

NEW ZEALAND

ANNUAL STATISTICS IN RELATION TO HYDRO-ELECTRIC DEVELOPMENT AND OPERATION

YEAR ENDING 31st MARCH, 1943

CHIEF ELECTRICAL ENGINEER'S REPORT

For full text of the above report, refer to Public Works Statement, 1943, Appendix D, pages 14 to 16 inclusive.

ELECTRICAL WIREMEN

The statistics for the year ended 31st March, 1943, are set out below (the figures in parentheses are for the previous year):—

(1) Number of meetings of Wiremen's Registration Board: 17 (22).

(2) Registrations:—

Inspectors.	Wiremen.				
	Full Registration.	Limited Registration.	Provisional Licenses.	Temporary Permits.	Reregistrations after Periodical Purging.
17 (28)	80 (109)	142 (157)	19 (14)	1 (3)	4 (6)

(3) Examinations:—

—	Wiremen.			Servicemen.		
	Candidates.	Passed (%).	Highest Marks.	Candidates.	Passed (%).	Highest Marks.
Written	317 (382)	36 (32)	89 (86)	130 (83)	50 (59)	94 (95)
Practical	216 (252)	57 (56)	94 (91)	152 (66)	66 (68)	96 (95)

(4) Defective work reports, 6 (8); endorsements made, 3 (2); endorsement removed, 2 (1).

(5) Breach of Act reports, 50 (51); prosecutions authorized, 37 (36).

Tables

For reasons of economy in paper, the usual number of tables is not being published for the year ended 31st March, 1943, 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 Systems," "Broken Wires and Poles," "Growth of Load," "Electrical Accidents," and "Electrical Fires," have been condensed and summarized as follows:—

A. Condensed Statistics, 1942-43

		1943:	1942.	Increase or Decrease.
(a) Installed generating-capacity (main stations)	kW.	364,245†	340,755	+23,490
(b) Installed generating-capacity (standby)	kW.	97,775†	101,089	-3,314
(c) Total connected load (excluding bulk supply)	kW.	2,814,103	2,570,872	+243,231
(d) Consumers	No.	460,771	455,030	+5,741
(e) Units sold per capita	No.	1,038	975	+63
(f) Units sold per consumer	No.	3,254	3,089	+165
(g) Route-miles of main and distribution line	R.M.	29,449	29,037	+412
(h) Consumers per route-mile of line	No.	15.64	15.67	-0.03
(i) Sales per route-mile (retail sales)	Units	55,948	53,251	+2,697
(j) Miles of conductor in service (excludes service lines)	Miles	140,310	137,388*	+2,922
(k) Broken poles reported	No.	290	213	+77
(l) Broken wires reported	No.	3,062	2,146	+916
(m) Electrical fires reported	No.	22	40	-18
(n) Electrical accidents reported	No.	49	34	+15
(o) Electric ranges installed	No.	(20 fatal)	(13 fatal)	
(p) Electric water-heaters installed	No.	124,569	116,775	+7,794
(q) Electric milking-machines installed	No.	145,476	136,681	+8,795
	No.	30,826	30,763	+63

*Includes 1,359 miles of service lines, but not included for 1943.

Installed Generating Capacity.—† Increases: One 350 kW. hydro set installed by Otago Central Power Board; one 20,000 kW. hydro set installed at Piripana (Public Works Department); one 3,200 kW. hydro set installed at Waipori for Dunedin City Council. Decrease: One 80 kW. hydro set previously included for Westland Power, Ltd., now in disuse, but one remaining unit re-rated at 26 kW. increase. Therefore net decrease in plant is 60 kW. † Decrease: One 64 kW. Diesel set previously included for Patea Borough Council now sold for defence purposes; one 60 kW. gas-engine set previously included for Westport Borough Council now in disuse; one 3,190 kW. steam set installed at Portland works now not being included.

B. Summarized Results of Operations for Year ended 31st March, 1943

Item.		Water.	Steam.	Gas.	Oil.	Total.
1. Number of main stations	No.	(a)32	(c)1		(b)7	40
2. Installed capacity (main plant)	kW.	362,288	750		1,207	364,245
3. Number of standby plants	No.	(d)10	(f)9	(g)3	(e)23	45
4. Installed capacity (standby plant)	kW.	3,167	74,912	1,041	18,655	97,775
5. Units generated	No.	1,947,057,349	83,596,676		5,718,252	2,036,372,277
6. Units sold to consumers						
7. Percentage of non-productive units						1,647,628,385
8. Number of consumers						10 31
9. Connected load (excluding bulk supply)						460,771
10. Total operative capital (including distribution systems and standby plant)						2,814,103kW.
11. Total capital per kilowatt installed (including distribution systems, &c)						£44,194,906
12. Annual working-costs*						£95 65
13. Annual working-cost per unit under section 6						£2,087,953
14. Annual capital costs (interest, sinking fund, and depreciation)						0.304d.
15. Annual capital cost per unit under section 6						£2,596,895
16. Annual capital cost as a percentage of capital						0.378d.
17. Total annual costs (section 12 plus section 14)						5.87%
18. Total annual cost per unit under section 6						£4,684,948
19. Total annual revenue (from retail sale of electricity)						0.682d.
20. Average revenue per unit (from sections 19 and 6)						£5,766,931
21. Gross revenue (excluding rates and bulk sales)						0.840d.
22. Net profit (section 21 less section 17)						£5,920,409
23. Ratio of working-costs to gross revenue (section 12 and section 21)						£1,235,461
						35.26%

* After deducting cost of power purchased in bulk.

MAIN STATIONS

(a) Hydro-electric: Arapuni, Horahora, Walkaremoana, Mangahao, Lake Coleridge, Waitaki, Monowai, Arnold River, Bay of Islands, Golden Bay, Marlborough, Opunake, Otago Central, South Taranaki, Taranaki, Teviot, Waiwera, Waikare, Dunedin, New Plymouth (Mangorei), Picton, Queenstown, Taupo, Taihape, Tauranga, Westport, Kaponga, Murchison, Kanieri, Reefton Electric Light and Power Co., Ltd., Wilsons (N.Z.) Portland Cement Co., Ltd., Westland Power, Ltd. Total, 32.

(b) Oil: Waiwera, Picton, Kalkoura, Uawa, L. Keys (Kohukohu), Reefton Electric Light and Power Co., Ltd., Rawene Motors. Total, 7.

(c) Steam: Nelson Total, 1.

STANDBY STATIONS

(d) Hydro-electric: Banks Peninsula, Waipara (Kourarau), Waitaki, New Plymouth, Ohakune, Patea, Raetihi, Taumarunui, Te Aroha, Thames, Taupo, Taihape, Tauranga, Westport, Kaponga, Murchison, Kanieri, L. Keys (Kohukohu), Reefton Electric Light and Power Co., Ltd. Total, 10.

(e) Oil: Penrose, Dobson, Hawke's Bay, Marlborough, Opunake, Poverty Bay, South Taranaki, Waiwera, Waitaki, Dunedin, Palmerston North, Wellington, Napier, Ohakune, Picton, Queenstown, Rangiora, Thames, Murchison, Kanieri, L. Keys (Kohukohu), Reefton Electric Light and Power Co., Ltd. Total, 23.

(f) Steam: Huntly, Christchurch Tramway Board, King's Wharf, Bay of Islands, Wanganui-Rangitikei, Dunedin, Invercargill, Nelson, Wellington. Total, 9.

(g) Gas: Palmerston North, Taihape, Westport. Total, 3.

19411942

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	£	109,428	Coleridge	£	25,841	
Horahora		3,208	Waitaki		48,441	
Mangahao		74,707	Southland		12,226	
Waikaremoana		17,200	Arnold River (Kaimata)		1,865	
" Lower development		36,443	Highbank		3,281	
Taupo		83,562				
Karapiro		15,287				
Headworks—			Headworks—			431,489
Arapuni		1,231,401	Coleridge		550,679	
Horahora		151,468	Waitaki		1,095,102	
Mangahao		943,937	Southland		86,816	
Waikaremoana		200,714	Arnold River (Kaimata)		108,153	
" Lower development		655,290	Highbank		26,441	
Karapiro		353,749	Tekapo		164,916	
Generating-station, buildings, and village—			Generating-station, buildings, and village—			5,568,756
Arapuni		448,623	Coleridge		104,233	
Horahora		61,131	Waitaki		468,187	
Mangahao		132,350	Southland		46,752	
Waikaremoana		277,389	Arnold River (Kaimata)		8,631	
" Lower development		84,612	Highbank		50,146	
Karapiro		35,941				
Generating plant and machinery—			Generating plant and machinery—			1,717,995
Arapuni		784,445	Coleridge		207,265	
Horahora		95,231	Waitaki		364,627	
Mangahao		217,337	Southland		61,581	
Waikaremoana		357,414	Arnold River (Kaimata)		26,806	
" Lower development		142,472	Highbank		89,937	
Karapiro						
Auxiliary stations (three)—Penrose, Huntly, and King's Wharf			Auxiliary station (one)—Dobson			2,347,115
		483,234			136,691	
Transmission and distribution—			Transmission and distribution—			619,075
Primary distribution—			Primary distribution—			
11 kV. lines		66,334	11 kV. lines		549,811	
33 kV. lines			33 kV. lines		59,159	
50 kV. lines		447,314	50 kV. lines			
66 kV. lines			66 kV. lines		598,052	
110 kV. lines		2,007,966	110 kV. lines		430,475	
Secondary distribution			Secondary distribution			4,488,036
					328,025	
Substations—			Substations—			2,946,901
11 kV. substations		13,315	11 kV. substations			
33 kV. substations			33 kV. substations		34,991	
50 kV. substations		458,355	50 kV. substations			
66 kV. substations			66 kV. substations		531,097	
110 kV. substations		1,613,333	110 kV. substations		206,810	
General—			General—			3,280,042
General offices, garages, stores, and other accommodation		78,852	General offices, garages, stores, and other accommodation		37,794	
Telephone services		202,526	Telephone services		87,674	
Explorations and preliminary surveys; engineering, office, and general expenses; charges and expenses of raising loans		674,581	Explorations and preliminary surveys; engineering, office, and general expenses; charges and expenses of raising loans		541,021	
Interest during construction		1,144,079	Interest during construction		513,515	
Grand totals		13,702,368			7,697,941	£21,400,309

TABLE III.—OPERATING OR WORKING COSTS FOR YEAR ENDED 31ST MARCH, 1943

	North Island System.				South Island System.			
	Cost.	Cost per Unit.			Cost.	Cost per Unit.		
		Generated.	Distributed.	Sold.		Generated.	Distributed.	Sold.
(a) Hydro stations	£ 90,546	d. 0 0170	d.	d.	£ 41,625	d. 0 0208	d.	d.
(b) Fuel stations	130,658	0 8821	. . . . .	. . . . .	6,310	13 5698	. . . . .	. . . . .
(c) Auxiliary stations, power purchased, and standby provision	205,485	0 7237	. . . . .	. . . . .	354	2 7819	. . . . .	. . . . .
Generated and purchased	426,689	0 0742	0 0809	0 0812	48,289	0 0242	0 0279	0 0283
(d) Transmission	41,835	0 0073	0 0079	0 0080	20,694	0 0104	0 0120	0 0121
(e) Communication system	3,382	0 0005	0 0006	0 0006	2,343	0 0012	0 0013	0 0014
(f) Substations	79,974	0 0139	0 0151	0 0152	31,599	0 0157	0 0183	0 0185
(g) Distribution	1,379	0 0002	0 0003	0 0003	23,892	0 0120	0 0138	0 0140
(h) System operations	21,487	0 0038	0 0041	0 0041	12,023	0 0060	0 0069	0 0070
(i) Management and general expenses	67,684	0 0118	0 0128	0 0129	62,737	0 0314	0 0363	0 0366
	642,430	0 1118	0 1218	0 1223	201,577	0 1009	0 1166	0 1179

	North Island System	South Island System
Units generated—		
Hydro	1,275,146,574	478,983,260
Fuel	35,545,346	111,600
Purchased	68,135,611	30,540
Units distributed	1,378,827,531	479,125,400
Units sold	1,265,799,945	414,879,988
	1,259,905,541	410,062,927

TABLE I.—SUMMARY OF FINANCIAL AND OPERATING STATISTICS FOR NORTH ISLAND AND SOUTH ISLAND ELECTRIC-POWER SYSTEMS FOR THE YEAR ENDING 31ST MARCH, 1943 (9TH YEAR)

NOTE.—“North Island system” includes Arapuni—Horahora—Mangahao—Waikaremoana all interconnected. “South Island system” includes Lake Coleridge—Waitaki—Southland—Arnold River (Westland) all interconnected.

A. Financial

	North Island.	South Island.	Total.		North Island.	South Island.	Total.
Capital outlay—							
Assets in operation ..	£ 12,632,990	£ 7,237,175	£ 19,870,165	Net profit for year ..	£ 425,203	£ 150,012	£ 575,215
Assets not in operation ..	1,069,378	460,767	1,530,145	Transfer from Reserve ..	92,314	..	92,314
Total capital outlay ..	13,702,368	7,697,942	21,400,310	Allocation of profits—			
Revenue for year ..	1,696,700	749,442	2,446,142	Sinking Fund ..	197,652	41,615	239,267
Working-costs ..	642,430	201,577	844,007	Income-tax, &c. ..	319,865	108,397	428,262
Capital charges—				Reserve Fund ..	..	..	..
Interest ..	399,289	263,380	662,669	Totals ..	517,517	150,012	667,529
Depreciation ..	229,778	134,473	364,251	Accumulated Depreciation Reserve ..	1,468,567	942,121	2,410,688
Totals ..	629,067	397,853	1,026,920	Accumulated Sinking Fund ..	1,684,652	756,116	2,440,767
Total costs for year ..	1,271,497	599,430	1,870,927	Reserve Fund ..	301,015	86,766	387,781
				Arrears: Sinking Fund not yet appropriated ..	..	199,902	199,902

B. Operating Results

	1942-43 (Ninth Year).	1942-43 (Ninth Year).
Maximum load (kilowatts)—		
North Island system ..	257,700	Revenue—
South Island system ..	97,680	Per kilowatt (system maximum)—
		North Island system ..
Average load (kilowatts)—		South Island system ..
North Island system ..	157,400	Per unit generated—
South Island system ..	54,694	North Island system ..
		South Island system ..
Average load factor—	Per Cent.	Per unit distributed—
North Island system ..	61.07	North Island system ..
South Island system ..	55.99	South Island system ..
		Per unit sold—
Units output (generated and purchased)—		North Island system ..
North Island system ..	1,378,827,531	South Island system ..
South Island system ..	479,125,400	Working costs—
Combined ..	1,857,952,931	Per kilowatt (system maximum)—
		North Island system ..
Units distributed—		South Island system ..
Units sold—		Per unit generated—
North Island system ..	1,259,905,541	North Island system ..
South Island system ..	410,062,927	South Island system ..
Combined ..	1,669,968,468	Per unit distributed—
		North Island system ..
Units unsold (used free of charge)—		South Island system ..
North Island system ..	5,894,404	Per unit sold—
South Island system ..	4,817,061	North Island system ..
Combined ..	10,711,465	South Island system ..
		Capital charges—
Total units distributed, North Island system ..	1,265,799,945	Per kilowatt (system maximum)—
Total units distributed, South Island system ..	414,879,988	North Island system ..
Combined ..	1,680,679,933	South Island system ..
		Per unit generated—
Line losses—		North Island system ..
Transmission and distribution—	Units.	South Island system ..
North Island system ..	113,027,586	Per unit distributed—
South Island system ..	64,245,412	North Island system ..
Combined ..	177,272,998	South Island system ..
		Per unit sold—
	Per Cent.	North Island system ..
	8.19	South Island system ..
	13.40	Total costs—
	9.54	Per kilowatt (system maximum)—
		North Island system ..
		South Island system ..
		Per unit generated—
		North Island system ..
		South Island system ..
		Per unit distributed—
		North Island system ..
		South Island system ..
		Per unit sold—
		North Island system ..
		South Island system ..

Supply Authorities	Number of Consumers		Source of Supply	Capacity of Generating Plant		Static Head in Feet	Generation	Transmission	Primary Distribution	Secondary Distribution (and System of Supply)	Number of Transformers	Miles of Lines	Direct Lighting System	
	Number	Percentage of Supply		Main Plant	Standby Plant									
PUBLIC WORKS DEPARTMENT 1. North Island system	50,550	451	I.	211,000*	247,260 kVA 3,750† 1,500† 1,875 37,950† 47,437 D.C.	Ararua = 175 Mangahao = 896 Horahora = 27 Walkare- moana = 876 Coleridge = 480 Arnold River = 52.5 Waikaki = 70 Monowai = 154	11,000 6,500 6,500 625	110,000 50,000	11,000 3,300	400/230 A.C.	76	7,327	1,748 Miles	Parallel
	Totals	18,107	..	314,560	365,214 62,801	1,860	29,071	5,315	Parallel
POWER BOARDS														
1. Ashburton	19,330	5,023	G.S.	1925	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	1,005	12,079	1,029	Series
2. Auckland	210,700	70,328	G.N.	1908	..	..	..	22,000	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C. 400/230 D.C.	1,178	90,218	1,302	Series an- parallel
3. Banks Peninsula	3,550	1,125	G.S.	1921	72*	90	3,300 (†)	33,000	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	201	1,098	217	Parallel
4. Bay of Islands	32,100	2,567	I. & G.N.	1939	88*	208	400	..	11,000 6,600 11,000 11,000 11,000 6,350-1 ph.	400/230 A.C.	515	4,820	401	Series an- parallel
5. Bay of Plenty	17,370	2,443	G.N.	1928	..	..	..	..	11,000 6,600 11,000	400/230 A.C.	403	5,825	317	Series an- parallel
6. Buller	6,030	1,983	G.N.	1921	..	..	..	..	11,000 3,300 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	102	2,383	208	Series
7. Cambridge	10,450	2,271	G.N.	1925	..	..	..	..	11,000 3,300 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	376	5,285	384	Parallel
8. Central Hawke's Bay	20,030	7,915	G.N. & B.	1921	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	527	13,124	932	Parallel
9. Central Waikato	12,550	3,325	G.N.	1925	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	317	3,684	368	Series an- parallel
10. Dannevirke	21,390	5,072	G.N.	1925	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	522	10,238	794	Series an- parallel
11. Franklin	3,750	592	I. & B.	1929	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	69	953	84	Parallel
12. Golden Bay	18,030	5,315	G.S.	1926	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	187	12,351	304	Series
13. Grey	32,370	9,480	G.N.	1927	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	325	16,903	501	Series
14. Hawke's Bay	18,550	6,438	G.N.	1924	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	221	10,928	388	Series an- parallel
15. Horowhenua	54,890	17,632	G.N.	1924	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	260	24,650	342	Series an- parallel
16. Hutt Valley	6,300	704	G.S.	1925	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	212	1,720	103	Parallel
17. King-country	23,420	6,131	G.N.	1924	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	506	13,728	700	Series an- parallel
18. Manawatu-Oroua	15,400	3,540	I.	1927	1,000*	1,250	6,000	33,000	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	228	4,624	204	Series an- parallel
19. Marlborough	27,280	4,981	G.N.	1930	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	907	13,542	880	Parallel
20. North Auckland	15,900	3,982	G.S.	1928	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	677	9,903	867	Parallel
21. North Canterbury	0,090	1,400	G.N.	1923	315**	450	6,000 (†)	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	146	1,354	182	Series an- parallel
22. Otago	34,590	5,273	G.S. & B.	1926	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	408	4,213	690	Series an- parallel
23. Otago Central	8,000	1,609	I. & B.	1923	1,950*	2,440	..	33,000	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	279	8,080	330	Parallel
24. Poverty Bay	25,100	6,591	G.N.	1912	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	443	47	442	Series an- parallel
25. Reefton	20,300	5,494	G.S.	1925	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	706	993	916	Series an- parallel
26. South Canterbury	15,500	4,282	I. & G.N.	1920	560**	607	6,500	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	301	7,244	350	Series an- parallel
27. South Taranaki	14,000	3,049	G.S. & B.	1922	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	488	4,110	375	Series an- parallel
28. Springs-Eileanere	15,580	3,201	I. & G.N.	1927	4,800**	5,400	6,000	33,000	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	303	8,026	405	Series
29. Taranaki	9,240	2,211	G.N.	1925	..	..	..	..	11,000 6,600 11,000 11,000 11,000 6,600 3,300	400/230 A.C.	30†	4,306	380	Series an- parallel
30. Tauranga	11,000	2,577	G.N. & B.	1926	..	..	..	33,000	11,000 6,600 11,000 11,000 11,000 6,350-1 ph. 3,300	400/230 A.C. 400/230 A.C.	416	5,944	613	Parallel

(For notes see page 7.)

TABLE IX.—STATISTICS OF POPULATION, CONSUMERS, GENERATING-PLANTS, SYSTEM VOLTAGE, ROUTE-MILES OF LINES, &C., FOR THE YEAR ENDED 31st MARCH, 1943—continued

Supply Authorities.	Population included in Area of Supply.	Number of Consumers.	Source of Supply.	Year when Supply commenced.	Capacity of Generating Plant.			State Head in Feet.	Voltage.			Secondary Distribution (and System of Supply).	Distribution Transformers.	Route-miles of Lines.	Street Lighting System.
					Main Plant.		Standby Plant.		Transmission.	Primary Distribution.	Total KVA.				
					KW.	KVA.	KW.									KVA.
POWER BOARD—continued															
84. Te Anau	12,770	2,833	G.N.	1921	..	..	..	..	..	..	..	..	..	..	..
35. Teviot	1,500	498	I.	1924	750*	930	320	3,300	..	..	..	..	..	..	..
36. Thames Valley	42,310	10,064	G.N. & B.	1921	..	..	..	..	..	..	..	..	..	..	..
37. Waimea	16,000	3,348	I. & B.	1933	750† 440*	940 542	900/10/10	400 2,500 3,300 3,300 (†)	..	..	..	..	..	..	..
38. Waipara	25,440	6,308	G.N.	1923	..	..	429/200	3,300 (†)	..	..	..	..	..	..	..
39. Waipare	3,800	615	I.	1925	624*	780	65	500 400	..	..	..	..	..	..	..
40. Waipara	7,800	601	G.N.	1923	..	..	..	..	..	..	..	..	..	..	..
41. Waitaki	18,010	5,091	G.S.	1920	..	..	250	3,300 (†)	..	..	..	..	..	..	..
42. Waitemata	52,340	17,550	G.N.	1926	..	..	..	..	..	..	..	..	..	..	..
43. Waitomo	10,020	2,230	G.N.	1926	..	..	..	..	..	..	..	..	..	..	..
44. Wanganui-Rangitikei	46,230	12,320	G.N.	1924	..	..	..	3,300 (†)	..	..	..	..	..	..	..
45. Westland ¹¹	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	982,080	259,395	..	..	11,473	13,784	..	..	..	..	..	..	17,156	418,932	20,927
OTHER LOCAL AUTHORITIES															
City Councils															
1. Christchurch	104,000	34,983	G.S.	1903	..	..	700	..	..	..	..	..	..	..	..
2. Dunedin	85,000	32,275	I. & G.S.	1907	23,400**	29,250	..	..	..	..	..	..	..	..	..
3. Invercargill	22,000	7,218	G.S.	1914	..	..	..	..	..	..	..	..	..	..	..
4. Nelson	11,400	3,760	I. & B.	1923	750†	937	..	..	..	..	..	..	..	..	..
5. Palmerston North	23,000	7,300	B.	1924	..	..	..	..	..	..	..	..	..	..	..
6. Wellington	121,000	42,171	G.N.	1888	..	..	..	..	..	..	..	..	..	..	..
Totals	365,000	127,697	..	..	24,150	30,187	..	..	..	..	..	..	1,578	184,147	1,585
Rorough Councils															
1. Bluff	2,000	610	G.S.	1903	..	..	..	..	..	..	..	..	..	..	..
2. Hamilton	17,280	6,085	G.N.	1913	..	..	..	..	..	..	..	..	..	..	..
3. Inglewood	1,270	408	B.	1905	..	..	..	..	..	..	..	..	..	..	..
4. Kaitiaki	1,610	675	B.	1917	..	..	..	..	..	..	..	..	..	..	..
5. Lyttelton	3,060	1,072	G.S.	1917	..	..	..	..	..	..	..	..	..	..	..
6. Napier	16,950	4,995	B.	1913	..	..	..	..	..	..	..	..	..	..	..
7. New Plymouth	24,950	7,749	G.N.	1906	3,750**	4,500	120/240	..	..	..	..	..	..	..	..
8. Ohakune	1,800	608	I. & B.	1914	..	..	..	..	..	..	..	..	..	..	..
9. Patoka	2,180	533	I. & B.	1901	..	..	..	..	..	..	..	..	..	..	..
10. Pictou	1,390	460	I.	1917	..	..	..	..	..	..	..	..	..	..	..
11. Queenstown	920	296	I.	1924	..	..	..	..	..	..	..	..	..	..	..
12. Raetihi	2,980	510	I.	1917	..	..	..	..	..	..	..	..	..	..	..
13. Rangiora	2,240	837	B.	1919	..	..	..	..	..	..	..	..	..	..	..
14. Riccarton	5,780	2,134	G.S.	1910	..	..	..	..	..	..	..	..	..	..	..
15. Ross ¹²	10,740	3,729	G.N.	1901	..	..	..	..	..	..	..	..	..	..	..
16. Rotorna (Tourist Dept.)	3,000	1,312	B.	1898	..	..	..	..	..	..	..	..	..	..	..
17. Stratford	3,290	1,245	G.B.	1918	..	..	..	..	..	..	..	..	..	..	..
18. Sumner	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(For notes see page 7.)

TABLE I.—STATISTICS OF POPULATION, CONSUMERS, GENERATING-PLANTS, SYSTEM VOLTAGE, ROUTE-MILES OF LINES, &c., FOR THE YEAR ENDED 31st MARCH, 1943.—continued

Supply Authorities.	Population included in Area of Supply.		Source of Supply.	Year when supply commenced.	Capacity of Generating Plant.			Stallo Head in Feet.	Voltage.			Secondary Distribution (and System of Supply).	Distribution Transformers.		Route-miles of Lines.	Street Lighting System.	
	Number.	Number of Consumers.			K.W.	K.V.A. D.C.	K.V.A. D.C.		K.W.	K.V.A. D.C.	Transmission.		Primary Distribution.	Number.			Total k.V.A.
OTHER LOCAL AUTHORITIES—<i>de Borough Councils</i>—continued																	
19. Tairāpapa	2,210	690	I. & B.	1913	150*	75½	500	30	11,000	2	200	400/230 A.C.	2	200	11	Parallel	
20. Taumarunui	4,330	1,263	G.N.	1924	..	425*	500	25	6,000	35	1,337	400/230 D.C.	35	1,337	33	Parallel	
21. Tauranga	3,910	1,028	I. & G.N.	1915	3,450*	..	..	110/60	11,000	10	1,800	400/230 A.C.	10	1,800	64	Parallel
22. Te Aroha	2,450	842	B.	1906	..	133*	100	600	3,300	14	1,040	400/230 A.C.	14	1,040	10	Series and Parallel	
23. Te Puke	1,020	368	B.	1921	..	..	..	..	3,300	4	363	400/230 A.C.	4	363	12	Parallel
24. Thames	4,220	1,233	I. & B.	1914	..	200½	340	130	11,000	21	1,325	400/230 A.C.	21	1,325	25	Series and Parallel	
25. Timaru	17,800	5,479	B.	1908	..	100*	122	..	3,300	30	5,055	400/230 A.C.	30	5,055	72	Series	
26. Waioira	2,030	925	B.	1913	..	..	..	..	11,000	15	1,100	400/230 A.C.	15	1,100	19	Parallel
27. Waitara	2,060	689	B.	1917	220*	150	187	430	11,000	20	500	400/230 A.C.	20	500	12	Parallel	
28. Westport	4,240	1,453	I. & B.	1925	..	..	..	..	11,000	36	622	400/230 A.C.	36	622	36	Parallel
29. Whakatane	2,000	769	B.	1922	..	..	..	..	6,600	12	1,025	400/230 A.C.	12	1,025	18	Parallel
30. Whangarei	7,000	2,789	B.	1916	..	..	..	..	11,000	47	3,870	400/230 A.C.	47	3,870	45	Series and Parallel
Totals	155,900	51,504	..	..	8,071	3,425	4,037	..	..	908	39,480	..	908	39,480	1,187	..
Town Boards																	
1. Kaitiaki	1,700	446	I. & B.	1916	90*	..	..	57	3,300	41	551	400/230 A.C.	41	551	55	Parallel
2. Mangere	380	137	B.	1913	..	..	..	..	2,300	12	141	400/230 A.C.	12	141	11	Parallel
3. Manurewa	770	184	B.	1929	..	..	..	..	3,300	3	35	400/230 A.C.	3	35	5	Parallel
Totals	2,850	767	..	..	99	120	..	..	..	56	727	..	56	727	71	..
County Councils																	
1. Heathcote	3,400	1,085	G.S.	1914	..	..	..	..	11,000	13	1,434	400/230 A.C.	13	1,434	22	Series and Parallel
2. Kaihara	700	295	I.	1922	148½	..	..	..	3,300	7	135	400/230 A.C.	7	135	8	Series
3. Murchison	800	196	I.	1922	80*	96	100	105	3,300	12	142	400/230 A.C.	12	142	16	Parallel	
4. Uawa	500	113	I.	1925	30½	..	..	..	6,000	85	5,085	230 D.C.	85	5,085	4	Parallel
5. Waikare	14,700	4,580	G.S. & B.	1917	..	..	..	..	3,300	..	..	400/230 A.C.	..	..	154	Series and Parallel
Totals	20,100	6,230	..	..	238	281	100	..	..	117	6,700	..	117	6,700	204	..
Totals, other Local Authorities	544,000	186,207	..	..	32,575	40,093	44,460	..	..	2,719	251,150	..	2,719	251,150	3,047	..
COMPANIES																	
1. Kanieri Electric, Ltd.	2,830	932	I.	1921	1,560*	1,050	187	250/109	2,400	6	1,580	400/230 A.C.	6	1,580	30	Series	
2. L. Key's, Kohukohu	400	67	I.	1933	29½	30	15	30	400	..	..	400/230 A.C.	..	..	2	Parallel
3. Bechtel Electric Light and Power Co., Ltd.	1,500	383	I.	1887	98½	D.C.	..	..	3,300	..	..	230 D.C.	..	..	7	Parallel
4. Rawene Motors, Ltd.	300	55	I.	1936	19½	D.C.	..	..	230	..	..	230 D.C.	..	..	1	Parallel
5. Wilson's (N.Z.) Portland Cement, Ltd.	500	212	I. & G.N.	1916	3,000*	3,750	..	130	5,500	..	..	400/230 A.C.	..	..	46	..
6. Westland Power, Ltd.	4,000	410	I. & B.	1928	845*	929	..	260	6,000	48	1,030	400/230 A.C.	48	1,030	74	Parallel	
Totals	9,630	2,059	..	..	5,037	9,065	202	..	..	90	4,126	..	90	4,126	100	..
Grand totals	1,689,120	460,765	..	..	364,545	425,729	115,055	..	..	21,844	703,279	..	21,844	703,279	29,449	..

Notes.—¹ Includes Arapuni, Hornora, Waikaremanoa, and Mangahao power-stations interconnected. ² Includes Lake Coleridge, Waitaki, Monowai, and Arnold River power-stations interconnected. ³ Christchurch Tramway Board's standby steam station available for general supply when required. ⁴ Board constituted 15th May, 1940; not yet actively functioning. ⁵ License delegated to Westland Power to denote the type of prime mover: * water, † steam, ‡ oil, § gas. ⁶ Standby generating-plant capacity. ⁷ Penrose Diesel plant. ⁸ Operation of Westland Power. The following symbols are used: .. = Government supply, North Island system; G.S. = Government supply, South Island system; I = Independent supply (own generating plant); B = Bulk supply from another authority.

Total Population of Dominion as at 31st March, 1943, was—1,634,094.
 Ratio of Total Population in Areas of Supply to total Population of Dominion = 97.06 per cent.

TABLE X.—RESULTS OF GENERATION, DISTRIBUTION, AND CONSUMPTION FOR THE YEAR ENDED 31ST MARCH, 1943

Supply Authorities.	Connected Load.		Maxi- mum Load on System.	Demand Factor.		Generated.				Purchased.		Total generated and purchased.		Sold.		Non- productive.		Percentage Non- productive.	Units sold (Average).		Consumers Per Route-mile of Line.	Rat Cons Popu in A of Su			
	Includ- ing Bulk Supply.	k.W.		%	k.W.	%	Water.	Steam.	Oil.	Gas.	kWh.	In Bulk for Resale.	kWh.	kWh.	kWh.	kWh.	kWh.		kWh.	kWh.			Per Head of Population.	Per Consumer (exclud- ing Bulk Supplies).	Per Route-mile of Line.
PUBLIC WORKS DEPARTMENT.	1,765,600	31,378	237,700	14.59	0.71	146,574	35,348,056	190,690	111,000	190,690	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	1,765,600	
1. North Island system	701,913	92,972	97,080	12.85	0.99	479,983,390	35,348,056	111,000	190,690	479,983,390	30,540	1,378,827,533	1,217,270,755	42,634,788	118,921,990	42,634,788	118,921,990	8.62	179	210	720,770	114,900	17,476	4.88	
2. South Island system	2,527,122	124,380	1,765,600	69.64	0.71	1,765,600	35,348,056	308,290	308,290	1,765,600	2,746,360	1,569,705,277	1,569,705,277	1,569,705,277	1,569,705,277	1,569,705,277	1,569,705,277	14.41	179	314,200	314,200	51,839	7.70		
Totals																									
POWER BOARDS																									
1. Ashburton	27,748	3,484	12,567	45.28	0.88																				
2. Auckland	404,000	75,745	16,320	20.35	0.82																				
3. Banks Peninsula	7,984	814	10,193	127.19	0.88	8,911																			
4. Bay of Islands	13,621	1,717	12,012	87.82	0.41	662,000																			
5. Bay of Plenty	18,201	2,730	15,037	82.61	0.68																				
6. Buller																									
7. Cambridge		6,543	1,560	23.84	0.71																				
8. Central Hawke's Bay	47,843	14,809	1,794	12.28	0.40																				
9. Central Otago	28,380	16,390	6,708	41.02	0.74																				
10. Dannevirke		29,279	5,544	19.62	0.73																				
11. Franklin		2,809	440	15.66	0.72																				
12. Grey		82,145	4,892	5.82	0.43	1,136,470																			
13. Hawke's Bay	70,804	93,422	8,682	10.87	0.63																				
14. Horowhenua	32,950	4,938	14,984	45.17	0.52																				
15. Hutt Valley	17,000	105,914	16,000	15.73	0.87																				
16. King-country		3,974	347	8.73	0.70																				
17. Manawatu	85,320	41,965	11,490	27.38	0.61																				
18. Manawatu-Oroua	15,062	32,049	3,946	12.78	0.43	6,944,620																			
19. Marlborough	29,917	24,095	2,719	9.08	0.80																				
20. North Auckland		7,458	2,010	26.90	0.83																				
21. North Canterbury		7,555	1,840	24.35	0.81																				
22. Otago		48,345	4,372	9.04	0.58																				
23. Otago Central		33,485	5,612	16.76	0.34																				
24. Poverty Bay		22,450	19,548	87.60	0.34																				
25. South Canterbury		30,050	16,292	53.85	0.77																				
26. South Taranaki		50,876	17,377	33.90	0.69																				
27. Tairāhiki			50,523	N.A.	0.70																				
28. Tairāhiki			2,210	7.96	0.87																				
29. Tairāhiki			82,451	10,418	12.63																				
30. Tairāhiki			14,749	908	6.16																				
31. Tairāhiki			42,974	5,722	13.33																				
32. Tairāhiki			4,270	1,949	45.95																				
33. Tairāhiki			25,913	3,585	13.83																				
34. Tairāhiki			108,967	10,824	9.93																				
35. Tairāhiki			17,607	1,930	10.96																				
36. Tairāhiki			67,040	8,510	12.40																				
Totals	605,990	1,051,000				1,158,748,420	1,215,045,030	90,237,875	1,104,364	994,602,603	180,804,500	10,771,113	1,104,364	70	51,839	12.64	20.4								

(For notes see page 10.)

1941/1942

Supply Authorities	Capital				Revenue				Working Expenses				Capital Charges				Net Results	
	Outlay on Electric Supply System		Liability		From Sale of Electrical Energy		Other Sources (excluding Rates)		Cost of Power		Management and General		Depreciation		Interest		Total Annual Costs	Profit
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£		
PUBLIC WORKS DEPARTMENT.	13,769,982	10,944,510	6,281,532	2,109,281	18,440	1,090,939	8,044	2,441,479	255,646	171,016	70,003	944,927	399,280	102,841	731,008	1,376,858	319,804	
1. North Island system	7,803,449	6,281,532	408,956	652	7,959	942,535	7,959	744,780	48,160	129,106	43,500	190,906	263,379	41,014	439,407	686,573	108,407	
2. South Island system	5,966,433	4,662,978	2,072,576	1,450,000	1,081	148,404	1,081	2,441,479	303,806	171,145	113,503	841,833	692,403	144,455	1,171,975	2,013,268	428,271	
Totals	13,769,982	10,944,510	6,281,532	2,109,281	18,440	1,090,939	8,044	2,441,479	255,646	171,016	70,003	944,927	399,280	102,841	731,008	1,376,858	319,804	
POWER BOARDS	407,586	383,846	72,881	2,880	7,959	77,750	7,959	77,750	27,015	7,205	5,353	40,173	10,523	1,380	28,135	68,308	9,442	
1. Ashburton	156,148	154,038	31,970	2,880	7,959	942,535	7,959	942,535	380,814	96,936	70,206	552,950	76,304	70,386	257,187	810,153	122,712	
2. Banks Peninsula	114,450	100,959	16,795	1,640	640	47,311	640	47,311	5,817	1,843	2,132	10,140	4,087	1,163	17,769	17,900	6,554	
3. Bay of Islands	189,798	216,325	42,039	1,079	1,079	44,060	1,079	44,060	23,059	8,195	5,029	24,400	8,304	0,082	14,837	39,327	2,001	
4. Bay of Plenty	213,261	180,700	54,429	1,079	1,079	61,449	1,079	61,449	11,377	3,032	2,348	16,757	3,940	1,701	14,179	50,492	10,747	
5. Cambridge	118,808	82,995	28,806	184	184	59,386	184	59,386	14,828	3,226	2,200	22,500	8,789	1,751	8,127	24,884	4,502	
6. Central Hawke's Bay	202,196	163,860	36,783	73	73	100,000	73	100,000	33,006	9,625	7,000	66,504	18,577	5,433	18,213	35,512	1,448	
7. Central Waikato	590,522	468,755	117,200	233	233	118,334	233	118,334	18,900	5,303	3,670	77,503	16,774	11,209	38,475	114,979	3,375	
8. Dannevirke	253,074	231,160	42,163	155	155	44,372	155	44,372	42,055	8,397	7,186	58,478	16,932	3,697	18,008	40,571	2,001	
9. Frankton	404,848	414,425	89,301	74	74	1,048	74	1,048	42,055	8,397	7,186	58,478	16,932	3,697	18,008	40,571	2,001	
10. Golden Bay	37,082	27,085	7,400	115	115	90,403	115	90,403	1,633	979	1,320	5,447	1,032	3,005	24,764	84,242	1,103	
11. Grey	228,312	200,051	82,145	94	94	82,838	94	82,838	38,702	7,620	5,831	53,831	8,827	2,243	44,800	84,242	1,103	
12. Hawke's Bay	545,210	477,303	118,808	24,082	24,082	183,907	24,082	183,907	64,347	13,279	10,700	91,233	23,559	11,184	18,048	71,809	10,083	
13. Hervey Bay	281,723	189,705	78,802	571	571	183,907	571	183,907	39,957	8,004	6,005	55,256	18,305	11,184	40,012	81,844	19,683	
14. Hutt Valley	429,301	328,201	117,386	1,824	1,824	186,150	1,824	186,150	117,434	14,008	15,807	148,209	15,637	6,074	17,850	73,106	7,168	
15. Kaipara	73,503	72,250	10,214	163	163	10,513	163	10,513	3,030	971	1,798	5,805	3,036	295	5,015	10,821	2,387	
16. Manawatu-Oroua	555,911	449,549	112,359	156	156	100,533	156	100,533	70,352	13,812	7,641	100,805	21,691	2,791	30,986	140,791	19,742	
17. Marlborough	305,480	312,110	50,876	1,354	1,354	51,508	1,354	51,508	39,367	5,022	3,692	47,530	13,212	1,978	28,478	45,014	6,554	
18. North Canterbury	369,787	368,168	84,636	1,354	1,354	87,507	1,354	87,507	22,984	4,053	2,932	27,530	7,532	1,750	28,286	45,014	6,554	
19. North Otago	297,707	254,852	50,040	1,354	1,354	50,532	1,354	50,532	22,984	4,053	2,932	27,530	7,532	1,750	28,286	45,014	6,554	
20. Otago	125,552	77,150	24,732	2,600	2,600	50,782	2,600	50,782	6,944	2,000	1,400	15,237	4,033	8,855	28,050	69,302	11,953	
21. Otago Central	353,374	284,901	56,257	1,400	1,400	56,700	1,400	56,700	15,540	9,732	2,025	27,207	12,400	2,611	1,500	52,846	1,586	
22. Otago East	196,734	136,734	86,450	206	206	87,845	206	87,845	29,344	12,211	9,168	54,337	12,444	4,890	24,409	51,780	1,983	
23. Otago West	393,728	304,547	86,450	206	206	87,845	206	87,845	29,344	12,211	9,168	54,337	12,444	4,890	24,409	51,780	1,983	
24. Poverty Bay	390,106	320,247	60,062	611	611	102,512	611	102,512	42,807	9,500	6,290	58,702	13,732	3,588	26,450	85,182	2,360	
25. South Canterbury	250,307	186,329	54,000	2,879	2,879	60,303	2,879	60,303	2,279	7,000	3,915	39,015	7,752	4,012	20,901	59,919	7,573	
26. South Otago	187,519	149,632	58,145	2,879	2,879	60,303	2,879	60,303	31,478	6,641	3,417	39,536	6,635	3,574	20,901	59,919	7,573	
27. Springs Blenheim	480,313	426,331	67,803	16,925	16,925	71,242	16,925	71,242	13,031	7,650	5,498	20,849	18,171	13,491	31,662	62,608	8,456	
28. Tairāhema	180,200	180,413	50,523	353	353	39,379	353	39,379	14,350	2,533	1,800	20,387	7,539	4,623	15,044	35,431	3,948	
29. Tairāhema	203,808	178,455	60,523	353	353	39,379	353	39,379	20,618	8,000	4,974	24,258	7,539	4,623	15,044	35,431	3,948	
30. Tairāhema	202,570	192,004	49,038	402	402	32,381	402	32,381	19,055	0,231	3,807	23,693	7,539	4,623	15,044	35,431	3,948	
31. Tairāhema	60,905	40,300	0,303	458	458	49,623	458	49,623	19,055	0,231	3,807	23,693	7,539	4,623	15,044	35,431	3,948	
32. Thames Valley	901,688	809,892	105,785	1,027	1,027	7,128	1,027	7,128	70,700	17,185	11,202	108,183	31,819	2,450	15,409	45,102	3,588	
33. Waikato	127,819	39,410	39,410	1,378	1,378	7,128	1,378	7,128	338	338	1,301	2,702	8,008	3,712	1,700	45,102	3,588	
34. Waikato	106,188	127,819	39,410	1,378	1,378	7,128	1,378	7,128	17,185	11,202	108,183	31,819	2,450	15,409	45,102	3,588		
35. Waikato	308,957	340,045	85,658	2,655	2,655	93,425	2,655	93,425	37,728	13,472	8,111	59,000	14,430	6,479	28,986	87,980	7,433	
36. Waikato	86,537	72,288	9,151	270	270	9,020	270	9,020	37,728	13,472	8,111	59,000	14,430	6,479	28,986	87,980	7,433	
37. Waikato	73,062	65,514	11,798	7,862	7,862	20,056	7,862	20,056	11,368	2,151	1,532	17,750	2,072	1,400	5,417	20,163	4,453	
38. Waikato	231,518	203,640	58,574	2,824	2,824	60,170	2,824	60,170	25,020	7,006	2,938	37,572	2,841	1,784	5,311	20,163	4,453	
39. Waikato	628,304	587,168	189,574	929	929	306,509	929	306,509	80,279	24,531	16,140	120,050	23,084	14,905	16,274	53,848	0,324	
40. Waikato	151,873	130,218	34,427	930	930	36,446	930	36,446	14,803	3,026	2,803	21,593	6,758	5,000	46,927	107,838	26,620	
41. Waikato	875,420	437,462	141,931	229	229	147,709	229	147,709	63,193	12,736	11,730	89,278	19,059	17,527	39,156	128,534	18,985	
Totals	15,221,872	12,385,070	3,525,272	40,785	40,785	9,744,525	40,785	9,744,525	1,626,053	389,118	208,803	2,262,209	605,283	228,194	897,949	1,088,705	394,485	
OTHER LOCAL AUTHORITIES	1,141,203	259,516	341,001	16,308	597	357,009	597	357,009	190,425	46,034	22,086	259,444	10,859	1,104	52,884	312,328	46,578	
1. Christchurch	1,089,672	1,175,700	299,808	821	821	311,247	821	311,247	98,421	44,340	25,082	129,406	47,340	2,008	99,871	259,277	81,970	
2. Dunedin	109,972	56,901	30,033	25	25	38,080	25	38,080	24,991	4,601	0,652	30,613	3,607	4,015	8,217	33,024	10,601	
3. Invercargill	145,510	60,386	30,033	1,443	1,443	89,665	1,443	89,665	47,056	3,353	4,410	25,104	2,560	2,173	33,024	10,601		
4. Nelson	900,310	147,506	45,460	1,387	1,387	89,665	1,387	89,665	208,750	93,888	31,609	478,924	19,182	0,283	39,480	115,728	16,983	
5. Palmerston North	1,569,277	334,044	456,179	36,301	36,301	624,138	36,301	624,138	503,750	93,888	31,609	478,924	19,182	0,283	39,480	115,728	16,983	
6. Wellington	1,569,277	334,044	456,179	36,301	36,301	624,138	36,301	624,138	503,750	93,888	31,609	478,924	19,182	0,283	39,480	115,728	16,983	
Totals	5,321,913	1,274,532	159,138	2,001	2,001	43,170	2,001	43,170	504,871	196,823	95,525	991,972	84,140	17,517	211,670	1,203,651	275,950	

Supply Authorities.	Revenue.			Working-expenses.			Capital Charges.			Total.		Net Result.	
	From Sale of Electrical Energy.		Other Sources (excluding Trading Profit)	Cost of Power.		Costs of Transmission and Distribution.	Management and General.	Interest.	Sinking Fund.	Depreciation.	Other Capital Charges.		
	Retail.	Bulk (for example).		Generated.	Purchased.								
OTHER LOCAL AUTHORITIES—<i>contd.</i>													
1. Bluff Borough Council	£ 12,587	£ 6,128	£ 415	£ 200	£ 0,743	£ 0,43	£ 902	£ 5,117	£ 915	£ 470	£ 23	£ 6,031	
2. Hamilton	91,284	62,061	159	159	122,520	10,516	3,291	39,302	773	3,296	..	43,271	
3. Inglewood	11,018	9,704	38	..	2,250	1,740	706	4,406	418	340	137	4,060	
4. Kaiapoi	15,143	4,243	170	..	4,319	807	620	3,671	255	50	..	4,411	
5. Lyttelton	10,510	3,495	564	..	2,244	2,911	107	7,236	160	185	..	8,452	
6. Napier	135,068	10,791	606	..	4,718	2,011	4,433	10,609	1,000	70	..	12,119	
7. New Plymouth	134,032	33,254	6	..	22,970	6,482	5,275	10,800	5,000	2,343	988	10,690	
8. New Plymouth	384,890	98,207	2,003	1,300	122,700	17,593	702	34,412	10,117	2,000	..	45,102	
9. Otakare	9,390	5,034	..	..	7,777	721	5,591	9,101	418	444	..	9,782
10. Pictou	20,255	9,329	63	..	2,848	840	836	5,170	1,168	317	..	6,073	
11. Queenstown	17,170	5,540	..	..	7,044	410	502	1,550	305	53	..	1,850
12. Raedford	15,084	2,410	..	..	5,540	534	385	1,381	523	834	..	1,907
13. Rangiora	25,177	5,664	..	..	2,412	1,004	966	2,390	922	142	..	3,068
14. Riccarton	3,450	7,432	293	..	6,069	1,638	1,100	2,000	137	580	..	1,067	
15. Ross	44,866	10,603	228	..	7,747	1,533	1,002	14,250	200	350	..	1,790	
16. Roxburgh (Tourist Department)	115,265	43,001	215	..	10,837	12,033	2,600	30,953	5,633	2,253	1,131	10,035	
17. Stratford	39,850	37,643	..	..	40,150	12,033	2,600	30,953	5,633	2,253	..	10,130
18. Tairāne	18,238	10,107	..	..	10,165	1,310	947	10,416	1,665	1,424	510	11,985
19. Tairāne	5,808	7,873	..	..	10,068	3,180	3,530	7,703	2,003	1,424	..	9,127
20. Tairāne	81,428	14,143	..	..	7,057	1,103	818	4,608	520	420	..	5,028
21. Tairāne	181,440	112,094	381	..	22,237	2,385	5,314	4,608	1,444	554	1,178	7,004	
22. Tairāne	21,737	5,827	7	..	33,237	3,518	1,705	10,800	2,103	1,402	453	12,203	
23. Tairāne	14,799	4,034	105	..	9,878	1,165	4,828	21,188	4,880	2,731	..	30,799	
24. Tairāne	5,955	1,444	57	..	4,001	2,051	304	7,457	221	82	155	8,225	
25. Tairāne	150,624	30,000	310	..	15,704	335	848	12,600	236	321	215	13,653	
26. Tairāne	15,108	14,555	253	..	53,078	4,074	848	792	400	181	344	11,907	
27. Wairara	12,240	8,000	26	..	14,062	24,004	5,125	3,357	5,272	400	..	10,590	
28. Wairara	45,834	29,360	103	..	7,902	1,730	981	10,679	525	460	..	12,462	
29. Wairara	40,010	31,703	498	..	12,247	2,711	575	6,211	395	917	..	8,098	
30. Wairara	109,487	31,912	33	..	11,892	2,759	1,681	6,114	1,201	1,013	1,590	7,553	
Totals	1,074,540	935,050	6,944	6,143	617,915	10,181	85,270	47,544	43,062	25,602	10,430	122,340	
Town Boards													
1. Kaponga	17,554	4,805	147	..	7,860	3,113	1,002	5,009	582	435	227	7,840	
2. Mangaweka	2,150	1,418	378	..	1,873	531	213	1,684	91	22	..	1,797	
3. Manunui	2,560	1,182	..	..	1,182	46	250	679	149	94	..	1,122
Totals	24,000	10,329	925	70	10,924	4,410	1,025	8,332	822	551	227	11,004	
County Councils													
1. Heathcote	15,914	12,127	..	..	12,187	9,078	552	12,350	505	540	..	15,224
2. Kaitiaki	9,083	3,106	352	..	3,520	80	281	2,805	485	150	..	3,945	
3. Murchison	13,153	10,230	21	..	2,677	575	320	1,243	404	..	..	2,206
4. Uawa	1,800	920	..	..	929	21,892	3,734	28,598	857	1,011	..	30,444
5. Waimairi	93,906	36,082	52	..	38,135	21,892	3,734	28,598	857	1,011	1,633	32,944	
Totals	133,830	53,970	562	73	57,448	30,910	6,407	40,007	2,351	2,405	2,747	55,390	
Totals, other Local Authorities	7,155,297	1,902,779	203,062	10,503	49,450	785,814	280,935	149,514	130,975	101,330	39,930	1,760,874	
COMPANIES													
1. Kauri Electric Ltd. ^{1,2}	70,181	12,855	38	15	12,878	1,407	3,172	10,389	2,400	1,242	..	14,100	
2. Leo Koy, Kohukohu Co. Ltd.	5,175	6,000	165	101	4,344	500	9	2,744	..	230	..	715	
3. Redfern Electric Light and Power Co. Ltd.	7,795	4,078	..	..	4,078	..	..	..	..	..	..	2,980
4. Rawsons Motors Ltd. ^{1,2}	830	654	31	363	885	50	74	531	25	81	..	637	
5. Wilson's (N.Z.) Portland Cement, Ltd.	75,787	8,084	..	..	12,038	1,108	983	0,538	..	2,225	..	11,763
6. Westland Power, Ltd. ^{1,2}	78,538	7,577	95	8	7,080	1,903	3,000	5,883	2,597	1,908	..	10,478	
Totals	244,300	103,364	34,418	487	47,872	14,122	2,990	3,926	5,091	5,782	..	11,394	
Grand totals	44,194,906	32,874,072	5,706,431	2,479,291	35,072	117,800	8,939,070	581,362	2,486,911	935,058	4,574,804	1,304,017	473,979

Net profit for year: Public Works Department, £198,271; Electric-power Boards, £393,521; cities £275,056; boroughs £131,070; Town Boards, £170 (net deficit); County Councils, £2,058; companies, £7,199; total net profit, £1,227,911.

NOTES: ¹ Includes Arapuni, Horowhenua, Waikarepa, Waikarepa, King's Wharf, Pemrose and Hunnly power-stations. ² Includes Lake Coleridge, Waitaki, Monowai, Arnold River, and Dobson power-stations. ³ Not yet actively functioning. ⁴ License delegated to Westland Power, Ltd. ⁵ No return received. ⁶ Includes £6,077 cost of operating standby plants. ⁷ Includes £3,000 of operating standby plants. ⁸ Made up as follows: Wellington City Council, £1,068; New Plymouth Borough Council, £20,500; Tairāne Borough Council, £100; minor stations (six) £458. ⁹ Made up as follows: Invercargill City Council, £37; Dunedin City Council, £32. ¹⁰ Returns are for year ended 31st December, 1942. ¹¹ Return as at 31st Aug.

1941/1942

TABLE XIII.—AVERAGES DERIVED FROM PREVIOUS TABLES FOR THE YEAR ENDED 31ST MARCH, 1943—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 (Overall including Bulk Supply).	Per Unit (Excluding Bulk Supply).	Per Unit (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 Dist. Cost.	Per Cap.
OTHER LOCAL AUTHORITIES																	
1. Christchurch	10.97	32.02	3.10	0.797	0.705	0.632	3.28	9.76	11.65	908.18	0.628	8.62	72.49	0.108	1.64	0.685	37.1
2. Dunedin	23.05	21.65	6.43	0.740	0.707	0.615	3.63	9.01	10.80	494.42	0.313	8.62	41.58	0.241	3.48	0.594	23.7
3. Invercargill	7.71	23.60	2.97	1.273	1.273	1.214	2.65	7.89	18.61	671.27	0.884	13.01	66.72	0.183	2.82	1.067	7.90
4. Nelson	12.76	38.80	4.03	3.210	3.210	4.874	3.33	9.61	39.23	27.23	2.440	27.23	65.05	0.739	3.21	3.210	33.2
5. Palmerston North	12.96	41.98	3.66	0.766	0.811	0.510	3.73	11.56	13.92	954.47	0.630	9.64	66.33	0.117	2.14	3.210	35.2
6. Wellington	12.96	37.21	2.68	0.783	0.811	0.505	4.07	10.04	16.11	1,762.18	0.611	12.57	73.53	0.039	0.80	3.210	39.4
Totals	14.57	41.97	3.50	0.789(b)	0.824(d)	0.544(p)	3.61(e)	9.69(f)	10.66	904.52(m)	0.644(p)	...	67.04(m)	0.116(c)	0.80	0.677	38.2
Borough Councils																	
1. Bluff	6.11	20.63	2.05	2.207	2.207	4.045	3.27	10.04	17.87	510.66	1.843	15.00	75.88	0.329	2.68	2.172	47.9
2. Hamilton	5.28	15.00	1.47	0.976	0.976	0.802	3.60	10.19	17.46	816.50	0.616	11.03	69.00	0.054	1.14	0.680	57.4
3. Inglewood	8.67	23.54	3.57	1.115	1.216	1.088	3.62	9.74	18.16	606.60	1.191	17.79	97.12	0.252	3.76	1.445	27.4
4. Kalapoi	5.30	22.42	1.59	1.251	1.251	1.253	3.71	10.66	19.90	303.00	1.000	16.68	83.07	0.175	2.74	1.276	28.4
5. Lyttelton	8.46	15.40	2.50	0.975	0.971	0.822	3.33	10.06	20.54	1,224.00	0.897	14.27	68.12	0.048	4.07	0.940	49.4
6. Napier	15.42	40.65	3.24	0.909	0.739	0.610	4.00	12.44	17.82	311.71	0.877	11.12	69.68	0.193	0.617	0.817	45.5
7. New Plymouth	4.04	20.60	2.49	1.925	1.925	2.503	1.98	8.28	25.43	218.56	0.991	13.08	51.39	0.120	3.55	0.438	73.1
8. Otakune	9.20	38.60	3.65	1.165	1.165	1.160	3.52	14.31	21.85	423.83	0.780	14.83	61.27	0.175	1.79	0.688	20.7
9. Patoka	12.35	37.32	3.09	4.222	4.719	2.932	3.88	12.01	47.35	527.61	3.471	88.95	82.23	0.707	8.34	1.79	44.1
10. Queenstown	10.30	50.83	4.23	2.780	2.780	4.719	2.62	8.14	28.35	292.12	1.596	16.24	7.93	0.034	5.40	4.179	46.87
11. Raetihi	10.80	40.83	4.24	1.985	1.985	2.883	2.41	10.61	21.98	212.00	0.535	8.62	38.75	0.691	8.67	1.136	59.3
12. Rangiora	4.85	12.68	1.37	1.173	1.058	1.058	3.45	8.87	20.70	837.89	0.953	16.81	71.60	0.145	2.56	1.038	63.0
13. Riccarton	7.64	21.02	2.28	0.724	0.724	0.704	3.37	9.18	12.65	597.90	0.528	9.19	71.83	0.065	1.15	0.592	35.7
14. Ross	10.73	30.91	2.62	1.248	1.248	1.056	4.29	11.79	23.10	357.65	0.678	15.55	67.07	0.287	5.00	1.166	39.4
15. Stratford	19.21	30.36	2.49	0.925	0.925	0.705	4.14	12.31	17.66	718.31	0.588	11.85	84.82	0.202	3.84	0.800	35.1
16. Sumner	9.37	14.64	1.80	1.687	1.687	1.056	3.06	8.09	14.45	1,000.73	0.888	11.18	77.23	0.073	1.18	0.761	35.1
17. Tairāhema	18.80	19.78	3.72	0.866	0.866	1.342	3.68	11.31	23.50	715.72	0.987	17.75	58.13	0.513	7.15	1.501	159.4
18. Tauranga	40.40	44.42	5.65	0.418	0.566	0.468	3.36	11.18	35.86	682.96	0.827	13.70	48.43	0.161	6.69	0.589	40.0
19. Te Aroha	11.45	25.82	2.37	0.909	0.909	0.733	4.02	10.83	15.13	507.40	0.271	6.82	3.09	0.123	3.09	0.395	48.8
20. Te Puke	14.80	37.09	3.19	0.942	0.942	0.753	3.69	11.61	17.65	386.16	0.746	12.32	78.49	0.106	1.77	0.846	49.8
21. Thames	7.11	23.11	1.84	1.171	1.183	1.019	3.68	10.83	24.26	615.58	0.814	10.87	68.12	0.091	3.00	0.749	60.1
22. Wairoa	5.70	10.30	1.04	1.024	1.024	0.801	5.67	9.40	16.88	900.87	0.748	11.80	66.95	0.105	1.76	0.308	51.0
23. Waikanae	10.80	30.90	3.90	1.227	1.227	1.151	3.24	7.92	21.47	265.36	0.797	12.27	72.15	0.069	1.14	0.814	76.2
24. Westport	20.30	53.44	3.42	1.080	2.633	2.231	2.88	15.74	16.88	63.02	0.173	13.04	63.02	0.173	3.03	0.973	41.9
25. Whakatane	13.40	39.26	3.43	1.181	1.080	0.917	5.94	15.50	20.68	619.47	0.461	9.14	44.06	1.029	8.39	2.848	44.9
26. Whangarei	10.73	32.51	2.71	0.870(b)	0.902(d)	0.845	4.34	11.44	16.62	709.15	0.714	10.05	58.39	0.117	1.66	0.712	25.0
Totals	10.73	32.51	2.71	0.870(b)	0.902(d)	0.845	3.68(c)	10.85(f)	10.66	599.54(m)	0.597(p)	...	69.86(m)	0.147(r)	0.80	0.682	20.5
Town Boards																	
1. Kaponga	10.32	30.35	2.28	1.190	1.190	1.214	4.02	17.28	20.51	141.23	0.923	20.51	75.85	0.239	6.45	1.212	26.94
2. Manawaka	12.89	36.73	3.38	0.997	0.997	0.918	4.02	10.68	11.59	236.40	1.169	13.47	50.90	1.734	3.55	0.308	64.8
3. Manunui	3.31	13.85	2.15	4.030	4.030	4.217	1.53	6.42	38.12	236.40	2.657	21.00	80.44	1.734	14.20	1.468	17.05
Totals	8.77	32.50	2.28	1.263(d)	1.263(d)	1.263(d)	3.83(c)	13.46(f)	...	145.47(m)	1.019(p)	...	79.27(m)	0.337(r)	...	1.337(e)	47.3

(For notes see page 15.)

1941/1942

TABLE XIII A

Large Industrial and Tractors Loads.—Units sold and Revenue received for Year ended 31st March, 1943

Supply Authority.	Type of Load.	Units sold.	Revenue.
PUBLIC WORKS DEPARTMENT North Island system	Gold-mining N.Z.R. Workshops, Pebbles, and traction	KWh.	£(N.Z.)
		15,749,850	14,404
		17,488,429	37,607
South Island system	Gold-dredging N.Z.R. Workshops, Addington, and traction	18,429,480	83,280
		8,038,027	23,777
	Christchurch Tram- ways	9,054,110	18,101
	Alloy Steel (N.Z.) Ltd.	1,938,800	3,685
Totals		71,206,687	130,784
ELECTRIC-POWER BOARDS			
Auckland	Traction	24,312,145	68,248
		10,707,780	21,707
	Gold-dredging	8,052,051	10,147
	Collector	4,082,811	13,728
	Traction	1,229,600	2,602
Totals		48,384,487	112,552
CITIES AND BOROUGH			
Dunedin	Traction	4,479,419	9,102
		712,274	2,374
	Traction	970,875	1,800
	Traction	11,993,150	32,481
Totals		18,155,718	46,757
COMPANIES			
Kaiser Electric, Ltd.	Gold-dredging	2,568,840	4,014
		6,887,451	6,800
	Gold-mining	10,070,441	12,477
	Cement-manufacture		
Totals		147,883,333	301,570
Totals for all above Supply Authorities			

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

Item.	Electric Power Boards.				Other Local Authorities.				Companies.	Totals, all Supply Authorities.
	No.	£(N.Z.)	No.	£(N.Z.)	City Councils.	Borough Councils.	Town Boards.	County Councils.			Total.
1. Population	94,530	15,291,879	365,090	1,074,540	No.	£(N.Z.)	No.	£(N.Z.)	No.	£(N.Z.)
2. Number of consumers	13,107	3,525,272	259,385	969,950	2,850	24,000	2,850	133,830	9,530	44,304,00
3. Total units sold (bulk plus retail)	1,689,968,468	3,164,240	1,084,840,638	1,006,754,632	6,239	1,902,779	6,239	1,902,779	20,200,485	3,170,183
4. Units sold retail (less units sold for large industrial and traction loads (see Table XIII A))	110,173,191	3,412,720	894,602,663	934,822	1,061,529	10,329	1,061,529	203,062	20,200,485	3,170,183
5. Units sold retail, less units sold for large industrial and traction loads (see Table XIII A)	38,876,504	3,412,720	940,238,170	359,156	1,061,529	10,329	1,061,529	203,062	12,709,039	1,047,628,88
6. Route-miles of lines	5,315	20,927	1,685	1,187	71	204	204	1,857,022	2,092,508	1,499,735,05
										39,44
7. Capital outlay	21,573,431	5,321,813	5,321,813	1,074,540	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)
8. Revenue (retail sales)	304,462	3,525,272	1,274,532	969,950	24,000	1,902,779	24,000	1,902,779	244,300	44,304,00
9. Revenue (bulk sales)	2,100,281	3,164,240	1,169,138	43,872	10,329	10,329	50,962	1,902,779	34,418	3,170,183
10. Revenue (retail plus bulk sales)	2,418,743	3,679,552	1,433,670	694,822	10,329	10,329	57,014	2,105,841	13,638	3,330,266
11. Revenue from retail sales, less revenue from large industrial and traction loads (see Table XIII A)	173,078	3,412,720	1,230,575	359,156	10,329	10,329	58,962	2,105,841	47,050	3,240,10
12. Gross revenue (excluding rates)	2,441,479	3,744,625	1,479,507	617,918	10,924	10,924	57,446	2,165,704	47,872	3,399,07
13. Gross revenue (less revenue from bulk sales)	332,108	3,690,245	1,350,309	574,043	10,924	10,924	57,300	2,165,704	35,234	3,320,40
14. Working-costs	841,833	2,862,299	991,972	394,021	8,332	40,097	40,097	1,440,982	29,800	3,574,86
15. Capital charges	1,171,376	1,088,705	211,579	102,218	2,762	9,383	9,383	325,942	19,873	2,596,89
16. Total costs	2,013,208	3,353,004	1,203,551	496,839	11,094	55,300	55,300	1,766,874	40,673	7,171,75
17. Capital outlay on transmission and distribution systems	9,310,119	14,262,828	3,751,188	1,102,094	23,442	140,157	140,157	4,906,791	70,171	28,645,00

194/1942

TABLE XIV.—RETURN OF ELECTRIC RANGES, WATER-HEATERS, AND MILKING-MACHINES CONNECTED TO ELECTRIC-SUPPLY SYSTEMS AS AT 31ST MARCH, 1943

Supply Authorities.	Number of Consumers.				Ranges.				Water-heaters.			Milk-mach.				
	Domestic.		Commercial.		Total.		Under 6 Kilowatts.		5 Kilowatts and over.		Total Number.	Total Kilowatts.	Percentage of Total Ranges to Domestic Consumers.	Number.	Percentage of Total Water-heaters to Total Consumers.	Number.
	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	kW.	Per Cent.	kW.	Per Cent.	Number.		
PUBLIC WORKS DEPARTMENT																
1. North Island system ¹	439	12	451	5,023	1,127 ⁰	911	2,038	7,314	2,038	45.80	2,964	28.76	1,445	28.76	192	
2. South Island system ²	10,885	1,771	12,656	70,328	N.A.	22,175	22,175	133,000 ¹¹	22,175	38.50	20,275 ¹¹	38.67	27,197	38.67	750	
Totals ..	11,324	1,783	13,107	75,353	1,127 ⁰	23,186	24,313	246,314	24,313	43.92	22,249	30.93	34,894	30.93	1,527	
POWER BOARDS																
1. Ashburton ..	4,449	574	5,023	5,023	1,127 ⁰	911	2,038	7,314	2,038	45.80	2,964	28.76	1,445	28.76	192	
2. Auckland ..	57,589	12,739	70,328	70,328	N.A.	22,175	22,175	133,000 ¹¹	22,175	38.50	20,275 ¹¹	38.67	27,197	38.67	750	
3. Banks Peninsula ..	1,061	64	1,125	1,125	196	270	466	2,333	466	43.92	584	30.93	348	30.93	153	
4. Bay of Islands ..	2,192	365	2,557	2,557	135 ⁸	412	547	2,615	547	24.95	802	31.36	802	31.36	438	
5. Bay of Plenty ..	2,097	346	2,443	2,443	148	774	922	5,401	922	43.96	1,341	64.55	1,577	64.55	753	
6. Buller's ..																
7. Cambridge ..																
8. Central Hawke's Bay ..	1,731	252	1,983	1,983	27	435	462	2,705	462	26.68	1,214	49.72	986	49.72	436	
9. Central Waikato ..	1,886	385	2,271	2,271	215	646	861	4,863	861	45.65	866	33.98	765	33.98	176	
10. Dannevirke ..	7,220	695	7,915	7,915	606 ⁷	1,630	2,136	11,088	2,136	29.58	3,827	48.36	3,827	48.36	2,096	
11. Franklin ..	2,777	548	3,325	3,325	125	550	675	3,953	675	24.30	1,072	32.34	1,072	32.34	523	
12. Golden Bay ..	5,042 ¹¹	630 ¹¹	5,672	5,672	634	1,912	2,546	12,432	2,546	50.49	4,070	71.75	4,070	71.75	2,365	
13. Grey ..	474	88	562	562	91	60	151	625	151	31.85	123	34.34	193	34.34	129	
14. Hawke's Bay ..	4,618	697	5,315	5,315	252	772	1,024	6,046	1,024	22.17	562	10.67	562	10.67	60	
15. Horowhenua ..	8,512	963	9,475	9,475	135	3,339	3,474	28,948	3,474	40.81	3,532	37.25	2,305	37.25	403	
16. Hutt Valley ..	4,935	1,503	6,438	6,438	1,836	2,486	2,486	13,320	2,486	50.37	1,588	35.80	2,305	35.80	776	
17. King-country ¹ ..	15,632	2,000	17,632	17,632	610	5,433	6,049	36,248	6,049	36.13	6,629	37.02	6,629	37.02	120	
18. Manawatu ..																
19. Manawatu-Oroua ..	713	81	794	794	73	138	211	1,037	211	29.59	166	10.95	87	10.95	5	
20. Marlborough ..	5,871	260	6,131	6,131	21	1,678	1,699	11,747	1,699	28.93	1,733	41.42	2,640	41.42	1,601	
21. North Auckland ..	3,028	518	3,546	3,546	222	487	719	4,077	719	23.74	334	10.40	369	10.40	145	
22. North Canterbury ..	4,014	967	4,981	4,981	N.A.	1,197	1,197	6,726	1,197	29.82	1,760	55.73	2,776	55.73	1,630	
23. Opuake ..	3,621	361	3,982	3,982	419	619	1,038	5,578	1,038	28.66	1,331	19.68	784	19.68	222	
24. Otago ..	1,199	201	1,400	1,400	75	291	363	2,203	363	30.52	509	44.21	619	44.21	415	
25. Otago Central ..	4,218	1,055	5,273	5,273	69	543	612	3,795	612	14.50	731	10.33	545	10.33	164	
26. Poverty Bay ..	1,369	330	1,699	1,699	89	365	454	2,543	454	33.16	468	27.64	468	27.64	112	
27. Reefton ³ ..	5,227	1,364	6,591	6,591	N.A.	2,258	2,258	13,561	2,258	43.19	1,509	32.02	2,111	32.02	296	
28. South Canterbury ..																
29. South Taranaki ..	4,814	680	5,494	5,494	142	775	917	5,946	917	19.04	984	14.05	772	14.05	198	
30. Springs-Ellesmere ..	3,432	850	4,282	4,282	126	948	1,074	6,729	1,074	31.29	1,179	41.49	1,777	41.49	953	
31. Taranaki ..	2,776	273	3,049	3,049	330	512	842	4,119	842	30.33	1,211	27.15	1,828	27.15	287	
32. Tairāia ..	2,906	285	3,191	3,191	17	668	685	4,679	685	23.57	1,001	43.54	1,394	43.54	21	
33. Tairāra ..	1,898	313	2,211	2,211	423	606	1,029	4,903	1,029	54.21	653	44.14	976	44.14	485	
34. Te Awamutu ..	2,382	195	2,577	2,577	132	1,044	1,176	7,412	1,176	49.37	1,399	77.92	2,008	77.92	847	
35. Teviot ..	2,335	498	2,833	2,833	327	692	1,019	4,970	1,019	43.04	1,562	55.13	1,562	55.13	905	
36. Thames Valley ..	434	64	498	498	34	202	236	1,407	236	54.37	1,67	40.56	6,401	40.56	2	
37. Thames ..	9,703	981	10,684	10,684	34	202	236	1,407	236	54.37	1,67	40.56	6,401	40.56	2	
38. Wairarapa ..	2,754	594	3,348	3,348	85	348	490	2,965	490	17.79	5,248	60.02	2,370	60.02	191	
39. Waikare ..	5,265	1,104	6,369	6,369	424	1,696	2,119	12,856	2,119	40.24	2,300	38.10	2,427	38.10	709	
Totals ..	541	74	615	615	60	224	284	1,608	284	52.49	1,608	52.19	321	52.19	165	

(For notes, see page 19.)

194/1942

TABLE XIV.—RETURN OF ELECTRIC RANGES, WATER-HEATERS, AND MILKING-MACHINES CONNECTED TO ELECTRIC-SUPPLY SYSTEMS AS AT 31ST MARCH, 1943—continued.

Supply Authorities.	Number of Consumers.				Ranges.				Water-heaters.			Milk-machines.			
	Domestic.		Commercial.		Total.		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. Power.
	Number.	Number.	Number.	Number.	Number.	Per Cent.										Per Cent.
POWER BOARDS—continued															
40. Wairoa	474	117	591	54	138	192	1,123	1,123	40.50	238	161	40.27	134	1.1	
41. Waikaki	4,448	643	5,091	225	1,523	1,748	11,251	11,251	39.29	1,783	1,998	35.02	66	1.3	
42. Waitemata	16,356	1,200	17,556	67	6,133	6,200	37,816	37,816	37.90	5,710	4,376	32.52	2,087	1.3	
43. Waikato	1,796	434	2,230	82	832	914	5,682	5,682	50.89	1,041	839	46.68	378	1.3	
44. Wanganui-Kangitikei	10,063	2,257	12,320	N.A.	2,447	2,447	15,860	15,860	24.31	3,181	2,386	25.81	1,217	1.3	
45. Westlands .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	221,852	37,543	259,395	8,195	70,900	79,095	478,024	478,024	35.65	96,449	79,255	37.18	27,343	35.1	
OTHER LOCAL AUTHORITIES															
<i>City Councils</i>															
1. Christchurch	29,055	5,328	34,383	644	14,987	15,631	106,902	106,902	52.70	11,979	11,451	34.24	61	..	
2. Dunedin	24,858	7,417	32,275	1,081	3,183	4,264	23,067	23,067	17.15	7,155	8,350	22.16	208	..	
3. Invercargill	6,120	1,098	7,218	191	138	329	1,058	1,058	5.37	328	379	4.54	..	..
4. Nelson	2,800 ¹¹	950 ¹¹	3,750	..	..	..	..	..	..	..	..	..	..	..
5. Palmerston North	5,900 ¹¹	1,400 ¹¹	7,300	144	1,819	1,963	11,307	11,307	33.27	2,848	2,213	39.01	3	..	
6. Wellington	31,053	11,118	42,171	426	4,800	5,226	30,957	30,957	16.82	8,960	11,489	21.24	18	..	
Totals	100,386	27,311	127,697	2,486	24,927	27,413	173,351	173,351	27.30	31,270	33,862	24.48	290	3	
<i>Borough Councils</i>															
1. Bluff	504	106	610	8	7	15	57	57	2.97	10	13	1.03	..	..
2. Hamilton	4,635	1,450	6,085	161	742	903	5,243	5,243	19.48	1,435	859	23.58	4	..	
3. Inglewood	350	118	468	2	83	85	604	604	24.28	82	63	17.52	..	..
4. Kaapoi	586	89	675	95	100	195	885	885	33.28	78	80	11.55	2	..	
5. Lyttelton	914	158	1,072	8	207	215	1,394	1,394	23.52	130	117	12.12	4	..	
6. Napier	3,909	1,086	4,995	51	785	836	5,847	5,847	21.38	1,435	1,031	28.72	..	..
7. New Plymouth	6,624	1,125	7,749	352	2,770	3,122	17,205	17,205	47.13	3,453	2,939	44.56	808	1.1	
8. Ohakune	469	139	608	29	22	51	180	180	10.87	42	39	6.90	11	..	
9. Patea	533	88	621	30	134	164	1,080	1,080	30.76	160	110	30.01	23	..	
10. Picton	372	72	444	2	1	3	14	14	0.80	7	3	2.36	..	..
11. Queenstown	224	72	296	3	12	15	70	70	6.69	74	60	14.50	..	..
12. Raetihi	393	117	510	21	24	45	229	229	11.45	203	224	24.25	..	..
13. Rangiora	724	113	837	5	162	157	988	988	21.68	1,039	807	48.68	..	..
14. Riccarton	1,971	163	2,134	45	1,006	1,051	6,957	6,957	53.32	1,039	807	48.68	..	..
15. Ross .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16. Rotorua (Tourist Department)	2,879	850	3,729	183	591	774	4,181	4,181	26.88	902	838	24.18	250	..	
17. Stratford	1,012	300	1,312	10	319	329	1,937	1,937	32.51	319	290	24.31	3	..	
18. Sumner	1,243	2	1,245	N.A.	317	317	1,903	1,903	25.50	262	254	21.04	1	..	
19. Taihape	609	18	627	18	80	98	625	625	19.25	71	69	10.20	2	..	
20. Taurarunui	986	277	1,263	61	115	176	857	857	17.85	130	93	10.29	54	..	
21. Taumarunga	1,318	310	1,628	170	802	972	6,062	6,062	73.74	955	450	58.66	..	..
22. Te Aroha	604	238	842	16	196	212	1,488	1,488	36.09	240	181	28.50	8	..	
23. Te Puke	269	130	399	34	99	133	731	731	49.44	126	74	31.57	10	..	
24. Thames	940	233	1,173	69	231	300	1,673	1,673	31.91	247	161	20.03	1	..	
25. Timaru	4,410	1,069	5,479	N.A.	1,048	1,048	6,588	6,588	23.76	1,072	1,604	19.56	2	..	

(For notes, see page 19.)

1942

TABLE XIV.—RETURN OF ELECTRIC RANGES, WATER-HEATERS, AND MILKING-MACHINES CONNECTED TO ELECTRIC-SUPPLY SYSTEMS AS AT 31ST MARCH, 1943—continued

Supply Authorities.	Number of Consumers.			Ranges.				Water-heaters.			Milking-ma	
	Domestic.	Commercial.	Total.	Under 5 Kilowatts.	5 Kilowatts and over.	Total Number.	Total Kilowatts.	Per Cent. of Total Ranges to Domestic Consumers.	Number.	Total Kilowatts.	Percentage of Total Water-heaters to Total Consumers.	Number.
OTHER LOCAL AUTHORITIES—continued												
<i>Borough Councils—continued</i>												
26. Wairoa	668	257	925	20	311	331	2,228	49.55	364	212	39.35	3
27. Waitara	551	689	1,240	61	130	191	1,003	34.66	163	128	23.65	10
28. Westport	1,167	316	1,483	5	8	13	66	1.11	34	32	2.29	12
29. Whakatane	592	168	760	33	282	315	2,040	63.21	279	191	36.71	14
30. Whangarei	2,044	745	2,789	35	598	633	3,034	30.96	562	355	20.15	15
Totals	41,400	10,104	51,504	1,527	11,172	12,699	75,169	30.67	13,874	11,277	26.93	1,300
<i>Town Boards</i>												
1. Kaponga	373	73	446	45	70	115	602	30.83	157	123	35.20	165
2. Mangaweka	105	32	137	4	35	39	219	37.14	39	26	28.46	6
3. Manunui	161	23	184	1	1	2	8	1.24	..	..	..	5
Totals	639	128	767	50	106	156	829	24.41	196	149	25.55	176
<i>County Councils</i>												
1. Heathcote	1,080	5	1,085	103	556	659	3,503	61.01	509	519	40.91	8
2. Kaikoura	195	70	265	4	..	4	8	2.05	..	..	..	1
3. Murchison	175	21	196	17	12	29	94	16.57	35	26	17.85	25
4. Uawa	93	20	113	..	..	..	..	..	..	..	..	..
5. Waimairi	4,270	310	4,580	125	1,757	1,882	11,260	44.07	1,495	1,468	32.64	83
Totals	5,813	426	6,239	249	2,325	2,574	14,865	44.28	2,039	2,013	32.68	117
Totals, other Local Authorities	148,238	37,969	186,207	4,312	38,530	42,842	264,214	28.90	47,379	47,321	25.44	1,883
COMPANIES												
1. Kanieri Electric, Ltd.†	679	253	932	32	114	146	879	21.50	71	69	7.01	..
2. Leo Keys, Kohukohu	65	2	67	3	..	3	6	4.61	3	2	4.47	..
3. Reefton Electric Light and Power Co., Ltd.	306	77	383	..	..	..	..	..	1	2	0.26	1
4. Rawene Motors, Ltd.††	35	20	55	..	..	..	..	..	..	..	..	..
5. Wilson's (N.Z.) Portland Cement, Ltd.	164	48	212	14	10	30	140	18.29	41	33	19.33	29
6. Westland Power, Ltd.	334	76	410	16	25	41	217	12.27	40	52	9.75	43
Totals	1,583	476	2,059	65	155	220	1,242	13.80	156	158	7.57	73
Grand totals	382,997	77,771	460,768	12,816	111,753	124,569	759,180	32.52	145,476	128,596	31.57	30,836

NOTES.—† Includes Arapuni, Horahora, Waikaremoana, Mangaiaco, and King's Wharf power-stations interconnected.
 †† Board constituted 15th May, 1940; not yet actively functioning.
 ††† Includes 1,057 heat storage ranges.
 †††† Includes 67 heat storage ranges.
 ††††† Includes Lake Coleridge, Waitaki, Monowai, and Arnold River power-stations interconnected.
 †††††† Includes 165 heat storage ranges.
 ††††††† Return for year ended 31st December, 1942.
 †††††††† N.A. = Not available.
 Ratio of domestic consumers to total consumers = 83.12 per cent.