

but if we had to shift from crude to the lighter products, we would first have to clean out the line. That would be done by simply shoving the lighter products behind the crude, and after passing a few thousand barrels it would be relatively clean, and you would have a few contaminating products that would have to be fractionated at the east end of the line.

The CHAIRMAN. Have you an estimate of the pumping stations that would be required along the line? You will have to have one about every 30 or 40 miles, will you not?

Major PARTEN. The line as it is designed now calls for 21 pump stations. Of course, we could add 2 or 3 pump stations at any time and increase the carrying capacity of that line.

The CHAIRMAN. Will there be any difficulty in the way of getting priorities for the machinery for the operation of those pumps?

Major PARTEN. The engineers say that it is feasible to get the power. It all depends, again, upon the appraisal of the War Production Board, and that Board, of course, has the responsibility of passing finally upon the matter.

Mr. CULKIN. These four lines at Pittsburgh now go into New Jersey and they reach to where?

Major PARTEN. These lines generally touch Bayonne, N. J., and the Philadelphia area; that is, Marcus Hook and several other points.

Mr. CULKIN. They are now pumping west, and you are going to change them to the east?

Major PARTEN. No, sir; they are not now pumping to the west. Most of them are reversed or in the process of reversal. There is no line in there pumping west of Harrisburg. There are two lines pumping as far west as Harrisburg, and the reason they have not been stopped as far as Harrisburg is because we calculate that there is a transportation saving in there as far as Harrisburg until such time as we get ready to pump east, after which they will be reversed all the way.

Mr. CULKIN. How soon will that be, Major?

Major PARTEN. That will be just as soon as we can get this supply by the rearrangement of these pipe lines and we can get an adequate supply in the vicinity of Pittsburgh or western Pennsylvania to fill them.

Mr. CULKIN. How much will that increase the present supply of the unrationed part of New York?

Major PARTEN. The pipe-line rearrangement program—and by that I refer to the relaying of approximately 1,400 miles of second-hand pipe in about 7 projects that we have under way—will deliver as far as the Mississippi River and Illinois basin points about 200,000 barrels a day additional of oil and products, and the pipe-line program of second-hand pipe and reversals such as we are talking about will carry about 100,000 barrels of that all the way through to the east coast. The other 100,000 barrels will have to move by tank car or barge.

Mr. CULKIN. Is that gasoline or crude?

Major PARTEN. That will be both. One of those lines, for instance, is under project 1, and is a rearrangement of a series of pipe lines running all the way from Texas to the Chicago district, which will increase the flow into Chicago by 40,000 barrels. We will get 25,000