

The reports of the Engineer-in-Chief and of the General Manager of the State Hydro-electric Department cover amply the progress made in the field of hydro-electric construction. Considering the many problems which have had to be overcome, progress during the year can generally be considered as satisfactory although we are still embarrassed on account of technical staff and in getting man-power into the remote parts of the country where these works are, in general, located. There have been inquiries from a number of large overseas contracting firms during the year and representatives of some of these have visited New Zealand. It is felt, however, that the opening of these major works to overseas tender must depend upon the overtaking of the arrears of design with which we are still faced, in order that the requisite plans and specifications may be available. The position in this respect is better than it has been but is still affected by shortage of trained staff.

Dr. J. L. Savage, late of the United States Bureau of Reclamation, visited New Zealand during the year and reported upon all major projects under construction and scheduled for commencement in the near future. Dr. Savage's reports have already been well publicized and it is sufficient to say that, in general, he endorses the methods adopted by our own engineers.

Sir William Halcrow, late President of the Institution of Civil Engineers in Great Britain, and Mr. J. P. Thomas, late Chairman of the London Transport Advisory Committee, visited New Zealand during the year at the invitation of the Government for the purpose of reporting on the proposed railway improvements in the Auckland metropolitan area and the surrounding district. Their full report was received towards the end of the financial year and contains a number of far-reaching recommendations involving considerable expenditure, and is still under review by the Ministry of Works and the Railways Department. To some extent the report must be related to proposals being put forward by the General Manager of the Railways for electrification of the railway system in that area. As soon as the joint review is completed recommendations will be made to the Government.

Arising originally from the proposal to establish a State pulp and paper project at Murupara, the Ministry of Works has continued with the investigation of the railway and harbour facilities required. The investigations covering the selection of a port on the east coast are now nearing completion.

Following the recommendations of the Government geologist that a full exploration of our thermal areas should be made in order to ascertain their potentialities for power supply, work commenced on this at the beginning of the year and is now being prosecuted vigorously. An area in the vicinity of Wairakei has been selected for preliminary investigation and boring is well in hand. So far the results have not been discouraging, but there are several problems to be overcome before it is possible to define, with any assurance, the prospects of obtaining electric power from this source.

Full details of all investigations, together with essential basic information, is now in the hands of Messrs. Freeman, Fox, and Partners, who were selected by the Government to carry out the design of the Auckland Harbour Bridge. There are, however, a number of problems still to be settled, but the preparation of the preliminary drawings is now well in hand and it is hoped to have these early in the current year.

In view of the fact that the principal airports have a local as well as national significance, negotiations have been commenced with the City Councils in Wellington and Christchurch, with a view to their finding a portion of the cost of providing aerodrome facilities in these two places. These negotiations will be continued when the sites for other principal aerodromes are finally determined, and should result in the Government being relieved of a substantial part of the considerable financial expenditure necessary to establish adequate air facilities at the principal centres.