The maximum demand per head of population in the area supplied is 0·105 kw., 70 per cent. of the allocation of 0·15 kw., or 0·2 h.p. per head of population, which is the basis of the design of the Government schemes. The units sold per head of population supplied were 398, as compared with 320 last year.

The total length of distribution-line is 17,759 route-miles, as compared with 17,063 last year, an increase of 696 miles, or 4·1 per cent. The number of consumers per route-mile is 15, as compared with 14·3 last year, the increase being due to the extra mileage of new lines erected during the year and to the increased generating-capacity made available.

The maximum power-demand per route-mile is now 8·15 kw., the sales 30,600 units, and the revenue £211. The units are better than last year (26,800), and there is a slight increase in revenue as against £198 last year, and there is an increase in the maximum demand of 6·9 kw., last year.

The revenue per kilowatt of maximum load of all stations was £26, as compared with £28·4 last year. The water-power stations show a revenue of £27 per kilowatt, steam stations of £21·97 per kilowatt, oil stations of £37·01 per kilowatt, and gas stations of £44·28 per kilowatt. These are valuable figures for use in forecasting the revenue from systems of various descriptions. The water-power systems include the greatest proportion of large consumers, and the gas-engine stations the greatest proportion of small consumers.

Out of the ninety-six scheduled supply authorities, sixty-nine showed a profit for the year amounting to £673,256, and twenty-seven showed a loss amounting to £159,441. The general result is a net profit for the whole Dominion of £513,815 after paying working-costs (£1,814,633) and capital (interest and sinking fund) charges (£1,425,793) at the rate of 5·99 per cent. on the total capital outlay of £23,813,228. This shows a net profit of 2·16 per cent. as compared with 2·13 per cent. last year. The business, on the whole, is thus a thoroughly sound and remunerative one, as well as supplying a public necessity to 91 per cent. of the population of the Dominion.

The following table summarizes the results of the year's operations in connection with electric supply throughout the Dominion :—

Results for Electric-power Supply of New Zealand for the Year ended 31st March, 1929.

—	Water.	Steam.	Gas.	Oil.	Total.
Number of electric-supply authorities ..	88	3	2	3	96
Installed capacity (main plant only), (kilowatts)	146,512	27,324	112	1,016	174,964
Average installed generating capacity (kilowatts)	1,665	9,108	56	339	1,822
Maximum load (kilowatts)	113,360	29,650	87	1,129	144,226
Units generated	483,795,760	107,851,325	102,554	3,158,222	594,907,861
Units sold	441,182,465	97,471,660	80,623	2,519,316	541,254,064
Annual load factor (per cent.)	48·8	45·43	13·46	34·45	47·1
Number of consumers	216,811	44,659	448	4,388	266,306
Capital outlay	£20,584,109	£2,980,555	£22,672	£225,892	£23,813,228
Capital outlay per kilowatt installed (including reticulation)	£140·49	£109·08	£202·43	£222·33	£136·10
Total working-costs	£1,447,644	£330,555	£3,408	£33,026	£1,814,633
Working-costs per unit sold	0·79d.	0·81d.	10·14d.	3·15d.	0·81d.
Working-costs per kilowatt (maximum) ..	£12·8	£11·15	£39·17	£29·25	£12·5
Total capital charges	£1,213,066	£199,664	£1,708	£11,355	£1,425,793
Capital charges per unit sold	0·66d.	0·49d.	5·08d.	1·08d.	0·63d.
Capital charges per kilowatt (maximum) ..	£10·66	£6·73	£19·63	£10·06	£9·88
Capital charges as percentage of capital outlay	5·89	6·70	7·53	5·03	5·99
Total annual costs	£2,660,710	£530,219	£5,116	£44,381	£3,240,426
Total costs per unit sold	1·45d.	1·30d.	15·22d.	4·23d.	1·44d.
Total costs per kilowatt (maximum).. ..	£23·46	£17·88	£58·80	£39·31	£22·38
Revenue (not including rates)	£3,057,335	£651,273	£3,852	£41,781	£3,754,241
Revenue per unit sold	1·66d.	1·60d.	11·47d.	4·00d.	1·66d.
Revenue per kilowatt (maximum)	£27·0	£21·97	£44·28	£37·01	£26·0
Net profit..	£396,625	£121,054	−£1,264	−£2,600	£513,815
Ratio of working-costs to revenue (per cent.)	47·35	50·76	88·47	79·05	48·34

GROWTH OF LOAD.

In the early days of electric supply electricity was used almost exclusively for lighting purposes, but with the advent of electric motors and the application of electricity for heating purposes the power and heating load increased, until at the present time the energy used for lighting is small compared with that used for other purposes. The benefits of electric drive in factories and workshops have to a large extent been taken advantage of, and the use of electricity for commercial heating and domestic heating and cooking is rapidly increasing. The use of electric ranges, water-heaters, and portable domestic appliances, such as radiators, toasters, percolators, vacuum cleaners, and kettles, during the past few years confirms the opinion that the use of electricity for domestic purposes will soon exceed the demand for industrial and commercial uses.

An interesting graph has been prepared showing the growth of load from 1919 to 1929, and is published with this report. This graph shows the annual increments in the installed generating-capacity, aggregate maximum demand on the generating-stations, the number of consumers supplied, number of units generated, and total connected load. The figure for the installed capacity of hydro