248. Did your estimate proceed on the assumption that the amount of hydraulic work was half of what in point of fact it turned out to be?—Yes.

249. Would you have recommended the Lee Stream scheme against the Waipori scheme if you had known what the hydraulic work was going to cost you?—I do not wish to say anything about the Waipori scheme.

250. *Mr. MacGregor.*] I understand you to say that any power that would be delivered, as suggested, by the Waipori Company to your power-house for tramway purposes must be converted there by your machinery?—Yes.

251. You told us that by the use of condensers you could decrease the cost of your steam-power by some 20 per cent.?—Yes.

252. And as regards your former report as to the merits of the scheme, I think the fact now is that the present estimate of £104,000 involves bringing in about twice the amount of water of the original scheme?—Not twice the amount, but forty heads instead of thirty heads.

253. *Mr. Herries.*] Have you any knowledge of the Waipori scheme?—I know it, and have been over the works.

254. Did you ever report on it?—I reported on the electrical side of it.

255. You told Dr. Findlay that you did not care to say anything about it, but the Committee desires to get what information it can, and the two sides to this case seems to be hostile?—I am not hostile.

256. Which would be the cheapest scheme to bring into Dunedin so far as the electrical side of the question is concerned?—It depends on the relative power. The Waipori scheme is a very good scheme.

257. You have been over both schemes?—Yes.

258. And, as an electrical engineer, which would you advise, supposing the Taieri were coming into the scheme and both the powers were open to Dunedin?—That depends entirely upon the amount of power one is likely to require. From an electrical standpoint, the only difference is that one is about twice the distance in transmission of the other.

259. Does that make it more expensive?—Yes—in the transmission.

260. How much difference is there in the cost of the line?—It depends upon what you have to spend in copper.

261. Which has the better water-power?—The Waipori has the most water.

262. Could you say which would be the cheaper to deliver the power to Dunedin?—I should have to go into figures to take that out.

263. You could not give the Committee an idea of which would be the cheaper scheme?—No; I should say there would not be much difference in them.

264. *Mr. Major.*] I was somewhat concerned about your net cost of running at present?—Our present cost of running is due to working about half the system. When we have the system fully loaded it will come down to about half that amount.

265. *Mr. Buddo.*] As an electrical engineer, I take it that you would necessarily advise a scheme subject to the cost of transmission; what would be the loss on the transmission of, say, fifteen miles?—3 per cent. to 5 per cent.

266. I assume that as an electrical engineer you have estimated the loss?—Yes—4.7 per cent.

267. I understood you to say in your former evidence that you recommended the Lee Stream, *plus* the Taieri, as the best for the Council to adopt?—Yes.

268. Did you take into the question the drainage area?—I based my calculations on the figures supplied for the water and the hydraulic works.

269. You did not take it from the altitude—from the hydraulic point of view?—I only went into the electrical side of it.

270. If you had the electrical system at work, would you recommend the steam-power at present in force?—Do you mean keeping it at work?

271. Yes?—I would recommend that it be kept as a stand-by for the city.

272. As you are representing the Council as an electrical expert, would you give the Committee an idea of what would be the chief objections to duplicating the wires along the streets?—They are mostly alone upon æsthetic grounds; technically there is no objection. At the present time we have telegraph and telephone wires overhead.

273. Apart from the fact that there might be some danger through the touching of the wires, would there be any danger in the duplication of any system throughout the city?—There is very little danger in connection with the duplication. The danger with one set of mains is so small that the risk would scarcely be added to if the mains were duplicated.

274. *Dr. Findlay.*] You said that 580-horse power would be required for the tramway and for such lighting as is at present proposed?—Yes.

275. What surplus do you apprehend will be available for industrial purposes in Dunedin from your present scheme?—2,098-horse power, less 580.

276. That would leave you 1,518-horse power?—Yes.

277. Do you know the horse-power required to run an electrical-lighting scheme in Wellington—it is 1,500-horse power?—Yes, I am informed that is the peak load.

278. So that if you instal the electric-light system in Dunedin you will require probably 1,800 electrical horse-power?—I do not think you can put Dunedin on the same footing as Wellington as regards the demand for electric light. Wellington is altogether a different city from Dunedin. The public and Government buildings alone are sufficient to support a generating-station.

279. In Dunedin you have gas and in Wellington we have gas. You may or may not bring yourselves up to date by having electric light in your homes; but if you did, what do you think would be the power required to carry that out?—It is very hard to say.