Private Bills

times the mere \$500,000 that Frank McMahon offered as a performance bond.

The Deputy Chairman: It is my duty to inform the hon. member that his time has expired.

Mr. Nickle: I shall carry on the next time I have the opportunity.

The Deputy Chairman: The hon. member for York-Humber. It being five o'clock, the house will proceed to consideration of private and public bills.

PRIVATE BILLS

CANADIAN PACIFIC RAILWAY COMPANY

Mr. John Decore (Vegreville) moved the second reading of Bill No. 291, respecting Canadian Pacific Railway Company.

He said: Mr. Speaker, in this bill the Canadian Pacific Railway Company is seeking authority to build a branch line of railway for a distance of some 20 miles southerly from a point near Brocket, Alberta. As most hon. members probably know, all railway companies must come to parliament for authority to build a branch line which is longer than six miles, by virtue of section 183 of the Railway Act. Brocket is situated in the southwest corner of the province of Alberta and is on the secondary main line of the Canadian Pacific Railway between Vancouver and Medicine Hat, which runs through the Crowsnest pass.

The branch line will be built in a southerly direction to a property owned by Canadian Gulf Oil Company, where at the present time a plant is in the course of erection to process the natural gas developed from the Pincher Creek field by the Canadian Gulf Oil Company. It is not expected that the construction of this line will cause any great difficulty. The first five miles of this line will pass through the Peigan Indian reservation and I understand satisfactory arrangements have been made between the Canadian Pacific Railway Company and the Indian band on that reservation.

I should like to point out, Mr. Speaker, that one of the significant sources of natural gas in Alberta is in the Pincher Creek field in the southwest portion of the province. This field has been discovered and developed by the Canadian Gulf Oil Company.

The gas at Pincher Creek is a sour wet gas. In other words, it contains approximately 10 per cent hydrogen sulphide. In the formation the pressures are in the order of 5,000 pounds per square inch. Because of these pressures, and because of the large percentage of hydrogen sulphide which the gas contains, the gas is very corrosive. [Mr. Nickle.] In its natural state this gas cannot be placed in transmission lines for sale as a fuel. It must first be stripped or purified. Purification means removing all the hydrogen sulphide, almost all the carbon dioxide, and a large percentage of the liquefiable hydrocarbons. From the process of purification the following products will be obtained: sulphur, propane, butanes, natural gasoline and condensate.

The removal of these products requires the installation of a plant of considerable magnitude, and involves the installation of precision equipment. As a matter of fact, two plants must be built. One will recover the stabilized condensate and the hydrogen sulphide. When these products are removed the other plant will recover the elemental sulphur from the material taken from the hydrogen sulphide gas. At the initial stage, of course, the purified gas thus obtained will be reinjected into the formation on which the sour gas was obtained.

Construction of the Gulf plant at Pincher Creek began on April 1, 1956, according to the information I have. It is hoped that the plant will be completed by September 1 of this year.

The important purpose of establishing the plant now at Pincher Creek is to recover the elemental sulphur. A company known as Northwest Nitro Chemicals is now completing a plant at Medicine Hat, Alberta. This plant will produce a fertilizer with an ammonium base. To produce this fertilizer, sulphuric acid will be required. The acid will be manufactured from the elemental liquid sulphur supplied by Canadian Gulf Oil Company. This elemental sulphur will be shipped in a liquid state, in tank cars, from the Pincher Creek plant to Northwest Nitro Chemicals at Medicine Hat.

It is expected that the sulphur will be produced at the rate of 225 long tons per day. The stabilized condensate which will be another by-product of the purification will be produced at the rate of 76,650 imperial gallons per day. This condensate will be shipped to refineries at Calgary.

While the immediate customer for sulphur is the new fertilizer industry established at Medicine Hat by Northwest Nitro Chemicals, there will be a market for the additional sulphur produced by Gulf in the pulp and paper industry to the west and to the south of Pincher Creek. Northwest Nitro Chemicals plant will be in production, it is expected, by about September 1, 1956.

I am also informed that the only feasible and practical way to ship the volume of these by-products from the Pincher Creek gas field is by rail. The sulphur is, of course,