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HYDRO-ELECTRIC SCHEMES COMPARED WITH THE GAS INDUSTRY:

BEING A REPORT BY Mr. JAMES LOWE, A.M.I.C.E., ENGINEER AND MANAGER, AUCKLAND GAS COMPANY, TOGETHER WITH REPLY BY Mr. EVAN PARRY, B.Sc., M.I.E.E., A.M.I.C.E., CHIEF ELECTRICAL ENGINEER, PUBLIC WORKS DEPARTMENT.

Laid on the Table of the House of Representatives by Leave.

HYDRO-ELECTRIC SCHEMES COMPARED WITH THE GAS INDUSTRY.

INTRODUCTION BY Mr. J. H. UPTON, CHAIRMAN OF DIRECTORS.

(1)

THE question is sometimes asked, What effect will the competition of the hydro-electric schemes of the Government have upon the gas industry? The answer to that question involves an examination into the economic soundness of the schemes themselves, and also opens up various large questions of a political character. But, of course, the fundamental question is, Are these schemes financially and economically sound?

(2)

The directors of the Gas Company have asked Mr. J. Lowe, engineer and manager of the company, to prepare a report on this important question, and have thought it well to put it into print for the benefit of the shareholders.

(3)

The Public Works Statement for 1917 has supplied definite information regarding the Lake Coleridge scheme, upon which Mr. Lowe has been able to base reliable calculations showing the results that may be anticipated from similar enterprises in other parts of New Zealand if the Government should be unwisely induced to borrow large sums of money for such works, when the country stands in urgent need of railways and roads for the opening-up of virgin lands and the promotion of settlement.

(4)

In considering this report it must be borne in mind that Lake Coleridge was selected from among all the hydro-electric schemes submitted for consideration by the Government as being the one which promised the best results from the smallest outlay of capital, and the comparison which Mr. Lowe institutes between the practical working-out of this scheme and the proposed supply of electricity from Arapuni, as recommended by the Chief Electrical Engineer, is very instructive, and, so far as gas investments are concerned, very reassuring.

(5)

The first outstanding fact to which Mr. Lowe's report directs attention is the proof which the official returns afford that electricity for lighting and power cannot be supplied to consumers in Auckland at lower rates than are already current in the city, if State enterprises of this description are to be placed on a self-supporting basis. The reason for this is made very plain. While the initial installation of the Arapuni scheme, providing for 30,000 horse-power, would—according to the estimate of the Government Engineer—involve an expenditure of £1,200,000, the chief gain resulting from the substitution of water for steam power would consist in the saving of the expenditure upon coal used at the city electrical works, which, as Mr. Lowe points out, consists almost entirely of slack that would otherwise become a waste product, but the carriage of which now provides a very substantial revenue to the Railway Department.