

DAILY LOAD CURVES.

The question of the daily load curve and the ratio of the average load to the maximum load or the load-factor is an important one in determining the selling-price of electric power. Each station must ascertain its own load-factor and determine its selling policy accordingly. As a general guide the daily load curves of sixteen of the larger stations of the Dominion have, by the kind co-operation of the engineers to these places, again been obtained for two days of the current year—viz., Friday, 14th March (representing equinoctial conditions), and Friday, 27th June (representing midwinter conditions). Friday has been selected as the late-shopping night in most places, thus representing the most extreme conditions of loading. These sixteen stations have an installed capacity of 63,271 kw., or 96 per cent. of the total installed capacity of the Dominion, so that the resultant curves may be taken to represent quite accurately the shape of the load curve of the combined output of the whole Dominion. Water-power and fuel stations are proportionately represented, including all the large stations of each type, and the diagram includes not only the total output, but the water-power and fuel-power outputs separately. The summation curves are plotted in Fig. 3, and the results are as follows :—

Summer and Winter Typical Loads
(Sixteen Power-stations).

—	Installed.	Maximum Load.	Units.	Daily Load-factor.
March 14th, 1924—	Kilowatts.	Kilowatts.		
Water-power	29,225	26,809	506,024	78·64
Fuel-power	34,046	16,535	231,769	58·40
Totals	63,271	42,537*	737,793	72·27
June 27th, 1924—				
Water-power	29,225	26,651	475,144	74·28
Fuel-power	34,046	22,718	301,351	55·27
Totals	63,271	49,124*	776,495	65·86

* Combined maximum.

These are daily load-factors. The annual load-factors are, of course, substantially lower, being 52·8 per cent. for water-power, 36·7 per cent. for steam-power, and 45·7 per cent. for the whole output of the Dominion.

REGISTRATION OF ELECTRIC WIREMEN.

This matter has now been under consideration for several years, and a draft Bill dealing with the registration of wiremen has been prepared in collaboration with the supply authorities. With the increasing amount of electrical work that is going on all over the Dominion, it is felt that some standard of construction, with adequate inspection, is necessary, so that as far as possible the same standard of work will be carried out in all parts. At present wiremen are licensed by various electric-supply authorities to do work in their own areas, and in accordance with their own particular sets of rules. The result is that a man who is licensed to do electrical-wiring work in one town may have to pass a fresh examination and obtain a new license before being allowed to work in another district. The draft Bill which has been prepared, provided for a controlling body on which will be representatives of the Government, the electric-supply authorities, the electrical contractors, the fire underwriters, and the wiremen, who will have authority to issue regulations in respect to wiring-work, and to arrange or conduct examinations, and issue licenses to wiremen which shall hold good all over the Dominion. It is proposed that the expenses of this Board and cost of examinations, &c., shall be carried temporarily by the Government Electric Supply Account until it reaches some predetermined amount, when it shall be divided *pro rata* amongst the various electric-supply authorities.

WORLD POWER CONFERENCE.

A comprehensive paper on the electric-power supply of New Zealand was prepared during the year for presentation at the World Power Conference held in London in August. This paper was to have been read at the conference by the late Chief Electrical Engineer, Mr. Lawrence Birks, B.Sc., M.Inst.C.E., M.I.E.E., &c.

Mr. Birks left New Zealand in April to attend this conference, and generally to study electrical development abroad, but unfortunately was compelled by illness to return from Australia to New Zealand, where he died on the 25th July.

During his absence and since his death the work of the branch has been carried on by the undersigned, who takes this opportunity of expressing his appreciation of the loyal and efficient manner in which all members of the staff have co-operated in carrying through the extra work that has been occasioned through being short-handed during the present important period of development.

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