

"3. If the Canadian Northern, the Grand Trunk Pacific and National Transcontinental be maintained in two separate systems, it will cost at least \$400,000,000 to build the necessary branch line feeders and terminals, to provide them with adequate rolling stock, and put them in proper physical condition to compete with the Canadian Pacific.

"4. It will be necessary that the Grand Trunk Pacific build five to six thousand miles of feeders in the West.

"5. It will be necessary that the Canadian Northern build two to three thousand miles of feeders in the east, and terminals costing many millions in Montreal, Toronto, Ottawa, Quebec and Vancouver.

"6. Canada has already sufficient railway mileage for years to come. The additional mileage necessary for these roads could only be had by duplicating existing lines. Such duplication of lines would only add to the burden to be borne by Canada in the way of subsidies, guarantees, etc., without doing the country any good.

"7. Canada has sufficient railway mileage and traffic for two good transcontinental systems, the Canadian Pacific and another—but has not enough for three.

"8. A consolidation of the Grand Trunk, the Grand Trunk Pacific, Transcontinental and Canadian Northern Railways would give a well-balanced system. The Grand Trunk has an excellent system in the east, with terminals in all large and important centres. The Canadian Northern has not. The Canadian Northern has a good system of feeders in the West. The Grand Trunk has not. Each is strong where the other is weak. Combining them must, of necessity, be the most economical and efficient way of handling the situation.

"9. Such a combination would not require more than \$100,000,000 to provide it with sufficient rolling stock and to put it in proper physical condition to compete with the Canadian Pacific.

"10. The saving in capital cost would be at least \$300,000,000 and, at present rates of interest, the saving in fixed charges at least \$15,000,000 per annum."

Thus the *exclusive* taking over of the Canadian Northern Railway means that it must be provided with branches in the east. The construction of these feeders in the east must necessarily duplicate, parallel, the Grand Trunk's Ontario and Quebec lines—the inadequate earnings of which, to support them and the Grand Trunk Pacific, the government is also called upon to supplement to the extent of their deficiency.

The argument, moreover, applies inversely to the Grand Trunk Pacific in the West, if it be left isolated and necessarily to be supplied there with the indispensable feeders.

If we have to pay the deficiencies of the Canadian Northern Railway and also of the Grand Trunk Pacific as well why, from an economic point of view, burden the one and the other with the extra capitalization of from fifty to one hundred millions of dollars in each case for branch feeders, etc? The interest on this illogical proceeding would also have to be paid by the Dominion.

People are seemingly losing sight of the fact that it is this very wasteful and unnecessary duplication of lines which has landed the railways and the country where we are.

It seems strange that the recognized authorities who have given this matter careful and expert study should not be heard before a committee of the House; that the members may have the opportunity to satisfy themselves

with economic views on the question, before committing the country to the "last straw that breaks the camel's back."

NOULAN CAUCHON,

Consulting Engineer.

Ottawa, Ont., August 25th, 1917.

POWER FIGHT IN THE SENATE

The Railway Committee of the Senate is hearing arguments by representatives of the Ontario municipalities and of private electric companies in regard to the government's bill to amend and consolidate the railway act. The section in dispute is that which takes away from power companies their right to distribute electricity in any municipality in Canada without first obtaining the municipality's consent.

The Privy Council's decision of 1912 in the injunction suit brought by the Toronto-Niagara Power Co. against the town of North Toronto, virtually declared that the power company has the right to enter the streets of any municipality and to erect and maintain poles and wires for the distribution of electricity for all purposes.

When the bill to amend and consolidate the railway act was before the House of Commons this session, a clause was inserted which takes away this right. As the bill passed the House, a power company may build its transmission lines through any municipality upon terms to be fixed by the railway board, but may not distribute electricity to consumers in any municipality without obtaining the consent of the municipality.

The particular case which led to the insertion of that clause was the situation in Toronto. The franchise of the Toronto Electric Light Co. expires in 1919, and the company has been ordered to remove its poles and wires from the streets. The Toronto-Niagara Power Co., as the assignee of the Toronto Electric Light Co., claims perpetual right to maintain its poles and wires in Toronto, and to distribute power without the city's permission.

MAY USE CONCRETE PIPE

Consulting Engineer Jas. H. Fuertes and Chief Engineer W. G. Chace, of the Greater Winnipeg Water District, have presented a report to the commissioners recommending reinforced concrete pipe for the portion of the Shoal Lake Aqueduct from the westerly shaft of the Red River tunnel to the MacPhillips Street reservoir. It was originally intended to build this section with cast-iron pipe, but on account of the increase in cost of cast iron, the engineers now recommend a 48-inch reinforced concrete pipe.

Mayor Davidson, of Winnipeg, was not satisfied with the reason for the change, stating that price is not the ultimate consideration, and after some discussion, decision in regard to the matter was held over until another meeting of the Board. The report of the engineers, which was presented to the commissioners last week, is as follows:—

"The lowest tender received on April 16th for cast-iron pipe for this line was \$321,015. The market price of cast-iron pipe at New York on that date was \$50.50 per ton. The market price on July 31st, 1917, was \$65.50 per ton, which would correspond to an increase in cost of the cast-iron pipe for this line, considering the Cana-