

STATE OF MICHIGAN  
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application  
of LAKEHEAD PIPE LINE COMPANY, INC.  
for approval of construction and  
operation of a common carrier oil  
pipe line.

D-3903-53.1

At a session of the Michigan Public Service  
Commission held at its offices in the city of Lansing on the  
31st day of March A. D. 1953.

PRESENT: Hon. John H. McCarthy, Chairman  
Hon. Maurice E. Hunt, Commissioner  
Hon. John M. Veale, Commissioner

OPINION AND ORDER

On the 2nd day of February 1953, the Lakehead Pipe Line Company, Inc. (Lakehead), a Delaware corporation, with its principal office located at 100 W. Tenth Street, City of Wilmington, County of New Castle, Delaware, and with its present Michigan office at 1881 National Bank Building, Detroit, Michigan, a wholly owned subsidiary of Interprovincial Pipe Line Company, a Canadian corporation, filed with this Commission an application requesting approval of the location and construction of a 30" O.D. welded steel pipe line including two 20" O.D. welded steel pipe lines across

the Straits of Mackinac, together with the fixtures and equipment appurtenant thereto for the purpose of carrying and transporting crude oil and petroleum as a common carrier in interstate and foreign commerce, the proposed location of said lines within Michigan being described generally as follows:

Entering the State of Michigan from the State of Wisconsin at a point near Ironwood, Michigan, thence proceeding in an easterly direction through the counties of Gogebic, Iron, Dickinson, Marquette, Delta, Schoolcraft and Mackinac to a point on the north boundary of the Straits of Mackinac, thence in a southerly direction under said Straits to a point on the south boundary thereof, thence in a southeasterly direction through the counties of Emmet, Cheboygan, Otsego, Crawford, Oseoda, Ogemaw, Arenac and Bay to a point between Saginaw and Bay City, thence in a southeasterly direction through the counties of Tuscola, Lapeer, Sanilac and St. Clair to a point on the international boundary in the St. Clair River, south of the City of Port Huron. (The above route is subject to minor changes after an on-the-ground survey, presently in progress, has been completed).

After due and proper notice, hearing was held on this matter at the offices of the Commission in Lansing, Michigan, on the 20th day of March A. D. 1953. Appearances for intervenors were entered by counsel for Michigan-Ohio Pipeline Company; Township of Denmark, Tuscola County; Tuscola County Drain Commission; and a group of land owners in Bay County along the proposed right-of-way consisting of John G. Ziegler, et al. Representatives were also present from Township Boards, County Road Commissions and from the State Highway

Department.

At the hearing, applicant requested permission to amend its application by inserting the words "operation and maintenance" after the word construction in the final paragraph of the petition, and objection thereto was made by counsel for Denmark Township, Tuscola County.

It appears to the Commission that such amendment would not prejudice any of the parties present at the hearing, and if re-noticed and re-heard would not include any additional parties not having received notice of the instant hearing. It is immediately apparent that the pipe line, if constructed, must be operated and maintained in the same location where constructed, hence such amendment, but makes specific what is otherwise reasonably implied; therefore, the amendment to the application is proper and is hereby received.

The proposed pipe line above described is an extension of an existing pipe line owned and operated by petitioner, Lakehead Pipe Line Company, Inc., as a common carrier, for the transportation of crude oil and petroleum in interstate and foreign commerce from the international boundary between the United States and Canada near Neeche, North Dakota, to Superior, Wisconsin.

The sole present source of oil for this pipe line is the Interprovincial Pipe Line Company, which in turn has its source of supply from the Redwater area north of Edmonton,

Alberta, Canada. The Petroleum Administration for Defense has given priority for materials for this pipe line. It appears to this Commission that in times of national emergency delivery of crude oil for joint defense purposes would be greatly enhanced by operation of the proposed pipe line.

The petitioner filed with its petition a map or plat of such proposed pipe line showing the approximate route to be traversed. Upon completion of the pipe line a more detailed map will be filed showing the exact location of the pipe line as laid.

It is not anticipated that any pumping stations will be built in Michigan in 1953, but as the throughput increases according to the present forecast of the petitioner, additional pumping stations will be built in Michigan at or near the following locations:

Watersmeet, Gogebie County  
Gulliver, Schoolcraft County  
Indian River, Cheboygan County  
Bay City, Bay County.

It was represented by the petitioner that the proposed pipe line will be constructed of 30" O.D. x 9/32" high strength expanded, welded pipe. At the discharge of the No. 1 Pump Station at Superior, Wisconsin, there will be a few miles of 5/16" or 11/32" wall pipe. River crossings will be made using 30" x 1/2" wall pipe of the same specification. The Mackinac Straits crossing will consist of two parallel lines

laid approximately 1,000 ft. apart and these lines will be 20" x .812" wall thickness.

It was further represented by the petitioner that the specifications of the pipe to be used are as follows:

30" Pipe will be constructed to API specifications 5LX-52, having a guaranteed minimum yield strength as follows:

1. For thicknesses 3/8" and below, 52,000 psi.
2. Thicknesses 7/16" to 3/8" have 48,000 psi.
3. Thicknesses 1/2" to 7/16", 46,000 psi.

The 20" schedule 60 (.812" wall) pipe is API specifications 5L Grade A.

The joints will be made by welding except where otherwise required as in the case of insulating flanges and certain control valves.

The pipe line will be designed for a normal operating pressure at the pumping stations of 500-550 pounds per square inch except for the first station at Superior, Wisconsin, which may operate at approximately 700 pounds per square inch until station 2 is put into operation.

The minimum mill test pressure is approximately 138% of the maximum allowable working pressure of the pipe in the line. After completion of construction, a test pressure of 740 psig at the outlet of the Superior pumping station will be placed on the line under "no flow" conditions. The minimum test pressures and the allowable working pressures for various diameters and wall thicknesses of pipe to be used are approximately as follows:

<u>Size</u>	<u>Minimum Mill Test Pressures</u>	<u>Maximum Allowable Working Pressures</u>
30" x 1/2"	1242 lbs. per sq. inch	894 lbs. per sq. inch
30" x 11/32"	965 lbs. per sq. inch	695 lbs. per sq. inch
30" x 5/16"	878 lbs. per sq. inch	632 lbs. per sq. inch
30" x 9/32"	790 lbs. per sq. inch	570 lbs. per sq. inch
24" x 5/16"	1097 lbs. per sq. inch	790 lbs. per sq. inch
20" x .812"	1700 lbs. per sq. inch	1200 lbs. per sq. inch

The capacity of the pipe line with no pumping stations in Michigan will be 120,000 barrels per day and when all of the above pumping stations are constructed and in operation the capacity will be 300,000 barrels per day.

The portion of the line that is buried will have a minimum cover of 36" except that in rock the minimum cover will be 24". In rivers, creeks, ditches, ravines and similar locations the minimum cover will be 48".

The entire pipe line will be properly cleaned, primed and coated with a single application of coal tar. The coating will be reinforced by a spiral wrap of glass material and covered by a spiral wrap of special glass outer wrap. Preparations will be made for cathodic protection.

The entire pipe line will be designed in accordance with conservative pipe line practices and under codes applicable to such pipe lines. The presently proposed line and future pump stations will be designed in accordance with the A.S.A. Code for Pressure Piping (Code) where this code is applicable.

The Code provides for two classes of construction for oil transmission pipe lines, namely, Division A and Division B. The Division A requirements allow greater factors of safety and, among other places, are imposed inside cities and villages within the developed residential, business, and industrial areas. In this case the present information does not permit a determination as to whether there would be any Division A construction required, though it is stated that the line is expected to pass within the corporate limits of four cities and villages.

The petitioner, being engaged in interstate and foreign transportation of crude oil and petroleum, must file its tariffs or schedule of rates and charges with the Interstate Commerce Commission. Although the petitioner contemplates providing take-off points for the delivery of crude oil in Michigan, tariffs for any delivery points in the State of Michigan have not yet been determined but when determined and filed with the Interstate Commerce Commission, copies thereof will be supplied to this Commission.

The petitioner has filed its explicit authorized acceptance of the provisions of Act 16, P.A. 1929, as amended.

The Prosecuting Attorney of Tuscola County on behalf of Tuscola County Drain Commissioner, having requested that any grant of authority to applicant contain certain reservations in favor of the County Drain Commissioner, and it appearing to this Commission that such reservations are not

within this Commission's jurisdiction in the matter, but are more properly the subject of negotiation between the parties under other provisions of Act 16, P.A. 1929, as amended, the request hereinbefore mentioned is denied. However, it is recommended that the applicant incorporate the foregoing reservations in its future negotiations with the Drain Commissioners of this state.

Examination of witness T. S. Johnston, President of Lakehead, was of such probative value that the witness agreed to a change in policy employed by agents of the company in obtaining options for right of way. Also, testimony as to the method employed in replacing land drain tile displaced by construction would appear to be reasonable and a conscientious attempt on the part of the petitioner to safeguard private property. While the scope of the examination was in some respects beyond the ordinary jurisdiction of this Commission, we are of the opinion that by reason of statements and correspondence in the file on this matter the applicant intends to operate so as to create a minimum of hardship to the landowners.

Counsel for Denmark Township, Tuscola County and property owners in Bay County moved that the application be denied and in support thereof contended that the proposed project was not in the public interest and that the applicant intended to conduct a private business thereby excluding applicant from the provisions of Act 16, P.A. 1929, as amended. However, the Commission deems these contentions to be without merit and the motions based thereon are hereby denied.

After careful consideration of this matter the Commission FINDS that the petitioner should be authorized to construct, operate and maintain this line as a common carrier as represented by the applicant.

NOW THEREFORE, IT IS HEREBY ORDERED by the Michigan Public Service Commission that the Lakehead Pipe Line Company, Inc. be and the same is authorized to construct, operate and maintain as a common carrier the 30" oil pipe line consisting of approximately 630 miles of 30" O.D. pipe and approximately 10 miles of 20" O.D. pipe (the latter to be used for crossing the Straits of Mackinac), said pipe line to be constructed of the material and over the route as hereinbefore described.

IT IS FURTHER ORDERED that the specifications filed with the petition and presented at the hearing are hereby approved and the said pipe line shall be constructed in accordance therewith; and, in all cases the construction shall be equal to or better than that prescribed for oil transmission pipe lines by the Code for Pressure Piping as approved by the American Standards Association.

IT IS FURTHER ORDERED that detailed information shall be furnished the Commission, prior to actual construction, on the location and character of buildings within 150 feet of the pipe line in all incorporated cities or villages through which the line passes, at which time the Commission will determine whether Division A or Division B construction shall be required at such locations.

IT IS FURTHER ORDERED that the petitioner shall comply in all respects with the provisions of Act 16 of the Public Acts of Michigan for 1929 subject to all the duties and obligations thereby imposed, and with all the rights and privileges by said Act conferred.

IT IS FURTHER ORDERED that the map or plat filed by the petitioner with the Commission be and the same is hereby approved and that within 90 days after the completion of the construction of said line the petitioner shall file a more detailed map showing the exact location of the said pipe line as laid.

The Commission hereby specifically reserves unto itself jurisdiction of this matter and the right to make any other or further orders herein which in its judgment should be hereafter made.

( S E A L )

MICHIGAN PUBLIC SERVICE COMMISSION

By the Commission and  
pursuant to its action  
of March 31, 1953

/s/ John H. McCarthy  
Chairman

S. A. LUND  
Its Secretary

/s/ Maurice E. Hunt  
Commissioner

S T A T E   O F   M I C H I G A N  
B E F O R E   T H E   M I C H I G A N   P U B L I C   S E R V I C E   C O M M I S S I O N

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CONCURRING OPINION

Upon consideration of the record in these proceedings and the argument of counsel relating thereto, I concur in the opinion of the Commission that applicant is a common carrier of property and that its operations in Michigan are affected with a public interest. The order therefore, giving applicant the benefit of Act 16, P.A. 1929, as amended, is proper.

This matter is of considerable import to the United States, the Dominion of Canada, the Province of Ontario, and the State of Michigan. Accordingly, I believe some clear expression of broad policy and economic aspects should be made.

Applicant proposes to transport property as a common carrier for hire between two points in the Dominion of Canada, traversing, inter alia, some 630 miles in the State of Michigan. The property to be transported will originate in the Province of Alberta and be delivered to the Province of Ontario. This

transportation will be of great mutual benefit to these provinces. To permit this, the State of Michigan hereby confers upon Canadian citizenry the right to construct and operate the facilities required to perform such transportation, including the right to condemn the property of Michigan citizens.

This action, in my opinion, is justified as a step in the development of proper international, provincial and state trade cooperation. Its import, and similarity to certain other trade problems, should not be overlooked by our Canadian neighbors, particularly by brethren in the Province of Ontario. Therefore, I sign this order with the hope that it will take its place as an integral part of the movement for the freer exchange of trade and transportation facilities by the various governments herein concerned.

( S E A L )

/s/ John M. Veale  
John M. Veale, Commissioner