IN THE MATTERS OF

NORTHWEST NATURAL GAS COMPANY, G–996, G–1916, G–1917; PACIFIC NORTHWEST PIPELINE CORPORATION, G–1429; WESTCOAST TRANSMISSION COMPANY, INC., G–1526, G–1919, G–1920; GLACIER GAS COMPANY, G–1816, G–1817, G–1818; NORTHERN NATURAL GAS COMPANY, G–1918, G–1926. G–1927; TRANS-NORTHWEST GAS, INC., G–1923, G–1924, G–2111; COLORADO INTERSTATE GAS COMPANY, G–2121

Opinion and Order Authorizing Construction and Operation of Natural Gas Facilities and Denying Applications for Authorization

June 18, 1954*

Syllabus

1. Area and population to be served through facilities proposed by Pacific greatly exceed that proposed by other applicants, and route proposed by Pacific would stimulate exploration and development of large production areas by providing an outlet for natural gas. P. 226.
2. Commission *finds* that any increase in cost of service or decline in competitive fuel costs would result in Westcoast project being uneconomic. P. 234.
3. It would not be in the public interest to permit the importation of natural gas as the sole source of supply for customers in need of an uninterruptible supply at a reasonable price. P. 235.
4. Commission *issues* certificates of public convenience and necessity under Section 7 of the Natural Gas Act to Pacific Northwest and Colorado Interstate and either dismisses or denies other certificate applications. P. 239.

Chairman KUYKENDALL dissenting in part.

Arthur G. Logan and *Richard H. Wilmer* for Northwest Natural Gas Co.

Binford Arney, *Claude A. Roth*, *Charles E. McGee*, *Leon M. Payne*, *Earl Foster*, *Jr.*, *R. E. Christiansen*, and *W. K. Hudson* for Pacific Northwest Pipeline Corp.

R. A. Henderson and *Harry A. Poth*, *Jr.* for Glacier Gas Co.

Justin R. Wolf, *Lawrence I. Shaw*, and *Dale Le Kolste* for Northern Natural Gas Co.

Robert E. May, *Charles V. Shannon*, and *Omar L. Crook* for Westcoast Transmission Co., Inc.

J. W. Greenough, *Paul H. Graves*, *John M. McCormick*, *George W. Martin*, *Charles V. Shannon*, and *Robert May* for Trans-Northwest Gas, Inc.

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*Designated Commission Opinion No. 271. Rehearing denied by order issued August 4, 1954, *infra*, p. 1249.

Henry F. Lippitt, *James L. White*, *William A. Dougherty*, and *Charles E. McGee* for Colorado Interstate Gas Co.

Alvin A. Kurtz, *Joseph B. Hobbs*, *Harry Albrecht*, and *Jacob Goldberg* for the staff of the Federal Power Commission.

BY THE COMMISSION:

OPINION

These proceedings involve interrelated applications[1] seeking authorizations for the construction and operation of natural gas facilities in the United States.

Northwest Natural Gas Company (Northwest Natural) is the applicant for a certificate of public convenience and necessity under Section 7 of the Natural Gas Act (Docket No. G–996); an import and export authorization under Section 3 of the Act (Docket No. G–1916); and a Permit under Executive Order No. 10485 (Docket No. G–1917) authorizing, respectively: (1) the construction and operation of pipeline facilities for the transportation and sale of natural gas in Washington, Northern Idaho, and at Portland, Oregon, and vicinity; (2) the importation of all of its natural gas supply from the Southern Alberta area of Canada, and the exportation of natural gas to consumers in the vicinity of Trail and Vancouver, British Columbia; and (3) the construction, operation, maintenance and connection of natural gas facilities at three points on the international border in the States of Idaho and Washington in the vicinity of Kingsgate, Trail and Vancouver, British Columbia. Northwest Natural filed a motion, during the latter stages of the hearing, to amend its applications limiting its proposed operations in the United States to Northern Idaho and Eastern Washington. This motion will be discussed with other pending motions respecting Northwest Natural's applications.

Pacific Northwest Pipeline Corporation (Pacific) is the applicant for a certificate of public convenience and necessity under Section 7 of the Natural Gas Act (Docket No. G–1429) authorizing the construction and operation of pipeline facilities for the transportation and sale of natural gas in Colorado, Utah, Wyoming, Idaho, Oregon and Washington, extending from the San Juan Basin in New Mexico and Colorado, via Boise, Idaho, and Portland, Oregon, to various points in the State of Washington.

Westcoast Transmission Company, Inc. (Westcoast Inc.) is the applicant for a certificate of public convenience and necessity un-

[1] The above-entitled matters involving one or more questions in common, respecting their proposed gas supply or proposed markets, were consolidated for the purpose of hearing by orders issued January 28 and April 2, 1952 and January 29 and April 8, 1953.

der Section 7 of the Natural Gas Act (Docket No. G–1526); an import authorization under Section 3 of the Act (Docket No. G–1919); and a Permit under Executive Order No. 10485 (Docket No. G–1920) authorizing, respectively: (1) the construction and operation of pipeline facilities for the transportation and sale of natural gas in Western Washington and at Portland, Oregon, and vicinity; (2) the importation of all of its natural gas supply from the Peace River Area of Alberta and British Columbia, Canada; and (3) the construction, operation, maintenance and connection of natural gas facilities at a point on the international border in the vicinity of Sumas, Washington.

Glacier Gas Company (Glacier) is the applicant for a certificate of public convenience and necessity under Section 7 of the Natural Gas Act (Docket No. G–1818); an import authorization under Section 3 of the Act (Docket No. G–1816); and a Permit under Executive Order No. 10485 (Docket No. G–1817) authorizing, respectively: (1) the construction and operation of pipeline facilities for the transportation and sale of natural gas in Northwestern Montana, Northern Idaho, and Eastern Washington; (2) the importation of all of its natural gas supply from the Southern Alberta area of Canada; and (3) the construction, operation, maintenance and connection of natural gas facilities at a point on the international border in the vicinity of Kalispell, Montana.

Northern Natural Gas Company (Northern Natural) is the applicant for a certificate of public convenience and necessity under Section 7 of the Natural Gas Act (Docket No. G–1918); an import authorization under Section 3 of the Act (Docket No. G–1926); and a Permit under Executive Order No. 10485 (Docket No. G–1927) authorizing, respectively: (1) the construction and operation of pipeline facilities for the transportation and sale of natural gas in Minnesota, Nebraska and Iowa; (2) the importation of natural gas from the Southern Alberta area of Canada; and (3) the construction, operation, maintenance and connection of natural gas facilities at a point on the international border in the State of Minnesota in the vicinity of Emerson, Manitoba.

Trans-Northwest Gas, Inc. (Trans-Northwest) is the applicant for a certificate of public convenience and necessity under Section 7 of the Natural Gas Act (Docket No. G–2111); an import and export authorization under Section 3 of the Act (Docket No. G–1923); and a Permit under Executive Order No. 10485 (Docket No. G–1924) authorizing, respectively: (1) the construction and operation of pipeline facilities for the transportation and sale of natural gas in Eastern Washington and Northern Idaho; (2) the importation of all of its natural gas supply from the Peace River Area of Alberta and British Columbia, Canada, and the exportation of natural gas to consumers in the vicinity of Trail, British Columbia; and (3) the construction, operation, maintenance and connection of natural gas facilities at two points on the international border in the State of Washington in the vicinity of Osoyoos and Trail, British Columbia.

Colorado Interstate Gas Company (Colorado Interstate) is the applicant for a certificate of public convenience and necessity under Section 7 of the Natural Gas Act (Docket No. G–2121) authorizing the construction and operation of pipeline facilities for the transportation and sale of natural gas in Colorado and Wyoming, extending from a point of connection with the proposed line of Pacific Northwest at a point near Rock Springs, Wyoming, to Colorado Interstate's existing system at a point near Denver, Colorado.

These consolidated hearings were concluded March 31, 1954. By order issued April 1, 1954, upon motion of certain of the parties, the Commission omitted the intermediate decision procedure and fixed the dates for the filing of briefs and for oral argument in these matters.

There are numerous interveners in the proceedings upon the several applications herein. The identity of interveners is a matter of record, and the identity of those participating in these proceedings is shown with appearances of counsel.

PENDING MOTIONS

Motions have been made by certain parties to dismiss or deny the applications of Northwest Natural, Glacier, and Northern Natural. These motions are collectively based on the grounds (1) that all of those three applicants failed to prosecute their applications to completion during the hearing and, (2) that no one of those three applicants has obtained the necessary Canadian export authorization for the delivery of gas in any quantities to the areas in the United States proposed to be served by them.

Counsel for Glacier and Northern Natural appeared at the hearing and stated respectively to the effect that those two applicants would not present any evidence in these consolidated proceedings in support of their respective applications, nor have they presented such evidence. While Northwest Natural appeared and presented some evidence which we have considered, it failed to present certain of its witnesses when called on by the Presiding Examiner for cross-examination.

As hereinbefore stated, Northwest Natural filed a motion on January 27, 1954 to amend its applications to limit its proposed operations in the United States to Northern Idaho and Eastern Washington. Apparently the only reason for the proposed amendment to its pending applications is that Northwest Natural has been unsuccessful in its several attempts to obtain the necessary Canadian authority to export natural gas from Canada into the United States for its Project as originally proposed. In its motion to amend its application Northwest Natural stated that, pending action on its application with Canadian authorities for permission to export gas from Canada, for its proposed modified Project, its applications in these proceedings should be placed in the same category as the Glacier and Northern applications. Admittedly Northwest Natural, Glacier, and Northern Natural have not obtained Canadian authorization for the export of Canadian gas in any quantities to the areas proposed to be served by them in the United States.

Subsequent to the failure of Northwest Natural to present certain witnesses for cross-examination, certain parties moved that the testimony and exhibits presented by such witnesses on direct examination be stricken from the record. The motion to strike was granted by the Presiding Examiner. On March 9, 1954, Northwest Natural filed an application with the Commission for reversal of the aforesaid action of the Presiding Examiner and for denial of the motion to strike.

On March 12, 1954, Northern Natural filed a motion to sever its applications from these consolidated proceedings. The basis of Northern Natural's motion to sever is that it proposed to serve a different area than the other applicants in these consolidated proceedings. It does, however, have an interest in these consolidated proceedings in that it, together with certain other applicants, proposed to obtain their gas supply from Southern Alberta. Moreover, if Northern Natural is ever prepared to proceed it is entirely possible that it would proceed on a basis substantially different from that proposed herein.

In the circumstances herein, no useful purpose would be served (1) by granting Northwest Natural's motion to amend its applications as proposed, (2) by reversing the action of the Presiding Examiner in granting the motion to strike certain evidence presented by Northwest Natural, and (3) by granting Northern Natural's motion to sever its applications from these consolidated proceedings.

The original applications of Northwest Natural, Glacier, and Northern Natural were filed with this Commission on February 2, 1948, October 15, 1951, and March 17, 1952, respectively. No one of these three applicants has made the necessary showing required by Section 7(e) of the Natural Gas Act with respect to its ability to perform the service proposed in the delivery of natural gas from Southern Alberta to the respective areas proposed to be served by them. We therefore conclude that these three applications should at this time be dismissed without prejudice.

SUMMARY STATEMENT

Upon consideration of the record, and the contentions of the parties, including interveners, it is clear that there is a need for natural gas in the areas proposed to be served by all of these applicants. The principal question remaining for us to determine is which of these applicants, if any, or what combination of them are able to meet the requirements of the public convenience and necessity.

There are certain small communities in Western Washington proposed to be served by Westcoast Inc., and certain small communities in Northeast Washington and Northern Idaho proposed to be served by Trans-Northwest which Pacific does not propose to serve. On the other hand there are populated areas in the Yakima Valley of Washington, Northern Oregon, and Southern Idaho, and small communities in Eastern Utah and Western Wyoming and Colorado proposed to be served by Pacific which would not be served by Westcoast Inc., Trans-Northwest, or Colorado Interstate. There are large populated areas of Wyoming and Colorado proposed to be served by Colorado Interstate which would not be served by the other applicants in these consolidated proceedings. However, the gas supply for these requirements would be supplied to Colorado Interstate by Pacific.

It is apparent that the area and population to be served through the facilities proposed by Pacific greatly exceed the population and areas proposed to be served by Westcoast Inc. and Trans-Northwest. Moreover, the route of the proposed Pacific pipeline traverses at least three large undeveloped sedimentary basins in the States of Colorado, Utah, and Wyoming. Exploration and development of these production areas would be stimulated by providing an outlet for natural gas. It is for these reasons and others, including the feasibility of the projects hereinafter discussed, that we conclude that the applications of Pacific and Colorado Interstate should be granted.

Since the areas to be served by Pacific in the State of Washington and at Portland, Oregon, would be largely duplicated by Westcoast Inc. and Trans-Northwest, these applications are mutually exclusive and the applications of Westcoast Inc. and Trans-Northwest must be denied.

PACIFIC NORTHWEST PIPELINE CORPORATION

Pacific, a Delaware corporation, proposes to construct and operate a natural gas transmission pipe line from Ignacio, Colorado on the northern tip of the San Juan Basin, running through the States of Colorado, Utah, Wyoming, Idaho, Oregon and Washington with its terminus at Bellingham in northwestern Washington. Sales laterals are proposed from the main line in south central Washington to Spokane and Wenatchee.

Pacific will receive its supply of gas from the San Juan Basin in Colorado and New Mexico, the Piceance Creek field in Colorado and from the Big Piney and Dry Piney fields in Wyoming and said supply is proposed to be sold in the States of Colorado, Utah, Wyoming, Idaho, Oregon and Washington to various local distributing companies and to certain industrial customers along the route of the pipe line.

In accordance with the Commission's rules, Pacific submitted market estimates for the first three years of operation. Market estimates disclose the sale of 92,582,211 Mcf of gas in the first year of operation, 107,010,899 Mcf in the second year and 122,972,337 Mcf in the third year. The maximum day firm sales to utilities for resale are shown to be 231,300 Mcf in the first year, 274,300 Mcf in the second year and 319,300 Mcf in the third year. The largest customer will be Colorado Interstate Gas Company which sales represent 40,150,000 Mcf per year with a maximum volume of 110,000 Mcf per day. Pacific proposes to serve the following direct industrials: Monsanto Chemical Company and Idaho Portland Cement Company in Idaho, Oregon Portland Cement Company at Lime, Oregon, Aluminum Company of America at Wenatchee, Washington, and the Atomic Energy Commission at Hanford, Washington. The volumes of gas to be sold to these industrials during the third year of operation will be 14,200,000 Mcf and represents 11.5% of Pacific's total sales. In addition Pacific will have available 8,350,-800 Mcf of gas in the third year with a maximum day volume of 15,000 Mcf for which no market has been definitely assigned. These estimates reflect the conditions and circumstances existing in the area proposed to be served.

The project as proposed by Pacific will include service to areas populated by approximately 1,500,000 people in Washington, 676,000 people in Oregon, 205,000 people in Idaho and 750,000 people in Utah, Wyoming and Colorado.

During the course of the hearing, certain interveners in the State of Washington sought a supply of gas from Pacific.[2] It is the position of Pacific that it will make gas available to these communities but that the demands are uncertain. The pipeline capacity north of Portland, Oregon, to serve the additional requested volumes of these communities has been questioned. While the need for natural gas in the area proposed to be served by Pacific is recognized, gas distribution systems will have to be built and certain of the communities will have to hold elections as to bond issues. The certainty required for an allocation of gas to those communities in this proceeding has not been shown.

During the closing days of the hearing the Atomic Energy Commission, on March 17, 1954, advised the Commission, among other things, that in order for natural gas to be really attractive from an economic standpoint at Hanford, Washington, it would have to seek a cost of roughly 30¢ per Mcf and consideration would have to be given to reliability of supply and susceptibility of the natural gas line to sabotage.

While Pacific in its estimates contemplated the sale to the Atomic Energy Commission at Hanford, Washington at 34¢ per Mcf, it took the position that it could render this service at 30½¢ per Mcf and further, that the feasibility of its project did not depend upon the Hanford load. From the earnings estimates of Pacific, it would appear that it could further reduce this price of gas to Hanford without jeopardizing the project. The Pacific project is only affected to a minor extent by the attachment of industrial load and even if Hanford is not served such gas then could be made available to other prospective customers.

The route of Pacific's pipe line from Hanford, Washington, to the nearest gas fields of Tiptop and Big Piney in Wyoming is 726 miles, extending through the populated areas of Eastern Washington, Southern Idaho and Western Wyoming.[3]

Pacific to render the above mentioned service proposed to construct 1466 miles of main pipe line ranging in size from 26 inch to 6 inch; 106 miles of supply laterals; 327 miles of sales laterals and 14 compressor stations, of which 8 stations will be installed during the initial construction period and the remaining 6 will be installed during the first year of operations. In addition to the above facili-

[2] Requested maximum day volumes, third year: Sedro Woolley, 622 Mcf; Mt. Vernon, 3,084 Mcf; Marysville, 1,102 Mcf; Bellevue, 2,279 Mcf; Enumclaw, 1,820 Mcf; Buckley, 615 Mcf; Aberdeen, 4,611 Mcf; Hoquiam, 2,450 Mcf; Tumwater, 1,524 Mcf; Winlock, 507 Mcf; Medical Lake, 2,970 Mcf; and Quincy, 777 Mcf; totalling 22,361 Mcf.

[3] In comparison the route of the Trans-Northwest and Westcoast pipe lines from Hanford, Washington to the nearest gas fields in the Peace River area of British Columbia is 860 miles, and extends through the sparsely populated area of British Columbia.

ties, Pacific proposes to construct a natural gas processing dehydration plant near Ignacio, Colorado with a designed capacity of 284,500 Mcf per day; a gathering system including the drilling of wells in the San Juan field; gathering systems with booster stations and dehydration facilities in the Dry Piney and Piceance Creek fields. These facilities are adequate to enable Pacific to render the natural gas service to the various communities and industries as proposed.

The cost of the above facilities including the drilling of the necessary wells in the San Juan field at the beginning of the first year of operations and including interest during construction and working capital is $160,000,000. This cost estimate appears adequate and reasonable.

Pacific, as above pointed out, will obtain its gas supply from the San Juan field in New Mexico and Colorado, the Piceance Creek field in Colorado, and the Tip Top and Big Piney fields in Wyoming. In the San Juan field, Pacific has under contract 320,000 acres of leases. Of Pacific's acreage in this field, Mr. Bendorf, of the firm of De Golyer & McNaughton, made an estimate of gas reserves underlying 196,469 acres in the Mesa Verde formation, and estimated the proved recoverable reserves to be 3,045,538,000 Mcf. This proved area was divided into a so-called "Block A" of 133,378 acres for which a deliverability schedule was made, and a "Block B" for which no deliverability schedule was made. Within this contract acreage, gas from other formations is also available to Pacific under its contracts, although not relied upon in support of its gas supply.

In the Piceance Creek field Pacific has contracted to purchase a total of 100 billion cubic feet of gas at the rate of 15,000 Mcf per day, with the right to take additional daily volumes of gas if available. Underlying this contract is 61,247 acres with estimated proved recoverable reserves by Mr. Demaris, of General Petroleum Company, of 95,400,000 Mcf and probable recoverable reserves of 12,150,000 Mcf.

In the Tip Top field, Pacific has contracted for 150 billion cubic feet of gas at the rate of 20,000 Mcf of gas per day, with the right to take additional daily volumes if available. Underlying this contract is 27,574 acres upon which estimated proven recoverable reserves were estimated to be 176,030,000 Mcf by Mr. Hoenshell, of General Petroleum Corporation, probable reserves of 29,386,000 Mcf, and possible reserves of 42,493,000 Mcf.

In the Big Piney field Pacific has contracted for 375 billion cubic feet of gas to be taken at the rate of 50,000 Mcf per day with the right to take additional volumes if available. In this field Mr.

Krueger estimated the proved recoverable reserve supporting this contract to be 329,600,000 Mcf of gas.

Based upon the reserve estimates, Pacific, through Mr. Sol Smith and Mr. Bendorf, submitted a production schedule from the Piceance field, Tip Top field, Big Piney field, and the above referred to Block A acreage only in the San Juan field, which discloses that the total requirement on peak days will be met from this acreage for 13 years and then there will be a decline for the remaining 7 years. The total deficiency for the last seven years of the 20-year supply picture is approximately 20% of the estimated proven recoverable reserves under Block B acreage in the San Juan field.

The right of Pacific to drill wells on less than 320 acre spacing in the San Juan field has been raised by reason of an order of the Oil Conservation Commission of New Mexico establishing spacing rules. This order was adopted to provide for orderly development of the field and any doubt of Pacific's right to drill on a 160 acre well spacing is nullified by the position of the Governor of the State of New Mexico, the Oil Conservation Commission and the Public Service Commission of that State in this proceeding that such spacing rule will be changed to insure additional necessary market outlets for gas from the San Juan field which they support, for the further orderly and proper development of the field.

Witnesses on behalf of Westcoast and certain Staff members questioned the reserves and availability of gas to Pacific from the San Juan field and Big Piney field. It is clear from the testimony that the estimates made on behalf of Pacific reflect careful study of the fields and the estimates are reliable.

The pipeline route of Pacific traverses three large sedimentary basins in the States of Colorado, Utah and Wyoming in which there has been only minor development due to the lack of a market. It is common knowledge, as testified to by Mr. Krueger, that development of this potentially productive area will be retarded unless stimulated by a market outlet.

From an examination of all the evidence the conclusion is clear that Pacific now has available to it an adequate gas supply for its project.

Pacific's plan of financing provides for the raising initially of $160,000,000 as follows:

	Principal amount	Net	Debt ratio
			Percent
First mortgage bonds	$120,000,000	$120,000,000	75
Interim notes, convertible to preferred stock	22,500,000	18,000,000	11.25
Common stock		22,000,000	13.75

The bonds are to be sold at par, the interim notes at a discount of $4,500,000 and the common stock at $10 a share of which 450,000 shares of common stock will be sold with the interim notes.

Further financing will be by the issuance of additional bonds of not more than 75% of costs and the balance from cash received from operations.

We have previously held that the common equity should aggregate at least 15% of total capital. Pacific takes the position that no difficulties will be encountered in complying with this requirement. In this we concur. Accordingly the certificate will be conditioned to require Pacific to submit for our approval its plan of financing.

Pacific submitted a ten-year forecast of earnings which discloses an average return for this period of 6.9%. This forecast takes into account the investment in Gas Plant including working capital, operating revenues and expenses. In addition it discloses a net income before dividends of $3,867,000 for first year, $5,685,000 for second year, and $9,912,000 for third year. The ten-year net income is $60,340,000. Further the forecast discloses that after the payment of preferred stock dividends, retirement of debt beginning in the first year, retirement of preferred stock beginning in the sixth year, plant additions from earnings, that there will be available for Common for the ten years $40,249,000. The breakdown of earnings for a three-year period between jurisdictional sales and non-jurisdictional sales including unallocated gas discloses the following returns:

	Jurisdictional sales	Nonjurisdictional and unallocated	Total
	Percent	*Percent*	*Percent*
First year	5.27	5.99	5.43
Second year	6.3	7.24	6.48
Third year	8.58	10.44	8.95

The earning to be realized from operations places Pacific in an advantageous position to meet a decline if it occurs in competing fuel costs, and also to expand its facilities and services to meet additional needs of this rapidly developing Pacific Northwest area. This is illustrated by the effect on income if gas is sold to the Hanford Plant for 30 cents per Mcf instead of 34 cents as estimated by Pacific. This sale is reflected in the non-jurisdictional and unallocated sales and represents 75.8% of such direct sales in the first year, 68.7% in the second year and 38.7% in the third year. The net operating revenues earned on these sales are shown to be $2,023,000 for the first year, $2,344,000 for the second year and $3,625,000 for the third year. On the sales volume as set forth in the Atomic Energy Commission's letter the above net operating revenues would only be reduced by approximately $458,000 in the first and second years and $280,000 in the third year.

The economic feasibility of the Pacific project has been challenged From a review of all the evidence we believe that Pacific's estimates are reasonable and that its project is economically feasible. Under the rates proposed to be charged they can secure the estimated volumes and such rates will produce revenues adequate to cover operating expenses and taxes with sufficient return to insure the necessary financing.

Colorado Interstate proposes to construct and operate a natural gas transmission line of 365 miles of 22-inch pipe extending from Pacific's system near Rock Springs, Wyoming, to Denver, Colorado. The facilities are to be used to transport an average of 100,000 Mcf[4] of gas daily to be purchased by Colorado Interstate from Pacific Northwest at the Rock Springs point of interconnection. The system is designated to transport initially 118,000 Mcf per day, based on the delivery pressure of Pacific Northwest and the terminal pressure at Denver in the first year of operation.

Applicant proposes to receive 118,000 Mcf on the peak day in the first year of operation, but not more than 36,500,000 Mcf on an annual basis. The present delivery capacity of Applicant's Rocky Mountain transmission system is 508,800 Mcf.

Applicant estimates its peak day Rocky Mountain requirements, exclusive of gas used in operations, as follows (Mcf at 14.73 psig):[5]

1954–55	1955–56	1956–57
560, 536	609, 207	647, 579

Total cost of construction is estimated at $23,298,653, to be financed by short term bank loans, with subsequent long term financing by the issuance of bonds and preferred stock.

Based on the future estimated peak-day requirements of Applicant's Rocky Mountain transmission system, Applicant will require the additional gas and the additional facilities proposed in this proceeding.

WESTCOAST TRANSMISSION COMPANY, INC.

Westcoast Inc., a Delaware corporation, proposes to construct 270 miles of main transmission pipeline from the Canadian border to Portland, Oregon, and vicinity, together with 126 miles of branch

[4] 1,100 Btu per cu. ft.

[5] In Docket No. G–2269, Applicant reduced its estimated peak-day requirements by about 10,000 Mcf. Such reduction does not change the over-all result that Applicant's Rocky Mountain peak-day requirements are expected to increase above its present capacity.

lines to communities along the route. Its entire supply of natural gas is contracted to be furnished to it at the border by its parent company, Westcoast Transmission Company, Limited (Westcoast Ltd.), incorporated by Act of Parliament of Canada. Westcoast Inc. is a wholly-owned subsidiary of Westcoast Ltd. which likewise owns entirely Westcoast Transmission Company (Alberta), Limited (Westcoast Alberta), incorporated under the laws of the Province of Alberta, Canada. Westcoast Inc. refers in its brief to the joint project of these "Westcoast Companies" as one having a "single integrated ownership, management and operation" through the parent Westcoast Ltd.

The Westcoast project contemplates that Westcoast Alberta will purchase gas from various producers in Northwest Alberta and will transmit and deliver such gas under contract to Westcoast Ltd. at the border of the Provinces of Alberta and British Columbia, Canada. Westcoast Ltd. will purchase additional gas from producers in Northeastern British Columbia and transmit it and the Alberta gas by pipeline located entirely in British Columbia to various cities in that province and to the border for export to Westcoast Inc. and to the applicant Trans-Northwest. These gas fields in Northwestern Alberta and Northeastern British Columbia are in what is known as the Peace River Area. Westcoast Alberta plans the construction of a total of 127 miles of pipelines of various sizes to gather and transmit the Alberta gas for delivery to Westcoast Ltd. Westcoast Ltd. will construct 660 miles of 24-inch diameter main transmission pipeline in British Columbia with 136 miles of smaller diameter intake and branch pipelines. Along this pipeline will be five compressor stations, approximately 160 miles apart. Westcoast Inc. will construct the necessary importing facilities at the border.

The laws of Alberta require that a permit must be obtained to export gas from the Province. Such a permit was issued June 16, 1952 to Westcoast Alberta and Westcoast Ltd. by the Petroleum and Natural Gas Conservation Board, with the approval of the Lieutenant-Governor in Council and the legislature of Alberta. The permit limits the exportation to natural gas obtained from the Peace River Area of Alberta, and it is issued for a period of 22 years. The amount of gas authorized to be exported thereunder is 210 billion cubic feet for the first five years, not to exceed 42 billion cubic feet for any one year, nor 165 million cubic feet in any one day. Thereafter, during the remaining 17 years of the permit, the amount of gas which may be removed will be that fixed by orders of the Petroleum and Natural Gas Conservation Board as being found to be surplus to the needs of the province.

British Columbia has placed no restrictions upon the exportation

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of natural gas produced in the province; and the exportation of its gas produced in the Peace River Area to Washington, Oregon and Idaho has been approved by the Legislature. There is no legal impediment to the exportation of this gas from this province into the United States except for the gas export laws of the Dominion of Canada.

Under Dominion laws, Westcoast Ltd. has obtained from the Board of Trade and Commerce of Canada authorization to construct and operate a pipeline from within Alberta in the Peace River Area into British Columbia and then to the International Border for export. The Dominion Government has likewise issued under its applicable laws a license to export natural gas for a term of 22 years to Westcoast Ltd., and the volumes authorized for export are 65 billion cubic feet in the first year and increasing each year to 100 billion cubic feet in the fifth year; and not less than 100 billion cubic feet for the remaining 17 years, with the right to Westcoast Ltd. to apply to the Board for increased volumes.

Westcoast Inc. submitted a five-year forecast of earnings which discloses a deficit in net income for the first and second years of $324,900 and $144,400, respectively; thereafter the net income in the third year is $199,600, in the fourth year $350,100 and in the fifth year $357,700. For the five-year period the net income is only $438,100.[6]

The rate of return shown by Westcoast Inc. for five years is 2.72% first year, 3.85% second year, 5.58% third year, 6.42% fourth year and 6.55% fifth year. Westcoast did not submit an allocation of costs between jurisdictional and non-jurisdictional sales except for the fifth year which discloses a deficiency in cost of service including return for jurisdictional sales of $725,603.[7]

The feasibility of the Westcoast project depends upon securing substantial volumes of direct industrial sales and the rates named for this class of customers is a reflection of competitive fuel prices. Of the total estimated volumes such sales represent 43.6% first year, 35.5% second year, 31.3% third year, 28.6% fourth year and 26.5% in the fifth year.[8] The evidence does not show that the facilities of the entire Westcoast project both in the United States and Canada can be constructed within the cost estimates and that the operating expenses will be as low as estimated. Any increase in cost of service

[6] For a like period the net income of Pacific on a sales volume of 2.41 times that of Westcoast Inc. is $31,729,000.

[7] On the same basis of cost allocation used by Westcoast Inc. the Contract Demand rate schedule would have to be changed by increasing the Demand Charge of $38.40 per year and Commodity Charge of 19.6 cents to $54.62 per year and 21.47 cents, respectively for the first year, to cover the cost of service.

[8] Pacific's sales to this class which is shown for three years represent 16.3% first year, 15.6% second year, and 18.3% third year.

or a decline in competitive fuel costs would result in the Westcoast project being uneconomic.

The Pacific Northwest is the one remaining large area of this country with a great need for natural gas but which is still without this highly desirable fuel and raw material. It is a section where great industrial expansion has occurred and is still in progress, and one which has played and continues to occupy a very important role in the National defense. The record amply demonstrates that it has a real desire and need for natural gas.

The Natural Gas Act imposes upon this Commission the duty to protect the American public in all possible respects through the regulation and control of the transmission and wholesale sale of natural gas. It is most essential that the domestic consumers and much of the industry in any area into which natural gas is introduced be reasonably assured of a firm supply, so far as is possible through such regulation and control. We would fail in our duty if we did not jealously retain and exercise our full legal powers to this end. Therefore, in granting any application under Section 3 of the Act for the importation of natural gas, the Commission must not fail to give the fullest possible protection to all the prospective consumers.

Such protection would not be afforded to any segment of the American people if its sole source of essential natural gas were through importation from a foreign country without some intergovernmental agreement assuring the continued adequacy of its supply. Otherwise, all control over the production, allocation, and transportation to our border of such natural gas would be in the hands of agencies of foreign governments, whose primary interest would of necessity always be in the needs and advantages of their own people, and whose judgments and actions would be essentially dependent upon public opinion within that country, rather than upon the interests of American consumers. Regardless of any long and cherished friendly relations with any neighbor nation able to supply such area with natural gas, it would not be in the public interest to permit the importation of its gas as the sole source for the consumers in need of an uninterruptible supply at a reasonable price, which should always be assured by this Commission to the full extent of its powers.

In this Pacific Northwestern section of our country there are potential industrial consumers of natural gas whose needs will be great and who may well be supplied with imported gas on a supplementary or interruptible basis. In any area which is receiving from an American source a supply of gas sufficient for its firm needs, it is conceivable that there might be imported to it from a neighbor country upon satisfactory terms and conditions a supplementary supply of gas for its interruptible needs. We do not consider it to be in the public interest, however, to authorize a most important new project to serve a major area—involving a large and important segment of the American economy—which from the outset will be completely tied to and wholly dependent upon an exclusive source of supply entirely beyond the control of agencies of the United States.

From a consideration of all the evidence, including the offers of proof on behalf of Westcoast Inc. and its associated companies, the necessary finding cannot be made for the issuance of a certificate of public convenience and necessity pursuant to Section 7 of the Natural Gas Act or for authorization pursuant to Section 3 of this Act, or pursuant to Executive Order No. 10485.

Even though the proposal of Westcoast Inc. were feasible, it is not in the public interest to deprive so large a segment of the people in the United States from the advantages of natural gas or deprive the present service area of Colorado Interstate from additional volumes of natural gas if the Pacific application were not granted. Nor can we close our eyes to the industrial potential of all the areas proposed to be served by Pacific and Colorado Interstate. They must have natural gas and such gas available to them through Pacific and Colorado Interstate without the possibility of restriction by foreign authority fostering the needs and advantages first of its own people. This need for the development of our potential of natural gas resources is now as urgent as any time in our history and Pacific's proposed line is another step in this direction as pointed out by the State of New Mexico in its plea that Pacific's proposal would permit the orderly development of the gas resources in an area retarded by the lack of market outlet.

TRANS-NORTHWEST GAS, INC.

Trans-Northwest, a Washington corporation, proposes to construct 169 miles of 18-inch main transmission pipeline from the Canadian Border near Osoyoos, British Columbia, to Spokane, Washington, with some 352 miles of branch lines to various communities in Eastern Washington and Idaho and to the Canadian Border for export to Trail, British Columbia, and vicinity. Like the applicant, Westcoast Inc., its entire supply of natural gas is contracted to be furnished to it at the border by Westcoast Ltd.

Further consideration need not be given to the proposal of Trans-Northwest because its supply of gas is dependent upon the construction of facilities by Westcoast Ltd. which will not be constructed independent of certification of the Westcoast Inc. proposal.[9]

INTERVENERS

Certain interveners opposed the granting of a certificate to Pacific to take gas from the San Juan Basin on the grounds that this gas should be reserved for them if and when it should be desired. This position was opposed by the State of New Mexico, on the grounds that it would not permit the development of the potential gas reserves of this area. From a consideration of the contentions, including the offer of proof made by Westcoast Inc., we find no merit to these interveners' contentions.

Interveners representing coal, labor and railroad interests oppose the granting of a certificate to any applicant therefor in these consolidated proceedings upon the grounds that the natural gas to be made available to consumers in the area here involved will cause a displacement of coal as a fuel to the detriment of the producers and transporters thereof, and that all such applicants have failed to establish by evidence in this record that they are able to perform the services proposed by them and to show that their proposed facilities are required by the public convenience and necessity. The evidence definitely shows a need for natural gas by the consuming public in said area, which should be met without further delay. There is, indeed, nothing in the record to indicate that it would be in the public interest to deny to these consumers the use of natural gas as proposed.

For the reasons set forth herein and upon consideration of the entire record in these matters, the Commission further *finds*:

(1) Pacific Northwest Pipeline Corporation (Pacific), a Delaware corporation having its principal place of business at Houston, Texas, upon commencement of operation of the facilities authorized herein, will be engaged in the transportation and sale of natural gas in interstate commerce and will be a "natural-gas company" within the meaning of the Natural Gas Act.

(2) The proposed facilities of Pacific will be used in the transportation of natural gas in interstate commerce and in the sale in interstate commerce of natural gas for resale for ultimate public consumption, and the construction and operation thereof are subject to the requirements of subsections (c) and (e) of Section 7 of the Natural Gas Act.

(3) Colorado Interstate Gas Company (Colorado Interstate), a Delaware corporation having its principal place of business at Colo-

[9] It is noted, among other things, that the Trans-Northwest project is admittedly not feasible without the market for gas of the Hanford Plant of the Atomic Energy Commission. Under the rate proposed by Trans-Northwest this market cannot be secured.

rado Springs, Colorado, is a "natural-gas company" within the meaning of the Natural Gas Act, as heretofore found by the Commission in its order issued June 9, 1945, in Docket No. G–294 (4 F. P. C. 936).

(4) The proposed facilities of Colorado Interstate will be used in the transportation of natural gas in interstate commerce and in the sale in interstate commerce of natural gas for resale for ultimate public consumption, as integral parts of its existing pipeline system, and the construction and operation thereof are subject to the requirements of subsections (c) and (e) of Section 7 of the Natural Gas Act.

(5) Pacific and Colorado Interstate are able and willing properly to do the acts and to perform the services proposed and to conform to the provisions of the Natural Gas Act, as amended, and the requirements, rules and regulations of the Commission thereunder.

(6) The construction and operation of the facilities as proposed by Pacific and Colorado Interstate are required by the public convenience and necessity and certificates therefor should be issued as hereinafter ordered and conditioned.

(7) The certificate of public convenience and necessity issued to Pacific should be conditioned upon the submission of a plan of financing satisfactory to the Commission.

(8) Northwest Natural Gas Company (Northwest Natural), Glacier Gas Company (Glacier) and Northern Natural Gas Company (Northern Natural) have been given full opportunity to be heard on their respective applications herein, including opportunity to introduce evidence, file briefs and participate in oral argument, but each and all of these three applicants have failed to show the availability of natural gas in any quantities for the service proposed to be rendered by the facilities sought to be constructed by them.

(9) Northwest Natural, Glacier and Northern Natural are not able properly to do the acts and to perform the services proposed and to conform to the provisions of the Natural Gas Act, as amended, and the requirements, rules and regulations of the Commission thereunder.

(10) The application filed by Pacific and the application of Westcoast Inc. are mutually exclusive since both proposals include the sale and delivery of natural gas to substantially the same communities in Western Washington and at Portland, Oregon, and the granting of either application renders the other application infeasible.

(11) The application filed by Pacific and the application filed by Trans-Northwest are mutually exclusive since both proposals include the sale and delivery of natural gas to several of the same

communities in Eastern Washington and the granting of either application renders the other application infeasible.

(12) The construction and operation of the facilities proposed by Westcoast Inc. and by Trans-Northwest are not required by the public convenience and necessity and their applications should be denied.

(13) The proposed importation of natural gas by Westcoast Inc. and by Trans-Northwest will not be consistent with the public interest and their respective applications, including applications for facilities at the international border, should be denied.

(14) The intermediate decision procedure having been ordered omitted, the Commission should forthwith render the final decision in these proceedings, as provided by Section 1.30(d)(4) of the Commission's Rules of Practice and Procedure (18 CFR 1.30(d)(4)).

The Commission *orders*:

(A) A certificate of public convenience and necessity be and the same hereby is issued authorizing Pacific Northwest Pipeline Corporation to construct and operate the facilities hereinbefore described, all as more fully described in the application in these proceedings, for the transportation and sale for resale of natural gas in interstate commerce as therein set forth, upon the terms and conditions of this order.

(B) A certificate of public convenience and necessity be and the same hereby is issued authorizing Colorado Interstate Gas Company to construct and operate the facilities hereinbefore described, all as more fully described in the application in these proceedings, for the transportation and sale for resale of natural gas in interstate commerce as therein set forth, upon the terms and conditions of this order.

(C) Pacific shall submit a plan of financing satisfactory to the Commission.

(D) These certificates issued in paragraphs (A) and (B) hereof shall be accepted in writing by responsible officials of Pacific and Colorado Interstate, respectively, and the general terms and conditions set forth in paragraphs (1), (3) and (5) of Section 157.20 of the Commission's Rules and Regulations shall attach to the issuance of such certificates, and to the exercise of the rights granted thereunder.

(E) Construction of the facilities herein authorized shall commence on or before January 1, 1955 and shall be completed and operations commenced on or before January 1, 1957.

(F) The aforesaid applications of Northwest Natural Gas Company, Glacier Gas Company, and Northern Natural Gas Company be and the same are hereby dismissed without prejudice and the other aforesaid motions with respect thereto are denied.

(G) The aforesaid applications of Westcoast Transmission Company, Inc. and Trans-Northwest Gas Inc., be and the same are hereby denied.

Chairman Kuykendall dissenting in part.

KUYKENDALL, Chairman, dissenting in part:

I agree with my colleagues that the application of Northwest, Glacier and Northern should be dismissed and that Trans-Northwest's project is not economically feasible and its application must be denied.

This leaves Westcoast's application standing alone as opposed to Pacific's, and I concur with my associates that in this posture the national interest is better served by the granting of a certificate to Pacific. However, the record before us, including maps of the various projects which have been proposed, indicates to me—although I do not pre-judge the question—that the entire Pacific Northwest area could be better and more cheaply served by natural gas transported from Southern Alberta.

The information we have also indicates—although again I do not pre-judge the fact—that the Peace River gas fields of Northern Alberta and British Columbia might be connected with those of Southern Alberta more cheaply than a parallel line could be constructed from the Peace River area southerly along the coast of British Columbia, as proposed by Westcoast.

In view of this situation, I am reluctant to take final action at this time which would preclude the possibility of what probably is the soundest project which could be devised to provide natural gas to the Pacific Northwest area.

Because of the necessity of preventing further protracted delay in providing natural gas to this region, I would not now refuse a certificate to all parties in the vague hope that a better project may materialize.

However, I would not grant a certificate to Pacific at this time, but would enter an order granting such certificate within a stated time from this date, unless within such period the Canadian and appropriate Provincial Governments authorized the export of an adequate supply of gas from Southern Alberta to this country by a company of their own choice, and within such time, there was filed with this Commission, an application in proper form, for a certificate to construct the facilities necessary to deliver such gas from the Southern Alberta border to the Pacific Northwest.

If the above conditions should be met within the time allowed, I would receive evidence in support of the application immediately, and then pass on the same. This could, I believe, be done expeditiously under our present rules of practice and procedure. If no such application were filed, or if we determined that such a project was not desirable, we could then issue a certificate to Pacific.

I recognize that Canadian gas would not provide service to certain areas which Pacific will serve. However, I am confident that those areas would soon be provided with natural gas from fields relatively close to them.

I do not share all the apprehension of my fellow members of the Commission concerning the use of Canadian gas as a major source of supply for a region of this country, and believe we could successfully regulate those rates which would be under our jurisdiction.