45. This further large supply of electrical energy is to be supplied from a system known as the Lee Stream - Taieri River Scheme?—Yes. The Lee Stream is the source from whence we bring the power in.

46. How long has that Lee-Taieri scheme been in contemplation by the City Council?—I reported on the probable flow and gauged the Taieri River in 1901.

47. We may take it that the scheme has been under consideration by the City Council for the last three years?—Yes.

48. And it has been a matter of public notoriety that this scheme was projected three years ago?—Yes, probably for four years.

49. *Dr. Findlay.*] There was no report made on the scheme in 1901?—No, not by me.

50. *Mr. MacGregor.*] You know as a matter of fact that the Council have been for the last three or four years investigating the subject of acquiring electrical power from a stream or streams in the vicinity of Dunedin?—Yes, I took up the rights of the Lee Stream for them.

51. And you are aware that the Lee-Taieri system has been reported on by Messrs. Orchardson, Goodman, and Rogers?—Yes.

52. And the result of their reports then was to convince the City Council that the Lee-Taieri scheme was the best available scheme for their purpose?—Yes, it necessarily follows from their having taken it up.

53. The Council, you say, are now taking steps to bring in electrical energy from the Lee Stream?—Yes.

54. And the works are now going on with that end in view?—Yes, the works are in actual progress now. I was over them about three months ago when the contractor failed, and I reported on the whole matter.

55. And you are thoroughly conversant with the whole matter?—Yes.

56. I would like you to give, as shortly as you can, a description of the scheme itself that will satisfy the Committee?—The Lee Stream watershed is some 73,000 acres in area, and it is proposed to lift the water at a point on the Lee Stream and convey it by a pipe to and through a tunnel about a mile and a half long, whence it is again taken by pipes, graded alongside of the hill, to a point 714 ft. above the generating-station. At that station Pelton wheels will be erected and dynamos will be placed in position and the current generated and conveyed by a transmission-line to Dunedin, which is at a distance, to a point at Halfway Bush, of about twelve miles and a half from the generating-station. From there it is conveyed underground to the distributing-station in Dunedin, which is the present power-house.

57. That is a brief outline of the scheme?—Yes.

58. Now, I want you to tell us as accurately as you can what the cost of this scheme is to be?—To divert and transmit the minimum power that will be derived from the water at Lee Stream is estimated to cost £104,000.

59. How much of that is represented by the hydraulic work?—Sixty thousand pounds for the hydraulic work and £44,000 for the electrical work, transmission-line, transformers, and everything necessary to connect up with the Dunedin station.

60. How is it that the hydraulic portion of this amount is so large in proportion?—It has been designed and constructed in a permanent manner.

61. Is the tunnel through the solid rock?—Yes, and where not solid it will be lined with concrete. Where the conduit is not concrete it will be iron pipes.

62. The result of that expenditure of £60,000 will be to give the Corporation a solid and permanent job?—Yes.

63. For the total expenditure of £104,000, what power do you expect will be delivered at the power-house at Dunedin?—2,130 electrical horse-power. Then, in addition to that, the Corporation have 900-horse power in steam. That makes a total of 3,030-horse power available for distribution and running the trams.

64. Does that £104,000 include the construction of what is known as street feeders?—No, it simply means delivering the current into the distributing-station.

65. You have told us that from the Lee system you expect to get 2,130-horse power, and added to that you have 900-horse power from your steam-power, making a total of 3,030-horse power?—Yes.

66. What is the actual horse-power required for tramway purposes, including power and lighting?—580-horse power.

67. Assuming that to be correct, that leaves available 1,550-horse power, and 900-horse power from the steam-power?—That leaves the Corporation with 2,450-horse power to dispose of for public or private purposes.

68. So that proves paragraph 7 of the petition, "That the Corporation tramways," &c.?—Yes.

69. Paragraph 8: "That it is intended to sell and dispose of all surplus electrical energy thus introduced into the City of Dunedin to public and private consumers for power, lighting, and all other available purposes." Do you know whether that is the intention of the Council?—Yes.

70. Now, I want to ask you a few questions about the probable demand for power in the City of Dunedin?—Well, the actual amount of power that is available in Dunedin at the present time, including steam, gas, water, and oil is 2,680-horse power—steam, 1,745; gas, 905; water, 25; and oil, 5.

71. Take the case of gas-engines: Is it a fact that as a rule these engines are only worked intermittently?—The bulk of the engines employed are worked intermittently—that is to say, you would not require to be in a position to supply 2,680-horse power, but probably only one-third of that. The bulk of those who use the power are in a very small way. They are butchers, coffee and spice works, aerated-water factories, and so on. There is a number of these establishments that would not take electrical power. For instance, sawmills use their own refuse—shavings and sawdust—for raising steam, and there are other industries such as soap-works that would not