

Electric Vehicles.

The sale and use of electric vehicles has been hampered by the difficulty of obtaining delivery and by the high cost of new vehicles. This form of transport continues to play an important part in the industrial life in the city, and will doubtless increase rapidly when deliveries at reasonable prices can be obtained. The Department now has three battery trucks in use on the Lake Coleridge system, and there are forty-two other vehicles in operation in the district, ranging from $\frac{1}{2}$ ton to $3\frac{1}{2}$ tons capacity. The uses include five runabouts, one taxi, twenty delivery-vans, and fourteen heavy lorries.

WAIKATO ELECTRIC-POWER SUPPLY.

On the 1st November last, in terms of the agreement entered into between the Department and the Waihi Gold-mining Company (Limited), the company's electric-power plant was acquired by the Department for £212,500.

The main features of the plant acquired are the headworks and generating-station on the Waikato River at Horahora, seventeen miles from Cambridge, with a plant capacity of six generators, each capable of generating 1,050 kw., or a total of 6,300 kw.; the transmission-line of three No. 0 S.W.G. copper conductors on steel towers, from Horahora to Waikino (fifty miles); and the transformer station at Waikino for transforming the energy supplied to the Waihi Company's mine.

Results of Operation.

During the five months from the 1st November until the end of the financial year the Waihi Company operated the plant on behalf of the Department. Practically the only consumer supplied during that period was the Waihi Company itself, for whom the Department is committed to reserve 2,500 kw.

As shown in the accounts, the operations for the five months mentioned resulted in a gross revenue of £5,803, or £3,933 in excess of working-expenses. Interest on the purchase-money amounted to £4,427, and depreciation at 2 per cent. per annum, as required by law, to £1,628, leaving a deficiency, after paying all working and capital charges, of £2,122.

The total number of units generated over the five months was 6,415,150, and the number delivered to consumers was 5,630,200, so that 784,950 units, or 12·3 per cent. of the amount generated, were lost in transmission. The maximum demand on the power-house was 2,700 kw.

The following shows the average cost of production :—

	Cost.	Per Unit generated.	Per Unit sold.	Per Kilowatt, Power-house Maximum per Year.
	£	d.	d.	£
Generating	1,024	0·040	0·043	0·91
Transmission	278	0·010	0·012	0·23
Distribution	225	0·008	0·010	0·20
Management	343	0·013	0·015	0·30
Total working-costs	1,870	0·071	0·080	1·64
Interest	4,427	0·165	0·189	3·93
Depreciation	1,628	0·061	0·069	1·45
Total costs	7,925	0·297	0·338	7·02

The revenue represented a return of 0·217d. per unit generated, 0·247d. per unit sold, and £5·16 per annum per kilowatt of power-house maximum.

Arrangements for Distribution.

A District Office has been opened at Hamilton to deal with the administration of the Department's electrical undertakings in the Waikato district. The area which it is proposed to serve from Horahora comprises the counties of Matamata, Piako, Ohinemuri, Waikato; parts of Waipa, West Taupo, and Waitomo Counties; together with the towns situated within that area. It measures approximately 3,000 square miles, and consists mostly of rich dairying-country. The power-station at Horahora is situated near the south of this area, and the maximum distance of transmission in a straight line is about sixty-five miles in the direction of Thames and about the same distance in the direction of Taupiri.

Electric-power Boards have been formed under the Electric-power Boards Act, 1918, covering practically the whole of the area mentioned except Hamilton and Waihi Boroughs, which will be dealt with through the Borough Councils in each case. The Boards are :—

- (1) Thames Valley Power Board, with an area of approximately 2,300 square miles, embracing the counties of Matamata, Hauraki Plains, Thames, Piako, and Ohinemuri, and the towns of Putaruru, Tirau, Matamata, Morrinsville, Te Aroha, Waihou, Paeroa, and Thames.
- (2) Te Awamutu Power Board, with an area of about 300 square miles, consisting of parts of the counties of Waipa, West Taupo, Waikato, and Waitomo, the chief centres being Kihikihi, Te Awamutu, Pirongia, Te Rore, and Ohaupo, with the Otorohanga district as "outer area."
- (3) Cambridge Power Board : This district is about 100 square miles in extent, and consists of the country adjoining Cambridge Borough, which it includes.
- (4) Central Power Board : This contains part of Waipa County and part of Waikato County, and includes the towns of Ngaruawahia and Taupiri, with an area of about 300 square miles.