had to be applied, but thereafter, with the demand tending to fall and with hydro conditions at the main generation stations improving, less difficulty was experienced in carrying the system peak loads. A material reduction in peak loads was afforded by extending in June the afternoon half-hour shut-down of all broadcasting-stations to one hour from 5 p.m. to 6 p.m. on week-days. All steam standby and auxiliary generating-plants which could be paralleled with the system were in use throughout the winter months.

The consumption of electricity in January and February, 1946, was in excess of the allocations given to all supply authorities. Present indications are that the supply position for the 1946 winter will be much more difficult than was anticipated would be the case a few months ago. Since last November rainfall in the catchment areas at Taupo and Waikaremoana has been abnormally low. For the four months November to February the mean rainfall in the Taupo and Waikaremoana drainage areas was less than one-third of the average over the corresponding months of the past ten years. The lake-levels have steadily fallen, and by the end of March were lower than the lowest levels previously recorded for twenty years. Steps were taken in February to reduce consumption, so that coal and water would be conserved against the winter demand for power, but on 4th March an unseasonable spell of very cold weather and the breakdown of a machine at Arapuni and a boiler at Evans Bay brought matters to a head. Load had to be shed by disconnecting supply to consumers, and strict control has since had to be exercised to keep the consumption of power within our resources. Although the actual plant breakdowns were soon made good no relief to the position is possible until heavy rains replenish supplies of water at the main hydro-generating stations. Nevertheless, compared with the first quarter of 1945, over 3½ per cent. more electrical energy was used by consumers in the first three months of 1946.

## RURAL RETICULATION

Under the Electricity Act, 1945, Part II, three members of the Rural Electrical Reticulation Council shall be appointed on the recommendation of the Electric-power Boards and Supply Authorities' Association. On the Association's recommendation the Hon. R. Masters, M. E. Lyons, Esq., and H. V. Murray, Esq., were appointed to the Council in March of this year.

Preliminary investigations have been made into the problem of giving a supply of electricity to settlers in the sparsely occupied areas, and shortly it should be possible to call the first meeting of the Council to determine the procedure for dealing with applications for subsidies in cases where the costs of giving supply would otherwise be unduly high.

## NORTH ISLAND ELECTRIC-POWER SYSTEM

### 1. System Operation and Load Despatch

The maximum half-hourly load on the system was 306,400 kW., as compared with 295,000 kW. last year. The peak occurred between 17.30 and 18.00 hours on Thursday, 24th May. The peak would have been higher in the ensuing weeks but for the severe rationing implemented on Thursday, 31st May, because of coal shortage at King's Wharf generating-station.

The highest Saturday peak was 273,700 kW. between 17.30 and 18.00 hours on 21st July. Last year's Saturday peak was 258,200 kW.

The highest Sunday peak was 239,200 kW. between 11.30 and noon on 6th May, compared with 233,900 kW. last year.

The greatest weekly generation was 34,169,000 units (last year 32,534,000) for the week ending Sunday, 22nd July, 1945, an increase of 5 per cent. The maximum daily output was 5,232,000 units (last year 4,946,000) on