

Operation of the station was generally satisfactory, but continuous output is limited to approximately 23,000 kW., principally on account of screen trouble. Excessive debris and rubbish coming down the race cause undue restriction of screen area. Improved forebay screen arrangements are contemplated, but cannot be undertaken till next summer. Improvements in the cooling water-supply arrangements are also required, and difficulty is still being experienced with excessive wear of main generator slip-rings.

During the summer shutdown all power-house equipment was overhauled, main C.B. valve cylinder was dressed up, and a new dovetailed retaining-ring was fitted in the relief-valve.

Machine-running Times

Generator No.	Time on Load.		Time Idle.		Time under Repair.		Percentage Availability for Service.
	Hours.	Percentage.	Hours.	Percentage.	Not in Demand (Hours).	In Demand (Hours).	
1	5,240	59·8	609	7·0	2,905	6	66·8

Arnold.—Throughout the year the Arnold River flow was maintained, and this station ran virtually continuously on full load until a fault on 21st February resulted in serious loss of output continuing past the end of the year.

When a fault developed in the voltage regulator wiring at approximately 01.30 hours on 21st February, the two units shed their load, as is usual, but on this occasion the main governor gate ring connecting link on No. 2 fractured, resulting in damage to the gates and the runaway of the machine. The operators are to be commended on their success in bringing the runaway machine under control without further damage in very trying circumstances. While a full set of new gates was being made in Christchurch, new main gate ring connecting links are being fitted to both machines, all underwater gear overhauled, and restanching of surge chamber gates carried out.

Machine-running Times

Generator No.	Time on Load.		Time Idle.		Time under Repair.		Percentage Availability for Service.
	Hours.	Percentage.	Hours.	Percentage.	Not in Demand (Hours).	In Demand (Hours).	
1	8,590	98·1	170	1·9	..	..	100
2	7,794	89·0	222	2·5	744	..	91·5

Monowai.—The normal operation of the station was interrupted on two occasions only, both due to loss of parallel with Waitaki Power-station, causing overload and necessitating load being dropped.

The rainfall for the year was 45·31 in., most of which fell between August and December. Floods occurred in October which necessitated sandbagging of the dam, and water was run to waste from October to December.