The Transportation Features of the Coal Situation in the Prairie Provinces.

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In dealing with this question, I will confine myself mainly to the situation as it exists in the western prairie provinces, as it is in these provinces that it assumes its most acute form. In the eastern and mountain sections of the Dominion, except in the larger cities, wood can be, and is, used to a large extent to relieve a shortage in the coal supply, but on the prairies there is nothing to take the place of coal. Straw is to some extent used for firing threshing engines, but it is not adapable in its present form for winter use. Therefore in winter, if the supply of coal is short, the prairie town and country dweller is faced with a desperate situation. It is chiefly to the credit of the railways that there has not in past years been much suffering due to a lack of this necessary commodity, as it can be stated generally, that with the exception of the United States coal which has been annually brought in and stored by the railways at the lake head, and the coal which the railways have stocked at various points for their own use, there has been in Western Canada, practically no stocking of coal during months favorable for its transportation, to provide for severe weather conditions. This has placed upon the railways the burden of handling a heavy coal tonnage during the worst weather, a tremendously difficult and costly operation.

In so far as Canada, east of the Great Lakes, is concerned, there are only two features which alter the situation to any extent over past years. The first is the enormous traffic with which the railways are now burdened, which of course adds to the difficulties experienced in handling coal, and second, the limitation in the allotment of U.S. coal to that territory, which will no doubt be reflected in an increased movement of wood in some sections. The situation has not altered in British Columbia, where the comparatively limited demand is met locally. It is in Alberta, Saskatchewan and Manitoba, and particularly in the two latter, that the situation takes on its difficult aspects. To a very large extent, Manitoba and eastern parts of Saskatchewan have in past years depended for their fuel on the supplies of anthracite brought in by lake and rail from the U.S. The transportation of the winter's coal supply from western mines places upon the railways a tremendously increased burden.

It is almost an impossibility to deal with this question statistically with any degree of accuracy. There are no statistical bases of comparison between the situation in Western Canada in past years and the situation as it exists today. In considering this matter from a transportation standpoint, I will take Winnipeg, the point which is most greatly affected by the change, as an illustration. During 1917, Winnipeg consumed a total of approximately 457,000 tons of commercial coal, of which about 215,000 tons were anthracite, 222,000 tons bituminous, and 20,000 tons lignite. The bituminous supply has not been greatly disturbed, but the Fuel Controller has stated that not more than 50% of last year's anthracite supply will be available this year, which means that, allowing for the difference in efficiency between anthracite and lignite, Winnipeg will have to receive from the western mines about 200,000 tons. As the railways cannot be expected to maintain the movement at full capacity, after the commencement of the heavy grain movement, this means that from May 15 to Oct. 1, a period of 138 days, coal should have been coming into Winnipeg from the west at the rate of 50 cars a day. As a matter of fact, it has not been coming in anything like that quantity. During May, the average number of cars to arrive in Winnipeg daily was 13; in June, 29 cars, and in July, 27 cars. During the week ended July 14, there were shipped to Winnipeg from all mines in Western Canada, 217 cars of coal, an average of 31 a day. During the week ended July 21, there were shipped a total of 252 cars, an average of 36 a day. During the 10-day period ended July 31, there were shipped a total of 333 cars, an average of 33 a day.

While these figures are typical of a section of Manitoba, they are not so of Saskatchewan, where stocking of western coal has been fairly heavy, and into which province, shipments for the three weeks prior to July 31, averaged over 125 cars a day.

From May 15 up to the end of July, all the mines in Western Canada shipped to all points, of all classes of coal, a total of 1,238,000 tons, as compared with a total of 592,000 tons shipped in the same period last year, but the figures mean very little when it is remembered that last year, from early in May until about July 1, almost all the coal mines in Alberta had strikes on their hands. In addition, a very large proportion of the increase is made up of steam coal stocked for railway purposes.

Winnipeg's anthracite supply, brought in during the lake navigation period to the lake head, was, in railway movement, distributed over 8 months. By far the greater portion of it, however, was handled during the months in which the grain was moved to the lakes, giving the railways a westbound coal movement to Winnipeg, and to some extent beyond, corresponding with the eastern grain movement, and thus limiting in some measure, that bane of the transportation officer—empty car haulage. Now look at the situation created by the substitution of western coal for anthracite. This must be brought from mines located an average of 900 miles from Winnipeg. It must largely come down in a period of approximately four months. It must be handled in the same direction with the preponderance of traffic during the greater portion of the year, meaning an empty car hauled for nearly every car of coal brought in. Where to bring in a car of coal from Port Arthur or Fort William only meant a loaded car haul of 420 miles, to bring one in from the western mines means an empty car haul from Winnipeg west of 900 miles, and as during the grain shipping period, which extends over a considerable portion of the year, every car sent west from Winnipeg for coal loading necessitates an equivalent empty movement from the lake head to Winnipeg, the total empty haulage for each car of western coal brought to Winnipeg is 1,320 miles. Add to this the return loaded haul of 900 miles, and you have a mileage of 2,200 a car, or over five times the distance is covered to bring a car of coal to Winnipeg from the western mines than was covered to bring a car from the lake head. The car efficiency is actually reduced by more than five times, because the western railways, between Winnipeg and the western mine territory, all operate through a section of prairie country, where the scarcity and poor quality of the water reduces locomotive efficiency, and makes railway operation at certain seasons very difficult and costly.

The greatest movement must be crowded into 4 or 5 months, because during the latter part of September and the months of October and November, when the bulk of the crop is moving out, the railways cannot undertake to move coal from the west in any quantity, and at the same time discharge their essential duty as grain carriers. The very fact that the bulk of the western coal must be moved during the summer, however, would, if taken advantage of, to a slight extent offset the disadvantages referred to, as that is the period when the railways in the west have usually had a surplus of men, power and cars, and weather conditions are most favorable to an uninterrupted movement.

Under the conditions created by the necessity for bringing the coal supply from the west, a feature upon which too much stress cannot be laid, is that of capacity loading of cars. Practically all of the railways in Canada, as a result of exhaustive tests, have increased the loading capacity of their cars beyond that formerly allowed, as high in some cases, as 20%, basing it upon the carrying strength of the axles. Loading cars with all they will carry, in the direction of the preponderance of traffic, increases transportation efficiency enormously, and the Canadian Railway War Board has been urging upon all shippers the importance of giving attention to this feature. It is one way in which the railways can be assisted by the shipping public to give better service to that public.

The railways were early in the field to assist in improving this season's fuel situation. Through the Canadian Railway War Board they have entered into all movements looking to a solution of the problem. On their behalf, Grant Hall, Chairman of the western administrative sub-committee of the board, at a meeting which was held in Calgary on Feb. 11, gave assurance that the railways would be prepared to handle all the coal offered up to the commencement of the grain movement, and W. P. Hinton, representing the administrative sub-committee, repeated this assurance at a meeting held in Ottawa on April 18, and they have not failed to do this. Steps were taken by the railways to begin at once to stock all the railway steam coal which the mines could turn out, in order to free railway facilities for handling domestic coal later on. Empty cars, which, accumulating in the east as a result of the winter all-rail grain movement, are usually moved west gradually throughout the summer, as traffic conditions permit, were in early spring handled west in train loads, and an uninterrupted full supply of cars has been maintained at all mines throughout the spring and summer, with a surplus always available to meet any needs which might arise.

It is not the intention to criticize the efforts of anyone else, but the movement of coal from the west has not, up to the present, been what the railways had