

- (d.) Freezing for the Canterbury Frozen Meat Company (night power only): The substation at the works is completed and ready for service, but the company have not yet obtained their plant.
- (e.) Lyttelton Borough water-supply pumping: Two 80 h.p. motors, superseding suction-gas engines, have now been installed, and are regularly driving the pumps for night load only.

The two electro-chemical industries—carbide and caustic-soda manufacture—more directly resulting from war conditions have not survived competition with the imported article, which has again become available since the cessation of the war. Both enterprises experienced many initial difficulties, but both succeeded in turning out a sample product of satisfactory quality. In each case the plant had all the inherent disabilities of small experimental equipments. Therefore, though it is still a question whether such industries can be successfully established in this country, the failure of these particular attempts is by no means a conclusive indication that their local development is impracticable.

12. *General.*—As a result of the rapidly extending appreciation of the value of hydro-electric supply, and more particularly as a result of the present acute coal-shortage, the demand for supply from the Lake Coleridge system has been continually increasing during the year. Unfortunately, this increased demand has occurred simultaneously with the enforced restrictions of output due to non-arrival of plant ordered over two years ago for extensions. This has embarrassed the Department and caused disappointment to prospective power-users, and in many ways has resulted in a substantial delay in the development of the scheme. In spite of these unfortunate circumstances, however, the present limited development of the Lake Coleridge scheme has proved an economic asset of national as well as local importance, the power-output for the year from Addington substation representing at a moderate estimate the equivalent of 100,000 tons of coal.

A number of local bodies have taken action under the Electric Power Boards Act providing for the formation of special Boards to take supply in bulk from the Department and administer the local reticulations. Stimulated by the activity of the Canterbury Progress League, local bodies in all parts of Canterbury are carrying out preliminary investigation into the possibilities of their districts.

The route of the 66,000-volt transmission-line to Timaru has been surveyed in detail, and routes selected for extensions to the 11,000-volt feeders.

During the year under review nine employees have returned from active service and have resumed their duties with the Department, leaving about thirteen yet to come back. Two other returned soldiers are now in training, and every effort is being made to give such training where possible. In general, the past year has been one of exceptional circumstances—in each case with a tendency to affect adversely the development of the scheme. But the year closed with satisfactory indications that these disabilities are passing, and a period of vigorous development may be expected.

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TABLES.

TABLE A.—DETAILS OF CAPITAL OUTLAY.

Item.	Capital Outlay.		Increase.
	31st March, 1918.	31st March, 1919.	
	£	£	£
Land, roading, and fencing	17,250	17,386	136
Tunnel and headworks	94,390	98,421	4,031
Power-house and machinery	70,976	72,860	1,884
Staff village	11,333	12,215	882
Transmission-lines	52,884	52,882	Decrease 2
Addington distributing-station	22,510	22,502	Decrease 8
Primary distribution	38,451	41,813	3,362
Secondary distribution	24,371	23,734	Decrease 637
Service transformers and meters	11,627	11,848	221
Motor vehicles and loose equipment	3,988	4,466	478
Telephone-lines	1,815	1,828	13
Office furniture	93	105	12
Survey, engineering, and general expenses	25,746	28,532	2,786
Interest during construction	14,320	14,564	244
Totals	389,754	403,156	13,402