USE OF PULVERIZED FUEL

GENERAL FUEL SITUATION IN CANADA

N a country of such enormous proportions as the Dominion of Canada, extending from the Atlantic to the Pacific, and northward to the Arctic, and with its severe winters, the question of an adequate fuel supply as a source of heat, light and power, and for use in the metallurgical industries, must always be of paramount importance. To a great extent the requisites of power and light can be supplied by the utilization of the numerous waterfalls with which the country is so abundantly supplied. Based upon investigations by the Commission of Conservation, the total water-power in Canada is estimated at 18,953,000 horse-power.¹ Assuming that, under average conditions, one horse-power-hour can be produced in a steam plant from three pounds of coal, one-half of the 17,000,000 horse-power, if developed, would, on a basis of twelve hours a day, and a load factor of 50 per cent, represent a saving of nearly 24,000,000 tons of coal per year. Although hydro-electric energy will, where available, to a great extent replace the use of coal for light and power purposes and for certain metallurgical work, the necessary uses of coal will continue on a large scale.

The coal deposits of Canada, in respect of quality, quantity, and accessibility for mining purposes, compare favourably with those of other countries. About one sixth of the coal resources of the world is possessed by Canada. The deposits are, however, confined to the eastern and western portions of the Dominion, the large central market being supplied by imported coal. Previous to the war, Nova Scotia bituminous coal was used as far west as Montreal, while United States bituminous was sold within the area extending from Montreal to Swift Current and Saskatoon, Sask., the railways being the principal users of this fuel. Portions of Manitoba and Saskatchewan are supplied with coal also from Crowsnest, Lethbridge, Canmore, Drumheller, Edmonton, Yellowhead Pass and Souris districts.

Eastern Canada possesses no deposits of anthracite, and, as this class of coal is suitable for heating and domestic purposes, considerable quantities are imported from the United States. Prior to the war, it was sold over an area extending from Nova Scotia to Battleford, Sask., in the west. In 1913, imports exceeded 4,640,000 tons, more than double those of 1906; thus it is apparent that the demand for anthracite is rapidly increasing, notwithstanding the upward tendency of prices. The supply of anthracite coal in the United States, also, is limited, and there is no assurance that its

¹Not all the water-power can be economically developed. This estimate was made by Mr. Arthur V. White, Consulting Engineer, Commission of Conservation.