

The maximum demand per head of population in the areas supplied is 0.124 kw., which is nearing the allocation of 0.15 kw., or 0.2 h.p., per head of population, the basis of the design of the Government schemes. The units sold per head of population supplied were 495, as compared with 489 last year.

The total length of distribution-line is 20,251 route-miles, as compared with 19,636 last year, an increase of 615 miles, or 3.12 per cent. The number of consumers per route-mile is 15.2 as compared with 14.5 last year, the increase being due to additional consumers being connected to the extra mileage of new lines erected during the previous year to which the full number of services were not then connected, and to the increased proportion of country lines.

The maximum power-demand per route-mile is now 8.51 kw., the sales 34,250 units, and the revenue £211. The units are more than last year (33,000), and there is a slight increase in revenue as against £210 last year, but there is a decrease to the corresponding maximum demand of 8.76 kw. last year.

The revenue per kilowatt of maximum load of all stations was £24.75, as compared with £24 last year. The water-power stations show a revenue of £26.4 per kilowatt, steam stations of £19.15 per kilowatt, oil stations of £49.8 per kilowatt, and gas stations of £46.75 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-eight distributing authorities, eighty-one showed a profit for the year amounting to £725,027, and seventeen showed a loss amounting to £72,311. The general result is a net profit for the whole Dominion of £652,716, after paying working-costs (£2,030,967), and capital (interest and sinking fund only) charges (£1,608,414) at the rate of 5.31 per cent. on the total capital outlay of £30,370,747. This shows a net profit of 2.15 per cent. as compared with 2.38 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 93 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, and Table XXXII shows in condensed form the financial statistics for each supply authority.

		Water.	Steam.	Gas.	Oil.	Total.
Number of stations	No.	32	3	2	3	40
Installed capacity, main plant only	Kw.	153,735*	37,100	112	186	191,133*
Average capacity	Kw.	4,810	12,367	56	62	4,780
Number of consumers	No.	255,310	53,035	506	509	309,360
Connected load	Kw.	897,439	202,440	330	640	1,100,849
Maximum load	Kw.	135,371	37,156	83	101	172,711
Units generated	No.	630,084,807	157,413,830	108,313	174,321	787,781,271
Annual load-factor	%	53.25	48.57	14.86	19.58	52.25
Units sold	No.	561,835,569	132,530,062	83,665	127,128	694,576,424
Total capital outlay in operation, including distribution systems	£	26,577,910†	3,738,418	25,998	28,421	30,370,747†
Total capital outlay per kilowatt installed, including distribution systems	£	173	100	231	152	158
Total annual working-costs	£	1,647,191	376,965	3,503	3,308	2,030,967
Total annual working-costs per unit sold	d.	0.708	0.681	10.0	6.26	0.705
Total annual working-costs per kilowatt (maximum demand)	£	12.18	10.10	42.25	32.60	11.74
Total annual capital charges (interest and sinking fund)	£	1,371,567	233,252	1,708	1,887	1,608,414
Total annual capital charges per unit sold	d.	0.587	0.424	4.90	3.55	0.557
Total annual capital charges per kilowatt (maximum demand)	£	10.10	6.31	20.60	18.60	9.38
Total annual capital charges as percentage of capital outlay	%	5.19	6.28	6.61	6.68	5.30
Total annual costs	£	3,018,758	610,217	5,211	5,195	3,639,381
Total annual costs per unit sold	d.	1.295	1.105	14.90	9.81	1.262
Total annual costs per kilowatt (maximum demand)	£	22.28	16.41	62.85	51.20	21.12
Total annual revenue, not including rates	£	3,571,301	711,885	3,858	5,053	4,292,097
Total annual revenue per unit sold	d.	1.52	1.29	11.00	9.56	1.45
Total annual revenue per kilowatt (maximum demand)	£	26.38	19.15	46.51	49.91	24.75
Net profit (before deducting depreciation charges)	£	552,379	101,668	-1,353	-142	652,716
Ratio of working-costs to revenue	%	46.25	52.98	91.12	66.00	47.41

* Does not include Arapuni, 60,000 kw.

† Includes £3,231,114 Arapuni assets temporarily out of commission (60,000 kw.).

BROKEN WIRES AND POLES.

During the year ending 31st March, 1932, there were 898 instances (1,574 broken wires) reported by electric-supply authorities, with 94,014 miles of conductor erected. The corresponding figures for the previous year were 1,019 broken wires, and 93,121 miles of conductor in use.

Falling trees were again the principal cause of the breaks, and accounted for 21.75 per cent. of the total, as against 25.4 per cent. for 1931.

As regards broken poles, 291 instances were reported for the year, of which 238 were New Zealand blue-gum. For 1931 the total number of broken poles reported was 450, and it is still evident that electric-supply authorities who experimented with New Zealand blue-gum and nondescript Australian "hardwoods" are now being called upon to make early replacements after approximately five to seven years of pole-life.