

ANNUAL STATISTICS IN RELATION TO ELECTRIC POWER DEVELOPMENT AND OPERATION

YEAR ENDED 31 MARCH 1964

Condensed Statistics for the Combined Development and Operations of the New Zealand Electricity Department and Distributing Electrical Supply Authorities

No.			Water	Steam	Oil	Total	No.
1	Generating stations	No.	44	4	7	55	1
2	Installed capacity	kW	1,579,526	421,420	5,398	2,006,344	2
3	Generation	kWh	6,851,518,197	2,111,277,795	566,730	8,963,352,722	3
4	Maximum load	kW				1,874,300	4
5	Retail sales	kWh				7,577,489,873	5
6	Consumers	No.				912,673	6
7	Population	No.				2,590,787	7
8	Capital outlay, generation, transmission, and distribution	£		41,814,660		382,307,002	8
9	Revenue retail sales of electricity	£		959,148			9
10	Revenue from other sources	£				42,773,808	10
11	Total revenue	£					11
12	Working costs	£		13,792,426			12
13	Capital charges	£		21,349,801			13
14	Total costs	£				35,142,227	14
15	Net profit	£				7,631,581	15
16	Working costs per kWh sold retail	d.		0.4368			16
17	Capital charges per kWh sold retail	d.		0.6762			17
18	Total costs per kWh sold retail	d.				1.1130	18
19	Total revenue per kWh sold retail	d.				1.3548	19
20	Revenue retail sales of electricity per kWh sold retail	d.				1.3244	20
21	Generation per head of total population	kWh				3,460	21
22	Retail sales per consumer	kWh				8,303	22
23	Capital outlay per kW installed capacity	£				190.55	23
24	Ratio of capital charges to capital outlay	%				5.584	24
25	Electrical fires reported during year	No.				164	25
26	Fatal electrical accidents during year	No.				19	26
27	Electric ranges (domestic)	No.				563,510	27
28	Electric water heaters (domestic)	No.				596,800	28

TABLE I—NEW ZEALAND ELECTRICITY DEPARTMENT ONLY
Summarised Gross Revenue, Net Revenue, and Appropriation Accounts for Year Ended 31 March 1964

	£	Revenue—	£
Working costs	6,410,962	Sales of energy	25,615,868
Capital charges—		Rent and miscellaneous receipts	163,346
Interest	10,616,392		
Depreciation	2,779,157		
Loan capital repayments	1,548,424		
	14,943,973		
Total costs (see table IV)	21,354,935		
Transfer to Reserve Fund	4,424,279		
	25,779,214		

TABLE II—NEW ZEALAND ELECTRICITY DEPARTMENT ONLY
Summarised Balance Sheet as at 31 March 1964

	£		£
Loan liability	220,914,570	Completed works	215,746,676
Sundry creditors, etc.	2,808,034	Works under construction	57,162,642
Reserves—		Plant, motor vehicles, and tools	1,423,087
Depreciation	31,864,695	Stocks of materials	3,085,948
Loan capital repayments	14,734,716	Capital outlay (see table V)	277,418,353
Reserve Fund	13,342,086	Sundry debtors, etc.	6,245,748
	59,941,497		
	283,664,101		283,664,101

TABLE III—OPERATING RESULTS: NEW ZEALAND ELECTRICITY DEPARTMENT ONLY

	1963-64		1963-64
Maximum load (kilowatts)—		Revenue—	
North Island†	1,305,130	Per kW of maximum load	£14-1498
South Island†	505,200	Per unit output	0-705d.
	*1,810,330	Per unit sold	0-768d.
Average load (kilowatts)—		Working costs—(including administration)—	
North Island	715,139	Per kW of maximum load	£3-5413
South Island	278,154	Per unit output	0-176d.
		Per unit sold	0-192d.
Average load factor—	Per Cent	Capital charges—	
North Island	54-79	Per kW of maximum load	£8-2548
South Island	55-06	Per unit output	0-411d.
		Per unit sold	0-448d.
Unit output (generated and purchased)—		Total costs—	
North Island	6,281,783,856	Per kW of maximum load	£11-7961
South Island	2,443,308,515	Per unit output	0-587d.
		Per unit sold	0-640d.
Total	8,725,092,371		
Units sold—			
North Island	5,783,179,088		
South Island	2,221,372,789		
Total	8,004,551,877		
Units unsold (used free of charge)—			
North Island	38,397,783		
South Island	28,832,516		
Total	67,230,299		
Line losses—			
Transmission and distribution—	Units	Per Cent	
North Island	460,206,985	7-33	
South Island	193,103,210	7-90	
Total	653,310,195	7-49	

*Sum of North and South Island maximum loads - not simultaneous maximum demand.
†See footnote, table VII, for maximum load for total public supply.

TABLE IV—NEW ZEALAND ELECTRICITY DEPARTMENT ONLY
Analysis of Operating Costs for Year Ended 31 March 1964

	(a) Working Costs	(b) Administration Costs	(c) Capital Charges	(d) Total Costs	Total Cost per kWh	
					(e) Output	(f) Sold
Hydro-electric stations	£ 889,440	£ 369,431	£ 7,861,563	£ 9,120,434	0-3341	d.
Thermal stations	2,665,837	319,321	3,373,689	6,358,847	0-7266	..
Power purchases	221,619	4,432	..	226,051	0-7468	..
Generated and purchased	3,776,896	693,184	11,235,252	15,705,332	0-4320	0-4709
Transmission	384,426	159,672	1,793,927	2,338,025	0-0643	0-0701
Substations	537,506	223,255	1,653,609	2,414,370	0-0664	0-0724
Communications	87,714	36,432	74,302	198,448	0-0055	0-0059
Retail distribution	158,863	127,354	186,883	473,100	0-0130	0-0142
System operation	159,437	66,223	..	225,660	0-0062	0-0068
Totals	5,104,842	1,306,120	14,943,973	21,354,935	0-5874	0-6403
Administration (see column (b))	1,306,120					
	6,410,962	SUMMARY				
		Working costs	5,104,842	0-1404	0-1531	
		Administration costs	1,306,120	0-0359	0-0392	
		Capital charges	14,943,973	0-4111	0-4480	
		Total costs	21,354,935	0-5874	0-6403	

TABLE V—NEW ZEALAND ELECTRICITY DEPARTMENT ONLY
Analysis of Capital Outlay as at 31 March 1964

	Headworks	Station Buildings and Villages	Generating Plant and Machinery	Total	Grand Total
<i>Completed Works</i>					
Hydro-electric stations—	£	£	£	£	£
Karapiro	2,574,402	604,382	953,922	4,132,706	
Arapuni	1,525,698	556,736	1,092,630	3,175,064	
Waipapa	4,975,545	1,377,147	1,425,776	7,778,468	
Maraetai	6,091,307	1,693,351	1,759,230	9,543,888	
Whakamaru	6,987,538	1,337,533	2,291,706	10,616,777	
Atiamuri	6,760,961	1,478,575	2,055,989	10,295,525	
Ohakuri	6,899,836	1,575,811	1,992,971	10,468,618	
Aratiatia	4,509,155	1,314,720	803,194	6,627,069	
Lake Taupo Control	205,165	..	..	205,165	
Kaitawa	1,208,910	188,385	314,406	1,711,701	
Tuaiti	275,344	336,629	482,328	1,094,301	
Piripaua	756,567	107,849	212,709	1,077,125	
Lake Waikaremoana Control	463,377	..	..	463,377	
Mangahao	979,637	197,329	320,787	1,497,753	
Cobb	4,134,025	427,613	397,267	4,958,905	
Arnold	109,996	11,469	26,667	148,132	
Lake Coleridge	552,479	188,552	251,150	992,181	
Highbank	333,788	129,216	179,901	642,905	
Lake Tekapo	2,580,270	525,649	441,987	3,547,906	
Lake Pukaki Control	2,309,991	..	..	2,309,991	
Waitaki	1,890,732	1,539,198	1,292,358	4,722,288	
Roxburgh	16,417,796	3,051,932	4,362,625	23,832,353	
Lake Wakatipu Control	692	2,747	..	3,439	
Lake Hawea Control	2,436,841	6,180	..	2,443,021	
Monowai	128,656	79,898	69,647	278,201	
	75,108,708	16,730,901	20,727,250	..	112,566,859
Thermal stations—					
King's Wharf	..	165,170	259,243	424,413	
Meremere	1,991,428*	4,201,455	11,629,166	17,822,049	
Wairakei	9,935,080†	4,536,188	4,687,842	19,159,110	
Evans Bay	..	77,066	223,292	300,358	
Stoke	..	12,341	66,961	79,302	
Dobson	..	42,428	94,398	136,826	
	11,926,508	9,034,648	16,960,902	..	37,922,058
Transmission system—					
33 kV a.c. lines	..	..	..	223,677	
50 kV a.c. lines	..	..	..	787,948	
66 kV a.c. lines	..	..	..	2,097,804	
110 kV a.c. lines	..	..	..	8,509,869	
220 kV a.c. lines	..	..	..	14,067,294	
				..	25,686,592
Substations—					
33 kV	..	..	..	194,664	
50 kV	..	..	..	1,117,559	
66 kV	..	..	..	2,012,285	
110 kV	..	..	..	11,740,451	
220 kV	..	..	..	8,612,470	
				..	23,677,429
Communication system	..	..	..	..	1,063,908
Distribution system	..	..	..	..	2,675,901
Offices, stores, land, and buildings	..	..	..	..	973,446
Cost of raising loans	..	..	..	..	824,721
Interest during construction on completed works	..	..	..	..	10,355,762
				..	215,746,676
<i>Works Under Construction</i>					
Hydro-electric stations—					
Maraetai II	3,622,726	602,282	176,811	4,401,819	
Aratiatia	283,885	53,788	594,089	931,762	
Matabiqa	6,943,428	..	867,948	7,811,376	
Benmore	21,308,371	917,386	4,172,334	26,398,091	
Aviemore	572,301	..	..	572,301	
Manapouri	2,234,683	..	..	2,234,683	
Additions to completed stations	815	172,782	32,226	205,823	
	34,966,209	1,746,238	5,843,408	..	
Thermal stations—					
Wairakei	1,719,013†	22,498	8,493	1,750,004	
Transmission system—					
66 kV a.c. lines	..	..	..	85,459	
110 kV a.c. lines	..	..	..	98,215	
220 kV a.c. lines	..	..	..	2,178,446	
500 kV d.c. lines	..	..	..	4,040,344	
Substations—					
33 kV	..	..	..	40,092	
50 kV	..	..	..	3,307	
66 kV	..	..	..	103,611	
110 kV	..	..	..	378,264	
220 kV and higher voltage	..	..	..	2,937,142	
Communication system	..	..	..	94,073	
Distribution system	..	..	..	13,396	
Offices, stores, land, and buildings	..	..	..	21,669	
				..	54,299,877
Interest on works under construction	..	..	..	..	15,269
Surveys and investigations of other schemes	..	..	..	..	2,847,496

TABLE VI—STATISTICS OF GENERATING PLANTS, SYSTEM VOLTAGES, ROUTE-MILES OF LINES, DISTRIBUTION SUBSTATIONS, ETC., FOR THE YEAR ENDED 31 MARCH 1964

o.	Supply Authorities	Source of Supply ¹	Year When Supply Com-menced	Capacity of Generating Plant			Static Head, in Feet	Voltage			Route Miles of Lines	
				Water	Steam	Oil		Transmission	Distribution*	Number		kVA
1	NEW ZEALAND ELECTRICITY DEPARTMENT											
2	North Island	G.	1921	kW 157,800 kVA 180,000	kW 1,369,420 kVA 1,533,731	kVA 92	175	220,000 110,000 50,000	11,000; 6,600; 3,300	204	120,892	3,634
3	North Island	G.	1915	kW 3,060 kVA 3,600	kW 550,960 kVA 616,733		42	220,000 110,000 66,000 33,000	11,000	71	252,157	2,310
4	Arnold			kW 32,000 kVA 37,222			1,950					
5	Cobb			kW 24,500 kVA 28,640			490					
6	Highgate			kW 23,000 kVA 27,080			330					
7	Manawatu			kW 320,000 kVA 355,555			157					
8	Manawatu			kW 25,200 kVA 28,000			100					
9	Manawatu			kW 103,000 kVA 116,666			70					
10	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
11	Manawatu			kW 3,060 kVA 3,600			42					
12	Manawatu			kW 32,000 kVA 37,222			1,950					
13	Manawatu			kW 24,500 kVA 28,640			490					
14	Manawatu			kW 23,000 kVA 27,080			330					
15	Manawatu			kW 320,000 kVA 355,555			157					
16	Manawatu			kW 25,200 kVA 28,000			100					
17	Manawatu			kW 103,000 kVA 116,666			70					
18	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
19	Manawatu			kW 3,060 kVA 3,600			42					
20	Manawatu			kW 32,000 kVA 37,222			1,950					
21	Manawatu			kW 24,500 kVA 28,640			490					
22	Manawatu			kW 23,000 kVA 27,080			330					
23	Manawatu			kW 320,000 kVA 355,555			157					
24	Manawatu			kW 25,200 kVA 28,000			100					
25	Manawatu			kW 103,000 kVA 116,666			70					
26	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
27	Manawatu			kW 3,060 kVA 3,600			42					
28	Manawatu			kW 32,000 kVA 37,222			1,950					
29	Manawatu			kW 24,500 kVA 28,640			490					
30	Manawatu			kW 23,000 kVA 27,080			330					
31	Manawatu			kW 320,000 kVA 355,555			157					
32	Manawatu			kW 25,200 kVA 28,000			100					
33	Manawatu			kW 103,000 kVA 116,666			70					
34	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
35	Manawatu			kW 3,060 kVA 3,600			42					
36	Manawatu			kW 32,000 kVA 37,222			1,950					
37	Manawatu			kW 24,500 kVA 28,640			490					
38	Manawatu			kW 23,000 kVA 27,080			330					
39	Manawatu			kW 320,000 kVA 355,555			157					
40	Manawatu			kW 25,200 kVA 28,000			100					
41	Manawatu			kW 103,000 kVA 116,666			70					
42	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
43	Manawatu			kW 3,060 kVA 3,600			42					
44	Manawatu			kW 32,000 kVA 37,222			1,950					
45	Manawatu			kW 24,500 kVA 28,640			490					
46	Manawatu			kW 23,000 kVA 27,080			330					
47	Manawatu			kW 320,000 kVA 355,555			157					
48	Manawatu			kW 25,200 kVA 28,000			100					
49	Manawatu			kW 103,000 kVA 116,666			70					
50	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
51	Manawatu			kW 3,060 kVA 3,600			42					
52	Manawatu			kW 32,000 kVA 37,222			1,950					
53	Manawatu			kW 24,500 kVA 28,640			490					
54	Manawatu			kW 23,000 kVA 27,080			330					
55	Manawatu			kW 320,000 kVA 355,555			157					
56	Manawatu			kW 25,200 kVA 28,000			100					
57	Manawatu			kW 103,000 kVA 116,666			70					
58	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
59	Manawatu			kW 3,060 kVA 3,600			42					
60	Manawatu			kW 32,000 kVA 37,222			1,950					
61	Manawatu			kW 24,500 kVA 28,640			490					
62	Manawatu			kW 23,000 kVA 27,080			330					
63	Manawatu			kW 320,000 kVA 355,555			157					
64	Manawatu			kW 25,200 kVA 28,000			100					
65	Manawatu			kW 103,000 kVA 116,666			70					
66	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
67	Manawatu			kW 3,060 kVA 3,600			42					
68	Manawatu			kW 32,000 kVA 37,222			1,950					
69	Manawatu			kW 24,500 kVA 28,640			490					
70	Manawatu			kW 23,000 kVA 27,080			330					
71	Manawatu			kW 320,000 kVA 355,555			157					
72	Manawatu			kW 25,200 kVA 28,000			100					
73	Manawatu			kW 103,000 kVA 116,666			70					
74	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
75	Manawatu			kW 3,060 kVA 3,600			42					
76	Manawatu			kW 32,000 kVA 37,222			1,950					
77	Manawatu			kW 24,500 kVA 28,640			490					
78	Manawatu			kW 23,000 kVA 27,080			330					
79	Manawatu			kW 320,000 kVA 355,555			157					
80	Manawatu			kW 25,200 kVA 28,000			100					
81	Manawatu			kW 103,000 kVA 116,666			70					
82	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
83	Manawatu			kW 3,060 kVA 3,600			42					
84	Manawatu			kW 32,000 kVA 37,222			1,950					
85	Manawatu			kW 24,500 kVA 28,640			490					
86	Manawatu			kW 23,000 kVA 27,080			330					
87	Manawatu			kW 320,000 kVA 355,555			157					
88	Manawatu			kW 25,200 kVA 28,000			100					
89	Manawatu			kW 103,000 kVA 116,666			70					
90	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
91	Manawatu			kW 3,060 kVA 3,600			42					
92	Manawatu			kW 32,000 kVA 37,222			1,950					
93	Manawatu			kW 24,500 kVA 28,640			490					
94	Manawatu			kW 23,000 kVA 27,080			330					
95	Manawatu			kW 320,000 kVA 355,555			157					
96	Manawatu			kW 25,200 kVA 28,000			100					
97	Manawatu			kW 103,000 kVA 116,666			70					
98	Manawatu			kW 1,498,960 kVA 1,683,599	kW 421,420 kVA 486,865			11,000 6,600 3,300 400	11,000	275	373,049	5,944
99	Manawatu			kW 3,060 kVA 3,600			42					
100	Manawatu			kW 32,000 kVA 37,222			1,950					

(For notes see page 6.)

TABLE VI—STATISTICS OF GENERATING PLANTS, SYSTEM VOLTAGES, ROUTE-MILES OF LINES, DISTRIBUTION SUBSTATIONS, ETC., FOR THE YEAR ENDED 31 MARCH 1964—continued

o.	Supply Authorities	Source of Supply ¹	Year When Supply Com-menced	Capacity of Generating Plant			Static Head, in Feet	Voltage			Route Miles of Lines	
				Water	Steam	Oil		Transmission	Distribution*	Number		kVA
1	Power Boards											
2	Ashburton	G. G.	1923	kW 88	kW 88	kVA 92	134	11,000; 6,600	11,000; 6,600	1,963	34,270	1,502
3	Auckland	G. G.	1908	kW 200	kW 200	kVA 250	430	11,000; 6,600	11,000; 6,600	2,369	526,49	

TABLE VI—STATISTICS OF GENERATING PLANTS, SYSTEM VOLTAGES, ROUTE-MILES OF LINES, DISTRIBUTION SUBSTATIONS, ETC., FOR THE YEAR ENDED 31 MARCH 1964—continued

No.	Supply Authorities	Source of Supply ¹	Year When Supply Commenced	Capacity of Generating Plant				Static Head, in Feet	Voltage			Route Miles of Lines	
				Water	Steam	Oil	Total Capacity		Generation	Transmission	Distribution ³		
				kW	kVA	kW	kVA		kW	kVA	Number	kVA	
1	Town Boards	B.	1916	..	..	..	..	..	..	..	12	205
2			1913	..	..	..	..	..	..	..	12	205
1	County Councils	G.	1914	..	..	..	..	..	..	..	23	9,400
2			1922	..	..	..	..	..	..	..	112	2,141
3			1957	250	313	..	..	..	..	..	45	1,265
4			1960	..	..	250	313	..	..	..	34	1,360
1	Companies	I. & G.	..	250	313	..	..	..	..	..	214	13,186
2			1954	230	286	..	..	..	..	..	39	457
1	Government Departments	G.	1901	..	..	..	..	..	..	..	111	3,994
2			1925	..	..	..	..	..	..	..	150	4,461
GRAND TOTALS				1,579,526	1,781,009	421,420	486,865	5,396	6,671	2,006,344	2,274,544	56,645	3,790,877

Notes—¹G. = Government supply; B = Bulk supply from another supply authority; I = Independent supply (own generating plant);
²Return for year ended 31 December 1963. ³Low Tension is 400/230 volts, 50 cycle a.c.
⁴uthland E.P.S. (Monowai) route miles and distribution substations. ⁵Amalgamation of Banks Peninsula and Springs Eilesmere Power Boards, April 1963.
⁶Amalgamation of Opunake and South Taranaki Power Boards, June 1963.
⁷Capacity of generating plant at Monowai is shown in New Zealand Electricity Department section above.

Excludes
 Taken

TABLE VII—RESULTS OF GENERATION, DISTRIBUTION, AND CONSUMPTION FOR THE YEAR ENDED 31 MARCH 1964

Supply Authorities	Maximum Load	Annual Load	Units										Units Sold (Average)			Average Demand per Consumer	Maximum Demand per Consumer	
			Generated			Feed Back	Net Generated	Purchased	Net Generated and Purchased	Sold		In Bulk for Resale	Percentage Non-productive ⁴	Per Head of Population ⁵	Per Consumer (Excluding Bulk Supply)			Per % of Distribution Capital ⁶
			Water	Steam	Oil					Domestic	Non-domestic							
NEW ZEALAND ELECTRICITY DEPARTMENT	1,810,330	..	6,552,210,630	2,100,238,135	..	52,016,322	8,704,465,287	20,627,084	8,725,092,371	7,582,771,127	13,424,418	408,356,332	720,540,494	8.26 ⁷	2,658	8,130	46	1,550
POWER BOARDS	13,266	64.47	..	..	..	..	..	74,922,816	74,922,816	..	55,036,509	14,560,404	5,325,903	7.11	3,202	9,068	35	2,108
Whakatane	204,761	53.02	..	..	..	..	..	1,322,560,540	1,322,560,540	..	654,826,340	570,085,985	97,737,215	7.38	3,202	9,068	35	2,108
Bay of Islands	3,989	61.93	317,080	..	..	..	..	41,355,900	41,355,900	..	43,560,498	78,203,855	9,122,927	10.27	1,891	6,009	23	1,234
Bay of Plenty	27,672	59.21	1,190,327	..	..	..	..	150,672,200	150,672,200	19,765,000	7,167,678	15,667,551	1,491,885	6.97	3,533	15,509	59	3,022
..	4,684	..	..	..	..	..	..	24,347,109	24,347,109	..	16,857,288	7,725,595	3,756,401	13.25	2,426	6,291	23	1,292
..	6,102	53.04	..	..	..	..	..	28,349,284	28,349,284	..	16,857,288	7,725,595	3,756,401	13.25	2,426	6,291	23	1,292
..	25,980	57.87	..	..	..	..	..	131,709,604	131,709,604	24,059	30,346,178	6,545,512	5,489,044	12.95	3,902	11,937	44	1,770
..	9,188	52.66	..	..	..	..	..	42,380,734	42,380,734	67,726	95,220,392	59,767,909	16,083,079	9.40	2,637	7,380	28	1,838
..	40,155	48.65	..	..	..	..	..	171,139,106	171,139,106	..	21,979,077	8,545,482	4,472,691	12.78	2,194	7,257	28	1,838
..	7,600	52.16	..	..	..	..	..	34,997,250	34,997,250	..	21,979,077	8,545,482	4,472,691	12.78	2,194	7,257	28	1,838
..	17,711	57.68	..	..	..	..	..	89,469,367	89,469,367	21,810	48,443,975	32,158,563	8,849,316	9.89	2,874	8,808	77	1,935
..	18,200	56.71	..	..	..	..	..	30,804,979	30,804,979	279,464	50,197,105	32,158,563	8,849,316	9.89	2,874	8,808	77	1,935
..	5,413	70.83	..	..	..	..	..	33,803,606	33,803,606	..	19,707,000	3,742,133	3,742,133	7.76	2,661	22,909	100	3,825
..	9,762	56.37	..	..	..	..	..	48,201,606	48,201,606	..	19,707,000	3,742,133	3,742,133	7.76	2,661	22,909	100	3,825
..	49,291	56.47	..	..	..	..	..	243,632,070	243,632,070	38,649,000	131,364,924	52,792,197	21,115,149	10.29	2,521	7,463	73	1,722
..	29,872	59.80	..	..	..	..	..	105,782,597	105,782,597	..	67,494,706	27,329,418	10,968,473	10.37	2,521	7,463	73	1,722
..	18,200	56.71	..	..	..	..	..	453,909,493	453,909,493	..	281,779,018	150,176,449	22,044,026	4.86	2,790	9,461	105	2,387
..	5,413	70.83	..	..	..	..	..	11,259,861	11,259,861	15,131,496	11,765,700	7,309,918	3,897,047	16.96	1,334	5,334	40	1,616
..	2,020	59.27	..	..	..	..	..	10,488,035	10,488,035	..	7,605,905	1,220,729	1,661,401	15.84	1,787	5,669	32	2,917
..	42,811	56.44	..	..	..	..	..	211,677,207	211,677,207	105,368,240	52,637,044	46,245,439	7,366,484	6.93	2,949	9,190	117	1,869
..	12,996	55.96	..	..	..	..	..	63,656,955	63,656,955	..	38,732,816	17,435,590	7,533,709	11.83	2,160	6,573	48	1,521
..	32,256	62.27	..	..	..	..	..	175,960,780	175,960,780	38,228,820	57,386,972	65,810,979	14,394,009	10.55	3,183	11,937	57	1,681
..	15,300	60.18	..	..	..	..	..	80,660,083	80,660,083	22,449,949	36,295,082	13,722,394	8,191,933	14.97	2,294	7,257	28	1,838
..	15,092	53.53	..	..	..	..	..	73,419,327	73,419,327	..	41,625,158	21,156,935	9,695,700	9.23	2,294	7,257	28	1,838
..	11,804	55.12	..	..	..	..	..	14,571,380	14,571,380	1,815,300	30,329,012	19,354,645	9,695,700	9.23	3,014	7,970	50	1,878
..	22,609	48.98	..	..	..	..	..	96,974,663	96,974,663	..	65,660,701	23,308,776	8,041,416	8.29	2,071	5,818	44	1,478
..	27,817	61.87	..	..	..	..	..	133,228,094	133,228,094	63,529,720	49,552,098	14,275,653	5,870,423	8.42	2,005	5,824	74	1,949
..	19,056	59.52	..	..	..	..	..	30,274,306	30,274,306	29,461,641	25,069,513	24,700,183	10,242,969	16.84	3,005	9,761	68	2,073
..	22,900	54.24	..	..	..	..	..	26,322,419	26,322,419	..	16,582,157	6,563,406	3,176,856	12.07	2,394	6,307	37	1,375
..	11,331	50.51	..	..	..	..	..	108,613,601	108,613,601	..	72,760,970	26,803,668	9,248,963	8.30	2,480	6,867	61	1,580
..	64,094	59.92	..	..	..	..	..	50,134,330	50,134,330	17,850,829	28,497,420	3,786,081	3,786,081	7.55	2,278	7,076	50	1,730
..	27,130	57.43	..	..	..	..	..	336,430,252	336,430,252	22,678,371	97,526,732	192,041,102	24,184,047	7.71	4,066	10,144	106	2,095
..	2,500,200	68.27	..	..	..	..	..	104,028,762	104,028,762	46,441,860	61,236,844	22,285,913	6,514,175	7.34	2,538	7,065	83	1,631
..	22,132	68.69	..	..	..	..	..	2,420,325	2,420,325	4,441,775	8,202,469	2,102,806	1,452,878	19.60	2,447	6,862	59	1,919
..	5,785	51.52	..	..	..	..	..	95,108,945	95,108,945	12,398,342	7,569,080	5,107,243	1,039,278	7.58	1,674	5,754	80	1,311
..	21,194	50.34	..	..	..	..	..	39,459,500	39,459,500	..	52,040,849	33,683,368	7,729,353	8.27	3,175	8,108	75	2,005
..	89,411	49.56	..	..	..	..	..	386,189,334	386,189,334	..	262,817,354	85,145,076	40,227,004	10.36	2,221	5,446	69	1,399
..	11,067	57.08	..	..	..	..	..	59,042,488	59,042,488	..	29,184,940	23,805,740	6,051,600	10.25	2,638	7,724	44	1,723
..	40,567	56.95	..	..	..	..	..	181,959,940	181,959,940	7,017,065	109,045,534	47,937,632	17,959,709	10.27	2,404	7,116	130	1,769
..	1,500	76.51	..	..	..	..	..	151,360	151,360	4,025,304	3,329,218	1,860,062	1,241,717	19.30	1,637	4,416	41	1,328
..	..	..	..	..	..	..	..	..	..	431,815,942	2,865,175,346	1,939,456,098	456,166,928	8.01	2,767	7,921	71	..

(For notes see page 9.)

TABLE VII—RESULTS OF GENERATION, DISTRIBUTION, AND CONSUMPTION FOR THE YEAR ENDED 31 MARCH 1964—continued

Supply Authorities	Maximum Load	Annual Load Factor	Units											Units Sold (Average)				No.	
			Generated			Feed Back	Net Generated	Purchased	Net Generated and Purchased	In Bulk for Retail	Sold		Non-productive	Percentage Non-Productive	Per Head of Population	Per Consumer (Excluding Bulk Supply)	Per % of Distribution Capital		Average Demand per Retail Consumer
			Water	Steam	Oil						Domestic	Non-domestic							
CITY COUNCILS																			
Christchurch	163,947	46.90	109,005,200	..	..	672,105,603	672,105,603	449,302,741	175,592,486	47,137,056	7.01*	2,902	2,902	8,004	104	2,265	
Dunedin	15,740	47.85	..	..	..	291,081,088	400,897,288	234,510,118	135,655,731	30,721,439	7.66	5,302	5,302	9,604	70	2,599
Hamilton	18,365	47.83	..	..	..	66,000,240	66,000,240	32,843,980	28,806,620	4,349,440	6.59	2,725	2,725	6,152	90	2,599
Invercargill	7,920	55.94	..	..	..	38,649,800	38,649,800	20,401,058	16,131,977	2,276,025	5.86	2,911	2,911	5,006	88	1,466
Napier	9,984	53.10	..	..	..	46,441,860	46,441,860	28,894,048	13,957,604	3,580,208	7.71	2,532	2,532	7,102	104	1,654
New Plymouth	24,459	60.32	15,956,440	..	..	108,974,732	108,974,732	71,631,000	36,726,000	10,317,732	8.69	2,532	2,532	7,859	145	1,654	
Palmerston North	24,566	49.10	..	..	..	73,471,089	73,471,089	24,430,396	7,769,103	3,324,809	7.35	2,394	2,394	6,905	114	1,733
Tauranga	6,545	48.52	22,853,130	..	..	3,957,615	3,957,615	13,270,562	8,464,644	3,138,980	12.52*	3,324	3,324	7,535	85	2,248	
Timaru	14,192	51.10	..	..	..	63,529,730	63,529,730	30,316,383	17,211,165	8,022,172	12.60	2,644	2,644	7,198	127	1,840
Wellington	104,800	45.94	..	..	..	421,741,800	421,741,800	236,125,460	159,059,343	26,556,997	6.30	3,354	3,354	8,335	188	2,210
	..	..	148,615,770	..	..	1,905,480,978	2,038,601,926	1,242,205,437	644,517,739	149,069,571	7.31*	2,964	2,964	8,080	80	..
TOWN BOARDS																			
Bluff	1,576	44.61	..	..	..	6,159,176	6,159,176	2,544,505	3,041,333	573,338	9.31	1,693	1,693	5,225	67	1,474
Inglewood	1,020	59.10	..	..	..	5,312,092	5,312,092	3,011,445	1,881,255	419,392	7.90	2,341	2,341	7,091	142	1,497
Keapoa	1,580	53.38	..	..	..	7,426,000	7,426,000	4,592,478	2,502,693	992,481	11.82	2,445	2,445	6,733	115	1,584
Lytelton	1,780	53.85	..	..	..	8,397,280	8,397,280	4,902,106	2,502,693	992,481	11.82	2,445	2,445	6,084	99	1,463
Ohakune	1,110	46.27	..	..	..	4,499,230	4,499,230	2,427,726	1,171,578	355,746	7.91	1,684	1,684	5,076	49	1,360
Raetihi	1,029	44.51	1,857,660	..	..	4,012,970	4,012,970	2,235,270	1,182,416	594,584	14.82	1,467	1,467	4,618	35	1,391	
Rangiora	2,126	54.69	..	..	..	10,184,560	10,184,560	7,416,787	1,983,770	784,564	7.70	2,507	2,507	6,378	95	1,442
Riccarton	6,272	51.28	..	..	..	26,173,960	26,173,960	16,255,301	9,739,239	2,198,841	4.83	3,539	3,539	9,689	153	2,339
Stratford	3,068	55.86	..	..	..	15,110,434	15,110,434	3,919,437	5,240,037	733,028	4.83	2,609	2,609	7,339	80	1,576
Tahape	1,545	46.12	..	..	..	6,241,400	6,241,400	3,919,437	1,785,786	536,167	8.59	2,038	2,038	6,188	130	1,676
Taumarunui	2,800	44.74	3,731,568	..	..	10,974,180	10,974,180	5,502,424	4,276,896	1,194,930	10.89	2,778	2,778	6,358	84	1,821	
Tuapou	3,046	55.45	8,030,904	..	..	12,059,440	12,059,440	7,285,963	5,949,656	1,340,805	6.86*	1,697	1,697	5,453	106	1,469	
Waipapa	3,985	52.67	..	..	..	7,703,667	7,703,667	4,713,060	2,231,254	739,353	6.86	2,191	2,191	5,453	106	1,469
Whangarei	2,688	48.84	..	..	..	14,944,700	14,944,700	8,756,367	5,343,716	844,597	5.65	2,582	2,582	7,287	191	1,376
Whangaroa	1,814	51.04	..	..	..	12,398,342	12,398,342	7,846,340	3,396,800	1,155,122	9.32	2,455	2,455	6,537	156	1,605
Whangatake	4,296	52.57	..	..	..	8,111,172	8,111,172	6,364,629	1,126,495	620,108	7.65	1,584	1,584	4,759	97	1,152
Whangarei	9,546	45.72	..	..	..	19,785,000	19,785,000	13,127,000	5,014,659	1,643,341	8.31	2,271	2,271	7,384	74	1,748
	..	..	13,620,132	..	..	219,722,113	227,753,118	140,545,567	69,466,214	17,727,497	7.78*	2,304	2,304	6,593	91	..
TOWN BOARDS																			
Kaponga 14	..	..	..	..	..	949,753	949,753	465,056	380,604	104,083	10.96	1,932	1,932	3,587	73	1,120
Mangaweka	..	..	..	..	..	775,665	775,665	390,827	208,247	176,591	22.77	..	..	..	..	..
	..	..	..	..	..	1,725,418	1,725,418	855,883	588,851	280,684	16.27*	..	..	..	..	..
COUNTY COUNCILS																			
Haikou	4,812	49.34	..	..	..	20,799,825	20,799,825	12,928,800	6,177,933	1,692,492	8.14	3,989	3,989	11,868	177	2,989
Kaikoura	1,030	53.63	..	..	..	4,839,939	4,839,939	2,506,114	1,486,561	846,324	17.49	3,989	3,989	3,795	29	0,979
Wairarapa	577	58.68	590,800	..	..	2,663,639	2,663,639	1,119,591	1,693,535	152,773	5.15	3,801	3,801	30,248	20	6,204	
Westland	120	58.68	590,800	..	..	590,800	590,800	336,519	157,318	96,963	16.41	1,204	1,204	5,254	19	1,277	
	..	..	590,800	..	..	590,800	590,800	16,090,964	9,515,347	2,788,552	9.55*	3,114	3,114	9,269	64	..

(For notes see page 9.)

TABLE VII—RESULTS OF GENERATION, DISTRIBUTION, AND CONSUMPTION FOR THE YEAR ENDED 31 MARCH 1964—continued

Supply Authorities	Maximum Load	Annual Load Factor	Units											Units Sold (Average)				No.	
			Generated			Feed Back	Net Generated	Purchased	Net Generated and Purchased	In Bulk for Retail	Sold		Non-productive	Percentage Non-Productive	Per Head of Population	Per Consumer (Excluding Bulk Supply)	Per % of Distribution Capital		Average Demand per Retail Consumer
			Water	Steam	Oil						Domestic	Non-domestic							
COMPANIES																			
Amethyst Power Ltd	230	55.02	1,108,640	..	..	1,108,640	1,108,640	721,685	213,288	173,667	15.66	1,768	1,768	9,404	85	1,575	
Westland Power Ltd	1,405	53.48	5,576,330	..	..	6,581,710	6,581,710	2,078,760	2,766,210	945,970	16.34*	1,417	1,417	6,141	108	1,781	
	..	..	6,684,970	..	..	7,690,350	7,690,350	2,800,475	2,979,498	1,119,637	14.56*	1,467	1,467	6,182	104	..
Sundry private plants	..	..	21,100	..	..	11,060,760	11,060,760	..	..	..	..	..	..	..	..	..
	..	..	21,100	..	..	11,060,760	11,060,760	..	..	..	..	..	..	..	..	..
GOVERNMENT DEPARTMENTS																			
Rotorua E.S. (Tourist Dept.)	19,507	49.37	..	..	..	84,355,857	84,355,857	49,282,945	26,605,693	8,467,219	10.04	1,943	1,943	5,401	52	1,388
Southland E.P.S. (N.Z.E.D.)	38,535	50.41	..	..	..	257,615,389	257,615,389	76,829,657	67,993,409	29,702,267	17.02*	2,287	2,287	6,710	..	1,810
	..	..	..	..	..	341,971,246	341,971,246	126,112,602	94,599,102	38,169,486	11.16*	2,156	2,156	6,194	..	..	
GRAND TOTALS	1,874,300 ¹	..	6,851,518,197	2,111,277,795	556,730	8,963,352,722	8,963,352,722	4,408,010,692	3,169,479,181	1,385,862,849	15.46*	2,938	2,938	8,303	45	..			

Units generated per head of total population 3.460
 Units sold retail per consumer 8.303

Maximum load for public supply: North Island, 1,314,400 kW. Annual load factor: North Island 55.19 per cent. South Island, 53.16 per cent.

Notes—1 Includes generation by electrical supply authorities for own use and is the sum of North Island 1,314,400 kW, and South Island 559,900 kW. 2 Return for year ended 31 December 1963. 3 Includes adjusted units for Westland Power Ltd. due to different financial periods. 4 In the case of individual supply authorities includes units lost in transmission and distribution. Units used free of charge, units supplied to station auxiliaries, units used for cable - losses occasioned by supply in bulk to other electrical supply authorities. 5 Total units sold (bulk plus retail) divided by population in area of supply. 6 Units sold retail divided by population in area of supply. 7 Amalgamation of Banks Peninsula and Springs Eilemshere Electric Electricity Department generation. 8 Supply to King Country Electric Power Board, June 1963. 9 Amalgamation of Opuake and South Taranaki Electric Power Boards. 10 Taken over by Taranaki Electric Power Board, June 1963. 11 Amalgamation of Banks Peninsula and Springs Eilemshere Electric Power Boards.

TABLE VIII—CAPITAL OUTLAY, FINANCIAL RESULTS OF GENERATION, DISTRIBUTION, AND OPERATION FOR THE YEAR ENDED 31 MARCH 1964

Items	Capital Outlay*		Loan Liability	Revenue			Working Costs			Capital Charges			Total Annual Costs		Net Results		No. of Capital Works Appropriation		
	£(N.Z.)	£(N.Z.)		£(N.Z.)	Feed-back and Refund of Costs	Trading Account Profit	Other Sources	Cost of Power		Management and General	Interest	Sinking Fund and Principal Repayments	Depreciation	Renewals out of Revenue	£(N.Z.)	£(N.Z.)		Surplus	Deficit
								Generated*	Purchased											Trans-mission and Distribution†	Total
Electricity	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	
...	277,418,353	220,914,570	1,418,904	23,196,884	163,346	25,779,214	3,555,277	174,760	1,327,946	1,306,120	6,410,962	10,616,392	1,548,424	2,779,157	14,943,973	21,954,935	4,424,279	...	
...	1,503,151	589,380	400,261	7,695	3,896	7,695	411,792	210,703	34,540	26,172	121,089	94,454	51,419	13,299	89,102	360,597	51,105	...	
...	14,321,827	4,656,400	5,747,923	66,460	3,699	66,460	5,910,902	210,703	58,599	37,710	489,071	215,261	97,743	6,973	39,063	5,010,254	20,771	...	
...	1,325,097	1,037,689	467,854	11,831	1,145	11,831	3,479,830	4,217,762	587,743	350,140	176,559	215,261	49,016	10,792	131,356	127,034	...		
...	1,444,502	1,507,266	584,396	12,960	3,211	12,960	6,720,015	4,434,088	64,505	52,722	144,526	22,212	39,833	19,375	81,420	623,543	46,470	...	
...	397,350	188,716	137,077	3,159	...	3,159	143,971	76,116	15,931	109,856	6,367	...	9,210	15,153	22,750	11,389	...		
...	317,100	140,264	...	...	334	...	142,959	93,115	12,907	121,089	...	...	...	7,951	129,050	13,909	...	
...	1,736,415	697,906	651,110	7,015	3,169	7,015	661,468	395,422	56,739	37,710	489,071	39,355	53,834	13,710	106,899	566,770	64,698	...	
...	808,116	229,339	...	...	365	...	236,809	127,866	25,359	23,304	176,559	8,913	24,965	13,769	47,647	224,206	12,603	...
...	2,673,429	1,022,828	982,544	3,367	1,997	8,033	992,941	569,448	71,164	83,914	744,526	49,938	14,278	32,280	192,267	936,793	56,148	...	
...	704,690	14,684	...	...	1,888	...	115,661	115,661	18,816	14,195	150,872	1,331	...	21,406	195,887	15,651	...	
...	1,114,911	37,872	417,127	91	804	3,718	438,002	253,693	49,117	44,493	365,047	1,488	6,589	9,167	17,244	362,291	55,711	...	
...	1,032,439	452,300	382,700	1,456	2,877	794	3,077	2,250	36,391	56,391	365,348	22,340	94,460	30,416	137,386	502,944	2,061	...	
...	301,247	37,680	206,053	...	945	...	383,518	180,394	3,423	3,423	323,941	3,166	1,127	1,127	19,967	127,034	...		
...	3,046,636	1,160,306	1,032,320	116,912	9,565	12,976	1,171,773	742,751	91,084	394,544	53,751	...	77,670	10,529	144,150	1,098,094	75,079	...	
...	4,695,566	548,908	595,004	...	7,900	3,417	606,321	335,373	61,979	40,393	437,765	71,638	105,388	11,193	141,219	578,954	27,967	...	
...	4,132,106	1,660,766	2,489,123	52,767	1,460	19,106	2,517,306	1,519,811	249,730	128,745	1,944,703	44,415	28,643	9,650	82,708	1,653,611	71,791	...	
...	3,777,291	96,542	66,004	...	250	4,779	71,033	32,091	9,039	5,927	47,903	4,299	6,415	8,375	19,089	66,146	4,887	...	
...	1,748,180	255,667	594,727	336,601	2,055	5,193	938,576	610,567	96,948	45,591	753,106	12,662	11,666	33,996	811,600	126,376	...		
...	1,314,999	375,476	360,918	18,019	4,904	17,061	855,990	183,719	40,762	27,224	250,121	18,121	40,291	26,907	85,319	342,632	49,215	...	
...	2,046,098	1,225,218	673,609	160,332	2,244	13,075	393,263	494,923	77,236	55,943	628,102	54,536	119,995	66,664	175,105	80,287	52,619	...	
...	1,068,115	324,300	287,646	79,998	3,603	12,085	494,811	222,793	38,103	18,887	299,783	25,263	86,528	16,360	366,624	26,639	...		
...	1,922,548	571,199	468,923	2,836	8,171	8,416	244,963	116,912	45,536	38,560	127,162	17,033	20,579	20,360	191,151	43,877	...		
...	1,246,096	303,310	235,340	...	8,171	8,416	244,963	116,912	45,536	38,560	127,162	17,033	20,579	20,360	191,151	43,877	...		
...	2,063,215	1,246,415	561,674	596,975	1,921	8,416	596,975	305,210	76,993	48,505	439,210	51,885	70,490	8,993	131,764	579,374	25,001	...	
...	1,712,460	724,400	465,952	295,298	3,329	12,043	438,425	253,756	31,668	31,026	325,417	10,381	60,926	25,026	60,926	437,771	38,555	...	
...	1,411,796	217,635	263,440	110,881	5,993	3,480	178,816	76,766	21,437	17,393	115,508	12,381	27,960	13,236	53,377	169,084	6,731	...	
...	1,627,983	252,747	171,733	...	...	10,482	575,436	335,626	88,688	36,128	460,442	38,448	84,169	4,737	127,374	295,481	12,300	...
...	1,630,784	871,926	564,954	...	...	10,482	575,436	335,626	88,688	36,128	460,442	38,448	84,169	4,737	127,374	295,481	12,300	...
...	917,174	283,515	303,738	...	23	14,154	307,915	165,768	29,214	22,595	217,577	12,648	32,648	32,577	77,912	295,489	12,426	...	
...	2,832,922	916,884	1,460,355	...	1,566	14,320	1,460,355	962,431	148,221	93,303	1,204,035	42,563	120,308	69,124	231,995	1,436,030	24,325	...	
...	1,589,626	407,303	442,333	146,927	7,119	22,201	617,128	400,250	51,595	37,947	476,704	20,115	33,593	1,432	66,691	557,395	59,733	...	
...	1,519,850	521,810	549,449	6,716	6,270	23,176	585,611	326,160	46,129	74,979	466,129	25,853	45,355	27,350	564,687	20,924	...		
...	606,856	381,270	37,526	...	...	8,293	75,296	116,912	13,607	10,776	37,814	15,925	16,874	3,471	36,270	74,084	1,212	...
...	431,730	138,543	93,266	44,000	...	5,487	142,772	82,564	9,212	13,948	106,124	5,309	7,420	16,669	29,398	135,322	7,250	...	
...	1,114,624	768,400	500,615	...	3,433	13,302	326,415	310,262	29,255	11,621	300,136	25,203	35,716	31,350	106,001	466,219	60,196	...	
...	1,194,995	493,954	321,710	...	2,718	8,720	2,336,998	1,195,318	27,154	27,572	2,210,415	22,016	35,083	61,438	2,107,767	29,202	...		
...	2,615,451	967,633	879,969	27,556	10,938	19,123	937,366	572,276	92,541	71,861	736,678	44,909	30,165	22,695	119,405	856,083	61,503	...	
...	128,384	93,200	39,923	6,290	...	377	46,590	473	6,866	8,349	26,568	4,779	6,200	10,979	37,547	9,043	...		
...	75,847,743	27,068,391	26,562,394	1,470,859	104,510	89,579	483,676	20,711,008	27,669	50,398	17,262,205	2,931,723	2,026,817	22,920,812	1,271,538	1,736,118	14,441	1,292,087	
...	7,234,302	1,637,732	3,530,282	287	5,901	19,267	3,555,737	2,358,394	357,629	209,232	925,258	64,234	102,729	311,468	478,431	3,403,689	152,048	88,703	
...	646,245	27,500	397,065	...	4,077	20,780	403,010	678,474	289,994	218,613	254,521	147,445	171,314	234,935	553,694	1,808,215	318,309	177,800	
...	626,556	137,896	455,534	...	4,075	2,069	498,803	297,698	40,406	20,697	358,801	5,122	2,400	11,398	14,920	21,066	...		
...	406,372	3,126	227,427	...	...	1,014	432,516	116,912	20,031	162,971	162,971	1,133	5,419	2,000	22,216	31,017	...	
...	431,730	...	240,150	...	9,885	3,775	586,880	146,927	42,915	15,904	905,746	...	...	11,724	11,724	217,470	93,761	...
...	1,002,343	...	514,849	...	2,151	7,958	110,976	336,601	25,934	35,070	399,003	464	4,812	25,028	28,781	427,784	110,249	...	
...	436,918	5,400	343,560	...	985	2,954	345,509	225,239	21,453	17,697	264,359	328	5,600	14,633	20,561	28,890	60,619	...	

(For notes see page 11.)

TABLE VIII—CAPITAL OUTLAY, FINANCIAL RESULTS OF GENERATION, DISTRIBUTION, AND OPERATION FOR THE YEAR ENDED 31 MARCH 1964—continued

Items	Capital Outlay*		Loan Liability	Revenue			Working Costs			Capital Charges			Total Annual Costs		Net Results		No. of Capital Works Appropriation		
	£(N.Z.)	£(N.Z.)		£(N.Z.)	Feed-back and Refund of Costs	Trading Account Profit	Other Sources	Cost of Power		Management and General	Interest	Sinking Fund and Principal Repayments	Depreciation	Renewals out of Revenue	£(N.Z.)	£(N.Z.)		Surplus	Deficit
								Generated*	Purchased											Trans-mission and Distribution†	Total
Electricity	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	£(N.Z.)	
...	24,520,126	6,632,066	10,742,473	5,063	63,080	130,855	10,972,141	1,473,213	359,005	732,000	8,286,316	276,033	336,174	86,966	1,404,517	6,990,833	1,281,308	600,442	
...	83,001	4,149	45,370	...	...	507	45,877	25,540	5,313	3,446	34,299	174	265	1,651	3,401	37,700	8,177	4,368

TABLE IX—AVERAGES DERIVED FROM PREVIOUS TABLES FOR THE YEAR ENDED 31 MARCH 1964—continued

No.	Supply Authorities	Capital Outlay		Revenue from Sale of Electricity					Working Costs		Capital Charges		Total Costs		No.
		Per Head of Population	Per Consumer	Per Unit Sold (Including Bulk Sales)	Per Unit Sold (Retail Sales)	Per Unit Sold (Domestic Supply)	Per Unit Sold (Non-domestic Supply)	Per Head of Population	Per Retail Consumer	Per kW of Maximum Demand	Per Unit Sold	Per kW of Maximum Demand	Per Unit Sold	Per kW of Maximum Demand		Per Cent of Distribution Capital*
1	Amethyst Power Ltd.	£(N.Z.) 37.21	£(N.Z.) 132.53	d. 2,298	d. 2,298	d. 1,800	d. 3,981	£(N.Z.) 17.22	£(N.Z.) 61.32	£(N.Z.) 38.92	d. 0.272	£(N.Z.) 4.60	d. 1.292	£(N.Z.) 21.88	45.63
2	Westland Power Ltd.	28.75	124.60	1,916	2,168	1,826	2,425	12.80	55.47	20.83	0.332	5.55	1.578	26.38	71.29
	COMPANIES	29.86	125.84	1,971	2,189	1,819	2,536	13.38	56.30	..	0.323	..	1.537	..	66.80
1	Government Departments	37.34	103.77	1,670	1,732	1,653	2,428	13.53	37.59	27.08	0.328	5.32	1.612	26.13	34.96
2	Rotorua E.S. & Southland E.P.S.	..	..	1,441	1,732	1,500	1,821	16.51	48.43	23.46	..	..	..	..	..
	Averages for all supply authorities ²	148.24	418.89	1,498	1,711	1,324	1,632	16.21	45.82	..	..	..	..	..	35.33
	Averages for 1963	139.47	397.62	..	1,346	1,116	1,672	14.87	42.38	..	..	..	..	..	34.31
	" 1962	132.63	380.45	..	1,340	1,167	1,592	13.97	40.07	..	..	..	..	..	35.37
	" 1961	126.00	363.98	..	1,340	1,088	1,704	13.20	39.13	..	..	..	..	..	33.95
	" 1960	118.15	346.80	..	1,367	1,100	1,742	12.74	37.40	..	..	..	..	..	33.01
	" 1959	108.83	323.75	..	1,394	1,034	1,811	11.81	35.14	..	..	..	..	..	32.48
	" 1958	101.93	273.27	..	1,421	966	1,846	9.66	32.25	..	..	..	..	..	29.48
	" 1957	83.93	258.63	..	1,121	0,970	1,622	8.40	25.69	..	..	..	..	..	26.43
	" 1956	82.02	258.63	..	1,121	0,970	1,622	8.40	25.69	..	..	..	..	..	26.43
	" 1955	76.46	239.79	..	1,120	..	1,622	7.91	24.79	..	..	..	..	..	27.39

Notes—¹Returns for year ended 31 December 1963. ²Excludes sundry private plants (Table VII) who do not furnish returns. ³Retail sales. ⁴Excludes cost of generating feed-back. ⁵Amalgamation of Banks Peninsula and Springs Elicemere electric power boards. ⁶Amalgamation of Opuake and South Taranaki electric power boards. ⁷Taken over by Taranaki Electric Power Board, June 1963.

TABLE X—STATISTICS OF POPULATION, CONSUMERS, ELECTRIC RANGES AND WATER-HEATERS, FOR THE YEAR ENDED 31 MARCH 1964

No.	Supply Authority	Population Included in Area of Supply	Ratio of Consumers to Population	Consumers		Domestic Ranges		Water-Heaters		Consumers per Route-mile of Line	No.
				Domestic	Commercial	Number	Per Cent	Domestic	Total		
1	N.Z. Electricity Department	..	..	..	..	..	..	..	..	..	1
2	North Island ¹	..	..	14	6	1,036	100.38	1,056	1,086	102.52	1
	South Island ¹	..	..	6	..	358	96.76	427	482	115.40	2
	Averages	..	..	20	..	1,394	99.57	1,483	1,568	105.93	0.24
	POWER BOARDS										
1	Ashburton	24,350	35.16	1,011	8,561	5,999	79.46	8,060	8,903	106.75	1
2	Auckland	382,590	35.31	22,276	135,087	86,312	76.51	95,262	95,262	84.44	2
3	Bay of Islands	35,760	31.46	1,578	11,251	6,907	71.40	6,103	8,077	63.09	3
4	Bay of Plenty	34,460	22.78	1,135	7,851	5,153	76.73	5,411	6,495	80.57	4
5	Buller	9,420	38.57	656	3,633	691	23.21	583	762	19.58	5
6	Cambridge	9,620	35.83	386	3,447	2,277	74.39	2,679	3,079	87.52	6
7	Central Canterbury ³	30,780	32.69	660	10,061	7,636	81.23	7,495	8,425	79.73	7
8	Central Hawke's Bay	13,990	35.73	676	4,999	4,091	94.63	3,836	3,893	88.73	8
9	Central Waikato	70,650	30.19	2,023	21,328	14,137	73.23	14,127	16,809	73.18	9
10	Dannevirke	13,450	34.51	649	4,642	3,087	76.06	2,866	3,328	71.78	10
11	Egmont ⁴	28,050	32.63	1,355	9,152	5,978	76.67	5,898	7,843	75.64	11
12	Franklin	31,650	33.29	1,136	10,535	7,666	81.56	7,253	9,152	77.17	12
13	Golden Bay	3,650	38.77	159	1,415	799	63.61	927	952	73.81	13
14	Grey	19,600	34.85	1,111	6,831	3,614	63.18	2,658	4,477	46.47	14
15	Hawke's Bay	73,020	33.78	3,294	24,664	18,675	87.39	17,834	20,671	83.45	15
16	Horowhenua	37,410	45.93	2,239	17,182	11,240	75.22	11,264	12,446	75.38	16
17	Hutt Valley	154,810	29.49	3,583	45,656	35,361	84.05	37,179	38,006	88.37	17
18	King Country	14,300	25.01	262	3,576	1,559	47.04	1,383	1,519	41.73	18
19	Malvern	4,940	31.52	171	1,557	809	58.37	770	770	55.56	19
20	Manawatu-Orua	33,550	32.09	956	10,766	7,975	81.29	7,693	8,977	78.42	20
21	Marlborough	25,760	33.17	1,319	8,545	4,449	61.57	4,508	4,770	62.39	21
22	North Auckland	38,710	36.04	1,379	13,950	9,981	79.40	8,803	12,337	70.03	22
23	North Canterbury	19,280	38.57	618	7,436	4,739	69.51	4,739	5,331	69.51	23
24	Otago	27,890	38.85	1,311	10,834	4,091	42.96	4,224	4,441	44.36	24
25	Otago Central	13,860	45.34	1,195	6,284	3,057	60.07	2,968	3,275	58.32	25
26	Poverty Bay	42,970	33.59	3,128	15,292	8,674	71.31	8,389	9,038	68.97	26
27	South Canterbury	31,840	34.42	733	10,959	5,847	57.18	5,206	5,601	50.91	27
28	Taranaki	16,990	31.61	477	5,181	3,590	76.32	4,853	5,071	67.05	28
29	Tairāwhiti	9,670	37.95	541	3,670	2,968	94.85	2,968	2,968	75.68	29
30	Tairāwhiti	40,150	36.11	1,611	14,498	11,330	87.92	10,945	12,464	84.93	30
31	Te Awamutu	20,350	32.19	1,211	6,350	5,248	98.30	4,131	5,354	77.37	31
32	Thames Valley	71,210	40.09	2,414	28,546	16,972	64.95	15,291	20,324	58.51	32
33	Waikato	32,910	32.27	943	10,619	8,220	84.95	8,469	9,009	87.53	33
34	Wairarapa	35,200	38.83	2,762	13,668	8,264	73.77	9,220	9,841	84.54	34
35	Waikato	4,180	37.27	207	1,558	1,150	71.80	1,150	1,174	85.12	35

TABLE X—STATISTICS OF POPULATION, CONSUMERS, ELECTRIC RANGES AND WATER-HEATERS, FOR THE YEAR ENDED 31 MARCH 1964—continued

No.	Supply Authority	Population Included in Area of Supply	Ratio of Consumers to Population	Consumers			Domestic Ranges			Water-Heaters			Consumers Per Route-mile of Line	No.
				Domestic	Commercial	Total	Number	Per Cent	Ratio, Number of Domestic Ranges to Number of Domestic Consumers	Domestic	Total	Ratio, Number of Domestic Water-Heaters to Number of Domestic Consumers		
36	Wairoa	7,570	29.09	2,074	128	2,202	1,154	55.64	1,113	1,177	53.66	4.86	36	
37	Waitaki	27,000	39.16	8,951	1,622	10,573	6,436	71.90	6,243	6,619	69.75	11.25	37	
38	Waitemata	156,680	40.78	57,048	6,846	63,894	44,078	77.26	45,929	45,929	80.51	16.78	38	
39	Waitemata	20,090	34.11	5,864	988	6,852	3,821	55.16	3,560	4,375	60.71	6.68	39	
40	Wanganui-Rangitikei	65,300	33.79	19,143	2,919	22,062	13,374	69.86	13,568	14,743	70.88	11.98	40	
41	Westland	3,170	37.07	942	233	1,175	549	58.28	525	550	55.73	20.98	41	
		1,736,230	34.93	528,641	77,901	606,542	397,728	75.24	403,784	440,600	76.38	11.66		
	CITY COUNCILS													
1	Christchurch	209,590	34.53	64,313	8,062	72,375	53,405	83.04	56,137	58,717	87.29	37.50	1	
2	Dunedin	111,170	36.97	36,122	4,972	41,094	33,405	57.15	26,514	27,432	73.40	43.81	2	
3	Hamilton	22,620	44.31	7,383	2,639	10,022	8,830	51.88	4,916	5,292	66.59	38.11	3	
4	Invercargill	36,730	33.63	10,562	1,790	12,352	4,382	41.49	4,420	4,743	41.85	66.41	4	
5	Napier	12,550	42.96	4,272	1,119	5,391	2,505	58.64	2,705	3,285	63.32	57.97	5	
6	Nelson	16,930	35.65	4,889	1,146	6,035	2,379	48.66	4,063	4,545	83.10	71.00	6	
7	New Plymouth	40,580	33.98	12,064	1,724	13,788	8,572	71.05	10,503	11,525	87.06	27.47	7	
8	Palmerston North	40,900	34.67	11,970	2,208	14,178	8,432	70.44	10,154	10,405	84.83	40.05	8	
9	Tauranga	6,600	44.11	2,028	883	2,911	1,788	88.17	1,878	2,013	92.60	30.32	9	
10	Timaru	21,000	36.73	6,418	1,296	7,714	4,347	67.73	4,728	4,965	73.67	64.82	10	
11	Wellington	117,840	40.24	38,622	8,791	47,413	14,225	36.83	26,289	26,289	68.07	62.14	11	
		636,510	36.65	198,643	34,630	233,273	124,509	62.68	152,307	159,211	76.67	43.77		
	BOROUGH COUNCILS													
1	Bluff	3,300	32.39	872	197	1,069	371	42.55	214	246	24.54	59.39	1	
2	Ingliswood	2,090	33.01	590	100	690	472	80.00	455	470	77.12	28.75	2	
3	Karapiro	2,850	36.32	900	135	1,035	704	78.22	729	746	81.00	60.88	3	
4	Lytelton	3,140	38.76	1,018	199	1,217	590	57.96	723	748	71.02	55.32	4	
5	Ohakune	2,460	33.17	726	90	816	244	33.61	318	346	43.80	6.38	5	
6	Raetihi	2,330	31.76	567	173	740	213	37.57	242	280	42.68	6.12	6	
7	Rangiora	3,750	39.31	1,240	234	1,474	941	75.89	1,116	1,148	90.00	73.70	7	
8	Riccarton	7,340	36.53	2,446	235	2,681	1,850	75.63	2,036	2,073	83.24	43.95	8	
9	Stratford	5,810	35.55	1,595	364	1,959	1,226	76.87	1,225	1,289	76.80	52.95	9	
10	Taihape	2,800	32.93	709	213	922	445	62.76	438	455	61.78	41.91	10	
11	Taumarunui	3,520	43.69	1,292	246	1,538	652	50.46	618	660	47.83	38.45	11	
12	Taupo	10,370	38.13	3,052	384	3,436	1,972	64.61	1,885	1,950	61.76	12.82	12	
13	Te Aroha	5,460	40.16	957	316	1,273	678	70.85	725	752	75.76	26.52	13	
14	Thames	5,460	35.44	1,592	343	1,935	1,318	82.79	1,276	1,287	80.15	39.49	14	
15	Wairoa	4,580	37.55	1,331	389	1,720	1,172	88.05	1,100	1,159	82.64	43.00	15	

TABLE X—STATISTICS OF POPULATION, CONSUMERS, ELECTRIC RANGES AND WATER-HEATERS, FOR THE YEAR ENDED 31 MARCH 1964—continued

No.	Supply Authority	Population Included in Area of Supply	Ratio of Consumers to Population	Consumers			Domestic Ranges			Water-Heaters			Consumers Per Route-mile of Line	No.
				Domestic	Commercial	Total	Number	Per Cent	Ratio, Number of Domestic Ranges to Number of Domestic Consumers	Domestic	Total	Ratio, Number of Domestic Water-Heaters to Number of Domestic Consumers		
16	Borough Councils—contd.													
17	Waitara	4,730	33.28	1,356	218	1,574	975	71.90	980	981	72.27	62.96	16	
18	Whakatane	7,990	30.75	1,965	492	2,457	1,845	93.89	1,917	1,975	97.56	39.63	17	
	Whangarei	15,770	33.73	4,173	1,146	5,319	3,740	89.62	3,564	3,619	85.41	46.66	18	
		91,160	34.94	26,381	5,474	31,855	19,408	73.57	19,561	20,184	76.51	28.54		
1	Town Boards													
2	Kaponga	310	53.87	110	57	167	80	72.73	70	76	63.64	15.18	1	
	Mangaweka	310	53.87	110	57	167	80	72.73	70	76	63.64	15.18	2	
1	County Councils													
2	Heathcote	4,790	33.61	1,560	50	1,610	1,244	79.74	1,560	1,563	100.00	17.31	1	
3	Kaikoura	2,540	41.42	862	190	1,052	368	42.69	321	361	37.24	10.02	2	
4	Mackenzie	740	12.57	75	18	93	80	106.67	122	131	162.67	0.53	3	
	Westland	410	22.93	78	16	94	37	47.44	35	38	44.87	3.13	4	
		8,480	33.60	2,575	274	2,849	1,729	67.15	2,038	2,113	82.06	7.03		
1	Companies													
2	Amethyst Power Ltd.	520	28.08	128	18	146	45	35.16	50	90	39.06	4.71	1	
	Westland Power Ltd.	3,420	23.07	686	103	789	195	28.43	141	275	20.55	4.99	2	
		3,940	23.73	814	121	935	240	29.48	191	365	23.46	4.95		
1	Government Departments													
2	Rotonia Electric Supply	39,050	35.98	11,612	2,438	14,050	8,094	69.70	7,935	8,690	68.33	14.44	1	
	Southland E.P.S.	63,320	34.08	18,776	2,806	21,582	10,328	55.01	9,431	9,956	50.23	5.37	2	
		102,370	34.80	30,388	5,244	35,632	18,422	60.62	17,366	18,646	61.36	7.14		
	GRAND TOTALS	2,579,000	35.39	788,952	123,721	912,673	563,510	71.43	596,800	642,763	75.64	13.04		

Total population of Dominion as at 1 April 1964 was 2,590,787. Ratio of population in area of supply to total population of Dominion = 99.545 per cent.

NOTES—¹Return for year ended 31 December 1963. ²Taken over by Taranaki Electric Power Board, June 1963. ³Amalgamation of Banks Peninsula and Springs Ellesmere electric power boards. ⁴Amalgamation of Opunake and South Taranaki electric power boards. ⁵Supplied direct by New Zealand Electricity Department.

TABLE XI—STATISTICS RELATING TO ELECTRICIANS REGISTRATION BOARD, YEAR ENDED 31 MARCH 1964

(The figures in parentheses are for the previous year)

1. Number of board meetings: 12 (11)

	During Year	Total	Current
2. Registrations—			
Inspectors	52 (41)	919 (867)	619 (608)
Electricians	406 (443)	9,414 (9,008)	9,260 (8,877)
Electrical servicemen	19 (14)	465 (446)	416 (405)
Electrical (radio) servicemen	125 (123)	1,663 (1,538)	1,626 (1,502)
Limited registration ¹	126 (143)	2,708 (2,582)	2,447 (2,355)
3. Provisional licences ²	446 (391)	3,668 (3,222)	.. .. .
4. Permits to Assist	159 (116)	1,438 (1,279)	.. .. .
5. Applications for ruling on experience	245 (199)	.. .. .	.. .. .
	Candidates	Passed, Percentage	Highest Marks
6. Examinations (two examinations)—			
Electricians written, theory paper	653 (577)	64 (69)	98 (96)
Electricians written, regulations paper	678	96	100
Electricians practical	610 (534)	68 (84)	97 (98)
Electrical servicemen and limited registration, written	380 (348)	70 (78)	94 (96)
Electrical servicemen and limited registration, practical	296 (293)	70 (79)	98 (97)

7. Defective work reports, 5 (6); endorsements made, 2 (Nil); endorsements removed, nil (nil).

8. Breach of Act reports, 9 (15); prosecutions authorised, 12 (11).

9. Appeals, nil (nil).

NOTES—¹Includes refrigeration servicemen, 17; assembly and repair of portable domestic appliances, 10; servicing calculating machines and like office appliances, 5; replacement of fuse links, connection and replacement flexible cords, earthing of appliances, 5; assembly and repair of heating appliances, 1; maintenance and repair of electrical instruments and process control equipment, 1; supply authority work, 10; radio experimenter, 5; New Zealand Broadcasting Corporation, 9; Civil Aviation Administration, extended limits, 22; radio servicemen's limits restricted to Civil Aviation Administration, 9; assembly and repair of teletypewriter machines and associated equipment, 1; automatic telephone and impulse signalling equipment, 4; Post Office radio technician, 10; radio interference suppression, 6; Post Office telephone exchange technician, 7; Post Office telephone exchange technician (extended limits), 4. ²114 were issued to apprentices.