

of traffic. There will be the peak of traffic next fall or next winter, five times the present amount, with all of these great factories coming into production, and they require material for manufacturing steel and heat treating it with oil and fabricating it into armament.

On the question of the fuel-oil requirements the necessity is going up so fast that you cannot get any more estimates on that out of the Bureau of Mines. That is the critical demand for war, the oil required for manufacturing purposes, and next comes, of course, the heating of homes in New England and the East. They say that if we do not get some assurances of oil up here we cannot heat our homes, and we cannot work. In Vermont they telegraph us that they will be chopping wood next winter for fuel and, of course, the general shortage of gasoline reduces our war effort commensurate with that shortage.

That covers the movement of oil up to the northeast by rail and by pipe line. There never was much pipe-line capacity, and if the railroads can sustain the present traffic it would surprise me from the experiences I have had in the World War, and even if this movement is sustained by every means possible, and there is a 400,000-barrel tank ship movement we are still short 600,000 barrels in this district. All the means we can get must deliver oil.

Mr. JOHNS. You say they are piping gas from Texas to New York?

Mr. PENNINGTON. Yes, sir.

Mr. JOHNS. It is possible to use those pipe lines for oil purposes?

Mr. PENNINGTON. The effect in heat units would be approximately the same as in fuel oil, but you could do it; yes.

The CHAIRMAN. You use smaller pipes for gas ordinarily than for crude oil; do you not?

Mr. PENNINGTON. Oh, they are very much larger.

The CHAIRMAN. They are larger?

Mr. PENNINGTON. Yes, sir. The gas lines run up to 24 inches, and we have never had an oil line that big. The gas lines are always very much larger lines.

The CHAIRMAN. Those gas lines use the larger pipe?

Mr. PENNINGTON. Yes, sir; and they have approximately the same pressure.

Mr. ANGELL. Mr. Pennington, are there not any gas pipe lines leading from the Pittsburgh area up into the northeast section of our country?

Mr. PENNINGTON. There is the Columbia Gas & Electric, and the Standard.

Mr. DONDERO. How many of them are there?

Mr. PENNINGTON. I think there are four of them.

Mr. DONDERO. There are four lines leading out of the Pittsburgh area?

Mr. PENNINGTON. Yes.

Mr. DONDERO. Could they not get that oil up to the Pittsburgh area and then pump it through those lines to the northeast section on the Atlantic seaboard?

Mr. PENNINGTON. Considering the oil lines alone the total movement of oil by pipe line from the Pennsylvania area to the seaboard is 175,000 barrels.