D.--1.

The cost of restoring this damage by flood being very considerable, both to the local authorities and to the Crown, seems to indicate that some better method of finance is called for. The expenditure may be a serious drain on the Government's financial resources, but it is crippling on the local authorities. I am of the opinion that the time has now arrived when local authorities should be empowered, and required by legislation, to set up reserve funds to provide for such exceptional occurrences. This proposal is now being investigated by departmental officers, and it is hoped that a means may be evolved whereby the revenue of any one year should be relieved of the heavy drain due to those spasmodic occurrences.

## HYDRO-ELECTRIC DEVELOPMENTS.

## **OPERATION.**

The Department's operating hydro-electric plants have had a successful year, have given satisfactory service to consumers, and have been able to make a profit after paying all operating and capital charges.

## LAKE COLERIDGE ELECTRIC SUPPLY.

The capital has been increased during the year from  $\pounds 892,801$  to  $\pounds 1,008,491$ , of which about  $\pounds 100,000$  is for duplication works that have not yet gone into operation. The financial results for the year can be summarized as follows:—

Capital invest	nent	•••	••	• •	•••	$\overset{\pm}{1,008,491}$
Revenue	••	••	••	••	• • €	92,163
Expenditure-	-Working	-expenses	••	••	23,270	
	Interest	• •	••	••	47,780	
	Deprecia	$\operatorname{tion}$	••	••	15,679	
	1					86,729
	Profit	••	••	• •		£5,434

This has been utilized in reducing the deficiency which had accumulated on the Profit and Loss in the early years, from  $\pounds 23,172$  to  $\pounds 17,738$ . The water-supply to the lake has been well maintained. It has not been

The water-supply to the lake has been well maintained. It has not been necessary to draw at all on the storage available, as the lake has been maintained at overflow level practically for the whole year. The power-station plant has operated very satisfactorily throughout the year,

The power-station plant has operated very satisfactorily throughout the year, although it has had to carry heavy overloads on several occasions. The maximum load for the year ended 31st March, 1925, was 13,180 kilowatts, occurring in June, 1924, but since the end of the financial year the peak load has exceeded 14,000 kilowatts.

Two 30 in.-diameter siphons were installed during the year to bring in additional water over the intake gates and screens, and to reduce the heavy frictional losses which were occurring on heavy loads. These gates and the tunnel were originally designed for only 9,000 kilowatts, and the siphons at a very limited cost have been successful in enabling heavy overloads to be carried until the second tunnel now under construction can be put into operation.

During the year a new contract for supply of power for a period of twelve years was entered into with the Christchurch City Council, the Department's largest consumer on the Coleridge system. This contract provides that the Council shall guarantee to the Department substantial minimum payments each year, and in return will receive power at rates equivalent to those at which it estimated it could have obtained power from a local development at Waimakariri. It is considered that this contract will have very satisfactory results for both parties : the Department has secured a guaranteed revenue over a long period, and the Council has secured a power supply at cheap rates, without having to raise a large amount