(18)

If the same disparity be assumed between the estimate and the actual cost as was found to be the case with the Lake Coleridge scheme, the cost per horse-power of plant installed will be in the neighbourhood of £80 for complete development, and very much more for partial development.

(19)

It has been shown that the average price received per unit sold by the Lake Coleridge power-station is 0·427d., and that this does not pay expenses; and, further, that the average price should not be less than 0·5d. in order to meet working-expenses, interest at 4 per cent., and depreciation at 2 per cent., without any allowance for rates, taxes, and management.

(20)

If, then, the Lake Coleridge installation requires an average price of at least 0·5d. per unit sold, how much more will the Arapuni scheme require in view of the admittedly greater expenditure required for hydraulic works and the much greater length of the transmission-lines from the principal market?

(21)

If the actual cost exceeds the estimate in the same ratio as has been found to be the case with the Lake Coleridge plant, the average price per unit in order to make ends meet, without rates, taxes, and management charges, will require to be in the neighbourhood of 0·8d., and this for a development of 30,000 h.p.

(22)

For partial development the price would require to be very much greater, or else there would be a very large annual deficit.

(23)

There is a great difference between the area proposed to be supplied from Arapuni and that already supplied from Lake Coleridge, because in the former area there are abundant supplies of lignite or brown coal, and in the latter area there are no coalfields at all. The slack and cheaper varieties of the Waikato coal are at present chiefly used for steam-raising and power-production within the district.

(24)

One might expect to find, therefore, that the cost of generating power by steam would be less in the former district than in the latter, and this is in fact the case, and it forms an additional circumstance which will militate against the success of the Arapuni scheme.

(25)

The cost of electric current generated at the steam-driven station of the Auckland City Council, deducted from the accounts for the year ending 31st March, 1917, is as follows:—

	£	Per Unit generated. d.
Coal	11,491	0·3389
Oil-waste, stores, and water	448	0·0132
Wages	3,559	0·1050
Repairs and maintenance—		
Buildings	1,288	0·0380
Engines and boilers	1,456	0·0429
Instruments and tools	519	0·0153
Dynamos, exciters, and transformers	143	0·0042
Accumulators	60	0·0177 (? *0·00177*)
		0·5752 (? *0·55927*)

Units generated, 8,119,000; units sold, 6,842,000.

(26)

In the event of the City Council deciding to take a bulk supply from the hydro-electric installation, the cost of the first item, and possibly two-thirds of the second item, which includes water, and also half the wages-cost, could be saved. It is doubtful if there would be any saving in repairs and maintenance charges, because, although these charges could be eliminated on the engines and boilers, this saving would be counterbalanced by additional charges on the transformer plant.

(27)

The savings would therefore amount to 0·4002d. per unit. But this saving is less than the average price charged for power by Lake Coleridge Station (0·427d.), and greatly less than the price which a station at Arapuni would require to charge, operating, as it would do, under less favourable conditions with regard to cost of transmission and cost of hydraulic works.

(28)

No advantage would therefore be obtained by the electricity-consumers in Auckland City, unless the Government should sell the current at a price much below the cost of production and place the deficit on the shoulders of the general body of taxpayers.