

that matter. At Salem, Ill., it would tie in, and that would be a valuable tie-in, with the whole network of pipe lines emanating from the Salem field, and over on the east coast it would tie in with all the pipe lines there. So you would have a system with the maximum of flexibility to serve the needs of the Nation in the best possible way.

Mr. DONDERO. What is the estimated cost of that line?

Major PARTEN. \$95,000,000 is the new figure; \$80,000,000 was estimated last summer, but, owing to the increased costs, we would probably be justified in estimating \$95,000,000 at this time.

Mr. GREEN. If you constructed wooden barges for this purpose, you would have the consumption of a very negligible amount of critical materials, would you not?

Major PARTEN. Yes, sir; there would be a very small amount of steel involved in the construction of wooden barges. The power would be the bottleneck there.

Mr. GREEN. You could utilize existing fishing craft and pleasure craft for the purpose?

Major PARTEN. Our surveys do not show that we will find enough Diesel or steam power in that kind of craft.

Mr. GREEN. But you could utilize a considerable amount there?

Major PARTEN. Yes, sir; there is a considerable amount that should be utilized.

Mr. SMITH. Is it true that through a level country it would be practicable to use wooden-stave pipe sealed by steel wiring instead of steel pipe?

Major PARTEN. Not under pressure. You could build a pipe line of wood to be used under low pressure, with a small volume of delivery. I dare say you could carry a big volume if you had the pumping capacity, but in order to have pumping capacity to make the delivery and at the same time keep it at low pressure, the pump steel you would use would be as much as the pipe line steel. This pipe line would be operated at a 750-pound discharge pressure and at a 300-pound suction pressure.

Mr. SMITH. I agree with you about the pipe line program. In the Pacific Northwest, in Washington and Oregon, we still depend largely on wooden barges out there. I hope you will show more interest in getting that program actually started out there so as to relieve the situation. We have already lost valuable time in the East. We will need that oil out there for heating and industrial purposes within a few months. Let us not wait to build the barges until it is too late. It seems to me that we have been delaying matters to the point where we are facing a dilemma.

Major PARTEN. The Maritime Commission has a barge program, according to the advices we have, under way. Of course, the petroleum requirements in the Pacific Northwest, in Washington and Oregon—

Mr. SMITH (interposing). That oil comes from California, and there is some in Montana and Wyoming.

Major PARTEN. Those requirements are minor compared with the situation we are struggling with on the east coast. Naturally circumstances are such that I would say that as long as there are any tankers, it would be better to keep them in service for the Pacific Northwest than to keep them in service over here where it is easier to develop