

(e) Test Department.

The telephone installation on the system has been maintained, all watertight telephones previously installed were overhauled and fitted with breathers.

The usual two-monthly tests of rubber gloves and boots were carried out.

The quarterly tests of 11 kV. switchgear at Timaru and Addington were done.

The annual check of testing standards was done.

The time-clocks of the system were maintained satisfactorily.

Assistance was rendered other branches of the system in testing, adjusting, &c.

Insulator tests were carried out as required.

O.C.B.'s were examined and repaired where required.

(3) Rainfall and Lake Levels.

Maximum flow at Waitaki for the year ended 31st March, 1938, was 50,400 cusecs on 10th January.

Minimum flow at Waitaki for the period was 4,300 cusecs on 18th August.

Lake Coleridge : Rainfall for the year was 31·86 in. Harper : Rainfall for the year was 40·07 in. Waitaki : Rainfall for the year was 17·83 in. Lake Coleridge : Lake-level at 31st March was 1,670·98 ft.

B. INVERCARGILL DISTRICT.**1. Capital Outlay.**

The capital outlay at 31st March was £1,520,708, of which assets to the value of £46,212 were not in operation.

2. Finance.

The total revenue for the year was £155,166, including a sum of £122, being additional charges in connection with rates levied by the former Southland Electric-power Board. Working expenses for the period were £59,372, including £73 for commission for collecting rates. The interest charge was £59,629. After providing an amount of £29,490 for the Depreciation Reserve and £392 for cost of raising loans there was a net profit of £6,283.

3. Construction, Operation, and Maintenance.**(1) CONSTRUCTION.***(a) Power-station and Village.*

Monowai.—Plans for two cottages and a communal garage are in hand. At the same time alterations to the staff bach are to be undertaken. Owing to shortage of houses, portions of this bach have been used for housing a family. The proposed alterations will allow single men to be catered for as at other generating stations of the Department.

(b) Substations.

The major work in hand is that of extending the Gore Substation in preparation for the linking-up of the Lake Coleridge – Waitaki system with the Southland system.

As a corner of the site is subject to flooding, a certain amount of filling had to be used to raise this corner above flood-level.

Road access has been levelled, a water-tower erected, concrete transformer pads have been placed in position, and a traverser track laid.

The contractor has completed the oil-filter house, oil-tank pads, and workshop foundations, but erection of the workshop itself has been delayed owing to the non-delivery of steel stanchions. These are expected shortly, and the drying-out of the transformers will be commenced as soon as the building is available and the crane is erected. Arrangements are in hand for the erection of the outdoor steelwork as soon as it comes to hand.

Plans are in hand for the erection of additional cottages and single men's quarters to house the substation and line staffs.

Winton Substation.—Plans are in the course of preparation for the erection of additional cottages and single men's quarters. A rearrangement of the outdoor structure is also contemplated.

Invercargill Substation.—Plans are in the course of preparation for the erection of additional cottages and single men's quarters. The layout of additional steel structures, transformers, and control equipment is also under consideration, in order to cope with the growth of load.

Ohai Substation.—The mining load in this area is at present fed from Winton Substation over an 11 kV. line. Owing to the growth of load this line has become overloaded. Arrangements have therefore been made to secure the necessary land and erect a 66/11 kV. substation at Ohai. The necessary equipment has been ordered, and erection will be commenced at an early date.

Faultsmen's Residences.—Faultsmen in outlying areas are finding great difficulty in obtaining houses, and in two instances this was found to be quite impossible. The Department is therefore providing residences at Tuatapere and Waimahaka.

(c) Transmission Lines.

Half-way Bush – Gore 110 kV. Line.—The survey of the section Berwick to Gore has been completed, plans prepared, and poles located for pegging. Schedules of quantities have been made out and contract documents for the layout of material and erection of structures are ready for advertising.