

ANNUAL STATISTICS IN RELATION TO

HYDRO-ELECTRIC DEVELOPMENT AND OPERATION

YEAR ENDING 31ST MARCH 1946

GENERAL MANAGER'S REPORT

For full text of the above report, refer to State Hydro-electric Statement 1946, Appendix pages 5 to 24 inclusive.

The statistics and information usually compiled under the headings "Local Electrical Supply Systems", Broken Wires and Poles", Growth of Load", "Electrical Accidents", and "Electrical Fires", have been condensed and summarized as follows:-

A. CONDENSED STATISTICS, 1945-46

		1946	1945	Increase or Decrease
Installed Generating-capacity (main stations) ..	kW.	455,912	595,579	+ 58,553
Installed Generating-capacity (standby) ..	kW.	96,636	95,436	+ 5,199
Total connected load (excluding bulk supply) ..	kW.	5,151,154	2,947,988	+ 1,631,166
Consumers ..	No.	486,172	475,857	+ 12,555
Units sold per capita ..	No.	1,097	1,151	- 54
Units sold per consumer ..	No.	5,888	5,805	+ 83
Route-miles of main and distribution lines ..	R.M.	50,777	50,187	+ 610
Consumers per route-mile of line ..	No.	15.79	15.74	+ 0.05
Sales (retail) per route-mile of line ..	Units	61,417	59,774	+ 1,643
Miles of conductor in service ..	Miles	142,144*	144,271**	- 2,127
Broken poles reported ..	No.	444	168	+ 276
Broken wires reported ..	No.	10,513	2,462	+ 8,051
Electrical fires reported ..	No.	17	16	+ 1
Electrical accidents reported ..	No.	55	50	+ 5
Electric ranges installed ..	No.	(6 fatal)	(9 fatal)	- 3
Electric water-heaters installed ..	No.	146,142	135,665	+ 10,479
Electric milking-machines installed ..	No.	175,510	160,694	+ 14,816
	No.	55,504	51,181	+ 2,123

* Including service lines. No returns received from Christchurch City Council.
 ** Including service lines. No returns received from Auckland Electric Power-board and Christchurch City Council

B. SUMMARIZED RESULTS OF OPERATIONS FOR YEAR ENDED 31ST MARCH, 1946

Item		Water	Steam	Gas	Oil	Total
Number of main stations	No.	24	-	-	5	29
Installed capacity (main plant)	kW.	455,553	-	-	569	455,912
Number of standby plants	No.	17	8	2	21	48
Installed capacity (standby plant)	kW.	9,594	66,887	2,891	17,265	96,636
Units generated	No.	2,259,559,900	96,009,501	-	9,590,115	2,364,959,514
Units sold to consumers ..						1,890,227,014
Percentage of non-productive units ..						80
Number of consumers ..						486,172
Connected load (excluding bulk supply) ..						5,151,154
Total operative capital (including distribution systems and standby plant)						£54,112,028
Total capital per kilowatt installed (including distribution systems etc.)						£ 101
Annual working-costs (excluding cost of power purchased in bulk)						£ 2,745,259
Annual working-cost per unit under section 8						0
Annual capital cost (interest, sinking fund, and depreciation)						£ 2,775,952
Annual capital cost per unit under section 8						0
Annual capital cost as a percentage of capital						5
Total annual costs (section 12 plus section 14)						£ 5,521,197
Total annual cost per unit under section 8						0
Total annual revenue (from retail sale of electricity)						£ 6,504,380
Average revenue per unit (from sections 19 and 8)						0
Gross revenue (excluding rates and bulk sales)						£ 6,689,458
Net profit (section 21 less section 17)						£ 1,168,262
Ratio of working-costs to gross revenue (section 12 and section 21)						41

TABLES

For reasons of economy in paper, the usual number of tables is not being published for the year ended 31st March 1946, Table VIII, XII, XIV, and XVI being omitted. Tables IV and V have been incorporated in Table II.

This edition contains --
 Table I. -- Government System: Capital Outlay and Results of operation

Table X -- Results of Generation, Distribution, etc.

TABLE I -- SUMMARY OF FINANCIAL AND OPERATING STATISTICS FOR NORTH ISLAND AND SOUTH ISLAND GOVERNMENT ELECTRIC-POWER S FOR THE YEAR ENDING 31st MARCH, 1948 (TWELFTH YEAR)

Note: - "North Island system" includes Arapuni-Horahora-Mangaha-o-Waikaremoana main stations, and Huntly-Kings Wharf-standby stations, all interconnected. "South Island system" includes Coleridge-Waitaki-Monowai-Arnold (Eimata)-main stations and Dobson standby station, all interconnected; also Cobb main station and Stoke standby station, not in connected.

A. FINANCIAL

	North Island	South Island	Total		North Island	South Island
CAPITAL OUTLAY						
Assets in operation	14,184,389	9,169,726	23,353,995	Net profit for year	188,329	280,736
Assets not in operation	5,503,768	840,468	6,344,236	Transfer from Reserve	--	--
Total capital outlay	19,688,037	9,810,194	29,498,231	Allocation of profits --		
REVENUE FOR YEAR	1,927,144	984,994	2,912,138	Loan Redemption Account	--	137,043
Working costs	982,634	317,697	1,300,331	Income Tax, etc.	279,981	145,893
Capital charges				Reserve Fund		
Interest	515,414	333,162	848,576	Totals	279,981	280,736
Depreciation	260,787	53,399	314,186	Depreciation Reserve to date	2,382,622	1,228,274
Totals	776,181	366,561	1,142,742	Loan Redemption Fund		1,150,337
TOTAL COSTS FOR YEAR	1,738,815	684,256	2,423,073	Reserve Fund to Date	2,025,045	
				Arrears: Loan Redemption Fund not yet appropriated	376,552	176,623

B. OPERATING RESULTS

	1945 - 48 (Twelfth Year)		1944 (Eleventh Year)
MAXIMUM LOAD (kilowatts) --			
North Island system	..	306,400	
South Island system	..	128,640	
AVERAGE LOAD (kilowatts) --			
North Island system	..	179,945	
South Island system	..	69,800	
AVERAGE LOAD FACTOR --			
North Island system	..	58.73	
South Island system	..	54.28	
UNITS OUTPUT (GENERATED AND PURCHASED) --			
North Island system	..	1,576,314,776	
South Island system	..	611,446,304	
Combined	..	2,187,761,080	
DISTRIBUTED --			
Units sold --			
North Island system	..	1,421,751,549	
South Island system	..	530,084,008	
Combined	..	1,951,815,557	
Units unsold (used free of charge) --			
North Island system	..	8,208,133	
South Island system	..	6,098,942	
Combined	..	14,306,075	
Total units distributed, North Island system	..	1,429,957,682	
Total units distributed, South Island system	..	536,183,950	
Combined	..	1,966,121,632	
LOSSES --			
Transmission and distribution --	Units	Per Cent	
North Island system	146,377,094	9.29	
South Island system	75,262,354	12.31	
Combined	221,639,448	10.13	
REVENUE --			
Per kilowatt (system maximum) --			
North Island system	..		5
South Island system	..		2
Per unit output --			
North Island system	..		0
South Island system	..		0
Per unit distributed --			
North Island system	..		0
South Island system	..		0
Per unit sold --			
North Island system	..		0
South Island system	..		0
CAPITAL CHARGES --			
Per kilowatt (system maximum) --			
North Island system	..		2
South Island system	..		2
Per unit output --			
North Island system	..		0
South Island system	..		0
Per unit distributed --			
North Island system	..		0
South Island system	..		0
Per unit sold --			
North Island system	..		0
South Island system	..		0
TOTAL COSTS --			
Per kilowatt (system maximum) --			
North Island system	..		4
South Island system	..		5.6
Per unit output (generated and purchased) --			
North Island system	..		0.2
South Island system	..		0.3
Per unit distributed --			
North Island system	..		0.2
South Island system	..		0.3
Per unit sold --			
North Island system	..		0.2
South Island system	..		0.3

TABLE II. -- ANALYSIS OF GOVERNMENT CAPITAL OUTLAY AS AT 31st MARCH, 1946.

North Island System			South Island System			Combined Totals	
		£			£	£	
Headworks and power-stations --			Headworks and power-stations --				
Land, fencing, and roading --			Land, fencing, and roading --				
Arapuni	..	118,575	Coleridge	..	26,841		
Horahora	..	3,375	Waitaki	..	48,441		
Mangahao	..	74,707	Monowai	..	12,328		
Waikaremoana (Tuai)	..	17,200	Arnold (Kaimata)	..	1,830		
" (Piripaua)	..	40,195	Highbank	..	9,583		
Taupo	..	150,558	Cobb	..	59,084		
Karapiro	..	175,285					756,678
Headworks --			Headworks --				
Arapuni	..	1,300,402	Coleridge	..	550,759		
Horahora	..	159,353	Waitaki	..	1,085,090		
Mangahao	..	947,079	Monowai	..	86,870		
Waikaremoana (Tuai)	..	200,775	Arnold (Kaimata)	..	108,155		
" (Piripaua)	..	694,201	Highbank	..	228,476		
" (Kaitawa)	..	1,142,841	Tekapo	..	417,052		
Karapiro	..	1,568,763	Cobb	..	427,524		
Generating-station, buildings, and village --			Generating-station, buildings, and village --				
Arapuni	..	505,693	Coleridge	..	104,409		
Horahora	..	64,280	Waitaki	..	486,542		
Mangahao	..	153,350	Monowai	..	47,105		
Waikaremoana (Tuai)	..	291,722	Arnold (Kaimata)	..	9,135		
" (Piripaua)	..	83,218	Highbank	..	63,155		
Karapiro	..	454,108	Cobb	..	65,053		
Generating plant and machinery --			Generating plant and machinery --				
Arapuni	..	1,078,769	Coleridge	..	253,266		
Horahora	..	100,010	Waitaki	..	368,595		
Mangahao	..	219,913	Monowai	..	62,100		
Waikaremoana (Tuai)	..	424,051	Arnold (Kaimata)	..	26,906		
" (Piripaua)	..	202,823	Highbank	..	154,379		
Karapiro	..	596,967	Cobb	..	79,580		
Fuel stations (three) -- Penrose, Huntly, King's Wharf			Fuel stations (two) -- Stoke and Dobson				
		417,672			156,754		
Transmission and distribution --			Transmission and distribution --				
Primary distribution --			Primary distribution --				
11 kv. lines	..	71,275	11 kv. lines	..	593,843		
33 kv. lines	..	--	33 kv. lines	..	59,447		
50 kv. lines	..	535,098	50 kv. lines	..	--		
66 kv. lines	..	--	66 kv. lines	..	752,339		
110 kv. lines	..	2,309,888	110 kv. lines	..	430,708		
220 kv. lines	..	5,540	220 kv. lines	..	--		
Secondary distribution	..	--	Secondary distribution	..	350,440		
Substations --			Substations --				
11 kv. substations	..	87,752	11 kv. substations	..	6,806		
33 kv. substations	..	--	33 kv. substations	..	50,002		
50 kv. substations	..	963,240	50 kv. substations	..	--		
66 kv. substations	..	--	66 kv. substations	..	762,756		
110 kv. substations	..	1,954,336	110 kv. substations	..	403,672		
220 kv. substations	..	28,000	220 kv. substations	..	--		
General --			General --				
General offices, garages, stores, and other accommodation			General offices, garages, stores, and other accommodation				
		119,802			58,535		
Telephone services			Telephone services				
		241,525			131,559		
Explorations and preliminary surveys; engineering, office, and general expenses; charges and expenses of raising loans			Explorations and preliminary surveys; engineering, office, and general expenses; charges and expenses of raising loans				
		675,695			630,484		
Interest during construction			Interest during construction				
		1,424,405			656,087		
GRAND TOTALS			GRAND TOTALS				
		£19,688,057			£9,810,194		£29,498,251

TABLE III. -- GOVERNMENT OPERATING OR WORKING COSTS FOR YEAR ENDED 31st MARCH, 1946

	North Island System				South Island System			
	Cost	Cost per Unit			Cost	Cost per Unit		
		Generated	Distributed	Sold		Generated	Distributed	Sold
	£	d.	d.	d.	£	d.	d.	d.
(a) Hydro stations	..	..	..	..	..	..	..	..
(b) Fuel stations	..	..	..	..	..	..	..	..
(c) Auxiliary stations, power purchased, and standby provision	..	..	..	..	..	..	..	..
Generated and purchased	..	..	..	..	..	..	..	..
(d) Transmission	..	..	..	..	..	..	..	..
(e) Communication System	..	..	..	..	..	..	..	..
(f) Substations	..	..	..	..	..	..	..	..
(g) Distribution	..	..	..	..	..	..	..	..
(h) System operation	..	..	..	..	..	..	..	..
(i) Management and general expenses	..	..	..	..	..	..	..	..
	107,862	0.0185	--	--	61,359	0.0241	--	--
	181,822	0.8621	--	--	11,411	5.9730	--	--
	301,053	0.7994	--	--	5,348	1.5689	--	--
	600,737	0.0915	0.1008	0.1014	78,116	0.0307	0.0350	0.03
	62,335	0.0095	0.0105	0.0105	28,255	0.0110	0.0126	0.01
	10,379	0.0016	0.0018	0.0018	4,756	0.0019	0.0021	0.00
	72,175	0.0110	0.0121	0.0122	41,189	0.0162	0.0184	0.01
	1,565	0.0001	0.0003	0.0003	31,303	0.0123	0.0140	0.01
	28,172	0.0043	0.0047	0.0048	15,950	0.0063	0.0071	0.00
	187,371	0.0285	0.0314	0.0315	118,126	0.0463	0.0529	0.05
	962,634	0.1465	0.1616	0.1625	517,697	0.1247	0.1421	0.14

Units generated --

	North Island System	South Island System
Hydro	..	..
Fuel	..	..
Purchased	..	..
	1,435,319,570	610,045,310
	50,618,580	458,497
	90,376,825	944,497
	1,576,314,776	
Units distributed	..	..
Units sold	..	..
	1,429,937,682	536,183,950
	1,421,731,549	530,024,000

Supply Authorities	Source of Supply	Year When Supply Commenced	Capacity of Generating Plants						Static Head in Feet		Voltage				Distribution Transformers		Route Miles of Lines	
			Water	Steam	Oil	Main Plant	Standby	Plant	Total Capacity	Head	Generation	Transmission	Primary Distribution	Secondary Distribution	Number	Total kVA.		
			kW	kW	kW	kVA	kVA	kVA	kVA	kVA	Feet	kW	kVA	kV	kV	kV	kV	kV
53. To Araratu	GN	1921	---	---	---	---	---	---	---	---	360	---	---	---	---	---	---	---
54. Tevriet	I	1924	750	---	---	655	---	---	---	---	---	750	959	---	---	---	---	306
55. Thames Valley	GN & B	1931	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	72
56. Waikato	GN & B	1933	440	---	---	---	---	---	---	---	---	440	542	---	---	---	---	1,262
57. Waikarepa	GN	1933	837	---	---	---	---	---	---	---	---	837	1,194	---	---	---	---	1,972
58. Waiveru	I	1925	634	---	---	780	---	---	---	---	---	624	1,030	---	---	---	---	230
59. Waikato	GN	1923	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0,44
60. Waitaki	GN	1926	120	---	---	---	---	---	---	---	---	---	---	---	---	---	---	197
61. Waitanata	GN	1926	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	116
62. Waitomo	GN	1928	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	574
63. Waikarepa	GN	1924	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1,565
64. Westland &	GN	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	232
TOTALS			11,954	1,697	4,221	9,760	11,611	17,762	21,571			19,278	472,819					21,853
Other Local Authorities																		
CITY COUNCILS																		
1. Christchurch	CS	1903	23,400	1,875	860	23,400	29,550	860	23,400	29,550	700	660	11,000	35,000	35,000	35,000	35,000	431
2. Dunedin	I & GS	1907	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	630
3. Hamilton	GN	1913	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4. Invercargill	GN	1914	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
5. Nelson	B	1923	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
6. Palmerston North	B	1924	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7. Wellington	GN	1928	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTALS			23,400	29,650	4,276	23,400	29,550	41,681	57,326	71,131								1,712
BOROUGH COUNCILS																		
1. Bluff	GS	1903	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2. Invercargill	B	1906	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3. Napier	B	1917	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4. New Plymouth	GN	1913	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
5. Ohakune	GN	1914	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
6. Patea	B	1901	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7. Pictou	I	1917	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8. Rasthi	I	1917	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
9. Rangiora	B	1919	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10. Riccarton	GS	1916	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11. Ross	B	1901	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12. Rotoma (Tourist Department)	GN	1901	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
13. Tairāpapa	B	1915	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14. Tauranga	I & GN	1924	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15. To Arata	D	1900	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16. To Puke	D	1914	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
17. Timaru	B	1908	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
18. Waitara	B	1915	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
19. Waitara	I & B	1917	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20. Westport	B	1925	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21. Whangarei	B	1915	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTALS																		

TABLE XIII -- AVERAGES DERIVED FROM PREVIOUS TABLES, YEAR ENDED MARCH 31st 1940 (continued)

For Notes See Page 13.

ly tion	Capital			Outlay			Revenue from Sale of Electricity			Workings			Capital Charges			Total		
	Per Head of Population	Per Consumer	Per \$1 of Revenue	Per Unit Sold including Bulk Sales	Per Unit Sold Excluding Bulk Sales	Per Head of Population (a)	Per Retail Consumer	Per \$1 of Maximum Demand	Per Mile of Line (b)	Per Unit Sold (c)	Per \$1 of Maximum Demand	Per Cent of Total Revenue	Per Unit Sold (d)	Per \$1 of Maximum Demand	Per Cent of Capital Outlay	Per Unit Sold (e)	Per \$1 of Maximum Demand	Per Cent of Distribution Capital
\$ MZ	\$ MZ	¢ MZ	d.	d.	¢ MZ	¢ MZ	¢ MZ	¢ MZ	d.	¢ MZ	¢ MZ	¢ MZ	d.	¢ MZ	¢ MZ	d.	¢ MZ	¢
6.36	31.38	1.750	2.046	2.046	5.83	13.28	19.85	610.07	1.650	16.09	78.66	6.07	1.667	2.12	0.241	16.21	52.16	
8.07	22.69	1.85	1.157	1.157	4.56	12.26	20.37	830.43	1.669	19.82	90.03	9.27	1.510	3.53	0.241	26.05	87.95	
9.00	26.83	2.67	1.006	1.006	3.50	9.85	16.00	456.10	0.824	15.10	78.99	4.05	0.929	1.67	0.105	14.77	54.63	
5.32	17.85	1.44	1.377	1.377	5.82	13.05	18.41	894.80	1.071	15.14	77.47	7.85	1.149	4.30	0.178	20.01	45.91	
8.75	27.61	2.11	1.002	1.002	3.95	12.50	25.86	1480.19	0.835	15.70	89.65	4.97	0.708	4.30	0.098	16.92	66.63	
15.04	49.64	3.03	0.666	0.666	4.28	15.76	30.37	547.01	0.438	15.85	69.34	10.04	1.293	5.09	0.538	20.69	98.80	
8.47	19.69	1.63	1.784	1.784	2.90	9.65	37.39	326.70	1.048	25.21	87.04	5.63	1.032	10.04	1.032	20.69	50.90	
11.11	38.65	2.54	1.059	1.059	4.28	14.67	22.50	565.75	0.875	17.49	78.59	3.20	1.032	5.63	1.032	20.69	68.94	
10.68	35.41	3.65	4.451	4.451	4.03	12.96	45.35	617.35	4.504	50.64	111.71	6.49	4.655	10.37	0.551	22.67	27.89	
17.89	55.31	6.63	1.771	1.771	2.97	12.59	18.43	231.57	0.978	12.30	44.89	1.48	1.818	10.37	0.933	15.90	51.84	
6.35	17.68	1.67	1.024	1.024	3.68	10.89	18.43	653.37	0.801	14.42	76.09	0.80	0.883	1.48	0.651	10.35	46.76	
11.94	37.74	3.04	1.034	1.034	4.15	12.40	22.48	1108.98	0.854	9.55	85.67	6.07	1.068	0.80	0.854	10.35	46.76	
9.80	30.67	2.18	1.141	1.141	4.55	14.05	22.51	285.76	0.645	15.67	65.82	4.15	1.068	4.15	0.205	19.82	29.45	
5.43	17.37	1.56	1.696	1.696	4.00	12.75	28.25	776.16	0.729	14.87	63.80	8.24	0.935	4.05	0.205	16.42	37.48	
37.94	106.15	2.56	0.454	0.454	5.47	12.85	10.21	487.44	1.030	15.79	59.70	5.72	1.152	2.05	0.132	17.84	109.46	
13.39	38.97	3.15	1.111	1.111	4.40	11.23	16.66	534.92	0.481	19.71	50.61	6.51	0.634	2.78	0.634	28.44	45.68	
6.68	22.15	1.75	0.822	0.822	3.63	10.21	18.98	399.61	0.161	16.99	100.32	3.06	1.065	2.05	0.117	29.72	70.87	
7.50	25.16	2.07	0.822	0.822	4.11	12.77	13.99	720.44	0.762	15.42	63.62	4.54	0.963	3.04	0.047	17.78	70.87	
5.64	17.77	1.665	1.072	1.072	5.69	17.64	16.85	849.24	0.785	15.42	87.73	5.08	1.065	2.05	0.963	16.45	37.54	
6.49	20.75	2.07	1.323	1.323	3.28	10.01	19.80	596.26	0.800	11.18	65.70	1.46	0.969	3.88	0.689	15.00	54.68	
8.25	28.77	2.68	2.497	2.497	2.80	9.98	25.69	426.67	1.929	12.87	61.95	7.00	0.776	12.44	0.776	12.44	32.90	
14.71	51.54	5.01	1.249	1.249	4.84	17.04	32.12	773.31	0.855	10.54	47.13	6.84	0.852	13.10	2.818	34.77	50.35	
13.25	42.41	5.58	1.191	1.191	3.69	11.65	19.98	603.21	0.850	15.60	74.10	5.68	1.086	2.65	0.257	13.10	29.37	
11.25	36.06	2.79	0.894	0.894	3.85	12.20	22.20	510.44	0.612	11.11	85.67	5.25	0.742	0.80	0.139	18.35	42.81	
14.98	53.57	2.91	1.158	1.158	5.22	18.41	23.17	155.05	0.870	17.40	75.98	5.12	1.043	3.45	0.172	20.85	51.06	
3.77	14.76	2.65	1.285	1.285	7.05	10.97	18.11	140.17	1.563	22.42	97.38	8.71	1.875	4.49	0.513	26.91	68.10	
11.94	40.12	2.85	1.277	1.277	1.65	6.48	38.00	244.60	2.663	31.50	59.72	8.71	3.875	7.15	0.691	38.65	54.91	
2.98	10.66	0.79	0.749	0.749	4.43	14.17	11.47	185.24	1.027	11.03	78.38	5.94	1.243	0.215	0.215	33.90	55.66	
5.58	29.00	1.95	6.456	6.456	2.84	10.41	11.47	388.64	0.872	9.91	65.58	6.19	0.774	0.215	0.102	18.35	25.49	
15.00	52.64	3.74	1.897	1.897	2.87	9.52	11.03	251.93	0.608	15.60	74.10	5.68	1.086	2.65	0.155	13.10	29.37	
4.59	15.25	1.93	11.451	11.451	3.69	11.03	11.03	251.93	0.608	15.60	74.10	5.68	1.086	2.65	0.155	13.10	29.37	
6.25	23.70	2.45	0.661	0.661	2.87	9.52	11.03	251.93	0.608	15.60	74.10	5.68	1.086	2.65	0.155	13.10	29.37	
5.95	22.08	2.11	0.775	0.775	2.84	10.41	11.47	388.64	0.872	9.91	65.58	6.19	0.774	0.215	0.102	18.35	25.49	
12.71	59.65	3.14	0.795	0.795	5.72	11.26	11.26	788.95	0.639	15.60	74.10	5.68	1.086	2.65	0.155	13.10	29.37	

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RESULTS

TABLE XIV --- STATISTICS OF POPULATION, CONSUMERS, ELECTRIC RANGES, WATER-HEATERS, AND MILKING MACHINES. (continued).

For Notes See Page 16.

Supply Authorities	Population included in area of supply		Ratio of Consumers to Population in area of supply		Consumers			R a n g e s			W a t e r			H e a t e r s			M i l k i n g M a c h i n e s			No.			
	No.	%	No.	%	Domestic	Commercial	Total	Under 5 H.P.	5 H.P. and Over	Total	Total K.W.	Ratio Total No. Ranges to Domestic Consumers	No.	Ratio	Total K.W.	No. Water-Heaters to Total No. Consumers	No.	Ratio	Total K.W.		No.	Ratio	
LOCAL AUTHORITIES																							
WILTSHIRE																							
Abingdon	180,180	51.50	38,866	5,468	37,884	16,870	17,515	131,014	54.10	14,684	15,893	38.79	56	58.79	15,893	55	58.79	15,893	56	58.79	89.92	1.	
Andover	95,550	29.74	22,744	7,670	25,414	3,882	5,250	28,664	20.89	9,239	11,210	35.88	235	35.88	11,210	528	35.88	11,210	235	35.88	52.27	2.	
Bath	21,840	4.94	4,944	1,485	6,429	828	1,179	6,743	25.64	1,769	1,869	27.61	..	27.61	1,869	..	27.61	1,869	..	27.61	81.54	3.	
Bristol	23,080	33.14	6,885	1,135	7,420	1,389	1,589	10,009	7.45	629	605	15.64	..	15.64	605	..	15.64	605	..	15.64	85.28	4.	
Chippenham	15,550	29.29	5,369	1,460	6,829	190	1,500	8,329	59.06	3,408	2,845	48.60	..	48.60	2,845	..	48.60	2,845	..	48.60	80.60	5.	
Devon	28,500	29.71	6,555	1,460	7,815	2,328	2,483	14,921	39.06	5,493	35,827	17.25	19	25.60	15,369	20	25.60	15,369	19	25.60	132.64	6.	
Exeter	129,200	53.62	31,935	11,268	45,103	5,056	5,493	50,596	17.25	10,992	15,369	25.60	..	25.60	15,369	..	25.60	15,369	..	25.60	..	7.	
TOTALS	426,180	52.85	110,919	39,066	140,005	29,850	32,675	209,917	39.36	41,174	45,717	39.40	311	39.40	45,717	407	39.40	45,717	311	39.40	81.77	8.	
GOVERNMENT																							
London	2,100	29.76	610	115	695	10	21	79	4.11	16	19	2.65	..	2.65	19	..	2.65	19	..	2.65	49.84	1.	
Manchester	1,530	35.56	555	118	473	102	104	74	39.29	104	85	21.26	..	21.26	85	..	21.26	85	..	21.26	51.41	2.	
Birmingham	1,770	33.95	601	89	694	155	242	1,140	47.26	185	132	20.79	..	20.79	132	..	20.79	132	..	20.79	45.83	3.	
Cardiff	5,970	30.68	884	150	1,054	355	285	1,566	26.58	166	162	16.05	..	16.05	162	..	16.05	162	..	16.05	74.98	4.	
Edinburgh	15,710	31.49	5,932	1,016	4,948	880	915	6,359	25.21	3,597	3,293	34.03	..	34.03	3,293	..	34.03	3,293	..	34.03	112.43	5.	
Glasgow	30,510	50.51	9,971	1,741	8,113	5,128	5,490	19,178	50.05	74	46	11.99	..	11.99	46	..	11.99	46	..	11.99	21.32	6.	
Leeds	26,780	37.54	473	142	617	56	81	481	18.60	188	131	33.51	..	33.51	131	..	33.51	131	..	33.51	28.68	7.	
Liverpool	1,950	35.76	686	95	781	14	17	81	4.19	1	4	0.20	..	0.20	4	..	0.20	4	..	0.20	47.61	8.	
Newcastle	1,610	31.05	405	117	484	50	51	279	15.52	76	71	15.28	..	15.28	71	..	15.28	71	..	15.28	17.64	9.	
Nottingham	2,800	21.47	577	114	668	194	169	1,225	25.06	368	290	50.87	..	50.87	290	..	50.87	290	..	50.87	62.64	10.	
Sheffield	2,450	35.43	754	114	868	194	169	1,225	25.06	368	290	50.87	..	50.87	290	..	50.87	290	..	50.87	62.64	11.	
Southampton	7,980	28.18	2,074	175	2,249	1,198	1,182	7,816	36.99	1,219	969	54.20	..	54.20	969	..	54.20	969	..	54.20	95.70	12.	
Trinidad	460	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13.
Wales (Government Department)	15,150	31.65	5,289	1,888	4,166	815	1,008	5,668	30.84	1,194	1,035	27.76	..	27.76	1,035	..	27.76	1,035	..	27.76	23.64	14.	
York	5,970	32.29	976	306	1,283	375	392	2,900	59.15	1,594	1,529	29.09	..	29.09	1,529	..	29.09	1,529	..	29.09	55.25	15.	
TOTALS	149,060	50.69	53,988	6,764	45,763	11,602	15,285	68,182	35.91	14,493	15,290	31.67	1,286	31.67	15,290	1,896	31.67	15,290	1,286	31.67	39.85	16.	
METS																							
London	1,620	27.86	577	70	465	89	141	740	57.40	209	172	46.15	..	46.15	172	..	46.15	172	..	46.15	8.31	1.	
Manchester	290	50.68	109	39	147	59	44	215	40.74	..	88	39.83	..	39.83	88	..	39.83	88	..	39.83	12.78	2.	
Trinidad	740	25.54	105	26	156	1	3	6	1.22	..	..	..	..	..	..	..	..	..	..	..	37.80	3.
TOTALS	2,650	29.77	650	141	769	129	167	995	58.05	355	301	52.05	103	52.05	301	380	52.05	301	103	52.05	10.95	17.	

CONSUMERS, ELECTRIC RANGES, WATER-HEATERS, & MILKING MACHINES (continued)

Supply Authorities	Population in area of supply		Ratio of Consumers to Population in area of supply		Consumers		E. R. G. O.		Water Heaters		Milking Machines		Consumers per House Hold of like
	No.	%	No.	%	Domestic	Commercial	Total	Total 5 HP	Total HP	Ratio Total Ranges to Domestic Consumers	No.	H.P.	
1. Heathcote	3,520	27.47	963	5	540	593	5,149	61.45	644	6	4	58.61	
2. Eastbourne	1,600	13.35	222	75	3	297	35	3.60	..	5	2	36.00	
3. Murchison	750	18.76	180	23	15	215	114	16.43	54	28	29	15.85	
4. Urua	410	28.78	80	32	..	118	..	..	..	..	..	35.71
5. Waimairi	19,250	27.49	4,862	355	2,155	2,595	15,956	49.01	2,000	64	60	50.22	
TOTALS	34,540	26.95	6,615	480	2,713	2,931	17,243	47.62	2,678	125	95	51.55	
TOTALS OTHER LOCAL AUTHORITIES	602,420	52.06	154,710	38,481	44,235	46,978	310,354	51.05	59,791	2,007	2,678	60.87	
1. Kaitiaki Electric Ltd.	2,950	52.06	690	286	127	168	1,019	32.69	65	..	..	31.53
2. L. Kaye, Kaitiaki	240	28.35	66	..	..	3	4.41	6	3	..	..	34.00
3. Beaufort Electric Light & Power Co., Ltd.	1,250	55.49	324	68	21	21	189	6.48	6	1	2	48.47	
4. Hawsons Motors Ltd., Ltd.	500	15.12	39	..	..	..	..	..	..	..	..	59.00
5. Wilsons (N.Z.) Portland Cement Ltd.	1,480	18.18	164	47	21	56	347	21.95	45	31	52	5.62	
6. Westland Power Ltd.	5,170	15.21	379	82	33	48	270	14.24	43	40	69	5.87	
TOTALS	9,140	25.14	1,622	495	196	266	1,800	16.29	180	81	133	13.64	
GRAND TOTALS	1,772,010	26.25	406,539	79,615	131,600	146,142	951,675	55.96	175,310	33,204	65,195	15.79	

NOTES TO TABLE IV.

- 1. Not strictly functioning.
- 2. License delegated to Westland Power Ltd.
- 3. For year ended 31 December, 1945.
- 4. License delegated to Westland Power Ltd.
- 5. No return received.

RATIO OF DOMESTIC CONSUMERS TO TOTAL CONSUMERS ... 83.68 per cent.

TABLE XVII -- STATISTICS RELATING TO MINORITIAL MEMBERS'S EXPERIMENTAL BOARD FOR YEAR ENDED MARCH, 1946.

The figures in parentheses are for the previous year

- 1. Number of Members' Registration Board Meetings : 25 (26); Includes three Emergency Committee Meetings on Rehabilitation Business.
- 2. Registrations

Type of Registrations	During Year		Total	Current
	Present	Marked		
Impersonal	41 (21)	..	815 (774)	410 (360)
Electrical	188 (170)	..	4690 (4508)	4581 (4533)
Electrical Servicemen Class IV (including Radio)	9 (8)	..	94 (85)	65 (76)
Electrical Servicemen Class III (including Radio)	65 (59)	..	128 (79)	121 (65)
Electrical Servicemen Class II (including Radio)	1 (4)	..	21 (21)	23 (22)
Limited Registrations	..	..	..	..
Provisional Licenses	65 (48)	..	1088 (1114)	1000 (1018)
Temporary Permits	0 (5)	..	63 (57)	3
Registrations after Periodical Purging	..	..	150	..
5. Examinations	6 (8)	..	546 (541)	..
Written	580 (486)	..	61 (45)	53 (53)
Practical	308 (304)	..	87 (75)	93 (83)
Servicemen: Written	727 (704)	..	..	..

* Includes Radio Servicemen registered prior to the introduction in 1935 of the examination for Electrical Servicemen Class "B", and miscellaneous registrations.