bundi Power House.
2×1,000	kVA	33/11	kV	} Kotah Power House.
1× 600	kVA	11/3·3	kV	
1× 700	kVA	11/3·3	kV	

UTTAR PRADESH

1×1,500	kVA	33/11	kV	Faizabad Hydro Electric Division.
2×6,000	kVA	6·6/11	kV	} Kanpur Electricity Supply Administration.
2×4,000	kVA	33/6·6	kV	
1×6,000	kVA	33/11	kV	
1×4,000	kVA	6·6/37·5	kV	} Azamgarh Power House.
1× 750	kVA	33/11	kV	
1×1,000	kVA	37·5/6·6	kV	
1×1,500	kVA	33/11	kV	
2×1,575	kVA	6·6/37·5	kV	Hydro Electric Division, Kanpur.
		0·4/11		

DAMODAR VALLEY CORPORATION

1×100,000	kVA	11/33	kV	Bokaro Power Station.
2×100,000	kVA	11/33	kV	Durgapur Thermal Power Station.
2×50,000	kVA	132/33	kV	} Damodar Valley Corporation.
2×10,000	kVA	132/33	kV	

2·0 TRANSMISSION AND HIGH VOLTAGE

Table XXXIV gives the total circuit kilometres of transmission and high voltage distribution lines

TABLE XXXIV—TRANSMISSION

Serial No.	State and Union Territory	Length of Transmission					
		Below 11 kV				11 kV	
		2·2/3·3 kV		5/6·6 kV		O.H.	U.G.
		O.H.	U.G.	O.H.	U.G.		
1	Andhra Pradesh ..	42·47	6·79	538·51	112·23	11,515·74	5·04
2	Assam	25·68	10·24	..	..	59·80	0·48
3	Bihar	69·69	16·63	190·57	49·86	10,380·65	24·96
4	Gujarat	229·74	322·00	13·38	0·40	3,049·94	462·91
5	Jammu & Kashmir ..	26·40	..	115·00	..	251·00	..
6	Kerala	135·10	..	8·80	18·00	5,372·37	33·97
7	Madhya Pradesh ..	132·11	75·85	85·88	16·30	2,335·60	24·91
8	Madras	70·30	7·01	244·06	211·34	13,154·70	162·00
9	Maharashtra ..	149·12	82·03	141·79	644·72	3,446·99	319·37
10	Mysore	1,171·40	5·61	6,670·00	206·44	8,871·16	9·57
11	Orissa	93·45	14·68	72·00	25·60	598·76	27·30
12	Punjab	18·95	41·07	..	..	10,573·61	4·80
13	Rajasthan	345·32	77·00	298·18	16·81	562·32	2·21
14	Uttar Pradesh ..	205·70	500·63	320·45	375·68	12,500·00	93·19
15	West Bengal ..	61·30	139·42	128·13	1,304·82	1,050·00	55·61
16	Union Territories—						
	(a) Delhi .. ..	..	..	147·22	357·14	221·47	128·26
	(b) Rest	11·76	0·10	52·22	2·46	272·62	0·09
	GRAND TOTAL ..	2,788·49	1,299·06	9,026·19	3,341·80	84,216·73	1,354·67

DISTRIBUTION LINES

grouped under various voltages between 2.2 kV and 220 kV as on 31st March, 1961.

AND HIGH VOLTAGE DISTRIBUTION LINES

(Kilometres)

in circuit kilometres as on 31-3-1961

22 kV		33 kV		44/37.5 kV	78/66 kV	110/90 kV	132 kV	220 kV
O. H.	U. G.	O. H.	U. G.	O. H.	O. H.	O. H.	O. H.	O. H.
..	..	2,832.80	..	8.00	2,492.00	..	1,309.60	..
..	..	62.46	..	..	..	..	..	..
..	..	3,224.24	6.08	..	..	..	2,249.60	..
850.04	3.04	883.47	..	1.07	799.63	0.18	..	..
..	..	210.40	..	..	48.00	56.00	..	..
169.08	..	36.21	..	..	1,373.08	552.75	..	..
25.10	3.20	1,674.40	..	..	245.00	..	198.00	..
5,889.66	..	1,465.00	18.00	..	2,641.00	2,480.00	..	445.00
525.92	259.65	982.94	..	..	1,250.76	1,390.03	..	..
72.50	..	580.00	..	..	1,538.00	1,633.00	..	..
3.20	..	467.34	..	..	259.72	..	672.12	..
..	..	2,280.00	..	..	503.80	..	1,285.70	654.00
225.60	..	461.80	..	..	..	..	..	..
1,104.10	6.53	985.94	11.40	1,812.90	1,487.00	..	516.00	..
..	99.34	941.06	414.59	75.20	167.00	..	460.00	..
..	..	40.49	..	..	..	..	..	..
434.27	7.62	..	..	..	..	..	..	..
9,299.47	379.38	17,128.55	450.07	1,897.17	12,804.99	6,111.96	6,690.42	1,099.00

At the end of the year 1960-61 there were 11,811.68 kilometres of overhead transmission lines operating on voltages below 11 kV, 84,216.73 kilometres of 11 kV, 9,299.47 kilometres of 22 kV, 17,128.55 kilometres of 33 kV and 28,603.54 kilometres above 33 kV and upto 220 kV. The length of underground cables were 4,640.86 kilometres below 11 kV, 1,354.67 kilometres of 11 kV, 379.38 kilometres of 22 kV and 450.07 kilometres of 33 kV.

IMPORTANT TRANSMISSION AND HIGH VOLTAGE DISTRIBUTION LINES COMMISSIONED DURING THE YEAR ENDED 1960-61

ANDHRA PRADESH

236.25 kilometres of 11 kV	}	Khammameth Construction and Operation Division.
56.00 kilometres of 66 kV		
123.00 kilometres of 11 kV	}	Chittoor District.
248.00 kilometres of 11 kV		
100.00 kilometres of 11 kV	}	Anantapur District.
214.00 kilometres of 11 kV		
19.40 kilometres of 132 kV	}	Kurnool District.
159.00 kilometres of 11 kV		
29.00 kilometres of 33 kV	}	Cuddapah District.
155.00 kilometres of 11 kV		
32.38 kilometres of 11 kV	}	Guntur District.
5.24 kilometres of 11 kV		
		Krishna District.
		Nellore District.
		Masulipatnam Municipality.

BIHAR

21.60 kilometres of 33 kV	}	Singhbhum Electric Supply Division.
4.80 kilometres of 11 kV		
38.40 kilometres of 11 kV	}	Monghyr Electric Supply Division.
12.37 kilometres of 11 kV		
11.78 kilometres of 11 kV	}	Electric Supply Sub Division No. 1 Bihar Shariff.
2.32 kilometres of 6.6 kV		
1.04 kilometres of 6.6 kV (Cable)	}	Sijua (Jharriah) Electric Supply Company Ltd.
2.05 kilometres of 11 kV		
0.86 kilometres of 11 kV (Cables)	}	Mozuffarpur Electric Supply Co. Ltd.
3.15 kilometres of 33 kV		
6.44 kilometres of 11 kV	}	Patna Electric Supply Co. Ltd.
0.88 kilometres of 11 kV (Cables)		
1.28 kilometres of 6.6 kV	}	Bhagalpur Electric Supply Co. Ltd.
0.25 kilometres of 6.6 kV (Cables)		
0.52 kilometres of 3.3 kV		

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2.40 kilometres of 3.3/3 kV	}	Cambay Electric Supply Co. Ltd.
0.28 kilometres of 11 kV		
1.55 kilometres of 11 kV (Cables)	}	Navsari Electric Supply Co. Ltd.
12.22 kilometres of 11 kV		
9.83 kilometres of 11 kV (Cables)	}	The Ahmedabad Electric Supply Co. Ltd.
0.52 kilometres of 11 kV		
1.61 kilometres of 3.3/3 kV	}	The Amalgamated Electricity Supply Co. (Bulsar Branch).
95.02 kilometres of 22 kV		
1.13 kilometres of 3.3/3 kV	}	Anand Electric Supply Co. Ltd.
0.81 kilometres of 66 kV		
23.08 kilometres of 22 kV	}	Baroda Electric Division.
61.97 kilometres of 11 kV		
43.50 kilometres of 11 kV	}	Sanand Electric Supply Co. Ltd.
0.40 kilometres of 11 kV (Cables)		
1.20 kilometres of 11 kV	}	Sabarmati Electric Division.
14.00 kilometres of 11 kV		
		Jamnagar Power House.
		Jodiya Power House.
		Jamkhabalia Power House.

GUJARAT—Contd.

169.00 kilometres of 33 kV }
 70.70 kilometres of 11 kV }
 1.60 kilometres of 3.3 kV }

Kutch Electrical Division.

KERALA

1.66 kilometres of 11 kV }
 0.32 kilometres of 11 kV } (Cables)
 1.20 kilometres of 11 kV } (Cables)

Hindustan Tile Works

The Cochin Electric Co. (Private) Ltd.

MADHYA PRADESH

(Cables) Sangor Electric Supply Co.

0.60 kilometres of 3.3/3 kV }
 0.32 kilometres of 33 kV }
 1.61 kilometres of 11 kV }
 0.37 kilometres of 6.6/5 kV }
 78.00 kilometres of 15/11 kV }

Indore Division.

Sagar Division.

MADRAS

Salem Erode.

11.40 kilometres of 22 kV }
 3.72 kilometres of 11 kV }
 1.54 kilometres of 11 kV } (Cables)
 7.34 kilometres of 22 kV }
 5.69 kilometres of 22 kV } (Cables)
 20.40 kilometres of 33 kV }
 171.00 kilometres of 22 kV }
 115.00 kilometres of 11 kV }

Coimbatore Municipality.

Tinnevelly Tuticorin Electric Supply Co. Ltd.

Trichy. Electricity System.

7.35 kilometres of 6.6 kV }
 9.85 kilometres of 3.3 kV }
 118.68 kilometres of 220 kV }
 2.01 kilometres of 11 kV }
 0.42 kilometres of 11 kV }
 0.16 kilometres of 11 kV } (Cables)

Mettur Electricity System.

Karur Municipality.

114.46 kilometres of 230 kV }
 87.21 kilometres of 110 kV }
 160.66 kilometres of 22 kV }
 198.68 kilometres of 11 kV }
 14.58 kilometres of 110 kV }
 11.86 kilometres of 33 kV }
 101.53 kilometres of 11 kV }
 12.20 kilometres of 11 kV } (Cables)

Mettur Electricity System.

Madras Electricity System.

MAHARASHTRA

The Amalgamated Electricity Co. Ltd. (Bhusawal Branch).

2.40 kilometres of 11 kV }
 0.70 kilometres of 6.6/5 kV }
 0.80 kilometres of 6.6/5 kV } (Cables)
 1.32 kilometres of 3.3/3 kV }
 0.92 kilometres of 3.3/3 kV }
 0.14 kilometres of 22 kV } (Cables)
 0.43 kilometres of 11 kV }
 14.72 kilometres of 11 kV } (Cables)
 0.41 kilometres of 11 kV }
 100.93 kilometres of 11 kV }
 14.51 kilometres of 22 kV }
 3.92 kilometres of 6.6 kV }
 0.54 kilometres of 11 kV }
 3.34 kilometres of 3.3 kV }
 0.19 kilometres of 3.3/3 kV }

Nasik Deolali Electric Supply Co. Ltd.

Panvel Taluka Electrical Development Co. Ltd.

Bombay Suburban. Electric Supply Co. Ltd.

Arvi Power House

Akola Division.

Kalyan Division.

Yeotmal Electric Supply Co. Ltd.

Dhulia Electric Supply Co. Ltd.

The Ahmednagar Electric Supply Co. Ltd.

MAHARASHTRA—contd.

0.16 kilometres of 3.3/3 kV (Cables)	}	The Ahmednagar Electric Supply Co. Ltd.
0.13 kilometres of 22.20 kV		
3.39 kilometres of 6.6/5 kV	}	Thana Electric Supply Co. Ltd.
1.75 kilometres of 6.6 6.6/5 kV (Cables)		
4.99 kilometres of 11 kV	}	Poona Electric Supply Co. Ltd.
0.75 kilometres of 11 kV (Cables)		
12.80 kilometres of 11 kV	}	Nagpur Light and Power Co. Ltd.
0.80 kilometres of 11 kV (Cables)		
9.04 kilometres of 100 kV (Cables)	}	Tata Hydro Electric Co.
7.67 kilometres of 22 kV		
8.22 kilometres of 22 kV		
1.65 kilometres of 22/20 kV (Cables)	}	Bombay Electricity Supply and Transport Undertaking.
25.73 kilometres of 6.6/5 kV (Cables)		
57.60 kilometres of 33 kV		
166.11 kilometres of 11 kV	}	Nagpur Division.
		<i>ORISSA</i>
98.21 kilometres of 66 kV	}	Hirakud Dam Project.
6.44 kilometres of 11 kV		
12.87 kilometres of 33 kV	}	General Electrical Division, Bolangir.
29.76 kilometres of 11 kV		
4.02 kilometres of 3.3 kV		
		<i>PUNJAB</i>
95.70 kilometres of 132 kV	}	Punjab State Electricity Board.
16.80 kilometres of 66 kV		
26.40 kilometres of 33 kV		
1,260.00 kilometres of 11 kV		
		<i>RAJASTHAN</i>
22.94 kilometres of 11 kV	}	Rajasthan State Electricity Board. Maharana Bhupal Electric Supply Co. Ltd.
4.20 kilometres of 11 kV		
		<i>UTTAR PRADESH</i>
93.76 kilometres of 11 kV	}	Hydro Electric Division Faizabad.
0.80 kilometres of 11 kV		
1.20 kilometres of 6.6/5 kV	}	U. P. Electric Supply Co. Ltd., Lucknow.
4.36 kilometres of 33 kV		
4.18 kilometres of 33 kV (Cables)	}	Kanpur Electric Supply Administration.
1.58 kilometres of 11 kV (Cables)		
4.46 kilometres of 5 kV (Cables)		
13.74 kilometres of 33 kV		
11.29 kilometres of 11 kV	}	Azamgarh Power House
0.40 kilometres of 6.6 kV		
2.80 kilometres of 6.6 kV (Cables)		
0.85 kilometres of 11 kV	}	Agra Electric Supply Co. Ltd.
54.40 kilometres of 11 kV		
		Hydro Electric Division, Bareilly. Kanpur Hydro Electric Division.
		<i>WEST BENGAL</i>
8.55 kilometres of 11 kV	}	Dishergarh Power Supply Co. Ltd.
0.12 kilometres of 11 kV (Cables)		
1.50 kilometres of 3.3/3 kV		
0.03 kilometres of 3.3/3 kV (Cables)		
12.50 kilometres of 11 kV	}	Associated Power Co. Ltd.
0.94 kilometres of 11 kV		
		Raneeganj Electric Supply Co.

UNION TERRITORIES

33.31 kilometres of 22 kV } 84.35 kilometres of 11 kV } 48.52 kilometres of 22 kV } 2.50 kilometres of 6.6/5 kV } 18.00 kilometres of 6.6/5 kV (Cables) } 60.98 kilometres of 11 kV } 1.60 kilometres of 11 kV (Cables) } 27.58 kilometres of 6.6 kV } 0.16 kilometres 6.6 kV (Cables) } 1.81 kilometres of 6.6 kV }	Himachal Pradesh Electricity Department, Pondicherry. New Delhi Municipal Committee. Delhi Electric Supply Undertaking. Port Blair.
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3.0 TOWNS AND VILLAGES ELECTRIFIED

There were in all 23,969 towns and villages electrified in the country at the end of the year as shown in the Table XXXV (a).

The state-wise break up of these is shown in Table XXXV(b).

TABLE XXXV(a)—NUMBER OF TOWNS AND VILLAGES ELECTRIFIED AS ON 31-3-1961

Serial No.	Population Range	Number of towns and villages in each group	Number of towns and villages with public electricity supply on 31-3-1961	Percentage of towns and villages with public electricity supply to total
1	Over 1,00,000	73	73	100.0
2	50,001—1,00,000	111	111	100.0
3	20,001—50,000	401	380	94.7
	10,001—20,000	858	719	84.0
	5,001—10,000	3,101	1,669	53.8
	Upto—5,000	556,564	21,017	3.8
	Total	**561,106	23,969	4.2

** Details of Jammu & Kashmir State and Pondicherry have been excluded to keep in conformity with 1951 Census figures.
N.B.—Since the total number of places in Jammu & Kashmir and Pondicherry, the figures of places electrified in these two states have also been left out from the calculation of percentage of electrified places.

TABLE XXXV(b)—TOWNS AND VILLAGES ELECTRIFIED AS ON 31-3-1961
Population Range

Serial No.	State and Union Territory	0 to 5,000	5,001 to 10,000	10,001 to 20,000	20,001 to 50,000	50,001 to 1,00,000	Over 1,00,000	Total
1	Andhra Pradesh	1,795	247	75	32	10	6	2,165
2	Assam	39	6	7	6	1	..	59
3	Bihar	1,643	75	33	18	6	5	1,780
4	Gujarat	646	94	39	36	4	6	825
5	Jammu & Kashmir	89	9	2	..	..	1	101
6	Kerala	1,125	280	106	28	5	3	1,547
7	Madhya Pradesh	315	57	36	21	5	5	439
8	Madras	5,242	404	137	58	12	7	5,880
9	Maharashtra	718	86	60	40	16	5	925
10	Mysore	1,568	90	49	22	8	5	1,742
11	Orissa	115	24	8	5	1	1	154
12	Punjab	2,852	97	34	22	8	3	3,016
13	Rajasthan	51	34	28	20	4	4	141
14	Uttar Pradesh	4,018	130	61	40	15	14	4,278
15	West Bengal	330	30	44	29	14	7	454
16	Union Territories	560	15	2	3	2	2	584
17	Pondicherry	136	2	..	1	..	..	139
	Total	21,242	1,680	721	331	111	74	24,209*

* Figures for Jammu & Kashmir and Pondicherry included in the total. The total number of towns and villages electrified is 23,969.

4·0 CONSUMER AND

The total number of consumers and their connected load as on 31-3-1961 in the various
TABLE XXXVI—CLASSIFICATION OF

Serial No.	State and Union Territory	Segregation			
		Domestic light and small power		Commercial light and small power	
		A.C.	D.C.	A.C.	D.C.
1	Andhra Pradesh	236,232	..	15,928	..
2	Assam	11,623	3,192	1,867	1,851
3	Bihar	120,194	4,529	21,680	1,259
4	Gujarat	325,669	13,091	42,581	1,993
5	Jammu & Kashmir	44,578	..	5,783	..
6	Kerala	160,874	..	36,569	..
7	Madhya Pradesh	118,201	5,374	27,371	439
8	Madras	532,233	13,050	57,844	4,224
9	Maharashtra	499,535	3,231	141,706	689
10	Mysore	311,156	2,310	22,253	780
11	Orissa	22,719	3,013	6,876	622
12	Punjab	339,739	7,962	121,448	5,248
13	Rajasthan	85,027	2,182	22,932	1,054
14	Uttar Pradesh	182,335	49,464	50,110	21,742
15	West Bengal	168,768	238,312	15,823	1,119
16	Union Territories—				
	(a) Delhi	107,621	38,169	25,343	12,063
	(b) Rest	16,344	162	3,330	27
	Total	3,282,848	384,041	619,444	53,110

CONNECTED LOAD

states are given in Tables XXXVI and XXXVII respectively.

CONSUMERS AS ON 31-3-1961

of number of consumers

Industrial power including electric traction and public water works		Public lighting		Irrigation and de-watering		Total number of consumers		Total
A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	
7,139	..	1,691	..	17,953	..	278,943	..	278,943
182	86	29	4	..	..	13,701	5,133	18,834
5,975	116	160	3	3,347	1	151,356	5,908	157,264
21,252	847	674	32	6,678	49	396,854	16,012	412,866
639	..	4	..	48	..	51,052	..	51,052
6,708	..	838	..	2,678	..	207,667	..	207,667
7,553	79	432	52	1,962	10	155,519	5,954	161,473
26,710	212	9,396	8	117,650	..	743,833	17,494	761,327
23,721	155	545	6	7,524	..	673,031	4,081	677,112
13,415	29	328	5	17,160	1	364,312	3,125	367,437
943	160	105	2	12	..	30,655	3,797	34,452
13,751	372	230	3	12,106	..	487,274	13,585	500,859
5,930	95	50	6	1,147	14	115,086	3,351	118,437
13,714	1,622	219	9	6,181	11	252,559	72,848	325,407
9,276	11,507	134	15	6	..	194,007	250,953	444,960
5,853	211	115	..	18	..	138,950	50,443	189,393
438	2	30	1	1,346	..	21,488	192	21,680
163,199	15,493	14,980	146	195,816	86	4,276,287	452,876	4,729,163

TABLE XXXVII—CLASSIFICATION OF

Serial No.	State and Union Territory	Segregation			
		Domestic light and small power		Commercial light and small power	
		A.C.	D.C.	A.C.	D.C.
1	Andhra Pradesh	184,998	..	20,206	..
2	Assam	10,345	1,798	1,883	1,280
3	Bihar	65,190	2,581	18,216	589
4	Gujarat	180,312	5,709	35,000	642
5	Jammu & Kashmir	3,851	..	1,183	..
6	Kerala	92,608	..	19,061	..
7	Madhya Pradesh	37,522	1,946	16,744	694
8	Madras	284,957	6,760	63,546	5,960
9	Maharashtra	367,659	2,357	124,049	230
10	Mysore	131,000	512	19,585	369
11	Orissa	14,938	2,140	5,582	724
12	Punjab	117,562	6,243	61,659	4,537
13	Rajasthan	36,689	1,184	11,414	428
14	Uttar Pradesh	97,592	30,716	38,879	16,461
15	West Bengal	169,751	283,878	10,094	780
16	<i>Union Territories—</i>				
	(a) Delhi	64,267	21,026	32,029	12,813
	(b) Rest	8,682	13	1,430	3
	Total ..	1,867,923	366,863	480,560	45,510

The total number of consumers as on 31st March 1961 was about 4·730 million as compared to 4·029 showing an increase of 17·4 per cent over the number of consumers as at the beginning of the year. The the year.

CONNECTED LOAD AS ON 31-3-1961

(kW)

of connected load in kW

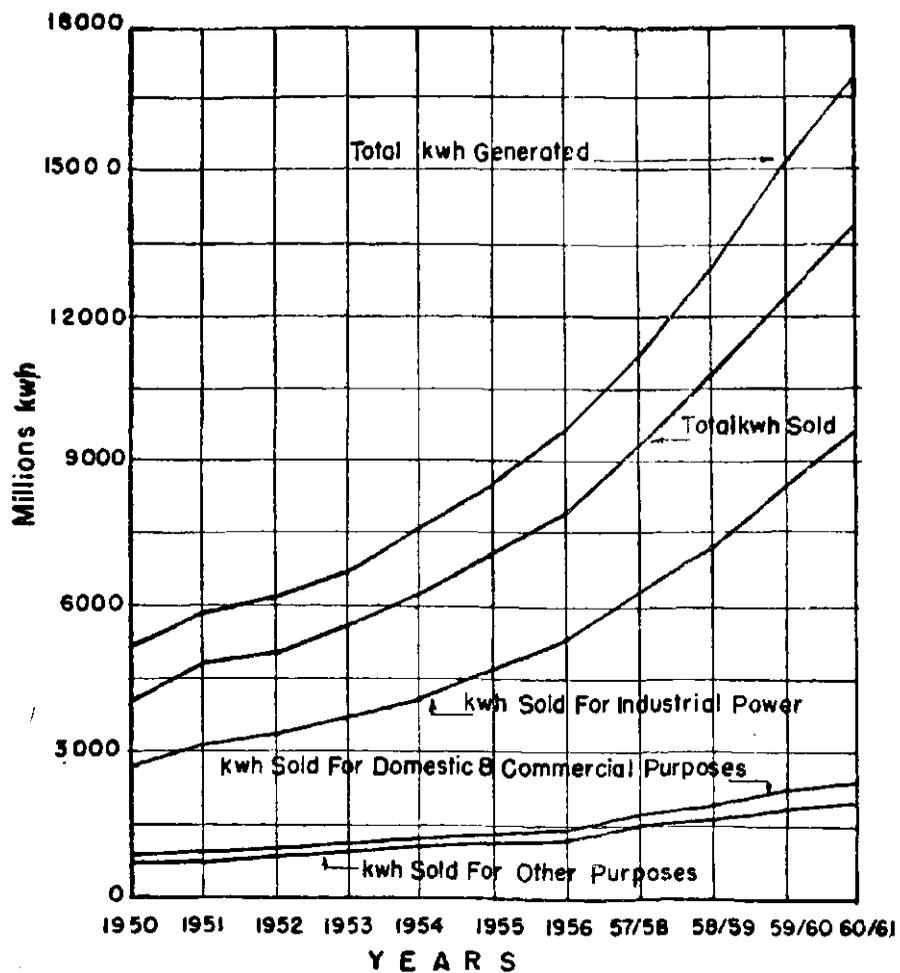
Industrial power including electric traction and public water works		Public lighting		Irrigation and de-watering		Total connected load in kW		Total
A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	
184,548	..	6,318	..	77,252	..	473,322	..	473,322
3,434	939	368	96	..	..	16,030	4,113	20,143
365,324	860	1,162	24	17,312	4	467,204	4,058	471,262
366,656	3,477	19,406	916	31,032	153	632,406	10,897	643,303
3,812	..	117	..	342	..	9,305	..	9,305
174,245	..	3,706	..	20,260	..	309,880	..	309,880
131,254	431	2,236	73	5,545	76	193,301	3,220	196,521
480,517	16,200	9,325	8	431,079	..	1,269,424	28,928	1,298,352
772,674	14,381	6,073	59	18,861	..	1,289,316	17,027	1,306,343
237,449	120	8,467	54	69,750	3	466,251	1,058	467,309
139,798	582	528	107	182	..	161,028	3,553	164,581
179,460	2,299	2,601	207	63,779	..	425,061	13,286	438,347
38,697	505	1,661	99	3,972	56	92,433	2,272	94,705
249,163	11,166	2,780	708	77,778	31	466,192	59,082	525,274
1,056,109	58,628	3,121	3,634	19	..	1,239,094	346,920	1,586,014
56,007	3,542	1,729	155	2,219	..	156,251	37,536	193,787
9,616	22	416	1	6,825	..	26,969	139	27,008
4,448,763	113,152	70,014	6,141	826,207	323	7,693,467	531,989	8,225,456

million in the previous year. The number of new connections during the year was about 0.701 million corresponding connected load increased from 8.225 million kW to 8.441 million kW or 17.1 per cent during

SECTION 3
ENERGY SALES

KILOWATT-HOURS GENERATED AND SOLD
BY THE ELECTRICITY SUPPLY UNDERTAKINGS

From 1950 to 1960-61



1·0 UTILISATION OF ENERGY GENERATED AND PURCHASED DURING 1960-61.

Table XXXVIII gives the summary of power generated, power purchased from non-utilities, power sold to ultimate consumers, the amount of the power lost in transmission and distribution etc.

TABLE XXXVIII—TOTAL ENERGY GENERATED, PURCHASED AND SOLD

Serial No.	Item	kWh sold in millions	Percentage total gross supply
1	kWh generated	16,937·012	98·7
2	kWh purchased from non-electric utilities	223·041	1·3
3	Gross kWh for Public Supply	17,160,953	100·0
4	kWh used in power station auxiliaries	721·864	4·2
5	Net kWh for public supply	16,438·189	95·8
6	Total kWh sold to ultimate consumers	13,952·716	81·1
7	kWh lost in transmission, distribution and unaccounted for	2,435·473	14·7

TABLE XXXIX —ENERGY SALES BY CLASS OF UTILISATION

Serial No.	Class of utilisation	kWh sold 1960-61	Percentage to total sales in 1960-61	kWh sold in 1959-60	Net percentage increase over 1959-60
1	Domestic light and small power	1,492·291	10·7	1,378·538	8·3
2	Commercial light and small power	847·735	6·1	766·184	10·6
3	Industrial power	9,696·415	69·4	8,455·534	14·4
4	Traction	453·923	3·3	440·594	3·0
5	Public lighting	193·241	1·4	177·984	8·6
6	Irrigation	832·921	6·0	753·946	10·5
7	Water works	436·190	3·1	434·163	0·5
	Total	13,952·716	100·0	12,406·943	12·1

10·7 per cent of total energy was sold to domestic consumers for residential light and power, 6·1 per cent to commercial lighting, heating and small power, 69·4 per cent industrial power, 3·3 per cent to traction, 1·4 per cent to public lighting, 6·0 per cent to irrigation and 3·1 per cent to water works. The percentage increase in sales during the year for domestic light and power, commercial light and power and the industrial power was 8·3, 10·6 and 14·4 respectively. The net increase in sales for all classes of utilisation was 12·1 per cent over the sales in the previous year.

Table XL gives the details of energy generated,

TABLE XL—ELECTRICITY GENERATED AND

Serial No.	State and Union Territory	kWh generated	kWh purchased	
			From non-electric utilities	From electric utilities in adjoining states
1	Andhra Pradesh	900·029	..	1·040
2	Assam	36·219	..	..
3	Bihar	1,596·833	175·920	35·000
4	Gujarat	1,271·227	..	..
5	Jammu & Kashmir	43·514	..	17·500
6	Kerala	581·818	..	50·341
7	Madhya Pradesh	476·966	..	30·000
8	Madras	2,213·716	..	23·866
9	Maharashtra	3,267·877	2·200	..
10	Mysore	1,057·998	..	48·250
11	Orissa	489·640	44·813	60·000
12	Punjab	1,003·638	..	..
13	Rajasthan	108·402	0·108	22·700
14	Uttar Pradesh	1,252·321	..	..
15	West Bengal	2,318·739	..	481·943
16	Union Territories—			
	(a) Delhi	310·756	..	142·837
	(b) Rest	7·319	..	32·006
	Total	16,937·012	223·041	945·483

The total kWh purchased from non-electric utilities aggregated 223·041 million kWh and represented

purchased and sold in various states.

SOLD IN STATES DURING THE YEAR 1960-61

(Millions)

kWh consumed for power station auxiliaries	kWh sold to adjoining states	kWh available for sale within the states	kWh sold direct to consumers within the states			kWh lost in transmission and unaccounted for
			By Public Sector	By Private Sector	Total	
23·237	120·525	757·307	571·290	0·266	571·556	185·751
1·273	..	34·946	19·838	9·260	29·098	5·848
98·629	481·943	1,227·181	863·238	190·078	1,053·316	173·865
82·615	..	1,188·612	256·029	727·609	983·638	204·974
0·509	..	60·505	51·000	..	51·000	9·505
18·394	11·591	602·174	446·266	39·564	485·830	116·344
30·985	3·000	472·981	348·810	56·890	405·700	67·281
64·746	80·549	2,092·287	1,478·814	186·329	1,665·143	427·144
136·118	30·000	3,103·959	1,134·919	1,584·004	2,719·523	384·436
16·658	..	1,089·590	920·727	14·223	934·950	154·640
3·680	25·000	565·773	478·541	9·630	488·171	77·602
7·955	182·875	812·808	550·597	29·792	580·299	232·509
6·395	..	124·815	76·618	18·912	98·530	26·285
59·551	..	1,192·770	663·080	312·623	975·703	217·067
130·595	10 000	2,660·087	267·826	2,224·940	2,492·766	167·321
39·243	..	414·350	375·754	7·121	382·875	31·475
1·281	..	38·044	33·255	1·363	34·618	3·426
721·864	945·483	16,438·189	8,539·512	5,413·204	13,952·716	2,485·473

about 1·3 per cent of the total energy produced by the public electric utility undertakings.

Table XLI gives the details of energy generated, purchased
TABLE XLI—GENERATION AND SALES OF GOVERNMENT/STATE

Serial No.	Government/State Electricity Board .	kWh generated	kWh purchased	
			From non-Electric utilities	From electric utilities
1	Andhra Pradesh	899·699	..	1·040
2	Assam	25·262	..	..
3	Bihar	29·406	..	449·291
4	Gujarat	393·225	..	169·805
5	Jammu & Kashmir	43·514	..	17·500
6	Kerala	581·818	..	50·341
7	Madhya Pradesh	405·214	..	30·000
8	Madras	2,213·716	..	23·866
9	Maharashtra	847·942	2·200	16·000
10	Mysore	1,048·050	..	48·250
11	Orissa	487·581	44·813	60·000
12	Punjab	988·744	..	..
13	Rajasthan	83·820	0·108	22·700
14	Uttar Pradesh	951·663	..	..
15	West Bengal	22·469	..	117·034
16	<i>Union Territories—</i>			
	(a) Delhi	310·649	..	142·837
	Total	9,332·772	47·121	1,142·664

and sold by various State Electricity Boards.

ELECTRICITY BOARDS DURING 1960-61

(Millions)

kWh used for power station auxiliaries	kWh sold to adjoining States	kWh available for sale within the Board	kWh sold by the Board	kWh lost in transmission and unaccounted for
23·234	120·525	756·980	571·556	185·424
0·834	..	24·428	19·838	4·590
0·510	10·000	468·187	422·655	45·532
36·059	..	526·971	460·123	66·848
0·509	..	60·505	51·000	9·505
17·455	11·591	603·113	494·026	109·087
26·248	3·000	405·966	360·230	45·727
64·657	80·549	2,092·376	1,733·931	358·445
66·442	30·000	763·700	641·396	122·304
16·224	..	1,080·076	933·223	146·853
3·551	25·000	563·843	488·816	75·027
7·322	182·875	798·547	575·283	223·264
5·314	..	101·314	81·396	19·918
39·224	..	912·439	773·041	139·398
0·876	..	138·627	125·018	13·609
39·243	..	414·243	382·777	31·466
347·702	463·540	9,711·315	*8,114·318	1,596·997

*This includes the sale of the Board to the distributing Agencies.

Table XLII gives the segregation of ultimate sales

TABLE XLII—SEGREGATION OF

Serial No.	State and Union Territory	Total sold to ultimate consumers	Domestic heat and small power	Domestic light and fans	Commercial heat and small power
1	Andhra Pradesh	571·556	13·463	57·352	13·911
2	Assam	29·098	0·790	9·107	0·801
3	Bihar	1,053·316	5·023	39·289	5·129
4	Gujarat	983·638	9·298	62·275	8·493
5	Jammu & Kashmir	51·000	1·500	21·000	0·500
6	Kerala	485·830	5·673	45·400	1·645
7	Madhya Pradesh	405·700	3·425	41·972	5·110
8	Madras	1,665·143	37·170	115·720	50·194
9	Maharashtra	2,719·523	80·957	178·944	42·528
10	Mysore	934·950	17·835	57·358	4·007
11	Orissa	488·171	1·700	16·600	2·320
12	Punjab	580·299	15·275	54·592	13·399
13	Rajasthan	98·530	2·034	18·700	3·018
14	Uttar Pradesh	975·703	11·177	111·541	18·493
15	West Bengal	2,492·766	69·061	284·456	26·594
16	<i>Union Territories—</i>				
	(a) Delhi	382·875	21·285	75·816	2·551
	(b) Rest	34·618	0·375	6·078	0·459
	Total ..	13,952·716	296·091	1,196·200	199·152

of energy in the different states.

SALES IN STATES

(Millions)

Commercial light and fans	Industrial power at low and medium voltage	Industrial power at high voltage	Public lighting	Electric traction	Irrigation and de-watering	Public water works and sewage Pumping	kWh generated
16·410	53·288	340·043	14·863	..	54·827	7·399	900·029
3·411	4·358	7·489	2·699	..	..	0·463	36·219
24·701	58·913	881·593	3·647	4·528	2255	12·238	1,596·833
23·187	111·804	694·157	15·274	..	19·610	39·560	1,271·227
0·500	15·000	7·000	1·300	..	0·700	3·500	43·514
2·206	54·111	342·306	8·358	..	18·287	7·844	581·818
15·680	46·416	254·851	9·113	..	3·890	25·243	476·966
106·518	228·845	682·946	33·920	15·000	382·403	14·427	2,213·716
155·702	347·506	1,505·160	19·883	338·927	14·759	35·157	3,267·877
17·292	83·191	648·708	18·880	..	28·714	58·915	1,057·998
5·550	12·620	444·845	1·487	..	0·752	2·297	489·640
47·998	183·722	172·252	9·092	..	74·848	9·121	1,003·638
12·840	29·530	4·050	5·200	..	3·621	19·537	108·402
56·243	193·421	310·507	13·848	..	199·992	60·481	1,252·321
89·192	150·750	1,657·378	23·395	95·297	0·650	95·993	2,318·739
70·031	66·550	87·342	10·937	0·171	5·007	43·185	310·756
1·142	3·103	14·680	1·345	..	6·606	0·830	7·319
648·583	1,641·128	8,055·287	193·241	453·923	832·921	436·190	16,937·1

2.0 PER CAPITA CONSUMPTION OF ELECTRICITY

The average per capita consumption of electricity for the Indian Union was 31.85 kWh. If the generation by the industries and the railway power stations is also taken into account, the per capita consumption for the year would be 38.2 kWh the corresponding per capita generation being 46 kWh.

Table XLIII gives the annual per capita consumption of electricity in public utilities under five classes of utilisation in the various states based on the estimated population figures as on 1st April, 1961. The table also gives the per capita consumption met by self-generating industrial establishments. The rate of growth of population is assumed to be 1.93 per cent per annum during the decade 1951 to 1961. On this rate of growth of population the per capita figures in (i) public utilities and (ii) public utilities including self-generating industrial establishments for the previous years were as follows—

Year	Public Utilities								Public utilities plus self-generating industrial establishments
1960-61	31.85	kWh	..	..	..	..	..	..	38.11
1959-60	28.94	"	..	..	..	..	..	..	34.78
1958-59	25.21	"	..	..	..	..	..	..	30.70
1957-58	22.31	"	..	..	..	..	..	..	27.90
1956	19.65	"	..	..	..	..	..	..	24.82
1955	17.86	"	..	..	..	..	..	..	23.00
1954	16.01	"	..	..	..	..	..	..	20.93
1953	14.59	"	..	..	..	..	..	..	19.34
1952	13.35	"	..	..	..	..	..	..	17.85
1951	13.00	"	..	..	..	..	..	..	17.25

The Delhi State, because of its predominant urban character, showed the highest overall per capita consumption of electricity of 186.75 kWh. Next to Delhi State, the West Bengal, Maharashtra, Gujarat, Madras, Mysore, Orissa, Bihar, Punjab and Kerala States followed in the order of magnitude.

TABLE XLIII—ANNUAL PER CAPITA CONSUMPTION OF ELECTRICITY IN 1960-61

Serial No.	State and Union Territory	Public Utilities							Non-utilities per capita kWh	All-India per capita kWh Column (9) plus Column (10)
		Population (Million)	Domestic light and small power per capita kWh	Commercial light and small power per capita kWh	Industrial including traction and water works per capita kWh	Public lighting per kWh	Irrigation per capita kWh	Total per capita consumption kWh		
1	Andhra	35.98	1.97	0.84	11.14	0.41	1.52	15.88	3.27	19.15
2	Assam	11.86	0.83	0.35	1.04	0.23	..	2.45	1.11	3.56
3	Bihar	46.46	0.96	0.64	20.67	0.08	0.39	22.74	18.75	41.49
4	Gujarat	20.62	3.47	1.54	40.98	0.74	0.95	47.70	4.33	52.01
5	Jammu & Kashmir	3.58	6.29	0.28	7.12	0.36	0.20	14.25	..	14.25
6	Kerala	16.88	3.03	0.23	24.08	0.49	1.08	28.72	0.03	28.75
7	Madhya Pradesh	32.39	1.40	0.64	10.08	0.28	0.12	12.52	7.07	19.59
8	Madras	33.65	4.54	4.66	28.00	1.01	11.36	49.48	0.89	50.46
9	Maharashtra	39.50	6.58	5.02	56.38	0.50	0.37	68.85	3.91	72.76
10	Mysore	23.55	3.20	0.90	33.54	0.80	1.22	39.70	4.52	44.18
11	Orissa	17.56	1.04	0.45	26.27	0.09	0.04	27.80	14.91	42.80
12	Punjab	20.30	3.44	3.02	17.98	0.45	3.69	28.59	3.80	32.39
13	Rajasthan	20.15	1.03	0.79	2.63	0.26	0.18	4.89	6.65	11.54
14	Uttar Pradesh	73.75	1.67	1.01	7.65	0.19	2.71	13.23	1.87	15.10
15	West Bengal	34.97	10.11	3.31	57.36	0.67	0.02	71.28	12.42	83.89
16	Union Territories—									
	(a) Delhi	2.64	36.50	27.55	75.72	4.18	2.65	146.00	40.75	186.75
	(b) Rest	4.16	1.55	0.39	4.47	0.32	1.59	8.32	0.42	8.26
	Total (All India)	438.00	3.41	1.94	24.13	0.44	1.90	31.85	6.30	38.12

3.0 AVERAGE REVENUE REALISED FROM SALE OF ELECTRICITY

Table XLIV gives an idea of the weighted average revenue realised from sale of electrical energy to ultimate consumers during 1960-61 as compiled from the data collected from major public utility undertakings covering about 74.5 per cent of the total power sold.

TABLE XLIV—AVERAGE PRICE OF ELECTRICITY

Serial No.	Category of sales	kWh sold in 1960-61 (Millions)	Revenue realised in Rs. (Lakhs)	Revenue realised in naye Paise per kWh. sold
1	Domestic and commercial premises for lighting, heating and small power etc.	1,804	29,54	16.40
2	Industries and traction	7,914	44,12	5.57
3	Agriculture	592	4,10	6.93
4	All purposes i.e. (1), (2) and (3) above	10,310	77,81	7.55

4.0 PROGRESS OF ELECTRICITY SUPPLY INDUSTRY AND INDEX OF FIGURES

The progress of electricity supply in the country as a whole and in each of the states is indicated in tables XLV (1), XLV (2) to XLV (18) respectively.

TABLE XLV (1)—PROGRESS OF ELECTRICITY SUPPLY IN THE COUNTRY

Year	Installed capacity of generating plant to the end of the year				Aggregate of M.D. on individual systems during the year	kWh generated	kWh generated per kW of average capacity	kWh sold	Average load factor based on columns (6) & (7)	Average demand factor based on columns (5) & (6)
	Steam	Oil	Hydro	Total						
1	2	3	4	5	6	7	8	9	10	11
	kW	kW	kW	kW	kW	Million		Million	%	%
1939	540,760	86,790	442,169	1,069,719	575,801	2,442.415	2,283	2,034.636	48.42	53.8
1947	757,457	97,679	508,129	1,363,265	882,853	4,073.318	2,988	3,358.794	52.67	64.8
1948	788,393	107,019	515,554	1,410,966	965,780	4,575.466	3,243	3,721.464	54.08	68.4
1949	852,639	125,468	559,079	1,537,186	1,008,000	4,909.289	3,194	4,004.716	55.60	65.6
1950	1,004,434	148,796	559,285	1,712,515	1,098,314	5,106.700	2,981	4,158.657	53.55	64.1
1951	1,097,567	162,680	575,179	1,835,426	1,205,194	5,858.403	3,192	4,793.344	55.49	65.7
1952	1,176,317	170,259	715,179	2,061,755	1,310,651	6,120.347	2,969	5,005.682	53.31	63.6
1953	1,393,717	180,294	731,179	2,305,190	1,416,350	6,697.187	2,905	5,597.083	53.98	61.4
1954	1,491,043	209,607	793,346	2,493,996	1,625,123	7,521.777	3,016	6,252.501	52.84	65.2
1955	1,546,805	208,529	939,483	2,694,817	1,849,672	8,592.451	3,189	7,111.011	53.03	68.6
1956	1,596,412	228,288	1,061,441	2,886,141	1,989,774	9,662.133	3,348	7,959.345	55.43	68.9
1957-58	1,763,257	245,935	1,213,919	3,223,111	2,288,212	11,369.142	3,527	9,345.224	56.72	71.0
1958-59	1,879,553	270,288	1,361,745	3,511,586	2,542,955	12,993.886	3,700	10,718.610	58.33	72.4
1959-60	2,047,011	296,010	1,530,145	3,873,166	2,931,360	15,032.953	3,681	12,406.943	58.56	75.7
1960-61	2,436,255	300,135	1,842,661	4,579,051	3,545,930	16,937.012	3,661	13,952.716	54.51	77.6

TABLE XLV(2)—PROGRESS OF ELECTRICITY SUPPLY IN ANDHRA PRADESH

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	46,000	83,500	83,500	83,500	83,500
Oil	19,876	20,291	20,832	22,702	20,188
Hydro	66,000	102,000	102,000	171,400	166,150
Total ..	131,876	205,791	206,332	277,602	269,838
Out-put (in million kWh)—					
Steam	60·177	51·809	68·037	116·673	145·836
Oil	9·661	4·268	3·369	7·007	5·450
Hydro	169·364	289·221	499·969	577·389	748·743
Total ..	239·202	345·298	571·375	701·069	900·029
Sales (Million kWh) within the State—					
Domestic light and small power ..	32·666	47·313	57·805	70·035	70·815
Commercial light and small power ..	33·810	44·081	45·348	49·014	30·321
Industrial Power	88·641	142·502	227·165	307·969	393·331
Public Lighting	9·032	12·331	14·437	17·032	14·863
Traction .. .. .	..	..	..	..	..
Irrigation	10·458	19·116	27·927	53·378	54·827
Water Works	6·410	9·084	12·786	12·932	7·399
Total ..	181·017	274·427	385·468	510·360	571·556

TABLE XLV (3)—PROGRESS OF ELECTRICITY SUPPLY IN ASSAM

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	622	622	622	..	..
Oil	4,108	5,392	8,185	9,990	10,160
Hydro	550	8,950	9,270	9,270	9,270
Total ..	5,280	14,964	18,077	19,260	19,430
Output (in million kWh)—					
Steam .. .. .	..	..	..	..	..
Oil	8·372	6·752	10·465	13·117	15·336
Hydro	2·897	11·318	14·350	17·792	20·883
Total ..	11·269	18·070	24·815	30·909	36·216
Sales (Million kWh) within the State—					
Domestic light and small power ..	3·331	8·629	9·000	9·308	9·897
Commercial light and small power ..	3·689	2·642	3·549	5·677	4·212
Industrial Power	1·383	2·646	4·240	6·558	11·827
Public Lighting	0·740	1·701	1·996	2·325	2·699
Traction .. .. .	..	..	..	..	..
Irrigation .. .. .	..	0·070	..	..	..
Water Works	0·143	0·179	0·483	1·002	0·463
Total ..	9·286	15·867	19·268	24·870	29·098

TABLE XLV (4)—PROGRESS OF ELECTRICITY SUPPLY IN BIHAR

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	185,045	183,620	206,120	206,020	288,520
Oil	15,396	15,457	16,122	17,793	18,373
Hydro	4,000	4,000	4,000	44,000	44,000
Total ..	204,441	203,077	226,242	267,813	93
Output (In million kW)—					
Steam	580·118	1,010·555	1,206·419	1,260·206	1,408·554
Oil	20·964	31·952	42·321	44·183	44·624
Hydro	1·153	8·361	13·271	98·115	143·655
Total ..	603·235	1,050·868	1,262·011	1,402·504	1,596·833
Sales (Million kWh) within the State—					
Domestic light and small power ..	27·138	35·388	44·824	55·212	41·312
Commercial light and small power ..	13·296	13·728	19·645	23·108	29·830
Industrial Power	298·543	382·796	494·071	651·796	940·506
Public Lighting	1·937	2·642	3·462	4·216	3·647
Traction .. .. .	..	..	..	..	4·528
Irrigation	4·272	9·784	13·490	22·008	18·255
Water Works	8·126	11·277	12·468	14·479	12·238
Total ..	353·312	455·615	587·960	770·819	1,053·316

TABLE XLV (5)—PROGRESS OF ELECTRICITY SUPPLY IN GUJARAT

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	183,600	187,900	207,300	271,245	280,900
Oil	40,605	53,388	49,943	49,389	52,367
Hydro .. .. .	..	..	..	..	..
Total ..	224,205	241,288	257,243	320,634	333,267
Output (in million kWh)—					
Steam	739·372	853·393	934·055	1,025·339	1,209·144
Oil	51·577	56·255	61·743	65·417	62·083
Hydro .. .. .	..	..	..	..	..
Total ..	790·949	909·648	995·798	1,090·756	1,271·227
Sales (Million kWh) within the State—					
Domestic light and small power ..	46·726	55·084	57·485	63·803	71·573
Commercial light and small power ..	14·936	17·129	23·335	28·075	31·660
Industrial Power	590·402	668·115	717·244	770·368	805·961
Public Lighting	8·980	10·572	11·874	13·228	15·274
Traction .. .. .	..	..	..	..	..
Irrigation	6·060	14·553	17·929	27·241	19·610
Water Works	26·746	29·695	33·321	35·713	39·560
Total ..	693·850	795·148	861·191	938·428	983·638

TABLE XLV (6)—PROGRESS OF ELECTRICITY SUPPLY IN JAMMU AND KASHMIR

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	1,500	1,500	1,500	1,500	1,500
Oil	769	769	869	869	869
Hydro	10,606	10,602	10,612	10,612	10,612
Total	12,875	12,871	12,981	12,981	12,981
Output (in million kWh)—					
Steam	0.075	0.075	0.075	0.081	0.025
Oil	23.896	36.257	39.298	42.442	43.489
Hydro					
Total	23.971	36.332	39.373	42.523	43.514
Sales (Million kWh) within the State—					
Domestic light and small power ..	8.864	18.722	21.298	22.000	22.500
Commercial light and small power ..	0.176	0.248	0.282	1.000	1.000
Industrial Power	6.424	16.074	18.284	21.500	22.000
Public Lighting	0.566	0.822	0.935	1.300	1.300
Traction					
Irrigation	0.302	0.426	0.485	0.700	0.700
Water Works	2.086	2.942	3.347	3.500	3.500
Total	18.418	39.234	44.631	50.000	51.000

TABLE XLV(7)—PROGRESS OF ELECTRICITY SUPPLY IN KERALA

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	4,277	4,277	4,277	4,762	4,762
Oil	85,500	109,500	109,500	117,500	132,500
Hydro					
Total	89,777	113,777	113,777	122,262	137,262
Output (in million kWh)—					
Steam	0.132	0.170	0.202	0.106	
Oil	349.599	441.226	504.408	487.811	591.818
Hydro					
Total	349.731	441.396	504.610	487.917	591.818
Sales (Million kWh) within the State—					
Domestic light and small power ..	22.890	31.236	37.290	44.840	51.073
Commercial light and small power ..	2.291	4.426	3.544	4.319	3.851
Industrial Power	223.592	282.948	338.989	342.060	396.417
Public Lighting	2.722	4.253	5.819	7.439	8.358
Traction					
Irrigation	10.721	12.216	12.034	12.668	18.287
Water Works	7.001	7.305	6.660	7.730	7.844
Total	269.217	342.384	404.336	419.056	485.830

TABLE XLV (8)—PROGRESS OF ELECTRICITY SUPPLY IN MADHYA PRADESH

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	66,322	74,322	109,838	169,798	169,798
Oil	15,984	17,633	26,013	26,364	28,739
Hydro .. .. .	..	..	..	..	69,000
Total ..	82,306	91,955	135,851	196,162	267,537
Output (in million kWh)—					
Steam	150·070	166·640	234·506	331·519	429·677
Oil	19·271	20·852	39·884	22·604	24·049
Hydro .. .. .	..	..	..	..	23·240
Total ..	169·341	187·492	274·390	354·123	476·966
Sales (Million kWh) within the State—					
Domestic light and small power ..	25·208	27·761	39·393	38·145	45·397
Commercial light and small power ..	13·525	14·174	17·191	20·324	20·790
Industrial Power	77·280	104·196	156·149	207·171	301·267
Public Lighting	4·801	5·717	7·389	7·849	9·113
Traction .. .. .	..	..	..	..	..
Irrigation	0·698	0·886	2·391	2·323	3·890
Water Works	18·486	20·793	19·144	19·677	25·243
Total ..	139·996	173·527	241·657	295·489	405·700

TABLE XLV (9)—PROGRESS OF ELECTRICITY SUPPLY IN MADRAS

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	84,000	84,000	114,000	112,500	101,500
Oil	516	516	516	516	516
Hydro	165,150	165,150	235,150	290,150	415,450
Total ..	249,666	249,666	349,666	403,166	517,466
Output (in million kWh)—					
Steam	281·718	321·509	458·882	439·336	416·171
Oil .. .. .	..	0·075	0·170	0·206	..
Hydro	802·619	1,020·422	1,050·974	1,458·351	1,797·545
Total ..	1,084·337	1,342·006	1,510·026	1,897·893	2,213·716
Sales (Million kWh) within the State—					
Domestic light and small power ..	108·915	130·344	144·724	153·117	152·890
Commercial light and small power ..	90·398	72·965	75·730	98·262	156·712
Industrial Power	449·368	537·746	568·924	769·982	909·790
Public Lighting	20·774	25·692	26·594	31·027	33·920
Traction	12·628	15·947	14·415	14·849	15·000
Irrigation	138·300	230·266	295·429	357·525	382·403
Water Works	10·319	11·989	13·948	14·385	14·427
Total ..	830·702	1,024·949	1,139·764	1,439·147	1,665·143

TABLE XLV (10)—PROGRESS OF ELECTRICITY SUPPLY IN MAHARASHTRA

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed plant capacity (in kW)—					
Steam	225,110	295,750	299,750	322,405	443,250
Oil	27,917	27,174	33,218	35,202	34,363
Hydro	279,914	279,914	279,914	279,914	281,914
Total	532,941	602,838	612,882	637,521	759,527
Output (in million kWh)—					
Steam	742,343	1,142,059	1,227,693	1,425,261	1,834,760
Oil	38,879	39,780	51,849	54,583	68,171
Hydro	1,467,483	1,294,926	1,355,155	1,440,623	1,364,946
Total	2,248,705	2,476,765	2,634,697	2,920,467	3,267,877
Sales (Million kWh) within the States—					
Domestic light and small power	165,574	184,464	202,602	233,040	259,901
Commercial light and small power	131,301	151,643	170,068	178,405	198,230
Industrial Power	1,234,899	1,381,208	1,493,822	1,619,604	1,852,666
Public Lighting	14,503	15,829	16,728	18,351	19,883
Traction	344,463	354,743	356,834	335,633	338,927
Irrigation	5,129	11,444	8,434	8,105	14,759
Water Works	31,366	36,153	37,878	41,581	35,157
Total	1,927,235	2,135,484	2,286,366	2,434,719	2,719,523

TABLE XLV (11)—PROGRESS OF ELECTRICITY SUPPLY IN MYSORE

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam .. .. .	..	..	..	..	..
Oil	12,264	12,424	13,144	12,411	12,876
Hydro	178,200	178,200	178,200	178,200	178,200
Total	190,464	190,624	191,344	190,611	191,076
Output (in million kWh)—					
Steam .. .. .	..	..	..	..	..
Oil	16,449	17,279	14,514	16,963	19,242
Hydro	809,725	916,721	933,167	982,750	1,038,756
Total	826,174	934,000	947,681	999,713	1,057,998
Sales (Million kWh) within the State—					
Domestic light and small power	55,489	61,829	60,546	69,923	75,243
Commercial light and small power	17,785	19,277	27,465	21,203	21,299
Industrial Power	486,229	608,242	618,193	686,926	731,899
Public Lighting	13,838	14,759	14,747	17,326	18,880
Traction .. .. .	..	..	..	..	..
Irrigation	16,465	21,008	22,353	26,308	28,714
Water Works	42,574	64,434	51,928	55,609	58,915
Total	632,380	789,549	795,232	877,355	931,950

TABLE XLV (12)—PROGRESS OF ELECTRICITY SUPPLY IN ORISSA

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	5,776	5,776	5,776	5,776	5,776
Oil	3,991	4,060	5,145	7,101	7,468
Hydro	24,005	85,505	123,005	123,005	123,005
Total	33,772	95,341	134,226	135,882	136,249
Output (in million kWh)—					
Steam	17·617	19·495	0·441	1·125	..
Oil	3·517	3·724	4·239	6·998	5·902
Hydro	0·011	70·001	284·050	493·609	483·738
Total	21·145	93·220	288·730	501·732	489·640
Sales (Million kWh) within the State—					
Domestic Light and small Power ..	4·023	12·189	14·470	16·806	18·300
Commercial light and small power ..	1·938	4·992	6·271	7·229	7·870
Industrial Power	7·578	44·671	240·450	426·491	457·465
Public Lighting	0·614	0·714	0·894	1·193	1·487
Traction .. .. .	..	..	..	..	..
Irrigation .. .. .	..	..	..	0·672	0·752
Water Works	1·049	0·731	1·516	3·001	2·297
Total	15·202	63·297	263·601	455·482	488·171

TABLE XLV (13) — PROGRESS OF ELECTRICITY SUPPLY IN PUNJAB

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	7,826	7,826	7,826	7,276	7,876
Oil	20,647	20,705	20,705	18,015	16,725
Hydro	145,990	145,990	145,990	145,990	252,476
Total	174,463	174,521	174,521	171,281	277,077
Output (in million kWh)—					
Steam	6·769	7·858	10·447	8·939	6·658
Oil	8·359	6·431	3·778	3·555	8·093
Hydro	425,697	642·934	683·214	760·296	918·887
Total	440·825	657·223	697·439	772·790	1,003·638
Sales (Million kWh) within the State—					
Domestic light and small power ..	40·840	39·003	57·240	59·792	69·867
Commercial light and small power ..	34·819	43·203	50·734	56·344	61·397
Industrial Power	153·632	222·003	249·084	287·958	355·974
Public Lighting	5·755	7·483	8·339	7·937	9·092
Traction .. .. .	..	..	..	..	..
Irrigation	22·655	31·131	36·432	50·447	74·848
Water Works	8·729	8·933	7·053	9·256	9·121
Total	266·430	351·756	408·882	471·734	580·299

TABLE XLV (14)—PROGRESS OF ELECTRICITY SUPPLY IN RAJASTHAN

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	24,000	24,750	24,750	29,250	46,250
Oil	19,787	21,181	21,611	21,878	24,425
Hydro .. .. .	..	..	..	..	..
Total ..	43,787	45,931	46,361	51,128	70,675
Output (in Million kWh)—					
Steam	61,279	65,260	64,646	65,811	70,411
Oil	29,030	30,880	36,109	37,894	37,991
Hydro .. .. .	..	..	..	..	..
Total ..	90,309	96,140	99,755	103,705	108,402
Sales (Million kWh) within the State—					
Domestic light and small power ..	12,325	14,164	15,494	18,003	20,734
Commercial light and small power ..	11,115	11,519	13,176	13,561	15,858
Industrial Power	21,890	22,090	22,360	24,995	33,580
Public Lighting	2,987	3,814	3,547	4,073	5,200
Traction .. .. .	..	..	..	..	..
Irrigation	1,845	1,982	2,458	2,795	3,621
Water Works	14,450	15,393	15,904	16,872	19,537
Total ..	64,621	68,962	72,938	80,299	98,530

TABLE XLV (15)—PROGRESS OF ELECTRICITY SUPPLY IN UTTAR PRADESH

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	179,860	227,760	232,660	249,810	270,810
Oil	32,490	30,755	30,174	35,699	34,164
Hydro	96,390	96,390	96,390	92,490	92,470
Total ..	308,740	354,905	359,224	377,999	397,444
Output (in Million kWh)—					
Steam	490,829	526,510	603,632	729,432	786,262
Oil	20,343	28,051	18,283	26,029	26,092
Hydro	232,309	317,447	343,397	427,078	439,967
Total ..	743,481	872,008	965,312	1,182,539	1,252,321
Sales (Million kWh) within the State—					
Domestic light and small power ..	71,510	80,186	93,281	118,081	122,718
Commercial light and small power ..	59,317	63,739	56,345	80,252	74,736
Industrial Power	314,181	350,602	420,764	485,152	503,928
Public Lighting	8,384	9,749	11,538	13,223	13,848
Traction .. .. .	..	..	..	..	..
Irrigation	90,441	203,766	133,243	176,448	199,992
Water Works	42,145	45,194	51,415	58,112	60,481
Total ..	585,978	753,235	766,586	931,268	975,703

TABLE XLV (16)—PROGRESS OF ELECTRICITY SUPPLY IN WEST BENGAL

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	528,351	528,331	528,331	528,331	676,975
Oil	5,612	7,525	8,208	8,963	9,473
Hydro	4,760	27,208	67,208	67,208	67,208
Total ..	538,723	563,064	603,747	604,502	753,656
Output (in million kWh)—					
Steam	1,765·624	1,668·114	1,786·445	1,994·810	2,150·169
Oil	4·632	6·056	5·520	7·974	8·684
Hydro	8·335	22·495	125·937	240·178	159·886
Total ..	1,778·591	1,696·665	1,917·902	2,242·962	2,318·739
Sales (Million kWh) within the State—					
Domestic light & small power ..	253·402	280·864	304·440	326·242	353·517
Commercial light and small power ..	79·273	88·719	98·975	106·732	115·786
Industrial Power	1,291·502	1,364·255	1,530·996	1,702·812	1,808·128
Public Lighting	15·112	17·583	20·854	22·079	23·395
Traction	47·487	50·841	70·045	90·056	95·297
Irrigation	2·170	0·563	0·996	0·455	0·650
Water Works	65·594	75·811	88·979	94·493	95·993
Total ..	1,754·542	1,878·636	2,115·285	2,342·869	2,492·766

TABLE XLV (17)—PROGRESS OF ELECTRICITY SUPPLY IN DELHI TERRITORY

Item	1956	1957-58	1958-59	1959-60	1960-61
Installed capacity (in kW)—					
Steam	52,400	51,600	51,600	53,600	53,600
Oil	2,791	3,130	9,202	22,703	22,703
Hydro .. .. .	..	..	..	..	..
Total ..	55,191	54,730	60,802	76,303	76,303
Output (in Million kWh)—					
Steam	231·676	203·479	246·865	276·394	271·406
Oil	0·541	0·294	5·006	17·516	39·350
Hydro .. .. .	..	..	..	..	..
Total ..	232·217	203·773	251·871	293·910	310·756
Sales (Million kWh) within the State—					
Domestic light and small power ..	52·462	64·075	74·168	74·790	97·101
Commercial light and small power ..	37·629	58·480	70·083	71·460	72·582
Industrial Power	74·306	94·593	117·254	135·789	153·892
Public Lighting	6·491	7·141	5·878	8·111	10·937
Traction	0·347	0·363	0·255	0·056	0·171
Irrigation	4·928	5·636	6·033	7·618	5·007
Water Works	31·592	25·369	35·108	45·020	43·185
Total ..	227·755	265·637	308·759	342·844	382·875

TABLE XLV (18)—PROGRESS OF ELECTRICITY SUPPLY IN UNION TERRITORIES (EXCEPT DELHI)

Item	1956	1957-58	1958-59	1959-60	1961-62
Installed capacity (in kW)—					
Steam	6,000	6,000	6,000	6,000	6,000
Oil	1,258	1,258	1,824	1,653	1,964
Hydro	376	506	506	406	406
Total ..	7,634	7,764	8,330	8,059	8,370
Output (in million kWh)—					
Steam	6,308	5,773	5,576	3,584	3,361
Oil	1,554	1,553	1,613	2,867	2,930
Hydro	0,789	0,912	0,912	0,990	1,028
Total ..	8,651	8,238	8,101	7,441	7,319
Sales (Million kWh) within the State—					
Domestic light and small power ..	2,761	3,313	3,984	5,401	6,453
Commercial light and small power ..	0,553	0,567	1,098	1,219	1,601
Industrial Power	3,575	4,572	6,045	8,403	15,783
Public Lighting	0,531	0,600	1,035	1,275	1,345
Traction .. .. .	..	..	..	..	..
Irrigation	1,734	2,971	3,848	5,255	6,606
Water works	0,251	0,367	0,676	0,651	0,830
Total ..	9,405	12,390	16,686	22,204	32,618

The Index numbers of the salient features of the electricity supply industry are given in table XLVI.

TABLE XLVI—INDEX NUMBERS OF ELECTRICITY SUPPLY IN THE COUNTRY 1951 AS BASE YEAR

	1951	1957-58	1958-59	1959-60	1960-61
Installed generating plant capacity—					
(a) Steam Plant	100	160.6	171.2	186.5	222.0
(b) Oil Plant	100	151.2	166.1	182.0	184.5
(c) Hydro Plant	100	211.1	236.8	266.0	320.3
Total ..	100	175.6	191.3	211.0	249.5
kWh generated—					
(a) Steam Plant	100	217.4	246.0	276.3	314.2
(b) Oil Plant	100	115.8	135.7	148.8	167.0
(c) Hydro Plant	100	177.4	204.5	245.7	274.1
Total ..	100	194.1	221.8	255.9	289.1
Coal consumption					
Coal consumption	100	182.5	206.6	232.4	270.3
Fuel oil consumption	100	110.3	124.0	136.5	153.1
Aggregate maximum demand ..	100	189.1	211.0	243.2	294.2
kWh sold—					
Domestic light and small power ..	100	184.0	207.4	229.4	250.8
Commercial light and small power ..	100	184.4	204.8	230.1	255.7
Industrial	100	201.9	234.9	276.2	317.4
Traction	100	128.0	134.0	133.7	137.7
Irrigation	100	278.7	316.9	392.7	410.2
Public Lighting	100	208.2	228.3	261.9	284.5
Water Works	100	172.8	184.1	203.2	206.2
Total ..	100	196.7	223.6	258.2	291.1

SECTION 4
POWER GENERATED AND USED IN SELECTED INDUSTRIES

1·0 ELECTRICITY PRODUCTION AND CONSUMPTION IN SELECTED MAJOR INDUSTRIAL ESTABLISHMENTS

The data in respect of generating plant capacity, maximum demand, energy generated and purchased relating to certain selected industries during 1960-61 is given in Table XLVII.

TABLE XLVII—ELECTRICITY PRODUCTION AND CONSUMPTION IN SELECTED INDUSTRIES DURING THE YEAR 1960-61

Serial No.	Name of Industry	Total number of factories covered	Installed generating plant capacity as on 31-3-61	Aggregate Maximum Demand (kW)		Kilowatt-Hours (Millions)				Annual load factor
				Generated in own power stations	Purchased from public utility electricity undertakings	Generated in own power stations	Purchased from public utility electricity undertakings	Used in industry	Sold to outside agencies	
1	Aluminium (Primary).	5	10,734	10,212	40,385	75·351	344·599	419·863	0·087	94·7
2	Aluminium (Secondary).	9	173	89	5,446	0·190	27·855	28·045	..	57·8
3	Cement (Primary)	27	129,239	86,624	78,072	501·460	422·752	917·084	7·128	64·1
4	Cement (Secondary).	23	705	346	4,656	0·287	19·019	19·300	0·006	44·1
5	Chemicals ..	34	95,193	58,276	45,722	308·380	248·211	404·259	152·332	61·1
6	Collieries ..	143	60,185	30,010	68,459	153·666	262·043	410·201	5·508	48·2
7	Copper (Primary)	1	9,025	2,617	6,433	9·452	29·278	38·730	..	48·9
8	Copper (Secondary).	1	..	..	760	..	1·942	1·942	..	29·2
9	Cotton Textiles	337	121,402	70,550	366,069	308·640	1,789·081	2,087·835	9·886	54·8
10	Ferromanganese	5	32	..	52,235	..	190·277	190·277	..	41·6
11	Fertilizers ..	4	80,560	64,870	26,220	394·316	95·907	477·196	13·027	61·4
12	Gold ..	1	4,700	26	19,320	0·118	113·036	113·154	..	66·8
13	Iron and Steel (Primary).	6	298,198	168,533	171,932	905·877	765·453	1,468·370	202·760	56·0
14	Iron and Steel (Secondary).	43	1,715	552	34,387	0·369	145·301	145·123	0·547	47·6
15	Tanneries ..	10	747	334	4,609	0·474	16·875	16·649	0·700	40·1
16	Jute ..	81	25,645	13,347	115,968	70·873	510·530	590·089	1·314	51·3
17	Paper ..	24	70,028	45,719	44,584	297·886	243·390	508·252	33·024	68·9
18	Petroleum ..	4	3,206	2,170	9,672	13·462	58·611	71·814	0·259	69·5
19	Silk ..	22	1,480	1,300	30,447	6·875	132·196	139·071	..	50·0
20	Soap ..	8	366	550	4,428	0·084	25·486	25·570	..	68·6
21	Sugar ..	99	84,088	58,370	10,882	135·044	20·257	154·433	0·868	25·6
22	Woollen ..	11	3,950	1,799	10,399	3·500	37·351	40·823	0·028	38·2
	Total ..	898	1,001,372	616,294	1,151,085	3,186·104	6,499·450	8,258·080	427·474	56·1

Among the 898 industrial undertakings, 320 undertakings supplemented their power requirements by 3,186 million kWh from their own generating plants.

The total amount of electricity purchased by all the industrial establishments from the Electric Utilities during the year was about 9,545 million kWh of which 5,499 million kWh was accounted for by only the large and medium size industrial establishments included in the tables. The industries consumed 8,258 million kWh of power of which 67 per cent was purchased from different electric utilities in the country. The total energy used by these industries increased by 11 per cent as compared with the previous year. The plant capacity owned by the industries increased during 1960-61 by 6.7 per cent.

The textile, Iron and Steel and Jute industries continued to be the largest purchasers of electricity from public electric supply undertakings. The cement (Primary) Iron (Primary) Fertilizers paper and sugar industries, however, generated the major portion of their requirements in their own power stations.

The table XLVIII gives the electricity production and consumption in selected major industries during 1960-61 in various States of the Indian Union.

TABLE XLVIII—ELECTRICITY PRODUCTION AND CONSUMPTION IN SELECTED INDUSTRIES ON STATEWISE BASIS DURING THE YEAR 1960-61

Serial No.	State and Union Territory	Total number of factories covered	Installed generating plant capacity as on 31-3-1961	Aggregate Maximum Demand (kW)		Kilowatt-Hours (Millions)			
				Generated in own power stations	Purchased from public utility electricity undertakings	Generated in own power stations	Purchased from public utility electricity undertakings	Used in industry	Sold to outside agencies
1	Andhra Pradesh ..	22	41,755	26,294	53,876	151.412	164.395	282.052	33.755
2	Assam	1	3,131	2,170	..	13.462	..	13.203	0.259
3	Bihar	99	233,453	179,788	130,701	1,048.704	650.114	1,521.453	177.365
4	Gujarat	109	39,560	22,379	129,062	89.975	517.571	606.946	0.600
5	Jammu & Kashmir ..	1	..	..	25	..	0.040	0.040	..
6	Kerala	12	1,573	642	49,568	0.570	267.578	268.148	..
7	Madhya Pradesh ..	46	72,236	50,306	68,303	237.740	225.344	454.364	8.720
8	Madras	79	23,000	12,952	72,931	29.902	380.515	410.417	..
9	Maharashtra	143	67,314	38,196	199,191	156.708	1,080.117	1,234.668	2.152
10	Mysore	32	25,855	22,981	106,125	107.381	510.984	617.401	0.964
11	Orissa	10	93,368	56,156	60,159	301.690	396.281	658.120	39.851
12	Punjab	15	24,798	13,997	14,270	77.229	71.871	149.100	..
13	Rajasthan	20	37,331	24,072	1,741	134.359	5.717	139.824	0.252
14	Uttar Pradesh	83	62,135	37,623	40,213	138.020	175.244	313.132	0.132
15	West Bengal	218	195,832	111,205	219,904	597.802	1,032.287	1,466.665	163.424
16	Union Territories—								
	(a) Delhi	7	29,459	17,003	3,341	99.422	16.352	115.774	..
	(b) Rest	1	572	530	1,675	1.733	5.040	6.773	..
	Total	898	1,001,372	616,294	1,151,085	3,186.104	5,499.450	8,258.080	427.474

*The break-up by type of plant is steam 954,248 Hydro 2,720 and Oil 44,404.

2·0 ANALYSIS OF GENERATING PLANT CAPACITY OF MAJOR INDUSTRIAL ESTABLISHMENTS

The table XLIX gives the distribution of Plant capacity in the various industrial power stations.

TABLE XLIX—ANALYSIS OF GENERATING PLANT CAPACITY OF MAJOR INDUSTRIAL ESTABLISHMENTS FOR THE YEAR 1960-61

Installed generating plant capacity	Number of industrial establishments	Aggregate installed capacity	Percentage of total capacity	kWh generated	Percentage of total kWh
kW		kW	%	(Millions)	%
Under 1,000	201	61,719	6·2	121·017	3·8
1,001—5,000	82	191,374	19·1	447·567	14·1
5,001—10,000	17	136,396	13·6	434·120	13·6
10,001—25,000	15	213,015	21·3	777·831	24·4
Over 25,000	5	398,868	39·8	1,405·569	44·1
Total ..	320	1,001,372	100·0	3,186·104	100·00

The table L gives further break-up of the installed capacity of generating plant

TABLE L—INSTALLED GENERATING PLANT CAPACITY OF SELECTED MAJOR

Serial No.	State and Union Territory	Aluminium (Primary)	Aluminium (Secondary)	Cement (Primary)	Cement (Secondary)	Chemicals	Collieries	Copper (Primary)	Copper (Secondary)
1	Andhra Pradesh ..	..	..	..	..	..	17,700	..	..
2	Assam ..	..	..	..	..	..	..	..	..
3	Bihar ..	2,634	173	37,200	..	..	22,675	9,025	..
4	Gujarat ..	..	..	17,874	..	968	..	..	..
5	Jammu & Kashmir ..	..	..	..	..	..	..	..	..
6	Kerala ..	..	..	..	..	..	..	..	..
7	Madhya Pradesh ..	..	..	17,850	..	..	14,250	..	..
8	Madras ..	..	..	2,295	..	..	..	..	..
9	Maharashtra ..	..	..	380	150	13,791	..	..	..
10	Mysore ..	..	..	10,000	..	..	..	..	..
11	Orissa ..	..	..	50	..	..	3,000	..	..
12	Punjab ..	..	..	9,300	..	..	..	..	..
13	Rajasthan ..	..	..	27,090	255	..	..	..	..
14	Uttar Pradesh ..	..	..	7,200	..	5,000	..	..	..
15	West Bengal ..	8,100	..	..	300	60,000	2,560	..	..
16	<i>Union Territories—</i>								
	(a) Delhi ..	..	..	..	..	15,435	..	..	..
	(b) Rest ..	..	..	..	..	..	..	..	..
	Total ..	10,734	173	129,239	705	95,194	60,185	9,025	..

industrial establishments, Statewise and classified by type of Industry.

INDUSTRIES STATE AND CLASSIFIED BY TYPE OF INDUSTRY AS ON 31-3-1961.

(IN kW)

Cotton Tex- tiles	Fertili- zers	Gold	Iron and Steel (Pri- mary)	Iron and Steel (Secund- ary)	Jute	Paper	Silk	Soap	Sugar	Tan- neries	Wool	Oil	Ferro- man- ga- nese	Total
2,950	18,430	..	..	2,600	..	..	75	..	41,755
..	3,131	..	3,131
..	80,400	..	120,500	..	3,180	..	..	..	7,666	..	..	..	..	283,453
20,718	39,560
..
1,093	280	..	200	..	..	..	..	..	1,573
14,606	24,000	..	..	580	..	..	950	..	..	..	..	72,236
16,443	3,965	297	..	..	..	23,000
25,410	1,365	..	..	1,480	166	24,572	..	..	..	..	67,314
7,943	..	4,700	..	30	..	..	..	..	3,150	..	..	..	32	25,855
1,600	77,968	..	..	10,750	..	..	..	..	..	..	..	93,368
2,515	9,750	..	..	1,733	..	1,500	..	..	24,798
8,762	160	..	180	..	..	..	..	..	884	..	..	..	..	37,331
4,551	320	780	3,338	..	..	38,046	450	2,450	..	..	62,135
215	75,550	..	21,685	26,900	..	..	522	..	..	..	..	195,832
14,024	29,459
572	572
121,402	80,560	4,700	298,198	1,715	25,645	70,028	1,480	366	84,088	747	3,950	3,206	32	1,001,372

The table LI shows the consumption of energy in selected major industries in several states during the period 1st April, 1960 to 31st March, 1961.

TABLE LI—ENERGY CONSUMED IN SELECTED MAJOR INDUSTRIES STATEWISE AND BY TYPE OF INDUSTRY DURING 1960-61 (Millions)

Serial No.	State and Union Territory	Aluminium (Primary)	Aluminium (Secondary)	Cement (Primary)	Cement (Secondary)	Chemicals	Collieries	Copper (Primary)
1	Andhra Pradesh .. ..	..	..	47·728	..	..	59·432	..
2	Assam .. ..	..	..	..	..	..	..	..
3	Bihar	8·831	0·162	257·026	1·271	2·375	182·100	38·730
4	Gujarat .. ..	..	..	91·051	0·180	13·562	..	..
5	Jammu & Kashmir .. ..	..	..	..	..	..	..	..
6	Kerala	127·879	2·880	8·131	..	43·441	..	..
7	Madhya Pradesh .. ..	..	0·044	61·816	4·796	..	36·035	..
8	Madras .. ..	..	..	118·844	..	28·882	..	..
9	Maharashtra .. ..	..	0·966	0·969	5·221	100·236	1·846	..
10	Mysore .. ..	..	..	61·677	0·018	0·676	..	..
11	Orissa	216·720	3·681	36·870	..	..	5·981	..
12	Punjab .. ..	..	..	76·956	..	..	..	..
13	Rajasthan .. ..	..	0·036	122·193	0·235	..	..	..
14	Uttar Pradesh .. ..	..	..	33·823	..	29·010	..	..
15	West Bengal	66·433	20·276	..	7·445	133·203	124·807	..
16	Union Territories—							
	(a) Delhi .. ..	..	..	..	0·134	52·874	..	..
	(b) Rest .. ..	..	..	..	..	..	..	..
	Total	419·863	28·045	917·084	19·300	404·259	410·201	38·730

TABLE LI—ENERGY CONSUMED IN SELECTED MAJOR INDUSTRIES STATEWISE AND BY TYPE OF INDUSTRY DURING 1960-61—*contd.* (Millions)

Serial No.	State and Union Territory	Copper (Secondary)	Cotton Textiles	Ferromanganese	Fertilizers	Gold	Iron and Steel (Primary)	Iron and Steel (Secondary)	Jute
1	Andhra Pradesh ..	..	16·447	19·905	..	..	..	..	13·276
2	Assam ..	..	..	..	..	..	..	..	..
3	Bihar ..	..	1·181	..	381·195	..	578·528	41·491	12·437
4	Gujarat ..	..	490·562	..	..	..	..	..	..
5	Jammu & Kashmir ..	..	..	..	..	..	..	..	..
6	Kerala ..	..	8·778	..	67·947	..	..	..	..
7	Madhya Pradesh ..	..	93·518	..	..	..	199·980	..	..
8	Madras ..	..	245·851	..	..	..	..	3·964	..
9	Maharashtra ..	1·942	820·216	43·873	..	..	..	28·364	..
10	Mysore ..	..	51·595	18·649	27·907	113·154	258·699	2·357	..
11	Orissa ..	..	10·866	107·850	..	..	175·407	..	..
12	Punjab ..	..	26·672	..	..	..	..	..	..
13	Rajasthan ..	..	16·338	..	0·147	..	..	0·177	..
14	Uttar Pradesh ..	..	141·691	..	..	..	..	9·544	10·900
15	West Bengal ..	..	94·604	..	..	..	255·756	59·226	543·476
16	<i>Union Territories—</i>								
	(a) Delhi ..	..	62·744	..	..	..	..	..	..
	(b) Rest ..	..	6·773	..	..	..	..	..	..
	Total ..	1·942	2,087·835	190·277	477·196	113·154	1,468·370	145·123	580·089

TABLE LI—ENERGY CONSUMED IN SELECTED MAJOR INDUSTRIES STATEWISE AND BY TYPE OF INDUSTRY DURING 1960-61—concl'd. (Millions)

Serial No.	State and Union Territory	Paper	Petroleum	Silk	Soap	Sugar	Tanne-ries	Wool	Total
1	Andhra Pradesh ..	71·218	15·855	26·974	..	11·217	..	..	282·052
2	Assam .. ..	..	13·202	..	..	..	..	..	13·203
3	Bihar .. ..	..	..	..	..	16·126	..	..	1,521·453
4	Gujarat	5·342	..	4·096	..	..	..	2·153	606·946
5	Jammu & Kashmir ..	..	..	0·040	..	..	..	..	0·040
6	Kerala	9·092	..	..	..	..	..	..	268·148
7	Madhya Pradesh ..	56·223	..	..	..	1·952	..	..	454·364
8	Madras .. ..	..	..	..	..	12·150	0·726	..	410·417
9	Maharashtra ..	21·515	41·665	103·209	21·809	33·325	..	9·512	1,234·668
10	Mysore	54·683	..	0·977	0·159	7·384	0·111	19·355	617·401
11	Orissa	100·746	..	..	..	..	..	..	658·120
12	Punjab	34·466	..	1·620	..	4·219	..	5·167	149·100
13	Rajasthan ..	..	..	..	..	0·698	..	..	139·824
14	Uttar Pradesh ..	16·105	..	..	..	65·513	2·527	4·019	313·132
15	West Bengal ..	138·862	1·091	2·133	3·602	1·849	13·285	0·617	1,466·665
16	<i>Union Territories—</i>								
	(a) Delhi ..	..	..	0·022	..	..	..	..	115·774
	(b) Rest ..	..	..	..	..	..	..	..	6·773
	Total ..	508·252	71·814	139·071	25·570	154·433	16·649	40·823	8,258·080

SECTION 5
ELECTRICAL ACCIDENTS

ELECTRICAL ACCIDENTS IN THE ELECTRICITY SUPPLY AND INDUSTRIAL UNDERTAKINGS

Table LII gives the fatal and non-fatal electrical accidents state wise in electricity supply and industrial undertakings.

TABLE LII—STATEMENT SHOWING THE NUMBER OF FATAL AND NON-FATAL ELECTRICAL ACCIDENTS DURING THE YEAR 1960-61—STATEWISE.

Serial No.	State and Union Territory	Generating and Sub-stations				Transmission				Distribution				Total	
		Electric Supply undertakings		Industrial undertakings		Electric Supply undertakings		Industrial undertakings		Electric Supply undertakings		Industrial undertakings			
		Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal
1	Andhra Pradesh.	1	2	..	..	28	30	..	..	44	41	..	..	73	73
2	Assam ..	..	..	..	..	..	1	..	..	4	1	..	..	4	2
3	Bihar ..	..	11	..	4	17	5	..	..	17	..	3	47	37	67
4	Gujarat ..	1	1	..	2	1	..	..	..	11	15	2	4	15	22
5	Jammu and Kashmir.	Not Available													
6	Kerala ..	..	..	..	..	12	14	..	..	34	27	1	..	47	41
7	Madhya Pradesh.	..	..	..	..	..	..	..	..	32	43	9	8	41	51
8	Madras ..	6	8	..	..	24	52	..	..	71	89	2	3	103	152
9	Maharashtra	1	2	..	..	3	4	..	..	35	35	51	9	90	50
10	Mysore ..	4	5	..	..	21	15	..	..	23	17	..	..	48	37
11	Orissa ..	..	..	..	..	..	1	..	..	4	9	..	..	4	10
12	Punjab ..	4	11	..	..	16	3	..	..	56	44	..	..	76	58
13	Rajasthan	..	..	..	..	..	..	..	..	8	13	..	5	8	18
14	Uttar Pradesh.	4	11	..	1	24	12	..	4	53	33	5	5	86	66
15	West Bengal	..	..	..	..	10	4	..	..	27	3	7	2	44	9
16	Union Territories	3	15	..	..	6	6	..	..	10	6	2	..	21	27
	Mines	..	..	..	..	..	..	..	..	5	3	..	..	5	3
	Railways	..	4	..	..	3	5	..	..	5	20	..	..	8	29
	GRAND TOTAL	24	70	..	7	165	152	..	4	439	399	82	83	710	715

SECTION 6
FINANCIAL DATA OF PUBLIC ELECTRICITY
SUPPLY UNDERTAKINGS

STATEMENT OF CAPITAL OUTLAY (i.e.) ORIGINAL COST OF PLANT, EQUIPMENT ETC. ON ELECTRICITY SUPPLY SYSTEMS AND UNDERTAKINGS OWNED AND OPERATED BY STATE GOVERNMENT DEPARTMENTS, STATE ELECTRICITY BOARDS, POWER CORPORATION AND LOCAL AUTHORITIES IN THE PUBLIC SECTOR AND COMPANIES, PARTNERSHIPS ETC. IN THE PRIVATE SECTOR AS ON THE 31ST MARCH, 1960 GROUPED STATE WISE.

TABLE LIII—CAPITAL EXPENDITURE

(Figures represent Rs. in lakhs)

Serial No.	States and Union Territory	State owned				Private		Total	
		Government and Boards		Municipalities		Companies		1958-59	1959-60
		1958-59	1959-60	1958-59	1959-60	1958-59	1959-60		
1	Andhra Pradesh ..	6,355	6,864	12	13	24	24	6,391	6,901
2	Assam	358	368	..	..	67	70	425	438
3	Bihar	1,760	2,265	..	..	385	414	2,145	2,679
4	Gujarat	3,091*	2,068	2,414*	85	6,467*	2,073	11,972*	4,226
5	Jammu & Kashmir	422	573	..	..	..	..	422	573
6	Kerala	2,801	3,127	17	20	77	84	2,895	3,231
7	Madhya Pradesh ..	1,487	2,318	2	..	200	213	1,689	2,531
8	Madras	8,309	9,281	99	103	429	459	8,837	9,843
9	Maharashtra ..	..	1,588	..	2,470	..	4,582	..	8,640
10	Mysore	3,650	3,722	1	..	92	96	3,743	3,818
11	Orissa	1,048	1,109	..	..	67	70	1,115	1,179
12	Punjab	6,005†	5,763	95	92	103	134	6,203	5,989
13	Rajasthan	299	310	..	..	137	140	436	450
14	Uttar Pradesh ..	6,581	7,008	176	182	1,120	1,151	7,877	8,341
15	West Bengal ..	656	740	19	19	5,023	5,173	5,698	5,932
16	Damodar Valley Corporation	4,213	5,097	..	..	..	..	4,213	5,097
17	Union Territories—								
	(a) Delhi ..	..	..	1,293	1,312	11	11	1,304	1,323
	(b) Rest ..	118	129	..	..	3	3	121	132
	Total ..	47,153	52,330	4,128	4,296	14,205	14,697	65,486	71,323

*Figures are for Bombay State, now bifurcated into Gujarat and Maharashtra.

†Including Capital Works-in-Progress.

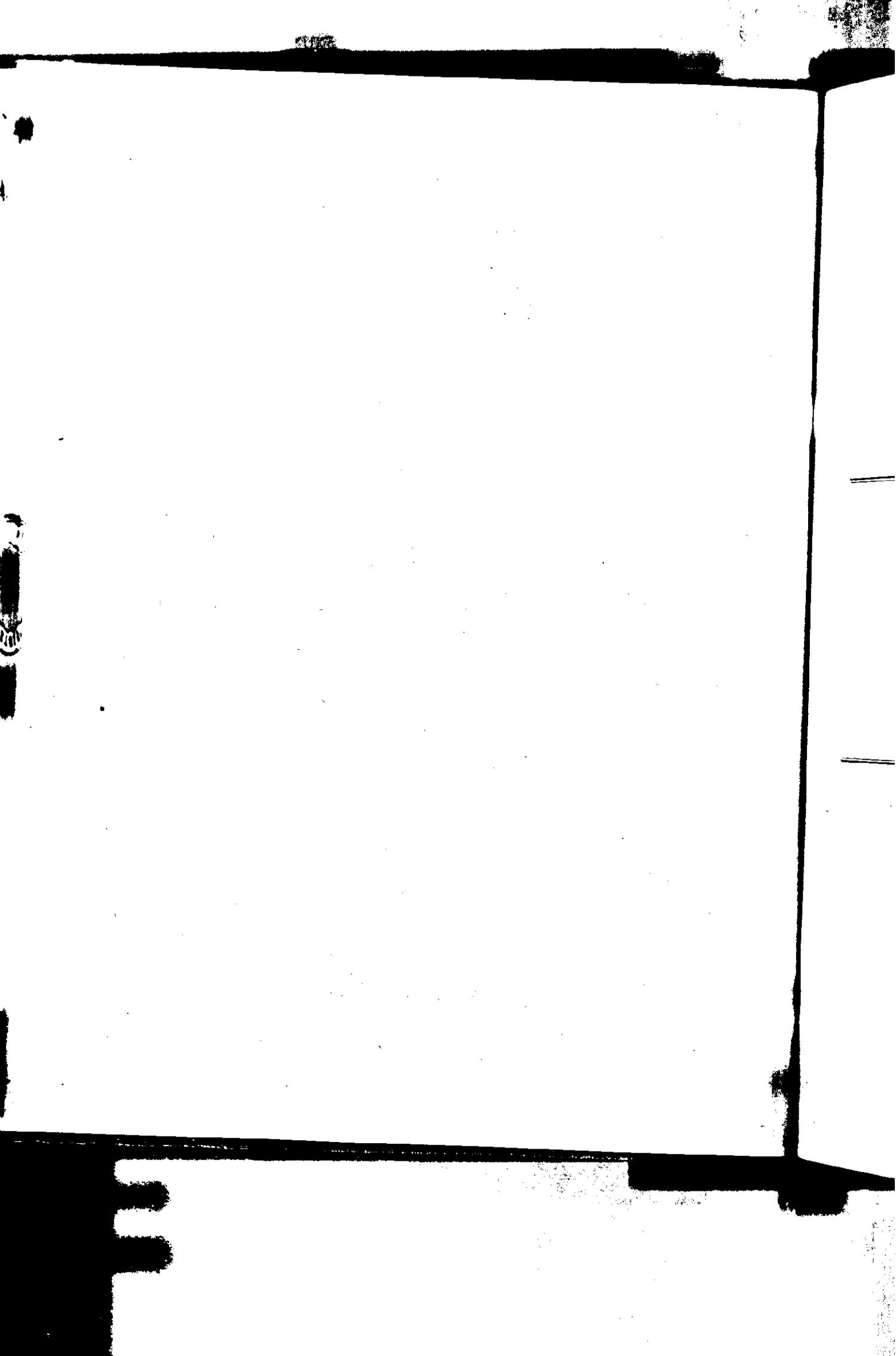


TABLE LIV

(a)—Consolidated Capital Account, 1959-60

(b)—Consolidated Revenue Account, 1959-60

(c)—Consolidated Net Revenue and Appropriation Account, 1959-60

(d)—Consolidated Balance Sheet, 1959-60

PUBLIC ELECTRICITY SUPPLY INDUSTRY—CONSOLIDATED
TABLE LIV (a)—CAPITAL

1958-59			Government and Boards	Municipalities	Companies	Total
		1. TO GENERATION ASSETS—				
		(a) Steam Power Stations—				
G	8,457	(i) Land	313	5	78	396
M	345	(ii) Buildings	791	7	699	1,497
C	4,447	(iii) Boilers, Turbines etc.	8,271	333	3,556	12,160
		(iv) Other equipments	11	..	82	93
	13,249	Group Total	9,386	345	4,415	14,146
		(b) Oil Power Stations—				
G	1,488	(i) Land	21	1	8	30
M	170	(ii) Buildings	169	7	66	242
C	501	(iii) Engines, generators etc.	1,461	162	478	2,101
		(iv) Other equipments .. .. .	..	..	1	1
	2,159	Group Total	1,651	170	553	2,374
		(c) Hydro Power Stations—				
G	14,875	(i) Land	354	1	72	427
M	64	(ii) Buildings	459	4	81	544
C	1,425	(iii) Hydraulic Power Plant	9,068	30	294	9,392
		(iv) Civil Works	6,627	29	996	7,652
	16,364	Group Total	16,508	64	1,443	18,015
	31,772	Sub Total (Generation Assets)	27,545	579	6,411	34,535
G	5,530	2. TO TRANSMISSION ASSETS	6,137	10	1,477	7,624
M	9					
C	1,453					
		3. TO DISTRIBUTION ASSETS—				
G	14,371	(a) Cables and Mains	9,260	1,015	2,701	12,976
M	2,061	(b) Sub-Stations, Transformers	3,201	439	1,202	4,842
C	5,729	(c) Service Lines	1,359	330	1,254	2,943
		(d) Public Lighting	556	44	201	801
		(e) Meters, testing instruments etc.	1,573	341	789	2,703
	22,161	Group Total	15,949	2,169	6,147	24,265
		4. TO GENERAL ASSETS—				
G	1,801	(a) Special structures tools etc.	1,110	184	273	1,567
M	250	(b) Office equipment, furniture etc.	597	52	175	824
C	501	(c) Motor cars, Vans, Cycles etc.	292	15	76	383
	2,552	Group Total	1,999	251	524	2,774
		5. INTANGIBLE ASSETS—				
G	631	(a) Good will .. .. .	..	..	10	10
M	1	(b) Preliminary expenses	226	1	41	268
C	149	(c) Expenses capitalised	474	..	87	561
	781	Group Total	700	1	138	839
		6. TO SPECIAL ITEMS—				
M	1,228	(Tramways in the case of Bombay) .. .. .	..	1,286	..	1,286
	1,228	Group Total .. .. .	..	1,286	..	1,286
G	47,153	Total carried to General Balance Sheet	52,330	4,296	14,697	71,323
M	4,128					
C	14,205					
	65,486					

G—Government. M—Municipalities. C—Companies.

ANNUAL ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 1960

ACCOUNT—1959-60

(Figures represent Rs. in lakhs)

1958-59			Go. ern- ment and Boards	Municipali- ties	Companies	Total
		1 BY CAPITAL RAISED—				
		(a) Invested by States—				
G	49,568	(i) Government undertakings	52,626	..		
M	2,443	(ii) Municipal undertakings .. ..	..	2,443		
		(iii) Other grants and advances	2,384	..		
	52,011	Group Total ..	55,010	2,443		57,453
		(b) Invested by Private Sector—				
		(i) Ordinary Share Capital, (including Proprie- tors Capital).	..	..	3,023	
O	3,913	(ii) Preference Share Capital .. ..	..	..	677	
P	666	(iii) Debenture and other Secured Loan Capital	..	..	2,733	
D	2,471					7,333
	7,050					
G	483					
M	..					
C	165	2 BY CAPITAL RESERVE	536	..	172	708
	648					
G	135	3 BY CONSUMERS CONTRIBUTION FOR	150	136	758	1,044
M	129	SERVICE LINE3.				
C	708					
	972					
	60,681		5,696	2,579	8,263	66,538

TABLE LIV(b)—

1958-59			Government and Boards	Municipalities	Companies	Total	
		TO OPERATING EXPENSES—					
		1. Generation—					
G	915						
M	87						
C	920	1,922	(a) (i) Coal	1,084	87	1,016	2,187
G	105						
M	17		(ii) Oil	124	18	154	296
C	130	252					
G	49		(iii) Consumable stores	58	4	26	88
M	2						
C	25	76	(b) Salaries and Wages	346	16	137	499
G	202						
M	16		(c) Repairs and Maintenance	357	6	147	510
C	133	441	(d) Purchase of Energy—				
G	301		(i) From other utilities	267	431	774	1,472
M	6		(ii) From non-utilities	21	..	4	25
C	128	435	2. Transmission—				
G	225		(a) Salaries and Wages	49	2	20	71
M	377		(b) Repairs and maintenance	28	1	12	41
C	711	1,313	3. Distribution—				
G	18		(a) Salaries and Wages	327	55	187	569
C	4	22	(b) Repairs and maintenance	256	29	112	397
G	41		(c) Public Lighting (attendance repairs and renewals).	41	10	31	82
M	2		4. Consumers servicing—				
C	20	63	(a) Salaries and Wages (billing accounting etc.)	205	36	143	384
G	24		(b) Other Expenses	43	27	79	149
C	9	33	5. Management Expenses	352	111	348	811
G	276		6. Depreciation	1,133	74	405	1,612
M	52						
C	172	500	Total operating expenses	4,691	907	3,595	9,193
G	216		To balance carried over	1,876	286	973	3,135
M	81						
C	103	350					
G	35						
M	10						
C	28	73					
G	173						
M	36						
C	137	346					
G	36						
M	33						
C	82	151					
G	297						
M	112						
C	318	727					
G	992						
M	69						
C	411	1,472					
G	3,995						
M	850						
C	3,331	8,176					
G	1,395						
M	278						
C	816	2,489					
G	5,390						
M	1,128						
O	4,147	10,665	Total	6,567	1,193	4,568	12,328

REVENUE ACCOUNT—1959-60

(Figures represent Rs. in lakhs)

1958-59				Government & Boards	Municipalities	Companies	Total
BY OPERATING REVENUES--							
1. Sale of Electricity--							
G	1,602						
M	574						
C	1,238	3,414	(i) Domestic and Commercial	1,952	600	1,355	3,916
G	2,107						
M	352						
C	2,231	4,690	(ii) Industrial	2,567	383	2,454	5,404
G	324						
M	10						
C	22	356	(iii) Irrigation	395	7	32	434
G	189						
M	34						
C	88	311	(iv) Public lighting	230	25	93	348
G	806						
M	90						
C	442	1,338	(v) Distributing Licensees	982	94	471	1,547
G	70						
M	30						
C	54	154	2. Meter and other rentals	85	32	58	175
G	3						
M	1						
C	11	15	3. Income from public lighting maintenance ..	4	1	15	20
G	289						
M	37						
C	61	387	4. Miscellaneous receipts	352	42	90	484
G	5,390						
M	1,128						
C	4,147	10,665		6,567	1,193	4,568	12,328

TABLE LIV(c)—NET REVENUE AND

1958-59			Government & Boards	Municipalities	Companies	Total
		To appropriations (Applicable to local authority licensees only)—				
	67	(a) Interest on loan capital .. .. .	..	75	..	75
	38	(b) Instalment of redemption of loan capital ..	..	35	..	35
	34	(c) General Rates .. .. .	..	11	..	11
G	8					
M	2					
C	146	156 To Taxes on income and Profits	9	4	194	207
C	11	11 To instalment of Write Down in respect of intangible assets.	..	4	8	12
M	3					
C	47	50 To contribution towards contingencies reserve ..	..	4	41	45
		To development reserve .. .. .	..	29	53	82
M	2					
C	8	10 To appropriation to tariffs and dividends Control Reserve.	..	..	6	6
M	2					
C	9	11 To appropriation to consumers Rebate Reserve ..	..	5	58	63
G	260					
M	120					
C	211	591 To other appropriations	309	74	193	576
		To appropriations towards interest paid and accrued and Dividends paid and payable—				
G	1,845					
C	114	1,959 (a) Interest on debentures and other secured loans	2,228	..	124	2,352
M	2					
C	11	13 (b) Interest on consumers security deposits ..	..	1	13	14
C	24	24 (c) Interest on Unsecured loans, advances, deposits, bank over-drafts etc.	..	..	25	25
C	38	38 (d) Dividends on preference Share Capital ..	..	..	37	37
C	274	274 (e) Dividends on Ordinary Share Capital ..	..	..	295	295
G	506	506 To Balance of loss carried over from previous year.	1,079	..	..	1,079
M	63					
C	5	68 To Balance carried over to General Balance Sheet	..	74	22	96
G	2,619					
M	333					
C	898	3,850	3,625	316	1,069	5,010

APPROPRIATION ACCOUNT—1959-60

(Figures represent Rs. in lakhs)

1958-59				Government and Boards	Municipalities	Companies	Total
G	1,395		By balance brought forward from the Revenue Account.	1,878	286	973	3,135
M	278						
C	816	2,489					
G	40		By interest on securities and investments ..	49	9	19	
M	16						
C	16	72					
G	105		By other receipts (non-operating), e.g., Rents less out-goings not otherwise provided for transfer fee etc.	128	2	63	191
M	1						
C	55	161					
M	(—) 26	(—) 26	By deficit on incidental business (tramways and omnibuses of Bombay Municipality).	..	(—)46	..	(—)46
M	64		By balance of profit carried over from previous year.	..	65	14	79
C	11	75					
G	1,079	1,079	By balance carried over to General Balance Sheet ..	1,572	..	..	1,572
G	2,619	2,619		3,625	316	1,069	5,010
M	333	333					
C	898	3,850					

TABLE LIV(d)—GENERAL BALANCE SHEET

1958-59		Government and Boards	Municipalities	Companies	Total
60,681	Fixed capital raised and appropriated as per the capital account	55,696	2,579	8,263	66,538
1,078	Capital Redemption Reserve .. .. .	..	943	185	1,128
	RESERVE AND SURPLUS				
5,569	Non-statutory Reserve	3,529	637	1,601	5,767
292	Contingencies Reserve Fund .. .. .	..	27	297	324
132	Tariffs and Dividends Control Reserve .. .. .	..	..	86	86
76	Consumer's Rebate Reserve .. .. .	..	..	127	127
	Development Reserve .. .. .	..	95	215	310
68	Balance of net revenue and appropriation account .. .. .	..	74	22	96
	CURRENT LIABILITIES AND PROVISIONS				
7,783	Creditors on open accounts	7,795	202	514	8,511
3,727	Consumers' Security Deposits	3,479	120	524	4,123
1,124	Accounts payable .. .. .	..	235	1,185	1,420
2,075	Temporary accommodations, Bank over-drafts and other finances	1,826	57	405	2,288
82,605		72,325	4,969	13,424	90,718

AS AT 31ST MARCH, 1960

(Figures represent Rs. in lakhs)

1958-59		Government and Boards	Municipalities	Companies	Total
65,486	Capital expenditure on works as per the capital accounts ..	52,330	4,296	14,697	71,323
	LESS—				
9,030	Accumulated provisions for Depreciation	5,091	988	4,644	10,731
56,447	NET BLOCK	47,239	,309	10,053	60,592
	CURRENT ASSETS				
6,631	Capital works in progress	8,260	90	696	9,046
	Stores and Materials in hand—				
684	(a) Fuel coal and or oil at cost	634	15	61	710
6,217	(b) General Stores at or below cost	5,435	341	714	6,490
1,756	Sundry debtors for electricity supplied	1,082	175	592	1,849
1,158	Other debtors	940	46	244	1,230
1,767	Accounts receivable	1,678	104	75	1,857
	Investments in statutory securities at cost—				
237	(a) Contingencies Reserve Fund investment (market value on closing date).	..	28	259	287
4,371	(b) Other investments (Market value on closing date) ..	3,947	499	236	4,682
	Special Deposits—				
62	(a) In respect of taxation .. .. .	..	2	81	83
537	(b) Others	495	28	29	552
	Balance at Bank—				
423	(a) Deposit Account	196	193	26	415
1,020	(b) Current Account and at call	693	116	319	1,133
123	Cash in hand	64	29	24	117
	Debit Balances—				
93	Deferred payments	85	3	15	103
1,079	Debit balance of net revenue and appropriations accounts ..	1,572	..	..	1,572
82,605		72,325	4,969	13,424	90,718

Some important financial features for the years 1955 to 1960 are given in Table—
TABLE LV—FINANCIAL DATA OF THE PUBLIC ELECTRICITY SUPPLY INDUSTRY—1955—60

	Units	1955	1956-57	1957-58	1958-59	1959-60
A. Installed capacity	kW	2,694,817	2,886,141	3,223,111	3,511,586	3,873,166
Average Capital Outlay per kW installed—						
(a) Generation	Rs.	589	878	764	905	892
(b) Transmission, Distribution etc. .. .	Rs.	603	879	781	925	917
	Rs.	1,192	1,757	1,545	1,830	1,809
B. Number of consumers	No.	2,508,580	2,825,802	3,207,508	3,617,849	4,029,740
Average Capital Outlay per consumer—						
(a) Generation	Rs.	632	896	768	878	857
(b) Transmission, distribution etc. .. .	Rs.	648	898	785	898	881
	Rs.	1,280	1,794	1,553	1,776	1,738
C. Maximum Demand—	kW.	1,849,672	1,989,774	2,288,212	2,542,955	2,931,360
Average Capital Outlay on transmission, distribution etc. per kW of Maximum Demand.	Rs.	879	1,276	1,100	1,277	1,211
D. Total Capital Outlay—						
(a) On electrical works	Rs.	321	507	498	643	700
(b) Non-electrical works like tramways and Omnibus	Rs. (crores)	5	10	11	12	13
	Rs. (crores)	326	517	509	655	713

	1955		1956-57		1957-58		1958-59		1959-60	
	Outlay	Percent of total	Outlay	Percent of total	Outlay	Percent of total	Outlay	Percent of total	Outlay	Percent of total
SEGREGATION										
Public Sector	211.93	65	393.96	76	374.10	73	512.81	78	566.26	79
Private Sector	114.28	35	122.93	24	135.18	27	142.05	22	146.97	21
	326.21	100	516.89	100	509.28	100	654.86	100	713.23	100
Additions during the year	57.95	..	190.68	..			145.58	..	58.37	..
SEGREGATION										
Public sector	50.68	87	182.03	95	*		138.71	95	53.45	92
Private Sector	7.27	13	8.65	5			6.87	5	4.92	8
	57.95	100	190.68	100			145.58	100	58.37	100

*Could not be worked out due to non-receipt of data from the Andhra Pradesh and Assam State Electricity Boards and Orissa and Jammu and Kashmir Government Electricity Departments.

SECTION 7
ADDRESSES OF PUBLIC ELECTRICITY SUPPLY
UNDERTAKINGS & SYSTEM OF SUPPLY

ANDHRA PRADESH

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD				
1-1	Anantapur District Chittoor District Cuddapah District Kurnool District	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Guntur District Krishna District Nellore District West Godavary District	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	11,000 6,600 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	East Godavary District Skikakulam District Visakhapatnam District	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-4	Nizamsagar Hydro- Electric Scheme	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-5	Hyderabad City	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P.O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-6	Hyderabad Construction and Operation Division Andhole Gajwel Ibrahimpatnam Nandikandi Narsapur Patancheru Siddipet Vikarabad Sadasivpet Pochampalli	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-7	Kammameth Construc- tion. and Operation Division Aswaraopet Boorgampad Hazurnagar Khammameth Miryalguda Mahaboobabad Nalgonda Palvancha Suryapet	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-8	Mahaboobnagar Cons- truction and Operation Division Achampet Devarkadra Husnabad & Jogipet Kollapur Kosgi Kodangal Kalwakurthy	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

ANDHRA PRADESH—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-9	Nizamabad Construction and Operation Division Kavarampet Jadcherla Narayanpet Nagarkurnool Pargi Shadnagar Shabad Zahirabad	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.		
1-10	Mackkund	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	132,000	3 ph. A.C. 50 cy
1-11	Nizamabad Construction and Operation Division Armoor Anksapur Adloor Yellareddy Adilabad Bhainsa Both Balkonda Banswada Bodhan Rakkasipet Chepur Dichapalli R.S. Dilwarpur Janakampet Khoda Kalwaral Khanapur Kumareddy Munipalli Mudhol Nizamabad Narsapur Nirmal Perkel Pedgal Ramapuram Sirmipalli Soan Utmoor Velpur Yallareddy	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-12	Ramagundam Construction and Operation Division Azambad (Karimnagar) Jagitial Mancherial Metapalli Peddapalli	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

ANDHRA PRADESH—*contd.*

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—<i>concl.</i>				
1-12	Ramagundam Construction and Operation Division Ramagundam Sirilla	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.		
1-13	Ramagundam	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-14	Secunderabad Construction and Operation Division Madchal	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-15	Tungabhadra Hydro Electric Scheme	The Divisional Engineer, Operation and Maintenance Tungabhadra Dam P.O.		
1-16	Warrangal Construction and Operation Division Tandur Sirpur Dharampuri Mitpalli Mulug Jaigiri Jangaon Mulug Chinoor Mankondur Potbekapally Manthini Narsanpet Nalgonda Parkal	The Chief Engineer for Electricity, Andhra Pradesh Electricity Board, Opposite Bella Vista, P. O. Hyderabad-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MUNICIPALITIES				
2	Masulipatam	The Commissioner, Masulipatam Municipality, Musulipatam.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
3	Vijayawada	The Commissioner, Vijayawada Municipality, Vijayawada.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
4	Mahboobnagar	The Mahboobnagar Electricity Consumer's Cooperative Society Ltd., Mahboobnagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
5	Wanaparthy	M/S. Power Supply Industrial Co., P.O., Wanaparthy, District Mahboobnagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
ASSAM				
BOARD				
1-1	Gauhati Division Gauhati	The Commercial Officer, Assam State Electricity Board, Uzan Bazar, Gauhati.	11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

ASSAM—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases, frequency etc .
BOARD—contd.				
1-2	Jorhat Division			
	Dibrugarh A.M.C. Doomdooma Dergaon Golaghat Jorhat Jorhat, A.A.C. North Lakhimpur Sibsagar Titabar	The Commercial Officer, Assam State Electricity Board, Uzan Bazar, Gauhati.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-3	Nowgong Division			
	Aijal Diphu. Hailakandi Hojai Karimganj Nowgong	The Commercial Officer, Assam State Electricity Board, Uzan Bazar, Gauhati.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-4	Tezpur Division			
	Charali Dhekiajuli Goalpara. Kokrajhar Nalbari Mangaldai Saulkuchi Tura Tezpur	The Commercial Officer, Assam State Electricity Board, Uzan Bazar, Gauhati.	400 230	3 ph. A.C. 50 cy 1 ph. .A.C. 50 cy
1-5	Umtru Division			
	Umtru	The Commercial Officer, Assam State, Electricity Board, Uzan Bazar, Gauhati.	6,600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
2	Barpeta Mouza.	The Barpeta Mouza Co-operative Electric Supply Co., P. O. Barpeta, District Kamrup.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
3	Dibrugarh	The Dibrugarh Electric Supply Co., Private Ltd., P.O. Rehabari, Post Box No. 9, Dibrugarh.	440 220	D.C. 3 wire D.C. 2 wire
4	Dhubri	The National Power Supply Corporation Ltd., (Dhubri Branch), M/A. M/S. K. K. Sen & Sons, 23-B, Allenby Road, Calutta-20.	400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy
5	Shillong	The Shillong Hydro Electric Ltd., M/A, Development of Industries (India) Private Ltd., 135, Prinsep Street, Calcutta-13.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Silchar	The Silchar Electric Supply Ltd., M/A. M/S. Sarada Charan Barda Kanta Roy, Silchar.	410 230	D.C. 3 wire D.C. 2 wire
7	Tinsukia	The Tinsukia Electric Supply Co. Ltd., P.O. Senairam Bazar, Tinsukia.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

BIHAR

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD				
1-1	Aurangabad Division Daltenganj	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Arrah Division Arrah Buxar	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230 460 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire
1-3	Bettiah Division Bettiah Barigania Chakia	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-4	Behar Shariff Division	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-5	Chapra Division Chapra Mirganj Siwan	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-6	Dhanbad Division Ganeshpur & Mohuda	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-7	Dohri-on-Sone Division	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-8	Deogarh Division Deogarh-Madhupur Sahibganj	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-9	Gaya Division Gaya	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	2,200 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire
1-10	Gomia Division	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	2,200 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire
1-11	Hazaribagh Division Netarhat Ramgarh	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	11,000 6,600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-12	Katihar Division Begusarai Katihar Khagaria Kishanganj Saharsa	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

BIHAR—contd.

Serial No	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D. C. Phases frequency etc.
BOARD—contd.				
1-13	Kodarma Division	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-14	Monghyr Division Monghyr Lakhisarai	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230 460 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire
1-15	Muzafferpore Division Madhubani (Sakri) Pusa Samsatipur Hajipur	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	3,300 400 230 460 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire D.C. 3 wire D.C. 2 wire
1-16	Patna Division	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-17	Ranchi Divisions	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230	3 ph. AC. 50 cy 1 ph. A.C. 50 cy
1-18	Singhbhum Division	The Chief Electrical Engineer, Bihar State Electricity Board, Patna.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
POWER CORPORATION				
2	Damodar Valley Corporation Bokaro Tilaiya Panchet Hill	The Chief Electrical Engineer, Damodar Valley Corporation, Anderson House, Alipore, Calcutta-27.	33,000 11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
3	Bhagalpur	The Bhagalpur Electric Supply Co., M/A. M/S. Octavious Steel & Co. Ltd., 14, Old Court House Street, Calcutta-1	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Chaibasa	The Chaibasa Electric Supply Co., C/O M/S. Madan Gopal, Chaibasa.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
5	Chirkunda	The Chirkunda Electric Supply Co. Ltd., P. O. Barabar, District Burdwan.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Darbhanga Leherisarai	The Darbhanga Leherisarai Electric Supply Corporation Ltd., M/A. M/S. Baroliya Bros., Darbhanga.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
7	Jharia Coal Field	The Jharia Coal Field Electric Supply Co. Private Ltd., P.B. No. 16, Dhanbad.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. AC. 50 cy D.C. 3 wire D.C. 2 wire
8	Jugsalai	The Jugsalai Electric Supply Co., C/O. M/S. Mangilal Rungta, Jugsalai (Tatanagar) B.N. Rly.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Muzafferpore	The Muzafferpore Electric Supply Co. Ltd., M/A. M/S. Octavious Steel & Co. Ltd., 14, Old Court House Street, Calcutta-1.	3,300 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire

BIHAR—concl.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
<i>COMPANIES—contd.</i>				
10	Patna	The Patna Electric Supply Co. Ltd., M/A. M/S. Octavious Steel & Co. Ltd., 14, Old Court Street, House Calcutta-1.	6,000 3,300 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire
11	Ranchi	The Ranchi Electric Supply Co. Ltd., M/A. M/S. Budhia Brothers, Private Ltd., Main Road, Ranchi.	6,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
12	Sijua (Jhariah)	The Sijua (Jhariah) Electric Supply Co. M/A. M/S. Bird & Co. Private Ltd. P. O. Bausjora (District Dhanbad).	19,900 6,300 500	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy
GUJARAT				
BOARD				
1-1	Baroda Division Baroda Chota Udepur Deogad Baria Rajpipla Santrampur	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Dhoraji Division Bhanavad Dheraji Upleta Jamjodhpur Manvadar	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	11,000 400 230 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire
1-3	Jamnagar Division	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	11,000 400 230 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-4	Junagadh Division Amarnagar Bagasara Chorwad Junagadh Keshod Mangrol Talala Una Veraval Vadia	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-5	Kutch Division Bhuj Mandvi Mundra Nakhatrana Kothara Kandla	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	400 230 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 2 wire

GUJARAT—contd.

Serial No.	Area or Town served/System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-6	Nadiad Division	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	22,000	3 ph. A.C. 50 cy
	Himmatnagar		11,000	3 ph. A.C. 50 cy
	Mansa		400	3 ph. A.C. 50 cy
	Vijapur		230	1 ph. A.C. 50 cy
1-7	Palitana Division	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	400	1 ph. A.C. 50 cy
	Botad		230	1 ph. A.C. 50 cy
	Gadhada			
	Lathi			
	Mahuva			
	Palitana			
	Rajula			
	Sihor			
	Valabhipur			
1-8	Porbander Division	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	11,000	3 ph. A.C. 50 cy
	Port Okha		400	3 ph. A.C. 50 cy
	Porbander		230	1 ph. A.C. 50 cy
1-9	Rajkot Division	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	400	3 ph. A.C. 50 cy
	Gondal		230	1 ph. A.C. 50 cy
	Jasdan		460	D.C. 3 Wire
	Kotda Sangni		230	D.C. 2 Wire
	Rajkot			
	Virupur			
	Morvi			
1-10	Surendranagar Division	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	400	3 ph. A.C. 50 cy
	Chotila		230	1 ph. A.C. 50 cy
	Dharangadhra		460	D.C. 3 Wire
	Halvad		230	D.C. 2 Wire
	Lakhtar			
	Sayla			
	Surendranagar			
1-11	Shahpur Division	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	6,600	3 ph. A.C. 50 cy
	Shahpur			
1-12	Sabarmati Division	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	400	3 ph. A.C. 50 cy
	Ambaji		230	1 ph. A.C. 50 cy
	Deesa		440	D.C. 3 Wire
	Dhandhuka		220	D.C. 2 wire
	Modasa			
	Radhanpur			
1-13	Sikka Power House Division— Sikka	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	11,000	3 ph. A.C. 50 cy
			400	3 ph. A.C. 50 cy
			230	1 ph. A.C. 50 cy
1-14	Utran Power House Division— (South Gujarat Grid)	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	22,000	3 ph. A.C. 50 cy
	Utran		11,000	3 ph. A.C. 50 cy
	Dharampur		3,300	3 ph. A.C. 50 cy
	Bansda		400	3 ph. A.C. 50 cy
	Buher		230	1 ph. A.C. 50 cy

GUJARAT—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-15	Dwaraka	The Chief Engineer, The Gujarat Electricity Board, Race Course, Baroda-I.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MUNICIPALITIES				
2	Baroda	The Electrical Engineer, Department of Electricity, Baroda Borough Municipality, Post Box No. 17, Baroda-I.	3,300 400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy 1 ph. A.C. 50 cy
3	Bhadran	The President, Bhadran Municipality, Bhadran ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Chanasma	The President, Chanasma Municipality, Chanasma ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
5	Karjan	The President, Karjan Municipality, Karjan ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Muli	The President, Muli Municipality, Muli	230	D.C. 2 Wire
7	Nar Gram Panchayat	The Electrical Engineer, Nar Gram Panchayat, Nar (via Anand).		
8	Palanpur (Iqbal)	The Electrical Engineer, The Iqbal Electric Supply, Municipal Power House, Palanpur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Patan	The Electrical Engineer, Patan Municipality, Patan ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
10	Petlad	The Electrical Engineer, Petlad Municipality, Petlad ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Sijotra	The President, Sijotra Municipality, Sijotra ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
12	Sankheda	The Sankheda Municipal Electric Power House, Sankheda.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
13	Vadnagar	The Chief Officer, Electricity Department, Vadnagar Municipality, Vadnagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
14	Visnagar	The Chief Officer, Visnagar Municipality, Visnagar ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
15	Vanthali	The President, Vanthali Municipality, Vanthali ..		
COMPANIES				
16	Ahmedabad	The Ahmedabad Electrical Co. Private Ltd., M/A. M/S. Killick Industries Ltd., Electricity House, Lal Darwaja, Ahmedabad-I.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
17	Anand	The Anand Electric Supply Co. Ltd., M/S. Sonawala Co. Ltd., Sonawala Buildings, 459, Apollo Street, Fort, Bombay-I.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
18	Anjar	M/s. Shah Spinning and Weaving Mills, Anjar ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
19	Bajana	Shri Babu Lal Valji, Proprietor, Bajana Power House Via Patri.	230	D.C. 2 Wire
20	Bardoli	Shree Sardar Kheti Sahayak Vidaya Mandal Ltd., Bardoli (District. Surat).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

GUJARAT—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—contd.				
21	Bulsar	The Bulsar Electric Supply Co., The Amalgamated Electricity Co. Ltd. M/A. M/S. N. C. Javeri & Co., Post Box No. 879, 17-B, Horniman Circle, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
22	Beilkha	M/S. Unity Power House, Bilkha	230	D.C. 2 Wire
23	Bilimora	The Bilimora Electric Supply Co. Ltd., Bilimora	460 230	D.C. 3 Wire D.C. 2 Wire
24	Bhavnagar	The Bhavnagar Electricity Co. Ltd., P.O. Box No. 45, Bhavnagar.	11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
25	Broach	The Broach Electric Supply & Development Corporation Ltd., M/S. The Rajputana Textile (Agencies) Private Ltd., Esplanade Mansions, 144-146, Mahatma Gandhi Road, Fort, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
26	Cambay	The Cambay Electric Supply & Industrial Co. Ltd., M/A. M/S. A. A. Meeyajee & Co., Private Ltd., Power House, Bombay.	400 230 460 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
27	Dabhoi	The Dabhoi Electric Supply Co., C/O. Seth Girdhari Lal Moti Lal Contractor, Dabhoi, District Baroda.	400 220	D.C. 3 Wire D.C. 2 Wire
28	Dakor Umreth	The Dakor-Umreth Electric Co. Ltd., Dakor	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
29	Dhanera	The Dhanera Electric Supply Co., M/A. M/S. M.A. Master & Sons, Station Road, Palanpur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
30	Dhari	The Dhari Electric Supply Co., Dhari	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
31	Dohad	The Dohad Electric Supply Co., The Amalgamated Electricity Co. Ltd., M/A. M/S. N.C. Javeri & Co., Post Box No. 879, 17-B, Horniman Circle, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
32	Godhra	The Godhra Electricity Co. Ltd., M/A. M/S. Udayan & Co., Power House, Godhra.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
33	Gandhidham	The Sindhu Resettlement Corporation Ltd., Power Supply Department, Adipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
34	Jetpur	The Jetpur Electric Supply Co. Ltd., Jetpur	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
35	Jambusar	The Jambusar Electric Supply Co. Ltd., Sarodi Bhagal, Jambusar (District Broach).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
36	Jhalawar (Surendernagar)	The Jhalawar Electric Supply Co. Ltd., M/S. N.D. Mehta & Co., Suredranagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
37	Kadi	The Kadi Electric Supply Co. Ltd., M/A. M/S. Parik & Co., Kadi.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

GUJARAT—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—contd.				
38	Kalol	The Kalol Electric Supply and Industrial Co. Ltd., Power House, Kalol (North Gujarat).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
39	Kapadwanj	The Kapadwanj Town Co-operative Electricity Association Ltd., Sardar Baug, Kapadwanj.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
40	Kholvad	The Kholvad Electric Supply Corporation, Kholvad (District Surat).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
41	Limbdi	The Limbdi Electric Supply Co., M/A. M/S. Amulakh Amichand & Co., Limbdi.	460 230	D.C. 3 Wire D.C. 2 Wire
42	Lunawada	Shree Lunawada Industries & Electricity Co., Lunawada (Via Godhra).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
43	Mehsana	The Mehsana Electric Supply Co. Ltd., Near Model Talkies, 1758/1, Gandhi Road, Ahmedabad.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
44	Nadiad	The Nadiad Electric Supply Co. Ltd., M/A. M/S. Sonawala Co. Ltd., Sonawala Buildings, 59, Appollo Street, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
45	Navsari	The Navsari Electric Supply Co. Ltd., M/A. M/S. Ardeshir Modi & Co., Navsari.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
46	Rander	The Rander Electric Supply Co. Ltd., M/A. M/S. Sunderrao Moreshawr Co., Lal Baug, Rander, District Surat.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
47	Sanad	The Sanad Electric Supply Co. Private Ltd., M/A. M/S. Ranchodlal Chandu Lal & Co., Station Road, Sanad.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
48	Savarkundla	The Savarkundla Electricity Co. Ltd., M/A. M/S. Shah Electrical Agencies, Savarkundla.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
49	Sidhpur	The Sidhpur Electric Industrial Co. Ltd., Near Station, Sidhpur (District Mehsana).	440 230	D.C. 3 Wire D.C. 2 Wire
50	Sihor	The Sihore Electric Works, Sihor	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
51	Surat	The Surat Electricity Supply Co., Central Administration Department, M/A. M/S. Killick Industries Ltd., 5 Graham Road (4th floor), Ballard Estate, (P. O. Box No. 109), Bombay-1.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
52	Tapi	The Tapi Electric Supply & Industries Ltd. (in liquidation), Kathor (Via Savan).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
53	Thanagadh	The Parshuram Pottery Works Co. Ltd., Power House, Thana Pottery, Thanagadh.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
54	Udwada	The Udwada-Vapi Electric Supply Co. Ltd., M/A. M/S. Raiyamand Engineering Co., Electric House, Ganchalla Post, Vapi, District Surat.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
55	Vapi	The Udwada-Vapi Electric Supply Co. Ltd., M/A. M/S. Raiyamand Engineering Co., Electric House, Ganchalla Post, Vapi, District Surat.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

GUJARAT—concl'd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—concl'd.				
56	Vallabh-Vidayanagar	M/S. Charotar Gramodhar-Sahakari Mandal Ltd., Vallabh-Vidayanagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
57	Vasai	The Vasai Electric Supply Co. Ltd., M/A. M/S., R. Shukla & Co., Vasai-Debhla Taluka Bijapur, District Mehsana.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
58	Virangam	The Virangam Electric Supply Co. Ltd., M/A. M/S. Saifee & Co., Mandal Road, Virangam	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
59	Vyara-Kanpura	The Vyara Kanpura Electric Supply Co-operative Society Ltd., Vyara, District Surat.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
60	Wankaner	The Wankaner Electric Supply Co., M/A. M/S. Sarvaiya & Co., Wankaner.	460 230	D.C. 3 Wire D.C. 2 Wire
JAMMU & KASHMIR				
1-1	Jammu Electric Division Jammu Miran Sahib	The Chief Engineer, Electrical & Mechanical Depart- ment, Kashmir State, Srinagar.	3,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Sindh Electric Division Ganderbal	The Chief Engineer, Electrical & Mechanical Depart- ment, Kashmir State, Srinagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	Srinagar Division Bandipore Pahalgam	The Chief Engineer, Electrical & Mechanical Depart- ment, Kashmir State, Srinagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-4	Mohora Division Mohora	The Chief Engineer, Electrical & Mechanical Depart- ment, Kashmir State, Srinagar.	2,300 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-5	Ramnagar	The Chief Engineer, Electrical & Mechanical Depart- ment, Kashmir State, Srinagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-6	Poonch	The Chief Engineer, Electrical & Mechanical Depart- ment, Kashmir State, Srinagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
KERALA				
BOARD				
1-1	Kerala State Electricity Board	The Chief Engineer, Kerala State Electricity Board, P.O. Box No. 65, Trivandrum.	60,000 22,000 11,000 3,300 400 230	} 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Port of Cochin	The Chief Engineer, Kerala State Electricity Board, P.O. Box No. 65, Trivandrum.	400 320 440 220	

KERALA—Contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
MUNICIPALITY				
2	Trichur	The Commissioner, Trichur Municipality, Trichur ..	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
3	Calicut (Kozhikode)	The West Coast Electric Supply Corporation Ltd., (Calicut Branch) M/A, M/S. Chandrie & Co., P.B. No. 156, National Insurance Building, Esplanade, Madras 1.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Ernakulam	The Cochin State Power & Light Corporation Ltd., M/A, M/S. Chandrie & Co. (Private) Ltd., P.O. Box No. 156, National Insurance Building, Espla- nade, Madras-1.	11,000 6,600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
5	Kottayam	The Kottayam Electric Supply Agency, C/O M/S. A. Narayan Moos, Kottayam.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Kannan Dewan Hills	The Kannan Dewan Hills Produce Co. Ltd., Head- quarters Office, Munnar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
7	Mattencherry	The Cochin Electric Co. Private Ltd., Mattencherry, Cochin-1.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MADHYA PRADESH				
BOARD				
1-1	Bhilai Division Bhilai Chhuikhadam Khairgarh Rajnandgaon	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Bhopal Division Bhopal Bareilly Begumaganj Itarsi Pachmarhi Piparia	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	3,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	Bilaspur Division Ambikapur Baikunthpur Champa Dharamjaigarh Jashpurmagar Raigarh Sakti Sarangarh	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2. Wire
1-4	Chambal Hydel Division	The Superintending Engineer, (Electrical), Chambal Hydel & Irrigation Scheme, Madhya Pradesh Electricity Board, P.O. Chambal Hydel Works via Jhalwar Road Rly. Station, Western Rly.	132,000 11,000	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy

MADHYA PRADESH—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-5	Chhindwara Division	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-6	Dhar Division Barwani Dhar Maheshwar	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-7	Gwalior Division Bhind Datia Gwalior Morena	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-8	Guna Division Ashoknagar Guna Kutwai Narsinghgarh Rajgarh Shivpuri Vidisha	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	400 230 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 2 Wire
1-9	Indore Division Dewas (Jr.) Indore Mhow	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	22,000 11,000 6,000 400 230 460 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-10	Jabalpur Division Amarkantak Kareli Mandla Shahdol Gotegaon	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	11,000 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-11	Korba Division Korba	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-12	Nepanagar Division Harsud Chandni	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	11,000 6,600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-13	Raipur Division Jagdulpur Kanker Raipur	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	11,000 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire

MADHYA PRADESH—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-14	Satna Division	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	400	3 ph. A.C. 50 cy
	Ajaigarh		230	1 ph. A.C. 50 cy
	Maihar		440	D.C. 3 Wire
	Nagod		220	D.C. 2 Wire
	Panna Rewa Sidhi Satna			
1-15	Sagar Division	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	400	3 ph. A.C. 50 cy
	Bina		230	1 ph. A.C. 50 cy
	Bijawar		220	D.C. 2 Wire
	Chattarpur Damoh Khajraho Tikamgarh			
1-16	Ujjain Division	The Chief Engineer, Madhya Pradesh Electricity Board, P.O. Box No. 34, Rampur, Jabalpur.	11,000	3 ph. A.C. 50 cy
	Jaora		400	3 ph. W.C. 50 cy
	Khargone		230	1 ph. A.C. 50 cy
	Mehidpur Shujalpur Sanawad Ujjain			
MUNICIPALITIES				
2	Sandhwa	The Sandhwa Municipal Electric Supply, Sandhwa	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
3	Alirajpur	The Aliraj Electric Supply Co., Alirajpur	400 230	D.C. 3 Wire D.C. 2 Wire
4	Barnagar	The Barnagar Electric Supply and Industrial Co. Ltd., Barnagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
5	Bilaspur	The Central India Electric Supply Co. Ltd., P. B. No. 9, Bilaspur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Burhanpur	The Burhanpur Electric Supply and Trading Co., C/O The Kohinoor Traders Ltd., Kalbadevi Road, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
7	Bhikangaon	The Proprietor, Mohan Talkies, Bhikangaon	230	D.C. 2 Wire
8	Chhindwara	The Chhindwara Electric Supply Co., Narsinghpur Road, Chhindwara.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Dewas (Senior)	The Dewas (Senior) Electric Supply Co. Private Ltd., Dewas Senior.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
10	Harda	The Harda Electric Supply Co. Private Ltd., M/A. M/S. Bomanjee Eduljee Cossinath, 17-19, Baston Road, Fort, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Jubbulpore	The Jubbulpore Electric Supply Co. Ltd., M/A. M/S. Martin Burn Co. Ltd., Calcutta-1	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

MADHYA PRADESH—concl'd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—cont'd.				
12	Katni	The Central India Electric Supply Co. Ltd., P.O. Box No. 190, Katni.	6,600 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
13	Khilchipur	The Khilchipur Power House, Khilchipur ..	230	D.C. 2 Wire
14	Mandsaur	The Mandsaur Electric Supply Co., Mandsaur ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
15	Neemuch	The Gwalior and Malwa Industries & Electric Supply Ltd., Neemuch.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
16	Ratlam	The Ratlam Electric Supply & Weaving Mills Co., Ltd., Ratlam.	460 230	D.C. 3 Wire D.C. 2 Wire
17	Sailana	The Sailana Electric Power House, Sailana ..	230	D.C. 2 Wire
18	Saugor	The Saugor Electric Supply Co., M/A. M/S. Martin Burn Ltd., 12, Mission Row, Calcutta-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
19	Seoni	The Seoni Electric Supply Co., C/O M/S. Byramji D. Doongaji & Sons, Seoni.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
20	Sehore	The Sehore Electric Supply Co. Private Ltd., Sehore Cantt.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
21	Sitamau	The Shree Krishna Electric Supplies, Sitamau ..	460 230	D.C. 3 Wire D.C. 2 Wire
MADRAS				
BOARD				
1-1	Madras System	Electricity The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	11,000 6,000 400 230 450 250	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-2	Mettur Electricity System	The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	22,000 11,000 6,600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	Madurai System	Electricity The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-4	Pykara Electricity System	The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-5	Pariyar Hydro System	Electric The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	11,000	3 ph. A.C. 50 cy
1-6	Tirunelveli System	Electricity The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	11,000	3 ph. A.C. 50 cy

MADRAS—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phase: frequency etc.
BOARD—contd.				
1-7	Tiruchirappally Electricity System	The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	110,000 66,000 22,000 11,000 6,600 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-8	Vellore Electricity System	The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	33,000 22,000 11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-9	Kundah	The Chief Engineer, Electricity, Madras State Electricity Board, 157, Mount Road, Madras.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MUNICIPALITIES				
2	Coimbatore	The Commissioner, Coimbatore Municipality, Coimbatore.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
3	Karur	The Municipal Electrical Engineer, Karur Municipality, Karur, District Tiruchirappally.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Mathurai	The Commissioner, Mathurai Municipality, Mathurai.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
5	Pollachi	The Commissioner, Pollachi Municipality, Pollachi.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Tanjore	The Municipal Electrical Engineer, Tanjore Municipality, Tanjore.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
7	Kumbakonam	The Kumbakonam Electric Supply Corporation Ltd., M/A. The India Co. Private Ltd., Oriental Buildings, Armenian Street, Madras-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
8	Mayawaram	The South Madras Electric Supply Corporation Ltd., Post Box No. 67, Tiruchirappalli.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Negapatam	The Negapatam Electric Supply Co. Ltd., M/A. The India Co. (Private) Ltd., Oriental Buildings, Armenian Street, Madras-1.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
10	Salem Erode	The Salem Erode Electric Supply Co. M/A. M/S. Octavious Steel & Co. Ltd., 14, Old Court House Street, Calcutta.	22,000 600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Shencottah	The Shencottah Electric Supply Agencies, Shencottah.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
12	Tirunelveli Tuticorin	The Tirunelveli Tuticorin Electric Supply Co., M/A. M/S. Octavious Steel & Co. Ltd., 14, Old Court House Street, Calcutta.	22,000 11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

MADRAS—*concl.*

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phase frequency etc.
COMPANIES—<i>concl.</i>				
13	Tiruchirappalli	The South Madras Electric Supply Corporation, Post Box No. 67, Tiruchirappalli.	22,000 11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
14	Vellore	The Vellore Electric Supply Corporation Ltd., M/A. M/S. Chandrie & Co. (Private) Ltd., National Insurance Buildings, Esplanade, Madras-1.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MAHARASHTRA				
BOARD				
1-1	Akola Division Buldana Deolgaon Raja Digra Malkapur Mehkar Paras Umerkhed	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 wire D.C. 2 wire
1-2	Amaravati Division Amravati Karanja	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	Bombay Division Ambarnath.	The Executive Engineer, Bombay Electric Division, P.W.D. Offices, Veer Nariman Road, Bombay-1.	6,600 2,200 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-4	Ballarshah Power House Division	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	66,000 11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-5	Chola	The Chief Electrical Engineer, Central Railway, Bombay V.T.	95,000	3 ph. A.C. 50 cy
1-6	Kolhapur Division Chiplan Islampur Kolhapur E.I. Radhanagiri Malvan Ratnagiri Vengurla	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-7	Khaperkheda Power House Division	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	66,000 11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-8	Kalyan Division Janjira Jawhar	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

MAHARASHTRA—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-9	Marathwada Division Aurangabad Aurangabad Bhir Chopda Dharangaon Manmad	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	6,600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-10	Nanded Division	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-11	Nagpur North Division	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-12	Nagpur South Division Hinganghat	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building Hornby Road, Fort, Bombay.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-13	Sholapur	The Power House Superintendent, Public Works Department, O. & M. Division, Sholapur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-14	Poona Division Bhatgar Phaltan- Wai	The Chief Engineer, Maharashtra State Electricity Board, Mercantile Bank Building, Hornby Road, Fort, Bombay.	2,000 400 230 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 2 wire
MUNICIPALITIES				
2	B.E.S.T. (Bombay City)	The Bombay Electric Supply and Transport Undertaking (Municipal Corporation), B.E.S.T. House, P.B. No. 192, Bombay-1.	6,600 5,500 400 230 600 460 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 3 Wire D.C. 2 Wire
3	Savantwadi	The Electrical Engineer, Savantwadi Municipality, Savantwadi.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Yeola	The Electrical Engineer, Yeola Municipal Power House, Yeola.	460 230	D.C. 3 Wire D.C. 2 Wire
5	Raver	The Electrical Engineer, Raver Municipal Power House, Raver.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
6	Ahmednagar	The Ahmednagar Electric Supply Co. Private Ltd., M/A. M/S. Nariman Sons Private Ltd., Power House, Station Road, Ahmednagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
7	Amalner	The Amalner Electric Supply Co. Ltd., Amalner	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
8	Arvi	The Electrical Undertakings Ltd. (Arvi Branch), M/S. The Indian Engineering Syndicate, Mehta House, Apollo Street, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

MAHARASHTRA—contd.

Serial No.	Area or Town served, System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—contd.				
9	Akalkot	The Vijayashinha Electric Supply Co., Akalkot	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
10	Aundh	The Light & Power Supplies Ltd., (Aundh Branch), M/S. Industrial Service Ltd. Gumaste Buildings, 180, Budhwar Peth, Laxmi Road, Poona-2.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Baranmati	The Baramati Electric Supply Co. Private Ltd., Poonawala & Co., 182, Raviwar Peth, Poona.	460 230	D.C. 3 Wire D.C. 2 Wire
12	Barsi	The General Engineering Corporation Ltd., Barsi Electric Supply Co., 60, Forbes Street, Temple Bazar Buildings, Fort, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
13	Bassein	The Bassein Electric Supply Co. Ltd., M/A. M/S. J. B. Maneckji & Co. Ltd., Mehta House, Apollo Street, Fort, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
14	Belapur-Kopergaon	The Belapur-Kopergaon Supply Co. Ltd., Shirampur, District Ahmednagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
15	Bhiwandi	The Bhiwandi Electric Supply Co. The Amalgamated Electricity Co. Ltd., M/A. M/S. N.C. Javeri and Co., Post Box No. 879, 17-B, Horniman Circle, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
16	Bhusawal	The Bhusawal Electric Supply Co., The Amalgamated Electricity Co. Ltd., M/A. M/S. N. C. Javeri & Co., Post Box No. 879, 17-B, Horniman Circle, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
17	Bhor	The Bhor Electric Supply Co. M/S. Thopte Patel & Co., 'Nana Bhavan', 1194/20 Ghote Road, Poona-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
18	Bombay Suburban	The Bombay Suburban Electric Supply Ltd., Central Administration Department M/S. Killiek Industries Ltd., 5, Graham Road (4th Floor), Ballard Estate, P.O. Box No. 109, Bombay-1.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
19	Belapur Town	The Belapur & Kopergaon Electric Supply Co. Ltd., Belapur Town, Distt. Ahmednagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
20	Chalisgaon	The Chalisgaon Electric Supply Co., The Amalgamated Electricity Co. Ltd., M/A. M/S. N. C. Javeri & Co., Post Box No. 879, 17-B, Horniman Circle, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
21	Dhanu Road	The Dhanu Road Peoples Co-operative Supply Society Ltd., Dhanu Road, District Thana.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
22	Dhulia	The Dhulia Electric Supply Co. Private Ltd., M/A. M/S. Godbole Kane & Co., P.B. No. 36, Dhulia.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
23	Dhond	The Dhond Electric Supply Co., Dhond	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
24	Gondia	The Gondia Electric Supply Co. Ltd., M/S. Sugni Chand Chaman Dass Jotwani & Co., Gondia.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
25	Ichalkaranji	The Ichalkaranji Electric Supply Co., Ichalkaranji (Dist. Satara).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

MAHARASHTRA—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—contd.				
26	Igatpuri	The Igatpuri Electric Supply Co., M/A. M/S. Pandit & Co., 15, Forbes Street, Fort, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
27	Jalgaon	The Jalgaon Electric Supply Co., The Amalgamated Electricity Co. Ltd., M/A. M/S. N. C. Javeri & Co., Post Box No. 879, 17-B, Horniman Circle, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
28	Jalna	The Jalna Electric Syndicate Private Ltd., Jalna	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
29	Junnar	The Junnar Electric Supply Co. Ltd., M/A. M/S. Thopte Patel & Co., 'Nana Bhavan', 1194/20, Ghole Road, Poona-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
30	Karad	The Karad Electric Supply Co. Private Ltd., Karad	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
31	Kurundwad	The Kurundwad Electric Supply Co., Kurundwad (Distt. Kolhapur).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
32	Koregaon	The Allied Electric Agency Private Ltd., Power House, Koregaon (North Satara).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
33	Lonavala Khandala	The Lonavala Khandala Electric Supply Co. Ltd., Lonavala.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
34	Madhavnagar Budhgaon	The Budhgaon & Madhavnagar Electric Supply Co. Ltd., M/A. M/S. Blossom Agencies Ltd., Satara.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
35	Mahabaleshwar	The Mahabaleshwar Electric Supply Co., M/A. M/S. Panchgani Electric Supply Co. Ltd., 96, Duncan Road, Byculla, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
36	Mahad	The Mahad Electric Supply Co. Ltd., Mahad (Distt. Kolaba).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
37	Malegaon	The Malegaon Electric Supply Co., The Amalgamated Electricity Co. Ltd., M/A. M/S. N. C. Javeri & Co., Post Box No. 879, 17-B Horniman Circle, Fort, Bombay-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
38	Matheran	The Matheran Electric Supply Co. Ltd., M/A. M/S. Anderson Engineering Co. Ltd., Mehta House, Apollo Street, Fort, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
39	Miraj	The Miraj Electric Supply Co. Ltd., Miraj (South Satara).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
40	Nagpur	The Nagpur Electric Light and Power Co. Ltd., Civil Lines, Post Box No. 2, Nagpur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
41	Nandurbar	The Nandurbar Electric Supply Co., M/S. K. S. Guzdar & Co., Ali chambers, 4 BC-Dean Lane, Fort, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
42	Nasarpur	The Nasarpur Electric Supply Co., Prop., N.S. Chakke, 649, Shanwar Peth, Poona-2.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
43	Nasik Deolali	The Nasik Deolali Electric Supply Co., M/A. The Rajputana Textile (Agencies) Ltd., Esplanade Mansions, 144-146, Mahatma Gandhi Road, Fort, Bombay-1.	6,600 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

MAHARASHTRA—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—contd.				
44	Nira-Lonand	The Nira-Lonand Electric Supply Co., M/A. M/S. Thopte Patel & Co., 'Nana Bhavan', 1194/20, Ghole Road, Poona-4.	400 250	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
45	Pachora	The Pachora Electric Supply Co. Ltd., Power House, Pachora (East Khandesh).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
46	Palghar Navli	The Palghar-Navli Electric Supply Co., The Light & Power Suppliers Ltd., M/A. Industrial Service Ltd., Gumaste Buildings, 180, Budhwar Peth, Laxmi Road, Poona-2.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
47	Panchgani	The Panchgani Electric Supply Co. Ltd., 96, Duncun Road, Byculla, Bombay.	460 230	D.C. 3 Wire D.C. 2 Wire
48	Pandharpur	The Pandharpur Electric Supply Co., Pandharpur	460 230	D.C. 3 Wire D.C. 2 Wire
49	Panvel Taluka	The Panvel Taluka Electrical Development Co. Ltd. M/A. M/S. Bantia Brothers, Kesar Baug, Panvel.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
50	Poona	The Poona Electric Supply Co., M/A. the Rajputana Textile (Agencies), Private Ltd., Esplanade Mansions, 144-146, Mahatma Gandhi Road, Fort, Bombay-1.	11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
51	Sangamner	The Sangamner Electric Supply Co. Ltd., M/A. M/S. Penta & Co., Sangamner, District Ahmednagar.	460 230	D.C. 3 Wire D.C. 2 Wire
52	Sangli	The Jubilee Electric Works, Electric Power House, Sangli.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
53	Satara	The Satara Electric Supply Co. Private Ltd., 217, Partaganj Peth, Satara City.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
54	Savda-Faizpur	The Savda Faizpur Electric Supply Co., Ltd. M/A. M/S. Bandale & Sons, 386, Vithalbai Patel Road, Bombay-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
55	Shirpur	The Shirpur Electric Supply Co. Ltd., Shirpur (East Khandesh).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
56	Siunar	The Sinnar Electric Supply Co. Ltd., M/A. M/S. Deshpande & Co., Sinnar (District Nasik).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
57	Shirwal	The Shirwal Electric Supply Co., M/S. Thopte Patel & Co., 'Nana Bhavan', 1194/20, Ghole Road, Poona-4.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
58	Tata Hydro	The Tata Hydro Electric Agencies Ltd., Bombay House, 24, Bruce Street, Fort, Bombay.	110,000 22,000 6,600	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy
59	Tasgaon	The Tasgaon Electric General Co-operative Society Ltd., Tasgaon (District Satara).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
60	Thana	The Thana Electric Supply Co. Private Ltd., Court House (4th Floor), Carnace Road, Dhobi Talao, Bombay.	6,800 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

MAHARASHTRA—*concl.*

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—<i>contd.</i>				
61	Vita	The Co-operative Electric Supply Society Ltd., Vita (South Satara).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
62	Wardha	The Nagpur Electric Light and Power Co. Ltd., Wardha Branch, Civil Lines, Post Box No. 2 Nagpur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
63	Yeotmal	The Yeotmal Electric Supply Co. Ltd., M/A. M/S. Hassanal & Sons. Yeotmal.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MYSORE				
BOARD				
1	Mysore State Electric- city Board	The Chief Engineer, (Electricity), Mysore State Electricity Board, Post Bag No. 15, Bangalore 1.	110,000 66,000 33,000 11,000 4,600 3,300 400 230 13,200 4,600 3,300 3,000	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy 3 ph. A.C. 25 cy 3 ph. A.C. 25 cy 3 ph. A.C. 25 cy 3 ph. A.C. 25 cy
MUNICIPALITY				
2	Savanur	The President, Savanur Municipality, Savanur ..	230	D.C. 2 Wire
COMPANIES				
3	Athni	The Athni Electric Supply Co., The Light and Power Suppliers Ltd., M/A. Industrial Service Ltd., Gumaste Buildings, 180, Budhwar Peth, Laxmi Road, Poona-2.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Bagalkot	Shri Venkatesh Power Works Ltd., Shrimant K.S. Sardesai, Bagalkot.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
5	Belgaum	The Belgaum Electric Supply Co., The Amalgamated Electricity Co., Ltd., M/A. M/S. N.C. Javeri & Co., Post Box No. 879, 17-B Horniman Circle, Fort, Bombay.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Bijapur	The Bijapur Electric Supply Co., Ltd., M/A. M/S. Abdul Kayum and Sons, Bijapur.	440 220	D.C. 3 Wire D.C. 2 Wire

MYSORE—*concl.*

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—<i>concl.</i>				
7	Byadgi	The Byadgi Electric Supply, M/A. M/S. Manvi Brothers, Station Road, Gadag.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
8	Dharwar	The Dharwar Electric Supply Co. Ltd., M/A. The A.E. Co.s' Post Box No. 5, Dharwar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Gadag	The Gadag Electric Supply, M/A. M/S. Manvi Brothers, Station Road, Gadag.	440 220	D.C. 3 Wire D.C. 2 Wire
10	Haveri	The Haveri Electric Supply, M/A. M/S. Manvi Brothers, Station Road, Gadag.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Jamkhandi	The Electric Power Supply Private Ltd., Jamkhandi, District Bijapur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
12	Karwar	The Karwar Electric Supply & Trading Co. Ltd., Karwar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
13	Khannapur	The Khannapur Co-operative Electricity Society Ltd., Khannapur, District Belgaum.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
14	Nipani	The Nipani Electricity Co. Private Ltd., Nipani, District Belgaum.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
15	Rabkavi	The Rabkavi Electric Supply Co. Ltd., Rabkavi, District Bijapur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
16	Ramdurg	The Madhav Pratap Electric Supply Co. Ltd., Ramdurg.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
17	Ranebenur	The Ranebenur Electric Supply, M/A. M/S. Manvi Brothers, Station Road, Gadag.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
18	Sirsi	The Kanara Electric Supply Co. Ltd. Sirsi (North Kanara).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
ORISSA				
GOVERNMENT				
1-1	Balasoro Division Anandpur Baripada Bhadrak Chandballi Jaleswar Keonjhar Kuldiha Markona	Electrical The Chairman, Orissa State Electricity Board, Bhubaneswar.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-2	Cuttack Division Choudhwar	Electrical The Chairman, Orissa State Electricity Board, Bhubaneswar.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	Duduma Division Jeypore	Transmission The Chairman, Orissa State Electricity Board, Bhubaneswar.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

ORISSA—concl'd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
ORISSA GOVERNMENT—cont'd.				
1-4	General Electrical Division	The Chairman, Orissa Electricity Board, State Bhubaneswar.	400 230 220 110	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
	Bhawanipatna Bargarh Bolangir Doogarh Khariar Road Padampur Sonapur Titilagarh Junagarh			
1-5	Hirakul Utilization Division No. 11, Rajgangpur	The Chairman, Orissa State Electricity Board, Bhubaneswar.	132,000 33,000 11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
	Jharsuguda Sundargarh			
1-6	Hirakud Dam Project	The Chairman, Orissa State Electricity Board, Bhubaneswar.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-7	Puri Electrical Division, Bhubaneswar	The Chairman, Orissa State Electricity Board, Bhubaneswar.	2,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
	Angul Bhubaneswar New Town Nayagarh Talachar			
1-8	Transmission Line Construction Division, Berhampur.	The Chairman, Orissa State Electricity Board, Bhubaneswar.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
	Baudh Bhanjanagar Chatarpur Thermal Khalli Koto Parlakimedi Phulbani Surada			
COMPANIES				
2	Balasore	The Balasore Electric Supply Co. Ltd., Balasore	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
3	Berhampur Chhattarpur	The Berhampur Electric Supply Corporation Ltd., Berhampur (District Ganjam).	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Cuttack	The Cuttack Electric Supply Co. Ltd., M/A. M/S. Octavious Steel & Co. Ltd., 14, Old Court House Street, Calcutta.	3,300 400 230 460 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
5	Puri	The Puri Electric Supply Co. Ltd., M/A. M/S. B. Das & Co., Chandni Chauk, Puri.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

PUNJAB

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phase: frequency etc.
BOARD				
1-1	Nangal Hydrl Scheme	The Chairman, Punjab State Electricity Board, Patiala.	132,000 33,000 11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Uhl River Scheme	The Chairman, Punjab State Electricity Board, Patiala.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MUNICIPALITIES				
2	Amritsar	The Chief Electrical Engineer, Amritsar Municipal Committee, Amritsar.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
3	Nilokheri	The Administrative Officer, Rehabilitation Colony, Nilokheri, District Karnal.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Simla	The Chief Electrical Engineer, Municipal Electricity Department, Simla-1.	2,200 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
5	Ambala City	The Ambala Electric Supply Co. Ltd., Ambala City ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Ambala Cantt.	The Ambala Cantonment Electric Supply Corpora- tion Ltd., M/A. M/S. L. Kidarnath Ltd., Ambala Cantt.	440 220	D.C. 3 Wire D.C. 2 Wire
7	Bhatinda	The Modi Electric Supply Co. Ltd., Bhatinda ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
8	Bhiwani	The Bhiwani Electric Supply Co. The South Punjab Electricity Corporation Private Ltd., Hissar.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Hansi	The Hansi Electric Supply Co., The South Punjab Electricity Corporation Private Ltd., Hissar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
10	Hissar	The Hissar Electric Supply Co., The South Punjab Electricity Corporation Private Ltd., Hissar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Jagadhri	The Jagadhri Electric Supply & Industrial Co. Private Ltd., Jagadhri.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
12	Kaithal	The Kaithal Electric Supply Co. Ltd., Kaithal (District Karnal).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
13	Kasauli	The Kasauli Electric Supply Co. Ltd., Kasauli (Simla Hills).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
14	Loharu	The Loharu Electric & Water Supply Co. Ltd., P. O. Loharu, District Hissar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
15	Malerkotla	The Malerkotla Power Supply Co., Proprietor M/S. Bhagwan Dass & Sons, Malerkotla.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

PUNJAB—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C or D.C. Phases frequency etc.
COMPANIES—contd.				
16	Rewari	The Rewari Electric Supply & General Industries Ltd., Rewari.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
17	Rohtak	The Rohtak Electric Supply Co., The South Punjab Electricity Corporation Private Ltd., Hisar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
18	Sirsa	The Sirsa Electric Supply Co., C/O. The Lal Chand Minda, Sirsa.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
RAJASTHAN				
BOARD				
1-1	Alwar	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-2	Bikaner	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	6,600 2,200 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	Bharatpur	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	440 220	D.C. 3 Wire D.C. 2 Wire
1-4	Bhilwara	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	230	1 ph. A.C. 50 cy
1-5	Bhawani Mandi	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-6	Bhilwara Division (a) Bijainagar (b) Kekri	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-7	Bundi	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-8	Chittorgarh	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-9	Churu	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-10	Deeg	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-11	Dholpur	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-12	Dungarpur	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-13	Ganganagar	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	6,600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

RAJASTHAN—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-14	Hindaun	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-15	Jaisalmer	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-16	Jhalawar	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 2 Wire
1-17	Jodhpur	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-18	Jodhpur Division (a) Bilara (b) Didwana (c) Nagaur (d) Jalore (e) Sumerpur	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-19	Jaipur	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-20	Jaipur Division (a) Sewai Madhopur (b) Malpura	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-21	Karauli	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	440 220	D.C. 3 Wire D.C. 2 Wire
1-22	Kishangarh	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire
1-23	Kotah	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-24	Kuchaman	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-25	Nawalgarh	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-26	Newai Town	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-27	Phalodi	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-28	Rajsamand	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-29	Sogwara	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-30	Shahpura	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	230	D.C. 2 Wire
1-31	Sikar	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

RAJASTHAN—concl'd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—concl'd.				
1-32	Sirohi	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-33	Tonk	The Chief Engineer, Rajasthan State Electricity Board, Jaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MUNICIPALITIES				
2	Barmer	The Chairman, Municipal Board, Barmer ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
3	Merta	The Chairman, Municipal Board, Merta City ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Nasirabad	The Cantonment Executive Officer, Power House, Nasirabad.	460 230	D.C. 3 Wire D.C. 2 Wire
5	Nainwa	The Chairman, Municipal Board, Nainwa ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
6	Abu Mount	The Mount Abu Electric Supply Co., Lothian Power House, Mount Abu.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
7	Abu Road	The Abu Road (Sirohi State) Electricity and Industrial Co. Ltd., M/A. M/S. Acharya Yodha & Co., Abu Road.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
8	Ajmer	The Amalgamated Electricity Co. Ltd., (Ajmer Branch), M/A. M/S. N. C. Javori & Co., P. O. Box No. 879, 17-B, Horniman Circle, Fort, Bombay.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
9	Beawar	The Beawar Electric Supply Co. Ltd., Beawar ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
10	Ladnun	The Ladnun Electric Supply Co. Ltd., Ladnun ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Nagaur	The Nagaur Electric Supply Co., Nagaur ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
12	Nathdwara	Shri Krishna Bhandar Power House, Nathdwara ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
13	Pali	The Pali Electricity Co. Ltd., M/A. Marwar Industries (Private) Ltd., Kuchaman House, Jodhpur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
14	Partabgarh	The Partabgarh Electric Power House, Partabgarh ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
15	Pilani	The Pilani Industrial Corporation Ltd., Pilani ..	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
16	Rajgarh (Alwar)	The Rajgarh Electric Supply Co., Proprietor The Bharat Electrical and Industrial Corporation Ltd., Rajgarh (Alwar).	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
17	Sambar Lake	The Sambar Lake Electric Supply Co. (Private) Ltd., Sambar Lake.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
18	Udaipur	The Maharana Bhopal Electric Supply Co. Ltd., Udaipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

UTTAR PRADESH

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
UTTAR PRADESH BOARD				
1-1	Hydel Division, Aligarh Aligarh Sudamapuri Summera Tundla	The Chief Engineer, Hydel, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Hydel Division, Budaun Chandauli.	The Chief Engineer, Hydel, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	Hydel Division, Bullandshahr Palra.	The Chief Engineer, Hydel, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-4	Hydel Division, Mainpuri Mainpuri	The Chief Engineer, Hydel, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-5	Hydel Division, Meerut Bhola Chitaura Meerut M.E.S. Sakuwa.	The Chief Engineer, Hydel, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-6	Hydel Division, Moradabad— Moradabad Pauri Upper Ganges Valley	The Chief Engineer, Hydel, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. .C. 50 cy
1-7	Hydel Division, Roorkee Dhakrani Laksar Mohammedpur Narendernagar Nirgajni Pathri Saharahnpur Tehri	The Chief Engineer, Hydel, U. P. State Electricity Board, Lucknow.	400 230 440 220 110	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire D.C. 2 Wire
1-8	Kanpur	The Kanpur Electricity Supply Administration, 'Kesa House, Post Box No. 141, Kanpur.	6,600 400 230 450 225	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-9	Hydel Division, Kanpur Hamirpur Kanpur Mohoba	The Chief Engineer, Hydel, U. P. State Electricity Board Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-10	Hydel Division Gorakhpur Deoria Gorakhpur	The Chief Engineer, Hydel, U. P. State Electricity Board, Lucknow.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

UTTAR PRADESH—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-11	Charkhari	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	440 220	D.C. 2 Wire D.C. 2 Wire
1-12	Hydel Division, Azamgrah Azamgarh Mau	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-13	Hydel Division, Rampur	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-14	Riband Hydro Generation Circle Chopan Pipri	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-15	Hydro Electric Division, Baroilly Bageshwar Khatima Shahjahanpur	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	11,000 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-16	Hydrol Divison, Faizabad Sohwal	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	6,600 400 230 460 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-17	Hydel Division, Gonda, Bahariach	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	440 220	D.C. 3 Wire D.C. 2 Wire
1-18	Hydel Generation Division, Lobia Head.	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-19	Hydel Division, Sitapur	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-20	Thermal Division, Kasimpur. Hardnaganj	The Chief Engineer, Hydrol, U. P. State Electricity Board, Lucknow.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MUNICIPALITIES				
2	Almora	The Electrical and Water Works Engineer, Municipal Board, Almora.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
3	Haldwani	The Electrical and Municipal Engineer, Municipal Board, Haldwani-cum-Kathgadani, Haldwani.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Hardwar	The Electrical and Water Works Engineer, Municipal Board, Hardwar Union, Hardwar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
5	Ka-ganj	The Electrical Engineer, Municipal Electric Supply, Ka-ganj.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Khurja	The Electrical Engineer, Municipal Electric Supply, Municipal Board, Khurja.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

UTTAR PRADESH—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
MUNICIPALITIES—contd.				
7	Meerut	The Electrical Engineer, Municipal Board, Meerut	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
8	Muzaffarnagar	The Electrical Engineer, Municipal Board, Muzaffarnagar.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Mussoorie	The President, Mussoorie Dehra Hydro Electric Undertaking, City Board, Mussoorie.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
10	Nainital	The Electrical & Mechanical Engineer, Municipal Board, Nainital.	380 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Roorkee	The President, Municipal Board, Roorkee	400 230	3 ph. A.C. 50 ey 1 ph. A.C. 50 cy
12	Rishikesh	The President, Municipal Board, Rishikesh	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
13	Unnao	The Electrical & Water Works Engineer, Municipal Board, Unnao.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
14	Aligarh	The Aligarh Electric Supply Co. Ltd., M/A. M/S. Jain & Co., Udai Singh Jain Road, Mathura.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
15	Agra	The Agra Electric Supply Co., M/A. M/S. Martin Burn Ltd., 12, Mission Road, Calcutta 1.	6,600 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
16	Allahabad	The United Provinces Electric Supply Co. (Allahabad Branch) M/A. M/S. Martin Burn Ltd., 12, Mission Row, Calcutta 1.	11,000 3,300 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
17	Banaras	The Banaras Electric Light & Power Co. Ltd., M/A. M/S. Martin Burn Ltd., 12, Mission Row, Calcutta 1.	33,000 11,000 6,600 3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
18	Bareilly	The Bareilly Electric Supply Co. M/A. M/S. Martin Burn Ltd., 12, Mission Row, Calcutta 1.	3,300 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
19	Bharaich	The Balrampur Electric Supply Co. Private, Ltd., Balrampur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
20	Balrampur	The Balrampur Electric Supply Co. Private, Ltd., Balrampur.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
21	Barabanki	The Barabanki Electric Supply Co. Ltd., M/A. The Progressive Industries, Barabanki.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

UTTAR PRADESH—*contd.*

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
<i>COMPANIES—contd.</i>				
22	Budaun	The Kishore Electric Supply Corporation, C/O Kishore Chand Shiv Charan Lal, Budaun.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
23	Banda	The Banda Electric Supply Co. Ltd., M/A. Shah & Co. Bhagwan Dass Road, New Delhi.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
24	Etah	M/S. Seth Ram Gopal & Partners Electricity Suppliers, Etah.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
25	Etawah	The Western United Provinces Electric Power and Supply Co. Ltd., M/A. M/S. Alopi Prashad and Sons Ltd., P. B. No. 1097, Kashmere Gate, Delhi 6.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
26	Farrukhabad	The Farrukhabad Electric Supply Co. Ltd., M/A. M/S. Radheshyam & Brothers, Fategarh.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
27	Faizabad	The Faizabad Electric Licensee C/O The British Insulated Calenders Cables Ltd., 116, Station Road, Faizabad.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
28	Ghazipur	The Eastern United Provinces Electric Supply Co. Ltd., M/A. M/S. Seth Brothers, Kothi Shiv Sahaya, Ghazipur.	440 220	D.C. 3 Wire D.C. 2 Wire
29	Gonda	The Balrampur Electric Supply Co. Private Ltd., Balrampur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
30	Gorakhpur	The Gorakhpur Electric Supply Co. M/A. M/S. Moona Lal & Sons, Jhansi.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
31	Hathras	The lower Ganges Jamna Electricity Distribution Co. Ltd. (In Liquidation), Shiv Bhavan Morris Road, Aligarh.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
32	Hardoi	The Laxmi Electric Supply Co., Proprietor, The Laxmi Sugar & Oil Mills Ltd., M/A. M/S. Bansidhar Sons and Co., Hardoi.	440 220	D.C. 3 Wire D.C. 2 Wire
33	Jhansi	The Jhansi Electric Supply Co., M/A. M/S. Moona Lal & Sons, Jhansi.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
34	Jaunpur	The Jaunpur Electric Licenses (1934) C/O The British Insulated Calenders Cables Ltd., 116, Station Road, Faizabad.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
35	Kosikalan	The Kosi Electric Supply Co., Kosikalan, District Mathura.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
36	Lucknow	The United Provinces Electric Supply Co. Ltd., (Lucknow Branch) M/A. M/S. Martin Burn Ltd., 12, Mission Row, Calcutta I.	11,000 6,600 3,000 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
37	Mathura	The Resident Engineer, The Mathura Electric Supply Co. Ltd., Mathura.	3,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

UTTAR PRADESH—*contd.*

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—<i>contd.</i>				
38	Mirzapur	The Mirzapur Electric Supply Co. Ltd., M/A. M/S. Octavious Steel and Co. Ltd., 14, Old Court House Street, P.B. No. 55, Calcutta.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
39	Pilibhit	The Pilibhit Electric Supply Co. Private Ltd., M/A. M/S. Manmohan Lal & Sons (Private) Ltd., Pilibhit.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
40	Sadabad	The Sadabad Electric Supply Co. C/O M/S. M. N. Bharagava & Brothers, Sadabad.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
41	Saharanpur	The Saharanpur Electric Supply Co. Ltd., Ramnagar (Pathanpura Street), P.B. No. 16, Saharanpur.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
42	Shahjahanpur	The Shahjahanpur Electric Supply Co. Ltd., M/A. M/S. Octavious Steel & Co. Ltd., 14, Old Court House Street, P.B. No. 55, Calcutta.	3,300 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
43	Upper Jamuna Valley	The Upper Jamuna Valley Electric Supply Co. Ltd., M/A. M/S. Martin Burn Ltd., 12, Mission Row, Calcutta.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
44	Vrindaban	The General Engineering Co. Electricity Suppliers, Vrindaban.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
WEST BENGAL				
BOARD				
1-1	Barrackpore Division Barrackpore Barasat Grid North Calcutta Grid Sodepur Grid	The Divisional Engineer (Commercial), West Bengal State Electricity Board, New Secretariat Buildings, (7th Floor), 1, Hastings Street, Calcutta.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-2	Burdwan Division Burdwan Memari Grid Durgapur Sonamukhi Grid Mogra Boinchi Grid Arambagh	The Divisional Engineer (Commercial), West Bengal State Electricity Board, New Secretariat Buildings, (7th Floor), 1, Hastings Street, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-3	Howrah Division Howrah Amta Grid Kharagpur Midnapur Grid Singur Tarakeshwar Grid South Calcutta Grid Canning Cantai Digha Ghatal	The Divisional Engineer (Commercial), West Bengal State Electricity Board, New Secretariat Buildings, (7th Floor), 1, Hastings Street, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

WEST BENGAL—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
BOARD—contd.				
1-4	Krishnagar Division North Calcutta Grid Nimtita Grid Karimpore	The Divisional Engineer (Commercial), West Bengal State Electricity Board, New Secretariat Buildings, (7th Floor), 1, Hastings Street, Calcutta.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-5	Purulia Division Adra Purulia Grid	The Divisional Engineer (Commercial), West Bengal State Electricity Board, New Secretariat Buildings, (7th floor), 1, Hastings Street, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-6	Siliguri Division Balurghat Grid Changrabandha Grid Cooch Behar Grid Kurseong Siliguri Grid Raigunj Grid Haldibari Harischandrapur Mal Mathabhanga Old Malda	The Divisional Engineer (Commercial), West Bengal State Electricity Board, New Secretariat Buildings, (7th Floor), 1, Hastings Street, Calcutta.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
1-7	Suri Division Churulia Grid Damagoria Grid Mayurakshi Grid	The Divisional Engineer (Commercial), West Bengal State Electricity Board, New Secretariat Buildings, (7th Floor), 1, Hastings Street, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
1-8	Massanjore	The Assistant Engineer, Hydel Power Station, P. O. Massanjore District Santhal Parganas.	33,000 11,000	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy
MUNICIPALITIES				
2	Darjeeling	The Chairman, Darjeeling Municipality, Electrical Department, Darjeeling.	6,600 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
POWER CORPORATION				
3	Maithan	The Electrical Engineer, Damodar Valley Corporation, Anderson House, Alipore, Calcutta-27.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
4	Durgapur	The Electrical Engineer, Damodar Valley Corporation, Anderson House, Alipore, Calcutta-27.	11,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
COMPANIES				
5	Andul Mouri	The National Power Supply Corporation Ltd., M/A. M/S. K. K. Sen and Sons, 23-B, Allenby Road, Calcutta-20.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
6	Asansol	The Asansol Electric Supply Co. Ltd., M/S. Bengal Trust Ltd., Burnpur Road, Asansol.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
7	Bankura	The Bankura Electric Supply Co. Ltd., M/A. M/S. B. N. Elias & Co. Ltd., Northern Buildings, 1 & 2 Old Court House Corner, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

WEST BENGAL—contd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—contd.				
8	Bansberia	The Electrical Engineer, The East India Electric Supply & Traction Co. Ltd., M/A. M/S. Nursingsahay Mudungopal, 3, Jogendra Kaviraj Row, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Barakar	The Barakar Electric Supply Co., Proprietor, Babu Hari Ram Agarwala, P.O. Barakar, District Burdwan.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
10	Berhampur	The Berhampur Electric Supply Co. Ltd., M/A. M/S. S.C. Nag & Co., Berhampur.	400 230 440 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
11	Bhatpara	The Riverside (Bhatpara) Electric Supply Co., Private Ltd., M/A. M/S. Development of Industries (India) Ltd., 135, Princep Street, Calcutta-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
12	Bongaon	The Bongaon Electric Supply Co. Ltd., M/A. M/S. R. N. Chatterjee & Co. 135, Canning Street, Calcutta-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
13	Chandernagore	The Chandernagore Electric Supply Co. Private Ltd., Rue Carnot, Chandernagore.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
14	Calcutta	The Calcutta Electric Supply Corporation Ltd., Victoria House, Calcutta-1.	33,000 20,000 6,600 3,300 400 230 450 225	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire
15	Dishergarh	The Dishergarh Power Supply Co. Ltd., Associated Power Co. Ltd., Central Office, Dishergarh P.O. Sanctoria, District Burdwan.	11,000 3,300 550	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy
16	Gourepore	The Gourepore Electric Supply Co. Ltd., M/A. M/S. Macneill & Barry Ltd., 2, Fairlie Place, Calcutta 1.	6,600 3,300 440 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
17	Hooghly Chinsura	The East India Electric Supply & Traction Co. Ltd., M/S. Nursingsahay Mudungopal 3, Jogendra Kaviraj Row, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
18	Jalpaiguri	The Jalpaiguri Electric Supply Co. Ltd., M/A. M/S. Indo Swiss Trading Co. Ltd., Kent House, P-33, Mission Row Extension, Calcutta-13.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
19	Joynagar-Majilpur	The Joynagar-Majilpur Electric Supply Co. Ltd., 135, Canning Street, Calcutta-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
20	Jamuria	The Jamuria Electric Supply Co., M/A. M/S. Bengal Trust Ltd., Burnpur Road, Asansol.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
21	Kalimpong	The Kalimpong Electric Supply Co. Ltd., P-34, Mission Row Extension, 3rd Floor, Calcutta-1.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
22	Krishnagar	The Krishnagar Electric Supply Co. M/A. M/S. B.N. Elias & Co., Ltd., Norton Building, 1 & 2, Old Court House Corner, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy

WEST BENGAL—concl'd.

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES—concl'd.				
23	Malda	The Malda Electric Supply, Malda	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
24	Midnapur	The Midnapur Electric Supply Co., M/A. M/S. B. N. Elias & Co. Ltd., Norton Buildings, 1 & 2, Old Court House Corner, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
25	Nabadwip	The Nabadwip Electric Supply Co. M/A. M/S. B. N. Elias & Co. Ltd., Norton Buildings, 1 & 2, Old Court House Corner, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
26	Naihati	The Naihati Electric Supply Co. Ltd., M/S. Sanyal & Co., 300, Bow Bazar Street, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
27	Purulia	The Purulia Electric Supply Corporation Ltd., M/S. The Purulia Trading Co. Ltd., Electrical Engineers and Contractors, Purulia.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
28	Raneeganj	The Raneeganj Electric Supply Co. Ltd., M/A. M/S. Industries and Power Development Private Ltd., Western Block, 1st Floor, 40—1, Mahatma Gandhi Road, Calcutta-9.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
29	Seebpore	The Dishergharh Power Supply Co. Ltd., Associated Power Co. Ltd., (Seebpore Power House) Central Office P.O. Sanctoria, Dishergharh, District Burdwan.	11,000 3,300 550	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy
30	Vishnupur	The Vishnupur Electric Supply, The National Power Supply Corporation Ltd., M/A. M/S. K.K. Sen and Sons, 23-B, Allenby Road, Calcutta-20.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
UNION TERRITORIES				
1	ANDAMAN & NICOBAR ISLANDS	GOVERNMENT		
	Port Blair	The Electrical Engineer, Andaman & Nicobar Islands, Port Blair.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
2	HIMACHAL PRADESH			
2-1	Hydro Electric Division No. 1, Simla	The Superintending Engineer, Hydro Electric Circle, Himachal Pradesh P.W.D., Simla.	460 230 400 230	D.C. 3 Wire D.C. 2 Wire 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
	Jubbal Thanedar Theog			
2-2	Hydro Electric Division No. II, Dalhousie	The Superintending Engineer, Hydro Electric Circle, Himachal Pradesh P.W.D., Simla	400 230 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 2 Wire
	Chamba Jogindernagar Mandi South Chamba			

UNION TERRITORIES—*contd.*

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
HIMACHAL PRADESH <i>—contd.</i>		GOVERNMENT—<i>contd.</i>		
2-3	Hydro Electric Division No. III, Solan Arki Kunihar Line and Surrounding Area. Nahan Paonta Solan	The Superintending Engineer, Hydro Electric Circle, Himachal Pradesh P.W.D., Simla.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
2-4	Hydro Electric Division No. IV, Bilaspur Bilaspur Bilaspur New Town Bahl Valley Karsog Sundernagar	The Superintending Engineer, Hydro Electric Circle, Himachal Pradesh, P.W.D., Simla.	400 230 220	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 2 Wire
MANIPUR				
3	Imphal	The Electrical Engineer, Manipur Administration, Imphal Electricity Sub-Division, P.W.D., Manipur.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
TRIPURA				
4	Agartala	The Electrical Engineer, Agartala Electric Supply, Tripura Administration, Agartala.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
PONDICHERRY				
5	Pondicherry	The Director of Electricity, Electricity Department, Pondicherry.	22,000 400 230	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
MUNICIPALITIES				
DELHI				
6	Delhi Electric Supply Undertaking.	The Electrical Engineer, Delhi Electric Supply Un- dertaking (Municipal Corporation of Delhi) Central Power House, Rajghat, P.O. Box No. 589, New Delhi.	11,000 6,600 400 230 500 250	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D. C. 3 Wire D. C. 2 Wire
7	New Delhi Municipal Committee.	The Electrical Engineer, Electricity Department, New Delhi Municipal Committee, New Delhi.	6,600 400 230 440 220	3 ph. A.C. 50 cy 3 ph. A.C. 50 cy 1 ph. A.C. 50 cy D.C. 3 Wire D.C. 2 Wire

UNION TERRITORIES—*concl.*

Serial No.	Area or Town served/ System	Address of Undertaking	System of Supply	
			Voltage	A.C. or D.C. Phases frequency etc.
COMPANIES				
DELHI STATE—<i>contd.</i>				
8	Delhi Shahdra	The Upper Jamna Valley Electricity Supply Co. Ltd., M/A. M/S. Martin Burn Ltd., 12, Mission Row, Calcutta.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
9	Narela	The National Electric Supply & Trading Corporation Private Ltd., (Ganpati Bhawan) "Harblas Colony" Power House, Narela.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
PONDICHERRY				
10	Karaikal	The Karaikal Electric Supply Co. Ltd., M/A. M/S. A. S. Ahilandam, 13, West Boulevard Road, Tiruchirapalli.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy
11	Mahe	The Electrical Engineer, The West Coast Electric Supply Corporation Ltd., M/A. M/S. Chandrie & Co. (Private) Ltd., Mahe.	400 230	3 ph. A.C. 50 cy 1 ph. A.C. 50 cy