Lake Coleridge Hydro-Electric Plant

New Source of Power for Christchurch

By ROBT. WHITSON, Engineer

November 25th should surely be marked as a red letter day in the annals of water power development in the Dominion, for on that day the Prime Minister visited Lake Coleridge hydro-electric works and switched on the current of the first installation undertaken by the Government. This undertaking will prove of such immense importance not only to the district affected, but to the whole Dominion, that a general resumé of the whole scheme for the information of those who have been unable to follow the work stage by stage will no doubt prove acceptable.

The "Aid to Water Power Act" passed in 1910 made possible the development of hydro-electric installations by the Government, and the Lake Coleridge scheme was the first work put in hand under the new authority. The lake itself is situated some seventy miles east of Christchurch in the Southern Alps, and the natural features of the lake and adjacent rivers allow of a very large future extention to the initial installation at present laid down, in fact it is reckoned that when fully developed the total output of the station will exceed 58,000 h.p..

The present station is being laid down for a total output of 9,000 k.w., or roughly 12,000 h.p., and that portion of the work now nearing completion consists of head works and buildings for supplying 10,000 h.p., whilst the generating plant consists of three units each capable of supplying 2,000 h.p. Two of these units supplying 4,000 h.p. are available for supply purposes, leaving the third as a standby for the present. The transmission lines have been laid in duplicate by separate routes to Christchurch thus ensuring a continuity of supply, each line being capable of handling 5,000 k.w.

Interior of Lake Coleridge Power-House

Up to the present time the actual expenditure and commitments amount to about £253,438, and the expenditure of a further £10,000,will not only just about complete the present section of work but will