



GOVERNMENT OF INDIA
MINISTRY OF IRRIGATION AND POWER
CENTRAL ELECTRICITY AUTHORITY

PUBLIC ELECTRICITY SUPPLY
ALL INDIA STATISTICS
1968-69

GENERAL REVIEW

*As compiled by the Commercial Directorate, Central Water & Power Commission (Power Wing)
for and on behalf of the Central Electricity Authority*

NEW DELHI
1969

FOREWORD

The salient features of the progress and development of electricity supply industry in the Indian Union during the year 1968-69 have been summarised and presented in this publication which also covers selected industries. The presentation generally follows the same pattern as in the previous year except for the following few changes :—

- (i) Addition of two new tables—one showing inter-State transfer of energy and other showing category-wise energy sales in private sector (Tables No. 32 and 38 respectively).
- (ii) In all the previous publications the terms 'generation' meant 'gross generation'. Now, it has been considered advisable to show 'gross generation' and 'net generation' side by side in all the concerned tables, except where auxiliary consumption is shown along with gross generation.

2. The Central Electricity Authority is grateful to the various Governments of the States and Union Territories, State Electricity Boards and other electricity supply authority—both in the public and private sectors—for the supply of essential data without which the compilation of this publication would not have been possible. The Central Electricity Authority regrets the delay in the publication which was mainly due to late receipt of data from some undertakings. In a few cases where the data have not been received at all, the Central Water and Power Commission (Power Wing) on behalf of the Authority either had to resort to estimation of the figures wherever possible, or to indicate 'Not Available.'

3. As the publication is intended to present, as far as possible, a correct picture of the progress achieved by the electricity supply industry in each State/Union Territory of the Union for a particular year, it is necessary that in order to enhance its utility it is brought out well in time. To this end the cooperation of all electricity supply undertakings both in the public and private sectors—is solicited in ensuring that complete statistical and financial details regarding their undertakings are made available to this Authority as expeditiously as possible.

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

5. The Authority records its appreciation for the work done by the Commercial Directorate of the Central Water & Power Commission (Power Wing) on behalf of the Authority in the compilation and publication of this General Review.

BIKANER HOUSE, SHAHJAHAN ROAD,
NEW DELHI-11.

K. A. DAVE
Chairman
CENTRAL ELECTRICITY AUTHORITY

CONTENTS

Item No.	Description	Page No.
1. General Power Supply Position		1
2. Power Generation		1
2.1 Installed Plant Capacity and generation by ownership and Type of Plant		1
2.2 Installed plant Capacity and generation		2
2.3 Jointly owned projects		2
2.4 Generation Maximum Demand and Load factor		2
2.5 Additions to Generating Capacity		3
2.6 Plant withdrawn		4
2.7 Authorised Undertakings		4
2.8 Classification of undertakings owning Generating stations According to the Range of Installed Capacity, Generation and Maximum Demand		4
2.9 Classification of Power stations		5
2.9.1 Hydro Power Stations		5
2.9.2 Steam Power stations		5
2.9.3 Efficiency of Thermal Stations		6
2.9.4 Gas Turbine and Diesel Power Stations		6
2.10 Installed power plant according to AC & DC Generation		6
2.11 Voltage of Generation		7
2.12 Fuel Consumption		7
3. Energy Utilisation		7
3.2 Energy sales		9
3.3 Electricity Consumption Per Capita (Utilities plus non-Utilities)		9
3.4 Per Capita Installed Capacity (Utilities)		10
3.5 Progress of Electricity Supply Industry		10
4. Transmission and Distribution		10
4.1 Transmission and Distribution lines		10
4.2 Transformers		11
4.3 Consumer and Connected Load Data		11
4.4 Towns and Villages Electrified		12
5. Power Generated and used in selected Industries (excluding Railways)		12
6. Railways		13
7. Electrical Accidents		13
8. Financial data of Public Electricity Supply Undertakings 1967-68		13
9. Financing		14
10. Revenue		14
11. Revenue for kWhs sold under each category		15
12. Tentative Financial Results of the State Electricity Boards, Municipalities, Companies etc. during 68-69		16

Table No.	Description	Page No.
SECTION I—Technical Statistics		
1	Salient features of the Electricity Supply Industry	
2	Installed plant capacity (As on 31-3-1969) and generation by type of plant and ownership	
3	Installed plant capacity and generation by ownership and increase over previous year—(Utilities)	
4	State-wise installed capacity, generation and number of Undertakings (Utilities)—Sector-wise	
5	Installed plant capacity (31-3-1969) Aggregate maximum demand and energy generated by type of plant	
6	State-wise Gross Generation and auxiliary consumption by type of plant	
7	Installed hydro plant capacity and Gross generation by ownership (Utilities)	
8	Installed steam plant capacity and Gross generation by ownership (Utilities)	
9	Installed gas turbine and diesel plant capacity and Gross generation by ownership	
10	Shares of participating States in Jointly owned power stations	40
11	Aggregate generating maximum demand by ownership (MW)	42
12	Major hydro generating units commissioned during 1968-69	43
13	Steam and gas turbine generating Units commissioned during 1968-69	44
14	Boilers commissioned during 1968-69	45
15	Acquisition of Electricity Supply Undertakings	45
16	Distribution of Licensee Undertakings into (i) Generating (ii) Generating and purchasing (iii) Purchasing and Distributing State-wise	46
16(a)	Distribution of Municipal undertakings	47
17	Classification of undertakings (Utilities) owning generating stations according to ranges of installed capacity	48
18	Classification of undertakings (Utilities) owning generating stations according to ranges of generation	50
19	Classification of undertakings owning generating stations according to the range of generating maximum demand	51
20	Classification of hydro power stations according to the ranges of installed plant capacity	52
21	Classification of steam power stations according to the range of installed plant capacity	53
22	Distribution of steam power stations according to overall thermal efficiency	54
23	Classification of gas turbine and diesel power stations according to range of installed plant capacity	55
24	Plant capacity and generation by A.C. and D.C.	56
25	Analysis of generating sets according to type of prime movers and ownership	57
26	Classification of hydro power plant according to the size of the sets	60
27	Classification of steam power plant according to the size of the sets	61
28	Classification of gas turbine and diesel power plant according to the size of the sets (ownership-wise)	63
29	Classification of generating sets according to voltage of generation	64
30	Fuel consumption	66
31	Utilisation of electricity generated, purchased, sold and energy losses—All India (Utilities)	68
32	Inter-state transfer of power (Region-wise)	68
33	State-wise Energy generation, purchase Utilisation (including utilisation out of self generation of Non-utilities) and losses (Utilities)	70
34	Energy generation, purchase, utilisation and losses by the State Electricity Boards/Electricity Departments of Union Territories, Jammu & Kashmir and Nagaland/Damodar Valley Corporation (1968-69)	73
35	Energy sales—(1968-69) (Categorywise)	76
36	Statewise Energy Sales by Utilities to ultimate consumers	78
37	Energy sales by the State Electricity Boards	80
38	Energy sales by private sector (Million kWh)	82
39	Annual per capita consumption of electricity (1968-69) kWh	84
40	Installed plant capacity as on 31-3-1969 and energy consumption (1968-69) (utilities only) per square kilometer and per thousand of population	86
41	Progress of electricity supply—All India (Electric Utilities only)	88
42(1)	Progress of electricity supply—Andhra Pradesh	90
42(2)	Progress of electricity supply—Assam	91
42(3)	Progress of electricity supply—Bihar	92
42(4)	Progress of electricity supply—Gujarat	93
42(5)	Progress of electricity supply—Haryana	94
42(6)	Progress of electricity supply—Jammu and Kashmir	95
42(7)	Progress of electricity supply—Kerala	96
42(8)	Progress of electricity supply—Madhya Pradesh	97
42(9)	Progress of electricity supply—Maharashtra	98
42(10)	Progress of electricity supply—Mysore	99

(vii)

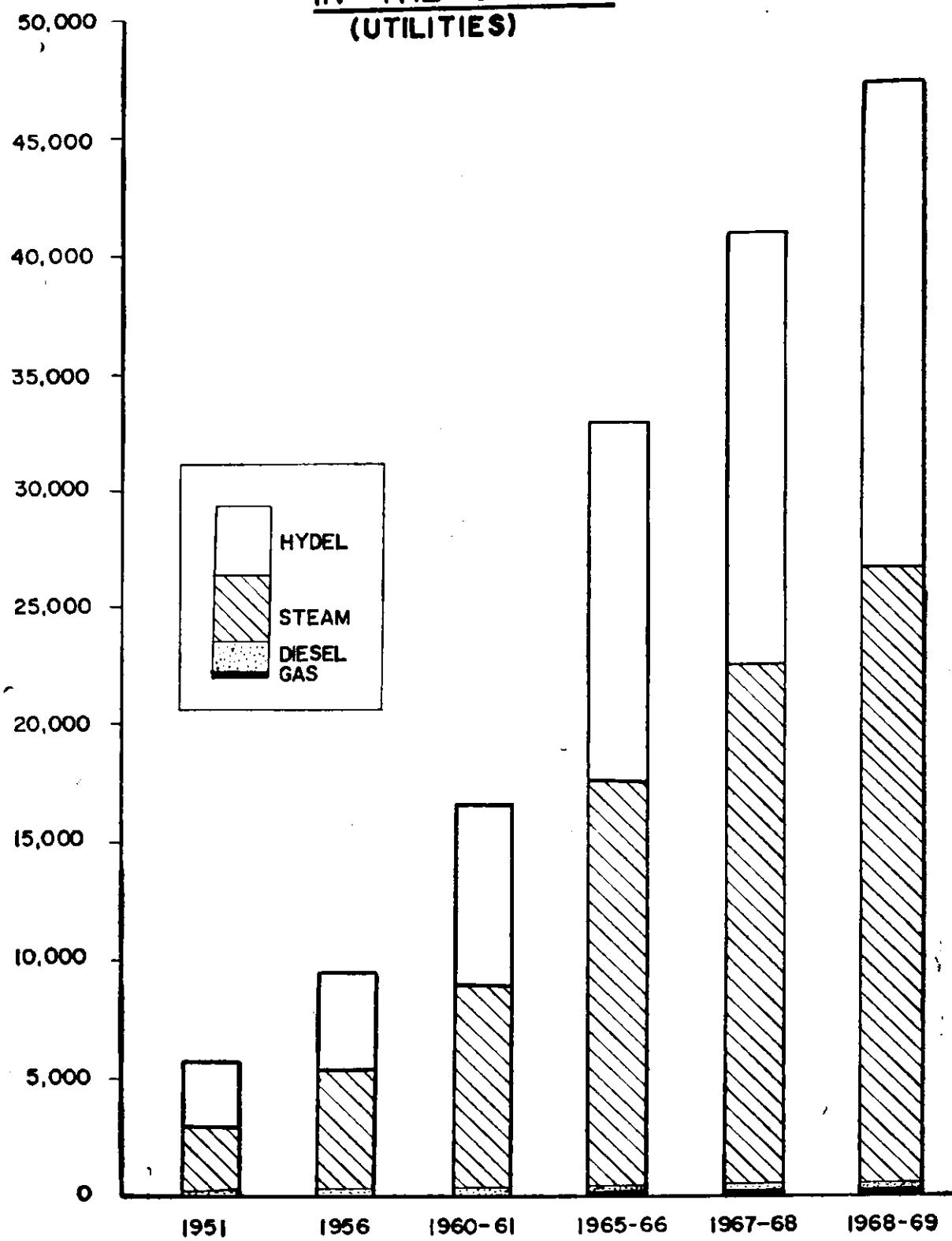
Table No.	Description	Page No.
42(11)	Progress of electricity supply—Nagaland	100
42(12)	Progress of electricity supply—Orissa	101
42(13)	Progress of electricity supply—Punjab	102
42(14)	Progress of electricity supply—Rajasthan	103
42(15)	Progress of electricity supply—Tamil Nadu	104
42(16)	Progress of electricity supply—Uttar Pradesh	105
42(17)	Progress of electricity supply—West Bengal	106
42(18)	Progress of electricity supply—D. V. C.	107
42(19)	Progress of electricity supply—Delhi	108
43	Index number of Public Electricity Supply Utilities—All India	109
44	Length of transmission and distribution lines of utilities (As on 31-3-1969)	110
45	Length of transmission lines (33 kv and above) commissioned during the year 1968-69	114
46	Installed transformer capacity—Utilities as on 31-3-1969	116
47	Important transformers commissioned during the year 1968-69	118
48	Classification of consumers of utilities as on 31-3-1969	120
49	Classification of connected load of utilities as on 31-3-1969 (MW)	124
50	Number of towns electrified in the various population groups (1961 census) as on 31-3-1969	128
51	Number of villages electrified in various population groups (1961 census) as on 31-3-1969	130
52	Electricity(i) production and consumption (In certain selected units) In selected industries (1968-69)	132
53	State-wise Electricity (i) production and (ii) consumption (In certain selected Units), In selected industries (1968-69)	134
54	Distribution of generating plant capacity in industrial establishments according to the range of installed plant capacity (1968-69)	136
55	Installed generating plant capacity of selected industries In kW as on 31st March, 1969	138
56	Energy consumed in selected industries (in certain selected units) 1968-69, (Million kWh)	142
57	Installed plant capacity and generation by the Indian Railways during the year 1968-69	146
58	State-wise installed plant capacity and generation by the Indian Railways during the year 1968-69	148
59	Electrical accidents during 1968-69	150

SECTION II—*Financial Statistics (1967-68)*

I	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 Corporations, and local authorities in the Public Sector & Companies, Partnership etc. in the Private Sector as on 31st March, 1968—(Capital Expenditure)	152
II	Public Electricity Industry—consolidated annual accounts for the year ended 31-3-68—Capital Account —1967-68	153
III	Revenue Account—1967-68	156
IV	Net Revenue and Appropriation Account 1967-68	160
V	Balance Sheet as at 31-3-1968	163
VI	Average Price of Electricity—1967-68	165
VII	Some Important Financial Features for the year 1965-66 to 1967-68	165
VIII	Consolidated Capital Outlay Ownership for the year 1963-64 to 1967-68	166
IX	Consolidated Capital Outlay of Electricity Supply Undertakings for the year 1963-64 to 1967-68	166

(viii)

PROGRESS OF POWER GENERATION
IN THE COUNTRY
(UTILITIES)



PUBLIC ELECTRICITY SUPPLY—ALL INDIA STATISTICS 1968-69

GENERAL REVIEW

1. GENERAL POWER SUPPLY POSITION

The total installed plant capacity of the Utility Power Stations as at the end of the year under review was 12,957.27 MW, including 136.0 MW of plant in the Chola Power Station of the Central Railway, 400.00 MW of plant in the Neyveli Power Station, and 125.00 MW in Renukot Power Station (U.P.) are also included. The net addition to generating capacity of Utilities was 1,054.5 MW, which represents an increase of 8.9 per cent over the installed plant capacity in the previous year. The total power generated (gross) by all the Utility undertakings was approximately 47,433 million kWh (net generation 44,901.5 million kWh) and the quantum of power purchased by them from self generating industries (non-utilities) was 96.29 million kWh. After meeting the power consumption in the station auxiliaries, and the losses in transformation, transmission and distribution and the energy unaccounted for, the net energy sold by Utilities to ultimate consumers, was approximately 37,352 million kWh. The increase in the sales to ultimate consumers during the year was approximately 4,615 million kWh equivalent to an increase of 14.1 per cent over the sales to ultimate consumers in the previous year.

The salient features of the Electric Power Supply Industry and of self-generating non-utilities in India for the years 1951, 1956, 1960-61, 1965-66, 1967-68, 1967-68 and 1968-69 are summarised in Table 1.

2. POWER GENERATION

2.1 Installed Plant Capacity and Generation by Ownership and Type of Plant

Table 2 gives the installed plant capacity and generation by types of plant and ownership. This table also gives further details of installed plant capacity and generation expressed as percentage of the All India totals.

Table 3 gives the installed plant capacity and generation classified according to ownership of plant. It will be seen that 87.5 per cent of the installed plant was in the public sector and this generated (net) 85.3 per cent of the total power (net). In the private sector, the installed plant capacity & generation (net) were 12.5 and 14.7% of all India respectively. The prime-mover wise position is given below :—

	Public Sector		Private Sector		Total	
	Installed capacity %	Generation (Net) %	Installed Capacity %	Generation (Net) %	Installed capacity %	Generation (Net) %
1	2	3	4	5	6	7
Hydro	43.5	43.5	2.1	2.4	45.6	45.9
Steam	41.2	41.2	10.1	12.2	51.3	53.4
Diesel	1.8	0.3	0.3	0.1	2.1	0.4
Gas Turbine	1.0	0.3	..	..	1.0	0.2
ALL-INDIA .	87.5	85.3	12.5	14.7	100.0	100.0

2.2 Installed plant capacity and generation

Table No. 4 gives the installed plant capacity and generation by Utilities in public and private sectors. The total installed plant capacity and the corresponding generation (Net) in the public utility undertakings were 12,957.27 MW and 44,901.5 million kWh respectively at the end of the year as per details shown below :—

	1	2	3
		Total Installed Capacity (MW)	Generation (Net) (Million kWh)
1. State Electricity Board		7,895.34	26,854.72
2. Government Undertakings, Electricity Departments/Damodar Valley Corporation . .		3,167.83	10,841.93
3. Municipalities		271.14	566.36
4. Companies		1,622.96	6,638.50
	TOTAL . .	12,957.27	44,901.51

Table 5 gives further details of installed plant capacity, Aggregate maximum demand and generation by type of plant arranged statewise. Tables 7, 8 & 9 give details of Plant capacity and generation according to type of plant and ownership.

2.3 Jointly-owned Projects

Table 10 summarises the share of the participating States in the jointly owned power stations in India. This table gives the installed plant capacity, energy generated, energy used by station auxiliaries and the energy sent out to the participating states & common consumers. 2072.750 MW of plant capacity was under joint ownership. The energy sent out from these Projects was 6971 million kWh. (Tarapur atomic power station commissioned commercially in 1969-70 is obviously not included).

2.4 Generation Maximum Demand and Load Factor

The aggregate generation maximum demand of the public sector utility undertakings was 9,480.60 MW and that of the private sector undertakings was 1,391.46 MW. (The data on simultaneous maximum demands grid-wise are not yet adequately available). Table 11 gives the demand registered in the respective sectors, in each of the States.

The aggregate maximum demand, kWh generated per kWh of plant capacity, load factor and plant demand factor for steam, gas turbine, diesel and hydro stations grouped separately on all India basis is given below :—

Type of power plant	Aggregate installed plant capacity (MW)	Energy generated (Million kWh) (Gross)	Aggregate Maximum Demand (MW)	kWh generated per kw of plant capacity	% load factor based on Cols. 3 & 4	% plant demand factor (Col. 4 & 2)
1	2	3	4	5	6	7
Hydro	5,906.91	20,722.67	5,146.28	3,400	46.1	84.3
Steam	6,640.34	26,393.72	5,538.80	3,721	52.0	81.6
Diesel	276.02	193.84	140.28	787	16.6	54.3
Gas Turbine	134.00	123.42	54.70	583	19.3	34.5
	TOTAL . .	12,957.27	47,433.65	10,880.06	8,491	48.9
						81.7

2.5 Additions to Generating Capacity

During the year 1,130.00 MW of generating capacity was added which figure excludes 19.63 MW installed capacity which is due to difference in reporting and 75.52 MW of plant capacity was withdrawn, resulting in a net increase of 1,074.41 MW allowing for reporting difference. (IIIrd unit of 50 MW of Korba stage II, though tested in 1967-68 was commercially commissioned in 1968-69 and hence taken in 1968-69).

The installed plant capacity added in the different States was as follows : (The addition of installed capacity in Jointly-owned projects has been distributed among the participating states as per their shares).

Note :—Figures given in brackets indicate the additions due to wrong reporting (i.e. addition having taken place earlier but not reported.)

State	Hydro (MW)	Steam (MW)	Diesel (MW)	Gas Turbine (MW)	Total (MW)	Remarks
1	2	3	4	5	6	7
Andhra Pradesh . . . . .	..	..	..	..	..
Assam	2.80	..	..	..	2.8	
Bihar . . . . .	..	50.00	..	..	50.00	
Gujarat . . . . .	..	..	..	..	..
Haryana	40.70	..	..	..	40.70	
Jammu & Kashmir . . . . .	..	7.5	..	..	7.50	
Kerala	18.00	..	..	..	18.00	
Madhya Pradesh	43.00	175.00	..	..	218.00@	@III unit of 50 MW of Korba
Maharashtra	15.00	62.50	..	..	77.50	Stage II com- mercially co- mmissioned
Mysore	178.20	..	..	..	178.20	in 68-69 hence taken.
Nagaland . . . . .	..	..	..	..	..
Orissa . . . . .	..	62.5	..	..	62.5	
Punjab	61.04	..	..	..	61.04	
Rajasthan	61.26	50.00	..	..	112.26	
Tamil Nadu . . . . .	..	..	..	..	..
Uttar Pradesh . . . . .	..	162.50	..	..	162.50	
West Bengal . . . . .	..	..	..	..	..
D. V. C. . . . .	..	140.00	..	..	140.00	
<i>Union Territories :</i>						
Delhi . . . . .	..	..	..	..	..
Rest . . . . .	..	..	..	..	..
TOTAL	420.00	710.00	..	..	1,130.00	
Wrong reporting	..	(+)5.75	(+)13.88	..	19.63	

The plant additions under Hydro and Steam as above constitute 37.2% and 62.8% of the total installed plant capacity added.

For further details about Steam, Gas Turbine and Hydro plants added during the year, tables 12 and 13 may be referred to. The boilers commissioned during 1968-69 are given in Table 14.

2.6 Plant Withdrawn

The plant withdrawn during the year was as follows :

Hydro	-	-	-	-	-	-	-	-	-	-	-	-	Nil
Steam	-	-	-	-	-	-	-	-	-	-	-	-	50.82 MW
Diesel	-	-	-	-	-	-	-	-	-	-	-	-	24.70 MW
												TOTAL	75.52 MW*

*Provisional.

2.7 Authorised Undertakings

Five undertakings have been acquired by the State Electricity Boards. Details are given in Table No. 15. The Chola Power Station of Central Railway, Thermal Power Station of Neyveli Lignite Corporation Ltd., have been considered under public utilities. (Renukot in Uttar Pradesh being a sanction holder is included in Utilities).

The total number of undertakings engaged in the business of generation and supply of electric power as at the end of the year was 234 (treating electricity departments as separate undertakings, which practice was started from the year 1967-68). Out of these 26 undertakings were generating and distributing; 67 undertakings were generating, purchasing and distributing, and 141 undertakings were purchasing and distributing. The number of operating undertakings according to ownership may be seen below :—

Ownership	Generating and distrib- uting	Generating purchasing & distrib- uting	Purchasing and distrib- uting	Total
1	2	3	4	5
(I) Public Sector :				
(a) State Electricity Board/Electricity Deptt./Govt. Under-taking	16	18	2	36
(b) Power Corporation . . . . . . . .	..	1	..	1
(c) Municipality	1	13	30	44
Sub-Total . .	17	32	32	81
(II) Private Sector :				
Company	9	35	109	153
TOTAL . .	26	67	141	234

The number of electricity supply undertakings classified according to ownership in different States along with the installed plant capacity and power generation is given in Table 4.

A large number of company-owned utility undertakings were operating in Maharashtra (39), Gujarat (25), West Bengal (24) and Uttar Pradesh (19). In other States, their number was 10 or less, each. In Andhra Pradesh, Jammu & Kashmir, Nagaland, Orissa and Union Territories (except Goa, Daman and Diu) there was no private utility undertakings.

2.8 Classification of Undertakings owning Generating Stations According to the Range of Installed Capacity, Generation and Maximum Demand

Table 17 gives the number of undertakings owning generating stations grouped according to the range of installed plant capacity. The aggregate plant capacity and generation under each group are also given.

Table 18 gives the distribution of generating undertakings according to their aggregate generation for all undertakings, and table 19 gives the distribution of generating undertakings according to maximum demand, for State Electricity Boards/State Governments/Government Undertakings and Power Corporation. 33 undertakings whose generation exceeded 50 million kWh each accounted for 99.5 per cent of the total power generated by Utilities in India.

2.9 Classification of Power Stations

2.9.1 Hydro Power Stations.—Table 20 gives the classification of hydro stations according to the range of installed capacity.

Among 100 hydro stations 55 stations had capacities exceeding 10.00 MW each and accounted for 98.9% of total installed hydro plant capacity. These stations generated 98.6% of the total power produced by all the hydro power stations in India.

The position for hydro stations is summarised below :—

	1967-68	1968-69	% increase over 1967-68
Number of Hydro Stations	96	100	4.17
Aggregate Plant Capacity (MW)	5,486.916	5,906.91	7.65
Total energy generated (Million kWh)	18,658.059	20,722.67	11.06
Average plant load factor (%)	38.8	40.05	4.08

2.9.2 Steam Power Stations.—Table 21 gives the classification of steam power stations according to the range of installed plant capacity. This table also gives the steam raising capacity of boilers and the average plant load factor for each range of plant capacity. There were 62 stations, whose capacities exceeded 10.00 MW each. Among these stations 33 stations exceeded 50.00 MW and out of these, only four stations had capacities upto 1.00 MW.

The 62 stations whose individual capacities exceeded 10 MW generated 99.5% of the total power produced by the steam power stations. Among these stations only 33 whose individual capacity exceeded 50.00 MW generated 91.3% of the total power produced by all steam power stations.

Table 21 also gives the aggregate steam raising capacity of boillers which was 29,121 tonnes per hour, which corresponds to 4.4 kg. per hour per KW of generating plant capacity.

The data relating to steam power stations are summarised below as compared with the position in the previous year:—

	1967-68	1968-69	% increase over 1967-68
No. of stations	94	95	1.1
Aggregate Installed Capacity (MW) at the end of the year	5,975.410@	6,640.34	11.1
Total energy generated (Million kWh)	22,232.745	26,393.72	18.7
Capacity of boilers (tonnes per hour)	25408	29121	14.6
Average capacity of boilers per kW of generating plant capacity (kg/hour)	4.25	5.5	3.5
Fuel consumed Coal, Lignite, Wood (Tonnes)	14689826	16559864	12.7
Furnace Oil (kilolitres)	801,647	1,125,303	40.4
Overall Thermal efficiency (%)	24.0	24.2	0.8
Average plant load factor (%)	42.5	45.4	6.8

@—III unit of 50MW of Korba Stage II though tested in 1967-68 was commercially commissioned in 1968-69 and hence taken in 1968-69.

2.9.3 Efficiency of Thermal Stations.—The average overall efficiency of all the Steam power stations was 24·2 per cent as compared with 24·0% for the year 1967-68. For details, table 21 may be seen where-in the overall efficiency of thermal stations is given according to capacity groupings of power stations. In the case of stations of capacity above 100·00 MW each, the average overall efficiency was 27·3%.

Table 22 shows the distribution of steam power stations according to their average overall efficiency. 30 power stations with aggregate installed capacity of 79.6% of the total steam plant installed, were working with efficiencies from 20% and above and generated 85.5% of the energy. 15 stations worked at efficiencies between 25% to 30% and only 6 stations above 30% efficiency.

The maximum steam pressure and temperature adopted in the steam power stations was 179.3 kg. per sq. cm and 571° C respectively.

2.9.4 Gas Turbine and Diesel Power Stations.—Table 23 gives the classification of gas turbine and Diesel power stations according to the range of installed plant capacity. There was no change in the number of the gas turbine power stations. The performance of the gas turbine power station during the year is given below :—

	1967-68
Number of generating stations	6
Aggregate installed capacity (MW)	134.00
Total energy generated (Million kWh)	123.42

The position for diesel plants is compared below with that of the previous year :—

	1967-68	1968-69	% increase over 1967-68
Aggregate installed capacity (MW)	286,837	276,02	(-) 3.8
Total energy generated (Million kWh)	225,776	193,54	(-)14.3
Fuel consumed (kilo-litres) (estimated)	80,733	67,949.00	(-)15.8
Average fuel consumption per kWh generated (litres) (estimated)	0.36	0.35	(-) 2.8
Average plant load factor (%)	9.0	8.0	(-)11.1

2.10 Installed Power Plant According to AC and DC Generation

Out of 566 power stations under review 557 stations generated alternating current; 3 both alternating and direct current and the remaining 6 generated only direct current. Table 24 shows the corresponding plant capacity and generation.

Table 25 gives the number of generating sets by type of prime-mover and ownership. This table also indicates AC and DC generating sets with their capacity.

Table 26, 27 and 28 give the classification of plant according to the size of the sets for steam, gas turbine, diesel and hydro categories respectively, giving break-up by ownership and AC/DC. The information contained in these tables are summarised below, for those stations where set-wise data were available :—

Sector & Installed Capacity	AC. Plant				DC. Plant			
	Hydro	Steam	Gas turbine	Diesel	Hydro	Steam	Diesel	Total
1	2	3	4	5	6	7	8	9
<i>Public Sector—</i>								
Number of sets . .	301	250	9	811	..	..	13	1,384
Installed capacity (MW)	5,629.4	6,638.67	134.000	206.530	..	..	2.03	11,334.31
<i>Private Sector—</i>								
Number of sets . .	24	94	..	116	..	3	13	250
Installed capacity (MW)	277.510	1,302.22	..	41.45	..	5,100.270	1.51	1,622.96
Total Number . .	325	334	9	927	..	3	26	1,634
Total capacity (MW) . .	5,906.91	7,940.89	134.000	247.98	..	0.270	3.54	12,957.27

2.11 Voltage of Generation

Generation voltage in India ranged from 230 volts to 33,000 volts in the case of A.C. generating sets, while for the D. C. generating sets it ranged from 110 volts to 500 volts. A very popular voltage for A. C. generating from steam and hydro sets is 11 kV. Classification of generating sets according to the voltage of generation is given in Table 29, in case of stations where setwise data were available.

2.12 Fuel Consumption

The fuel consumed in the thermal power stations in the various states in the year 1968-69 are given in Table 30. The steam power stations consumed approximately 13,807,760 tonnes of coal, 2,730,000 tonnes of wood and about 1,125,303 kilolitres of furnace oil. The gas turbines consuming Diesel oil, and the diesel stations, consumed about 68,677 kilolitres of diesel oil for power generation. The average heat in-put per kWh generated in the steam plants (including reciprocating steam plants) was 3,794 kilocalories and the average diesel oil consumption by the gas turbine and diesel power stations was 0.35 litre per kWh.

3. Energy Utilisation

3.1.1 Table 31 gives the summary of energy generated and power purchased from non-utilities, power sold to ultimate consumers and the amount of power lost in transformation, transmission and distribution including unaccounted consumption. 5.3% of the total energy generated and purchased was utilised by the power station auxiliaries. 83.0% of the net energy available for supply was sold to ultimate consumers. Thus the losses and energy unaccounted for from all sources were 17.0% of the total energy available for supply.

Table 33 gives further details of energy generated, purchased, and utilised and losses in transmission, transformation and distribution in the different States by all the Public Electricity Supply Undertakings.

3.1.2 Table 34 gives details of energy generated purchased and utilised by State Electricity Boards, Government Electricity Departments of Union Territories Jammu & Kashmir and Nagaland and the D. V. C.

	(Million kWh)	
	All State Electricity Boards/ Elec. Deptts. of U. Ts., Jammu & Kashmir & Nagaland/ D.V.C.	All India Utilities
1. Total energy generated	31,339.42	47,433.35
2. Energy purchased/transferred from		
(a) Non-Utilities	96.29	96.29
(b) (i) Private Sector Utilities :		
(ii) Govt. Undertakings and		
(iii) Electricity departments other than those of U.Ts., Jammu and Kashmir and Nagaland	9,338.24	Not applicable
3. Total power from all sources (1 + 2)	40,764.95	47,529.64
4. Energy used by power station auxiliaries	1,686.29	25,32.14
5. Total energy available for supply	39,078.66	44,997.50
6. Energy Sales to:—		
(a) Utilities	7,996.94	Not applicable towards calculation of losses
(b) Ultimate consumer	24,471.71 (directly ultimate consumers).	
7. Energy (i) lost in transformation, transmission & distribution & (ii) unaccounted for	6,610.55@	
8. Losses as percentage of energy available for supply	16.9@	17

@This excludes (naturally) losses in the systems of licensees and municipalities purchasing power and of supplying undertakings like Neyveli & Durgapur Projects.

3.1.3 Inter-State transfer of Energy.—Table 32 gives data about the energy transfer and aggregate maximum demand of such transfers. The aggregate of inter-state energy transfers from under-takings in one State to those in the other was 5,476 million kWh. This compared to the total sales to ultimate consumers works to 14.7%. For comparison the aggregate of inter-state energy transfers both as quantity and percentage of net generation from 1960-61 onwards is given below :—

	Year	Total net Generation	Aggregate of Inter-State transfers of energy	Column 3 as percentage of 2
	1	2	3	4
1960-61	.	16,215	921	5.7
1961-62	.	19,056	781	4.1
1962-63	.	21,452	3,282	15.3
1963-64	.	25,750	3,273	12.7
1964-65	.	28,259	3,446	12.2
1965-66	.	29,155	3,751	12.9
1966-67	.	34,583	4,479	13.0
1967-68	.	39,120	5,139	13.1
1968-69	.	44,901	5,476	12.2

3.2 Energy Sales

Table 35 gives the sales of Utilities to ultimate consumers who are classified under eight broad categories. 8.5% of the total sales of Utilities was for domestic light and small power 5.7% for commercial lighting, heating, and small power, 69.3% for industrial, 1.0% for public lighting, 3.3% for railways and tramways, 9.3% for agricultural (pumping) 2.3% for public water works and sewage pumping and 0.6% for miscellaneous (including free supply).

The percentage increase in power sold by Utilities during the year over the previous year for the categories (i) domestic light and small power, (ii) industrial power, (iii) traction and (iv) agricultural (pumping was 8.8, 13.3, (-)4.2 and 34.1 respectively. The net average increase in power sales by Utilities to all classes of consumers was 14.1% over that in the previous year.

Table 36 gives the segregation of net energy sold in each State according to different categories of consumption. The industrial power supply is sub-divided in to low and medium voltage, and, high voltage categories.

Similar segregation of net power sold in each State by State Electricity Boards is given in table 37, and that by the private sector in table No. 38.

3.3 Electricity Consumption per capita (Utilities plus non-Utilities)

The average per capita consumption of electricity for the Indian Union is estimated at 77.9 kWh in 1968-69 as compared to 71.6 kWh for the year 1967-68. The per capita consumption thus increased by 8.8% over that in the previous year.

Table 39 gives the annual per capita consumption of electricity in public utilities under five classes of utilisation in the different States based on the estimated mid-financial year population figures (*i.e.* for 30th September, 1968, the mid-point of 1968-69). This table also gives the contribution made by self-generating industrial establishments including Indian Railways to the per capita consumption in each of the States.

The per capita consumption as computed on this basis for the years 1951, 1956, 1960-61, 1965-66, 1967-68 and 1968-69 are given below :—

Year	Per Capita Consumption		
	Public Utilities (kWh)	From self-generation of Non-Utilities (kWh)	Total (kWh)
1968-69	70.81	7.07	77.88
1967-68	63.65	7.99	71.64
1965-66 (last year of III Plan)	53.66	7.23	61.33
1960-61	31.85	6.30	38.15
1956	20.70	5.70	26.40
1951	13.25	4.53	17.78

The Union Territories of Chandigarh and Delhi showed the highest overall per capita consumption of electricity of 254.30 (estimated) & 241.49 kWh respectively.

3.4 Per Capita Installed Capacity (Utilities)

Table 40 gives the installed capacity in Utilities per sq. kilometre and per thousand of population for each of the State in India.

During the period under review, the All India aggregate installed plant capacity of Utilities was 3.96 kW/sq. kilometre and 24.56 kW per thousand of population against 3.63 and 23.09 respectively in the previous year. For this purpose, the estimated population figures worked out by the Census Authorities have been used (except for Chandigarh which has been roughly estimated).

3.5 Progress of electricity Supply Industry

Table 41 gives the All India progress of electricity in Utilities with details of installed plant capacity, aggregate maximum demand, kilowatt hours generated per kW of capacity etc. from the year 1939 onwards.

Tables 42(1) to 42(19) give the installed capacity, generation, purchased and sale of power etc. for each State separately for the year 1951, 1956, 1960-61, 1965-66, 1967-68 and 1968-69.

Table 43 gives All India index numbers (taking 1951 as the base year) for some of the salient features of the electricity supply industry (utilities), like installed plant capacity, generation and sales etc.

4. TRANSMISSION AND DISTRIBUTION

4.1 Transmission and Distribution Lines

The length of transmission and distribution lines under different voltages is given below. The comparative position in the previous year may also be seen.

(Circuit kilometres)

Voltage	1967-68		1968-69		Increase Percentage
	O.H.	U.G.	O.H.	U.G.	
22 kV	21,454	472	24,163	549	12.71
33 kV	49,181	609	53,254	868	8.70
44/37.5 kV	2,930	..	3,615	..	23.38
78/76 kV	19,590	..	21,239	..	8.42
110/90 kV	10,626	..	11,122	..	4.67
132 kV	20,425	..	22,934	..	12.28
220/230 kV	6,386	..	10,225	..	58.55
TOTAL . .	130,592	1,081	146,552	1,204	12.08

O.H.—Overhead line.

U.G.—Underground.

The length of the lines in different States is given in Table 43. The total length of transmission and distribution lines added during the year was 118,686 circuit kilometres (Provisional due to data of Assam State Electricity Board and some other undertakings, not being available.)

Length of transmission lines 33 kV and above, commissioned during the year are given in Table 43.

4.2 Transformers

The number of transformers installed at the end of the year was 179,936 in the Public Electricity Supply Undertakings. Their aggregate capacity was 54,770.1 MVA as classified below :—

	Number	Aggregate Capacity (MVA)
Step-up transformers	1,155	14,749.4
Step-down transformers	4,871	27,998.0
Distribution transformers	173,910	12,021.6
TOTAL	179,936	54,770.17

All step-down transformers having a secondary voltage above 550 volts have been classified as step down transformers and those having secondary voltage below 550 volts have been classified as distribution transformers. Further details are given in Table 45. Some of the large power transformers commissioned during the year are indicated in Table 47.

4.3 Consumer and connected load Data (Utilities)

The particulars relating to the consumers and their connected loads, as at the end of the year, presented in Tables 48 and 49, are summarised below :—

1	Number of consumers			Total connected load (MW)
	A.C.	D.C.	Total	
2	3	4	5	
Domestic light & small power	7,994,142	393,971	8,388,113	4,803.08
Commercial light & small power	1,889,860	40,656	1,930,516	1,975.16
Industrial power—				
(i) LV & MV	37,097	15,240	452,333	3,687.07
(ii) H. V.	95,810	10	9,590	6,177.58
Public lighting	52,052	72	52,124	146.26
Railways & tramways	88	Nil	88	244.06
Agricultural (pumping) (Provisional)	1,077,891	11	1,077.901	4,219.56
Public Water Works & Sewage pumping	8,965	11	8,976	257.92
Miscellaneous	51,896	113	15,982	549.46
TOTAL	11,485,540	450,084	11,935,624	22,060.15 say 22,060 MW

The number of consumers at the beginning of the year was approximately 10,631,914. During the year approximately 1,303,710 (Provisional) new consumers were connected thus recording a rise of 6% in their number.

4.4 Towns and Villages Electrified

Table 50 shows the State-wise distribution of towns and villages electrified by the end of the year. The total number of towns and villages electrified was 2,677 and 71,410 respectively as per 1961 census.

5. POWER GENERATED AND USED IN SELECTED INDUSTRIES (EXCLUDING RAILWAYS)

Statistical data from 977 industrial establishments were received and have been analysed. These establishments consumed 17,802 million kWh of energy. Out of this 14,336 million kWh were purchased from public electric utilities and 4,136 million kWh were generated in the power plants owned by 398 self generating non-Utilities. It should be stated that while the coverage of self-generating industries is enough but not complete as it is not possible to cover all the thousands of industrial establishments consuming electricity. The consumption mentioned above therefore represents the consumption of the establishments covered and do not represent the total consumption in the selected industries as a whole.

The generating plant capacity of the self-generating industries increased by 70 MW (increase including error due to reporting). Renakot Power house in Uttar Pradesh has been treated as a licensee.

The industry-wise and statewise data of generating plant capacity, maximum demand, energy generation and purchase relating to selected industries are given in Tables 52 and 53 respectively.

The total installed plant capacity in the industrial power stations was 1,277.47 MW. This capacity was about 8.94% of the total installed plant capacity in the power stations owned by both the public utilities and industrial undertakings including the Indian Railways.

The cotton textiles, Aluminium (Primary), iron and steel (Primary), fertilizers, chemicals, cement (Primary) and jute industries were large purchasers of power from electricity supply undertakings. Fertilizers oil and Petroleum, sugar, paper, silk, cement (Primary), collieries, and copper (Primary), industries generated a large portion of their requirements in their own power stations.

The distribution of generating plant capacity in industrial establishments according to range of plant capacity is given in Table 54. 26 Undertakings with plant capacity of 10.001 MW and above produced 73.12% of the total power generated in the industrial power stations. 149 industries with plant capacity in the range of 1.001 to 10.000 MW generated 25.1% of the total power and the remaining 223 industries generated only 1.8% of the total electricity production by all the industries.

Table 55 and 56 give the installed generating plant capacity and consumption of energy in 25 classified industries and in the miscellaneous category in each State. The power consumption and load factor of a few important industries are summarised below :—

Name of Industry	Energy consumption (Million kWh)	System load Factor %
1. Aluminium (Primary)	2,436.8	89.3
2. Cement (Primary)	1,117.4	67.9
3. Chemicals	1,030.1	57.5
4. Collieries	618.4	49.2
5. Cotton textiles	3,047.7	62.9
6. Engineering	456.4	42.3
7. Fertilizers	2,155.8	83.7
8. Iron & Steel(Primary)	2,745.2	55.8
9. Jute	702.0	59.1
10. Paper	812.6	68.2
11. Silk	695.7	78.0
12. Sugar	305.0	22.7

6. RAILWAYS

Electricity statistics in respect of the Indian Railways is shown separately in Tables 57 and 58. This, however, does not include the Chola Power Station of the Central Railway which is covered under public utilities.

The salient features of the Railway Power Stations are summarised below :—

Aggregate installed plant capacity (MW)	61.93
Aggregate Maximum Demand (MW)	34.65
Generation (Million kWh)	72.08
Consumption in power station auxiliaries (Million kWh)	4.8

The steam power stations of the Railways generated 51.62 million kWh and the Diesel Stations 20.46 million kWh.

7. ELECTRICAL ACCIDENTS

Table 59 gives a consolidated summary of the frequency of accidents in the various sections of the electricity supply undertakings as compared to the industrial undertakings. The data which are unfortunately, only partly received, are summarised below :—

Section	Number of Fatal Accidents	
	Electricity supply undertakings	Industrial Undertakings
Generation	61 + (2)*	5
Transmission	260 + (14)*	4
Distribution	800 + (155)*	28
TOTAL	1121 + (171)*	37

*Accidents to animals.

The accidents in distribution systems are 11.6 times to those in generation premises in respect of electricity supply undertakings.

8. FINANCIAL DATA OF PUBLIC ELECTRICITY SUPPLY UNDERTAKINGS 1967-68

This Section gives consolidated financial data viz., capital expenditure, operating revenue, operating expenses etc. of the Electricity Supply Undertakings as compiled from their annual statutory accounts.

At the end of the year of report the electricity supply industry held assets worth Rs. 230,107 lakhs as against Rs. 202,729 lakhs at the end of 1966-67 (Table I), covering 11,032,266 kW of installed plant capacity and a sale of 30,766 Million kWh. This takes into account the data received from 216 out of 241 undertakings owned and operated by the State Electricity Boards/Government Departments/Power Corporations/Municipalities, and Private Licensees. Of the remaining undertakings, 6 companies, 8 municipality owned undertakings, Electricity Departments of the Jammu & Kashmir, Nagaland, Chandigarh,

Dadra & Nagar Haveli, NEFA etc. covers only 8% of the total installed capacity. In case of some Union Territories, where 1967-68 figures were not available, older figures, as available, have been repeated in working out the tables. The break-up of the assets according to ownership is given below :—

	1966-67 (Rs. in lakhs)	1967-68 (Rs. in lakhs)
1. Government and Boards	171,680*	194,647*
2. Municipalities	7,824	9,341
3. Private Companies	23,225	26,119
TOTAL	202,729	230,107

*Including works-in-progress of Bihar, Maharashtra and Uttar Pradesh Boards.

9. FINANCING

Under the existing provisions of the Electricity (Supply) Act, 1948, the assets of the State Electricity Boards are made up of the borrowings from the public as well as the State Governments. The private licensee's assets are financed from the share capital as well as debentures and secured loans raised from the public.

The capital account of the Private Companies from the year 1967-68 indicates that the equity and preference share capital as at the end of the year 1967-68 was Rs. 4,490 lakhs and Rs. 969 lakhs as against Rs. 4,028 lakhs and Rs. 839 lakhs respectively at the end of 1966-67 (Table -II).

10. REVENUE

10.1 The revenue realised by sale of electricity during the year indicates a general overall increase in all the categories of service, as per details given below :—

I. Sale of electricity	1966-67 (Rs. in lakhs)	1967-68 (Rs. in lakhs)
(i) Domestic & Residential	5,807	6,378
(ii) Commercial	3,311	3,306
(iii) Industrial	15,020	18,466
(iv) Public Water Works and Sewage pumping	537	762
(v) Traction	629	793
(vi) Public Lighting maintenance	682	713
(vii) Irrigation	2,293	2,793
(viii) Other revenue	10,496	10,032
TOTAL	38,775	43,243

10.2 The total revenue and operating expenses (ownership-wise) are given below :—

A Revenue	1966-67 (Rs. in lakhs)	%	1967-68 (Rs. in lakhs.)	%
1 Government/State Electricity Boards/Power Corporations	26,871	69.30	29,815	68.95
2 Municipalities	2,732	7.05	3,083	7.13
3 Companies	9,172	23.65	10,345	23.92
TOTAL .	38,775	100.00	43,243	100.00
B Operating Expenses	1966-67 (Rs. in lakhs)		1967-68 (Rs. in lakhs)	
1 Government/State Electricity Boards/Power Corporations				
(i) Expenses	15,783		16,924	
(ii) Depreciation	3,764		4,981	
(iii) Interest Charges	7,834		8,774	
TOTAL .	27,381		30,679	
2. Municipalities				
(i) Expenses	2,046		2,314	
(ii) Depreciation	163		141	
(iii) Interest Charges	199		258	
TOTAL .	2,408		2,713	
3. Companies				
(i) Expenses	6,794		7,934	
(ii) Depreciation	619		706	
(iii) Interest Charges	405		456	
TOTAL .	7,818		9,096	
Total(1+2+3) .	37,607		42,488	

11. REVENUE FOR KWH SOLD UNDER EACH CATEGORY

The average overall revenue by sale of electricity (excluding other revenue) for the year 1967-68 was 10.79 paise per unit. Table VI gives the revenue realised by each category of consumers for the electricity supply industry as a whole.

**12. TENTATIVE FINANCIAL RESULTS OF THE STATE ELECTRICITY BOARDS, MUNICIPALITIES, COMPANIES ETC.
DURING 1968-69**

A few broad particulars of the tentative financial results of operation of the State Electricity Boards, Municipalities, Companies etc. for the year 1968-69 are detailed below :—

	State Electricity Boards/ Departments/ Power Corporations (Rs. in lakhs)	Municipalities (Rs. in lakhs)	Private Companies (Rs. in lakhs)	Total (Rs. in lakhs)
1. Total fixed assets	245,075	10,000	27,510	282,585
2. Gross revenue	37,299	3,375	11,420	52,094
3. Total operating expenses including depreciations and interest charges	38,607	3,015	10,315	51,937
4. Surplus/Deficit	(—)1,308	(+)360	(+)1,105	(+)157

SECTION I
TECHNICAL STATISTICS

TABLE 1—SALIENT FEATURES OF THE ELECTRICITY SUPPLY INDUSTRY

Year	31-12-50 †	31-12-55 †	31-3-61	31-3-66	31-3-68	31-3-69
1	2	3	4	5	6	7
1. GENERATING CAPACITY (MW)—						
(a) Utilities—						
Hydro plant	559.29	939.48	1,916.66	4,123.75	5,486.91	5,906.91
Steam plant	1,004.43	1,546.81	2,436.26	4,417.11	5,975.41	6,640.34
Diesel plant	148.80	208.53	300.14	352.16	286.84	276.02
Gas Turbine plant . . . .	..	..	..	134.00	134.00	134.00
*TOTAL	1,712.52	2,694.82	4,653.05	9,027.02	11,883.16	12,957.27
(b) Non-Utilities—						
(i) Self generating Industry	587.85	723.51	1,001.37	1,082.36	1,207.64	1,277.47
(ii) Railways . . . .	..	..	..	63.64	62.05	61.93
*TOTAL	587.85	723.51	1,001.37	1,146.00	1,269.69	1,339.40
ALL-INDIA TOTAL	2,300.37	3,418.33	5,654.42	10,173.02	13,152.85	14,296.67

*Totals may not tally due to rounding off.

†Nearest dates to beginnings of first & Second Plans for which data available.

Year	1951	1956	1960-61	1965-66	1967-68	1968-69
1	2	3	4	5	6	7
2. GENERATION (GROSS) (MILLION kWh)—						
(a) Utilities—						
Hydro plant	2,859.70	4,294.88	7,836.6	15,224.97	18,658.06	20,722.7
Steam plant	2,779.06	51,33.90	8,732.4	17,372.18	22,232.75	26,393.7
Diesel plant	219.65	233.36	368.0	323.68	225.78	193.5
Gas Turbine plant . . . .	..	..	..	69.30	78.06	123.4
*TOTAL	5,858.40	9,662.13	16,937.0	22,990.18	41,194.64	47,433.3
(b) Non-Utilities—						
(i) Self generating Industry	1,655.57	2,209.51	3,186.10	3,733.19	4,038.61	4,136.1
(ii) Railways . . . .	..	..	..	101.94	81.59	72.1
*TOTAL	1,655.57	2,209.51	3,186.10	3,835.13	4,120.20	4,208.2
ALL-INDIA GRAND TOTAL	7,513.97	11,871.64	20,123.12	36,825.25	45,314.84	51,641.5
3. ENERGY USED BY POWER STATION AUXILIARIES (MILLION kWh)						
	218.32	386.45	721.86	1,647.46	2,075.12	2,532.14
4. GENERATION (NET)						
	5,640.08	9,275.68	16,215.14	31,342.84	119.52	44,901.20
5. ENERGY PURCHASED FROM NON-ELECTRIC UTILITIES (MILLION kWh)						
	17.74	18.64	223.04	12.92	104.75	96.29

*Totals may not tally due to rounding off.

TABLE I—SALIENT FEATURES OF THE ELECTRICITY SUPPLY INDUSTRY—*cgntd.*

Year	1951	1956	1960-61	1965-66	1967-68	1968-69
1	2	3	4	5	6	7
6. SALES (MILLION kWh)—						
(a) Domestic light and small power	594.08	934.12	1,492.29	2,365.14	2,927.96	3,184.19
(b) Commercial light and small power	330.02	545.85	847.74	1,650.07	1,750.17	2,125.74
(c) Industrial—						
(i) Upto 650 volts . . .	575.26	931.84	1,641.12	2,709.81	2,973.31	3,452.50
(ii) Above 650 volts . . .	2,483.63	4,391.59	8,055.28	16,166.08	19,878.93	22,438.77
(d) Public lighting . . .	67.60	117.77	193.24	279.57	349.93	372.09
(e) Railways/Tramways . . .	329.59	404.93	453.92	1,052.28	1,301.66	1,246.58
(f) Agricultural . . .	203.05	316.18	832.92	1,821.84	2,585.26	3,465.54
(g) Public Water Works & Sewage Pumping . . .	210.12	312.08	436.19	625.16	709.50	837.17
(h) Miscellaneous . . .	*	*	*	*	260.15	229.81
**TOTAL	4,793.34	7,959.35	13,952.72	26,734.94	32,736.87	37,352.35
7. ENERGY LOST IN TRANSFORMATION, TRANSMISSION, AND DISTRIBUTION AND UNACCOUNTED FOR						
	864.48	1,334.98	2,485.47	4,585.18	6,487.40	7,214.51
8. FUEL CONSUMPTION—						
(a) In steam power stations—						
(i) Coal (Tonnes) . . .	2,478,200	4,067.350	6,699,590	10,273,634	12,210,192	12,682,455
(ii) Lignite (Tonnes) . . .	..	..	..	2,184,116	2,462,580	2,730,000
(iii) Wood (Tonnes) . . .	..	..	..	14,196	17,055	22,106
(iv) Furnace Oil (kilo litres) . . .	..	..	..	422,848	801,647	1,125,303
(b) In gas turbine & diesel power stations—						
(v) Diesel Oil (kilo-litres) . . .	85.181	83.124	122.052	185.878	88.123	68.677
(vi) Gas (Million Cubic feet) . . .	..	..	..	..	1,843.171	3,465.000
9. AGGREGATE MAXIMUM DEMAND (MW)	1,205.19	1,989.77	3,545.93	7,306.23	9,702.74	10,872.06
10. TRANSMISSION AND DISTRIBUTION LINES KM. (AT THE END OF YEAR)	†39,380.00	†50,000.00	†146,737.26	514,475.9	717,615	836,301
11. AUTHORISED UNDERTAKINGS@—						
(at the end of year)						
(a) <i>Public Sector</i> —						
(i) Generating & Distributing . . .	..	..	..	..	18	17
(ii) Generating, Purchasing & Distributing . . .	260	69	74	80	32	32
(iii) Purchasing & Distributing . . .	..	..	..	..	33	32
Sub-Total (a)	269	69	74	80	83	81

*Included in Commercial.

**Total may not tally due to rounding off.

†Excludes L.T. lines upto 500 volts.

@The figures having been changed from 1965-66 & onwards by treating the State Electricity Board and Government Electricity Department in the same State as two separate undertakings.

TABLE 1—SALIENT FEATURES OF THE ELECTRICITY SUPPLY INDUSTRY—*contd.*

1	2	3	4	5	6	7
(b) Private Sector—						
(i) Generating & distributing	..	..	..	..	11	9
(ii) Generating, purchasing & distributing	316	301	263	180	36	35
(iii) Purchasing & distributing	..	..	..	..	111	109
SUB-TOTAL (b)	316	301	263	180	158	153
GRAND TOTAL	585	370	337	260	241	234
	@@ 31-12-50	@@ 31-12-55	31-3-61	31-3-66	31-3-68	31-3-69
12. No. of CONSUMERS—						
(a) Domestic light and small power	1,157,016	1,929,432	3,686,889	6,379,240	7,625,274	8,388,113
(b) Commercial light and small power	259,016	430,123	672,554	1,408,958	1,712,237	1,930,516
(c) (i) Industrial Power upto 650 volts including Public Water Works and Sewage Pumping	..	..	..	..	415,434	461,304
(ii) Industrial Power above 650 volts including Railways	63,043£	99,317£	178,692£	330,300£	9,068	9,678
(d) Public lighting	2,214	3,082	15,126	51,181	49,102	52,124
(e) Agricultural (Pumping)	19,316	46,626	195,902	508,372	813,438	1,077,902
(f) Miscellaneous	*	*	*	*	7,361	15,982
@TOTAL	1,500,605	2,508,580	4,729,163	8,678,051	10,631,914	11,935,624
13. CONNECTED LOAD (MW)—						
(a) Domestic light & small power	733.86	1,225.68	2,234.79	3,689.45	4,454.03	4,803.80
(b) Commercial light & small power	401.30	365.68	526.07	1,022.75	1,593.56	1,975.16
(c) (i) Industrial power upto 650 volts including Public Water Works and Sewage Pumping	..	..	..	..	3,548.35	3,944.99
(ii) Industrial power above 650 volts including Railways	1,511.68£	2,455.39£	4,561.92£	6,749.09£	6,339.79	6,421.64
(d) Public lighting	20.67	33.26	76.16	104.52	126.51	146.26
(e) Agricultural (Pumping)	117.56	242.60	826.53	2,037.35	3,175.90	4,219.56
(f) Miscellaneous	..	..	..	..	98.71	549.46
*TOTAL	2,835.06	4,322.60	8,225.46	13,603.15	19,336.83	22,060.15
14. ELECTRIFIED TOWNS AND VILLAGES	4,051	8,751	23,969	54,816	63,200	74,087

£Includes figures for item 12 c(i)

*Included in commercial.

@@Nearest available data for beginning of First & Second Plan.

@Totals may not tally due to rounding off.

££Includes figures for item 13 (c)(i).

TABLE 1—SALIENT FEATURES OF THE ELECTRICITY SUPPLY INDUSTRY—*concl.*

Year	1951	1956	1960-61	1965-66	1967-68	1968-69
1	2	3	4	5	6	7
15. PER CAPITA GENERATION (MID-YEAR) (UTILITIES & NON-UTILITIES)	20.8	30.9	43.9	73.81	88.04	97.82
16. PER CAPITA CONSUMPTION (MID-YEAR) (UTILITIES & NON-UTILITIES)	17.8	26.4	38.2	61.33	71.64	77.88

TABLE 2—INSTALLED PLANT CAPACITY (AS ON 31-3-69) AND GENERATION BY TYPE OF PLANT AND OWNERSHIP

Serial Number	Type of Plant and ownership	Installed Plant Capacity (MW)	Percentage of total	Generation (Million kWh)		Percentage of net generation
				Gross	Net	
1	2	3	4	5	6	7
I HYDRO—						
<i>Public Sector—</i>						
I	(a) State Electricity Boards	4,460.37	34.42	16,204.95	16,133.94	35.93
	(b) Electricity Departments/ Govt. Undertakings/D.V.C.	1,161.17	8.96	33,98.71	3,375.55	7.52
	(c) Municipalities	7.86	0.06	22.65	22.17	0.05
	SUB-TOTAL	5,629.40	43.44	19,626.31	19,531.66	43.50
<i>Private Sector—</i>						
I	Companies	277.51	2.14	1,096.36	1,089.14	2.42
	TOTAL (I)	5,906.91	45.58	20,722.67	20,620.80	45.92
II STEAM—						
<i>Public Sector—</i>						
II	(a) State Electricity Boards	4,079.75	31.49	11,602.69	10,531.34	23.45
	(b) Electricity Departments/ Govt. Undertakings/D. V. C.	1,027.10	7.93	8,303.84	7,438.06	16.57
	(c) Municipalities	231.00	1.78	605.42	520.43	1.16
	SUB-TOTAL	5,337.85	41.20	20,511.95	18,489.83	41.18
<i>Private Sector—</i>						
II	Companies	1,302.49	10.05	5,881.77	5,488.13	12.22
	TOTAL (II)	6,640.34	51.25	26,393.72	23,977.96	53.40

TABLE 2—INSTALLED PLANT CAPACITY (AS ON 31-10-69) AND GENERATION BY TYPE OF PLANT AND OWNERSHIP—*contd.*

1	2	3	4	5	6	7
III	DIESEL—					
	<i>Public Sector</i> —					
	(a) State Electricity Boards	178.72	1.38	93.63	88.03	0.20
	(b) Electricity Departments/ Govt. Un- dertakings/ D. V. C.	22.06	0.17	29.85	28.33	0.06
	(c) Municipalities	32.28	0.25	5.72	5.59	0.01
	SUB-TOTAL	233.06	1.80	129.20	121.95	0.27
	<i>Private Sector</i> —					
	Companies	42.96	0.33	64.64	61.25	0.14
	TOTAL (III)	276.02	2.13	193.84	183.20	0.41
IV	GAS TURBINE—					
	<i>Public Sector</i> —					
	(a) State Electricity Boards	134.00	1.04	123.42	119.55	0.27
	(b) Electricity Departments/ Govt. Un- dertakings/ D. V. C.	..	..	..	..	..
	(c) Municipalities	..	..	..	..	..
	SUB-TOTAL	134.00	1.04	123.42	119.55	0.27
	<i>Private Sector</i> —					
	Companies	..	..	..	..	..
	TOTAL (IV)	134.00	1.04	123.42	119.55	0.27
	GRAND TOTAL (I + II + III + IV)	12,957.27	100.00	47,433.65	44,901.51	100.00

TABLE 3—INSTALLED PLANT CAPACITY AND GENERATION BY OWNERSHIP AND INCREASE OVER PREVIOUS YEAR (UTILITIES)

Ownership	No. of undertakings	Installed Plant Capacity			Generation		
		As on 31-3-69 (MW)	Percentage of total	Increase over 31-3-68 %	Energy ge- nerated 1968-69 (Million kWh)	Percentage of generation gross	Increase of generation (gross) in 68-69 over 1967-68 %
1	2	3	4	5	6	7	8
1. Public Sector—							
(a) State Electricity Boards	15	7,839.34	60.93	8.7	28,024.67	59.08	19.5
(b) Government De- partments	18	1,285.33	9.92	23.2	3,540.05	7.46	8.1
(c) Government Un- dertakings	3	821.00	6.34	Nil	3,700.26	7.80	14.6
(d) D. V. C.	1	1,061.50	8.19	15.2	4,492.10	9.47	7.4
(e) Municipalities	44	271.14	2.09	Nil	633.81	1.34	24.1
SUB-TOTAL	81	11,334.31	87.47	9.8	40,390.89	85.15	16.6
2. Private Sector—							
(a) Companies	153	1,622.96	12.53	3.8	7,042.76	14.85	7.7
TOTAL	234	12,957.27	100.00	9.0	47,433.65	100.00	15.1

TABLE 4—STATEWISE INSTALLED CAPACITY@ GENERATION@

Serial Number	State	Public Sector			
		State Electricity Board			
		No. of Undertak- ings	Installed Plant Capacity@ (MW)	Energy Generated@ Gross (Mil- lion kWh)	Energy Generated@ Net (Mil- lion kWh)
1	2	3	4	5	6
1	Andhra Pradesh	1	487.14	1,727.46	1,624.29
2	Assam	1	154.75	236.60	230.80
3	Bihar	1	208.34	526.08	456.17
4	Gujarat	1	417.39	2,173.39	1,998.42
5	Haryana	1	504.31	1,673.64	1,649.64
6	Jammu & Kashmir	..	..	..	..
7	Kerala	1	546.60	1,623.00	1,605.78
8	Madhya Pradesh	1	680.25	2,017.64	1,845.27
9	Maharashtra	1	873.20	4,206.72	4,075.09
10	Mysore	1	216.26	1,150.40	1,144.07
11	Nagaland	..	..	..	..
12	Orissa	1	9.93	0.95	0.90
13	Punjab	1	671.69	2,446.60	2,438.56
14	Rajasthan	1	487.50	1,298.47	1,257.64
15	Tamil Nadu	1	1,070.50	3,342.21	3,298.02
16	Uttar Pradesh	1	1,161.97	4,376.15	4,104.37
17	West Bengal	1	405.07	1,225.58	1,125.70
18	D. V. C.	..	..	..	..
19	Union Territories—				
	(a) Delhi	..	..	..	..
	(b) Andaman & Nicobar Islands*	..	..	..	..
	(c) Chandigarh	..	..	..	..
	(d) Dadra & Nagar Haveli	..	..	..	..
	(e) Goa, Daman & Diu.	..	..	..	..
	(f) Himachal Pradesh	..	..	..	..
	(g) Laccadive, Minicoy & Amindive Islands	..	..	..	..
	(h) Manipur	..	..	..	..
	(i) N. E. F. A.	..	..	..	..
	(j) Pondicherry	..	..	..	..
	(k) Tripura	..	..	..	..
	ALL INDIA	15	7,895.34	28,024.67	26,850.72

*Data estimated.

@The installed capacity and the generation of jointly owned projects have been shown divided between the partner

AND NUMBER OF UNDERTAKINGS (UTILITIES) SECTORWISE

Public Sector							
Electricity Departments/Government Undertakings/ Corporation				Municipalities			
No. of Undertakings	Installed Plant @ Capacity (MW)	Energy Generated Gross (Mil- lion kWh)	Energy Generated Net (Mil- lion kWh)	No. of Undertakings	Installed Plant @ Capacity (MW)	Energy @ Generated Gross (Mil- lion kWh)	Energy Generated @Net (Mil- lion kWh)
7	8	9	10	11	12	13	14
2	137.93	618.38	616.17	..	..	..	..
..
..
..	..	..	..	11	2.27	0.24	0.22
..
1	40.34	133.95	124.25	..	..	..	..
..	..	..	..	1	..	..	..
..
1	136.00	439.18	394.50	7	1.69	0.01	..
1	582.20	1,367.59	1,362.99	..	..	..	..
1	2.00	1.20	1.18	..	..	..	..
1	491.22	1,381.93	1,328.43	..	..	..	..
1	10.00	N.A.	N.A.	1	..	..	..
..	..	..	..	1	0.37	..	..
1	400.00	2,318.80	2,069.70	5	..	..	..
..	..	..	..	13	8.13	10.00	9.86
2	289.00	952.90	847.76	1	3.20	4.47	4.46
1	1,601.50	4,492.10	4,071.50	..	..	..	..
..	..	..	..	2	251.82	608.29	541.41
1	1.76	3.50	3.20	..	..	..	..
1	2.48	Neg.	Neg.	..	..	..	..
1	..	..	..	..	..	..	..
1	2.87	4.10	4.00	1	..	..	..
1	1.34	4.80	4.49	1	3.66	10.80	10.41
1	0.40	0.20	0.19	..	..	..	..
1	3.40	6.24	6.14	..	..	..	..
1	1.80	N.A.	..	..	..	..	..
1	..	..	..	..	..	..	..
1	2.89	7.54	7.43	..	..	..	..
22	3,167.83	11,732.41	10,841.01	44	271.14	633.81	566.36

states as per their shares.

5—1 CW&PC/70

TABLE 4—STATEWISE INSTALLED CAPACITY@ GENERATION@

Serial Number	State	Private Sector			
		Companies			
		No. of Under- takings	Installed Plant @ Capacity (MW)	Energy Ge- nerated @ Gross (Mil- lion kWh)	Energy Ge- nerated @ Net (Mil- lion kWh)
1	2	15	16	17	18
1	Andhra Pradesh	.	.	..	..
2	Assam	.	.	3	3.45
3	Bihar	.	.	10	30.84
4	Gujarat	.	.	25	241.88
5	Haryana	.	.	2	0.10
6	Jammu & Kashmir	.	.	..	..
7	Kerala	.	.	4	..
8	Madhya Pradesh	.	.	5	18.15
9	Maharashtra	.	.	39	628.02
10	Mysore	.	.	9	0.59
11	Nagaland	.	.	..	..
12	Orissa	.	.	..	..
13	Punjab	.	.	1	..
14	Rajasthan	.	.	4	10.49
15	Tamil Nadu	.	.	7	..
16	Uttar Pradesh	.	.	19	175.34
17	West Bengal	.	.	24	512.06
18	D. V. C.	.	.	..	..
19	Union Territories—				
	(a) Delhi	.	.	..	..
	(b) Andaman & Nicobar Islands	.	.	..	..
	(c) Chandigarh	.	.	..	..
	(d) Dadra & Nagar Haveli	.	.	..	..
	(e) Goa, Daman & Diu	.	.	1	2.04
	(f) Himachal Pradesh	.	.	..	..
	(g) Laccadive, Minicoy & Aminidive Islands	.	.	..	..
	(h) Manipur	.	.	..	..
	(i) N. E. F. A.	.	.	..	..
	(j) Pondicherry	.	.	..	..
	(k) Tripura	.	.	..	..
	TOTAL	.	153	1,622.96	7,042.76
					6,638.50

AND NUMBER OF UNDERTAKINGS (UTILITIES) SECTORWISE—*contd.*

TOTAL			
No. of Undertakings	Installed Plant Capacity (MW)	Energy Generated@ Gross (Million kWh)	Energy Generated@ Net (Million kWh)
19	20	21	22
3	625·07	2,345·84	2,240·46
4	158·20	299·04	242·87
11	239·18	627·33	549·94
37	661·54	328·52	3,039·55
3	504·41	1,673·64	1,649·64
1	40·34	133·95	124·25
6	546·60	1,623·00	1,605·78
6	698·68	2,030·66	1,856·55
48	1,638·99	7,664·58	7,353·78
11	799·05	2,517·69	2,507·06
1	2·00	1·20	1·18
2	501·85	1,382·88	1,329·33
4	681·69	2,446·68	2,438·56
6	498·44	1,310·91	1,269·68
14	1,470·50	5,561·01	5,367·72
33	1,345·44	5,326·15	4,979·13
28	1,209·33	4,016·32	3,692·69
1	1,061·50	4,492·10	4,071·50
2	251·82	608·29	541·41
1	1·76	3·50	3·20
1	2·48	Neg.	Neg.
1	..	..	..
3	4·91	8·78	8·57
2	5·00	15·60	14·90
1	0·40	0·20	0·19
1	3·40	6·24	6·14
1	1·80	N.A.	N.A.
1	..	..	..
1	2·89	7·54	7·43
234	12,957·27	47,433·65	44,901·51

TABLE 3—INSTALLED PLANT CAPACITY@ (31-3-69) AGGREGATE MAXIMUM DEMAND AND ENERGY GENERATED@ BY TYPE OF PLANT

Serial Num ber	State/Power Corporation	Hydro			
		Installed Plant Capa- city@ (MW)	Maximum demand (aggregate) (MW)	Generation @ (Million kWh)	
				Gross	Net
1	2	3	4	5	6
1	Andhra Pradesh	321.75	327.90	1,349.42	1,345.22
2	Assam	48.71	27.24	108.32	106.91
3	Bihar	..	..	..	..
4	Gujarat	..	..	..	..
5	Haryana	..	..	..	..
6	Jammu & Kashmir	26.92	19.00	123.02	114.41
7	Kerala	545.00	443.20	1,623.00	1,605.78
8	Madhya Pradesh	244.00	246.00	542.85	539.22
9	Maharashtra	844.32	798.79	4,120.00	4,098.67
10	Mysore	774.00	667.10	2,436.76	2,446.29
11	Nagaland	..	..	..	..
12	Orissa	270.00	188.70	836.97	832.37
13	Punjab	1,252.50	955.45	4,575.27	4,560.60
14	Rajasthan	..	..	..	..
15	Tamil Nadu	969.00	865.24	3,044.81	3,037.41
16	Uttar Pradesh	477.75	482.24	1,611.44	1,606.33
17	West Bengal	25.51	13.87	38.83	38.13
18	D. V. C.	104.00	109.00	274.88	272.75
19	Union Territories—				
	(a) Delhi	..	..	..	..
	(b) Andaman & Nicobar Islands	..	..	..	..
	(c) Chandigarh	..	..	..	..
	(d) Dadra & Nagar Haveli	..	..	..	..
	(e) Goa, Daman & Diu	..	..	..	..
	(f) Himachal Pradesh	2.85	2.00	15.53	14.83
	(g) Laccadive, Minicoy & Aminidive Islands	..	..	..	..
	(h) Manipur	0.60	0.55	1.87	1.86
	(i) N. E. F. A.	..	..	..	..
	(j) Pondicherry	..	..	..	..
	(k) Tripura	..	..	..	..
	All-India	5,906.91	5,146.28	20,722.67	20,620.80

[@]For the purpose of this table the installed plant capacity and generation of jointly owned projects has been shown against the State having maximum share, since the maximum demand of such stations cannot be split and the maximum demand is desired to be compared with the installed capacity.

TABLE 5—INSTALLED PLANT CAPACITY@ (31-3-69) AGGREGATE MAXIMUM DEMAND AND ENERGY GENERATED@ BY TYPE OF PLANT—*contd.*

Serial Num- ber	State/Power Corporation	Steam			
		Installed Plant Capacity@ (MW)	Maximum Demand (aggregate) (MW)	Generation @ (Million kWh)	
				Gross	Net
1	2	7	8	9	10
1	Andhra Pradesh	326.00	307.40	1,217.75	1,115.47
2	Assam	..	..	..	..
3	Bihar	222.77	152.24	609.29	533.86
4	Gujarat	619.60	578.84	3,255.42	3,015.51
5	Haryana	28.10	18.20	11.38	10.05
6	Jammu & Kashmir	7.50	N.A.	N.A.	N.A.
7	Kerala	..	..	..	..
8	Madhya Pradesh	669.20	440.25	2,028.87	1,829.08
9	Maharashtra	771.00	692.75	3,508.52	3,221.23
10	Mysore	..	..	..	..
11	Nagaland	..	..	..	..
12	Orissa	195.75	110.00	384.36	336.11
13	Punjab	15.00	4.00	4.49	4.04
14	Rajasthan	46.15	35.00	75.21	67.69
15	Tamil Nadu	501.50	473.16	2,616.20	2,330.13
16	Uttar Pradesh**	814.24	773.49	3,707.27	3,365.68
17	West Bengal	1,171.43	824.00	3,961.19	3,638.82
18	D. V. C.	957.50	888.50	4,217.22	3,798.75
19	Union Territories—				
	(a) Delhi	293.50	240.50	794.55	709.56
	(b) Andaman & Nicobar Islands	1.10	0.47	2.00	1.80
	(c) Chandigarh	..	..	..	..
	(d) Dadra & Nagar Haveli	..	..	..	..
	(e) Goa, Daman & Diu	..	..	..	..
	(f) Himachal Pradesh	..	..	..	..
	(g) Laccadive, Minicoy & Amindivi Islands	..	..	..	..
	(h) Manipur	..	..	..	..
	(i) N. E. F. A.	..	..	..	..
	(j) Pondicherry	..	..	..	..
	(k) Tripura	..	..	..	..
	ALL-INDIA	6,640.34	5,538.80	26,393.72	23,977.96

**Renukot Power House working in parallel with U. P. Grid has been taken under utilities.

TABLE 5—INSTALLED PLANT CAPACITY@ (31-3-69) AGGREGATE MAXIMUM DEMAND AND ENERGY GENERATED@ BY TYPE OF PLANT—contd.

Serial Number	State/Power Corporation	Diesel			
		Installed Plant Capacity (MW)	Maximum Demand (aggregate) (MW)	Generation (Million kWh)	
				Gross	Net
1	2	11	12	13	14
1	Andhra Pradesh	6.14	1.16	0.12	0.11
2	Assam	27.99	5.57	18.85	17.93
3	Bihar	16.41	9.05	18.04	16.08
4	Gujarat	41.94	24.00	25.10	24.04
5	Haryana	5.34	1.61	0.30	0.30
6	Jammu & Kashmir	5.92	4.00	10.93	9.84
7	Kerala	1.60	..	Neg.	Neg.
8	Madhya Pradesh	7.40	0.90	1.47	1.41
9	Maharashtra	23.67	11.43	36.06	33.88
10	Mysore	0.65	N.A.	0.02	0.02
11	Nagaland	2.00	1.30	1.20	1.18
12	Orissa	1.68	0.49	0.95	0.91
13	Punjab	6.07	3.28	0.76	0.76
14	Rajasthan	36.96	26.00	32.15	30.32
15	Tamil Nadu	..	..	..	..
16	Uttar Pradesh	40.95	21.01	6.26	5.93
17	West Bengal	12.39	7.98	16.30	15.74
18	D. V. C.	..	..	..	..
19	Union Territories—				
	(a) Delhi	20.82	14.70	2.87	2.81
	(b) Andaman & Nicobar Islands	0.66	0.26	1.50*	1.40*
	(c) Chandigarh	2.48	N.A.	Neg.	Neg.
	(d) Dadra & Nagar Haveli	..	..	..	..
	(e) Goa, Daman & Diu	4.91	2.49	8.78	8.57
	(f) Himachal Pradesh	2.15	1.13	0.07	0.07
	(g) Laccadive, Minicoy & Aminidive Islands	0.40	0.17	0.20	0.19
	(h) Manipur	2.80	1.75	4.37	4.28
	(i) N. E. F. A.	1.80	N.A.	N.A.	N.A.
	(j) Pondicherry	..	..	..	..
	(k) Tripura	2.89	2.00	7.54	7.43
	ALL-INDIA	276.02	140.28	193.84	183.19

*Provisional.

TABLE 5—INSTALLED PLANT CAPACITY@ (31-3-69) AGGREGATE MAXIMUM DEMAND AND ENERGY GENERATED@ BY TYPE OF PLANT—*contd.*

Serial Number	State/Power Corporation	Gas			
		Installed Plant Capacity (MW)	Maximum Demand (aggregate) (MW)	Generation (Million kWh)	
1	2	15	16	17	18
1	Andhra Pradesh	20·00	19·70	0·36	0·35
2	Assam	81·50	26·00	121·87	118·03
3	Bihar	..	..	..	..
4	Gujarat	..	..	..	..
5	Haryana	..	..	..	..
6	Jammu & Kashmir	..	..	..	..
7	Kerala	..	..	..	..
8	Madhya Pradesh	..	..	..	..
9	Maharashtra	..	..	..	..
10	Mysore	10·00	..	..	..
11	Nagaland	..	..	..	..
12	Orissa	..	..	..	..
13	Punjab	..	..	..	..
14	Rajasthan	10·00	..	Neg.	..
15	Tamil Nadu	..	..	..	..
16	Uttar Pradesh	12·50	N.A.	1·19	1·17
17	West Bengal	..	..	..	..
18	D. V. C.	..	..	..	..
19	Union Territories—				
	(a) Delhi	..	..	..	..
	(b) Andaman & Nicobar Islands	..	..	..	..
	(c) Chandigarh	..	..	..	..
	(d) Dadra & Nagar Haveli	..	..	..	..
	(e) Goa, Daman & Diu	..	..	..	..
	(f) Himachal Pradesh	..	..	..	..
	(g) Lakadive, Minicoy & Amindivi Islands	..	..	..	..
	(h) Manipur	..	..	..	..
	(i) N. E. F. A.	..	..	..	..
	(j) Pondicherry	..	..	..	..
	(k) Tripura	..	..	..	..
	ALL-INDIA	1,340·00	45·70	123·42	119·55

TABLE 5--INSTALLED PLANT CAPACITY@ (31-3-69) AGGREGATE MAXIMUM DEMAND AND ENERGY GENERATED@ BY TYPE OF PLANT—*contd.*

Serial Number	State/Power Corporation	Total			
		Installed Plant Capacity @ (MW)	Maximum Demand (aggregate) (MW)	Generation @ (million kWh)	
				Gross	Net
1	2	19	20	21	22
1	Andhra Pradesh	673.89	656.16	2,567.35	2,461.19
2	Assam	158.20	58.81	249.04	242.87
3	Bihar	239.18	161.29	627.33	549.94
4	Gujarat	661.54	602.84	3,280.52	3,039.55
5	Haryana	33.44	19.81	11.68	10.35
6	Jammu & Kashmir	40.34	23.00	133.95	124.25
7	Kerala	546.60	443.20	1,623.00	1,605.78
8	Madhya Pradesh	920.60	687.15	2,573.19	2,369.71
9	Maharashtra	1,638.99	1,502.97	7,664.58	7,353.78
10	Mysore	784.65	667.10	2,456.78	2,446.31
11	Nagaland	2.00	1.30	1.20	1.18
12	Orissa	467.43	299.19	1,222.28	1,169.39
13	Punjab	1,273.57	962.73	4,580.52	4,565.40
14	Rajasthan	93.11	61.00	107.36	98.01
15	Tamil Nadu	1,470.50	1,338.40	5,661.01	5,367.72
16	Uttar Pradesh*	1,345.44	1,276.74	5,326.16	4,979.13
17	West Bengal	1,209.33	845.85	4,016.32	3,692.69
18	D. V. C.	1,061.50	997.50	4,492.10	4,071.50
19	Union Territories—				
	(a) Delhi	314.32	255.20	797.42	712.37
	(b) Andaman & Nicobar Islands	1.76	0.73	3.50*	3.20*
	(c) Chandigarh	2.48	N.A.	Neg.	Neg.
	(d) Dadra & Nagar Haveli	..	..	..	..
	(e) Goa, Daman & Diu.	4.91	2.49	8.78	8.57
	(f) Himachal Pradesh	5.00	3.13	15.60	14.90
	(g) Laccadive, Minicoy & Amindivi Islands	0.40	0.17	0.20	0.19
	(h) Manipur	3.40	2.30	6.24	65.14
	(i) N. E. F. A.	1.80	N.A.	N.A.	N.A.
	(j) Pondicherry	..	..	..	..
	(k) Tripura	2.89	2.00	7.54	7.43
	All-INDIA	12,957.27	10,871.06	47,433.65	44,901.51

*Provisional.

TABLE 6—STATEWISE GROSS GENERATION@ AND AUXILIARY CONSUMPTION@ BY TYPE OF PLANT

Serial Number	State/Power Corporation	Hydro		
		Energy generated@ (Gross) (Million kWh)	Energy used by power station auxiliaries (Million kWh)	Auxiliary consumption as percent- age of ge- neration
1	2	3	4	5
1	Andhra Pradesh	1,349.12	3.90	0.29
2	Assam	108.32	1.41	1.30
3	Bihar	..	..	..
4	Gujarat	..	..	..
5	Haryana	..	..	..
6	Jammu & Kashmir	123.02	8.61	7.00
7	Kerala	1,623.00	17.22	1.06
8	Madhya Pradesh	542.85	3.63	0.67
9	Maharashtra	4,120.00	21.33	0.52
10	Mysore	2,456.76	10.47	0.43
11	Nagaland	..	..	..
12	Orissa	836.97	4.60	0.55
13	Punjab	4,575.27	14.67	0.32
14	Rajasthan	..	..	..
15	Tamil Nadu	3,044.81	7.40	0.24
16	Uttar Pradesh	1,611.44	5.09	0.32
17	West Bengal	38.83	0.70	1.80
18	D. V. C.	274.88	2.13	0.77
19	Union Territories—			
	(a) Delhi	..	..	..
	(b) Andaman & Nicobar Islands	..	..	..
	(c) Chandigarh	..	..	..
	(d) Dadra & Nagar Haveli	..	..	..
	(e) Goa, Daman & Diu	..	..	..
	(f) Himachal Pradesh	15.53	0.70	4.51
	(g) Laccadive Minicoy & Aminidive Islands	..	..	..
	(h) Manipur	1.87	0.01	0.53
	(i) N. E. F. A.	..	..	..
	(j) Pondicherry	..	..	..
	(k) Tripura	..	..	..
	*ALL INDIA TOTAL	20,722.67	101.87	0.49

@Generation from jointly-owned projects has been taken against those states which have maximum share. Since it was considered better to keep the auxiliary consumption of power house in tact. Please note that these figures are different from the generation figure shown share-wise elsewhere.

*Totals may not tally due to rounding off.

TABLE 6—STATEWISE GROSS GENERATION@ AND AUXILIARY CONSUMPTION@ BY TYPE OF PLANT—*contd.*

Sl. No.	State/Power Corporation	Steam			Diesel		
		Energy generated (Million kWh)	Energy used by power station auxiliaries (Million kWh)	Auxiliary consump- tion as percentage of generation	Energy generated (Million kWh)	Energy used by power station auxiliaries (Million kWh)	Auxiliary consump- tion as Percentage of generation
1	2	6	7	8	9	10	11
1	Andhra Pradesh	1,217.75	102.28	8.40	0.12	0.01	8.33
2	Assam . . . . .	..	..	..	18.85	0.92	4.88
3	Bihar	609.29	75.43	12.38	18.04	1.96	10.86
4	Gujarat	3,255.42	239.91	7.37	25.10	1.06	4.22
5	Haryana	11.38	1.33	11.69	0.30	Neg.	..
6	Jammu & Kashmir . . . . .	..	..	..	10.93	1.09	9.97
7	Kerala . . . . .	..	..	..	Neg.	Neg.	Neg.
8	Madhya Pradesh	2,028.87	199.79	9.85	1.47	0.06	4.08
9	Maharashtra	3,508.52	287.29	8.19	36.06	2.18	6.05
10	Mysore . . . . .	..	..	..	0.02	Neg.	..
11	Nagaland . . . . .	..	..	..	1.20	0.02	1.67
12	Orissa	384.36	48.25	12.55	0.95	0.04	4.21
13	Punjab	4.49	0.45	10.02	0.76	Neg.	..
14	Rajasthan	75.21	7.52	10.00	32.15	1.83	5.69
15	Tamil Nadu	2,616.20	285.89	10.93	..	..	..
16	Uttar Pradesh	3,707.27	341.59	9.21	6.26	0.33	5.27
17	West Bengal	3,961.19	322.37	8.14	16.30	0.56	3.44
18	D. V. C.	4,217.22	418.47	9.92	..	..	..
19	Union Territories—						
	(a) Delhi	794.55	84.99	10.70	2.87	0.06	2.03
	(b) Andaman & Nicobar	2.00	0.20	10.00	1.50	0.10	6.67
	(c) Chandigarh . . . . .	..	..	Neg.	Neg.	..	..
	(d) Dadra & Nagar Haveli . . . . .	..	..	..	..	..	..
	(e) Goa, Daman & Diu . . . . .	..	..	..	8.78	0.21	2.39
	(f) Himachal Pradesh . . . . .	..	..	..	0.07	Neg.	..
	(g) Laccadive Minicoy & Am- nidive Islands . . . . .	..	..	..	0.20	0.01	5.00
	(h) Manipur . . . . .	..	..	..	4.37	0.09	2.06
	(i) N. E. F. A. . . . .	..	..	Data Not available	..	..	..
	(j) Pondicherry . . . . .	..	..	..	..	..	..
	(k) Tripura . . . . .	..	..	..	7.54	0.11	1.46
	ALL INDIA TOTAL	26,393.72	2,415.76	9.15	193.84	10.64	5.49

TABLE 6—STATEWISE GROSS GENERATION@ AND AUXILIARY CONSUMPTION@ BY TYPE OF PLANT—*contd.*

Sl. No.	State/Power Corporation	Gas			Total		
		Energy generated (Million KWh)	Energy used by power station auxiliaries (Million kWh)	Auxiliary consump- tion as percentage of generation	Energy generated (Million kWh)	Energy used by power station auxiliaries (Million kWh)	Auxiliary consump- tion as percentage of generation
1	2	12	13	14	15	16	17
1	Andhra Pradesh . . .	0.36	0.01	2.78	2,567.35	106.20	4.14
2	Assam . . .	121.87	3.84	3.15	249.04	6.17	2.48
3	Bihar . . .	..	..	..	627.33	77.39	12.34
4	Gujarat . . .	..	..	..	3,280.52	240.97	7.35
5	Haryana . . .	..	..	..	11.68	1.33	11.39
6	Jammu & Kashmir . .	..	..	..	133.95	9.70	7.24
7	Kerala . . .	..	..	..	1,623.00	17.22	1.06
8	Madhya Pradesh . .	..	..	..	2,573.19	203.48	7.91
9	Maharashtra . . .	..	..	..	7,664.58	310.80	4.06
10	Mysore . . .	..	..	..	2,456.78	10.47	0.43
11	Nagaland . . .	..	..	..	1.20	0.02	1.67
12	Orissa . . .	..	..	..	1,222.28	52.89	4.33
13	Punjab . . .	..	..	..	4,580.52	15.12	0.33
14	Rajasthan . . .	Neg.	Neg.	Neg.	107.36	9.35	8.71
15	Tamil Nadu . . .	..	..	..	5,661.01	293.29	5.18
16	Uttar Pradesh . . .	1.19	0.02	1.68	5,326.16	347.03	6.52
17	West Bengal . . .	..	..	..	4,016.32	323.63	8.06
18	D. V. C. . .	..	..	..	4,492.10	420.60	9.36
19	Union Territories—						
	(a) Delhi . . .	..	..	..	797.42	85.05	10.67
	(b) Andaman & Nicobar . .	..	..	..	3.50	0.30	8.57
	(c) Chandigarh . . .	..	..	..	Neg.	Neg.	..
	(d) Dadra & Nagar Haveli . .	..	..	..	..	..	..
	(e) Goa, Daman & Diu. . .	..	..	..	8.78	0.21	2.39
	(f) Himachal Pradesh . .	..	..	..	15.60	0.70	4.49
	(g) Laccadive Minicoy & Ami- dive Islands . . .	..	..	..	0.20	0.01	5.00
	(h) Manipur . . .	..	..	..	6.24	0.10	1.60
	(i) N. E. F. A. . .	..	..	..	..	..	..
	(j) Pondicherry . . .	..	..	..	..	..	..
	(k) Tripura . . .	..	..	..	7.54	0.11	1.46
	ALL-INDIA . . .	123.42	3.87	3.12	47,433.65	2,532.14	5.38

TABLE 7—INSTALLED HYDRO PLANT CAPACITY@ AND

Sl. No.	State/Power Corporation	Public Sector			
		State Electricity Board		Electricity Department/ Govt. Undertaking/ Corporation	
		Installed Plant Capacity@ (MW)	Energy Generated@ (Million kWh)	Installed Plant Capacity@ (MW)	Energy@ generated (Million kWh)
1	2	3	4	5	6
1	Andhra Pradesh	135.00	509.24	137.93	618.37
2	Assam	47.20	101.74	..	..
3	Bihar . . . . . . . .	..	..	..	..
4	Gujarat . . . . . . . .	..	..	..	..
5	Haryana	408.47	1,472.82	26.92	123.02
6	Jammu & Kashmir . . . . . . . .	..	..	26.92	123.02
7	Kerala	545.00	1,623.00	..	..
8	Madhya Pradesh	122.00	271.43	..	..
9	Maharashtra	578.32	3,030.22	..	..
10	Mysore	206.20	1,150.08	582.20	1,367.59
11	Nagaland . . . . . . . .	..	..	..	..
12	Orissa . . . . . . . .	..	..	304.42	997.57
13	Punjab	660.70	2,441.43	..	..
14	Rajasthan	305.33	932.44	..	..
15	Tamil Nadu	969.00	3,044.81	..	..
16	Uttar Pradesh	473.60	1,602.65	..	..
17	West Bengal	19.55	25.09	4.00	10.62
18	D. V. C. . . . . . . .	..	..	104.00	274.88
19	Union Territories—				
	(a) Delhi . . . . . . . .	..	..	..	..
	(b) Andaman & Nicobar Islands . . . . . . . .	..	..	..	..
	(c) Chandigarh . . . . . . . .	..	..	..	..
	(d) Dadra & Nagar Haveli . . . . . . . .	..	..	..	..
	(e) Goa, Daman & Diu . . . . . . . .	..	..	..	..
	(f) Himachal Pradesh . . . . . . . .	..	..	..	..
	(g) Laccadive Minicoy & Amindive Islands . . . . . . . .	..	..	1.10	4.79
	(h) Manipur . . . . . . . .	..	..	..	..
	(i) N. E. F. A. . . . . . . .	..	..	0.60	1.87
	(j) Pondicherry . . . . . . . .	..	..	..	..
	(k) Tripura . . . . . . . .	..	..	..	..
	ALL-INDIA*	4,460.37	16,204.95	1,188.09	3,521.73

@The installed capacity and of generation from Jointly owned projects have been shown against the owning states in the ratio of shares of the respective state.

*Totals may not tally with the break-up due to rounding off.

GROSS GENERATION@ BY OWNERSHIP (UTILITIES)

Public Sector		Private Sector		Total*	
Municipalities		Companies			
Installed Plant Capacity@ (MW)	Energy generated @ (Million kWh)	Installed Plant Capacity @ (MW)	Energy Generated@ (Million kWh)	Installed Plant Capacity@ (MW)	Energy Generated @ (Million kWh)
7	8	9	10	11	12
..	272.93	1,127.61
..	..	1.51	6.58	48.71	108.32
..
..
..	408.47	1,472.82
..	26.92	123.02
..	545.00	1,623.00
..	122.00	271.43
..	..	276.00	1,089.78	844.32	4,120.00
..	788.40	2,517.67
..
..	304.42	997.57
..	660.70	2,441.43
..	305.33	932.44
..	969.00	3,044.81
4.15	8.17	..	..	477.75	1,611.44
1.96	3.12	..	..	25.51	38.83
..	104.00	274.88
..
..
..
1.75	10.70	..	..	2.85	15.33
..	0.60	1.87
..
..
7.86	22.6	277.51	1,096.36	5,906.91	20,722.67

TABLE 8—INSTALLED STEAM PLANT CAPACITY@ AND

Sl. No.	State/Power Corporation	Public Sector			
		State Electricity Board		Electricity Department/ Govt. Undertakings/ Corporation	
		Installed Plant Capacity@ (MW)	Energy generated (Million@ kWh)	Installed Plant@ Capacity (MW)	Energy generated@ (Million kWh)
1	2	3	4	5	6
1	Andhra Pradesh	326.00	1,217.75	..	..
2	Assam	..	..	..	..
3	Bihar ¹	195.00	513.71	..	..
4	Gujarat	384.50	2,152.76	..	..
5	Haryana@	90.60	200.51	..	..
6	Jammu & Kashmir	..	..	7.50	N.A.
7	Kerala	..	..	..	..
8	Madhya Pradesh@	551.70	1,744.75	..	..
9	Maharashtra	297.50	1,168.94	136.00	439.18
10	Mysore	..	..	..	..
11	Nagaland	..	..	..	..
12	Orissa	8.25	..	187.50	384.36
13	Punjab	5.00	4.49	10.00	N.A.
14	Rajasthan@	146.15	346.32	..	..
15	Tamil Nadu	101.50	297.40	400.00	2,3318.80
16	Uttar Pradesh	640.49	2,767.67	..	..
17	West Bengal ¹	375.56	1,188.39	285.00	942.28
18	D. V. C.	..	..	957.50	4,217.22
19	Union Territories—				
	(a) Delhi@	..	..	..	..
	(b) Andaman & Nicobar Islands	..	..	1.10	2.00
	(c) Chandigarh	..	..	..	..
	(d) Dadra & Nagar Haveli	..	..	..	..
	(e) Goa, Daman & Diu	..	..	..	..
	(f) Himachal Pradesh	..	..	..	..
	(g) Laccadive, Minicoy & Aminidive Islands	..	..	..	..
	(h) Manipur	..	..	..	..
	(i) N. E. F. A.	..	..	..	..
	(j) Pondicherry	..	..	..	..
	(k) Tripura	..	..	..	..
	ALL-INDIA*	3,122.25	11,602.69	1,984.60	8,303.84

¹D. V. C. given separately.

@The installed capacity and generation of jointly owned projects has been shown distributed against the States as per their share.

*Totals may not tally due to rounding off.

GROSS GENERATION@ BY OWNERSHIP (UTILITIES)

Public Sector		Private Sector		Total	
Municipalities		Companies			
Installed Plant Capacity @ (MW)	Energy generated @ (Million kWh)	Installed Plant Capacity @ (MW)	Energy generated @ (Million kWh)	Installed Plant Capacity @ (MW)	Energy generated @ (Million kWh)
7	8	9	10	11	12
..	326.00	1,217.75
..
..	..	27.77	95.58	222.77	609.29
..	..	235.10	1,102.66	619.60	3,255.42
..	90.60	200.51
..	7.50	N.A.
..
..	..	17.50	13.01	569.20	1,757.76
..	..	337.50	1,900.40	771.00	3,508.52
..
..	195.75	384.36
..	15.00	4.49
..	146.15	346.32
..	501.50	2,616.20
..	..	*173.75	939.60	814.24	3,707.27
..	..	510.87	1,830.52	1,171.43	3,961.19
..	957.50	4,217.22
231.00	605.42	..	..	231.00 1.10	605.42 2.00
..
..
..
..
..
..
231.00	605.42	1,302.49	5,881.77	6,640.34	26,393.72

^aRenukote (which is company) has been taken as a licensee,

TABLE 9—INSTALLED GAS TURBINE AND DIESEL PLANT

Serial Number	State/Power Corporation	Public Sector			
		State Electricity Board		Electricity Department/ Govt. Undertaking/ Corporation	
		Installed Plant Capacity (MW)	Energy Generated (Million kWh)	Installed Plant Capacity (MW)	Energy Generated (Million kWh)
1	2	3	4	5	6
1	Andhra Pradesh	26.14	0.48 ¹	..	..
2	Assam	107.55	134.87 ^a	..	..
3	Bihar	13.34	12.37	..	..
4	Gujarat	32.89	20.63	..	..
5	Haryana	5.24	0.30	..	..
6	Jammu & Kashmir	..	..	5.92	10.93
7	Kerala	1.60	Neg.	..	..
8	Madhya Pradesh	6.75	1.46	..	..
9	Maharashtra	7.46	7.55	..	..
10	Mysore	10.06 ^b	0.02 ^b	..	..
11	Nagaland	..	..	2.00	1.20
12	Orissa	1.68	0.95	..	..
13	Punjab	6.07	0.76	..	..
14	Rajasthan	36.10 ^c	19.71 ^c	..	..
15	Tamil Nadu	..	..	..	..
16	Uttar Pradesh	47.88 ^d	5.85 ^d	..	..
17	West Bengal	9.96	12.10	..	..
18	D. V. C.	..	..	..	..
19	Union Territories—				
	(a) Delhi	..	..
	(b) Andaman & Nicobar Islands*	..	..	0.66	1.50*
	(c) Chandigarh	..	..	2.48	Neg.
	(d) Dadra & Nagar Haveli	..	..
	(e) Goa, Daman & Diu	..	..	2.87	4.10
	(f) Himachal Pradesh	..	..	0.24	0.01
	(g) Laccadive Minicoy Islands	..	..	0.40	0.20
	(h) Manipur	..	..	2.80	4.37
	(i) N. E. F. A.	..	..	1.80	N.A.
	(j) Pondicherry	..	..	2.89	7.54
	(k) Tripura	..	..
	ALL-INDIA**	312.72	217.05	22.06	29.85

*Provisional.

**Totals may not tally with break-up due to rounding off.

CAPACITY AND GROSS GENERATION BY OWNERSHIP

Public Sector		Private Sector		Total**	
Municipalities		Companies			
Installed Plant Capacity (MW)	Energy Generated (Million kWh)	Installed Plant Capacity (MW)	Energy Generated (Million kWh)	Installed Plant Capacity (MW)	Energy Generated (Million kWh)
7	8	9	10	11	12
..	..	..	..	26.14	0.48
..	..	1.94	5.85	109.49	140.72
..	..	3.07	5.67	16.41	18.04
2.27	0.23	6.78	4.24	41.94	25.10
..	..	0.10	..	5.34	0.30
..	..	..	..	5.92	10.93
..	..	..	..	1.60	Neg.
..	..	0.65	0.01	7.40	1.47
1.69	0.01	14.52	28.50	23.67	36.06
..	..	0.59	..	10.65	0.02
..	..	..	..	2.00	1.20
..	..	..	..	1.68	0.95
..	..	..	..	6.07	0.76
0.37	N.A.	10.49	12.44	46.96	32.15
..
3.98	1.20	1.59	0.40	53.45	7.45
1.24	1.35	1.19	2.85	12.39	16.30
..
20.82	2.87	..	..	20.82	2.87
..	..	..	..	0.66	1.50*
..	..	..	..	248	Neg.
..
1.91	0.06	2.04	4.68	4.21	8.78
..	..	..	..	2.15	0.07
..	..	..	..	0.40	0.20
..	..	..	..	2.80	4.37
..	..	..	..	1.80	N.A.
..	..	..	..	2.89	7.54
32.28	5.72	42.96	64.64	410.02	317.26

*Provisional.

**Totals may not tally with break-up due to rounding off.

¹Includes 20.00 MW of gas turbine and 0.36 million kWh generation therefrom, respectively.²Includes 81.50 MW of gas turbine and 121.87 million kWh generation therefrom, respectively.³Includes 10.00 MW of gas turbine & Nil generation therefrom respectively.⁴Includes 10.00 MW of gas turbine and negligible generation therefrom respectively.⁵Includes 12.50 MW of gasturbine & 1.19 million kWh generation therefrom respectively.

TABLE 10—SHARES OF PARTICIPATING STATES IN JOINTLY-OWNED POWER STATIONS

Serial Num- ber	Name of the Power Station	Installed Plant Capacity (MW)	Energy Generated (Million kWh)		Names of the Participating States	Shares of the Participat- ing States		Energy Sent out State-wise (Million kWh)
			Gross	Net		Percentage Share	Installed Capacity (MW)	
1	2	3	4	5	6	7	8	9
1	Machkund (Hydro)	114.75	535.33	533.14	Andhra Pradesh . . . Orissa . . .	70 30	80.33 34.42	306.50 198.18
2	Tungabhadra Right Bank and Hampi (hydro) . .	72.00	304.56	303.74	Mysore . . . Andhra Pradesh . . .	20 80	14.40 57.60	243.55 485.38
3	Chambal Projects (hydro)—							
	(a) Gandhi Sagar	115.00	280.73	278.90	Madhya Pradesh . . . Rajasthan . . .	50 50	57.50 57.50	
	(b) Rana Pratap Sagar	129.00	262.12	260.32	Madhya Pradesh . . . Rajasthan . . .	50 50	64.50 64.50	657.29 ¹
4	Satpura (Thermal)	250.00	677.77	608.86	Madhya Pradesh . . . Rajasthan . . .	60 40	150.00 100.00	490.79
5	Bakra Nangal (Hydro)	1,204.50	4,343.08	4,329.33	Punjab Haryana Rajasthan	84.78 ×60% 84.78 ×40% 15.22	612.70 408.47 183.33	1,143.90 859.40 270.80
					Common Pool Consumers— (a) Nangal Fertilizer . . . (b) Himachal Pradesh . . . (c) Jammu & Kashmir . . . (d) D. E. S. U. (e) Chandigarh . . . . .	.. .. .. .. ..	1,360.80 59.00 61.10 418.10 62.60	
6	Indra Prastha Extension (Thermal)	187.50	567.40	512.89	Delhi Haryana	66.67 33.33	125.00 62.50	464.69 ² 48.20

¹Off take of Rajasthan as given here includes supply from Chambal & Satpura. The balance is shown against M. P.

²Figure for Delhi arrived by subtracting Haryana's off take from the net generation of Indraprastha.

TABLE 11—AGGREGATE GENERATING MAXIMUM DEMAND@ BY OWNERSHIP (MW)

Sl. No.	State/Power Corporation	State Electri- city Boards	Government Departments	Government Undertak- ings	Corpora- tion	Munici- palities	Compa- nies	Total
1	2	3	4	5	6	7	8	9
A. States :								
1	Andhra Pradesh . . .	470·26	185·90	..	..	..	..	656·16
2	Assam . . .	56·04	..	..	..	..	2·77	58·81
3	Bihar . . .	39·29	..	..	..	..	22·00	161·29
4	Gujarat . . .	388·72	..	..	..	0·52	213·60	602·84
5	Haryana . . .	19·81	..	..	..	..	..	19·81
6	Jammu & Kashmir . . .	..	23·00	..	..	..	..	23·00
7	Kerala . . .	443·20	..	..	..	..	..	443·20
8	Madhya Pradesh . . .	676·80	..	..	..	..	10·35	687·15
9	Maharashtra . . .	785·62	..	86·2	..	0·18	630·97	1,502·97
10	Mysore . . .	189·10	478·00	..	..	..	..	667·10
11	Nagaland . . .	..	1·30	..	..	..	..	1·30
12	Orissa . . .	0·49	298·70	..	..	..	..	299·19
13	Punjab . . .	963·73	N.A.	..	..	..	..	963·73
14	Rajasthan . . .	52·50	..	..	..	..	8·50	61·00
15	Tamil Nadu . . .	928·40	..	410·00	..	..	..	1,338·40
16	Uttar Pradesh . . .	1,109·55	..	..	..	3·88	163·31	1,276·74
17	West Bengal . . .	279·13	3·51	222·00	..	2·44	338·77	845·85
B. Damodar Valley Corporation								
C. Union Territories :								
(a) Delhi . . .								
(b) Andaman & Nicobar Islands . . .								
(c) Chandigarh . . .								
(d) Dadra & Nagar Haveli . . .								
(e) Goa, Daman & Diu . . .								
(f) Himachal Pradesh . . .								
(g) Laccadive, Minicoy and Aminidive Islands . . .								
(h) Manipur . . .								
(i) N. E. F. A. . .								
(j) Pondicherry . . .								
(k) Tripura . . .								
		TOTAL	6,502·64	997·76	718·00	997·50	264·50	1,391·46
@Maximum demand of jointly-owned projects has been shown against the State having maximum share.								

@Maximum demand of jointly-owned projects has been shown against the State having maximum share.

TABLE 12—MAJOR HYDRO GENERATING UNITS COMMISSIONED DURING 1968-69

Installed at 1	State /Management Board 2	No. of sets 3	Capacity of each set (MW) 4	Total capacity (MW) 5
Umtru	Assam	1	2·8	2·8
Sholyar	Kerala	1	18·0	18·0
Purna	Maharashtra	2	7·5	15·0
Sharavathi	Mysore	2	89·1	178·2
Rana Pratap Sagar	Rajasthan	2	43·0	86·0
Bakra Right Bank	Bakra Management Board .	1	120·00	120·0

TABLE 13—STEAM AND GAS TURBINE GAS GENERATING UNITS COMMISSIONED DURING 1968-69

Installed at 1	State 2	No. of Sets 3	Capacity of each Set (MW) 4	Total Capacity (MW) 5
Patratu	Bihar	1	50·0	50·0
Kalakot	Jammu and Kashmir . . .	1	7·5	7·5
Korba	Madhya Pradesh	2*	50·0	100·0*
Satpura	Madhya Pradesh	2	62·5	125·0
Bhusawal	Maharashtra	1	62·5	62·5
Talcher	Orissa	1	62·5	62·5
Harduaganj B	Uttar Pradesh	1	50·0	50·0
Obra	Uttar Pradesh	1	50·0	50·0
Renukot	Uttar Pradesh	1	62·5	62·5
Chandrapur	D. V. C.	1	140·0	140·0

*One of these two sets was synchronised in 3/68, but was commercially commissioned in 1968-69.

TABLE 14—BOILERS COMMISSIONED DURING 1968-69

Installed at 1	State 2	No. of Boilers 3	Evapora- ting Capacity of each unit in 1000 kg./hr. 4	Steam Conditions at the stop valve	
				Pressure in kg/cm 5	Tempera- ture C° 6
Patratu	Bihar	1	220·0	90·0	535
Kalakot	Jammu and Kashmir . . .	1	N.A.	N.A.	N.A.
Korba	Madhya Pradesh	1	220·0	100·0	540
Satpura	Madhya Pradesh	2	272·7	102·6	515
Bhusawal	Maharashtra	1	137·0	92·0	515
Talcher	Orissa	1	272·7	87·9	510
Harduaganj B	Uttar Pradesh	1	220·0	100·0	540
Obra	Uttar Pradesh	1	222·0	90·0	535
Renukot	Uttar Pradesh	1	273·0	87·9	510
Chandrapura	D. V. C.	1	447·0	137·0	559

TABLE 15—ACQUISITION OF ELECTRICITY SUPPLY UNDERTAKINGS

Name of the Undertaking 1	Prior Ownership 2	Date and year of acquisition 3	By whom acquired 4
1	2	3	4
<i>Generating Distributing</i>	Nil.	Nil.	Nil.
<i>Generating Purchasing & Distributing</i> :			
1. Silchar	Company .	15-10-68	Assam State Electricity Board.
<i>Purchasing & Distributing</i> :			
1. Jambusar	Company .	5-4-68	Gujarat Electricity Board.
2. Navasari	Company .	14-7-68	Gujarat Electricity Board.
3. Mayawaram	Company .	18-5-68	Tamil Nadu State Electricity Board.
4. Baramati	Company .	1-11-68	Maharashtra State Electricity Board.

TABLE 16—DISTRIBUTION OF LICENSEE UNDERTAKINGS INTO (I) GENERATING (II) GENERATING AND PURCHASING (III) PURCHASING AND DISTRIBUTING—STATEWISE

Serial Num- ber	State	Number of Companies			TOTAL
		Generating Distribut- ing	Generating, purchasing & distributing	Purchasing and distributing	
1	2	3	4	5	6
1	Andhra Pradesh	..	..	..	..
2	Assam	..	3	..	3
3	Bihar	..	4	6	10
4	Gujarat	1	8	16	25
5	Haryana	..	1	1	2
6	Jammu & Kashmir	..	..	..	..
7	Kerala	..	..	4	4
8	Madhya Pradesh	..	2	3	5
9	Maharashtra	2	5	32	39
10	Mysore	..	1	8	9
11	Nagaland	..	..	..	..
12	Orissa	..	..	..	..
13	Punjab	..	..	1	1
14	Rajasthan	2	2	..	4
15	Tamil Nadu	..	..	7	7
16	Uttar Pradesh	2	5	12	19
17	West Bengal	1	4	19	24
<i>Union Territories :—</i>					
(a)	Delhi	..	..	..	..
(b)	Andaman & Nicobar Islands	..	..	..	..
(c)	Chandigarh	..	..	..	..
(d)	Goa, Daman & Diu	1	..	..	1
(e)	Dadra & Nagar Haveli	..	..	..	..
(f)	Himachal Pradesh	..	..	..	..
(g)	Laccadive, Minicoy & Aminidive Islands	..	..	..	..
(h)	Manipur	..	..	..	..
(i)	N. E. F. A.	..	..	..	..
(j)	Pondicherry	..	..	..	..
(k)	Tripura	..	..	..	..
TOTAL		9	35	109	153

TABLE 16(a)—DISTRIBUTION OF MUNICIPAL UNDERTAKINGS

Serial Number	State	Number of Municipalities			TOTAL
		Generating and distributing	Generating, purchasing and distributing	Purchasing and distributing	
1	2	3	4	5	6
1	Andhra Pradesh	..	..	..	..
2	Assam	..	..	..	..
3	Bihar	..	..	..	..
4	Gujarat	..	4	7	11
5	Haryana	..	..	..	..
6	Jammu & Kashmir	..	..	..	..
7	Kerala	..	..	1	1
8	Madhya Pradesh	..	..	..	..
9	Maharashtra	..	1	6	7
10	Mysore	..	..	..	..
11	Nagaland	..	..	..	..
12	Orissa	..	..	..	..
13	Punjab	..	..	1	1
14	Rajasthan	1	..	..	1
15	Tamil Nadu	..	..	5	5
16	Uttar Pradesh	..	5	8	13
17	West Bengal	..	1	..	1
<i>Union Territories—</i>					
(a)	Delhi	..	1	1	2
(b)	Andaman & Nicobar Islands	..	..	..	..
(c)	Chandigarh	..	..	..	..
(d)	Goa, Daman & Diu	..	..	1	1
(e)	Dadra & Nagar Haveli	..	..	..	..
(f)	Himachal Pradesh	..	1	..	1
(g)	Laccadive, Minicoy & Amindive Islands	..	..	..	..
(h)	Manipur	..	..	..	..
(i)	N. E. F. A.	..	..	..	..
(j)	Pondicherry	..	..	..	..
(k)	Tripura	..	..	..	..
TOTAL		1	13	37	44

TABLE 17—CLASSIFICATION OF UNDERTAKINGS (UTILITIES) OWNING

Range of Installed Capacity (MW)	State Electricity Board			Government Department/Electricity Department			
	No. of Undertakings	Aggregate Installed Capacity of the group (MW)	Total Energy generated by the group (Million kWh)	No. of undertakings	Aggregate Installed Capacity of the group (MW)	Total Energy Generated by the group (Million kWh)	
1	2	3	4	5	6	7	
Upto 1·000	1	0·40	0·20	
1·001 to 5·000	9	22·54	38·00	
5·001 to 10·000	.	1	9·93	0·95	1	10·00	N.A.
10·001 to 25·000
25·001 to 50·000	1	40·34	133·95	
50·001 to 100·000	1	72·00	304·56	
Over 100·000	.	14	7,885·41	28,023·72	3	1,140·05	3,063·44
TOTAL	.	15	7,895·34	28,024·67	1	1,285·33	3,540·05

TABLE 17—CLASSIFICATION OF UNDERTAKINGS (UTILITIES) OWNING

Range of Installed Capacity (MW)	Municipality			Companies			
	No. of Undertakings	Aggregate Installed Capacity (MW)	Total Energy generated by the group (Million kWh)	No. of Undertakings	Aggregate Installed Capacity (MW)	Total Energy generated by the group (Million kWh)	
1	14	15	16	17	18	19	
Upto 1·000	.	8	3·40	0·24	17	7·07	9·03
1·001 to 5·000	.	4	9·70	17·43	14	33·90	59·91
5·001 to 10·000	.	1	6·22	7·85	2	12·27	21·98
10·001 to 25·000	5	73·10	214·27
25·001 to 50·000	2	56·12	198·08
50·001 to 100·000
Over 100·000	.	1	251·82	608·29	4	1,440·50	6,539·49
TOTAL	.	14	271·14	633·81	44	1,622·96	7,042·76

GENERATING STATIONS ACCORDING TO RANGES OF INSTALLED CAPACITY

Range of Installed Capacity (MW)	Government Undertaking			Power Corporation		
	No. of Undertakings	Aggregate Installed Capacity of the group (MW)	Total Energy generated by the group (Million kWh)	No. of Undertakings	Aggregate Installed Capacity of the group (MW)	Total Energy generated by the group (Million kWh)
1	8	9	10	11	12	13
Upto 1·000 . . . .	..	..	..	..	..	..
1·001 to 5·000 . . . .	..	..	..	..	..	..
5·001 to 10·000 . . . .	..	..	..	..	..	..
10·001 to 25·000 . . . .	..	..	..	..	..	..
25·001 to 50·000 . . . .	..	..	..	..	..	..
50·001 to 100·000 . . . .	..	..	..	..	..	..
Over 100·000	3	821·00	3,700·26	1	1,061·50	4,492·10
TOTAL	3	821·00	3,700·26	1	1,061·50	4,492·10

GENERATING STATIONS ACCORDING TO RANGES OF INSTALLED CAPACITY

Range of Installed Capacity (MW)	Total		
	No. of Undertakings	Aggregate Installed Capacity of the group (MW)	Total energy generated by the group (Million kWh)
1	20	21	22
Upto 1·000	26	10·87	9·47
1·001 to 5·000	27	66·14	115·34
5·001 to 10·000	5	38·42	30·78
10·001 to 25·000	5	73·10	214·27
25·001 to 50·000	3	96·46	332·03
50·001 to 100·000	1	72·00	304·56
Over 100·000	26	12,600·28	46,427·20
TOTAL	93	12,957·27	47,433·65

TABLE 18—CLASSIFICATION OF UNDERTAKINGS (UTILITIES) OWNING GENERATING STATIONS ACCORDING TO RANGES OF GENERATION

Range of Generation (Million kWh)	State Electricity Board		Government Department	
	No. of Undertakings	Total Energy generated by the group (Million kWh)	No. of Undertakings	Total Energy generated by the group (Million kWh)
1	2	3	4	5
Under 1,000	1	0.95	4	0.20
1,001 to 10,000	..	..	6	27.38
10,001 to 25,000	..	..	1	10.62
25,001 to 50,000	..	..	..	..
50,001 to 100,000	..	..	..	..
100,001 to 250,000	1	236.60	1	133.95
250,001 to 500,000	..	..	1	304.56
500,001 to 1,000,000	1	526.08	1	535.33
Above 1,000,000	12	27,261.04	2	2,528.01
TOTAL	15	28,024.67	16	3,540.05

Range of Generation (Million kWh)	Government Undertaking		Power Corporation	
	No. of Undertakings	Total Energy generated by the group (Million kWh)	No. of Undertakings	Total Energy generated by the group (Million kWh)
1	6	7	8	9
Under 1,000	..	..	..	..
1,001 to 10,000	..	..	..	..
10,001 to 25,000	..	..	..	..
25,001 to 50,000	..	..	..	..
50,001 to 100,000	..	..	..	..
100,001 to 250,000	..	..	..	..
250,001 to 500,000	..	..	..	..
500,001 to 1,000,000	1	439.18	..	..
Above 1,000,000	1	942.28	..	..
TOTAL	3	3,700.26	1	4,492.10

Range of Generation (Million kWh)	Municipalities		Companies		Total	
	No. of Undertakings	Total Energy generated by the group (Million kWh),	No. of Undertakings	Total Energy generated by the group (Million kWh)	No. of Undertakings	Total Energy generated by the group (Million kWh)
1	10	11	12	13	14	15
Under 1,000	9	0.25	16	3.30	30	4.70
1,001 to 10,000	3	14.47	13	44.70	22	86.55
10,001 to 25,000	1	10.80	4	55.42	6	76.84
25,001 to 50,000	..	..	2	62.20	2	62.20
50,001 to 100,000	..	..	4	225.24	4	225.24
100,001 to 250,000	..	..	1	114.51	3	485.06
250,001 to 500,000	1	608.29	..	..	2	743.74
500,001 to 1,000,000	..	..	1	755.89	5	3,367.87
Above 1,000,000	..	..	3	5,783.60	19	42,583.55
TOTAL	14	633.81	44	7,042.76	93	47,433.65

TABLE 19—CLASSIFICATION OF UNDERTAKINGS OWNING GENERATING STATIONS
ACCORDING TO THE RANGES OF GENERATING MAXIMUM DEMAND

Range of Maximum Demand (MW)	Public Sector			
	State Electricity Board		Government Department	
	No. of Undertak- ings	Aggregate Maximum Demand of the group	No. of Undertak- ings	Aggregate Maximum Demand of the group
1	2	3	4	5
Upto 0.50	1	0.49	4	0.17
0.51 to 1.00	..	..	2	1.58
1.01 to 2.50	..	..	4	6.90
2.51 to 10.00	..	..	1	3.51
10.01 to 25.00	1	19.81	1	23.00
25.01 to 50.00	..	..	..	..
50.01 to 100.00	2	108.54	1	65.90
Over 100.00	11	6,378.80	3	986.70
	TOTAL	15	6,502.64	16
				997.76

Public Sector					
Government Undertakings		Power Corporation		Municipalities	
No. of Undertakings	Aggregate Maximum Demand of the group	No. of Undertakings	Aggregate Maximum Demand of the group	No. of Undertakings	Aggregate Maximum Demand of the group
6	7	8	9	10	11
..	..	..	..	9	0.66
..	..	..	..	1	0.52
..	..	..	..	2	4.72
..	..	..	..	1	3.40
1	86.20	..	..	..	..
2	632.00	1	997.50	1	255.20
3	718.20	1	997.50	14	264.50

Range of Maximum Demand (MW)	Private Sector		Total	
	Companies			
	No. of the Under- takings	Aggregate Maximum Demand of the group	No. of the Under- takings	Aggregate Maximum Demand of the group
1	12	13	14	15
Upto 0.50	15	4.37	29	5.69
0.51 to 1.00	5	3.88	8	5.98
1.01 to 2.50	7	10.90	13	22.52
2.51 to 10.00	8	39.87	10	46.78
10.01 to 25.00	5	65.64	7	108.45
25.01 to 50.00	..	..	..	..
50.01 to 100.00	..	..	4	260.64
Over 100.00	4	1,266.80	22	10,422.00
	TOTAL	44	1,391.46	93
				10,872.06

NOTE :—Generation data for NEFA & Pong Project were not available and therefore the same are not included.

TABLE 20—CLASSIFICATION OF HYDRO POWER STATIONS ACCORDING TO THE RANGE OF INSTALLED PLANT CAPACITY

Range of Installed Plant Capacity (MW)	No. of Generating Station	Installed Capacity Plant		Energy generated by the group (Million kWh)	Average Plant load factor %
		Group total (MW)	Percentage of total		
1	2	3	4	5	6
Upto 1,000	28	6,03	0.10	20,86	39.49
1,001 to 10,000	17	57.64	0.98	269.55	53.38
10,001 to 50,000	30	940.39	15.92	3,525.72	42.80
50,001 to 1,00,000	8	542.50	9.18	2,291.50	48.22
Over 1,00,000	17	4,360.36	73.82	14,615.04	38.26
TOTAL . .	100	5,906.91	100.00	20,722.67	40.05

TABLE 21—CLASSIFICATION OF STEAM POWER STATIONS ACCORDING TO THE RANGE OF
INSTALLED PLANT CAPACITY

Range of Installed Plant Capacity (MW)	No. of Generating Stations	Installed Plant Capacity		Generation (Million kWh)	Total Capacity of Boilers (Tonnes per hour)	Average capacity of Boilers kg/hr/kW of generating capacity	Average Overall thermal efficiency %	Average plant load factor %
		Group total (MW)	Percentage of total					
1	2	3	4	5	6	7	8	9
Upto 1.000	4	2.57	0.04	0.53	12.9	5.1	3.1	2.4
1.001 to 10.000	29	166.51	2.51	248.33	1,024.7	6.1	4.9	17.0
10.001 to 50.000	29	647.66	9.76	2,017.83	3,288.4	5.1	15.0	35.6
50.001 to 1.000.00	11	876.00	13.19	3,449.53	4,318.0	4.9	22.8	45.0
Over 1.00.000	22	4,947.50	74.50	20,677.50	20,477.4	4.1	27.3	47.7
TOTAL .	95	6,640.34	100.00	26,393.72	29,121.4	4.4	24.2	45.4

63

TABLE 22—DISTRIBUTION OF STEAM POWER STATIONS ACCORDING TO OVERALL
THERMAL EFFICIENCY*

Overall thermal Efficiency	No. of generating stations	Aggregate Installed Capacity (MW)	Energy generated by the group (Million kWh)
1	2	3	4
Under 10%	19	173.77	239.70
Above 10% & upto 15%	23	384.21	1,009.88
Above 15% & upto 20%	14	746.91	2,601.16
Above 20% & upto 25%	9	1,026.00	4,168.06
Above 25% & upto 30%	15	2,742.85	11,849.65
Above 30%	6	1,525.00	6,525.27
TOTAL .	86	6,598.34	26,393.72

*Provisional.

NOTE.—Power Stations with aggregate capacity of 42.00 MW not taken in the above analysis due to either no generation or for want of completed data.

TABLE 23—CLASSIFICATION OF GAS TURBINE AND DIESEL POWER STATIONS ACCORDING
TO RANGE OF INSTALLED PLANT CAPACITY

Range of installed plant capacity (MW)	No. of generating stations	Installed plant capacity		Energy generated by the group (Million kWh)	Fuel consumption (K. Litres)	Fuel consumption in Lit/kWh generated	Average plant load factor %	Remarks		
		Group Total (MW)	Percentage of total							
1	2	3	4	5	6	7	8	9		
<i>Gas Turbine Power Stations :</i>										
Upto 10·000	2	20.000	14.93	..	..	Did not function	during the year		
10·001 to 25·000	3	45.000	33.58	1.55	728	0.47	0.39			
25·001 to 50·000 . . . . .	..	..	..	..	..	Not applicable			
50·001 to 100·000	1	69.000	51.49	121.87	98.13 6×10 Cub. met.	0.81 (cub. met/kWh)	20.16	(Natural gas turbine.)		
TOTAL .	6	134.000	100.00	123.42	728 Kl. Diesel 98.13 & 6×10 cub. meter gas	0.47	10.51			

55

TABLE 24—PLANT CAPACITY AND GENERATION BY A. C. AND D. C.

System of generation	No. of generating Stations	Installed Capacity		Generation (Million kWh)
		Aggregate Capacity	Percentage of total	
1	2	3	4	5
Alternating Current only	557	12951.32	99.955	47427.75
Alternating and Direct Current	3	1.740 0.88	0.013 0.006	1.12
Direct Current	6	3.33	0.026	4.78
	566	12957.27	100.000	47433.65

TABLE 25—ANALYSIS OF GENERATING SETS ACCORDING TO TYPE OF PRIME MOVERS AND OWNERSHIP

Sl. No.	Type of Prime Mover	Public Sector			
		State Electricity Board		Government Departments	
		No. of sets	Aggregate Capacity (MW)	No. of sets	Aggregate Capacity (MW)
1	2	3	4	5	6
1	Water Turbine				
	A. C. Generator	207	4460.37	67	1057.17
	D. C. Generator	..	..	..	..
2	Steam Turbine—				
	A. C. Generator	192	3118.47	6	206.10
	D. C. Generator	..	..	..	..
3	Reciprocating Steam Engines—				
	A. C. Generator	5	3.78	..	..
	D. C. Generator	..	..	..	..
4	Diesel Engines—				
	A. C. Generator	577	133.92*	171	21.71
	D. C. Generator	10	1.68	3	0.35
5	Gas Turbines—				
	A.C. Generator	9	134.00	..	..
	D.C. Generator	..	..	..	..
6	Sub-Total	9	134.00	..	..
	Total—				
	A. C. Generator	990	7850.54	244	1284.98
	D. C. Generator	10	1.68	3	0.35
	GRAND TOTAL	1,000	7852.22	247	1285.33

*This does not include details of Diesel Capacity of Orissa S. E. B. (1.68MW), of Punjab S. E. B. (6.07 MW) and of U. P. S. E. B. (35.37 MW) for want of details.

TABLE 25—ANALYSIS OF GENERATING SETS ACCORDING TO TYPE OF PRIME MOVERS AND OWNERSHIP—*contd.*

Sl. No.	Type of Prime Mover	Public Sector						
		Government Undertakings		Power Corporation		Municipalities		
		No. of sets	Aggregate Capacity (MW)	No. of Sets	Aggregate Capacity (MW)	No. of Sets	Aggregate Capacity (MW)	
1	2	7	8	9	10	11	12	
1	Water Turbine— A.C. Generator	.	..	..	6	104.00	21	7.86
	D.C. Generator	.	..	..	..	..	..	..
	Sub-Total	.	..	..	6	104.00	21	7.86
2	Steam Turbine— A. C. Generator	.	22	821.00	10	957.50	15	231.00
	D.C. Generator	.	..	..	..	..	..	..
	Sub-Total	.	22	821.00	10	957.50	15	231.00
3	Reciprocating Steam Engines— A.C. Generator	.	..	..	..	..	..	..
	D. C. Generator	.	..	..	..	..	..	..
	Sub-Total	.	..	..	..	..	..	..
4	Diesel Engines— A. C. Generator	.	..	..	..	..	63	32.28
	D. C. Generator	.	..	..	..	..	..	..
	Sub-Total	.	..	..	..	..	63	32.28
5	Gas Turbines— A. C. Generator	.	..	..	..	..	..	..
	D. C. Generator	.	..	..	..	..	..	..
	Sub-Total	.	..	..	..	..	..	..
6	Total— A. C. Generator	.	22	821.00	16	1061.50	99	271.74
	D. C. Generator	.	..	..	..	..	..	..
	Sub-TOTAL	.	22	821.00	16	1061.50	99	271.14

TABLE 25—ANALYSIS OF GENERATING SETS ACCORDING TO TYPE OF PRIME MOVERS AND OWNERSHIP—*contd.*

Sl. No.	Type of Prime Mover	Public Sector				Percentage of total installed plant capacity	
		Companies		No. of Sets	Aggregate Capacity (MW)		
		No. of sets	Aggregate Capacity (MW)				
1	2	13	14	15	16	17	
1	Water Turbine— A.C. Generator	24	277.51	325	5906.91	45.74	
	D. C. Generator . . . . .	..	..	..	..	..
	Sub-Total	24	277.51	325	5906.91	45.74	
2	Steam Turbine— A. C. Generator	88	1300.82	333	6634.89	51.38	
	D. C. Generator . . . . .	..	..	..	..	..
	Sub-Total	88	1300.82	333	6634.89	51.38	
3	Reciprocating Steam Engines— A. C. Generator	6	1.40	11	5.18	0.04	
	D. C. Generator	3	0.27	3	0.27	0.00	
	Sub-Total	9	1.67	14	5.45	0.04	
4	Diesel Engines— A. C. Generator	116	41.45	927	229.36	1.77	
	D. C. Generator	13	1.51	26	3.54	0.03	
	Sub-Total	129	42.96	953	232.90	1.80	
5	Gas Turbines— A. C. Generator . . . . .	..	..	9	134.00	1.04
	D. C. Generator . . . . .	..	..	..	..	..
	Sub-Total . . . . .	..	..	9	134.00	1.04
6	Total— A.C. Generator	234	1621.18	605	12910.34	99.97	
	D.C. Generator	16	1.78	29	3.81	0.03	
	GRAND TOTAL .	250	1622.96	1634	12914.15	100.00	

TABLE 26—CLASSIFICATION OF HYDRO POWER PLANT ACCORDING TO THE SIZE OF THE SETS

Size of the Generating Sets	Public Sector					
	State Electricity Boards		Government Departments		Government Undertakings	
	No. of sets	Aggregate Plant Capacity (MW)	No. of Sets	Aggregate Plant Capacity (MW)	No. of Sets	Aggregate Plant Capacity (MW)
1	2	3	4	5	6	7
1. A. C. Plant—						
Under 1·000 MW	31	7.57	26	4.62	..	..
1·001 to 5·000 MW	29	82.80	9	30.00	..	..
5·001 to 10·000 MW	42	337.60	9	79.20	..	..
10·001 to 20·000 MW	42	608.90	5	75.00	..	..
20·001 to 30·000 MW	12	299.50	8	183.75	..	..
30·001 to 50·000 MW	29	1294.00	4	150.00	..	..
Over 50·000 MW	22	1,830.00	6	534.60	..	..
Sub-Total	207	4,460.37	67	1,057.17	..	..
2. D. C. Plant . . . . .	..	..	..	..	..	..
TOTAL	207	4,460.37	67	1,057.17	..	..

Size of the Generating Sets	Public Sector			
	Power Corporation		Municipalities	
	Number of sets	Aggregate Plant capacity (MW)	Number of Sets	Aggregate Plant capacity (MW)
1	8	9	10	11
1. A. C. Plant—				
Under 1.000 MW . . . . .	..	..	21	7.86
1.001 to 5.000 MW	2	4.00	..	..
5.001 to 10.000 MW . . . . .	..	..	..	..
10.001 to 20.000 MW	3	60.00	..	..
20.001 to 30.000 MW . . . . .	..	..	..	..
30.001 to 50.000 MW	1	40.00	..	..
Over 50.000 MW . . . . .	..	..	..	..
Sub-Total	6	104.00	21	7.86
2. D. C. Plant . . . . .	..	..	..	..
TOTAL	6	104.00	21	7.86

TABLE 26—CLASSIFICATION OF HYDRO POWER PLANT ACCORDING TO THE SIZE OF THE SETS—*contd.*

Size of the Generating Sets	Private Sector		Total		Percentage of total hydro plant
	No. of sets	Aggregate Plant capacity (MW)	No. of Sets	Aggregate Plant capacity (MW)	
1	12	13	14	15	16
(1) A. C. Plant—					
Under 1·00 MW	6	1.51	84	21.56	0.36
1·001 to 5·000 MW . . . . .	..	..	39	116.80	1.98
5·001 to 10·000 MW . . . . .	..	..	52	416.80	7.06
10·001 to 20·000 MW	12	144.00	62	887.90	15.03
20·001 to 30·000 MW	6	132.00	26	615.25	10.42
30·001 to 50·000 MW . . . . .	..	..	34	1484.00	25.12
Over 50·000 MW . . . . .	..	..	28	2364.60	40.03
SUB-TOTAL	24	277.51	325	5906.91	100.00
(2) D. C. Plant . . . . .	..	..	..	..	..
TOTAL	24	277.51	325	5906.91	100.00

TABLE 27—CLASSIFICATION OF STEAM POWER PLANT ACCORDING TO THE SIZE OF THE SETS

Size of generating sets	Public Sector					
	State Electricity Board		Government Departments		Government Undertaking	
	No. of Sets	Aggregate Plant Capacity (MW)	No. of Sets	Aggregate Plant Capacity (MW)	No. of Sets	Aggregate Plant Capacity (MW)
1	2	3	4	5	6	7
1. A. C. Plant—						
Under 1·000 MW	21	16.35	2	1.10	..	..
1·001 to 5·000 MW	92	315.40	..	..	..	..
5·001 to 10·000 MW	16	138.75	2	17.50	4	40.00
10·001 to 20·000 MW	21	306.25	..	..	6	96.00
20·001 to 30·000 MW	14	420.00	..	..	2	60.00
30·001 to 50·000 MW	14	664.00	..	..	6	300.00
Over 50·000 MW	19	1261.50	3	187.50	4	325.00
SUB-TOTAL	197	3122.25	7	206.10	22	821.00
2. D. C. Plant—						
Under 1·000 MW . . . . .	..	..	..	..	..	..
TOTAL	197	3122.25	7	206.10	22	821.00

TABLE 27—CLASSIFICATION OF STEAM PLANT ACCORDING TO THE SIZE OF THE SETS—*contd.*

Size of generating sets	Public Sector				Private Sector	
	Power Corporations		Municipalities		Companies	
	No. of Sets	Aggregate Plant Capacity (MW)	No. of Sets	Aggregate Plant Capacity (MW)	No. of Sets	Aggregate Plant Capacity (MW)
1	8	9	10	11	12	13
1 A. C. Plant—						
Under 1.000 MW . . .	..	..	..	..	10	4.90
1.001 to 5.000 MW . . .	..	..	6	16.00	38	116.82
5.001 to 10.000 MW . . .	..	..	5	38.40	13	95.50
10.001 to 20.000 MW . . .	..	..	1	15.00	16	252.50
20.001 to 30.000 MW . . .	..	..	..	..	9	270.00
30.001 to 50.000 MW . . .	..	..	1	36.60	2	100.00
Over 50.000 MW . . .	10	957.50	2	125.00	6	462.50
Sub-Total . . .	10	957.50	15	231.00	94	1302.22
2. D. C. Plant—						
Under 1.000 MW . . .	..	..	..	..	3	0.27
TOTAL . . .	10	957.50	15	231.00	97	1302.49

Size of generating sets	Total		Percentage of total Steam Plant
	No. of Sets	Aggregate Plant Capacity (MW)	
1	14	15	16
1. A. C. Plant—			
Under 1.000 MW	33	22.35	0.34
1.001 to 5.000 MW	136	448.22	6.75
5.001 to 10.000 MW	40	330.15	4.97
10.001 to 20.000 MW	44	669.75	10.09
20.001 to 30.000 MW	25	750.00	11.29
30.001 to 50.000 MW	23	1100.60	16.58
Over 50.000 MW	44	3319.00	49.98
	Sub-Total		
	345	6640.07	100.00
2. D. C. Plant—			
Under 1.000 MW	3	0.27	Neg.
	TOTAL		
	348	6640.34	10.00

TABLE 28—CLASSIFICATION OF GAS TURBINE POWER PLANT ACCORDING TO THE SIZE OF THE SETS (OWNERSHIPWISE)

Size of the generating sets	Public Sector							
	State Electricity Board		Government Departments		Government Undertakings		Power Corporation	
	No. of sets	Aggregate capacity (Mw)	No. of Sets	Aggregate capacity (Mw)	No. of Sets	Aggregate capacity (Mw)	No. of sets	Aggregate capacity (Mw)
1	2	3	4	5	6	7	8	9
<i>Gas Turbine Plant</i>								
1. A.C. Plant—								
Upto 10,000 Mw	4	40,000	..	..	..	..	..	..
Above 10,000 Mw	5	94,000	..	..	..	..	..	..
2. D. C. Plant	..	..	..	..	..	..	..	..
SUB-TOTAL	9	134,000	..	..	..	..	..	..

Municipalities		Private Sector		Total		
No. of Sets	Aggregate capacity (Mw)	Companies		No. of sets	Aggregate capacity (Mw)	Percentage of total plant capacity
		No. of sets	Aggregate capacity (Mw)			
10	11	12	13	14	15	16
..	4	40,000	9.505
..	5	94,000	22.336
..
..	9	134,000	31.841

TABLE 29—CLASSIFICATION OF GENERATING SETS

Sl. No.	No. of phases	Voltage of Generation	Type of Plant	Public Sector			
				State Electricity Board		Government Departments*	
				No. of Sets	Aggregate capacity (MW)	No. of Sets	Aggregate Capacity (MW)
1	2	3	4	5	6	7	8
ALTERNATING CURRENT							
1	3	33 KV . . .	H	..	..	..	..
			S	..	..	..	..
2	3	10.5 to 13.8 KV . . .	H	162	4,358.40	36	1,036.05
			S	110	2,739.97	4	195.50
			G	9	134.00	..	..
3	3	5 to 6.6 KV . . .	H	9	28.50	7	17.5
			S	49	291.92	..	..
4	3	2 to 3.9 KV . . .	H	23	72.27	..	..
			S	32	81.45	..	..
5	3	400 to 460 V . . .	H	13	1.20	24	3.62
			S	6	8.90	2	1.10
6	1	230 Volts . . .	H	..	..	..	..
			S	..	..	..	..
DIRECT CURRENT							
7	3 Wire	400-500V . . .	H	..	..	..	..
			S	..	..	..	..
8	2 Wire	220 V . . .	H	..	..	..	..
			S	..	..	67	1,057.17
Sub-Total				H	207	4,460.37	..
				S	197	31,22.24	..
				G	9	134.00	..

*One Steam set of 7.5 MW installed at Kalakot, J & K is not included here as its voltage of generation is not known.

LEGEND : H—Hydro

S—Steam

D—Diesel

ACCORDING TO VOLTAGE OF GENERATION

Public Sector						Private Sector		Total	
Government Undertakings		Power Corporation		Municipalities		Companies			
No. of Sets	Aggregate Capacity (MW)	No. of Sets	Aggregate Capacity (MW)	No. of Sets	Aggregate Capacity (MW)	No. of Sets	Aggregate Capacity (MW)	No. of Sets	Aggregate Capacity (MW)
9	10	11	12	13	14	15	16	17	18
..
..	10	330.00	10	330.00
..	..	6	104.00	..	..	..	..	204	5,498.45
14	697.00	10	957.50	6	194.60	27	710.00	171	5,496.57
..	9	134.00
..	2	1.00	18	76.00	36	323.00
..	9	36.40	22	192.00	88	644.32
8	124.00	..	..	12	3.86	6	1.51	41	77.64
..	35	70.23	67	151.68
..	7	3.00	..	..	44	7.82
..	8	10.00
..
..
..	3	0.27	3	0.27
..
..	..	6	104.00	..	..	..	..	..	..
22	821.00	10	957.50	21	7.86	25	277.51	325	5,906.91
..	15	231.00	97	1,302.50	347	6,632.84
..	9	134.00

TABLE 30—FUEL CONSUMPTION

Sl. No.	State	Steam Power Stations			
		Coal (Tonnes)	Furnace Oil £ (K.L.)	Natural & other gase- ous fuel cub. metres/ metric tons	Heat Input (k.cal $\times 10^6$)
1	2	3	4	5	6
A.					
1	Andhra Pradesh	7,86,455	12,352	..	3,767.940
2	Assam . . . . . . . .	..	..	..	..
3	Bihar	408,636	50,363	..	2,687.933
4	Gujarat	819,489	540,272	187.267 (M.cu. Met)	11,837.638
5	Haryana	7,159	284	..	43.622
6	Jammu & Kashmir	N.A.	..	..	..
7	Kerala . . . . . . . .	..	..	..	..
8	Madhya Pradesh	1,471,062	9,807	..	8,734.404
9	Maharashtra	1,581,960	438,047	15,832 (Metric Tonnes)	12,025.889
10	Mysore . . . . . . . .	..	..	..	..
11	Nagaland . . . . . . . .	..	..	..	..
12	Orissa	239,051	1,143	..	1,232.581
13	Punjab	5,890	..	..	32.719
14	Rajasthan	99,766	2,700	..	635.533
15	Tamil Nadu.	2,991,884@	4,615	..	8,062.920
16	Uttar Pradesh	2,808,292	19,715	..	15,257.331
17	West Bengal	2,586,651	5,933	5,043 (Million cu.met)	14,806.298
B. Union Territories					
(a)	Delhi	457,922	27,362	..	3,112.955
(b)	Andaman & Nicobar Islands**	22,106	..	..	27.633
(c)	Chandigarh . . . . . . . .	..	..	..	..
(d)	Goa, Daman & Diu . . . . . . . .	..	..	..	..
(e)	Dadra & Nagar Haveli . . . . . . . .	..	..	..	..
(f)	Himachal Pradesh . . . . . . . .	..	..	..	..
(g)	Lacadive, Minicoy & Amindive Islands . . . . . . . .	..	..	..	..
(h)	Manipur . . . . . . . .	..	..	..	..
(i)	NEFA . . . . . . . .	..	..	..	..
(j)	Pondicherry . . . . . . . .	..	..	..	..
(k)	Tripura . . . . . . . .	..	..	..	..
C.	D.V.C.	2,273,541	12,710	..	11,846.457
	TOTAL ALL-INDIA	16,559,864	1,125,303	..	94,111.853

£ Includes HSD & LDO used by Steam power stations.

*Estimated.

**Wood Figure estimated due to non-availability of data.

@ Includes 2730000 MT. Lignite

TABLE 30—FUEL CONSUMPTION

Steam Power Stations		Gas Turbine and Diesel Power Stations		
Generation (Million kwh)	Average Heat Input in (k. cal/kwh) generated	Oil consumption (K.L.)	Generation (Million KWH)	Average Oil Consumption lit/kwh generated
7	8	9	10	11
1,217.75	3,094	312 ¹	0.48	0.65
..	..	6,570 ²	140.72 ³	0.35 ⁴
609.28	4,412	5,895	18.04	0.33
3,255.42	3,636	8,013	25.10	0.32
11.38	3,833	87	0.30	0.29
N.A.	N.A.	4,372	10.93	0.40
..	..	Neg.	Neg.	..
2,573.19	3,395	720	1.47	0.49
3,508.52	3,427	11,440	36.06	0.32
..	..	7*	0.02	0.35
..	..	1,152*	1.20	0.96
384.36	3,207	721	0.95	0.76
4.49	7,287	256	0.76	0.34
75.21	8,450	12,860*	32.15	0.40
2,616.20	3,082	..	..	..
3,707.27	4,116	2,827 ⁵	7.45 ⁴	0.38
3,961.19	3,738	5,582	16.30	0.34
794.55	3,918	783	2.87	0.27
2.00	13,817	507*	1.50*	0.34
..	..	Neg.	Neg.	..
..	..	2,663	8.78	0.33
..	..	34*	0.07	0.49
..	..	96	0.20	0.48
..	..	1,424	4.37	0.33
..
..	..	2,156	7.54	0.29
4,217.22	2,809	..	..	..
26,938.03	3,794	68,677	317.26 ⁶	0.35

¹Includes 228 K. L. of Diesel Oil consumed by Gas turbine plant.²The Gas turbines at Naharkatia consume natural gas. The figure represents, therefore, the diesel oil used by only the diesel engine stations.³Includes 121.87 Million kwh generated by the Gas turbine at Naharkatia.⁴Includes 1.19 million kwh generated at Muradnagar Gas Station.⁵While calculating the average oil consumption, the generation from Naharkatia using natural gas, is excluded for enabling the rest of generation to be divided by the consumption of diesel oil.⁶Includes estimated Diesel oil consumption for Muradnagar Gas Station.

TABLE 31—UTILIZATION OF ELECTRICITY GENERATED PURCHASED
SOLD AND ENERGY LOSSES—ALL INDIA (UTILITIES)

Sl. No.	Item	Energy (Million kwh)	As Percen- tage of Item 5	
			3	4
1	Energy generated (gross) (Utilities)	47,433.3	105.4	
2	Energy used by power station auxiliaries	2,532.1	5.6	
3	Energy generated (Net) = (1) — (2)	44,901.2	99.8	
4	Energy Purchased from non-utilities	96.3	0.2	
5	Energy available for supply = (3) + (4)	44,997.5	100.00	
6	Energy sold to Ultimate consumers	37,352.4	83.0	
7	Energy Lost in transformation, transmission and distribution, and unaccounted for (5) — (6)	7,645.1	17.0	

TABLE 32—INTER-STATE TRANSFER OF POWER (REGION-WISE) (1968-69)

Sl. No.	Name of the Supplier	Name of the Purchaser	Maximum Demand	Units Transferred (Million kwh)	
				4	5
A.	<i>NORTHERN REGION</i>				
1	Bhakra Management Board	Punjab State Elecy. Board	265.1	1,143.9	
2	Do.	Haryana State Elecy. Board	208.2	859.4	
3	Do.	Rajasthan State Elecy. Board	57.0	270.8	
4	Do.	Delhi Electric Supply Undertaking	99.5 MVA	418.1	
5	Do.	Jammu & Kashmir	20.4 MVA	61.1	
6	Do.	Himachal Pradesh	14.7 MVA	59.0	
7	Do.	Chandigarh	15.4	62.6	
8	Do.	Nangal Fertilizer	..	1,360.8	
9	Haryana State Elecy. Board	Rajasthan State Elecy. Board	..	2.71	
10	Do.	Uttar Pradesh State Elecy. Board	..	..
11	Do.	Himachal Pradesh	..	3.45	
12	Uttar Pradesh State Elecy. Bd.	Bihar State Elecy. Board	N.A.	54.74	
13	Do.	Madhya Pradesh State Elecy. Board	4.89	3.50	
14	Do.	Damodar Valley Corporation	N.A.	4.84	
15	Delhi Electric Supply Undertaking	Uttar Pradesh State Electricity Board	25.0	108.28	
16	Do.	Haryana State Electricity Board	..	48.20	
B.	<i>WESTERN REGION</i>				
17	Gujarat Electricity Board	Dadra & Nagar Haveli	0.258 MVA	0.67	
18	Do.	Goa, Daman & Diu (a) Diu Area	0.263 MVA	0.38	
		(b) Daman Area	0.415 MVA	1.05	
19	Madhya Pradesh State Elec. Board	Maharashtra State Electricity Board	..	14.53	
20	Maharashtra State Electricity Bd.	Madhya Pradesh State Electricity Board	1.89 MVA	5.08	
21	Do.	Govt. of Goa, Daman and Diu	2.10 MVA	3.33	
22	Do.	Mysore State Electricity Board	..	..

TABLE 32—INTER-STATE TRANSFER OF POWER (REGION-WISE) (1968-69)—contd.

1	2	3	4	5
C.	<i>SOUTHERN REGION</i>			
23	Andhra Pradesh State Electricity Board	Mysore State Electricity Board . . . ..	..	48.59
24	Tamil Nadu State Electricity Bd.	Kerala State Electricity Board	N.A.	2.84
25	Do.	Govt. of Pondicherry	15.56	87.50
26	Do.	Andhra Pradesh State Electricity Board	N.A.	17.71
27	Do.	Mysore State Electricity Board . . . ..	..	..
28	Mysore State Electricity Board .	Andhra Pradesh State Electricity Board	11.2	10.70
29	Do.	Kerala State Electricity Board	6.8	16.05
30	Do.	Tamil Nadu State Electricity Board	198.0	107.68
31	Kerala State Electricity Board .	Do.	171.0	28.17
32	Do.	Govt. of Pondicherry (Mahe)	0.50	1.14
D.	<i>EASTERN REGION</i>			
33	Bihar State Electricity (Patratu) .	Damodar Valley Corporation@	N.A.	2.59
34	West Bengal State Electricity Board (Bardel).	Do.	N.A.	9.31
35	Durgapur Project Ltd.	Do.	N.A.	49.02
36	West Bengal State Electricity Board .	Bihar State Electricity Board	N.A.	0.49
37	Orissa State Electricity Board .	Bihar State Electricity Board	0.10 MVA	0.004
38	Damodar Valley Corporation @	Durgapur Porject Ltd.	N.A.	33.12
39	Damodar Valley Corporation @	Uttar Pradesh State Electricity Board	N.A.	292.36
40	Damodar Valley Corporation @	Bihar State Electricity Board	N.A.	136.16
41	Do.	West Bengal State Electricity Board(Bardel)	N.A.	1.73
42	Do.	Bihar State Electricity Board (in Bulk)	N.A.	1,008.19
43	Do.	Sijua Jharia Co.	N.A.	169.64
44	Do.	West Bengal State Electricity Board (in Bulk)	N.A.	60.91
45	Do.	Dishergarh Co. Calcutta and Seebpur	N.A.	862.92
E.	<i>NORTH-EASTERN REGION</i>			
46	Assam State Electricity Board .	Govt. of Nagaland	1.20 MVA	2.66
F.	<i>INTER REGINAL TRANSFER OF POWER NORTHERN REGION/ WESTERN REGION</i>			
47	Madhya Pradesh State Electricity Board.	Rajasthan State Electricity Board . . . ..	..	492.52
48	Do.	Uttar Pradesh State Electricity Board . . . ..	..	..
49	Andhra Pradesh State Electricity Board.	Orissa State Electricity Board	38.00	198.18
	<i>SOUTHERN REGION/ WESTERN REGION</i>			
50	Mysore State Electricity Board .	Goa, Daman & Diu	11.02 (aggregate)	52.00
51	Do.	Maharashtra State Electricity Board . . . ..	..	..
52	Orissa State Electricity Board .	Madhya Pradesh State Electricity Board	0.9000MVA	0.18
	Aggregate of inter-State transfer of energy*	..	..	547

@DVC treated as a separate entity for the purpose of this table.

*The transfer of energy from a jointly-owned project (and Central Government's Tarapore and other project coming after 1968-69 to the State) having maximum utilization therefrom, have been excluded since such jointly owned project(Atomic project) is located in one State (naturally taken in the State having maximum shares).

TABLE 33—STATEWISE ENERGY GENERATION, PURCHASE, UTILISATION (INCLUDING UTILISATION

Sl. No.	State	Energy Generated from Power Stations other than jointly owned (NET)	Energy available from		
			From Jointly owned Projects (including proportionate losses)	Purchased from utilities outside the State	Purchased from self generating industries
1	2	3	4	5	6
1	Andhra Pradesh	1624.29	577.01	28.41	..
2	Assam	242.87	..	..	..
3	Bihar	549.94	7.04 ¹	1369.22	4.01
4	Gujarat	3039.49	..	..	73.31
5	Haryana	10.35	947.04	..	..
6	Jammu & Kashmir	124.25	..	61.10	..
7	Kerala	1605.78	..	18.89	..
8	Madhya Pradesh	1221.63	657.29 ^b	8.76	..
9	Maharashtra	7355.70	..	14.53	..
10	Mysore	2446.29	50.52	0.06	..
11	Nagaland	1.18	..	2.66	..
12	Orissa	1169.39	209.34	..	9.83
13	Punjab	229.32	2554.50 ^a	..	..
14	Rajasthan	98.01	768.98 ^c	135.85	..
15	Tamil Nadu	5367.72	..	135.85	..
16	Uttar Pradesh	4979.13	..	400.64	..
17	West Bengal	3692.69	..	958.68	..
18	D. V. C.	4071.50	..	65.77	9.14
<i>Union Territories</i>					
(a)	Delhi	199.48	464.69 ^d	418.10	..
(b)	A. & N. Islands	3.20	..	..	..
(c)	Chandigarh	Neg.	..	62.60	..
(d)	Goa, Daman & Diu	8.57	..	56.76	..
(e)	Dadra & Nagar Haveli . . . . . . . . .	..	..	0.67	..
(f)	Himachal Pradesh	14.90	..	62.45	..
(g)	L. M. & A. Islands	0.19	..	..	..
(h)	Manipur ^e	6.14	..	..	..
(i)	N.E.F.A.	Data.....	Not.....	Available...	
(j)	Pondicherry . . . . . . . . .	..	..	88.64	..
(k)	Tripura ^f	7.43	..	..	..
ALL-INDIA					

See Notes on the Page at the end of the Table.

OUT OF SELF GENERATION OF NON-UTILITIES) AND LOSSES (UTILITIES)

(Energy in Million kwh)

Energy available for distribution within the State and for inter-state sale@	Energy Sold			Transformation, transmission and distribution losses and energy un- accounted for	
	Ultimate consumers	Inside the State@	Total(8+9)	Million kwh 7—10	Col.11 as % of col.7
	7	8	9	10	11	12
2229.71	1638.35	0.06	1638.41	591.30	26.52@@
242.87	190.33	2.66	192.99	49.88	20.54
1930.21	1584.02	2.59	1586.61	343.60	17.80
3112.80	2679.70	2.10	2681.80	431.00	13.85
957.39	655.42	6.16	661.58	295.81	30.90
185.33	131.07	..	131.07	54.28	29.29
1624.67	1320.39	29.31	1349.70	274.97	16.92
1887.68	1572.46	16.26	1588.72	298.96	15.84
7368.31	6389.59	8.41	6398.00	970.31	13.17
2496.88	1915.01	186.43	2101.44	395.44	15.84
3.84	3.38	..	3.38	0.46	11.98
1388.56	1250.06	0.18	1250.24	138.32	9.96@@
2783.82	2256.11	..	2256.11	527.71	18.96*
868.72	651.93	..	651.93	216.79	24.96
5503.57	4354.38	108.05	4462.36	1041.21	18.92
5379.77	4254.70	63.08	4317.78	1061.99	19.74
4651.37	4128.90	58.33	4187.23	464.14	9.98
4146.41	1295.72	2564.01	3859.73	286.68	6.92
1082.27	831.59	108.28	939.87	142.40	13.16
3.20	2.30	..	2.30	0.90	28.13
62.60	46.79	..	46.79	15.81	25.26
65.33	53.57	..	53.57	11.76	18.00
0.67	0.60*	..	0.60*	0.07	10.45
77.35	65.50	..	65.50	11.85	15.32
0.19	0.16	..	0.16	0.03	15.79
6.14	3.33	..	3.33	2.81	45.77
Data.....	Not .....	.....	Available.....	.....	.....
88.64	70.49	..	70.49	18.15	20.48
7.43	6.57	..	6.57	0.86	11.57

See Notes on the page at the end of the Table.

TABLE 33—*contd.*

*Estimated.

@Sale here denotes the energy exclusive of the energy share by virtue of a State share in that jointly-owned projects.

@@Andhra & Orissa State Electricity Boards are measuring the power received from the Government's power houses at Stations other than generating stations. The transmission and distribution losses of the Board do not contain the loss in lines between the generating stations (owned by Government) and these receiving stations. The figure of losses of the Board is, therefore, slightly different from that of the State.

¹ Supplied from Kosi and Gandak Projects.

² This includes 1360.80 million kwh of energy drawn by Nangal Fertilizer from B.M.B.

³ Includes Nangal Fertilizers (See table 34, which gives the loss of Punjab State Electricity Board as 34.1%, when Nangal Fertilizers are excluded). The losses in the network of jointly-owned project of B.M.B. have naturally been allocated to the partner States, like in other States.

⁴ Data under verification.

⁵ The figures of availability from the jointly-owned projects of (i) Chambal and Satpura in case of M.P. & (ii) Inderprastha Extension in case of Delhi have been taken equal to the Net generation of these projects minus the off-take of Rajasthan (at Chambal project) and of Haryana (at its receiving station) respectively.

TABLE 34—ENERGY GENERATION, PURCHASE, UTILISATION AND LOSSES BY THE STATE ELECTRICITY BOARD/ELECTRICITY DEPARTMENTS OF UNION TERRITORIES, JAMMU AND KASHMIR AND NAGALAND/DAMODAR VALLEY CORPORATION (1968-69)

(Energy in Million Kwh)

Sl. No.	State Electricity Board/Department	Energy generated from Power stations other than Jointly owned (Net)	Energy available from		
			Utilities within the State and Jointly owned Projects	Utilities outside the State	Purchase from self- generating industries
1	2	3	4	5	6
1	Andhra Pradesh	1624.29	550.00 ¹	28.41	..
2	Assam	230.80	..	..	..
3	Bihar	456.16	..	1206.62	4.01
4	Gujarat	1998.41	30.32	..	73.31
5	Haryana	10.35	907.60	..	..
6	Jammu & Kashmir	124.25	..	61.10	..
7	Kerala	1605.78	..	18.89	..
8	Madhya Pradesh	1210.35	657.29 ²	8.76	..
9	Maharashtra	4075.08	482.77	14.53	..
10	Mysore	1144.07	1302.24	48.59	..
11	Nagaland (Dept.) ⁴	1.18	..	2.66	..
12	Orissa	0.91	1366.67	..	9.83
13	Punjab	229.32	1143.90	..	..
14	Rajasthan	85.97	761.59	1.73	..
15	Tamil Nadu	3298.02	1772.76	135.84	..
16	Uttar Pradesh	4095.36	9.78	400.64	..
17	West Bengal	1125.70	676.16	62.63	..
18	D. V. C.	4071.50	..	65.77	9.14
<i>Union Territories</i>					
(a)	Delhi	199.48	464.69	418.10	..
(b)	A & N. Islands	3.20	..	..	..
(c)	Chandigarh	Neg.	..	62.60	..
(d)	Goa, Daman & Diu	4.00	4.54	56.76	..
(e)	Dadra & Nagar Haveli . . . . . . . .	..	..	0.67	..
(f)	Himachal Pradesh	4.49	..	62.45	..
(g)	L. M. & A. Islands	0.19	..	..	..
(h)	Manipur ⁴	6.14	..	..	..
(i)	NEFA . . . . . . . .	..	Data not available	..	..
(j)	Pondicherry . . . . . . . .	..	..	88.64	..
(k)	Tripura ⁴	7.43	..	..	..

See Notes on the Page at the end of the Table.

TABLE 34—ENERGY GENERATION, PURCHASE, UTILISATION AND OF UNION TERRITORIES, JAMMU AND KASHMIR AND

Sl. No.	State Electricity Board/Department	Energy available for supply including sale@ outside the State	Energy Sold@
			To Licensees Govt. Undertakings/ Govt. Deptts. within the State
1	2	7	8
1	Andhra Pradesh	2202.70	..
2	Assam	290.80	8.66
3	Bihar	1666.79	112.13
4	Gujarat	2102.04	344.43
5	Haryana	917.95	4.35
6	Jammu & Kashmir	185.35	..
7	Kerala	1624.67	82.03
8	Madhya Pradesh	1876.40	54.05
9	Maharashtra	4572.38	1998.55
10	Mysore	2494.90	32.54
11	Nagaland (Deptt.) ^a	3.84	..
12	Orissa	1977.41	..
13	Punjab	1973.22	94.81
14	Rajasthan	849.29	40.00
15	Tamil Nadu	5206.62	416.27
16	Uttar Pradesh	4505.78	318.71
17	West Bengal	1864.49	666.75
18	D. V. C.	4146.41	..
<i>Union Territories</i>			
(a)	Delhi	1082.27	206.63
(b)	A & N. Islands	3.20	..
(c)	Chandigarh	62.60	..
(d)	Goa, Daman & Diu	65.30	..
(e)	Dadra & Nagar Haveli	0.67	..
(f)	Himachal Pradesh	66.94	17.24
(g)	L. M. & C.A. Islands	0.19	..
(h)	Manipur ^b	6.14	..
(i)	N. E. F. A.	Data not available	
(j)	Pondicherry	88.64	..
(k)	Tripura ^c	7.43	..

@Sale outside the State denotes the energy, exclusive of the energy-share of the outside state(s) by virtue of a State's partnership in the jointly-owned projects.

*This figure is arrived at by subtracting Rajasthan's off take at Chambal area from the net generation of Chambal and Satputra.

£This figure is arrived at by subtracting Haryana's off take at the receiving station, from the net generation of Indraprastha Extension.

^aEstimated.

^bAndhra & Orissa State Electricity Boards are measuring the power received from the Government Power Houses at stations other than generating stations. The transmission and distribution losses of the Boards do not contain

**LOSSES BY THE STATE ELECTRICITY BOARD/ELECTRICITY DEPARTMENTS
NAGALAND/DAMODAR VALLEY CORPORATION (1968-69)—*contd.***

Outside of State	Energy Sold@		Energy lost in transformation transmission and distribution and the counted for	
	To Ultimate consumers within the State	Total (Col. 8+9+10)	Energy	Loss as percentage of col. 7
	9	10	11	12
0·6	1638·35	1638·41	564·29	25·62 ¹
2·66	171·29	182·61	48·19	20·88
2·59	1239·98	1354·70	312·09	18·72
2·10	1405·80	1752·33	349·71	16·64
6·16	691·92	662·43	255·52	27·84 ²
..	131·07	131·70	54·28	29·29
29·31	1256·02	1367·36	257·31	15·84
16·26	1517·04	1587·35	289·05	15·40
8·41	1948·12	3955·08	617·30	13·50
186·42	1887·52	2106·28	388·62	15·58
..	3·38	3·38	0·46	11·98
0·18	1250·06	1250·24	124·17	9·01 ^{1b}
..	810·01	904·82	468·40	34·11 ^{2a}
..	611·92	691·92	197·37	23·24 ^a
108·05	3757·27	4281·59	925·03	16·85
63·08	3183·76	3565·55	940·23	20·87
9·81	939·92	1616·48	248·01	13·30
2564·01	1295·72	3859·73	286·68	6·92 ^b
108·28	616·21	931·12	151·15	13·97
..	2·30	2·30	0·90	28·13
..	46·79	46·79	115·81	25·26
..	53·57	53·57	11·73	17·96
..	0·60	0·60	0·07	10·45
..	42·69	59·93	7·01	10·47
..	0·16	0·16	0·03	15·79
..	3·33	3·33	2·81	45·77
		Data not available		
..	70·49	70·49	18·15	20·48
..	6·57	6·57	0·86	11·57 ^c

the loss in lines between the generating stations (owned by Government) and the receiving stations. The figure of loss and the board, is, therefore slightly different from that of the State.

² The losses in the net work of jointly owned project of B. M. B. are also reflected to some extent in the computation for losses of the State Electricity Boards of Punjab, Haryana and Rajasthan due to B. M. B's figures being calculated by the B. M. B. in a particular fashion.

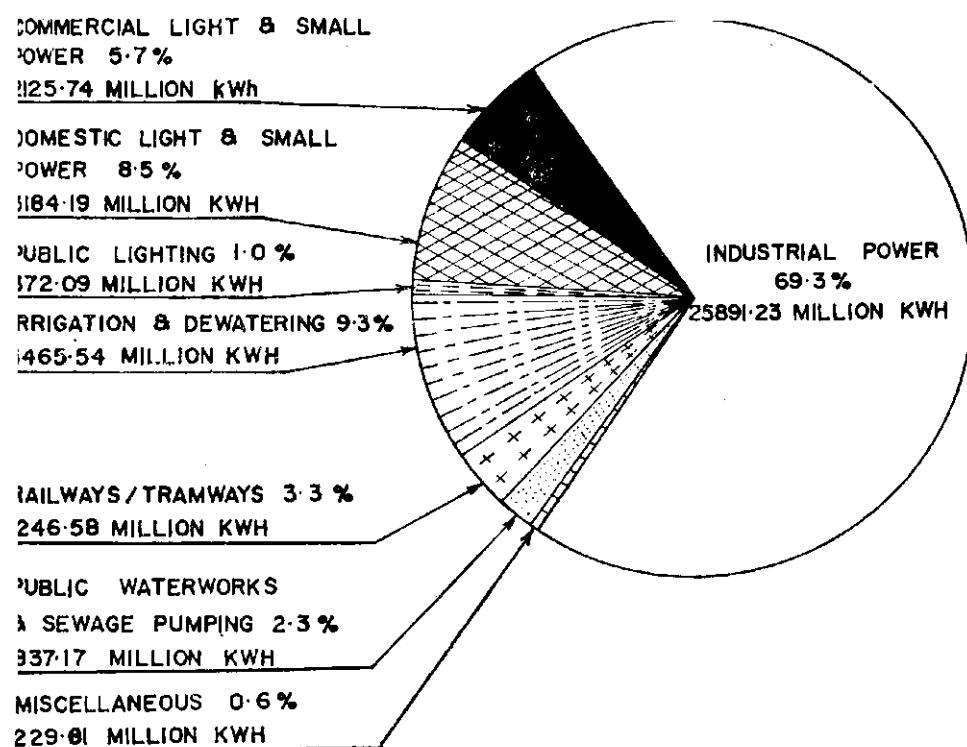
³ The loss for the Board does not take into account the supply to Nangal Fertilizers which is a direct consumer of the B. M. B. The losses for the State where Nangal Fertilizers is taken, are, therefore, substantially different from those of the Board (See Table 33).

⁴ Data under verification.

⁵ Low in case of Orissa as the large Aluminium factory is very near the supply, low in case of D. V. C. as it is mainly a bulk supplier.

TABLE 35—ENERGY SALES 1968-69 (CATEGORY-WISE)

Sl. No.	Category	Energy sold in 1968-69 (Million kwh)	Percentage to total Sales	Energy sold in 1967-68 (Million kwh)	Percentage increase over 1967- 68 sales
1	2	3	4	5	6
1	Domestic	3184.19	8.5	2927.97	8.8
2	Commercial	2125.74	5.7	1750.18	21.5
3	Industrial Power	25891.23	69.3	22852.24	15.3
4	Public Lighting	372.09	1.0	349.94	6.3
5	Railways/Tramways	1246.58	3.3	1301.66	(→)4.2
6	Agricultural	3465.54	9.3	2585.26	34.1
7	Public Water Works and Sewage Pumping	837.17	2.3	709.50	18.0
8	Miscellaneous	229.81	0.6	260.15	(→)11.7
	TOTAL . .	37352.35	100.0	32736.90	14.1

ENERGY SALES IN 1968-69

TOTAL SALES DURING THE YEAR
37352.35 MILLION KWH

TABLE 36—STATEWISE ENERGY SALES BY

Sl. No.	State	Total Sold to ultimate consumers	Domestic	Commercial	Industrial Power at low & medium Voltage
1	2	3	4	5	6
1	Andhra Pradesh	1638·35	125·84	193·81	112·04
2	Assam	190·33*	29·36	49·92**	22·91
3	Bihar ^a	2639·94	78·92	88·96	132·51
4	Gujarat	2679·70	194·07	76·53	311·75
5	Haryana	655·42	42·30	35·00	114·00
6	Jammu & Kashmir	131·07	48·82	31·04	31·30
7	Kerala	1320·39	80·45	58·29	115·95
8	Madhya Pradesh	1572·46	116·66	63·46	139·25
9	Maharashtra	6389·59	603·43	446·86	604·87
10	Mysore	1915·01	188·54	70·66	194·69
11	Nagaland £	3·38£	2·37	0·66	0·16
12	Orissa	1250·06 *@@	28·82	51·32	47·03
13	Punjab	2256·11	121·67	77·87	278·99
14	Rajasthan	651·93	53·56	51·06	80·95
15	Tamil Nadu	4354·31	270·86	309·26	304·82
16	Uttar Pradesh	4254·70	283·09	129·44	487·25
17	West Bengal ^a	4638·70*	607·78	209·20	272·44
18	<i>Union Territories</i>				
(a)	Delhi	831·59	261·31	151·51	169·28
(b)	Andaman & Nicobar@	2·30	1·24	0·16	0·55
(c)	Chandigarh £	46·79£	11·91	8·74	9·59
(d)	Dadra & Nagar Haveli £	0·60	0·18	..	0·29
(e)	(Goa, Daman & Diu	53·57	4·04	3·70	2·41
(f)	Himachal Pradesh	65·50*	18·63	14·19	13·42
(g)	Laccadive Minicoy & Aminidive Islands	0·16	0·11	0·03	Neg.
(h)	Manipur £	3·35£	2·64	0·07	0·50
(i)	N. E. F. A.		Data not available		
(j)	Pondicherry	70·49	3·62	3·71	3·93
(k)	Tripura*	6·57*	3·97	0·29	1·62
	ALL-INDIA	37352·35*	3184·19	2125·74	3452·50

^aProvisional.

**15.30 Million kWh. sale to Tea Gardens included in Commercial. @Data pertains to the calendar year 1968.

£ Estimated.

@@Figures for Amritsar Municipality are estimated.

¹Includes consumption by Nangal Fertilizers.²Includes DVC's sales within respective areas.

UTILITIES TO ULTIMATE CONSUMERS—1968-69

Industrial power at high voltage	Public lighting	Railways/Tramways	Agricultural	Public water Works and Sewage pumping	Miscellaneous
7	8	9	10	11	12
791·82	26·53	..	337·16	48·35	2·80
76·28	3·89	..	0·40**	4·06	3·51
1575·41	5·04	382·41	67·88	31·38	7·43
1645·67	28·90	..	334·75	75·70	12·33
290·58	3·41	..	169·32	Neg.	0·81
..	..	..	13·32	6·59	..
1001·19	16·29	..	43·21	4·43	0·58
1145·64	17·87	..	38·49	51·09	..
3883·89	59·01	388·85	236·21	113·67	52·80
1198·03	43·17	..	124·50	95·40	0·02
..	0·16	..	..	0·03	..
1084·10	4·41	26·11	3·33	4·94	..
1555·05 ¹	8·71	..	199·41*	6·84	7·57
328·27	9·55	0·53	68·55	49·13	10·33
2191·77	62·67	..	1126·16	34·65	54·12
2397·68	21·22	124·64	652·37*	82·17	76·84
3044·39	35·57	324·04	15·04	129·85	0·39
143·20	21·39	..	7·30	77·60	..
..	0·09	..	..	0·26	..
11·53	1·03	..	0·36	3·63	..
..	0·08	..	0·05	..	..
39·54	0·91	..	0·13	2·84	..
3·60	1·24	..	0·53	13·61	0·28
..	0·02	..	..	..	..
..	0·11	..	Neg.	0·01	..
		Data not available			
31·09	0·72	..	26·98	0·44	..
..	0·10	..	0·09	0·50	..
22438·73	372·09	1246·58	3465·54*	837·17	229·81

TABLE 37—ENERGY SALES BY THE

Sl. No.	State	Total sold to ultimate Consumers (i.e. excluding inter-state & licensees etc.)	Domestic	Commercial	Industrial power at low and Medium Voltage
1	2	3	4	5	6
1	Andhra Pradesh	1638.35	125.84	193.81	112.04
2	Assam**	171.29	23.89	44.98**	19.16
3	Bihar	1259.98	37.56	44.57	110.28
4	Gujarat	1405.80	82.07	22.92	146.30
5	Haryana	651.92	41.44	33.87	112.64
6	Kerala	1256.02	62.05	53.38	99.11
7	Madhya Pradesh	1517.04	107.57	54.03	128.22
8	Maharashtra	1948.12	139.73	71.57	149.95
9	Mysore	1887.32	178.09	65.08	184.73
10	Orissa	1350.06	28.82	51.32	47.03
11	Punjab	2170.81@	97.42	62.45	248.42
12	Rajasthan	611.01	42.45	40.48	74.32
13	Tamil Nadu	3757.27	203.67	245.82	230.33
14	Uttar Pradesh	3183.76	194.90	64.42	369.12
15	West Bengal*	939.92	27.50	29.52	49.42
	TOTAL	23,628.67@*	1393.00	1077.72	2081.07

*Provisional.

**15.30 million kWh consumed by tea gardens.

@Includes Nangal Fertilizers consumption (at present a consumer of Bhakra Management Board).

STATE ELECTRICITY BOARDS

(Million kWh)

Industrial Power at high voltage	Public lighting	Railways/Tramways	Agricultural	Public Water Works & Sewage pumping.	Miscellaneous
7	8	9	10	11	12
791·82	26·53	..	337·16	48·35	2·80
72·62	3·20	..	0·40**	4·06	3·48
713·46	2·57	244·14	66·95	20·45	..
795·06	15·23	..	318·50	25·72	..
290·58	3·33	..	169·25 ¹	..	0·81
980·07	14·10	..	45·18	4·13	..
1124·02	16·63	..	35·86	50·71	..
1163·45	27·50	21·26	232·86	89·22	52·58
1197·77	42·10	..	124·34	95·21	..
1084·10	4·41	26·11	3·33	4·94	..
1550·13@	6·11	..	199·17* ¹	..	7·11
322·86	8·23	..	67·22	45·33	10·10
1069·23	45·32	..	1084·38	26·15	52·37
1648·77	11·94	124·61	642·75*	50·81	76·44
589·50	4·76	218·00	15·00	6·22	..
14,193·44@	231·96	634·12	3340·35*	471·32	205·69

¹Includes figure of public water works and sewage pumping.

TABLE 38—ENERGY SALES BY

Sl. No.	State	Total sold to ultimate consumers	Domestic Power	Commercial Power	Industrial Power at low & medi- um voltage
1	2	3	4	5	6
1	Andhra Pradesh	..	..	..	..
2	Assam	19.04	5.47	5.44	3.75
3	Bihar	344.04	41.36	44.37	22.23
4	Gujarat	1188.59	86.43	52.18	153.32
5	Haryana	3.50	0.86	1.13	1.36
6	Jammu & Kashmir	..	..	..	..
7	Kerala	56.750	14.74	4.30	14.08
8	Madhya Pradesh	55.42	9.09	9.42	11.03
9	Maharashtra	3188.23	175.00	75.20	258.99
10	Mysore	27.67	10.44	5.57	9.96
11	Nagaland	..	..	..	..
12	Orissa	..	..	..	..
13	Punjab	2.30	0.75	0.43	..
14	Rajasthan	40.92	11.11	10.58	6.63
15	Tamil Nadu	259.41	42.05	34.58	55.81
16	Uttar Pradesh	995.65	63.40	50.22	776.92
17	West Bengal	2941.02	574.10	177.68	221.74
<i>Union Territories</i>					
(a)	Goa, Daman & Diu	..	..	..	..
(b)	ALL-INDIA	9122.54	1034.80	471.11	1535.82

PRIVATE SECTOR—(MILLION KWH)

Industrial Power at high voltage	Public lighting	Railways/ Tramways	Agricultural	Public Water Works & Sewage Pump- ping	Miscellaneous
7	8	9	10	11	12
..
3·66	0·69	..	..	..	0·03
221·75	2·47	..	0·93	10·93	..
815·81	11·13	..	11·60	45·82	12·30
..	0·08	..	0·07	Neg.	Neg.
..
21·12	1·61	..	0·03	0·30	0·57
21·62	1·24	..	2·63	0·38	..
2601·12	15·43	49·15	3·10	10·03	0·21
0·26	1·06	..	0·16	0·20	0·02
..
..
0·92	0·10	..	0·08	..	0·02
5·41	1·32	0·53	1·33	3·78	0·23
65·62	12·03	..	40·68	6·92	1·72
66·61	60·01	..	9·52	22·58	0·39
1786·36	30·34	35·97	0·04	114·65	0·14
..
5610·26	83·51	85·65	70·17	215·59	15·63

TABLE 39—ANNUAL PER CAPITA CONSUMPTION OF ELECTRICITY (1968-69) KWH

Sl. No.	State	Population (Millions) (mid-financial year) (estimated)	Utilities							From* self-generation of non-utilities	Total
			Domestic	Commercial	Industrial including public Water works and sewage pumping, Railways, Tramways and Miscellaneous	Public lighting	Agricultural (pumping)	Total			
1	2	3	4	5	6	7	8	9	10	11	
1	Andhra Pradesh	41.78	3.01	4.64	22.86	0.63	8.07	39.21	3.85	43.06	
2	Assam	14.85	1.98	3.36	7.19	0.26	0.03	12.82	2.08	14.90	
3	Bihar	55.43	1.42	1.61	38.41	0.09	1.23	42.76	18.20	60.96	
4	Gujarat	25.36	7.65	3.02	80.66	1.14	13.20	105.67	10.44	116.11	
5	Haryana	9.63	4.39	3.64	42.10	0.35	17.58	68.06	7.16	75.22	
6	Jammu & Kashmir	3.95	12.36	7.86	9.59	Neg.	3.37	33.18	..	33.18	
7	Kerala	20.42	3.93	2.85	54.95	0.79	2.12	64.64	2.94	67.58	
8	Madhya Pradesh	39.07	2.99	1.62	34.19	0.46	0.99	40.25	8.43	48.68	
9	Maharashtra	47.98	12.58	9.31	105.13	1.23	4.92	133.17	3.90	137.07	
10	Mysore	28.16	6.70	2.51	52.85	1.53	4.42	68.01	1.81	69.82	
11	Nagaland	0.42	5.64	1.57	0.45	0.39	..	8.05	..	8.05	
12	Orissa	20.80	1.39	2.47	55.87	0.21	0.16	60.10	28.41	88.51	
13	Punjab	13.68	8.89	5.69	135.12	0.64	14.58	164.92	0.05	164.97	
14	Rajasthan	25.04	2.14	2.04	18.74	0.38	2.74	26.04	6.75	32.79	
15	Tamil Nadu	38.36	7.06	8.06	67.40	1.63	29.36	113.51	1.49	115.00	
16	Uttar Pradesh	67.40	3.24	1.48	36.25	0.24	7.47	48.68	1.26	49.94	
17	West Bengal	42.88	14.17	4.88	87.95	0.83	0.35	108.18	10.09	118.27	
<i>Union Territories</i>											
(a)	Delhi	3.88	67.35	39.05	100.64	5.51	1.88	214.33	27.16	241.49	
(b)	Andaman & Nicobar Islands	0.087	14.25	1.84	9.31	1.03	..	26.43	..	26.43	
(c)	Chandigarh	0.184	64.73	47.49	134.52	5.60	1.96	254.30	..	254.30	
(d)	Dadra & Nagar Haveli	0.070	2.57	..	4.14	1.14	0.71	8.57	..	8.57	
(e)	Goa, Daman & Diu	0.677	5.97	5.47	66.16	1.34	0.19	79.13	1.54	80.67	
(f)	Himachal Pradesh	4.09	4.56	3.47	7.56	0.30	0.13	16.02	..	16.02	
(g)	Lacadive, Minicoy & Aminidive Islands	0.03	3.67	1.00	..	0.66	..	5.33	..	5.33	
(h)	Manipur	1.04	2.54	0.07	0.49	0.11	..	3.20	..	3.20	
(i)	NEFA	0.38	..	..	..	Data not available	..	..	..	..
(j)	Pondicherry	0.43	8.41	8.63	82.47	1.67	62.75	163.93	0.01	163.49	
(k)	Tripura	1.43	2.78	0.20	1.48	0.07	0.06	4.59	..	4.59	
ALL-INDIA		527.51	6.04	4.03	53.46	0.70	6.58	70.81	7.07	77.88	

*Excluding sales of non-utilities to utilities which gets reflected under utilities.

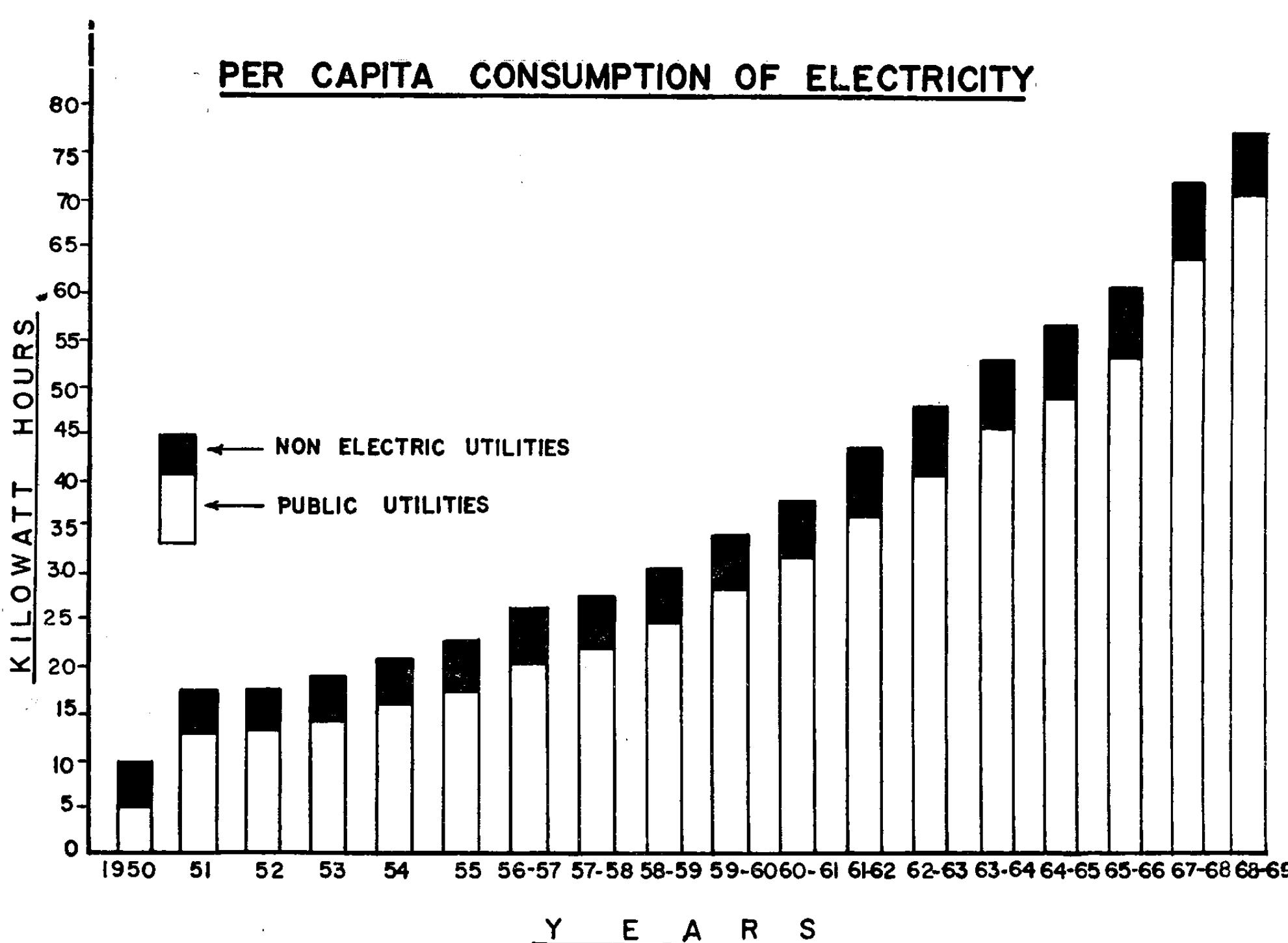


TABLE 40—INSTALLED PLANT CAPACITY@ (AS ON 31-3-1969) AND ENERGY CONSUMPTION

Sl. No.	State	Population (mid. finan- cial year) (Million) (Estimated)	Area in thousand sq. kilometers	Installed@ plant capacity (MW)
1	2	3	4	5
1	Andhra Pradesh	41.78	275.28	625.07
2	Assam	14.85	121.97	158.20
3	Bihar	55.43	174.04	950.68
4	Gujrat	25.36	187.11	661.54
5	Haryana	9.63	44.06	504.41
6	Jammu & Kashmir	3.95	222.80	40.34
7	Kerala	20.42	38.85	546.60
8	Madhya Pradesh	39.07	443.45	698.60
9	Maharashtra	47.98	307.45	1638.99
10	Mysore	28.16	192.20	799.05
11	Nagaland	0.42	16.49	2.00
12	Orissa	20.80	155.82	501.85
13	Punjab	13.68	50.38	681.77
14	Rajasthan	25.04	342.27	498.44
15	Tamil Nadu	38.36	130.36	1470.50
16	Uttar Pradesh	87.40	294.36	1345.44
17	West Bengal	42.88	87.62	1559.33
18	<i>Union Territories</i>			
(a)	Delhi	3.88	1.48	251.82
(b)	Andaman & Nicobar	0.087	8.33	1.76
(c)	Chandigarh	0.184*	0.11	2.48
(d)	Dadra & Nagar Haveli	0.677	0.50	..
(e)	Goa, Daman & Diu	0.070	55.66	4.91
(f)	Himachal Pradesh	4.09	4.18	5.00
(g)	Laccadive, Minicoy & Amindive Islands	0.03	0.03	0.40
(h)	Manipur	1.04	22.35	3.40
(i)	N. E. F. A.	0.38	81.40	1.80
(j)	Pondicherry	0.43	0.48	..
(k)	Tripura	1.43	10.45	2.89
	ALL-INDIA	527.51	3269.48	12957.27

@The capacity of the jointly owned projects has been shown distributed in the ratio of the respective States.

*Provisional.

(1968-69) (UTILITIES ONLY) PER SQUARE KILOMETER AND PER THOUSAND OF POPULATION

Installed@ capacity for 1,000 of population (kw)	@Installed capacity per sq. kilometer	Total energy consumed (Million kwh)	Energy consumed per 1,000 of population (kwh)	Energy consumed per sq. kilometer (kwh)
6	7	8	9	10
14.96	2.27	1538.35	39,214	5,952
10.65	1.30	190.33	12,816	1,560
17.15	5.46	2369.92 ¹	42,755	13,609
26.09	3.54	2579.70	105,666	14,223
52.38	11.45	655.42	68,060	14.876
10.21	0.18	131.07	33,182	588
26.71	14.07	1320.39	64,662	33,987
17.88	1.58	1572.46	40,247	3,546
34.16	5.33	6389.50	133,172	20,783
28.58	4.16	1915.01	68,005	9,964
4.76	0.12	3.38	8,048	205
24.13	3.22	1250.06	60,099	8,022
49.84	13.53	2256.11	164,920	44,782
19.91	1.46	651.93	26,036	1,905
38.33	11.28	4354.31	113,512	33,402
15.39	4.57	4254.70	48,681	14,454
36.37	17.80	4638.72 ¹	108,179	52,941
64.90	170.15	831.59	214,327	561,885
20.23	2.11	2.30	26,437	2,276
13.48	22.55	46.79 ²	254,293	425,363
7.25	1.18	53.57	79,129	12,816
..	..	0.60	8,571	1,200
1.22	0.09	65.50*	16,105	1,176
13.33	13.33	0.16	5,333	5,333
3.27	0.15	3.33	3,202	149
4.74	0.02	..	..	..
..	..	70.49	163,930	146,854
2.02	0.28	6.57*	4,594*	629*
24.56	3.96	37352.35@@	70,809*	14,437

*Provisional.

£Estimated.

@@Includes estimated sales for Chandigarh N. D. M. C., Dadra, Nagar Haveli, Nagaland & Manipur.

¹ Includes ultimate sales by D. V.C.

TABLE 41—PROGRESS OF ELECTRICITY SUPPLY ALL INDIA (ELECTRIC UTILITIES ONLY)

Year	Installed Plant Capacity in MW				Aggregate of Maximum Demand Generating (MW)	Energy Generated (Million kwh) (Gross)	Energy Generated per kw of Capacity	Energy Sold (Million kwh)	Average load Factor based on Cols. 6 & 7	Average Plan Demand factor based on Col. 5 & 6		
	Hydro	Steam	Gas Turbine and Diesel	Total								
1	2	3	4	5	6	7	8	9	10	11		
1939 . .	442·169	540·760	86·790	1069·719	575·801	2442·415	2,283	2,034·636	48·42	53·8		
1947 . .	508·129	757·457	97·679	1363·265	882·853	4073·318	2,988	3,358·794	52·67	64·8		
1948 . .	515·554	788·393	107·019	1410·966	965·780	4575·466	3,243	3,721·464	54·08	68·4		
1949 . .	559·079	852·639	125·468	1537·186	1008·000	4909·289	3,194	4,004·716	55·60	65·6		
1950 . .	559·285	1040·434	148·796	1712·515	1098·314	5106·700	2,981	4,156·657	53·08	64·1		
1951 . .	575·179	1097·567	162·680	1835·426	1205·194	5858·403	3,192	4,793·344	55·49	65·7		
1952 . .	715·179	1176·317	170·259	2061·755	1310·651	6120·347	2,969	5,005·682	55·31	63·6		
1953 . .	731·179	1393·717	180·294	2305·190	1416·350	6697·187	2,905	5,597·083	53·98	61·4		
1954 . .	793·346	1491·043	209·607	2493·996	1625·123	754·777	3,016	6,252·501	52·84	65·2		
1955 . .	939·483	1546·805	208·529	2694·817	1849·672	8592·451	3,189	7,111·011	53·03	68·6	88	88
1956-57 . .	1061·441	1596·412	228·288	2886·141	1989·774	9662·133	3,348	7,959·345	55·43	68·9		
1957-58 . .	1213·919	1763·257	245·949	3223·111	2288·212	11369·142	3,527	9,345·224	56·72	71·0		
1958-59 . .	1361·745	1879·553	270·288	3511·586	2542·255	12993·886	3,700	10,718·610	58·33	72·4		
1959-60 . .	1530·145	2047·001	296·010	3873·166	2931·360	15032·953	3,881	12,406·943	58·54	75·7		
1960-61 . .	1916·661	2436·255	300·135	4653·051	3545·930	15937·012	3,640	13,840·369	54·53	76·2		
1961-62 . .	2419·100	2471·019	328·897	5218·816	3971·206	19669·945	3,769	16,448·295	56·54	76·3		
1962-63 . .	2936·349	2537·693	327·152	5801·194	4635·049	22364·972	3,855	18,879·21	55·08	79·9		
1963-64 . .	3167·016	3007·634	401·289	6575·939	5548·503	26817·575	4,078	21,793·977	55·17	84·4		
1964-65 . .	3388·726	3604·575	403·364	7396·665	6257·197	29563·079	4,044	24,219·269	53·93	84·6		
1965-66 . .	4125·745	4417·115	486·159	9027·019	7306·230	32990·125	3,708	26,734·944	51·54	80·9		
1966-67 . .	4757·223	4846·910	448·034	10092·167	8291·571	36375·587	3,604	29,127·636	50·08	82·16		
1967-68 . .	5486·916	5975·410	420·837	11883·163	9702·787	41194·637	3,467	32,736·872	48·50	81·65		
1968-69 . .	5906·91	6640·34	410·20	12957·27	10871·06	47433·65	3,661	37,352·35	49·81	83·90		

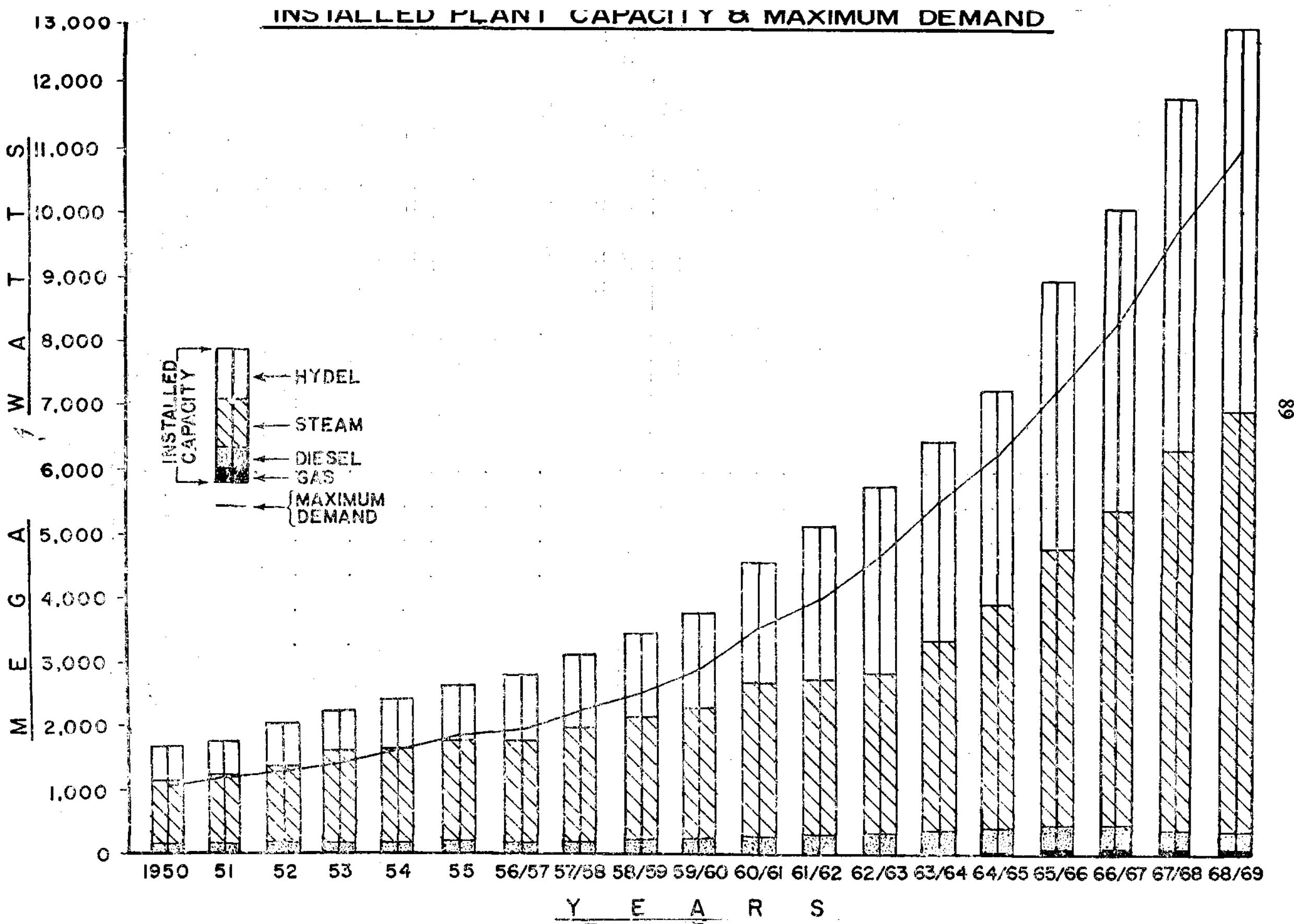


TABLE 42(I)—PROGRESS OF ELECTRICITY SUPPLY—ANDHRA PRADESH

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed Capacity (MW)</i>						
Hydro . . . . .	..	66·000	166·150	152·92	272·93	272·93
Steam	46·000	46·000	83·500	113·50	341·75	326·00
Diesel	13·164	19·876	20·188	12·13	6·16	6·14
Gas Turbine . . . . .	..	..	..	20·00	20·00	20·00
TOTAL . .	59·164	131·876	269·838	298·55	640·84	625·07
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (gross) (Million kWh)</i>						
Hydro . . . . .	..	169·364	748·743	764·61	858·59	1127·61
Steam	89·612	60·177	145·836	510·38	1090·31	1217·75
Gas Turbine . . . . .	..	..	..	38·41	0·25	0·36
Diesel	14·328	9·661	5·450	6·77	0·41	0·12
TOTAL . .	103·940	239·202	900·020	1320·17	1949·56	2345·84
*Purchased from non-utilities and adjoining States						
Used by power station auxiliaries . . .	..	..	1·040	152·94	16·41	38·64
@Sales—						
(i) To adjoining States . . . . .	..	..	120·525	0·40	11·55	49·40
(ii) Within the State—						
Domestic light and small power	20·946	32·666	0·815	85·75	106·00	125·84
Commercial light & small power	18·657	38·810	30·321	172·90	96·40	193·81
Industrial power	44·297	88·641	393·331	574·37	857·90	903·86
Public lighting	5·878	9·032	14·869	20·35	22·80	26·53
Railways/Tramways . . . . .	..	..	..	..	..	..
Agricultural	4·905	10·458	54·827	172·66	246·60	337·16
Public Water Works and Sewage pumping . .	3·493	6·410	7·399	22·31	..	48·35
Miscellaneous . . . . .	..	..	..	..	4·60	2·80
TOTAL (ii) . .	98·176	186·017	501·552	1048·54	1334·30	1638·35

Note.—Figures of installed capacity and generation from 1965-66 and onwards have been changed by taking the installed capacity and generation of jointly-owned projects according to the share of participating States instead of the previous practice of taking the total values against the State having major share.

*Purchase includes, inter-alia, that portion of transfer from the supplies of jointly-owned projects, which may be over and above the share of the State from those projects.

@Sales include, inter-alia, that portion of transfer from the supplies of jointly-owned projects, which may be below the share of the State from those projects.

TABLE 42(2)—PROGRESS OF ELECTRICITY SUPPLY—ASSAM

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed Capacity (MW)</i>						
Hydro	0·550	0·550	9·270	45·94	45·91	48·71
Steam	0·200	0·622	..	..	..	..
Diesel	2·593	4·108	10·160	32·10	29·27	27·99
Gas Turbine . . . . .	..	..	..	81·50	81·50	81·50
TOTAL . .	3·343	5·280	19·430	159·54	156·68	158·20
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (gross) (Million kWh)</i>						
Hydro	2·130	2·897	20·883	56·39	80·61	108·32
Steam	0·001	..	..	..	..	..
Diesel	4·469	8·372	15·336	26·65	26·40	18·85
Gas Turbine	2·130	..	..	14·86	63·30	121·87
TOTAL . .	8·760	11·269	36·219	97·90	170·31	249·04
Purchased from non-utilities and adjoining States	..	..	..	..	..	..
Used by power station auxiliaries . . .	..	..	1·273	4·92	8·29	6·17
<i>Sales :</i>						
(i) To adjoining States . . . . .	..	..	..	..	0·70	2·66
(ii) Within the State—						
Domestic light and small power . . .	2·080	3·331	9·897	23·59	43·16	29·36
Commercial light and small power* . .	2·060	3·689	4·212	19·33	23·51	49·92
Industrial power	0·772	1·383	11·827	23·59	46·51	99·19
Public lighting	0·614	0·740	2·699	3·65	3·71	3·89
Railways/Tramways . . . . .	..	..	..	..	..	..
Agricultural. . . . .	..	..	..	0·11	0·11	0·40
Public Water Works and Sewage Pumping .	0·069	0·143	0·463	0·76	2·90	4·06
Miscellaneous . . . . .	..	..	..	..	0·02	3·51
TOTAL (ii) . .	5·595	9·286	29·098	71·03	119·92	190·33

*Includes supply to tea gardens.

TABLE 42(3)—PROGRESS OF ELECTRICITY SUPPLY—BIHAR

Year	31-12-1951	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro	..	4·000	44·000	44·000	..	..
Steam	39·510	185·045	288·520	608·77	172·77	222·77
Diesel	7·486	15·396	18·373	19·52	16·72	16·41
TOTAL	46·996	204·441	350·893	672·29	189·49	239·18
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (gross) (Million kWh)</i>						
Hydro	..	2·153	143·655	124·51	..	..
Steam	118·870	580·118	1408·554	3079·56	759·92	609·29
Diesel	13·162	20·964	44·624	22·50	19·38	18·04
TOTAL	132·032	603·235	1596·833	3226·87	779·30	627·33
Purchased from non-utilities and adjoining States	..	..	67·789	193·53	1198·34	1380·27
Used by power station auxiliaries	..	..	98·620	300·68	76·16	77·93
<i>Sales—</i>						
(i) To adjoining States	..	..	457·839	889·30	127·39	2·59
(ii) Within the State						
Domestic light and small power	14·820	27·138	44·312	61·09	71·30	78·92
Commercial light and small power	6·062	13·296	29·830	69·35	82·47	88·94
Industrial power	87·847	298·543	776·395	1397·25	973·39	1067·72
Public lighting	1·098	1·937	3·647	4·80	4·90	5·04
Railways/Tramways	..	..	4·528	343·09	199·57	244·14
Agricultural	4·599	4·272	18·255	29·83	61·05	67·88
Public Water Works and Sewage Pumping	4·167	8·126	12·238	27·64	31·80	31·38
Miscellaneous	..	..	..	..	..	..
TOTAL (ii)	118·593	353·312	889·205	1932·55	1424·48	1584·02

NOTE.—Data included DVC (Bihar portion) upto 1965-66. From the year 1965-68 onwards D.V.C. data have been excluded and have given separately.

TABLE 42 (4)—PROGRESS OF ELECTRICITY SUPPLY—GUJARAT

Year	31-12-1951	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro	..	..	..	..	..	..
Steam	108.930	183.600	280.900	609.60	619.60	619.60
Diesel	32.948	40.605	52.367	41.02	45.24	41.94
TOTAL	141.878	224.205	333.267	650.62	664.84	661.54
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (gross) (Million kWh)</i>						
Hydro	..	..	..	..	..	..
Steam	316.405	739.372	1209.144	2155.48	2861.59	3255.42
Diesel	57.244	51.577	62.063	51.90	27.11	25.10
TOTAL	373.649	790.949	1271.227	2207.38	2888.70	3280.52
Purchased from non-utilities and adjoining States	..	..	..	0.87	44.55	73.31
Used by power station auxiliaries	..	..	82.615	177.76	218.85	240.97
<i>Sales—</i>						
(i) To adjoining States	..	..	..	0.40	1.19	2.10
(ii) Within the State—						
Domestic light and small power	30.901	46.726	71.573	141.54	172.97	194.07
Commercial light and small power	12.328	14.936	31.660	48.98	62.81	76.53
Industrial power	266.694	590.402	805.961	1421.15	1762.99	1957.42
Public lighting	5.889	8.980	15.274	22.23	27.67	28.90
Railways/Tramways	..	..	..	..	..	..
Agricultural	1.326	6.060	19.610	100.53	211.53	334.75
Public Water Works and Sewage Pumping	12.83	26.746	39.560	62.04	68.69	75.70
Miscellaneous	..	..	..	..	12.25	12.33
TOTAL (ii)	329.221	693.850	98.6338	1796.47	2328.91	2679.70

TABLE 42(5)—PROGRESS OF ELECTRICITY SUPPLY—HARYANA**

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro	..	..	..	245.69	367.78	408.47
Steam	1.300	6.750	6.300	28.10	84.85	90.60
Diesel	6.986	7.515	4.306	6.32	3.58	5.34
TOTAL	8.286	14.265	10.606	280.11	456.21	504.41
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (gross) (Million kWh)</i>						
Hydro	..	..	..	1083.26	1319.15	1472.82
Steam	2.881	6.769	6.658	14.15	66.04	200.52
Diesel	6.867	4.048	0.861	3.68	0.64	0.30
TOTAL	9.748	10.817	7.519	1101.09	1385.83	1673.64
*Purchased from non-utilities and adjoining States.	..	..	..	..	..	..
Used by Power station auxiliaries	..	..	..	1.339	3.517	24.00
@Sales						
(i) To adjoining States	..	..	..	..	..	721.07
(ii) Within the State—						
Domestic light and small power	..	..	..	..	..	42.30
Commercial light and small power	..	..	..	..	..	35.00
Industrial power	..	..	..	..	..	404.58
Public lighting	..	..	..	..	..	3.41
Railways/Tramways	..	..	..	..	..	..
Agricultural	..	..	..	..	..	169.32£
Public Water Works and Sewage Pumping	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	0.81
TOTAL (ii)	..	..	..	..	..	655.42

NOTE.—1. Figures of installed capacity and generation from 1965-66 and onwards have been changed by taking the installed capacity and generation of jointly owned projects according to the share of participating States instead of the previous practice of taking the total values against the State having major share.

*Purchase includes, inter-alia, that portion of transfer from the supplies of jointly-owned projects, which may be over and above the share of the State from those projects. Nangal-Fertilizer have been taken under Punjab table.

@Sales include, inter-alia, that portion of transfer from the supplies of jointly-owned projects which may be below the share of the State from those projects. Common consumers of B. M. B. have at present been shown under Punjab table.

£Includes figures of public water works and sewage pumping also.

**It has not yet been possible to work out figures of installed capacity, generation, purchase and station auxiliaries prior to 1965-66 for the area under Haryana, due to want of data. Similarly the figures for sales in Haryana are not available prior to 1967-68.

TABLE 42(6)—PROGRESS OF ELECTRICITY SUPPLY—JAMMU AND KASHMIR

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed Capacity (MW)</i>						
Hydro	4.514	10.606	10.612	28.07	26.92	26.92
Steam	1.500	1.500	1.500	1.50	..	7.50
Diesel	0.465	0.769	0.869	1.54	5.66	5.92
TOTAL .	6.479	12.875	12.981	31.11	32.58	40.34
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (gross) (Million kWh)</i>						
Hydro	23.479	23.896	43.489	..	112.03	123.02
Steam	1.774	..	..	N.A.	..	N.A.
Diesel	0.261	0.075	0.025	..	5.10	10.93
TOTAL .	25.514	23.971	43.514	..	118.13	133.95
Purchased from non-utilities and adjoining States . . . . .	..	..	17.500	35.462	56.58	61.10
Used by power station auxiliaries . . . . .	..	..	0.509	..	1.38	9.70
<i>Sales (Estimated)</i>						
(i) To adjoining States . . . . .	..	..	..	..	..	..
(ii) Within the State—						
Domestic light and small power	7.660	8.864	22.500	Data	56.22	48.82
Commercial light and small power	0.811	0.176	1.000	not avail-	10.00	31.04
Industrial Power	6.318	6.424	22.000	able	46.57	31.30
Public lighting	0.552	0.566	1.300		0.94	Neg.
Railways/Tramways . . . . .	..	..	..		..	..
Agricultural	0.424	0.302	0.700		4.39	13.32
Public Water Works and Sewage Pumping	1.610	2.086	3.500		12.78	6.59
Miscellaneous . . . . .	..	..	..		0.93	..
TOTAL (ii) .	17.375	18.418	51.000		131.83	131.07

TABLE 42(7)—PROGRESS OF ELECTRICITY SUPPLY—KERALA

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro	28.500	85.500	132.500	192.50	527.00	545.00
Steam	..	..	..	..	..	..
Diesel	4.170	4.277	4.762	4.60	1.60	1.60
TOTAL	32.670	89.777	137.262	197.10	528.60	546.60
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (gross) (Million kWh)</i>						
Hydro	152.179	349.599	581.818	840.34	1406.563	1623.00
Steam	..	..	..	..	..	..
Diesel	1.460	0.132	..	1.60	..	Neg.
TOTAL	153.639	349.731	581.818	841.94	1406.563	1623.00
Purchased from non-utilities and adjoining States	..	..	50.341	116.48	31.58	18.89
Used by power station auxiliaries	..	..	18.394	18.82	17.06	17.22
<i>Sales—</i>						
(i) To adjoining States	..	..	11.591	1.35	7.68	29.31
(ii) <i>Within the State—</i>						
Domestic light and small power	13.748	22.890	51.073	89.93	70.44	80.45
Commercial light and small power	2.697	2.291	3.851	14.43	48.98	58.29
Industrial power	140.939	223.592	396.407	602.90	1005.50	1117.14
Public lighting	1.604	2.722	8.358	10.55	14.01	16.29
Railways/Tramways	..	..	..	..	..	..
Agricultural	6.170	10.721	18.287	24.03	36.77	43.21
Public Water Works and Sewage Pumping	3.292	7.001	7.844	7.96	3.85	4.43
Miscellaneous	..	..	..	..	8.71	0.58
TOTAL (ii)	168.450	269.217	485.820	749.80	1188.26	1320.39

TABLE 42(8)—PROGRESS OF ELECTRICITY SUPPLY—MADHYA PRADESH

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro . . . . .	..	..	69.000	46.00	79.00	122.00
Steam	27.308	66.322	169.798	238.40	405.77	569.20
Diesel	11.979	15.984	28.739	26.14	7.15	7.40
TOTAL . .	39.287	82.306	267.537	310.54	491.92	698.60
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (gross) (Million kWh)</i>						
Hydro . . . . .	..	..	23.240	78.06	88.24	271.43
Steam	57.354	150.070	429.677	1110.20	1660.48	1757.76
Diesel	15.953	19.271	24.049	19.96	4.28	1.47
TOTAL . .	73.307	169.341	476.966	1208.22	1753.00	2030.66
*Purchased from non-utilities and adjoining States	..	..	30.000	69.29	55.33	58.78
Used by power station auxiliaries . .	..	..	30.985	100.06	146.99	174.11
@Sales—						
(i) To adjoining States . . . . .	..	..	3.000	0.09	11.67	14.53
(ii) Within the State—						
Domestic light and small power . . .	14.845	25.206	45.397	74.39	117.21	116.66
Commercial light and small power . .	7.470	13.525	20.790	26.64	71.76	63.46
Industrial Power	23.094	77.280	301.267	868.38	1146.14	1284.89
Public lighting	2.183	4.801	9.113	9.97	16.64	17.87
Railways/Tramways . . . . .	..	..	..	..	..	..
Agricultural	0.188	0.698	3.890	11.76	21.04	38.49
Public Water Works and Sewage Pumping .	10.321	18.486	25.243	37.28	45.75	51.09
Miscellaneous . . . . .	..	..	..	..	0.25	..
TOTAL (ii) . .	58.101	139.996	405.700	1028.42	1418.79	1572.46

NOTE.—Figure of installed capacity and generation from 1965-66 and onwards have been changed by taking the installed capacity and generation of jointly-owned projects according to the share of participating States instead of the previous practice of taking the total values against the State having major share.

*Purchase includes, *inter-alia*, that portion of transfer from the supply of jointly-owned projects, which may be over and above the share of the State from those projects.

@Sales include, *inter-alia*, that portion of transfer from the supply of jointly-owned projects, which may be below the share of the State from those projects.

TABLE 42(9)—PROGRESS OF ELECTRICITY SUPPLY—MAHARASHTRA

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity in (MW)</i>						
Hydro	253.114	279.914	281.91	598.89	829.32	844.32
Steam	64.954	225.110	443.25	653.25	708.50	771.00
Diesel	21.122	27.917	34.36	52.36	42.53	23.67
TOTAL .	339.190	532.941	759.53	1304.50	1580.35	1638.99
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh)</i>						
Hydro	1229.024	1467.483	1364.95	3157.56	4012.94	4120.00
Steam	280.038	742.343	1834.76	2415.92	2769.67	3508.52
Diesel	32.203	38.879	68.17	61.71	42.15	36.06
TOTAL .	1541.265	2248.705	3267.88	5635.19	6824.76	7664.68
<i>Purchased from non-utilities and adjoining States</i>						
Used by power station auxiliaries . . .	..	..	2.200	..	..	14.53
<i>Sales—</i>						
(i) <i>To adjoining States</i> . . . . .	..	..	30.000	44.409	35.75	8.41
(ii) <i>Within the State—</i>						
Domestic light and small power	107.964	165.574	259.901	448.208	536.73	603.43
Commercial light and small power	86.133	131.301	198.230	363.381	428.20	446.86
Industrial Power	815.801	1234.899	1852.666	3297.263	3880.05	4488.76
Public lighting	7.129	14.503	19.883	38.571	60.70	59.01
Railways/Tramways	270.946	344.463	338.927	413.863	552.56	388.85
Agricultural	2.748	5.129	14.759	89.555	154.95	236.21
Miscellaneous . . . . .	..	..	..	..	50.57	52.80
Public Water Works and Sewage Pumping .	23.346	31.366	35.157	65.696	100.76	113.67
TOTAL (ii) .	1314.067	1927.235	2719.523	4716.537	5764.52	6389.59

TABLE 42(10)—PROGRESS OF ELECTRICITY SUPPLY—MYSORE

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)—</i>						
Hydro	107.200	178.200	178.200	432.00	610.20	788.40
Steam	0.057	..	..	1.10	..	..
Gas turbine . . . . .	..	..	..	10.00	10.00	10.00
Diesel	7.681	12.264	12.876	12.53	1.58	0.65
TOTAL .	114.938	190.464	191.076	455.63	621.78	799.05
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh)—</i>						
Hydro	525.343	809.725	1038.756	1916.07	2293.39	2517.67
Steam . . . . .	..	..	..	1.63	..	..
Gas Turbine . . . . .	..	..	..	0.61	..	..
Diesel	13.159	16.449	19.242	17.52	0.58	0.02
TOTAL .	538.502	826.174	1057.998	1935.83	2293.97	2517.69
*Purchased from non-utilities and adjoining States . . . . .	..	..	48.250	0.04	..	0.06
Used by powerstation auxiliaries . . . . .	..	..	16.652	9.60	8.60	10.63
@Sales—						
(i) To adjoining States . . . . .	..	..	..	227.006	227.338	196.88
(ii) Within the State—						
Domestic light & small Power	31.987	55.489	75.243	131.255	168.218	188.54
Commercial light & small power	8.734	17.785	21.299	27.292	31.041	70.66
Industrial power	292.174	486.229	731.889	1035.514	1255.783	1392.72
Public lighting	7.140	13.838	18.880	28.682	38.977	43.17
Railways/Tramways . . . . .	..	..	..	..	..	..
Agricultural	6.967	16.465	28.714	66.015	90.139	124.50
Public Water Works and Sewage Pumping	37.034	42.574	58.915	92.846	93.003	95.40
Miscellaneous . . . . .	..	..	..	..	..	0.02
TOTAL (ii)	584.036	632.380	934.940	1381.604	1677.161	1915.01

NOTE.—Figures of installed capacity and generation from 1965-66 and onwards have been changed by taking the installed capacity and generation of jointly-owned projects according to the share of participating States instead of the previous practice of taking the total values against the State having major share.

*Purchase includes, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be over-and-above the share of the State from those projects.

@Sales includes, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be below the share of the State from those projects.

TABLE 42(11)—PROGRESS OF ELECTRICITY SUPPLY—NAGALAND

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed Capacity in (MW) —</i>						
Hydro
Steam
Diesel	0.73	1.57	2.00
TOTAL	0.73	1.57	2.00
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh) —</i>						
Hydro
Steam
Diesel	1.01	1.60	1.20
TOTAL	1.01	1.60	1.20
Purchased from non-utilities and adjoining States	0.70	2.66
Used by power station auxiliaries	0.01	0.03	0.02
<i>Sales—</i>						
(i) To adjoining States
(ii) Within the State—						
Domestic light and small power	0.65	1.47	2.37
Commercial light and small power	0.41	0.66
Industrial power	0.07	0.10	0.16
Public lighting	0.07	0.11	0.16
Railways/Tramways
Agricultural
Public Water Works and Sewage Pumping	0.05	0.01	0.03
Miscellaneous
TOTAL (ii)	0.84	2.10	3.38

TABLE 42(12)—PROGRESS OF ELECTRICITY SUPPLY—ORISSA

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro	0.005	24.005	123.005	304.44	304.42	304.42
Steam	0.776	5.776	5.776	5.75	133.25	195.75
Diesel	4.079	3.991	7.468	4.80	1.28	1.68
TOTAL	4.860	33.772	136.249	314.99	438.95	501.85
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh)—</i>						
Hydro	0.013	0.011	483.738	1155.52	974.22	997.57
Steam	2.133	17.617	..	..	55.85	384.36
Diesel	4.665	3.517	5.901	0.97	0.87	0.95
TOTAL	6.811	21.145	489.639	1156.49	1030.94	1382.88
*Purchased from non-utilities & adjoining States	..	..	104.813	12.38	129.46	59.23
Used by power station auxiliaries.	..	..	3.680	4.26	15.26	53.55
@Sales—						
(i) To adjoining States	..	..	25.000	131.03	2.31	0.18
(ii) Within the State—						
Domestic light & small power	2.226	4.023	18.300	29.93	25.40	28.82
Commercial light & small power	1.408	1.938	7.870	16.19	27.44	51.32
Industrial power	1.117	7.578	457.465	882.21	916.04	1131.13
Public lighting	0.243	0.614	1.487	7.95	4.31	4.41
Railways/Tramways	..	..	..	32.72	21.05	26.11
Agricultural.	..	..	0.752	1.73	3.32	3.33
Public Water Works and Sewage Pumping	0.101	1.049	2.297	5.36	3.96	4.94
Miscellaneous	..	..	..	..	20.34	..
TOTAL (ii)	5.095	15.202	488.171	976.59	1021.86	1250.06

NOTE.—Figures of installed capacity and generation from 1965-66 and onwards have been changed by taking the installed capacity and generation of jointly-owned projects according to the share of participating States instead of the previous practice of taking the total values against the State having major share.

*Purchase includes, *inter-alia*, that portion of transfer from the supplies of jointly-owned Projects, which may be over-and-above the share of the State from those projects.

@Sales include, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be below the share of the State from those projects.

TABLE 42(13)—PROGRESS OF ELECTRICITY SUPPLY—PUNJAB**

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)—</i>						
Hydro	98.240	144.240	324.726	417.37	99.67	660.70
Steam	1.076	1.076	1.576	5.00	15.00	15.00
Diesel	8.597	10.449	9.544	10.28	6.07	6.07
TOTAL	57.913	155.765	335.846	432.65	62.074	681.77
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh)—</i>						
Hydro	163.719	413.497	977.726	1806.54	2041.73	2441.43
Steam . . . . .	..	..	..	8.00	1.37	4.49
Diesel	9.309	0.685	4.359	4.45	0.28	0.76
TOTAL	173.028	414.182	982.085	1818.79	2043.38	2446.68
* Purchased from non-utilities & adjoining States . . . . .	..	..	..	311.561	377.218	345.26
Used by power station auxiliaries . . . . .	..	..	7.955	9.309	4.824	8.12
@Sales—						
(i) To adjoining States . . . . .	..	..	182.875	384.488	642.959	600.80
(ii) Within the State—						
Domestic light and small power	24.898	10.840	69.867	113.54	96.27	121.67
Commercial light and small power	12.006	34.819	61.397	86.43	62.37	77.87
Industrial Power	56.128	153.632	355.974	1915.71	1814.08	1834.04
Public lighting	2.443	5.753	9.092	9.87	7.39	8.71
Railways/Tramways . . . . .	..	..	..	..	..	..
Agricultural	0.490	22.655	74.848	210.85	143.63£	199.41
Public Water Works and Sewage Pumping	6.589	8.729	9.121	13.41	..	6.84
Miscellaneous . . . . .	..	..	..	..	10.54	7.57
TOTAL (ii)	102.554	266.430	580.299	2349.81	2134.28	2256.11

Note.—1. Figures of installed capacity and generation from 1965-66 and onwards have been changed by taking the installed capacity and generation of jointly-owned projects according to the share of participating States instead of the previous practice of taking the total values against the State having major share.

*Purchase includes, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be over-and-above the share of the State from those projects. This also includes receipt of energy by Nangal Fertilizer, detail of purchase from B.M.B. is given below—

Offtake of Punjab from B.M.B. (including proportionate losses) = (1193.70 MkWh)
Energy consumed by N.F.F. = 1360.80 MkWh

(→) Share of Punjab from B.M.B. (4343.083x84.78% x 60%)
= 2554.50 MkWh
= 2209.24
345.26

**Figures of installed capacity and generation for all the years from 1966-67 onwards are for the area under reorganised Punjab. Figures of the years 1951, 1956, 1960-61, and 1965-66 present Punjab and Chandigarh combined, due to want of data at present.

@Sales include, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be below the share of the State from those projects. These also include complete sales to common consumers. Detail of sales to commonpool consumers is given as below—

Jammu & Kashmir	61.10 MkWh
Himachal Pradesh	59.00 MkWh
Chandigarh	62.60 MkWh
D.E.S.U.	418.10 MkWh
	600.80

£Includes figure of Public Water Works and Sewage Pumping.

TABLE 42(14)—PROGRESS OF ELECTRICITY SUPPLY—RAJASTHAN

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro . . . . .	..	..	..	156.27	244.06	305.33
Steam	17.26	24.00	46.25	48.50	96.15	146.15
Diesel	13.68	19.79	24.43	31.81	36.86	36.96
Gas Turbine . . . . .	..	..	..	10.00	10.00	10.00
TOTAL .	30.94	43.79	70.68	246.58	387.07	498.44
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh)—</i>						
Hydro . . . . .	..	..	..	564.24	687.77	932.44
Steam	42.72	61.28	70.41	127.31	160.82	346.32
Diesel	21.55	29.03	37.99	36.16	39.74	32.15
Gas Turbine . . . . .	..	..	..	1.38	2.55	Neg.
TOTAL .	64.27	90.31	108.40	729.09	890.88	1310.91
*Purchase from non-utilities and adjoining States						
Used by Power Station auxiliaries . . .	..	..	22.808	3.086	14.732	..
@Sales—						
(i) To adjoining States . . . . .	..	..	..	311.49	298.37	432.87
(ii) Within the State—						
Domestic light and small power	10.834	12.325	20.734	38.51	64.72	53.56
Commercial light and small power	5.833	11.115	15.858	38.26	58.19	51.06
Industrial Power	14.198	21.890	33.580	197.81	236.86	409.22
Public Lighting	1.969	2.987	52.00	7.27	3.68	9.55
Railways/Tramways . . . . .	..	..	..	..	..	0.53
Agricultural	1.664	1.845	3.621	19.68	37.67	68.55
Public Water Works and Sewage Pumping . .	12.923	14.459	19.537	24.26	35.57	49.13
Miscellaneous . . . . .	..	..	..	..	0.14	10.33
TOTAL (ii) .	47.421	64.621	98.530	325.79	441.83	651.93

Note.—Figures of installed capacity and generation from 1965-66 and onwards have been changed by taking the installed capacity and generation of jointly owned projects according to the share of participating States instead of the previous practice of taking the total value against the State having major share.

*Purchase includes, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be over-and-above the share of the state from those projects.

@Sales include, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be below the share of the State from those projects. Common consumers of B. M. B. are at present being shown under Punjab table.

TABLE 42(15)--PROGRESS OF ELECTRICITY SUPPLY—TAMIL NADU

Year	31-12-1951	31-12-1956	1-3-1961	31-1-1966	31-3-1968	31-3-1969
<i>Installed capacity in (MW)</i>						
Hydro	101.950	165.150	415.450	906.63	969.00	969.00
Steam	52.000	84.000	101.500	401.50	501.50	501.50
Diesel	0.516	0.516	0.516	6.00	..	..
TOTAL . .	154.466	249.666	517.456	1314.15	1470.50	1470.50
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh)</i>						
Hydro	579.173	802.619	1797.545	1978.63	2729.69	3044.81
Steam	140.189	281.718	416.171	2230.50	2445.59	2616.20
Diesel	0.195	..	..	0.28	..	..
TOTAL . .	7197.557	1084.337	2213.716	4209.41	5175.28	5661.01
Purchased from non-utilities and adjoining States	..	..	23.866	218.60	169.33	135.76
Used power station auxiliaries	..	..	64.746	266.33	278.31	293.29
<i>Sales—</i>						
(i) To adjoining State . . . . .	..	..	80.549	210.62	96.18	108.05
(ii) Within the State—						
Domestic light and small power . . .	59.340	108.915	152.890	213.70	257.08	270.86
Commercial light and small power . .	54.693	90.398	156.712	299.14	263.30	309.26
Industrial Power	324.291	449.368	909.791	1792.32	2293.72	2496.59
Public Lighting	14.178	20.774	33.920	48.91	58.12	62.67
Railways/Tramways	15.749	12.628	15.000	20.29	32.19	..
Agricultural	69.636	138.300	382.403	819.65	1652.50	1126.16
Public Water Works and Sewage Pumping .	8.625	10.319	19.427	28.112	30.08	34.65
Miscellaneous . . . . .	..	..	..	..	58.42	54.12
TOTAL (ii) . .	546.572	830.702	1665.143	3222.12	4045.41	4354.31

TABLE 42(16)—PROGRESS OF ELECTRICITY SUPPLY—UTTAR PRADESH

	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity in (MW)</i>						
Hydro	26.220	96.390	92.470	477.76	477.75	477.75
Steam	161.090	179.860	270.810	398.23	675.24	814.24
Diesel	12.883	32.490	34.164	42.05	31.61	40.95
Gas Turbine	..	..	..	12.500	12.500	12.50
TOTAL	200.193	308.740	397.444	930.54	1297.10	1345.44
<i>Energy Generated (Gross) (Million kWh)—</i>						
Hydro	157.320	232.309	439.967	1542.86	1600.32	1611.44
Steam	398.271	490.828	786.262	1450.67	2095.04	3707.27
Diesel	14.181	20.343	26.092	25.10	90.34	6.26
Gas Turbine	..	..	..	14.03	11.97	1.19
TOTAL	569.772	743.481	1252.321	3032.66	3717.67	5326.16
Purchase from non-utilities and adjoining States	..	..	..	134.108	479.61	400.64
Used by power station auxiliaries	..	..	59.551	118.354	186.73	347.03
<i>Sales—</i>						
(i) To adjoining States	..	..	..	109.16	57.88	63.08
(ii) Within the State—						
Domestic light and small power	49.587	71.510	122.718	190.50	282.92	283.09
Commercial light and small power	40.451	59.317	74.736	116.11	98.88	129.44
Industrial power	230.991	314.181	503.928	1639.76	2197.34	2884.93
Public lighting	6.246	8.384	13.848	18.61	22.23	21.22
Railways/Tramways	..	..	..	20.32	89.84	124.64
Agricultural	98.230	90.441	199.992	315.99	354.32	652.37
Public Water Works and Sewage Pumping	32.434	42.145	60.481	70.94	80.11	82.17
Miscellaneous	*	*	*	*	20.45	76.84
TOTAL (ii)	457.939	585.987	975.703	2372.23	3146.09	4254.70

*Included in Commercial light and small power.

TABLE 42(17)—PROGRESS OF ELECTRICITY SUPPLY—WEST BENGAL

Year	31-12-1951	31-12-1956	31-3-1961	31-3-1966	31-3-1968	31-3-1969
<i>Installed capacity (MW)</i>						
Hydro	2.760	4.760	67.208	67.51	25.51	25.51
Steam	539.901	528.351	676.975	1211.21	1171.43	1171.43
Diesel	3.513	5.612	9.473	13.47	11.94	12.39
TOTAL . .	546.174	538.723	733.655	1292.19	1208.88	1209.33
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy generated (Gross) (Million kWh)</i>						
Hydro	5.929	8.335	159.886	144.90	33.34	38.83
Steam	1196.902	1765.624	2150.169	3879.68	3811.35	3961.19
Diesel	4.445	4.632	8.684	16.36	15.13	16.30
TOTAL . .	1207.276	1778.591	2318.739	4040.94	3859.82	4016.32
Purchased from non-utilities and adjoining States . . . . .	..	..	604.970	51.85	901.58	958.68
Used by power station auxiliaries . . . . .	..	..	130.595	329.45	307.62	323.63
<i>Sales—</i>						
(i) <i>To adjoining States</i> . . . . .	..	..	10.000	0.92	87.93	58.33
(ii) <i>Within the State—</i>						
Domestic light and small power	180.831	253.402	353.517	510.14	574.63	607.78
Commercial light and small power	37.550	79.275	115.786	173.87	210.87	209.18
Industrial Power	731.949	1291.502	1808.128	3009.71	2715.77	2877.35
Public Lighting	8.346	15.112	23.395	29.80	32.34	35.57
Railways/Tramways	42.899	47.487	95.297	227.01	185.90	253.96
Agricultural . . . . .	..	2.170	0.650	4.25	10.75	15.04
Public Water Works and Sewage Pumping	32.564	65.594	95.993	110.14	118.16	129.85
Miscellaneous . . . . .	..	..	..	..	2.19	0.17
TOTAL (II) . .	1034.139	1754.542	2492.766	4064.92	3850.61	4128.90

NOTE.—Data include D. V. C. upto 1965-66 and from the year 1967-68 onwards D. V. C. data have been excluded and have been given separately.

TABLE 42 (18)—PROGRESS OF ELECTRICITY SUPPLY—D. V. C.

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro	104.00	104.00
Steam	817.50	957.50
Diesel
TOTAL	921.50	1061.50
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh)</i>						
Hydro	203.11	274.88
Steam	3980.66	4217.22
Diesel
TOTAL	4183.77	4492.10
<i>Purchased from non-utilities and adjoining States</i>						
Used by power station auxiliaries	150.45	74.91
<i>Sales—</i>						
(i) <i>To adjoining States</i>	2509.45	2572.03
(ii) <i>Within the State—</i>						
Domestic light and small power
Commercial light and small power	0.05	0.04
Industrial power	977.52	1079.69
Public lighting
Railways/Tramways	220.55	208.34
Agricultural
Public Water Works and Sewage Pumping
Miscellaneous	7.87	7.65
TOTAL (ii)	1205.99	1295.72

TABLE 42(19)—PROGRESS OF ELECTRICITY SUPPLY—DELHI

Year	31-12-51	31-12-56	31-3-61	31-3-66	31-3-68	31-3-69
<i>Installed capacity (MW)</i>						
Hydro	..	..	..	..	..	..
Steam	35.15	52.40	53.60	91.60	231.00	231.00
Diesel	7.44	2.79	22.70	20.82	20.82	20.82
TOTAL	42.59	55.19	76.30	112.42	251.82	251.82
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Energy Generated (Gross) (Million kWh)</i>						
Hydro	..	..	..	..	..	..
Steam	131.88	231.68	271.41	387.13	513.96	605.42
Diesel	5.40	0.54	39.35	7.35	10.18	2.87
TOTAL	137.28	232.22	310.76	394.48	524.14	608.29
*Purchased from non-utilities and adjoining States	..	..	142.34	336.17	500.99	559.03
Used by Power Station auxillaries	..	..	59.24	38.25	56.11	66.88
@Sales—						
(i) To adjoining States	..	..	..	0.067	24.095	..
(ii) Within the State—						
Domestic Light and small power	24.250	52.462	97.101	186.51	231.40	261.31
Commercial Light and small power	33.003	57.629	72.892	167.29	148.16	151.51
Industrial Power	32.406	74.306	153.892	178.43	289.09	312.48
Public Lighting	2.637	6.491	10.937	15.88	19.07	21.39
Railways/Tramways	..	0.347	0.171	..	..	..
Agricultural	5.730	4.928	5.007	6.91	5.65	7.30
Public Water Works and Sewage Pumping	21.420	31.592	43.185	55.05	70.38	77.60
Miscellaneous	..	..	..	..	..	..
TOTAL	119.446	227.755	383.185	610.07	763.75	831.59

Note.—Figures of installed capacity and generation for the year 1967-68 onwards have been shown according to the share of Delhi.

*Purchase includes, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be over-and-above the share of the State from those projects.

@Sales include, *inter-alia*, that portion of transfer from the supplies of jointly-owned projects, which may be below the share of the State from those projects.

TABLE 43—INDEX NUMBER OF PUBLIC ELECTRICITY SUPPLY UTILITIES—ALL INDIA

Year	31-12-50	31-12-55	31-3-61	31-3-66 (@)	31-3-68	31-3-69
Year	1951	1956	1960-61	1965-66	1967-68	1968-69
<i>Installed plant capacity at the end of—</i>						
(a) Hydro	100	168·0	342·7	757·8	981·4	1056·1
(b) Steam	100	154·0	242·6	439·8	376·2	661·1
(c) Gas Turbine & Diesel	100	140·0	201·7	326·7	282·4	275·6
All-Types	100	157·4	271·8	527·2	694·2	756·6
<i>Energy generated—</i>						
(a) Hydro	100	150·1	274·0	532·4	652·4	724·6
(b) Steam	100	184·4	314·2	625·1	800·0	947·2
(c) Gas Turbine & Diesel	100	106·2	167·5	178·6	138·2	144·5
All-Types	100	164·9	289·1	563·1	703·2	809·7
Coal Consumption*	100	166·4	257·4	414·6	492·7	557·2
Diesel Oil consumption in Gas Turbine and Diesel Power Stations	100	104·3	153·1	233·1	103·6	80·6
Aggregate Maximum Demand	100	165·1	294·2	606·2	805·2	902·0
<i>Energy Sales—</i>						
Domestic Light and Small Power	100	157·2	251·2	396·4	492·9	536·0
Commercial Light and Small Power@@	100	165·4	256·9	500·0	609·1	713·7
Industrial Power	100	174·0	317·0	617·1	747·0	846·4
Public Lighting	100	173·2	285·8	413·6	514·7	550·4
Railways/Tramways	100	122·9	137·7	324·4	394·6	378·2
Agricultural	100	155·7	410·2	931·7	1273·4	1706·7
Public Water Works and Sewage Pumping	100	150·9	207·6	297·5	337·6	398·4
All Categories	100	166·1	288·9	557·8	683·0	779·2

*Excludes wood and lignite.

Base—(a) For installed capacity 31-12-50(nearest available for the beginning of First Plant.)

(b) For generation and sales : 1951 (calendar year).

@Installed capacity for 1966-67 revised.

@@Includes miscellaneous consumption figures.

TABLE 44—LENGTH OF TRANSMISSION AND DISTRIBUTION
(Circuit kilometers)

Sl. No.	State/Power Corporation	Distri- bution lines upto 500 V	2·2/3·3 KV		5/6·5 KV	
			O. H.	U.G.	O. H.	U.G.
1	2	3	4	5	6	7
1	Andhra Pradesh	33,892	..	..	..	..
2	Assam@	1,324	28	2	..	..
3	Bihar	24,430	36	9	233	56
4	Gujarat	18,996	63	146	14	4
5	Haryana	17,286	..	322	..	..
6	Jammu & Kashmir@@ . . .	5,677	..	..	431	..
7	Kerala*	16,366	124	..	4	11
8	Madhya Pradesh	12,797	36	47	49	..
9	Maharashtra	51,137	285	190	220	868
10	Mysore	53,616	..	..	4,423	147
11	Nagaland	161**	..	..	..	..
12	Orissa	2,679	63	..	32	..
13	Punjab	21,727	..	..	..	..
14	Rajasthan	8,536	99	..	62	13
15	Tamil Nadu	111,727	102	1	213	62
16	Uttar Pradesh	21,100	98	197	287	91
17	West Bengal	8,966	50	59	427	1,689
18	Damodar Valley Corporation . . .	..	..	..	..	..
19	Union Territories—					
	(a) Delhi*	4,330	..	..	40	242
	(b) Andaman & Nicobar . . .	49	..	..	15	..
	(c) Chandigarh . . . . .	..	..	..	Data not available	
	(d) Dadra & Nagar Haveli . . .	10	..	..	..	..
	(e) Goa, Daman & Diu . . .	547	..	..	..	..
	(f) Himachal Pradesh	3,450	3	80	..	..
	(g) Laccadive, Minicoy & Aminidive Islands	49	..	..	..	..
	(h) Manipur	322	..	..	..	..
	(i) N. E. F. A. . . . .	..	..	..	Data not available	
	(j) Pondicherry . . . . .	..	..	..	..	..
	(k) Tripura	213	..	..	..	..
	TOTAL	419,387	987	1,053	6,450	3,189

*Length of distribution lines shown last year was wrongly compiled.

@Data for Assam State Electricity Board of 1966-67 have been repeated due to non-receipt of data for even 1967-68.

P—Provisional.

*Data for Kerala State Electricity Board and New Delhi Municipal Committee of 1967-68, repeated.

@@Data received from J& K this year are quite different from the data brought out in the General Review for last year which were repeated data from previous years and hence not adequate.

111

LINES OF UTILITIES AS ON 31-3-1969

(Circuit Kilometres)

15/11 KV		22/20 KV		33 KV	
O.H.	U.G.	O.H.	U.G.	O.H.	U.G.
8	9	10	11	12	13
24,284	..	..	..	5,310	..
1,055	..	..	..	951	..
18,497	38	..	..	5,185	..
14,360	611	4,584	..	2,843	..
11,022	..	..	..	1,495	..
2,179	..	..	..	202	..
6,908	35	160	..	36	..
9,463	17	..	..	8,326	..
26,140	744	6,102	489	5,373	..
29,186	190	11	..	1,230	..
52	..	..	..	..	..
2,924	3	..	..	3,225	..
14,166	2	..	..	1,671	..
8,293	102	..	..	5,005	..
7,156	393	12,378	..	2,557	47
44,695	3,932	125	..	6,324	326
6,632	139	..	60	1,984	438
..
..	..	..	..	366	..
1,270	556	..	..	168	57
26	..	..	..	..	..
292	..	..	..	223	..
1,254	3	510	..	780	..
..
299	..	..	..	..	..
..	..	293	..	..	..
354	..	..	..	..	..
250,507	6,765	24,163	549	53,254	868

TABLE 44—LENGTH OF TRANSMISSION AND DISTRIBUTION
 (Circuit kilometers)

Sl. No.	State/Power Corporation	44/37.5 kV O.H.	78/66 kV O.H.	110/90 kV O.H.
1	2	14	15	16
1	Andhra Pradesh . . . . . . . . . .	..	2,940	..
2	Assam@ . . . . . . . . . .	..	273	..
3	Bihar . . . . . . . . . .	..	..	..
4	Gujarat	1	2,768	..
5	Haryana . . . . . . . . . .	..	520	..
6	Jammu & Kashmir@ . . . . . . . . . .	..	187	..
7	Kerala* . . . . . . . . . .	..	1,722	731
8	Madhya Pradesh . . . . . . . . . .	..	518	..
9	Maharashtra . . . . . . . . . .	..	2,041	2,342
10	Mysore . . . . . . . . . .	..	2,543	2,597
11	Nagaland . . . . . . . . . .	..	..	..
12	Orissa . . . . . . . . . .	..	601	..
13	Punjab . . . . . . . . . .	..	477	..
14	Rajasthan . . . . . . . . . .	..	412	..
15	Tamil Nadu . . . . . . . . . .	..	3,133	5,452
16	Uttar Pradesh	3,614	2,443	..
17	West Bengal . . . . . . . . . .	..	541	..
18	D. V. C. .. . . . . . . . . . .	..	..	..
19	<i>Union Territories</i>			
	(a) Delhi* . . . . . . . . . .	..	..	..
	(b) Andaman & Nicobar Pradesh . . . . . . . . . .	..	..	..
	(c) Chandigarh . . . . . . . . . .	..	..	..
	(d) Dadra & Nagar Haveli . . . . . . . . . .	..	..	..
	(e) Goa, Daman & Diu . . . . . . . . . .	..	68	..
	(f) Himachal Pradesh . . . . . . . . . .	..	52	..
	(g) Laccadive, Minicoy . . . . . . . . . .	..	..	..
	(h) Manipur Pradesh . . . . . . . . . .	..	..	..
	(i) N. E. F. A. . . . . . . . . .	..	..	..
	(j) Pondicherry . . . . . . . . . .	..	..	..
	(k) Tripura . . . . . . . . . .	..	..	..
	TOTAL	3,615	21,239	11,122

LINES OF UTILITIES AS ON 31-3-1969—*contd.*

(Circuit kilometers)

132 kV O.H.	220 kV O.H.	230 kV O.H.	Total
17	18	19	20
2,866	641	..	69,933
278	..	..	3,911
1,780	558	..	50,822
977	760	..	46,127
328	1	..	30,973
144	..	..	8,820
..	272	..	26,369
2,874	1,161	..	35,288
1,584	618	..	98,133
..	1,103	..	95,046
..	..	..	213
1,892	147	..	11,566
1,091	398	1	39,538
1,372	115	..	24,009
..	..	1,459	164,680
4,060	1,784	..	89,096
823	..	..	21,808
2,839	..	..	3,205
..	..	..	6,663
..	..	..	64
..
..	..	..	36
..	..	..	1,130
..	..	..	6,132
..	..	..	49
..	..	..	621
..
..	1,209	..	1,502
..	..	..	567
22,934	8,766	1,459	836,301

¹220 kV lines of Bhakra System included under Punjab.

TABLE 45—LENGTH OF TRANSMISSION LINES (33 KV AND ABOVE) COMMISSIONED
DURING THE YEAR 1968-69

Sl. No.	Undertaking	Line voltage	Length (circuit km)
1	2	3	4
1	<i>Andhra Pradesh</i>		
	Andhra Pradesh State Electricity Board . . .	220 kV 132 kV 66 kV 33 kV	146 11 23 241
2	<i>Assam</i>	..	..
	Data not available . . . . .	..	..
3	<i>Bihar</i>		
	Bihar State Electricity Board	220 kV 100 kV 33 kV	558 } 449 } * 140 }
	Patna Electric Supply Co. Ltd., Patna . . .	33 kV	9
4	<i>Gujarat</i>		
	Gujarat State Electricity Board	220 kV 132 kV 66 kV 33 kV	120 195 125 133
5	<i>Haryana</i>		
	Haryana State Electricity Board	132 kV 66 kV 33 kV	163 91 256
6	<i>Jammu & Kashmir</i>		
	Data not available . . . . .	..	..
7	<i>Kerala</i>		
	Data not available.	..	..
8	<i>Madhya Pradesh</i>		
	Madhya Pradesh State Electricity Board . . .	132 kV 33 kV	145 808
9	<i>Maharashtra</i>		
	Maharashtra State Electricity Board . . .	132 kV 100 kV 66 kV 33 kV	87 153 354 1,021
	Tata Hydro Electric Power Supply Co. Ltd. . .	110 kV	26
10	<i>Mysore</i>		
	Mysore State Electricity Board.	110 kV 33 kV	35 110
11	<i>Orissa</i>		
	Orissa State Electricity Board	66 kV 33 kV	9 82

TABLE 45—LENGTH OF TRANSMISSION LINES (33 KV AND ABOVE) COMMISSIONED
DURING THE YEAR 1968-69—*contd.*

Sl. No.	Undertaking	Line voltage	Length (circuit km)
1	2	3	4
12	<i>Punjab</i>		
	Punjab State Electricity Board	220 kV 132 kV 66 kV 33 kV	154 80 114 204
13	<i>Rajasthan</i>		
	Rajasthan State Electricity Board	220 kV 132 kV 33 kV	115 4 232
14	<i>Tamil Nadu</i>		
	Tamil Nadu State Electricity Board	230 kV 110 kV 33 kV	21 91 132
15	<i>Uttar Pradesh</i>		
	U. P. State Electricity Board	220 kV 132 kV 44/37 kV O.H. 33 kV O.H.	325 733 518 168 722 242
		U.G. U.G.	
16	<i>West Bengal</i>		
	West Bengal State Electricity Board	33 kV	85
	Calcutta Electricity Supply Corporation Ltd	33 kV	2
17	<i>Damodar Valley Corporation</i>	132 kV 33 kV	16 66
18	<i>Delhi</i>		
	Delhi Electric Supply Undertaking	33 kV	31

*Provisional

TABLE 46—INSTALLED TRANSFORMERS CAPACITY UTILITIES AS ON 31-3-1969

Sl. No.	State/Power Corporation	Step-Up Transformers		Step-Down Transformers	
		Number	Aggregate capacity (MVA)	Number	Aggregate capacity (MVA)
1	2	3	4	5	6
1	Andhra Pradesh	73	1,015.59	501	2,166.85
2	Assam@	58	203.15	88	191.87
3	Bihar	51	216.63	282	1,152
4	Gujarat*	69	694.02	283	1,636.55
5	Haryana	3	10.00	120	463.40
6	Jammu & Kashmir	29	80.00	16	92.50
7	Kerala*	49	692.38	116	620.69
8	Madhya Pradesh	64	808.14	288	1,687.23
9	Maharashtra	154	2,115.03	574	4,481.32
10	Mysore	65	938.00	285	1,689.30
11	Nagaland	..	..	..	..
12	Orissa	26	637.23	180	842.50
13	Punjab	29	1,337.50	168	1,447.00
14	Rajasthan	63	53.86	217	391.86
15	Tamil Nadu	100	2,459.50	629	3,985.61
16	Uttar Pradesh*	147	1,520.45	623	3,224.67
17	West Bengal	97	530.62	344	1,873.08
18	Damodar Valley Corporation	17	1,390.00	74	1,711.50
19	<i>Union Territories</i>				
	(a) Delhi**	6	33	42	323.50
	(b) Andaman & Nicobar	3	0.75	..	..
	(c) Chandigarh			Data not available	
	(d) Dadra & Nagar Haveli**	..	..	..	..
	(e) Goa, Daman & Diu	2	0.21	15	65.01
	(f) Himachal Pradesh**	33	7.86	26	22.56
	(g) Laccadive Minicoy Amendive Islands			Data not available	
	(h) Manipur	8	3.22	..	..
	(i) N. E. P. A.			Data not available	
	(j) Pondicherry	..	..	..	..
	(k) Tripura	9	2.30	..	..
	ALL-INDIA@@	1155	14,749.44	4871	27,999.00

@Data for Assam State Electricity Board for 1966-67 is repeated this year due to non receipt of data.
 @@Totals may not tally due to rounding off.

*Provisional.

**Data for N.D.M.C., H.P. & Dadra Nagar Haveli for 1967-68 repeated.

TABEL 46—INSTALLED TRANSFORMERS CAPACITY UTILITIES ON 31-3-1969—*contd.*

Sl. No.	State/Power Corporation	Distribution Transformers		Total@@	
		Number	Aggregate capacity (M.V.A.)	Number	Aggregate capacity (M.V.A.)
1	2	7	8	9	10
1	Andhra Pradesh	12377	857.20	12951	4,039.64
2	Assam	625	113.61	771	508.63
3	Bihar	9826	572.17	10159	1,940.80
4	Gujarat*	8758	780.16	9110	3,110.73
5	Haryana	8215	528.50	8338	1,001.90
6	Jammu & Kashmir	721	75.32	766	177.82
7	Kerala*	4585	342.71	4750	1,655.78
8	Madhya Pradesh	5176	423.44	5528	2,918.81
9	Maharashtra	16142	1,871.61	16870	8,467.96
10	Mysore	17511	865.70	17861	3,493.00
11	Nagaland	29	3.100	29	3.10
12	Orissa	1413	150.34	1619	1,630.07
13	Punjab	11255	825.44	11452	3,699.94
14	Rajasthan	3709	326.93	3989	772.65
15	Tamil Nadu	24602	1,912.96	25331	8,358.07
16	Uttar Pradesh	42931	1,448.04	43701	6,193.16
17	West Bengal	3262	374.50	3703	2,778.20
18	Damodar Valley Corporation . . . . . . .	..	..	91	3,101.50
19	<i>Union Territories</i>				
	(a) Delhi**	1604	469.34	1652	825.84
	(b) Andaman & Nicobar	14	1.00	17	1.75
	(c) Chandigarh . . . . . . .	..		
	(d) Dadra & Nagar Haveli*	9	0.80	9	0.80
	(e) Goa, Daman & Diu.	146	9.89	163	75.11
	(f) Himachal Pradesh**	582	31.78	641	62.20
	(g) Laccadive Mincoy Amendive Islands . . . . . . .	..	..	..	..
	(h) Manipur	48	2.90	56	6.12
	(i) N. E. F. A. . . . . . .	..	..	..	..
	(j) Pondicherry	282	28.50	282	28.50
	(k) Tripura	88	5.68	97	7.98
	ALL-INDIA . .	173910	12,021.62	179936	54,770.06

TABLE 47—IMPORTANT TRANSFORMERS COMMISSIONED DURING THE YEAR 1968-69

Sl. No.	State/Power Corporation	Voltage Ratio (kVA.)	Unit Capacity (kVA.)	No.	Aggregate Capacity (kVA.)	Remarks
1	2	3	4	5	6	7
1	Andhra Pradesh	220/132/3 220/132/11/3 132/66—33 132/33—11 132/33/11 132/11	33,333 33,333 31,500 25,000 20,000 30,000	3 3 1 3 1 2	100,000 100,000 31,500 75,000 20,000 60,000	
2	Assam		Data not available			
3	Bihar					
	Bihar State Electricity Board . . .	33/11	N.A.	5	408,550	
	Sijua-Jharia Electric Supply Co. Ltd. .	33/11	7,500	1	7,500	
4	Gujarat					
	Gujarat Electricity Board . . .	220/132 132/66	50,000 40,000	1 3	50,000 120,000	
5	Haryana					
	Haryana State Electricity Board . . .	132/33/11 132/11 33/11	8,000 25,000 12,500	1 1 1	8,000 25,000 12,500	
6	Jammu & Kashmir	. . . . .	N.A.	N.A.	N.A.	N.A.
7	Kerala	. . . . .	N.A.	N.A.	N.A.	N.A.
8	Madhya Pradesh					
	Madhya Pradesh State Electricity Board	13.8/230 11/132 10.5/220	45,000 27,500 63,000	2 3 1	90,000 82,500 63,000	
9	Maharashtra					
	Maharashtra State Electricity Board . . .	220/132 220/110 220/110/33 220/110/11 132/66 132/33 132/25 132/22 132/33/11 134/11 132/6.6 110/33 110/22 66/11 13.8/132 11/138.6 22/6.5	50,000 50,000 20,000 125,000 20,000 10,000 12,500 7,500 12,500 10,000 25,000 10,000 10,000 12,500 10,000 75,000 30,000 10,000	1 1 1 1 3 4 5 1 2 7 1 1 1 3 2 1 1 1 1 3 4	50,000 50,000 20,000 125,000 60,000 40,000 62,500 7,500 25,000 70,000 25,000 10,000 30,000 20,000 10,000 25,000 12,500 10,000 10,000 75,000 90,000 40,000	
	Tata Hydro-electric Supply Company Ltd.	100/23.1	30,000 60,000	2 3	60,000 180,000	

TABLE 47—IMPORTANT TRANSFORMERS COMMISSIONED DURING THE YEAR 1968-69—*contd.*

Sl. No.	State/Power Corporation	Voltage Ratio (kVA.)	Unit Capacity (kVA.)	No.	Aggregate Capacity (kVA.)	Remarks
1	2	3	4	5	6	7
10	<i>Mysore</i>					
	Mysore State Electricity Board . . .	220/110 220/66 110/33/11 10/13.2/11 66/110	100,000 67,500 5,000 to 20,000 1,000 to 10,000 10,000	1 1 11 15 2	100,000 67,500 70,000 211,000 20,000	
	<i>Government</i>					
	(Sharavathy)	11/220	100,000	2	200,000	
11	<i>Punjab</i>					
	Punjab State Electricity Board . . .	11/220	135,000	1	135,000	
12	<i>Rajasthan</i>					
	Rajasthan State Electricity Board . .	220/33 132/33 132/11 11/132	35,000 10,000 31,500 55,000	1 1 3 2	35,000 10,000 63,000 110,000	
13	<i>Tamil Nadu</i>					
	Tamil Nadu State Electricity Board . .	110/22	25,000	3	75,000	
	Neyveli Lignite Corporation Ltd. . .	10.5/220	125,000	1	125,000	
14	<i>Uttar Pradesh</i>					
	Uttar Pradesh State Electricity Board . .	10.5/220 66/33 220/132	63,000 20,000 60,000	1 1 2	63,000 20,000 120,000	
	Renusagar Power Company Ltd. . .	132/132	75,000	1	75,000	
15	<i>West Bengal</i>					
	West Bengal State Electricity Board . .	132/33	20,000	1	20,000	
16	Damodar Valley Corporation. . .	132/33 14.25/138	50,000 165,000	3 1	150,000 165,000	

TABLE 48—CLASSIFICATION OF CONSUMERS

Sl. No.	State/Power Corporation	Domestic Light & Small power		Commercial light & small power	
		A.C.	D.C.	A.C.	D.C.
1	2	3	4	5	6
1	Andhra Pradesh	514,000	..	167,295	..
2	Assam*	39,792	2,944	3,433	1,235
3	Bihar	245,884	593	130,175	226
4	Gujarat	754,735	443	125,056	193
5	Haryana	281,609	1,997	68,532	1,087
6	Jammu & Kashmir	137,320	..	3,940	..
7	Kerala	340,074	..	112,298	..
8	Madhya Pradesh	329,660	..	64,095	..
9	Maharashtra	1225,696	..	302,737	33
10	Mysore	665,039	..	75,336	..
11	Nagaland	4,557**	..	..	..
12	Orissa	76,564	..	36,294	..
13	Punjab	588,824	69,000	142,320	14,389
14	Rajasthan	229,091	..	76,634	..
15	Tamil Nadu	1029,405	..	283,839	..
16	Uttar Pradesh	558,612	44,198	127,224	19,869
17	West Bengal	442,365	270,209	66,232	1,541
18	D.V.C.	..	..	4	..
19	<i>Union Territories</i>				
(a)	Delhi	403,007	4,587	73,426	2,083
(b)	Andaman & Nicobar	3,095	..	61	..
(c)	Chandigarh	..		Data not available	
(d)	Dadra Nagar Haveli	569	..	..	..
(e)	Goa, Daman Diu	13,759	..	5,994	..
(f)	Himachal Pradesh	85,826	..	21,373	..
(g)	Laccadive Minicoy and Aminidive Islands	896	..	94	..
(h)	Manipur	4,670	..	54	..
(i)	N. E. F. A.	730	..	..	..
(j)	Pondicherry	12,231	..	3,009	..
(k)	Tripura	6,133	..	405	..
	TOTAL	7994,142	393,971	1889,860	40,656

*Due to non-availability of data of Assam State Electricity Board, data for 1966-67 repeated.

**Nagaland domestic figures may include commercial as well.

OF UTILITIES AS ON 31-3-1969

Industrial low & medium voltage		Industrial power high voltage		Public lighting	
A.C.	D.C.	A.C.	D.C.	A.C.	D.C.
7	8	9	10	11	12
16,857	..	495	..	5,576	..
713	44	144	..	85	2
23,299	23	666	..	6,016	..
53,346	12	483	..	2,136	
12,700	31	231	..	222	1
2,707	..	..	..	4	..
15,703	..	449	..	929	..
22,678	..	344	..	1,127	..
53,173	..	2,203	10	4,634	1
32,602	..	361	..	5,041	..
50	..	..	..	561	..
4,048	..	94	..	559	..
29,066	335	456	..	328	..
10,292	..	92	..	921	..
65,237	..	934	..	20,957	..
51,910	1,352	670	..	1,522	12
26,523	13,342	1,686	..	294	9
..	..	10	..	..	..
13,404	101	226	..	899	46
39	..	..	..	5	..
35	..	..	..	3	..
630	..	22	..	56	..
1,320	..	1	..	145	..
8	..	..	..	8	..
126	..	..	..	3	..
..	..	..	..	1	..
375	..	13	..	8	..
252	..	..	..	12	..
437,093	15,240	9,580	10	52,052	72

TABLE 48—CLASSIFICATION OF CONSUMERS

Sl. No.	State/Power Corporation	Railways/Tramways		Agricultural	
		A.C.	D.C.	A.C.	D.C.
1	2	13	14	15	16
1	Andhra Pradesh . . . . .	..	..	123,387	..
2	Assam . . . . .	..	..	54	..
3	Bihar	N.A.	N.A.	50,006	..
4	Gujarat	2	..	41,775	..
5	Haryana . . . . .	..	..	45,382	..
6	Jammu & Kashmir . . . . .	..	..	108	..
7	Kerala . . . . .	..	..	13,849	..
8	Madhya Pradesh . . . . .	..	..	24,738@	..
9	Maharashtra	3	..	128,649	..
10	Mysore . . . . .	..	..	91,973	..
11	Nagaland . . . . .	..	..	..	..
12	Orissa	3	..	255	..
13	Punjab . . . . .	..	..	63,237	..
14	Rajasthan . . . . .	..	..	19,071	..
15	Tamil Nadu	2	..	407,459	..
16	Uttar Pradesh	30	..	62,579@	11
17	West Bengal	41	..	1,075	..
18	D. V. C.	7	..	..	..
19	<i>Union Territories</i>				
	(a) Delhi . . . . .	..	..	206	..
	(b) Andaman & Nicobar . . . . .	..	..	..	..
	(c) Chandigarh . . . . .	..	..	..	..
	(d) Dadra Nagar Haveli . . . . .	..	..	19	..
	(e) Goa, Daman & Diu . . . . .	..	..	61	..
	(f) Himachal Pradesh . . . . .	..	..	163	..
	(g) Laccadive, Minicoy and Aminidive Islands	..	..	..	..
	(h) Manipur . . . . .	..	..	..	..
	(i) N. E. F. A. . . . .	..	..	..	..
	(j) Pondicherry . . . . .	..	..	3,843	..
	(k) Tripura . . . . .	..	..	2	..
	TOTAL . .	88	..	1077,891@	11

@Provisional.

OF UTILITIES AS ON 31-3-1969—*contd.*

Public Water Works & Sewage Pumping		Miscellaneous		Total		Grand Total
A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	
17	18	19	20	21	22	
574	..	2	..	828,186	..	828,186
27	1	59	49	44,307	4,275	48,582
484	5	..	..	456,530	847	457,377
2,039	..	443	..	980,015	649	980,664
5	408,681	3,116	411,797
81	144,160	..	144,160
388	483,690	..	483,690
428	443,070	..	443,070
881	..	6,961	..	1724,937	44	1724,981
794	871,146	..	871,146
7	5,175	..	5,175
80	117,897	..	117,897
30	824,261	83,724	907,985
848	..	306	..	337,255	..	337,255
1,466	..	4,654	..	1813,953	..	1813,953
496	5	3,195	64	806,238	65,511	871,749
146	..	249	..	538,611	285,101	823,712
..	21	..	21
55	491,223	6,817	498,040
6	3,206	..	3,206
..	626	..	626
..	20,531	..	20,531
9	108,833	..	108,833
..
5	1,006	..	1,006
..	4,857	..	4,857
4	731	..	731
110	19,588	..	19,588
2	6,806	..	6,806
8,965	11	15,869	113	11485,540	450,084	11935,624

TABLE 49—CLASSIFICATION OF CONNECTED LOAD

Sl. No.	State/Power Corporation	Domestic Light and Small Power		Commercial Light and Small Power	
		A.C.	D.C.	A.C.	D.C.
1	2	3	4	5	6
1	Andhra Pradesh	261.52	..	169.69	..
2	Assam@	27.53	1.93	6.07	1.21
3	Bihar	122.90	0.29	145.17	0.17
4	Gujarat	447.80	0.06	96.94	0.02
5	Haryana	73.78	0.62	28.81	0.65
6	Jammu and Kashmir	68.66	..	2.09	..
7	Kerala	200.47	..	80.69	..
8	Madhya Pradesh	191.44	..	46.77	..
9	Maharashtra	933.72	..	321.30 ¹	..
10	Mysore	261.74	..	49.75	..
11	Nagaland	4.62	..	..	..
12	Orissa	55.82	..	37.96	..
13	Punjab	189.16	5.71	88.27	3.94
14	Rajasthan	132.63	0.03	51.65	0.04
15	Tamil Nadu	568.48	..	348.95	..
16	Uttar Pradesh	398.88	26.95	90.05	12.52
17	West Bengal	392.37**	232.77**	201.07**	86.05**
18	D. V. C.			Data not available	
	<i>Union Territories</i>				
(a)	Delhi@@	227.51	1.56	83.61	4.67
(b)	Andaman & Nicobar	1.07	..	0.12	..
(c)	Chandigarh			Data not available	
(d)	Dadra & Nagar Haveli	0.22	..	..	..
(e)	Goa, Daman & Diu*	9.09	..	4.78	..
(f)	Himachal Pradesh@@	25.65	..	9.54	..
(g)	Laccadive, Minicoy & Amindive Islands	0.42	..	0.12	..
(h)	Manipur	4.36	..	0.11	..
(i)	N. E. F. A.			Data not available	
(j)	Pondicherry	7.34	..	1.81	..
(k)	Tripura	5.98	..	0.66	..
	TOTAL	4533.16	269.92	1865.89	109.27

@Data of Assam State Electricity Board for 1967-68 and 1968-69 have not been received and so data for 1966-67 have been repeated.

@@Data of N.D.M.C. and Himachal Pradesh for 1968-69 have not been received, data for 1967-68 have been repeated.

¹Figures for category 'Miscellaneous' were included in Commercial last year but have been repeated this year.

OF UTILITIES AS ON 31-3-1969 (MW)

Industrial Low and Medium Voltage		Industrial Power HV		Public Lighting	
A.C.	D.C.	A.C.	D.C.	A.C.	D.C.
7	8	9	10	11	12
185.97	..	320.98	..	10.41	..
12.97	0.46	26.40	..	1.19	0.07
217.83	0.11	332.13	..	3.42	..
314.41	0.05	432.04	..	13.36	0.01
153.34	0.24	114.41	..	1.28	0.44
32.74	..	..	..	0.43	..
173.50	..	253.07	..	7.63	..
172.62	..	278.14	..	7.73	..
590.46	..	1287.70	0.48	22.43	1.41
180.88	..	247.40	..	14.17	..
0.67	..	..	..	0.07	..
60.71	..	227.84	..	3.30	..
320.89	1.61	348.12	..	4.29	0.18
83.76	..	98.63	..	5.02	..
392.95	..	644.83	..	27.15	..
438.70	10.35	570.89	..	6.83	0.36
175.67	58.18	831.64	..	5.66	4.05
Data not available					
87.22	1.03	66.28	..	3.97	0.13
0.86	..	..	..	0.02	..
Data not available					
0.15	..	..	..	0.03	..
5.73	..	5.73	..	0.27	..
3.95	..	0.41	..	0.34	..
0.06	..	..	..	0.02	..
1.65	..	..	..	0.05	..
Data not available					
5.62	..	90.46	..	0.38	..
1.72	..	..	..	0.16	..
3615.04	72.03	6177.10	0.48	139.61	6.65

*Perhaps includes D.C. connected load also.

**Figures seem to be reconciled and classified into Domestic and Commercial categories.

TABLE 49—CLASSIFICATION OF CONNECTED LOAD

Sl. No.	State/Power Corporation	Traction		Agricultural	
		A.C.	D.C.	A.C.	D.C.
1	2	13	14	15	16
1	Andhra Pradesh . . . . .	..	..	528·72	..
2	Assam@ . . . . .	..	..	0·30	..
3	Bihar	N.A.	N.A.	160·76	..
4	Gujarat . . . . .	..	..	214·96	..
5	Haryana . . . . .	..	..	217·23	..
6	Jammu & Kashmir . . . . .	..	..	0·40	..
7	Kerala . . . . .	..	..	72·78	..
8	Madhya Pradesh . . . . .	..	..	69·84	..
9	Maharashtra	19·52	..	409·05	..
10	Mysore . . . . .	..	..	307·99	..
11	Nagaland . . . . .	..	..	..	..
12	Orissa	30·34	..	2·42	..
13	Punjab . . . . .	..	..	264·99	..
14	Rajasthan . . . . .	..	..	88·74	..
15	Tamil Nadu	31·98	..	1385·17	..
16	Uttar Pradesh	67·91	..	457·826£	0·01
17	West Bengal	94·31	..	13·57	..
18	D. V. C.	Data not available			
<i>Union Territories</i>					
(a)	Delhi@@ . . . . .	..	..	2·90	..
(b)	Andaman & Nicobar . . . . .	..	..	..	..
(c)	Chandigarh	Data not available			
(d)	Dadra & Nagar Haveli . . . . .	..	..	Neg.	..
(e)	Goa, Daman & Diu*	..	..	0·22	..
(f)	Himachal Pradesh . . . . .	..	..	0·15	..
(g)	Laccadive, Minicoy & Amindive Islands . . . . .	..	..	..	..
(h)	Manipur . . . . .	..	..	..	..
(i)	N. E. F. A.	Data not available			
(j)	Pondicherry . . . . .	..	..	21·52	..
(k)	Tripura . . . . .	..	..	0·02	..
	TOTAL	244·06	..	4219·55	0·01

*Provisional.

OF UTILITIES AS ON 31-3-1969 (MW)—*contd.*

Public Water Works and Sewage Pumping		Miscellaneous		Total		Grand Total
A.C.	D.C.	A.C.	D.C.	A.C.	D.C.	
17	18	19	20	21	22	23
16.92	..	310.00	..	1804.21	..	1804.21
2.30	0.02	10.60	0.08	87.36	3.77	91.13
9.63	0.08	..	..	991.85	0.65	992.50
36.15	..	1.58	..	1557.24	0.14	1557.38
0.02	588.87	1.95	590.82
N.A.	104.23	..	104.23
6.26	794.40	..	794.40
15.53	782.07	..	782.07
34.75	..	44.24	..	3683.17	1.89	3685.06
18.53	1080.46	..	1080.46
0.10	5.46	..	5.46
4.51	422.90	..	422.90
0.41	0.15	..	..	1216.13	11.59	1227.72
26.25	..	0.04	..	486.72	0.07	486.79
12.86	..	21.54	..	3433.91	..	3433.91
19.34	0.21	0.87	0.02	1951.29	50.42	2001.71
28.91	..	160.49	..	1903.69	381.05	2284.74
Data not available						
19.88	491.37	7.39	498.76
0.12	2.19	..	2.19
Data not available						
..	0.40	..	0.40
0.83	26.65	..	26.65
3.70	43.74	..	43.74
..	0.62	..	0.62
..	6.17	..	6.17
Data not available						
0.25	127.38	..	127.38
0.21	8.75	..	8.75
257.46	0.46	549.36	0.10	21601.23	458.92	22060.15

TABLE 50—NUMBER OF TOWNS ELECTRIFIED IN THE VARIOUS POPULATION GROUPS
(1961 CENSUS) AS ON 31-3-1960

States/Union Territories	Population Group		
	0-4999	5000-9999	10000-19999
Andhra Pradesh	7	71	73
Assam	9	19	12
Bihar	8	46	52
Gujarat	8	59	54
Haryana	12	15	15
Jammu & Kashmir	30	6	4
Kerala	1	18	33
Madhya Pradesh	17	98	57
Maharashtra	15	86	89
Mysore	37	64	80
Nagaland	..	3	..
Orissa	3	25	22
Punjab	20	35	23
Rajasthan	8	51	52
Tamil Nadu	36	95	119
Uttar Pradesh	16	76	81
West Bengal	12	48	44
TOTAL (States)		239	815
			810
<i>Union Territories</i>			
A. & N. Islands	..	..	1
Chandigarh	..	1	..
D. & N. Haveli	..	..	..
Delhi	..	..	..
Goa, Daman & Diu	6	3	2
Himachal Pradesh	18	7	4
I. M. A. Islands	..	..	..
Manipur	..	..	..
N. E. F. A.	..	..	..
Pondicherry	..	2	1
Tripura	..	4	1
TOTAL (Union Territories)		24	17
			8
TOTAL (ALL INDIA)		263	832
			1881

TABLE 50—NUMBER OF TOWNS ELECTRIFIED IN THE VARIOUS POPULATION GROUPS (1961 CENSUS)
AS ON 31-3-1968—*contd.*

States/Union Territories	Population Group			Total electrified
	20000-49999	50000-100000	Over 100000	
Andhra Pradesh	51	9	11	222
Assam	10	2	1	53
Bihar	33	7	7	153
Gujarat	43	9	6	173
Haryana	11	7	1	61
Jammu & Kashmir	1	..	2	43
Kerala	31	5	4	92
Madhya Pradesh	35	6	6	219
Maharashtra	47	15	12	264
Mysore	34	9	6	230
Nagaland . . . . .	..	..	..	3
Orissa	8	3	1	62
Punjab	23	4	4	109
Rajasthan	23	4	6	144
Tamil Nadu	61	19	9	339
Uttar Pradesh	56	18	17	264
West Bengal	46	19	12	181
TOTAL (States)		513	136	105
				2,618
<i>Union Territories</i>				
A. & N. Islands . . . . .	..	..	..	1
Chandigarh . . . . .	..	1	..	2
D. & N. Haveli . . . . .	..	..	..	Nil
Dehli	1	..	2	3
Goa, Daman & Diu	1	..	..	11
Himachal Pradesh . . . . .	..	..	..	30
I. M. A. Islands . . . . .	..	..	..	Nil
Manipur . . . . .	..	1	..	1
N. E. F. A. . . . .	..	..	..	Nil
Pondicherry	2	..	..	5
Tripura . . . . .	..	1	..	6
TOTAL (Union Territories)		5	3	2
				59
TOTAL (ALL INDIA)		518	139	107
				2,677

TABLE 51—NUMBER OF VILLAGES ELECTRIFIED IN VARIOUS

States/Union Territories	POPULATION					
	0—499	500—999	1000—1999	2000—4999	5000—9999	10000 and above
1	2	3	4	5	6	7
Andhra Pradesh	421	924	1,725	2,027	372	28
Assam	119	88	104	64	5	..
Bihar+	1,650	1,580	1,500	1,000	217	20
Gujarat	265	535	983	948	137	7
Haryana	333	372	379	332	46	2
Jammu & Kashmir+	230	220	115	113	5	..
Kerala	3	8	22	240	381	480
Madhya Pradesh	953	686	632	457	26	..
Maharashtra	2,518	2,619	2,474	1,538	274	27
Mysore	1,995	1,708	1,461	824	130	..
Nagaland	9	7	6	5	..	..
Orissa+	235	165	220	177	15	..
Punjab+	1,751	1,344	924	367	36	1
Rajasthan+	680	490	500	350	83	..
Tamil Nadu+	830	1,850	3,000	2,580	422	96
Uttar Pradesh	5,184	3,733	2,535	1,219	130	9
West Bengal+	505	600	667	541	111	11
TOTAL (States)	17,681	16,929	17,247	12,782	2,390	681
<i>Union Territories—</i>						
Andaman & Nicobar Islands . .	25	..	2	..	..	..
Chandigarh+	7	6	2	1	..	..
D. & N. Haveli . . . .	..	..	1	3	..	..
Delhi	76	99	59	42	..	..
Goa, Daman & Diu . . .	3	6	14	28	6	1
Himachal Pradesh+	2,270	250	260	8	..	..
L. M. A. Islands . . . .	..	..	..	6	..	..
Manipur	20	22	43	36	1	..
N. E. F. A.	29	7	5	5	..	..
Pondicherry	145	79	62	20	3	..
Tripura	6	16	17	9	..	..
TOTAL (Union Territories)	2,581	485	465	158	10	1
TOTAL (ALL-INDIA)	20,262	17,414	17,712	12,940	2,400	682

p—Figure provisional.

+Population-wise break up estimated.

*As per 1961 Census.

POPULATION GROUPS (1961 CENSUS) AS ON 31-3-1969

GROUP

Total Number 8	Electrified 9	% electrified 10	Position 11
27,084	5,497	20.2	7
25,702	380	1.4	17
67,665	5,967	8.8	11
18,584	2,875	15.5	8
6,669	1,461	21.9	6
6,559	683	10.4	10
1,573	1,134	72.1	1
70,414	2,754	3.9	14
35,851	9,450	26.4	4
26,377	6,118	23.2	5
814	27	3.3	15
46,466	812	.7	16
11,947	4,423P*	37.0	3
32,241	2,103	6.6	12
14,124	8,778	62.2	2
1,12,624	12,810	11.4	9
38,454	2,435	6.3	13
5,43,148	67,710	12.5	
399	27	8.7	7
31	16	51.6	4
72	4	5.5	9
276	276	100.0	1
245	58	23.7	5
13,060	2,788	21.4	6
10	6	60.0	3
1,866	122	6.5	8
2,451	46	1.8	10
388	309	79.6	2
4,932	48	0.9	11
23,730	3,700	15.6	
5,66,878	71,410	12.6	

TABLE 52—ELECTRICITY (i) PRODUCTION AND (ii) CONSUMPTION (IN

Sl. No.	Industry	Total number of factories covered	Installed generating plant capac- ity (31-3-69) (kW)	Aggregate Maximum Demand (kVA)	
				Generation in own power stations	Purchase from public utility undertakings
1	2	3	4	5	6
1	Aluminium (Primary)	6	22,450	17,942	371,530
2	Aluminium (Secondary)	10	780	338	14,330
3	Cement (Primary)	28	109,949	80,523	154,259
4	Cement (Secondary)	26	630	263	11,049
5	Chemicals	51	66,636	68,673	186,971
6	Collieries	149	55,553	36,800	142,700
7	Copper (Primary)	1	8,975	1,895	9,520
8	Copper (Secondary)	1	..	..	1,738
9	Cotton Textiles	317	119,341	62,702	628,470
10	Engineering	35	10,328	6,605	147,463
11	Ferro-Manganese	5	32	40	71,896
12	Fertilizers	6	83,605	79,763	287,854
13	Gold	1	6,700	..	20,100
14	Iron & Steel (Primary)	7	367,412	285,600	415,967
15	Iron & Steel (Secondary)	19	835	..	103,794
16	Jute	71	31,014	18,159	151,378
17	Mines	8	4,903	2,481	14,730
18	Oil & Petroleum	8	58,179	59,388	28,046
19	Paper	27	84,901	70,774	99,208
20	Silk	23	49,114	47,739	79,515
21	Soap	9	1,078	750	8,373
22	Sugar	136	183,316	154,007	37,575
23	Tanneries	7	307	521	6,920
24	Wool	11	3,398	1,435	12,609
25	Miscellaneous	15	6,940	3,838	23,610
TOTAL		977	1,277,466	1,000,236	3,029,605

CERTAIN SELECTED UNITS), IN SELECTED INDUSTRIES (1968-69)

Energy (Million (kWh))				Annual Load Factor	Remarks
Generated in own power Stations	Purchased from public utility undertakings	Used in industry	Sold to outside agencies		
7	8	9	10	11	12
108.893	2,336.834	2,436.757	..	89.27	
0.079	58.718	58.791	..	57.20	
385.397	767.993	1,117.444	0.116	67.91	
0.011	31.170	30.416	..	38.36	
198.929	854.709	1,030.141	..	57.50	
134.312	497.658	618.386	1.051	49.16	
6.567	42.964	49.005	..	61.38	
..	4.586	4.586	..	37.65	
220.609	2,856.767	3,047.650	7.772	62.91	
9.908	462.215	456.364	4.473	42.26	
0.001	336.546	336.546	..	66.76	
437.371	1,760.975	2,155.814	2.358	83.68	
..	8.669	98.669	..	70.05	
1,399.760	1,913.808	2,745.167	391.574	55.84	
..	291.349	290.097	1.258	39.88	
54.510	654.238	701.960	2.084	49.08	
15.02	43.183	44.616	..	36.99	
258.588	133.295	284.511	77.418	46.44	
388.590	487.227	812.621	30.404	68.21	
248.983	471.879	695.668	..	78.00	
0.591	32.168	32.513	0.078	50.85	
272.558	54.708	304.972	3.544	22.71	
0.646	22.940	20.704	..	39.70	
4.013	47.156	50.479	..	51.26	
4.242	74.101	78.033	..	40.56	
4,136.060	14,335.856	17,501.910	522.030	61.97	

TABLE 53—STATEWISE ELECTRICITY (i) PRODUCTION AND (ii) CONSUMPTION

Sl. No.	State	Total number of factories covered	Installed generating plant capacity (31-3-69) (kW)	Aggregate Maximum Demand (kVA)	
				Generation in own power stations	Purchase from pub- lic utility under- takings
1	2	3	4	5	6
1	Audhra Pradesh	38	71,810	54,321	92,149
2	Assam	7	11,364	7,323	2,240
3	Bihar	105	309,447	237,194	310,795
4	Gujarat	112	85,015	67,397	212,618
5	Haryana	8	20,078	19,435	20,609
6	Jammu & Kashmir	2	..	..	125
7	Kerala	21	18,332	16,076	130,698
8	Madhya Pradesh	44	97,046	74,120	142,253
9	Maharashtra	166	82,123	78,930	510,043
10	Mysore	35	40,615	23,284	183,449
11	Orissa	10	145,622	144,415	196,163
12	Punjab	9	2,095	1,186	222,921
13	Rajasthan	27	85,812	71,425	68,295
14	Tamil Nadu.	92	35,772	25,629	172,870
15	Uttar Pradesh	77	82,870	53,639	282,713
16	West Bengal	208	157,351	99,828	450,138
17	<i>Union Territories—</i>				
	(a) Delhi	6	26,166	23,003	14,113
	(b) The Rest	10	5,948	3,031	17,026
		TOTAL . .	977	1,277,466	1,000,236
					3,029,605

(IN CERTAIN SELECTED UNITS), IN SELECTED INDUSTRIES (1968-69)

Energy (Million kWh)				Energy sold to outside agencies	Remarks
Generated in own Power Stations		Purchased from public utility undertakings	Used in industry		
Gross generation	Net Generation				
7	8	9	10	11	12
179.764	160.973	394.959	523.983	31,396	
31.467	30.851	6.724	35.054	0.092	
1,124.845	1,021.751	1,347.585	2,000.535	361.272	
361.102	337.958	965.836	1,229.906	73.334	
73.132	69.030	90.604	159.633	..	
..	..	0.040	0.040	..	
67.150	59.841	713.054	772.871	..	
362.277	329.183	721.460	1,015.457	33.834	
202.378	187.247	2,437.568	2,615.365	3.286	
57.319	50.992	802.410	853.374	0.007	
699.122	600.697	892.812	1,483.681	9.826	
0.778	0.685	1,411.598	1,411.046	1.237	
186.451	169.047	214.096	383.142	..	
62.248	57.053	864.582	921.329	..	
120.718	110.149	1,529.550	1,639.393	0.207	
486.248	432.758	1,845.246	2,252.940	7.539	
119.953	105.384	39.411	144.795	..	
1.108	1.045	58.321	59.366	..	
4,136.060	3,724.644	14,335.856	17,501.910	522.030	

TABLE 54—DISTRIBUTION OF GENERATING PLANT CAPACITY IN INDUSTRIAL ESTABLISHMENTS ACCORDING TO THE RANGE OF INSTALLED PLANT CAPACITY (1968-69)

Sl. No.	Range of Installed Plant Capacity (KW)	Number of indus- trial estab- lishments	Aggregate installed capacity of the group (KW)	Percentage to total capacity
1	2	3	4	5
1	Under 1,000	223	82,116	7.43
2	1,001 to 10,000	149	439,994	34.44
3	10,001 to 25,000	20	293,344	22.96
4	Over 25,000	6	462,012	36.17
	TOTAL . .	398	1277,466	100

TABLE 54—DISTRIBUTION OF GENERATING PLANT CAPACITY IN INDUSTRIAL ESTABLISHMENTS
ACCORDING TO THE RANGE OF INSTALLED PLANT CAPACITY (1968-69)—*contd.*

Sl. No.	Range of Installed Plant Capacity (kW)	Energy generation by the group (Million kWh)	Percentage to total energy generated	Remarks
1	2	6	7	8
1	Under 1,000	75.103	1.82	
2	1,000 to 10,000	1037.368	25.08	
3	10,001 to 25,000	1232.083	29.79	
4	Over 25,000	1791.506	43.31	
	TOTAL .	4136.060	100	

TABLE 55—INSTALLED GENERATING PLANT CAPACITY OF

Serial Number	Name of State/Union Territory	Alluminium (Primary)	Alluminium (Secondary)	Cement (Primary)	Cement (Secondary)	Chemicals
1	2	3	4	5	6	7
1	Andhra Pradesh . . . . .	..	..	..	310	125
2	Assam . . . . .	..	..	..	..	..
3	Bihar	4,000	150	32,594	..	..
4	Gujarat . . . . .	..	..	16,600	..	14,680
5	Haryana . . . . .	..	..	2,600	..	..
6	Jammu & Kashmir . . . . .	..	..	..	..	..
7	Kerala . . . . .	..	420	..	..	775
8	Madhya Pradesh . . . . .	..	..	14,665	..	..
9	Maharashtra . . . . .	..	..	..	150	2,149
10	Mysore . . . . .	..	..	10,225	..	..
11	Orissa . . . . .	..	210	400	..	..
12	Punjab . . . . .	..	..	..	..	..
13	Rajasthan . . . . .	..	..	31,290	..	35,000
14	Tamil Nadu . . . . .	..	..	1,575	170	375
15	Uttar Pradesh . . . . .	..	..	..	..	12,842
16	West Bengal	18,450	..	..	..	630
17	<i>Union Territories—</i>					
	(a) Delhi . . . . .	..	..	..	..	60
	(b) Rest . . . . .	..	..	..	..	..
	TOTAL	22,450	780	109,949	630	66,636

SELECTED INDUSTRIES IN KW AS ON 31ST MARCH, 1969

Collieries	Copper (Primary)	Copper Secondary	Textiles	Engineering	Ferro- manganese	Fertiliser	Gold
8	9	10	11	12	13	14	15
27,700	2,950	..	..	..	..
1,103
18,000	8,975	..	..	..	..	80,500	..
..	13,887	..	..	..	..
..	3,090	..	..	..	..
..
..	393	..	..	2,400	..
5,750	17,381	3,100	..	..	..
..	16,538	800	..	..	..
..	5,430	3,605	32	..	6,700
3,000
..	545	..
..	10,016	2,371	..	160	..
..	17,061	..	..	..	..
..	4,322	452	..	..	..
..	192	..	..	..	..
..	26,106	..	..	..	..
..	2,075	..	..	..	..
55,553	8,975	..	119,341	10,328	32	83,605	6,700

TABLE 53—INSTALLED GENERATING PLANT CAPACITY OF SELECTED

Serial Number	Name of State/Union Territory	Iron & Steel (Primary)	Iron & Steel (Secondary)	Jute	Mines	Oil and Petroleum
1	2	16	17	18	19	20
1	Andhra Pradesh . . . . .	..	..	..	..	75
2	Assam . . . . .	..	..	..	..	9,886
3	Bihar	120,500	..	5,185	600	24,000
4	Gujarat . . . . .	..	..	..	505	24,000
5	Haryana . . . . .	..	..	..	..	..
6	Jammu & Kashmir . . . . .	..	..	..	..	..
7	Kerala . . . . .	..	..	..	..	..
8	Madhya Pradesh	36,000	..	..	..	..
9	Maharashtra . . . . .	..	235	..	..	..
10	Mysore	900	..	..	..	..
11	Orissa	1,30,012	..	..	..	..
12	Punjab . . . . .	..	..	..	..	..
13	Rajasthan . . . . .	..	..	..	..	..
14	Tamil Nadu . . . . .	..	..	..	..	..
15	Uttar Pradesh . . . . .	..	..	780	..	..
16	West Bengal	80,000	600	26,139	..	218
17	<i>Union Territories—</i>					
	(a) Delhi . . . . .	..	..	..	..	..
	(b) The Rest . . . . .	..	..	..	3,798	..
	TOTAL	367,412	835	32,104	4,903	58,179

INDUSTRIES IN KW AS ON 31ST MARCH, 1969—*contd.*

Paper	Silk	Soap	Sugar	Tannaries	Wool	Miscellaneous	Total
21	22	23	24	25	26	27	28
20,600	..	..	19,050	..	..	1,000	71,810
..	..	..	..	..	..	375	11,364
..	..	..	13,923	..	..	1,020	309,447
..	12,840	..	2,455	..	48	..	85,015
9,750	..	..	4,368	..	..	..	20,078
..
544	11,400	..	2,500	..	..	..	18,332
580	16,324	..	3,246	..	..	..	97,046
..	4,480	1,078	55,199	..	..	1,494	82,123
5,000	..	..	8,723	..	..	..	40,615
12,000	..	..	..	..	..	..	145,622
..	..	..	650	..	900	..	2,095
..	4,070	..	884	..	..	2,021	85,812
2,500	..	..	13,624	307	..	160	35,772
3,827	..	..	57,402	..	2,450	795	82,870
30,100	..	..	1,022	..	..	..	157,351
..	..	..	..	..	..	..	26,166
..	..	..	..	..	..	75	5,948
84,901	49,114	1,078	183,316	307	3,398	6,940	1,277,466

TABLE 56—ENERGY CONSUMED IN SELECTED INDUSTRIES

Serial Number	State	Aluminium (Primary)	Aluminium (Secondary)	Cement (Primary)	Cement (Secondary)	Chemicals
1	2	3	4	5	6	7
1	Andhra Pradesh . . . . .	..	..	4.829	0.009	27.641
2	Assam . . . . .	..	..	..	..	..
3	Bihar	19.997	0.242	298.155	1.296	19.479
4	Gujarat . . . . .	..	..	129.975	3.065	111.870
5	Haryana . . . . .	..	..	63.204	..	..
6	Jammu & Kashmir . . . . .	..	..	..	..	..
7	Kerala	359.838	6.742	7.000	..	88.564
8	Madhya Pradesh . . . . .	..	..	73.927	5.108	..
9	Maharashtra . . . . .	..	10.449	..	7.184	334.902
10	Mysore . . . . .	..	..	91.363	..	0.881
11	Orissa	422.417	3.009	50.241	..	..
12	Punjab . . . . .	..	..	..	..	..
13	Rajasthan . . . . .	..	..	136.159	0.689	46.548
14	Tamil Nadu	231.046	0.119	148.661	1.610	153.335
15	Uttar Pradesh	2,19.5084	..	43.930	..	56.677
16	West Bengal	208.375	38.230	..	11.329	121.425
17	<i>Union Territories—</i>					
	(a) Delhi . . . . .	..	..	..	0.126	68.819
	(b) The Rest . . . . .	..	..	..	..	..
	TOTAL	2436.757	58.791	1117.444	30.416	1030.141

(CERTAIN SELECTED UNITS) (1968-69) (MILLION kWh)

Collieries	Copper (Primary)	Copper (Secondary)	Cotton Textile	Engineering	Ferro- manganese	Fertilizers	Gold
8	9	10	11	12	13	14	15
76.637	15.616	4.470	80.400	..	..
2.741
297.666	49.005	..	..	190.353	..	388.104	..
..	849.615	2.599	..	..	..
..	21.470	2.264	..	..	..
..
..	15.545	..	..	198.181	..
52.553	157.645	26.890	..	..	..
2.380	..	4.586	1,037.098	67.196	76.771	191.400	..
..	65.619	62.336	33.620	1.586	98.669
13.577	145.755	..	..
..	24.674	..	..	1,376.264	..
..	136.748	14.060	..	0.279	..
..	319.506	..	..	..	..
..	174.915	4.768	..	..	..
172.832	125.043	81.428	..	..	..
..	75.850	..	..	..	..
..	28.306	..	..	..	..
618.386	49.005	4.586	3,047.650	456.364	336.546	2,155.814	98.169

TABLE 56—ENERGY CONSUMED IN SELECTED INDUSTRIES

Serial Number	State	Iron & Steel (Primary)	Iron & Steel (Secondary)	Jute	Mines	Oil & Petroleum
1	2	16	17	18	19	20
1	Andhra Pradesh . . . . .	..	..	14·944	..	19·027
2	Assam . . . . .	..	..	..	..	30·901
3	Bihar	583·605	47·900	8·252	13·265	64·991
4	Gujarat . . . . .	..	..	..	0·380	60·197
5	Haryana . . . . .	..	..	..	..	..
6	Jammu & Kashmir . . . . .	..	..	..	..	..
7	Kerala . . . . .	..	..	..	..	..
8	Madhya Pradesh	556·773	..	..	..	..
9	Maharashtra . . . . .	..	101·904	..	..	106·91
10	Mysore	378·080	..	..	..	..
11	Orissa	740·247	..	..	..	..
12	Punjab . . . . .	..	..	..	..	..
13	Rajasthan . . . . .	..	0·310	..	..	..
14	Tamil Nadu . . . . .	..	3·340	..	..	..
15	Uttar Pradesh . . . . .	..	10·363	11·154	..	..
16	West Bengal	486·462	126·280	667·610	..	2·483
17	<i>Union Territories—</i>					
	(a) Delhi . . . . .	..	..	..	..	..
	(b) The Rest . . . . .	..	..	..	30·971	..
	TOTAL . .	2,745·167	290·097	701·960	44·616	284·511

(CERTAIN SELECTED UNITS) (1968-69) (MILLION kWh)—*contd.*

Paper	Silk	Soap	Sugar	Tanneries	Wool	Miscellaneous	Total
21	22	23	24	25	26	27	28
133·167	30·391	..	40·403	..	..	6·449	523·983
..	..	..	..	..	..	1·412	35·054
..	..	..	16·847	..	..	1·378	2,000·535
8·975	53·733	..	5·411	..	4·086	..	1,229·906
63·023	..	..	9·672	..	..	..	159·633
..	0·040	..	..	..	..	..	0·040
12·132	82·427	..	2·442	..	..	..	772·871
52·064	88·158	..	1·979	..	..	..	1,015·457
87·318	409·295	25·448	98·736	..	7·101	46·685	2,615·365
81·211	0·536	0·395	14·363	0·062	24·653	..	853·374
106·844	..	..	1·591	..	..	..	1,483·681
..	1·656	..	0·506	..	7·946	..	1,411·046
..	28·500	..	1·248	..	..	18·601	383·142
34·295	..	..	26·809	1·103	..	1·505	931·329
47·367	..	..	83·833	2·987	0·401	1·914	1,639·393
186·225	0·572	6·670	1·132	16·552	0·292	..	2,252·940
..	..	..	..	..	..	..	144·795
..	..	..	..	..	..	0·089	59·366
812·621	695·668	32·513	304·972	20·704	50·479	78·033	17,501·910

TABLE 57—INSTALLED PLANT CAPACITY AND GENERATION

Serial Num- ber	Name of Railways	Installed Plant Capacity (KW)				Maximum Demand (kVA)
		Steam	Diesel	Hydro	Total	
1	2	3	4	5	6	7
1	Central Railway*	4,580	3,734	..	8,314	1,859
2	Eastern Railway	8,300	22	..	8,322	3,833
@3	Northern Railway	4,900	4,832	..	9,732	11,059
4	North-Eastern Railway	3,000	1,722	..	4,722	..
@5	North-East-Frontier Railway . . . . .	..	10,069	..	10,069	6,724
6	Southern Railway . . . . .	..	..	..	..	..
7	South-Central Railway . . . . .	..	863	..	863	126
8	South-Eastern Railway	7,160	546	..	7,706	4,618
9	Western Railway	7,800	4,397	..	12,197	6,429
	TOTAL .	35,740	26,185	..	61,925	34,648

*Excludes Chola (Kalyan) Power House which is taken under utility undertakings.

**Partly estimated.

@Due to non-availability, the data have been repeated.

BY THE INDIAN RAILWAYS DURING THE YEAR 1968-69

Energy Generation (gross) (Million kWh)				Energy used for Power Station auxiliaries (Million kWh)	Fuel Consumed		
Steam	Diesel	Hydro	Total		Coal (Tonnes)	Furnace Oil (kilo lit.)	Light/high Speed Diesel oil (kilo lit.)
8	9	10	11	12	13	14	15
3.308	1.806	..	5.114	0.460	19,528	..	628
9.793	0.005	..	9.798	1.053	16,320	..	4
18.187	1.467	..	19.654	0.931	16,348	..	785
..
..	14.655	..	14.655	0.499**	..	..	4,873
..
..	0.226	..	0.226	0.002	..	..	149
11.597	0.142	..	11.739	0.935**	19,373	..	86
8.736	2.159	..	10.895	9.917**	13,606	..	828
51.621	20.460	..	72.081	4.797	85,175	..	7,353

TABLE 58—STATEWISE INSTALLED PLANT CAPACITY AND GENERATION

Serial Number	Name of State/Union Territory	Installed Plant Capacity (KW)				Maximum Demand (kVA)
		Steam	Diesel	Hydro	Total	
1	2	3	4	5	6	7
1	Andhra Pradesh . . . . .	..	75	..	75	..
2	Assam . . . . .	..	5,941	..	5,941	4,093
3	Bihar	8,300	1,411	..	9,711	4,696
4	Gujarat	3,300	1,036	..	4,336	2,638
5	Haryana . . . . .	..	697	..	687	676
6	Jammu & Kashmir . . . . .	..	..	..	..	..
7	Kerala . . . . .	..	..	..	..	..
8	Madhya Pradesh . . . . .	..	1,503	..	1,505	903
9	Maharashtra	2,330	1,166	..	3,496	1,446
10	Mysore . . . . .	..	133	..	133	51
11	Orissa . . . . .	..	36	..	36	19
12	Punjab . . . . .	..	774	..	774	726
13	Rajasthan *	4,500	5,168	..	9,668	5,636
14	Tamil Nadu . . . . .	..	..	..	..	..
15	Uttar Pradesh	10,150	4,710	..	14,860	7,413
16	West Bengal	7,160	3,519	..	10,679	6,349
17	<i>Union Territories—</i>					
	(a) Delhi . . . . .	..	26	..	26	..
	(b) The Rest . . . . .	..	..	..	..	..
	TOTAL	35,740	26,185	..	61,925	34,648

BY THE INDIAN RAILWAYS DURING THE YEAR 1968-69

Energy Generation (gross) (Million kWh)				Energy used for power Station Auxiliaries (Million kWh)	Fuel Consumed		
Steam	Diesel	Hydro	Total		Coal (Tonnes)	Furnace Oil (kilo lit.)	Light/High Speed Diesel Oil (kilo lit.)
8	9	10	11		12	13	14
..
..	8·104	..	8·104	0·266	..	..	2,603
9·739	0·747	..	10·540	1·089	16,320	..	316
6·660	0·549	..	7·209	0·557	8,496	..	138
..	0·142	..	0·142	0·010	..	..	87
..
..
..	1·721	..	1·721	0·047	..	..	592
3·308	0·128	..	3·436	0·401	19,528	..	102
..	0·116	..	0·116	0·001	..	..	56
..	0·013	..	0·013	..	..	..	15
..	0·062	..	0·062	0·001	..	..	25
2·075	2·762	..	4·837	0·425	5,109	..	1,235
..
18·188	0·210	..	18·398	0·872	16,349	..	141
11·597	5·906	..	17·503	1·123	19,378	..	2,013
..
..
51·621	20·460	..	72·081	4·797	85,175	..	7,353

TABLE 59—ELECTRICAL

Serial Number	Name of State/Union Territory	Generating and Sub-stations				Transmission	
		Electric Supply Un- dertakings		Industrial Undertak- ings		Electric Supply Un- dertakings	
		Fatal	Non- Fatal	Fatal	Non- Fatal	Fatal	Non- Fatal
1	2	3	4	5	6	7	8
1	Andhra Pradesh	8	17	1	..	28+4*	17
2	Assam	1*	..	..	..	5	4
3	Bihar . . . . .	..	..	..	..	11	18
4	Gujarat	2	2	1	6	18	24
5	Haryana	6	14	..	..	14	12+10*
6	Jammu & Kashmir			Data not available			
7	Kerala	1	2	..	..	6	11
8	Madhya Pradesh	11	11	1	1	18+1*	32
9	Maharashtra	2	9	..	..	26+3*	32
10	Mysore . . . . .	..	5	..	..	33	30
11	Nagaland			Data not available			
12	Orissa . . . . .	..	..	2	..	2	..
13	Punjab	8+1*	10+2*	..	..	19+2*	16
14	Rajasthan	2	5	..	..	..	..
15	Tamil Nadu	12	5	..	..	27	51
16	Uttar Pradesh	18	44	..	..	463*	46
17	West Bengal			Data not available			
18	<i>Union Territories—</i>						
	(a) Delhi . . . . .	..	7	..	..	..	..
	(b) Goa, Daman and Diu . . .	..	..	..	..	..	..
	(c) Himachal Pradesh . . . .	..	3	..	..	2	5
	(d) Manipur . . . . .	..	..	..	..	..	..
	(e) Pondicherry . . . . .	..	..	..	..	2	..
	(f) Tripura . . . . .	..	..	..	..	1*	2
19	Mines	1	1	..	..	..	4
20	Railways@ . . . . .	..	1	..	..	4	13
	TOTAL	61+2*	136+2*	5	7	260+14*	317+10*

*Accidents to animals.

@Data exclusive of Central, Eastern NEFA and Southern Railway due to non-availability.

ACCIDENTS DURING 1968-69

Distribution						Total	
Industrial Undertakings		Electric Supply Undertakings		Industrial Undertakings		Fatal	Non-Fatal
Fatal	Non-Fatal	Fatal	Non-Fatal	Fatal	Non-Fatal		
9	10	11	12	13	14	15	16
..	..	98+28*	55	3	..	138+32*	89
1	..	7+3*	2	..	..	13+4*	6
..	..	26	13	..	..	37	31
..	..	70	66	..	..	90	98
..	..	23+15*	19	4	1	47+25*	46+10*
		Data not available					
..	2	29	40	..	..	36	55
..	..	40+22*	75	..	..	70+23*	119
..	7	110+38*	154+1*	18	28	156+41*	230+1*
..	..	83	83	..	..	116	118
		Data not available					
3	..	6	..	..	..	13	..
..	..	35+35*	21	1	..	62+38*	47+2*
..	..	35	31	..	2	38	38
..	..	166	135	..	..	196	191
..	..	43+11*	67	2	..	109+14*	157
		Data not available					
..	..	6+3*	..	..	..	6+3*	7
..	..	1	1	..	..	1	1
..	..	3	9	..	..	5	17
..	..	1	..	..	..	1	..
..	..	5	3	..	..	7	3
..	..	1	4	..	..	1+1*	6
..	..	7	2	..	..	8	7
..	..	5	3	..	..	9	17
4	9	800+155*	783+1*	29	31	1158+171*	1283+13*

**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 CORPORATIONS AND LOCAL
AUTHORITIES IN THE PUBLIC SECTOR AND COMPANIES, PARTNERSHIPS ETC. IN THE
PRIVATE SECTOR AS ON 31ST MARCH, 1968**

TABLE I—CAPITAL EXPENDITURE

(Figures in Rs. lakhs)

Serial Number	States, Corporations and Union Territories	State Owned				Private		Total	
		Government, Boards and Corporations		Municipalities		Companies			
		1966-67	1967-68	1966-67	1967-68	1966-67	1967-68	1966-67	1967-68
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	12,242	15,889	..	..	..	..	12,242	15,889
2	Assam	3,772	4,454	..	..	112	123	3,884	4,577
3	Bihar	*13,517	10,342	..	..	631	686	14,148	11,028
4	Gujarat	9,460	10,659	214	227	3,482	3,686	13,156	14,572
5	Haryana	..	6,611	..	..	..	11	..	6,622
6	Jammu & Kashmir	..	..	..	..	..	..	..	..
7	Kerala	8,896	9,988	33	35	98	105	9,027	10,128
8	Madhya Pradesh	6,963	8,847	..	..	201	215	7,164	9,062
9	Maharashtra	*12,592	12,448	3,713	4,080	9,068	9,592	25,373	26,120
10	Mysore	6,822	7,753	..	..	114	117	6,936	7,870
11	Nagaland	..	..	..	..	..	..	..	..
12	Orissa	3,017	3,688	..	..	..	..	3,017	3,688
13	Punjab	13,105	10,175	202	153	18	9	13,325	10,337
14	Rajasthan	5,029	6,442	..	..	161	176	5,190	6,618
15	Tamil Nadu	23,127	25,684	160	171	975	1,074	24,262	26,929
16	Uttar Pradesh	*30,931	*36,632	249	257	1,152	2,679	32,332	39,568
17	West Bengal	5,032	7,223	26	26	7,203	7,646	12,261	14,895
18	Power Corporations (D.V.C. & Durgapur)	16,288	16,802	..	..	..	..	16,288	16,802
19	Union Territories— (a) Delhi (b) Rest	887	1,010	3,227	4,331	10	..	3,227	4,331
	TOTAL	1,71,680	1,94,647	7,824	9,341	23,225	26,119	2,02,729	2,30,107

*Including Works-in-Progress.

PUBLIC ELECTRICITY INDUSTRY—CONSOLIDATED ANNUAL ACCOUNT FOR THE
YEAR ENDED 31ST MARCH, 1968

TABLE II—CAPITAL ACCOUNT

(Figures in Rs. lakhs)

	1966-67	Particulars	Government Departments/ Boards/ Power Corporations	Municipalities	Companies	Total	1966-67	Particulars	Government Departments/ Boards/ Power Corporations	Municipalities	Companies	Total
1	2	3	4	5	6	7	8	9	10	11	12	
1. TO GENERATION ASSETS—												
		(a) Steam Power Station—										
G—	39,842	(i) Land . . .	737	5	119	861		1. BY CAPITAL RAISED—				
M—	970	(ii) Buildings . . .	4,890	83	1,060	6,033	..	(a) Invested by States—				
C—	7,506	(iii) Boilers, Turbines etc.	36,512	1,798	7,820	46,130	G M	(i) Government Undertakings.	2,18,547	..	..	2,18,547
	48,318	(iv) Other Equipments	2,730	..	201	2,931		(ii) Municipal Undertakings	..	7,422	..	7,422
		GROUP TOTAL .	44,869	1,886	9,200	55,955		GROUP TOTAL .	2,18,547	7,422	..	2,25,969
		(b) Oil Power Stations—						(b) Invested by Private Sector—				
G—	3,677	(i) Land . . .	142	1	5	148	Companies	(i) Ordinary Share Capital.	..	..	4,490	4,490
M—	205	(ii) Buildings . . .	465	15	29	509	O P	(ii) Preference Share Capital.	..	..	969	969
C—	264	(iii) Engines Generators etc.	2,774	187	220	3,181	D SL	(iii) Debentures	..	..	2,058	2,058
	4,146	(iv) Other Equipments	415	..	..	415	G— M— C—	(iv) Other Secured Loan Capital.	..	..	3,330	3,330
		GROUP TOTAL .	3,796	203	254	4,253		2. BY CAPITAL RESERVE.	210	191	224	625

TABLE II—CAPITAL ACCOUNT—*contd.*

(Figures in Rs. lakhs)

1	2	3	4	5	6	7	8	9	10	11	12
	(c) Hydro Power Stations—					G 1,948 M 374 C 1,360	3. BY CONSUMERS CONTRIBUTION FOR SERVICE LINES.	2,473	410	1,528	4,411
G— 34,918 M— 66 C— 1,964	(i) Land . . . (ii) Buildings . . . (iii) Hydraulic Power Plant. (iv) Civil Works . .	659 3,410 23,512 12,737	1 3 36 28	72 121 408 1,403	732 3,534 23,956 14,168	3,682					
36,948	GROUP TOTAL . .	40,318	68	2,004	42,390						
89,412	SUB-TOTAL (Generation Assets).	88,983	2,157	11,458	1,02,598						
33,793	2. TO TRANSMISSION ASSETS.	34,828	170	2,267	37,265						
	3. DISTRIBUTION ASSETS—										
G— 51,129 M— 4,283 C— 9,757	(i) Cables and Mains. (ii) Sub-Stations, Transformers. (iii) Service Lines . . (iv) Public Lighting . . (v) Meters, Testing Instruments etc.	34,727 13,996 6,092 865 4,409	1,913 1,141 830 126 676	4,135 2,689 2,451 219 1,240	40,775 17,826 9,373 1,210 6,325						
65,169	GROUP TOTAL . .	60,089	4,686	10,734	75,509						
	4. TO GENERAL ASSETS—										
G— 9,115 M— 430 C— 714	(i) Land, Buildings & Structures etc. (ii) Office Furniture & Misc. Equipment. (iii) Workshop Plant & equipment tools & implements. (iv) Transportation & communications.	2,932 2,878 1,394 1,154	291 79 43 41	328 244 67 201	3,551 3,201 1,504 1,396						
10,259	GROUP TOTAL . .	8,358	454	840	9,652						

22-1 CW&PC/70

G— M— C—	1,488 47 890	5. TO INTANGIBLE ASSETS.	2,389	51	820	3,260						
	2,425		..	1,823	..	1,823						
M—	1,671											
G— M— C—	1,71,680 7,824 23,225	6. TO SPECIAL ITEMS (Tramways in the case of Bombay).					G— 1,97,635 M— 6,744 C— 12,228					
	2,02,729	TOTAL CARRIED TO GENERAL BALANCE SHEET	1,94,647	9,341	26,119	2,30,107	2,16,607					
								2,21,230	8,023	12,599	2,41,852	

G—Government

M—Municipalities

C—Companies

O—Ordinary Share Capital

SL—Secured Loans

P—Preference Share Capital

D—Debentures

TABLE III—REVENUE ACCOUNTS 1967-68

(Figures in Rs. lakhs)

1966-67	Particulars	Government Deptts./ Boards/ Power Corpo- rations	Muni- cipalities	Compa- nies	Total	1966-67	Particulars	Government Deptts./ Boards/ Power Corpo- rations	Muni- cipalities	Compa- nies	Total
1	2	3	4	5	6	7	8	9	10	11	12
TO OPERATING EXPENSES—											
I. GENERATION—											
G— 3,761							G— 3,186				
M— 208							M— 830				
C— 1,716							C— 1,791				
<u>5,685</u>							<u>5,807</u>				
G— 270							G— 2,014				
M— 37							M— 609				
C— 71							C— 688				
<u>378</u>							<u>3,311</u>				
G— 211							G— 9,519				
M— 6							M— 683				
C— 27							C— 4,818				
<u>244</u>							<u>15,020</u>				
G— 544							G— 524				
M— 51							M— 45				
C— 212							C— 113				
<u>807</u>							<u>682</u>				
G— 541							G— 270				
M— 12							M— 99				
C— 292							C— 168				
<u>845</u>							<u>537</u>				
(a) (i) Coal . . .	4,169	230	2,113	6,512		(i) Domestic and Residential . . .	3,560	891	1,927	6,378	
(ii) Oil . . .	296	21	73	390		(ii) Commercial . . .	1,874	679	753	3,306	
(iii) Consumable Stores.	214	5	40	259		(iii) Industrial . . .	12,174	768	5,524	18,466	
(b) Salaries and Wages	663	52	293	1,008		(iv) Public Lighting . . .	536	49	128	713	
(c) Repairs and Maintenance.	713	12	339	1,064		(v) Public Water Works and Sewage Pumping.	428	121	213	762	

	G— M— C—	4,780 1,016 2,762					G— M— C—	2,232 13 48					
		8,558						2,293					
	(d) Purchase of Energy	3,908	1,150	3,035	8,093				(vi) Irrigation . . .	2,712	15	66	2,793
	2. TRANSMISSION												
	G— M— C—	271 4 43					G— M— C—	565 1 63					
		318						629					
	(a) Salaries & Wages	334	5	53	392				(vii) Traction . . .	684	1	108	793
	G— M— C—	126 18					G— M— C—	6,389 213 1,148					
		144						7,750					
	(b) Repairs and Maintenance.	252	..	21	273				(viii) Supplies in Bulk to Distributing Licensees	5,312	249	1,314	6,875
	3. DISTRIBUTION												
	G— M— C—	1,064 161 303					G— M— C—	376 67 111					
		1,528						554					
	(a) Salaries & Wages	1,267	194	365	1,826				2. METER AND OTHER RENTALS.	518	74	118	710
	G— M— C—	641 72 209					G— M— C—	147 2 10					
		922						159					
	(b) Repairs and Maintenance.	896	78	232	1,206				3. SERVICE CONNECTION FEES.	86	3	8	97
	G— M— C—	74 18 56					G— M— C—	26 45 19					
		148						90					
	(c) Public Lighting (Attendance repairs & renewals).	85	24	67	176				4. PUBLIC LIGHTING, MAINTENANCE.	25	58	21	104

TABLE III—REVENUE ACCOUNTS 1967-68—*contd.*

(Figures in Rs. lakhs)

1	2	3	4	5	6	7	8	9	10	11	12
G— M— C— G— M— C— G— M— C— G— M— C— G— M— C— C— C— M—	4. CONSUMERS SERVICING (Billing Accounting etc.) (a) Salaries & Wages . (b) Other Expenses . 5. GENERAL ESTABLISHMENT CHARGES. (a) Salaries & Wages . (a) Other expenses (including Provident Fund etc.) 6. MANAGEMENT EXPENSES. (a) Directors fee and expenses. (b) Managing Agents Ordinary Remuneration & Office Allowance. 7. ADMINISTRATION Members Remuneration and other Expenses (L.A.)	144 10 49 203 177 101 202 480 928 56 165 1,149 2,223 213 543 2,979 6. MANAGEMENT EXPENSES. (a) Directors fee and expenses. (b) Managing Agents Ordinary Remuneration & Office Allowance. 7. ADMINISTRATION Members Remuneration and other Expenses (L.A.)	161 326 1,409 2,193 	11 113 55 271 86	45 250 197 650 13 90 ..	217 689 1,661 3,114 13 90 86	G— M— C— G— M— C— G— M— C— C— C— M—	1,623 125 195 1,943 1,906 175 165 2,246	5. MISCELLANEOUS RECEIPTS.		

TABLE IV—NET REVENUE AND APPROPRIATION ACCOUNT 1967-68

(Figures in Rs. lakhs)

1966-67	Particulars	Govt. Deptts./ Boards/ Power Corpo- rations	Munic- palities	Compa- nies	Total	1966-67	Particulars	Govt. Deptts./ Boards/ Power Corpo- rations	Munic- palities	Compa- nies	Total
1	2	3	4	5	6	7	8	9	10	11	12
	To appropriation (Ap- plicable to local authority licensee only)					G— 7,352 M— 527 C— 1,784	By Balance brought for- ward from Revenue Account.	7,948	635	1,763	10,346
						9,663					
M— 68	(a) Interest on loan Capital	..	80	..	80	G— 166 M— 26 C— 39	By interest on Securities and Investment.	178	24	40	242
M— 24	(b) Instalment of re- demption of loan capital	..	24	..	24	231					
M— 97	(c) General Rates .	..	109	..	109	M—(—) 126	By deficit incidental business (Tramways and Omnibuses of Bombay Municipalities)	..	(—)142	..	(—)142
M— 1	To taxes on income and profits.	..	1	487	488						
C— 590											
G— 591	To instalment of write down in respect of In- tangible Assets.	29	..	29	58	M— 100 C— 55	By Balance of profit brought forward from previous year.	..	120	29	149
M— 19						155					
C— 36											
	55										
M— 6	To contribution towards Contingencies Reserve.	..	6	67	73	G— 7,138	By Balance carried over to General Balance Sheet.	8,977	..	64	9,041
C— 62											
	68										
G— 51	To Development Re- serve.	46	..	92	138						
M— ..											
C— 32											
	83										
	To Appropriations to Tariff and Dividends Control Reserve.	..	..	8	8						
C— 16											

TABLE IV—NET REVENUE AND APPROPRIATION ACCOUNTS 1967-68—*contd.*

(Figures in Rs. lakhs)

1	2	3	4	5	6	7	8	9	10	11	12
G— 5,727 M— C— 27 <hr/> 5,754	To Balance of loss brought forward.	7,155	..	..	7,155						
M— 137 C— 38 <hr/> 175	To Balance carried over to General Balance Sheet.	..	156	..	156						
G— 14,656 M— 527 C— 1,878 <hr/> 17,061						G— 14,656 M— 527 C— 1,878 <hr/> 17,061					
	TOTAL .	17,103	637	1,896	19,636		TOTAL .	17,103	637	1,896	19,636

TABLE V—GENERAL BALANCE SHEET AS AT 31ST MARCH, 1968

(Figures in Rs. lakhs)

1966-67	Particulars	Government Deptts./ Boards/ Power Corporations	Municipalities	Companies	Total	1966-67	Particulars	Government Deptts./ Boards/ Power Corporations	Municipalities	Companies	Total
1	2	3	4	5	6	7	8	9	10	11	12
2,16,607	Fixed Capital raised and appropriated as per the Capital Account.	2,21,230	8,023	12,599	2,41,852	2,02,729	Capital Expenditure on works as per the Capital Account.	1,94,647	9,341	26,119	2,30,107
3,767	Capital Redemption Sinking Fund and Other Reserves.	2,476	1,428	507	4,411	29,997	<i>Less</i> Accumulated provisions for Depreciation.	25,371	1,932	7,913	35,216
	RESERVES & SURPLUS—					1,72,732	NET BLOCK . . .	1,69,276	7,409	18,206	1,94,891
7,890	Non-Statutory Reserve .	5,349	1,319	2,379	9,047	139	Balance of written down cost of obsolete and in adequate assets.	198	69	43	310
53	Special appropriation (as permitted by State Government).	..	1	42	43		CURRENT ASSETS—				
634	Contingencies Reserve Fund.	..	78	574	652	36,045	Capital Works in Progress.	40,954	1,568	1,098	43,620
369	Tariffs and Dividends Control Reserve.	129	148	97	374		STORES AND MATERIALS IN HAND—				
269	Consumers Rebate Reserve.	..	126	191	317	836	(a) Fuel Coal and or Oil at Cost.	210	40	139	389
921	Development Reserve .	293	9	764	1,066	20,679	(b) General Stores at or Below Cost.	21,305	1,405	1,246	23,956
175	Balance of net revenue and appropriation account.	..	156	..	156	6,902	Sundry debtors for Electricity Supplied.	6,086	1,059	1,588	8,733
	CURRENT LIABILITIES AND PROVISIONS					10,664	Other Debtors . . .	9,618	95	514	10,227
						11,531	Account receivable . .	12,378	905	115	13,398

TABLE V—GENERAL BALANCE SHEET AS AT 31ST MARCH, 1968—*contd.*

(Figures in Rs. lakhs)

1	2	3	4	5	6	7	8	9	10	11	12
9,211	Creditors on open account.	12,297	515	1,467	14,279		INVESTMENT IN STATUTORY SECURITIES AT COST				
5,281	Consumers Security Deposits.	5,072	612	1,068	6,752	534	(a) Contingencies Reserve Fund investment (Market value on closing date).	..	80	572	652
29,678	Accounts Payable .	27,657	1,465	2,637	31,759	4,128	(b) Other Investment (Market Value on closing date).	2,804	1,047	138	3,989
801	Balance due on construction of plant and machinery.	497	3	46	546		SPECIAL DEPOSITS—				
2,539	Temporary accommodations Bank overdrafts and other finances.	3,085	298	2,034	5,417	178	(a) In respect of taxation.	..	1	166	167
						964	(b) Other . . .	1,224	16	39	1,279
							BALANCE AT BANK—				
						1,698	(a) Deposit Account .	1,967	273	221	2,461
						2,847	(b) Current Account & at Call.	2,138	163	216	2,517
						1,058	Cash in Hand . .	850	51	34	935
						122	DEBIT BALANCES				
						Deferred Payments .	100	..	6	106	
						7,138	Debit Balance of net revenue and appropriation accounts.	8,977	..	64	9,041
2,78,195	TOTAL .	2,78,085	14,181	24,405	3,16,671	2,78,195	TOTAL .	2,78,085	14,181	24,405	3,16,671

TABLE VI—AVERAGE PRICE OF ELECTRICITY

Serial Number	Category of Sale	kWh Sold in 1967-68 (Million)	Revenue Realised in Rupees (Lakhs)	Revenue Realised per kWh Sold (Paise)
1	2	3	4	5
1	Domestic and Commercial premises for Lighting, Heating, small power etc.	4,926	10,397	21·11
2	Industrial and Traction	23,265	20,021	8·60
3	Agricultural	2,575	2,793	10·85
	TOTAL	30,766	33,211	10·79
4	Miscellaneous Revenue	..	3,399	..
5	All Purposes	30,766	36,610	11·90

NOTE.—About 1970 Million kWh Sales have been excluded corresponding to those few Electrical Undertakings from where financial data have not been received.

TABLE VII—SOME IMPORTANT FINANCIAL FEATURES FOR THE YEARS 1965-66 TO 1967-68

Serial Number	Particulars	Units	1966	1967	1968
1	2	3	4	5	6
1	Installed Plant Capacity	kW	8,513,447	9,538,638	11,032,266
2	Average Cost per kW Installed	Rs.	1,934	2,125	2,086
3	Number of consumers	No.	8,678,651	9,598,595	10,505,646
4	Average Capital Outlay per Consumers	Rs.	1,897	2,113	2,190
5	Maximum Demand	kW	6,911,392	7,784,908	9,000,106
6	Average Capital Outlay on transmission, distribution etc. per kW of maximum demand	Rs.	1,340	1,434	1,396

NOTE.—About 850,897 kW, 702,631 kW and 126,268—Installed Plant Capacity, Maximum Demand and Consumers have been excluded corresponding to those few Electrical Undertakings from where data have not been received.

TABLE VIII—CONSOLIDATED CAPITAL OUTLAY BY OWNERSHIP FOR THE YEARS 1963-64 TO 1967-68

Particulars	1964		1965		1966		1967		1968	
	Outlay (Rs. lakhs)	Per- centage of total								
1	2	3	4	5	6	7	8	9	10	11
Public Sector . . .	96,459	84	108,286	85	143,376	87	179,504	89	203,988	89
Private Sector . . .	*18,870	16	18,814	15	21,259	13	23,225	11	26,119	11
TOTAL . . .	115,329	100	127,100	100	164,635	100	202,729	100	230,107	100

TABLE IX—CONSOLIDATED CAPITAL OUTLAY OF ELECTRICITY SUPPLY UNDERTAKINGS FOR THE YEARS 1963-64 TO 1967-68

Particulars	Units	1964	1965	1966	1967	1968
1	2	3	4	5	6	7
On Electrical Works	Rs. lakhs	113,910	125,619	163,116	201,058	228,284
Non-Electrical Works Like Tramways and Omni-bus	Rs. lakhs	1,419	1,481	1,519	1,671	1,823
TOTAL		115,329	127,100	164,635	202,729	230,107