

NEW ZEALAND

# ANNUAL STATISTICS IN RELATION TO HYDRO-ELECTRIC DEVELOPMENT AND OPERATION

YEAR ENDING 31st MARCH, 1945

## CHIEF ELECTRICAL ENGINEER'S REPORT

For full text of the above report, refer to Public Works Statement, 1945, Appendix D, pages 9 to 12 inclusive.

### ELECTRICAL WIREMEN

The statistics for the year ended 31st March, 1945, are set out below (the figures in parentheses are for the previous year) :—

(1) Number of meetings of Wiremen's Registration Board : 20 (19).

(2) Registrations :—

Inspectors.	Wiremen.				
	Full Registration	Limited Registration.	Provisional Licenses.	Temporary Permits	Reregistrations after Periodical Purging
21 (17)	127 (75)	88 (74)	5 (4)	Nil (Nil)	2 (5)

(3) Examinations :—

—	Wiremen.			Servicemen.		
	Candidates.	Passed (%).	Highest Marks.	Candidates.	Passed (%).	Highest Marks.
Written	494 (363)	43 (45)	82 (89)	266 (163)	37 (52)	90 (100)
Practical	304 (305)	73 (59)	93 (94)	278 (196)	64 (68)	99 (98)

(4) Defective work reports, 8 (9) ; endorsements made, 1 (0) ; endorsements removed, Nil (2).

(5) Breach of Act reports, 36 (63) ; prosecutions authorized, 19 (39).

### Tables

For reasons of economy in paper, the usual number of tables is not being published for the year ended 31st March, 1945, Tables VI, VII, VIII, XII, XV, and XVI being omitted. Tables IV and V have been incorporated in Table XI.

This edition contains—

Table I.—P.W.D. System : Capital Outlay and Results of Operation.

Table II.—P.W.D. System : Analysis of Capital Outlay

Table III.—P.W.D. System : Working-costs.

Table IX.—Populations, Consumers, Route-miles of Lines, &c.

Table X.—Results of Generation and Distribution.

Table XI.—Financial Results of Operation.

Table XIII.—Averages derived from Tables IX, X, and XI

Table XIV.—Ranges, Water-heaters, and Milking-machines

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

### A. Condensed Statistics, 1944-45

		1945.	1944.	1943.
(a) Installed generating-capacity (main stations)				
(b) Installed generating-capacity (standby)	kW.	395,379	414,293	
(c) Total connected load (excluding bulk supply)	kW.	93,436	67,746	
(d) Consumers	kW.	2,947,988	2,809,230	
(e) Units sold per capita	No.	473,837	465,303	
(f) Units sold per consumer	No.	1,131	1,096	
(g) Route-miles of main and distribution line	No.	3,805	3,405	
(h) Consumers per route-mile of line	R.M.	30,167	29,595	
(i) Sales per route-mile (retail sales)	No.	15,74	15,72	
(j) Miles of conductor in service	Units	59,774	58,713	
(k) Broken poles reported	Miles	144,271 <sup>3</sup>	140,060 <sup>4</sup>	
(l) Broken wires reported	No.	166	424	
(m) Electrical fires reported	No.	2,462	5,744	
(n) Electrical accidents reported	No.	16	26	
	No.	30	36	
(o) Electric ranges installed		(9 fatal)	(16 fatal)	
(p) Electric water-heaters installed	No.	135,663	128,447	
(q) Electric milking-machines installed	No.	160,694	150,827	
	No.	31,181	31,088	

<sup>1</sup>Main Stations.—Increases: Arapuni, 3,100 kW.; Cobb, 12,000 kW. Decreases: Wanganui-Rangitikei, 1,500 kW.; Hawke's Bay, 520 kW; 680 kW Palmerston North, 2,000 kW.; Wellington, 25,000 kW.; New Plymouth, 3,750 kW.; Taumarunui, 425 kW. Transferred to standby, Wanganui-Rangitikei, 1,500 kW.; Hawke's Bay, 520 kW.; Poverty Bay, 680 kW.; Palmerston North, 2,000 kW.; New Plymouth, 3,750 kW.; Taumarunui, 425 kW.; Reefton, 80 kW.; Stoke, 750 kW. Decreases: Westport, 150 kW.; Christchurch Tramway Board's steam plant, 7,450 kW. (deleted from South Island system). Invercargill, 225 kW. (correction of figure previously published).

<sup>2</sup>Standby Stations.—Increases: Wanganui-Rangitikei, 1,500 kW.; Hawke's Bay, 520 kW.; Poverty Bay, 680 kW.; Palmerston North, 2,000 kW.; New Plymouth, 3,750 kW.; Taumarunui, 425 kW.; Reefton, 80 kW.; Stoke, 750 kW. Decreases: Westport, 150 kW.; Christchurch Tramway Board's steam plant, 7,450 kW. (deleted from South Island system). Invercargill, 225 kW. (correction of figure previously published).

<sup>3</sup>Including service lines. No returns received from Auckland Electric Power Board and Christchurch City Council.

<sup>4</sup>Excluding service lines.

### B. Summarized Results of Operations for Year ended 31st March, 1945

Item		Water.	Steam.	Gas.	Oil.	
1. Number of main stations	No.	(a) 31	(c) 1			
2. Installed capacity (main plant)	kW.	393,420	750		(b) 7	
3. Number of standby plants	No.	(d) 10	(f) 8		(e) 24	
4. Installed capacity (standby plant)	kW.	6,017	63,817	(g) 2	10,811	
5. Units generated	No.	2,199,742,098	66,163,787	891	7,933,610	2.1
6. Units sold to consumers						
7. Percentage of non-productive units						
8. Number of consumers						1.1
9. Connected load (excluding bulk supply)						
10. Total operative capital (including distribution systems and standby plant)						2.0
11. Total capital per kilowatt installed (including distribution systems, &c.)						£
12. Annual working-costs (excluding cost of power purchased in bulk)						
13. Annual working-cost per unit under section 6						
14. Annual capital cost (interest, sinking fund, and depreciation)						
15. Annual capital cost per unit under section 6						
16. Annual capital cost as a percentage of capital						
17. Total annual costs (section 12 plus section 14)						
18. Total annual cost per unit under section 6						
19. Total annual revenue (from retail sale of electricity)						£
20. Average revenue per unit (from sections 19 and 6)						£
21. Gross revenue (excluding rates and bulk sales)						£
22. Net profit (section 21 less section 17)						£
23. Ratio of working-costs to gross revenue (section 12 and section 21)						£

#### MAIN STATIONS

(a) Hydro-electric: Arapuni, Horahora, Waikaremoana, Mangahao, Coleridge, Waitaki, Monowai, Arnold, Cobb, Bay of Islands, Golden Bay, M Opanake, Otago Central, South Taranaki, Taranaki, Teviot, Waimea, Waipere, Dunedin, Picton, Queenstown, Raetihi, Taihape, Tauranga Borough, Westport, Murchison, Kanieri Electric, Ltd., Reefton Electric Light and Power Co., Ltd., Wilson's (N.Z.) Portland Cement, Ltd., Westland Pt total, 31.

(b) Oil: Waimea, Picton, Uawa, Kaikoura, L. Keys (Kohukohu), Reefton Electric Light and Power Co., Ltd., Rawene Motors, Ltd.: total, 7

(c) Steam: Nelson: total, 1

#### STANDBY STATIONS

(d) Hydro-electric: Banks Peninsula, Waipara, Waitaki Electric Power Board, New Plymouth, Ohakune, Paten, Raetihi, Taumarunui, Te Aroli Borough Council: total, 10.

(e) Oil: Penrose, Dobson, Stoke, Hawke's Bay, Marlborough, Opanake, Poverty Bay, South Taranaki, Waimea, Waipere, Waitaki Electric Power Board, Dunedin, Palmerston North, Napier, Ohakune, Picton, Queenstown, Rangiora, Thames Borough Council, Murchison, Kanieri Electric, Ltd (Kohukohu), Reefton Electric Light and Power Co., Ltd.: total, 24.

(f) Steam: King's Wharf (Auckland), Huntly, Bay of Islands, Wellington, Wanganui-Rangitikei, Dunedin, Invercargill, Nelson: total, 8.

(g) Gas: Palmerston North, Taihape: total, 2.

TABLE I.—SUMMARY OF FINANCIAL AND OPERATING STATISTICS FOR NORTH ISLAND AND SOUTH ISLAND GOVERNMENT ELECTRIC-POWER SYSTEMS FOR THE YEAR ENDING 31ST MARCH, 1945 (ELEVENTH YEAR)

NOTE.—“North Island system” includes Arapuni-Horahora-Mangahao-Waikaremoana all interconnected. “South Island system” includes Lake Coleridge-Waitaki-Monowai-Arnold River (Westland) all interconnected, also Cobb not interconnected.

### A. Financial

	North Island	South Island	Total.		North Island.	South Island	Total.
	£	£	£		£	£	£
Capital outlay—				Net profit for year	334,397	145,462	479,859
Assets in operation	13,458,423	8,539,938	21,998,361	Transfer from Reserve	98,532		98,532
Assets not in operation	3,429,789	878,675	4,308,464	Allocation of profits—			
Total capital outlay	16,888,212	9,418,613	26,306,825	Loan Redemption Account	132,325	2,213	134,538
Revenue for year	1,841,530	862,300	2,703,830	Income-tax, &c.	300,604	143,249	443,853
Working-costs	785,336	259,384	1,044,720	Reserve Fund			
Capital charges—				Totals	432,929	145,462	578,391
Interest	475,000	298,217	773,217	Depreciation Reserve to date	2,069,631	1,175,970	3,245,601
Depreciation	246,797	159,237	406,034	Loan Redemption Fund	2,025,045	1,013,194	3,038,239
Totals	721,797	457,454	1,179,251	Reserve Fund to date			
Total costs for year	1,507,133	716,838	2,223,971	Arrears: Loan Redemption Fund not yet appropriated	103,943	175,125	279,068

### B. Operating Results

	1944-45 (Eleventh Year).		1944-45 (Eleventh Year)	
Maximum load (kilowatts)—				
North Island system	292,900		£	
South Island system	123,290		Per kilowatt (system maximum)—	
Average load (kilowatts)—			North Island system	6.287
North Island system	174,946		South Island system	6.094
South Island system	62,723		Per unit output—	d.
Average load factor—	Per Cent.		North Island system	0.288
North Island system	59.73		South Island system	0.376
South Island system	50.87		Per unit distributed—	
Units output (generated and purchased)—			North Island system	0.322
North Island system	1,532,533,268		South Island system	0.431
South Island system	549,454,884		Per unit sold—	
Combined	2,081,988,152		North Island system	0.323
Units distributed—			South Island system	0.436
Units sold—			Working costs—	
North Island system	1,367,630,450		Per kilowatt (system maximum)—	£
South Island system	474,307,426		North Island system	2.681
Combined	1,841,937,876		South Island system	2.104
Units unsold (used free of charge)—			Per unit output—	d.
North Island system	7,542,302		North Island system	0.123
South Island system	5,742,097		South Island system	0.113
Combined	13,284,399		Per unit distributed—	
Total units distributed, North Island system	1,375,172,752		North Island system	0.137
Total units distributed, South Island system	480,049,523		South Island system	0.130
Combined	1,855,222,275		Per unit sold—	
Line losses—			North Island system	0.138
Transmission and distribution—	Units.	Per Cent.	South Island system	0.131
North Island system	157,360,516	10.27	Capital charges—	
South Island system	69,405,361	12.63	Per kilowatt (system maximum)—	£
Combined	226,765,877	10.80	North Island system	2.464
			South Island system	3.710
			Per unit output—	d.
			North Island system	0.113
			South Island system	0.200
			Per unit distributed—	
			North Island system	0.125
			South Island system	0.229
			Per unit sold—	
			North Island system	0.127
			South Island system	0.231
			Total costs—	
			Per kilowatt (system maximum)—	£
			North Island system	5.146
			South Island system	5.814
			Per unit output (generated and purchased)—	d.
			North Island system	0.236
			South Island system	0.313
			Per unit distributed—	
			North Island system	0.263
			South Island system	0.359
			Per unit sold—	
			North Island system	0.264
			South Island system	0.362

TABLE II.—ANALYSIS OF GOVERNMENT CAPITAL OUTLAY AS AT 31ST MARCH, 1945

North Island System.		South Island System.	
Headworks and power-stations—		Headworks and power-stations—	
Land, fencing, and roading—		Land, fencing, and roading—	
	£		£
Arapuni .. .. .	109,581	Coleridge .. .. .	25,841
Horahora .. .. .	3,208	Waitaki .. .. .	48,441
Mangahao .. .. .	74,708	Monowai .. .. .	12,226
Waikaremoana .. .. .	17,200	Arnold River (Kaimata) .. .. .	1,865
"    Lower development .. .. .	40,193	Highbank .. .. .	6,963
Taupo .. .. .	147,819	Cobb .. .. .	58,037
Karapiro .. .. .	86,314		
Headworks—		Headworks—	
Arapuni .. .. .	1,231,491	Coleridge .. .. .	550,720
Horahora .. .. .	151,468	Waitaki .. .. .	1,095,090
Mangahao .. .. .	947,079	Monowai .. .. .	86,870
Waikaremoana .. .. .	200,775	Arnold River (Kaimata) .. .. .	108,153
"    Lower development .. .. .	672,192	Highbank .. .. .	207,953
"    Upper development .. .. .	674,616	Tekapo .. .. .	250,443
Karapiro .. .. .	654,825	Cobb .. .. .	433,460
Generating-station, buildings, and village—		Generating-station, buildings, and village—	
Arapuni .. .. .	465,135	Coleridge .. .. .	104,407
Horahora .. .. .	61,131	Waitaki .. .. .	468,542
Mangahao .. .. .	132,350	Monowai .. .. .	47,105
Waikaremoana .. .. .	290,000	Arnold River (Kaimata) .. .. .	8,818
"    Lower development .. .. .	91,470	Highbank .. .. .	60,918
Karapiro .. .. .	156,608	Cobb .. .. .	50,449
Generating plant and machinery—		Generating plant and machinery—	
Arapuni .. .. .	912,905	Coleridge .. .. .	231,887
Horahora .. .. .	95,116	Waitaki .. .. .	366,645
Mangahao .. .. .	219,853	Monowai .. .. .	62,101
Waikaremoana .. .. .	393,662	Arnold River (Kaimata) .. .. .	26,806
"    Lower development .. .. .	202,134	Highbank .. .. .	174,389
Karapiro .. .. .	319,118	Cobb .. .. .	76,652
Fuel stations (three)—Penrose, Huntly, and King's Wharf	416,951	Fuel stations (two)—Stoke and Dobson	155,400
Transmission and distribution—		Transmission and distribution—	
Primary distribution—		Primary distribution—	
11 kV. lines .. .. .	71,275	11 kV. lines .. .. .	573,960
33 kV. lines .. .. .		33 kV. lines .. .. .	59,447
50 kV. lines .. .. .	492,965	50 kV. lines .. .. .	763,211
66 kV. lines .. .. .		66 kV. lines .. .. .	430,640
110 kV. lines .. .. .	2,160,074	110 kV. lines .. .. .	346,089
Secondary distribution .. .. .		Secondary distribution .. .. .	
Substations—		Substations—	
11 kV. substations .. .. .	18,441	11 kV. substations .. .. .	4,394
33 kV. substations .. .. .		33 kV. substations .. .. .	50,216
50 kV. substations .. .. .	614,588	50 kV. substations .. .. .	780,460
66 kV. substations .. .. .		66 kV. substations .. .. .	351,877
110 kV. substations .. .. .	2,021,703	110 kV. substations .. .. .	
General—		General—	
General offices, garages, stores, and other accommodation	181,881	General offices, garages, stores, and other accommodation	40,921
Telephone services .. .. .	218,565	Telephone services .. .. .	95,249
Explorations and preliminary surveys; engineering, office, and general expenses; charges and expenses of raising loans	1,059,426	Explorations and preliminary surveys; engineering, office, and general expenses; charges and expenses of raising loans	580,073
Interest during construction .. .. .	1,281,392	Interest during construction .. .. .	635,886
Grand totals .. .. .	£16,888,212	Grand totals .. .. .	£9,418,613

TABLE III.—GOVERNMENT OPERATING OR WORKING COSTS FOR YEAR ENDED 31ST MARCH, 1945

	North Island System.				South Island System.			
	Cost.	Cost per Unit.			Cost.	Cost per Unit		
		Generated.	Distributed.	Sold.		Generated.	Distributed	
(a) Hydro stations .. .. .	£ 95,172	d. 0 0100	d. . . . .	d. . . . .	£ 55,895	d. 0 0247	d. . . . .	
(b) Fuel stations .. .. .	135,232	1 1228			10,916	12 7984		
(c) Auxiliary stations, power purchased, and standby provision	252,470	0 7672			11,342	0 4219		
Generated and purchased .. .. .	482,874	0 0756	0 0842	0 0847	78,153	0 0341	0 0391	
(d) Transmission .. .. .	52,358	0 0081	0 0091	0 0092	18,365	0 0080	0 0092	
(e) Communication system .. .. .	71,750	0 0112	0 0125	0 0125	37,376	0 0163	0 0187	
(f) Substations .. .. .	5,967	0 0009	0 0010	0 0010	2,141	0 0009	0 0011	
(g) Distribution .. .. .	1,863	0 0003	0 0003	0 0003	25,911	0 0113	0 0130	
(h) System operation .. .. .	24,269	0 0038	0 0042	0 0042	13,188	0 0058	0 0065	
(i) Management and general expenses .. .. .	146,255	0 0229	0 0255	0 0256	84,250	0 0368	0 0421	
	785,336	0 1220	0 1370	0 1378	259,384	0 1133	0 1297	

	North Island System	South Island System
Units generated—		
Hydro .. .. .	1,424,654,925	542,798,300
Fuel .. .. .	28,907,312	204,740
Purchased .. .. .	78,971,031	6,451,844
	1,532,533,268	549,454,884



TABLE IX.—STATISTICS OF POPULATION, CONSUMERS, GENERATING-PLANTS, SYSTEM VOLTAGE, ROUTE-MILES OF LINES, &C., FOR THE YEAR ENDED 31ST MARCH, 1945—continued

Authorities.	Population included in Area of Supply.	Number of Consumers.	Source of Supply.	Year when Supply commenced.	Capacity of Generating Plant.		Static Head in Feet.	Voltage.			Secondary Distribution (and System of Supply).	Distribution Transformers.		Route-miles of Lines.	Street Lighting System.	No.
					Main Plant.	Standby Plant.		Transmission.	Primary Distribution.	Number.		Total KVA.				
ARDS—continued	Number.	Number.			KW.	KVA.	Ft.						Miles.			
..	12,770	2,900	G.N.	1921	..	..	..	..	..	..	400/230 A.C.	306	6,900	359	Series and parallel	33
..	1,500	515	I.	1924	750*	939	380	..	..	..	400/230 A.C.	170	1,563	70	Parallel	34
..	42,310	10,940	G.N. & B.	1921	..	..	..	..	..	..	400/230 A.C.	697	10,768	1,007	Parallel	35
..	15,000	3,468	I. & G.S.	1933	750†	940	900/16/10	400	11,000	..	400/230 A.C.	181	4,630	204	Series and parallel	36
..	25,440	6,452	G.N.	1923	440*	542	420/200	2,500	11,000	..	400/230 A.C.	413	13,297	638	Series	37
..	3,800	635	I.	1925	837*	..	65	3,300 (6)	3,300	..	400/230 A.C.	224	1,857	193	Parallel	38
..	7,800	587	G.N.	1923	300†	780	..	400	11,000	..	400/230 A.C.	104	3,027	133	Parallel	39
..	18,010	5,187	G.S.	1926	..	..	250	3,300 (6)	11,000	..	400/230 A.C.	568	7,844	563	Series and parallel	40
..	52,340	18,801	G.N.	1926	192†	240	..	..	11,000	..	400/230 A.C.	687	26,505	1,285	Parallel	41
..	10,960	2,324	G.N.	1926	120*	160	..	..	11,000	..	400/230 A.C.	230	5,038	221	Parallel	42
..	46,230	12,530	G.N.	1924	1,500†	1,875	..	3,300 (6)	11,000	..	400/230 A.C.	775	18,754	978	Series and parallel	43
..	900,050	268,330	..	..	7,037	8,080	..	..	3,300	..	..	17,701	456,116	21,341	..	44
AL AUTHORITIES	Number.	Number.			KW.	KVA.	Ft.									
..	105,480	35,934	G.S.	1903	1,878†	2,340	700	6,600	11,000	..	400/230 A.C.	361	68,000	401	Series	1
..	88,000	32,033	I. & G.S.	1907	800†	D.C.	..	3,300 (6)	6,000	..	400/230 A.C.	945	45,384	631	Series	2
..	11,400	3,852	G.S.	1914	1,000†	1,250	..	3,300 (6)	11,000	..	400/230 A.C.	69	5,175	86	Series and parallel	3
..	23,600	7,587	I. & B.	1923	500†	624	..	3,300	11,000	..	400/230 A.C.	34	5,100	63	Series	4
..	121,000	42,820	B.	1924	8103*	1,020	..	3,300 (6)	11,000	..	400/230 A.C.	59	7,200	94	Parallel	5
..	306,570	130,443	G.N.	1888	2,000†	2,500	..	11,000 (6)	11,000	..	400/230 A.C.	163	60,350	324	Parallel	6
..	2,000	685	..	..	25,000†	31,000	..	..	3,300	..	..	1,631	195,218	1,699	..	..
..	17,280	6,276	G.S.	1903	33,176	40,084	..	..	..	..	..	..	..	..	..	..
..	1,270	422	G.N.	1913	..	..	..	..	3,300	..	400/230 A.C.	23	1,091	13	Series and parallel	1
..	1,610	592	B.	1905	..	..	..	..	11,000	..	400/230 A.C.	48	7,350	76	Parallel	2
..	3,000	1,017	G.S.	1917	..	..	..	..	3,300	..	400/230 A.C.	4	379	9	Parallel	3
..	15,950	4,904	B.	1913	400†	500	..	3,300 (6)	11,000	..	400/230 A.C.	10	1,100	14	Series	4
..	24,950	7,933	G.N.	1906	3,750*	4,500	120/240	6,000 (6)	11,000	..	400/230 A.C.	39	6,950	44	Parallel	5
..	2,540	613	G.N.	1914	1,200*	1,500	42	2,400 (6)	11,000	..	400/230 A.C.	280	13,569	378	Series and parallel	7
..	2,180	560	B.	1901	96*	120	65	3,300 (6)	3,300	..	400/230 A.C.	21	467	23	Series	8
..	1,300	478	L	1917	112†	141	270	460 (6)	3,300	..	400/230 A.C.	36	714	18	Parallel	9
..	920	300	I.	1924	144†	D.C.	510	460 (6)	..	..	400/230 D.C.	..	..	11	Parallel	10
..	9,300	461	I	1917	80*	100	600	3,300	3,300	..	400/230 A.C.	9	105	8	Parallel	11

Authorities.	Population included in Area of Supply.	Number of Consumers.	Source of Supply.	Year when Supply commenced.	Capacity of Generating Plant.		Standby Plant.	Static Head in Feet.	Generation.	Voltage.		Secondary Distribution (and System of Supply).	Distribution Transformers.	Route-miles of Lines.	Street Lighting System.	No.
					KW.	KVA. D.C.				Transmission.	Primary Distribution.					
Authorities— continued	Number.	Number.	I. & B.	1913	KVA. 150*	KVA. D.C.	KW. 75 <sup>§</sup>	30	510	..	11,000	400/230 D.C.	3	300	Parallel	19
..	2,210	704	I. & B.	1913	..	500	425*	25	3,300	..	6,600	400/230 A.C.	42	3,021	Parallel	20
..	4,330	1,283	G.N.	1924	..	..	..	110/80	3,300	..	11,000	400/230 A.C.	16	1,800	Parallel	21
..	3,910	1,695	I. & G.N.	1915	3,450**	4,300	..	600	3,300 (†)	50,000	400/230 A.C.	14	1,040	Parallel	22	
..	2,450	862	B.	1906	..	..	133**	..	3,300	33,000	400/230 A.C.	4	363	Parallel	23	
..	1,020	414	B.	1921	..	..	..	..	3,300	..	400/230 A.C.	18	1,480	Parallel	24	
..	4,220	1,300	B.	1914	..	..	290†*	130	3,300 (†)	..	400/230 A.C.	36	6,070	Series	25	
..	17,800	5,558	B.	1908	..	..	100**	..	400 (†)	..	400/230 A.C.	16	1,250	Parallel	26	
..	2,030	934	B.	1913	..	..	..	..	..	..	400/230 A.C.	10	550	Parallel	27	
..	2,060	725	B.	1917	..	..	..	430	3,300	..	400/230 A.C.	28	927	Parallel	28	
..	4,240	1,528	I. & B.	1925	100*	250	..	..	400	22,000	400/230 A.C.	12	1,625	Parallel	29	
..	2,000	811	B.	1922	..	..	..	..	..	..	400/230 A.C.	50	4,285	Parallel	30	
..	7,600	2,809	B.	1915	..	..	..	..	..	21,200	400/230 A.C.	1,034	66,603	Series and parallel	1	
Totals	156,360	62,559	..	..	4,201	4,975	7,025	..	..	..	..	..	..	..	..	2
..	1,700	449	B.	1916	..	..	..	..	..	..	..	..	..	..	..	3
..	380	1013	B.	1913	..	..	..	..	..	..	..	..	..	..	..	..
..	770	185	B.	1929	..	..	..	..	..	..	..	..	..	..	..	..
Totals	2,850	781	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	2,340	949	G.S.	1914	..	..	..	..	..	..	..	..	..	..	..	..
..	700	278	I.	1922	148†	185	..	..	400	..	11,000	400/230 A.C.	10	1,159	Series and parallel	1
..	800	203	I.	1922	80*	90	80†	105	3,300	..	3,300	400/230 A.C.	8	145	Series	2
..	500	112	I.	1925	30†	D.C.	..	..	3,300	..	3,300	400/230 A.C.	12	142	Parallel	3
..	14,280	4,782	G.S. & B.	1917	..	..	..	..	230	..	6,600	230 D.C.	..	..	Parallel	4
Totals	18,620	6,924	..	..	258	281	80	..	..	..	11,000	400/230 A.C.	86	5,810	Series and parallel	5
Totals, other Local Authorities	544,400	190,112	..	..	50,784	73,934	9,106	..	..	..	..	..	2,838	260,907	..	..
..	2,830	934	I.	1921	1,560*	1,050	150†	250/100	2,400	..	11,000	400/230 A.C.	6	1,580	Series	1
..	1,400	68	I.	1933	..	30	127	30	400	..	..	400/230 A.C.	..	..	Parallel	2
..	1,500	393	I.	1887	98*	D.C.	146†	..	250	..	..	230 D.C.	..	..	Parallel	3
..	300	58	I.	1936	121	D.C.	..	130	230	22,000	230 D.C.	..	..	Series	4	
..	500	203	I. & B.	1910	3,000**	3,750	..	260	5,500	..	400/230 A.C.	37	936	Series	5	
..	3,930	406	I. & B.	1928	845*	929	..	..	6,000	..	400/230 A.C.	47	1,560	Parallel	6	
Totals	9,400	2,062	..	..	5,630	6,065	308	..	..	..	..	..	90	4,076	..	..
Grand totals	1,594,440	473,827	..	..	395,370	463,356	93,436	..	..	..	..	..	22,542	768,767	..	..

S... Includes Ararua, Kororua, Waikaremano, and Mangahao power-stations interconnected.  
 \* Operation of plant available for generation for Public Works Department when required, by agreement.  
 † No return received. G.N. = Government Supply, North Island system; G.S. = Government Supply, South Island system; I = Independent supply (own plant); B = Built supply from another authority.  
 The following symbols are used to denote the type of prime mover: \* water, † steam, ‡ oil, § gas.  
 † Includes Lake Coleridge, Waikaki, Monowai, Arnold River power-stations interconnected, also Cobb.  
 ‡ Net actively functioning.  
 § Standby generating-plant capacity.

Total Population of Dominion as at 31st March, 1945, was—1,679,972.  
 Ratio of Total Population in Areas of Supply to total Population of Dominion = 94.91 per cent.











TABLE XI.—CAPITAL OUTLAY, FINANCIAL RESULTS OF GENERATION, DISTRIBUTION, AND OPERATION FOR THE YEAR ENDED 31ST MARCH, 1945—continued

Supply Authorities.	Capital Outlay on Electric-supply System.	Loans Liability.	Revenue.				Working-expenses.				Capital Charges.				Total Annual Costs.		Net Results.		Amount collected by Rates to make up Deficiency.	No.
			From Sale of Electrical Energy.		Trading Accounts Profits.	Other Sources (excluding Rates).	Total.	Cost of Power.	Cost of Transmission and Distribution.	Management and General.	Total.	Sinking Fund.	Depreciation.	Other Capital Charges.	Total.	Surplus.	Deficit.			
			Retail.	Bulk (for Resale).														General.		
<b>OTHER LOCAL AUTHORITIES—<i>cont.</i></b>																				
<i>Borough Councils</i>																				
Bluff	13,181	3,724	7,072	298	7,540	3,854	420	3,218	5,270	174	354	200	19	6,017	1,520	43,045	23,824	1,520	1	
Hamilton	93,528	6,000	60,654	200	66,888	20,931	0,876	3,218	40,025	314	1,340	60	1,546	43,045	23,824	1,520	43,045	23,824	2	
Englewood	10,688	9,413	5,251	200	5,451	2,809	803	585	3,760	406	223	60	140	4,006	1,520	43,045	23,824	1,520	3	
Kaupoi	15,756	5,401	13,224	240	13,330	5,843	2,447	101	8,451	251	223	173	..	9,173	1,520	43,045	23,824	1,520	4	
Lyttelton	17,617	2,922	13,224	106	14,474	23,391	7,518	3,850	26,303	5,006	1,170	393	..	27,473	1,520	43,045	23,824	1,520	5	
Napier	136,446	205,089	105,983	1,442	139,774	2,440	2,440	5,803	80,239	9,521	2,003	2,162	..	104,914	1,520	43,045	23,824	1,520	6	
New Plymouth	289,004	8,113	7,824	282	7,839	3,233	857	808	4,398	316	406	..	1,170	5,574	1,520	43,045	23,824	1,520	7	
Otakarepa	12,270	14,780	7,824	..	7,839	3,233	857	808	4,398	316	406	..	1,170	5,574	1,520	43,045	23,824	1,520	8	
Patea	21,053	10,716	6,224	..	6,224	3,146	865	985	6,031	469	356	..	439	7,175	1,520	43,045	23,824	1,520	9	
Pictou	17,175	8,931	2,458	3	2,461	..	403	472	1,371	387	302	143	..	2,420	1,520	43,045	23,824	1,520	10	
Greenstone	15,464	17,404	5,834	445	3,349	3,883	1,092	1,072	2,415	771	641	..	981	4,844	1,520	43,045	23,824	1,520	11	
Rangiora	25,321	3,129	8,344	90	8,472	..	1,436	885	6,904	137	278	..	99	6,777	1,520	43,045	23,824	1,520	12	
Riccarton	10,920	9,438	24,590	552	25,108	15,586	1,860	1,187	18,013	397	250	356	736	20,352	1,520	43,045	23,824	1,520	13	
Ross	50,182	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
Rotorua (Tourist Dept.)	135,703	105,703	47,072	..	50,163	10,430	7,543	5,611	35,661	4,652	1,861	..	..	44,035	1,520	43,045	23,824	1,520	15	
Sirahoti	37,188	34,461	17,597	..	17,603	7,490	2,745	1,043	11,214	401	1,562	..	225	14,452	1,520	43,045	23,824	1,520	16	
Summer	18,778	5,505	10,426	37	10,566	6,394	1,497	868	5,631	244	156	423	..	823	1,520	43,045	23,824	1,520	17	
Takapue	12,101	6,353	8,262	..	8,313	970	1,437	368	3,016	235	103	290	666	6,226	1,520	43,045	23,824	1,520	18	
Tauranga	83,761	45,180	15,373	95	386	5,602	1,407	1,709	10,330	1,945	1,631	..	1,081	15,587	1,520	43,045	23,824	1,520	19	
Taurarua	185,768	105,820	29,875	17	29,920	4,272	3,893	3,076	10,742	4,583	2,694	1,000	..	12,919	1,520	43,045	23,824	1,520	20	
Te Aroha	15,151	5,324	9,163	..	9,170	5,331	2,081	678	8,060	503	89	..	166	9,625	1,520	43,045	23,824	1,520	21	
Te Puke	15,151	5,324	9,163	..	9,170	5,331	2,081	678	8,060	503	89	..	166	9,625	1,520	43,045	23,824	1,520	22	
Thames	29,869	14,831	16,579	223	16,802	3,738	916	355	3,282	239	302	..	247	4,073	1,520	43,045	23,824	1,520	23	
Umaru	132,650	208	47,580	..	48,060	27,708	6,698	4,521	39,084	638	5,691	102	390	45,713	1,520	43,045	23,824	1,520	24	
Waikanae	15,731	11,967	15,638	41	15,755	8,448	2,352	684	10,414	479	491	..	360	11,744	1,520	43,045	23,824	1,520	25	
Waikato	14,856	7,000	6,792	..	6,792	3,017	2,064	1,441	4,441	332	332	171	..	5,530	1,520	43,045	23,824	1,520	26	
Wairoa	45,123	20,709	14,567	..	14,567	8,012	2,804	1,482	9,935	1,183	1,301	..	627	13,056	1,520	43,045	23,824	1,520	27	
Westport	41,745	29,255	13,680	53	13,733	14,981	6,250	4,947	25,688	1,287	1,115	2,697	475	9,487	1,520	43,045	23,824	1,520	28	
Whakatane	124,856	24,882	33,548	622	37,211	14,981	6,250	4,947	25,688	1,287	1,115	2,697	475	9,487	1,520	43,045	23,824	1,520	29	
Whangarei	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30
Totals	1,643,307	897,014	603,600	41,398	692,721	255,826	99,472	50,470	425,411	38,756	27,322	11,104	22,496	535,089	138,583	991	1,643,307	897,014	603,600	41,398
<i>Town Boards</i>																				
Kaponga	23,748	12,674	8,060	146	8,290	3,937	1,314	992	6,656	527	473	..	244	7,900	350	23,748	12,674	8,060	146	1
Manawatu	4,646	2,150	1,493	130	1,673	831	584	229	1,644	91	22	..	..	2,056	..	4,646	2,150	1,493	130	2
Manurewa	2,790	3,500	1,282	..	1,282	391	58	550	699	146	94	..	..	942	..	2,790	3,500	1,282	..	3
Totals	31,184	18,324	10,835	276	11,175	5,159	1,956	1,471	8,999	767	589	244	1,800	10,808	363	31,184	18,324	10,835	276	1
<i>County Councils</i>																				
Heathcote	11,710	11,488	12,992	101	13,024	8,536	1,840	398	10,774	456	..	865	436	12,531	..	11,710	11,488	12,992	101	1
Kaitiaki	8,763	8,763	5,043	..	5,043	..	97	345	2,970	406	..	..	584	3,969	..	8,763	8,763	5,043	..	2
Kaitiaki	11,805	9,488	5,800	32	2,952	..	609	442	1,533	433	..	563	430	2,959	..	11,805	9,488	5,800	32	3
Ōhāuriwai	1,800	1,201	1,201	..	1,201	..	..	44	1,511	..	..	..	..	1,511	..	1,800	1,201	1,201	..	4
Waikato	107,685	14,700	42,557	49	42,647	28,068	3,260	2,750	34,978	687	2,068	4,000	..	42,342	..	107,685	14,700	42,557	49	5
Totals	141,763	44,377	63,510	323	64,380	37,504	5,806	3,970	51,775	1,982	2,068	6,037	1,450	63,312	47	141,763	44,377	63,510	323	1
Totals, other local authorities	6,278,222	2,916,342	2,103,510	238,396	2,403,981	869,964	292,798	162,847	1,560,452	150,901	105,779	52,066	40,793	1,879,991	1,381	6,278,222	2,916,342	2,103,510	238,396	1
<b>COMPANIES</b>																				
Canterbury Electric, Ltd.	74,086	60,000	13,898	40	13,978	..	1,717	3,088	10,028	2,394	..	1,091	..	13,508	..	74,086	60,000	13,898	40	1
Co. of New Zealand, Ltd.	5,175	5,175	763	..	763	..	..	774	783	..	..	..	..	783	..	5,175	5,175	763	..	2
Electric Light and Power Co., Ltd.	7,443	6,000	9,956	47	4,082	..	632	1,357	2,830	..	..	215	..	3,043	..	7,443	6,000	9,956	47	3
Electric Light and Power Co., Ltd.	684	400	764	..	764	..	2,180	91	1,208	7	..	60	..	1,281	..	684	400	764	..	4
Electric Light and Power Co., Ltd.	71,715	83,725	9,323	..	20,488	..	2,232	1,170	10,193	..	..	1,952	..	12,145	..	71,715	83,725	9,323	..	5
Electric Light and Power Co., Ltd.	76,435	41,070	7,123	91	7,395	..	803	2,692	5,441	2,211	..	1,445	..	9,097	..	76,435	41,070	7,123	91	6
Electric Light and Power Co., Ltd.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	943,542	100,970	95,947	164	100,970	..	..	..	..	..	..	..	..	..	..	943,542	100,970	95,947	164	..

TABLE XIII.—AVERAGES DERIVED FROM PREVIOUS TABLES FOR THE YEAR ENDED 31ST MARCH, 1945

Supply Authorities.	Capital Outlay.			Revenue from Sale of Electricity.				Working-costs.			Capital Charges.			Total Costs.		
	Per Head of Population.	Per Cent. of Consumer.	£(N.Z.)	Per Unit sold (Overall including Bank Supply).	Per Unit sold (Domestic Supply).	Per Head of Population.	Per Cent. of Retail Consumer.	Per kW. of Maximum Demand.	Route-able of Line. (q)	Per Unit sold.	Per kW. of Maximum Demand.	Per Cent. of Capital Outlay.	Per Unit sold.	Per kW. of Maximum Demand.	Per Cent. of Distribution Capital.	
																d.
<b>PUBLIC WORKS DEPARTMENT</b>																
1. North Island system <sup>1</sup>	22.06	5.45	0.909	0.900	0.756	4.19	15.25	75.37	0.530	11.35	0.323	0.53	0.862	18.40	17.30	
2. South Island system <sup>2</sup>	15.53	3.17	0.701	0.682	0.761	5.00	14.25	19.13	0.480	7.40	0.190	0.52	0.652	10.48	27.04	
Totals	18.60	4.31	0.805	0.791	0.761	4.59	14.75	47.25	0.505	9.40	0.256	0.52	0.752	14.44	22.17	
<b>POWER BOARDS</b>																
1. Ashburton	15.53	3.17	0.701	0.682	0.761	5.00	14.25	19.13	0.480	7.40	0.190	0.52	0.652	10.48	27.04	
2. Auckland	12.08	3.86	0.740	0.834	0.838	3.30	20.92	178.61	0.675	14.12	0.404	0.78	1.294	22.49	30.80	
3. Banks Peninsula	29.31	3.70	0.977	0.989	1.062	5.42	15.50	159.10	0.570	11.16	0.322	0.69	0.802	17.23	24.07	
4. Bay of Plenty	18.01	5.19	0.932	0.875	0.875	4.56	16.17	63.08	0.502	12.72	0.326	0.76	0.919	19.75	19.03	
5. Bay of Plenty	39.20	4.40	0.793	0.853	0.853	4.56	16.17	137.50	0.512	12.72	0.326	0.76	0.919	19.75	19.03	
6. Blenheim	29.82	7.75	1.296	1.239	1.239	3.48	12.97	117.11	0.683	14.40	0.537	0.80	1.233	25.70	21.35	
7. Cambridge	19.78	4.30	0.728	0.729	0.717	4.03	16.60	16.73	0.581	11.80	0.192	0.15	0.074	15.48	15.70	
8. Central Hawke's Bay	11.90	0.99	0.629	0.600	0.600	2.47	12.63	17.34	0.487	11.81	0.150	0.39	0.484	16.60	24.44	
9. Central Otago	13.35	4.50	0.763	0.763	0.763	5.26	17.63	236.02	0.494	10.82	0.150	0.39	0.484	16.60	24.44	
10. Dunedin	10.80	3.58	0.680	0.680	0.680	4.50	12.45	312.40	0.449	10.35	0.137	0.35	0.432	13.01	32.30	
11. Golden Bay	15.82	4.37	0.980	0.881	0.881	4.50	12.45	16.57	0.449	10.35	0.137	0.35	0.432	13.01	32.30	
12. Grey	8.54	2.18	0.657	0.657	0.591	3.93	11.29	803.61	0.519	11.41	0.234	0.67	0.813	15.94	25.90	
13. Hawke's Bay	10.46	0.76	0.647	0.647	0.591	3.93	11.29	803.61	0.519	11.41	0.234	0.67	0.813	15.94	25.90	
14. Horowhenua	24.46	3.48	0.644	0.644	0.644	4.87	18.19	54.36	1.140	10.83	0.780	1.11	1.035	33.49	14.47	
15. Hutt Valley	23.91	6.68	1.731	1.730	1.634	3.62	14.03	924.35	0.416	8.63	0.158	0.47	0.573	11.04	24.07	
16. King-country	15.25	78.22	0.900	0.900	0.814	3.60	18.02	186.32	0.728	12.86	0.701	0.05	1.429	25.25	26.67	
17. Manawatu	18.81	4.89	1.005	1.005	1.244	3.40	18.74	103.12	0.652	11.92	0.282	0.11	0.834	18.03	21.16	
18. Manawatu-Oroua	31.40	93.44	1.005	1.005	1.244	3.40	18.74	103.12	0.652	11.92	0.282	0.11	0.834	18.03	21.16	
19. Marlborough	10.45	67.31	0.640	0.640	0.616	4.00	19.25	73.91	0.568	12.61	0.290	0.66	0.943	18.87	10.10	
20. North Auckland	24.07	6.40	0.670	0.670	0.616	4.00	19.25	73.91	0.568	12.61	0.290	0.66	0.943	18.87	10.10	
21. North Canterbury	12.32	73.61	1.072	1.040	0.938	2.80	13.05	102.13	0.220	4.44	0.200	0.77	0.891	19.77	27.11	
22. Otago	16.58	3.55	0.915	0.915	0.856	4.42	16.62	203.68	0.638	10.98	0.301	0.60	0.738	21.28	14.08	
23. Poverty Bay	32.54	7.26	0.754	0.754	0.659	3.46	17.90	149.51	0.514	9.07	0.177	0.41	0.747	15.23	28.17	
24. Springs-Ellesmere	20.03	8.88	0.808	0.808	0.659	3.46	17.90	149.51	0.514	9.07	0.177	0.41	0.747	15.23	28.17	
25. South Canterbury	21.14	4.96	0.640	0.640	0.640	4.20	18.77	151.63	0.588	12.32	0.182	0.50	0.738	21.28	14.08	
26. South Taranaki	41.63	8.49	0.200	0.200	0.545	4.78	13.20	151.63	0.588	12.32	0.182	0.50	0.738	21.28	14.08	
27. Tairāhiki	21.41	82.85	0.550	0.512	0.805	2.50	10.23	165.03	0.098	3.24	0.151	4.98	0.805	19.48	17.27	
28. Tairāhiki	21.41	82.85	0.550	0.512	0.805	2.50	10.23	165.03	0.098	3.24	0.151	4.98	0.805	19.48	17.27	
29. Tairāhiki	15.67	61.83	0.850	0.814	0.803	2.70	14.93	145.54	0.072	10.61	0.310	5.03	0.812	16.06	16.95	
30. Tairāhiki	22.72	3.69	0.606	0.606	0.606	3.04	14.93	145.54	0.072	10.61	0.310	5.03	0.812	16.06	16.95	
31. Tairāhiki	9.72	3.02	0.853	0.836	0.836	3.01	12.05	154.57	0.261	10.97	0.167	3.43	0.702	14.40	27.32	
32. Tairāhiki	13.60	35.47	0.826	0.826	0.826	3.01	12.05	154.57	0.261	10.97	0.167	3.43	0.702	14.40	27.32	
33. Tairāhiki	14.52	68.47	0.902	0.902	0.871	4.14	11.34	108.01	0.610	11.23	0.228	6.83	0.847	14.93	27.32	
34. Tairāhiki	14.75	4.06	0.920	0.920	0.816	3.49	11.60	177.44	0.563	11.23	0.182	3.64	0.746	14.88	28.57	
35. Tairāhiki	54.43	4.00	0.920	0.920	0.816	3.49	11.60	177.44	0.563	11.23	0.182	3.64	0.746	14.88	28.57	
Totals	15.06(m)	3.92(a)	0.810(b)	0.850(c)	0.816	3.05(r)	14.314(s)	188.85(d)	0.512(e)	11.75	0.224(f)	6.08(h)	0.737(i)	17.02	24.40(l)	

(For notes see page 15.)

<sup>1</sup> Includes Lakes Coleridge, Waikaremoa, King's Wharf, Ferriss, and Huntly power-stations. <sup>2</sup> Not actively functioning. <sup>3</sup> License delegated to Westland Power, Ltd. <sup>4</sup> Includes 289,282 cost of operating standby plants. <sup>5</sup> Includes 289,282 cost of operating standby plants. <sup>6</sup> Includes 289,282 cost of operating standby plants. <sup>7</sup> Includes 289,282 cost of operating standby plants. <sup>8</sup> Includes 289,282 cost of operating standby plants. <sup>9</sup> Includes 289,282 cost of operating standby plants. <sup>10</sup> Includes 289,282 cost of operating standby plants. <sup>11</sup> Includes 289,282 cost of operating standby plants. <sup>12</sup> Includes 289,282 cost of operating standby plants. <sup>13</sup> Includes 289,282 cost of operating standby plants. <sup>14</sup> Includes 289,282 cost of operating standby plants. <sup>15</sup> Includes 289,282 cost of operating standby plants. <sup>16</sup> Includes 289,282 cost of operating standby plants. <sup>17</sup> Includes 289,282 cost of operating standby plants. <sup>18</sup> Includes 289,282 cost of operating standby plants. <sup>19</sup> Includes 289,282 cost of operating standby plants. <sup>20</sup> Includes 289,282 cost of operating standby plants. <sup>21</sup> Includes 289,282 cost of operating standby plants. <sup>22</sup> Includes 289,282 cost of operating standby plants. <sup>23</sup> Includes 289,282 cost of operating standby plants. <sup>24</sup> Includes 289,282 cost of operating standby plants. <sup>25</sup> Includes 289,282 cost of operating standby plants. <sup>26</sup> Includes 289,282 cost of operating standby plants. <sup>27</sup> Includes 289,282 cost of operating standby plants. <sup>28</sup> Includes 289,282 cost of operating standby plants. <sup>29</sup> Includes 289,282 cost of operating standby plants. <sup>30</sup> Includes 289,282 cost of operating standby plants. <sup>31</sup> Includes 289,282 cost of operating standby plants. <sup>32</sup> Includes 289,282 cost of operating standby plants. <sup>33</sup> Includes 289,282 cost of operating standby plants. <sup>34</sup> Includes 289,282 cost of operating standby plants. <sup>35</sup> Includes 289,282 cost of operating standby plants. <sup>36</sup> Includes 289,282 cost of operating standby plants. <sup>37</sup> Includes 289,282 cost of operating standby plants. <sup>38</sup> Includes 289,282 cost of operating standby plants. <sup>39</sup> Includes 289,282 cost of operating standby plants. <sup>40</sup> Includes 289,282 cost of operating standby plants. <sup>41</sup> Includes 289,282 cost of operating standby plants. <sup>42</sup> Includes 289,282 cost of operating standby plants. <sup>43</sup> Includes 289,282 cost of operating standby plants. <sup>44</sup> Includes 289,282 cost of operating standby plants.

TABLE XIII.—AVERAGES DERIVED FROM PREVIOUS TABLES FOR THE YEAR ENDED 31ST MARCH, 1945—continued

Supply Authorities.	Capital Outlay.			Revenue from Sale of Electricity.					Working-costs.			Capital Charges.			Total Costs.			No.
	Per Head of Population.	Per Consumer.	Per £1 of Revenue.	Per Unit sold (Overall including Bulk Supply).	Per Unit sold (excl. Bulk Supply).	Per Unit sold (Domestic Supply).	Per Head of Population.	Per Retail Consumer.	Per kW. of Maximum Demand.	Per kWh. of Maximum Demand.	Per Cent. of Local Revenue.	Per Unit sold.	Per kW. of Maximum Demand.	Per Cent. of Capital Outlay.	Per Unit sold.	Per kW. of Maximum Demand.	Per Cent. of Distribution Capital.	
<b>OTHER LOCAL AUTHORITIES</b>																		
1. Christchurch	11.13	32.08	2.81	0.706	0.753	0.612	3.76	11.03	10.47	10.31	0.404	0.087	1.30	4.30	0.581	8.63	20.30	
2. Dunedin	24.33	61.92	5.60	0.720	0.753	0.577	4.91	10.27	11.42	10.38	0.294	0.198	3.03	4.92	0.493	14.53	24.00	
3. Invercargill	7.84	29.60	2.64	1.217	1.231	1.135	3.54	8.06	18.32	15.95	0.845	0.127	1.91	3.96	0.973	41.45	41.45	
4. Nelson	13.44	39.78	4.16	2.316	2.316	2.143	3.29	9.56	27.78	20.01	0.671	0.400	5.87	5.08	2.161	34.05	34.05	
5. Timarua North	13.61	42.33	3.24	0.793	0.783	0.546	4.11	12.25	14.31	9.83	0.551	0.091	1.63	3.51	0.641	11.57	40.32	
6. Wellington	13.40	37.87	2.52	0.831	0.865	0.509	4.40	11.02	16.71	12.83	0.638	0.038	0.77	1.82	0.677	13.60	40.00	
Totals	12.17(m)	33.95(n)	2.75(e)	0.757(f)	0.796(g)	0.500	4.00(r)	10.94(s)	10.39(t)	64.48(u)	0.621(v)	0.106(w)	..	4.63(x)	0.621(y)	..	33.15(z)	
<b>Borough Councils</b>																		
1. Bluff	6.40	20.75	1.86	2.201	2.261	4.286	3.66	11.14	19.54	14.50	1.685	0.230	2.06	5.66	1.024	16.62	45.58	
2. Hamilton	5.41	14.00	1.40	1.035	1.035	1.035	4.29	10.03	17.30	10.38	0.621	0.047	0.78	3.23	0.668	11.16	46.14	
3. Inglewood	8.41	22.63	1.73	1.355	1.355	1.241	3.54	9.22	18.20	15.95	0.902	0.244	3.82	8.85	1.210	10.07	51.78	
4. Napier	5.76	16.81	1.33	1.254	1.254	1.174	4.36	12.01	14.44	13.09	0.801	0.192	2.16	4.13	1.041	16.35	30.74	
5. Lyttelton	8.55	27.82	2.20	1.001	0.987	0.775	3.20	11.83	23.30	11.78	0.600	0.060	1.07	4.13	0.870	12.80	52.00	
6. Napier	15.63	40.25	3.10	0.615	0.757	0.637	4.39	16.79	32.30	21.32	0.383	0.120	4.17	7.85	0.788	19.33	43.53	
7. New Plymouth	4.83	20.01	1.80	1.248	1.248	1.058	2.37	9.35	31.95	282.04	0.827	0.281	7.20	6.91	0.513	16.13	69.88	
8. Okarene	0.65	37.50	2.60	1.047	1.047	1.047	3.00	13.06	10.40	4.84	0.807	0.162	7.00	11.88	1.098	28.37	57.70	
9. Patea	12.35	35.93	2.75	3.980	3.980	4.407	4.47	13.02	47.15	568.82	3.998	0.682	7.01	5.30	4.591	54.35	75.62	
10. Queenstown	10.80	51.61	6.20	2.185	2.185	2.400	2.68	8.10	28.58	307.25	1.129	0.730	9.07	9.80	1.808	24.45	89.40	
11. Raetihi	10.80	51.25	4.31	1.778	1.778	1.644	2.72	11.81	208.35	8.94	0.786	0.740	8.90	9.80	1.476	17.93	38.09	
12. Rangiora	4.87	12.75	1.31	1.056	1.056	0.869	3.78	9.75	10.40	73.24	0.785	0.086	3.40	3.40	0.871	16.07	49.19	
13. Rangiora	8.54	22.69	2.04	0.708	0.708	0.567	4.39	11.12	12.53	9.49	0.536	0.056	1.88	3.40	0.580	10.37	40.45	
14. Riccarton	12.68	34.80	2.89	1.230	1.230	1.051	4.69	12.07	20.46	15.50	0.931	0.210	3.64	6.16	1.150	19.14	33.10	
15. Ross	5.24	28.06	1.81	1.026	1.026	0.834	4.51	13.28	20.23	12.89	0.654	0.180	3.72	8.70	0.843	10.01	38.87	
16. Rotorna (Tourist Department)	5.21	14.98	1.46	1.700	1.700	1.026	2.93	8.31	13.37	11.07	0.604	0.058	1.06	4.38	0.662	12.13	50.34	
17. Sumner	5.47	65.28	3.58	0.880	0.880	1.483	3.76	11.73	15.38	15.38	1.032	0.248	3.69	9.94	1.280	19.07	110.00	
18. Taupo	47.63	100.50	5.94	0.433	0.433	0.620	3.06	11.98	36.63	17.13	0.414	0.176	7.30	5.65	0.590	24.43	40.00	
19. Taupo	8.37	25.80	2.13	1.107	1.107	0.937	3.97	10.75	15.71	8.42	0.140	0.095	2.31	4.25	0.923	15.47	28.41	
20. Tairāwhiti	14.82	29.80	3.15	1.148	1.148	1.017	4.70	11.56	24.40	12.02	0.750	0.183	3.11	5.23	0.941	16.03	26.94	
21. Te Aroha	7.08	23.55	2.70	0.859	0.859	0.970	2.72	8.43	18.37	14.04	0.681	0.116	1.71	3.87	0.921	20.08	58.71	
22. Te Puke	7.45	16.84	1.00	1.096	1.096	0.970	6.09	16.74	18.22	12.14	0.730	0.083	1.55	4.98	0.823	13.68	34.48	
23. Tairāwhiti	3.88	18.80	2.00	2.646	2.646	2.181	3.51	9.28	20.97	13.83	0.830	0.204	3.39	7.59	1.034	17.22	38.52	
24. Tairāwhiti	10.64	20.55	3.00	1.172	1.172	0.975	0.87	10.86	10.52	48.11	1.804	0.567	7.98	6.91	2.371	33.39	43.61	
25. Westport	20.87	51.47	2.95	1.150	1.150	0.980	4.00	11.57	16.64	12.69	0.884	0.247	4.58	3.38	1.030	15.10	20.61	
26. Whakatane	16.42	43.03	3.73	0.875(b)	0.883(c)	0.980	3.97(r)	11.48(s)	..	..	0.577(t)	0.136(u)	..	6.07(v)	0.713(w)	..	42.55(x)	
27. Whangarei	10.51(m)	31.27(n)	2.548(o)	0.875(b)	0.883(c)	0.980	3.97(r)	11.48(s)	..	..	0.577(t)	0.136(u)	..	6.07(v)	0.713(w)	..	42.55(x)	
Totals	13.07	52.80	2.95	1.181	1.181	1.173	4.84	17.95	23.91	19.75	0.975	0.182	3.69	5.23	1.157	23.44	33.27	
1. Naponga	12.22	31.00	2.11	1.167	1.167	1.167	4.40	10.15	17.36	19.11	1.280	0.322	4.79	8.80	1.608	23.00	39.01	
2. Mangaweka	3.62	15.08	2.18	4.811	4.811	4.819	1.66	6.93	34.65	18.80	2.007	0.906	6.56	8.71	3.513	26.45	33.76	
3. Manuani	10.94(m)	39.98(n)	2.89(o)	1.204(p)	1.204(q)	1.204	3.92(r)	13.80(s)	..	..	1.075(t)	0.227(u)	..	6.08(v)	1.392(w)	..	36.93(x)	
Totals	10.94(m)	39.98(n)	2.89(o)	1.204(p)	1.204(q)	1.204	3.92(r)	13.80(s)	..	..	1.075(t)	0.227(u)	..	6.08(v)	1.392(w)	..	36.93(x)	

(For notes see page 16.)

TABLE XIII.—AVERAGES DERIVED FROM PREVIOUS TABLES FOR THE YEAR ENDED 31st MARCH, 1945—continued

supply Authorities.	Capital Outlay.				Revenue from Sale of Electricity.						Working-costs.			Capital Charges.			Total Costs.		
	Per Head of Population.	Per Consumer.	Per £1 of Revenue.	Per Unit sold (Overall including Bulk Supply).	Per Unit sold (excluding Bulk Supply).	Per Unit sold (Domestic Supply).	Per Head of Population.	Per Retail Consumer.	Per kW. of Maximum Demand.	Per Route-mile of Line.	Per Unit sold.	Per kW. of Maximum Demand.	Per Cent. of Capital Outlay.	Per Unit sold.	Per kW. of Maximum Demand.	Per Cent. of Capital Outlay.	Per Unit sold.	Per kW. of Maximum Demand.	Per Cent. of Discretion Capital.
<b>OTHER LOCAL AUTHORITIES—continued</b>																			
1. Headhote County Councils	5.00	12.34	0.91	0.797	0.797	0.738	5.56	13.41	11.20	760.17	0.664	0.34	82.72	0.198	1.52	15.60	0.772	10.86	107.01
2. Kaikoura	12.52	58.15	2.22	6.582	6.582	3.380	3.05	14.19	59.50	493.12	4.970	42.55	70.32	1.651	14.14	11.20	6.621	56.69	131.72
3. Murchison	14.75	58.15	4.08	1.863	1.863	2.380	3.05	14.23	22.23	180.62	0.988	11.70	52.46	0.919	10.97	12.07	1.907	22.76	50.36
4. Uawa	3.60	10.07	1.50	12.116	13.080	13.080	3.00	10.73	54.60	343.15	15.243	68.70	100.73	0.117	1.92	6.83	15.243	68.70	210.44
5. Waikari	7.54	22.51	2.52	0.680	0.679	0.604	2.98	8.90	11.12	238.21	0.588	9.12	82.10	0.117	1.92	6.83	0.675	11.04	39.32
Totals	7.62(m)	22.50(n)	2.23(a)	0.783(b)	0.783(c)	..	3.40(r)	10.08(s)	..	302.60(d)	0.698(e)	..	80.52(f)	0.142(g)	..	8.12(h)	0.780(k)	..	49.08(l)
Totals, other local authorities	11.53(m)	32.85(m)	2.05(a)	0.811(b)	0.843(c)	..	3.93(r)	11.00(s)	..	749.30(d)	0.540(e)	..	64.91(f)	0.111(g)	..	5.00(h)	0.651(k)	..	35.76(l)
<b>COMPANIES</b>																			
1. Kanget Electric, Limited	26.17	79.33	5.33	0.857	0.857	2.276	4.04	14.88	12.43	463.26	0.587	8.96	71.70	0.207	3.12	4.71	0.804	12.08	76.60
2. Leo Reys, Limited	12.04	76.10	0.60	11.063	11.063	4.493	1.96	11.51	361.50	391.50	11.983	22.46	169.00	0.268	1.70	2.88	3.769	94.16	89.50
3. Repton Electric Light and Power Co., Ltd.	4.96	18.63	1.88	4.936	4.936	10.894	2.72	10.00	31.30	565.14	3.531	400.66	158.11	0.843	0.08	19.51	14.805	106.74	1,557.68
4. Revenue Agency, Ltd.	2.31	11.06	0.91	8.826	8.826	10.894	2.55	13.18	63.66	764.00	13.956	3.19	34.55	0.024	0.60	2.71	0.152	3.70	84.93
5. Wilsons (S.A.) Portland Cement, Ltd.	143.43	353.27	2.46	0.365	0.339	1.332	19.30	45.92	9.11	767.37	0.128	10.10	73.87	0.613	10.88	4.85	1.526	27.07	30.76
6. Westland Power, Ltd.	19.19	185.80	10.37	1.250	1.321	2.097	1.83	17.54	21.65	98.29	0.913	..	53.94(f)	0.001(g)	..	4.00(h)	0.354(k)	..	59.05(l)
Totals	24.79(m)	110.42(n)	4.20(a)	0.539(b)	0.703(c)	..	3.84(r)	17.40(s)	..	369.76(d)	0.294(e)	..	55.01(f)	0.170(g)	..	5.42(h)	0.500(k)	..	24.48(l)
Grand totals, 1945	30.64(m)	102.91(n)	5.28(a)	0.839(b)	0.873(c)	..	4.07(r)	13.31(s)	..	300.89(d)	0.330(e)	..	55.17	0.174	..	5.71	0.503	..	25.36
" 1944	28.95	98.60	5.20	0.846	0.881	..	3.96	12.51	..	298.07	0.323	..	54.46	0.183	..	5.88	0.506	..	25.03
" 1943	27.86	95.91	5.26	0.849	0.874	..	3.73	11.86	..	277.08	0.343	..	56.52	0.181	..	5.64	0.525	..	25.45
" 1942	27.60	96.10	5.42	0.853	0.803	..	3.60	11.54	..	277.08	0.343	..	56.52	0.181	..	5.64	0.525	..	25.45
" 1941	26.31	93.06	5.24	0.802	0.815	..	3.54	11.74	..	280.97	..	..	..	..	..	5.55	..	..	25.07
" 1940	25.69	92.11	5.61	0.937	0.987	..	3.35	11.19	..	250.00	..	..	..	..	..	..	..	..	25.25

Average Revenue per Unit (kWh) sold for all Purposes for Year ended 31st March, 1945 : 0.839d.

Notes.—(a) Derived from items 7 and 11, Table XIII. (b) Derived from items 4 and 9, Table XIII. (c) Derived from items 6 and 11, Table XIII. (d) Derived from items 3 and 15, Table XIII. (e) Derived from items 3 and 18, Table XIII. (f) Derived from items 7 and 10, Table XIII. (g) Derived from items 2 and 7, Table XIII. (h) Derived from items 2 and 14, Table XIII. (i) Revenue from retail sales divided by total units sold retail. (j) Gross revenue excluding bulk sales and rates. (k) Revenue from retail plus bulk sales. (l) Revenue from items 1 and 14, Table XIII. (m) Revenue from items 1 and 7, Table XIII. (n) Revenue from items 2 and 7, Table XIII. (o) Revenue from items 2 and 9, Table XIII. (p) Revenue from retail plus bulk sales. (q) Revenue from items 1 and 14, Table XIII. (r) Derived from items 1 and 14, Table XIII. (s) Includes Coleridge, Waitaki, Monowai, Arnold, and Cobb power-stations. (t) Includes Arahua, Horahua, Mangahua, and Waikaremoana power-stations. (u) No return received.

TABLE XIII  
Large Industrial and Traction Loads.—Units sold and Revenue received for Year ended 31st March, 1945

Supply Authority.	Type of Load.	Units sold.	Revenue.
		KWh.	£(N.Z.)
PUBLIC WORKS DEPARTMENT			
North Island system ..	Public Works Department, Karapiro and traction	4,208,760	5,854
	Gold-mining	14,870,210	32,487
	Freezing-works	16,292,920	14,221
	Dairy-factories	2,240,760	3,660
	Gold-dredging	910,190	2,847
	Traction	10,124,560	34,188
South Island system ..	Traction and traction	10,189,070	19,105
	Freezing-works	8,000,240	23,522
	Alloy Steel Co.	2,823,100	0,540
		1,284,770	2,409
Totals ..		79,034,420	145,033
ELECTRIC-POWER BOARDS			
Auckland ..	Traction	95,391,920	63,157
Grey ..	Gold-mining	10,470,600	21,532
	Gold-mining	11,864,911	22,540
Otago Central ..	Gold-dredging	4,669,928	14,370
Wanganui-Rangitikei ..	Traction	1,307,460	2,834
Totals ..		54,673,880	124,442
CITIES AND BOROUGHS			
Dunedin ..	Traction	4,617,356	9,294
Invercargill ..	Traction	738,700	2,462
New Plymouth ..	Traction	1,005,780	1,800
Wellington ..	Traction	12,110,187	32,794
Bluff ..	Freezing-works	364,270	1,005
Totals ..		18,836,302	47,955
COMPANIES			
Kanieri Electric, Ltd. ..	Gold-dredging	2,658,300	4,153
Westland Power, Ltd. ..	Gold-mining	2,270,250	802
Wilson's (N.Z.) Portland Cement, Ltd.	Sawmilling	175,642	4,112
	Cement-manufacture	6,353,740	7,751
Totals ..		9,463,932	13,878
Totals for all supply authorities		192,008,384	331,308

TABLE XIII B  
Summary of Totals from Tables IX, X, and XI

Item.	Public Works Department.	Electric-power Boards.	Other Local Authorities.					Company.	Totals all Supply Authorities.
			City Councils.	Borough Councils.	Town Boards.	County Councils.	Total.		
1. Population ..	No. 50,530	No. 990,050	No. 366,570	No. 18,630	No. 544,400	No. 9,400	No. 1,504,140		
2. Number of consumers ..	13,383	268,330	52,559	6,324	100,119	2,062	1,573,837		
3. Retail units sold (bulk plus retail)	1,841,937,879	1,177,933,121	494,420,283	10,474,892	692,704,388	24,870,105	2,737,565,490		
4. Units sold retail	121,327,501	1,071,345,876	429,736,048	10,462,374	598,490,447	73,238,089	1,803,401,313		
5. Units sold retail less units sold for large industrial and traction loads (see Table XIII A)	42,283,081	1,016,672,196	412,269,805	10,462,374	579,654,145	2,774,157	1,641,835,379		
6. Route-miles of lines ..	5,550	21,341	1,244	240	3,125	151	30,167		
7. Capital outlay on transmission and distribution systems ..	£(N.Z.) 20,539,988	£(N.Z.) 15,790,418	£(N.Z.) 1,643,367	£(N.Z.) 141,763	£(N.Z.) 0,278,222	£(N.Z.) 234,548	£(N.Z.) 48,852,176		
8. Revenue (retail sales) ..	11,079,280	14,073,807	1,234,094	120,001	5,256,059	67,545	31,676,701		
9. Revenue (retail sales) ..	331,673	3,836,259	603,600	63,516	2,103,516	35,847	6,307,305		
10. Revenue (bulk sales) ..	2,334,993	186,437	41,308	49	238,336	19,988	2,779,654		
11. Revenue from retail sales, less revenue from large industrial and traction loads (see Table XIII A)	2,066,066	4,022,706	644,292	63,565	2,841,852	55,835	9,086,950		
12. Gross revenue (excluding rates) ..	186,640	3,711,827	600,195	63,516	2,055,561	21,969	5,975,997		
13. Gross revenue (less revenue from bulk sales)	2,897,162	4,095,916	662,721	64,330	2,403,961	56,460	9,252,619		
14. Working-costs ..	362,160	3,008,879	621,323	64,281	2,165,645	36,472	6,472,965		
15. Capital charges ..	1,938,052	2,515,758	455,411	51,775	1,560,462	30,478	5,144,740		
16. Total costs ..	1,215,256	1,162,225	529,678	11,830	310,539	9,381	2,646,401		
17. Total costs ..	2,553,308	3,617,983	525,089	63,312	1,879,991	39,859	7,791,141		



TABLE XIV.—RETURN OF ELECTRIC RANGES, WATER-HEATERS, AND MILKING-MACHINES CONNECTED TO ELECTRIC-SUPPLY SYSTEMS AS AT 31ST MARCH, 1945

Supply Authorities.	Number of Consumers.			Ranges.			Water-heaters.			Milkling-machines.			
	Domestic.	Commercial.	Total.	Under 5 Kilowatts.	5 Kilowatts and over.	Total Number.	Total Kilowatts.	Per Cent. Total Ranges to Domestic Consumers.	Number.	kW.	Percentage of Total Water-heaters to Total Consumers.	Number.	H.P.
<b>PUBLIC WORKS DEPARTMENT</b>													
1. North Island system <sup>1</sup>	417	23	440	37	338	375	2,365	89.91	421	571	95.62	..	..
2. South Island system <sup>2</sup>	11,052	1,841	12,893	303 <sup>h</sup>	2,030	2,333	14,805	21.01	1,345	1,726	10.42	1,499	2,455
Totals ..	11,469	1,864	13,333	340	2,368	2,708	17,170	..	1,766	2,297	..	1,499	2,455
<b>POWER BOARDS</b>													
1. Ashburton ..	4,451	673	5,124	1,440	476	1,916	4,649	43.04	1,534	2,846	29.93	132	155
2. Auckland ..	59,610	12,846	72,456	..	23,992	23,992	167,951	40.24	29,854	20,898	41.17	859	1,718
3. Banks Peninsula ..	1,090	65	1,155	225	299	524	2,580	48.07	372	571	32.20	156	118
4. Bay of Islands ..	2,478	393	2,871	144	540	684	3,613	27.36	1,087	765	37.48	605	798
5. Bay of Plenty ..	2,161	385	2,546	152	824	976	5,736	45.10	1,060	1,291	65.09	777	999
6. Buller <sup>3</sup> ..	..	..	..	..	..	..	..	..	..	..	..	..	..
7. Cambridge ..	1,816	257	2,073	27	446	473	2,787	26.04	1,001	1,226	48.28	430	534
8. Central Hawke's Bay ..	1,923	389	2,312	238	702	940	5,309	49.47	835	1,025	36.30	175	228
9. Central Waikato ..	7,540	731	8,271	562 <sup>h</sup>	1,690	2,252	12,711	30.02	4,117	3,194	49.78	2,141	3,197
10. Dannevirke ..	2,809	543	3,352	136	601	737	4,315	26.23	1,042	835	31.01	520	589
11. Franklin ..	5,231	655	5,886	642	2,109	2,751	13,711	52.59	4,424	2,984	75.16	2,453	2,780
12. Golden Bay ..	512	94	606	99	77	176	650	34.37	224	147	36.96	139	112
13. Grey ..	4,615	710	5,325	278	883	1,161	6,920	25.15	604	711	13.08	69	69
14. Hawke's Bay ..	8,619	992	9,611	135	3,776	3,911	32,566	45.38	3,870	3,500	40.27	407	431
15. Horowhenua ..	5,225	1,574	6,799	670	1,984	2,654	14,397	50.79	2,489	1,690	36.75	791	1,003
16. Hutt Valley ..	16,505	2,467	18,972	216	6,400	6,625	42,740	40.13	7,426	5,527	39.14	127	165
17. King-country <sup>4</sup> ..	..	..	..	..	..	..	..	..	..	..	..	..	..
18. Manawatu ..	722	81	803	83	135	218	1,030	30.19	97	182	12.08	9	7
19. Manawatu-Oroua ..	5,981	277	6,258	21	1,784	1,805	12,446	30.18	2,674	1,823	42.73	1,667	2,274
20. Marlborough ..	3,141	542	3,683	247	515	762	4,467	24.26	366	320	9.93	155	215
21. North Auckland ..	4,345	976	5,321	..	1,447	1,447	8,210	33.26	3,095	2,105	58.17	1,816	2,417
22. North Canterbury ..	3,769	373	4,142	403	694	1,156	6,159	30.67	919	1,528	22.18	259	203
23. Otago ..	1,206	189	1,395	89	342	431	2,582	35.01	732	622	52.47	443	540
24. Otago Central ..	4,303	1,068	5,371	84	572	656	4,013	16.51	612	892	11.39	176	252
25. Poverty Bay ..	5,339	1,403	6,742	..	2,385	2,385	14,533	44.67	2,274	1,758	33.72	318	274
26. South Canterbury ..	4,884	725	5,609	92	906	998	6,324	20.43	846	1,120	15.08	201	201
27. South Canterbury ..	3,478	869	4,347	139	1,037	1,166	7,322	33.52	1,916	1,276	44.07	972	1,245
28. Springs-Ellesmere ..	2,886	286	3,172	395	590	985	4,703	35.17	938	1,294	30.26	304	274
29. Taranaki ..	2,941	303	3,244	17	732	749	5,118	25.47	1,512	1,123	46.60	1,374	2,223
30. Taranaki ..	1,912	321	2,233	428	653	1,081	5,234	59.89	1,014	684	45.47	499	584
31. Taranaki ..	2,461	198	2,659	222	1,205	1,427	8,813	58.00	2,135	1,628	80.27	867	1,106
32. Tauranga ..	2,408	492	2,900	382	746	1,128	5,425	47.00	1,632	1,459	56.27	921	1,369
33. Te Awamutu ..	445	70	515	38	219	257	1,528	43.10	222	186	43.10	3	2
34. Teyot ..	9,947	1,002	10,949	89	3,607	3,696	26,947	37.33	6,658	5,512	61.08	3,539	5,931
35. Thames Valley ..	2,861	607	3,468	142	511	653	3,974	22.82	507	494	14.61	239	118
36. Waimea ..	5,328	1,124	6,452	450	1,758	2,208	13,347	41.44	2,519	2,446	39.04	733	1,031
37. Wairarapa ..	559	76	635	60	252	312	1,803	59.83	346	215	54.49	170	222

(For notes, see page 19.)

TABLE XIV.—RETURN OF ELECTRIC RANGES, WATER-HEATERS, AND MILKING-MACHINES CONNECTED TO ELECTRIC-SUPPLY SYSTEMS AS AT 31ST MARCH, 1945—continued.

Supply Authorities.	Number of Consumers.			Ranges.			Water-heaters.			Milkings-machines.			
	Domestic.	Commercial.	Total.	Under 5 Kilowatts.	5 Kilowatts and over.	Total Number.	Total Kilowatts.	Percentage of Total Ranges to Domestic Consumers.	Number.	Total Kilowatts.	Percentage of Total Water-heaters to Total Consumers.	Number.	H.P.
<b>Power Boards—continued</b>													
39. Waikon	496	91	587	54	151	205	1,205	41.33	237	165	40.37	141	155
40. Waitaki	4,519	668	5,187	255	1,606	1,861	11,873	40.19	1,982	2,100	37.63	72	69
41. Waitemata	17,501	1,300	18,801	67	7,104	7,171	44,116	40.97	6,719	5,212	35.73	2,220	1,411
42. Waitema	1,878	446	2,324	90	875	965	5,986	51.38	1,107	892	47.63	390	509
43. Wanganni-Rangitikei	10,267	2,263	12,530	..	2,631	2,631	17,225	35.36	3,381	2,568	26.98	1,257	1,379
44. Westland	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	229,473	38,857	268,330	8,958	77,680	86,638	547,862	..	105,505	85,354	..	27,695	37,005
<b>OTHER LOCAL AUTHORITIES</b>													
<b>City Councils</b>													
1. Christchurch	30,593	5,341	35,934	647	16,091	16,738	115,138	54.71	13,419	12,729	37.34	61	58
2. Dunedin	25,361	7,574	32,935	1,188	3,618	4,806	26,194	18.92	8,240	3,773	25.04	221	316
3. Invercargill	..	1,085	7,311	242	151	393	1,180	6.31	379	432	5.18	..	..
4. Nelson	3,292	560	3,852	..	49	49	340	1.48	215	200	5.58	..	..
5. Palmerston North	6,157	1,430	7,587	148	2,112	2,260	1,346	36.70	3,165	2,398	41.71	3	6
6. Wellington	31,609	11,220	42,829	434	4,736	5,160	33,991	16.32	10,035	12,540	23.44	18	15
Totals	103,238	27,210	130,448	2,659	26,747	29,406	178,198	..	35,453	32,072	..	303	395
<b>Borough Councils</b>													
1. Bluff	512	123	635	11	8	19	68	3.71	11	14	1.73	..	..
2. Hamilton	4,802	1,474	6,276	233	842	1,075	6,174	22.38	1,609	1,083	25.63	..	..
3. Inglewood	354	118	472	2	96	98	679	27.68	97	79	20.55	5	4
4. Knapoi	503	89	592	103	117	220	1,016	43.73	101	106	17.06	2	1
5. Lyttelton	897	151	1,048	..	220	220	1,455	24.52	146	141	13.93	4	5
6. Napier	3,932	972	4,904	43	851	894	6,195	22.73	1,590	1,212	32.41	..	..
7. New Plymouth	6,803	1,130	7,933	352	2,933	3,285	18,233	48.45	3,685	3,119	46.64	825	1,268
8. Ohakune	469	144	613	30	37	67	272	14.26	67	45	10.98	13	17
9. Patea	525	35	560	38	158	196	1,343	37.30	183	27	32.67	25	22
10. Picton	387	91	478	3	3	6	29	1.55	1	4	0.20	..	..
11. Queenstown	227	73	300	7	21	28	115	12.33	20	29	6.67	..	..
12. Raetihi	377	117	494	21	265	286	1,102	12.99	73	69	14.77	..	..
13. Rangiora	743	113	856	5	166	171	1,102	23.01	236	258	27.57	15	18
14. Riccarton	2,030	172	2,202	43	1,090	1,133	7,500	55.54	1,140	901	51.56	..	..
15. Ross	..	..	..	..	..	..	..	..	..	..	..	..	..
16. Rotorua (Tourist Department)	3,039	860	3,899	188	676	864	4,739	28.42	989	904	25.35	300	350
17. Stratford	1,021	304	1,325	10	324	334	1,969	32.71	327	290	24.67	3	4
18. Sumner	1,237	17	1,254	..	344	344	2,071	27.74	313	302	24.96	1	3
19. Taihape	517	187	704	18	86	104	664	20.11	78	77	11.08	2	1
20. Taumarunui	997	286	1,283	61	117	178	873	17.85	133	109	10.36	26	30
21. Tauranga	1,369	326	1,695	173	870	1,043	6,510	76.18	1,010	514	59.91	..	..
22. Te Aroha	610	242	852	16	202	218	1,532	35.73	252	191	29.57	14	21
23. Te Puke	282	132	414	34	109	143	698	50.70	139	81	33.57	7	11
24. Thames	1,013	233	1,246	69	256	325	1,850	32.09	287	194	21.06	1	2
Totals	1,460	1,076	2,536	1,114	1,114	1,114	1,114	91.91	1,114	1,114	31.15	1,114	1,114

TABLE XIV.—RETURN OF ELECTRIC RANGES, WATER-HEATERS, AND MILKING-MACHINES CONNECTED TO ELECTRIC-SUPPLY SYSTEMS AS AT 31ST MARCH, 1945—continued

Supply Authorities.	Number of Consumers.			Ranges.					Water-heaters.			Milk-machines.	
	Domestic.	Commercial.	Total.	Under 5 Kilowatts.	5 Kilowatts and over.	Total Number.	Total Kilowatts.	Percentage of Total Ranges to Domestic Consumers.	Number.	k.W.	Percentage of Total Water-heaters to Total Consumers.	Number.	H.P.
OTHER LOCAL AUTHORITIES—continued													
<i> Borough Councils—continued</i>													
26. Waikato .. .. .	675	259	934	20	329	349	2,348	51.70	375	225	40.15	3	2
27. Waikato .. .. .	583	142	725	72	148	220	1,158	37.70	180	140	24.82	9	9
28. Westport .. .. .	1,198	330	1,528	5	8	13	66	1.08	43	36	2.81	17	7
29. Whakatane .. .. .	626	185	811	75	295	370	2,215	59.10	306	205	37.73	14	7
30. Whangarei .. .. .	2,131	768	2,899	35	693	728	3,063	34.16	652	417	22.49	15	24
Totals .. .. .	42,348	10,211	52,559	1,667	12,150	13,817	81,805	..	15,219	12,534	..	1,302	1,803
<i> Town Boards</i>													
1. Kaponga .. .. .	374	75	449	52	77	129	662	34.49	187	148	41.65	169	253
2. Mangaweka .. .. .	108	39	147	5	38	43	239	30.81	44	27	29.93	6	9
3. Manunu .. .. .	161	24	185	1	1	2	8	1.25	..	..	..	5	4
Totals .. .. .	643	138	781	58	116	174	909	..	231	175	..	180	266
<i> County Councils</i>													
1. Heathcote .. .. .	944	5	949	53	516	569	3,003	60.27	599	607	63.11	8	4
2. Kaikoura .. .. .	207	71	278	6	1	7	17	3.50	..	..	..	4	2
3. Murchison .. .. .	181	22	203	20	12	32	96	17.67	35	28	17.24	27	30
4. Otago .. .. .	92	20	112	..	..	..	..	..	..	..	..	..	..
5. Waimairi .. .. .	4,452	330	4,782	132	1,944	2,076	12,529	46.68	1,720	1,701	35.98	84	61
Totals .. .. .	5,876	448	6,324	211	2,473	2,684	15,645	..	2,354	2,336	..	123	97
Totals, other local authorities .. .. .	152,105	38,007	190,112	4,595	41,486	46,081	276,557	..	53,257	47,117	..	1,908	2,561
<i> COMPANIES</i>													
1. Kaimere Electric, Ltd. <sup>7</sup> .. .. .	680	254	934	31	121	152	977	22.35	73	74	7.81	..	..
2. Leo Keys, Kohutoko .. .. .	68	..	68	3	..	3	6	4.41	3	2	4.41	..	..
3. Reefton Electric Light and Power Co., Ltd. .. .. .	316	77	393	..	..	..	..	..	1	2	0.25	1	2
4. Rawene Motors, Ltd. .. .. .	38	20	58	..	..	..	..	..	..	..	..	..	..
5. Wilson's (N.Z.) Portland Cement, Ltd. .. .. .	163	40	203	20	16	36	152	22.08	43	35	21.18	30	50
6. Westland Power, Ltd. <sup>7</sup> .. .. .	329	77	406	16	29	45	242	13.68	42	53	10.35	48	71
Totals .. .. .	1,594	468	2,062	70	166	236	1,377	..	166	166	..	79	123
Grand totals .. .. .	394,641	79,196	473,837	13,963	121,700	135,663	842,966	..	160,694	134,934	..	31,181	42,144

NOTES.—<sup>1</sup> Includes Arapuni, Horahora, Walkaromana, and Mangahao power stations. <sup>2</sup> Includes Coleridge, Waitaki, Monowai, Arnold, and Cobb power-stations. <sup>3</sup> Not actively functioning. <sup>4</sup> License delegated to Westland Power, Ltd. <sup>5</sup> No return received. <sup>6</sup> Return for year ended 31st December, 1944. <sup>7</sup> Includes 104 heat storage ranges. <sup>8</sup> Not actively functioning. <sup>9</sup> Includes 97 heat storage ranges. Ratio of domestic consumers to total consumers = 83.23 per cent.