

"While central station managers in the United States have been rather restive since war was declared, wondering how they would weather the approaching storm, our Canadian friends have passed through the crisis unscathed. Bereft, as some of them have been, through the voluntary enlistment of fully 35 per cent of their staffs, and faced also with extraordinary difficulties of financing and of securing coal, they have met the situation manfully, and, instead of suffering loss, are enjoying a prosperity wholly undreamed of and never before equalled. Happily, almost all of the electricity used in Canada is generated from water-power, so that the scarcity and high price of fuel are not felt universally in the Dominion; but the demands for energy have been so great that all steam reserve apparatus as well had to be pressed into continuous service. In the use of electricity we have much to learn from Canada. . . . The per capita consumption of electricity in Canada is enormous. True, the manufacture of munitions has helped to swell the figures, but the total without that is still very large. The war has caused Canadians to make a virtue out of necessity in a way very much to their credit. Had selective conscription been adopted in Canada from the start, as it has been in this country, many of the highly trained and dependable men would have been spared to the companies to help carry the burden. American managers may therefore take heart. With all their anxieties and perplexities, our Canadian friends have been equal to every emergency, and, what is most encouraging, they show no sign of overwork. On the contrary, they are unusually cheerful."

Although the present survey only comprises electric plants, the comparative figures are probably true for other industries. They are undoubtedly correct where the cost of power is of importance, as this factor governs the choice of prime-movers in electric generation and distribution more than in any other industry, and it is a fair inference that the mode of operation of any particular station is, for that locality, the most economical way of producing power.

It is often pointed out that Canada is very favourably endowed with primary power resources and, except for a portion of the Middle West, either water-power or coal is found in abundance, while, in British Columbia, we have both resources; in fact, we find that some coal mines are operated by hydro-electric energy.

The situation in various parts of Canada is well illustrated by the figures in the report. We have steam and water-power in the Maritime Provinces with a predominance of the former. In Quebec, Ontario and eastern Manitoba, water-power is the dominating source of power, every large centre and most of the smaller ones being supplied by electricity produced from water-power, either through the extensive net-work of transmission lines fed from large developments or by smaller local plants. In the Middle West, large plants are steam operated, while the smaller ones use internal combustion engines. In British Columbia and western Alberta, we again find water-power predominating, but the generous coal supply in certain districts also permits considerable steam operation.

We have reason to congratulate ourselves on the type of plants found in all our large hydro-electric installations. Usually, the works are of most substantial construction, and the most expert engineering advice has