

REPORT OF THE COMMITTEE ON NATURAL GAS IMPORTS AND EXPORTS

Under Section 3 of the Natural Gas Act, 15 U.S.C. § 717(b), natural gas may be exported from or imported into the United States upon a finding that the import or export is in the public interest. Pursuant to the Department of Energy Organization Act, 42 U.S.C. § 7151(a), Section 3 authority is vested in the Secretary of Energy. With a few exceptions, the Secretary has in turn delegated that authority to both the Economic Regulatory Administration (ERA) and the Federal Energy Regulatory Commission (FERC).¹

The ERA decides whether a proposed import or export is consistent with the public interest, a decision which is based upon such factors as price, security of supply, national and regional needs for gas and balance of payments. By contrast, the FERC exercises all Section 3 authority over proposed imports or exports that has not been delegated to the ERA or that the ERA has chosen not to exercise. Similarly, the FERC has authority pursuant to Sections 4, 5 and 7 of the Natural Gas Act to consider the site, construction and operation of particular facilities as well as the authority to review resale and transportation prices whenever the import is to be transported or resold in interstate commerce.

I. CANADIAN IMPORTS

A. Alaska Natural Gas Transportation System—Northwest Alaskan Pipeline Company, et. al., Docket Nos. CP78-123, et al.

(1) *Construction approvals*—In July of 1980, the National Energy Board of Canada approved the export of 4.5 Tcf of natural gas by Pan Alberta Gas, Ltd. through the southern Canadian segment of the Alaska Highway Natural Gas Pipeline, to be built in advance of northerly Canadian and Alaskan segments of the pipeline. The Canadian approval comes in the wake of FERC authorizations to construct and operate portions of the eastern and western legs of the ANGTS. In June, 1980, the FERC amended its prior order authorizing construction of the western leg. It now provides for construction of 350 miles of pipeline looping south of Kingsgate, British Columbia where deliveries of 300,000 Mcf/d will be made into the western leg for transport of Canadian volumes to southern California consumers.² Earlier in April, 1980, the FERC had approved construction of eastern leg facilities by Northern Border Pipeline Company.³ The eastern-leg facilities consist of 809 miles of 42-inch pipe extending from Monchy, Saskatchewan to a point of interconnection with the pipeline network of Northern Natural Gas Company near Ventura, Iowa.

¹The Secretary originally delegated all of his Section 3 authority to the ERA. DOE Delegation Order No. 0204-4, ¶ 6, 42 Fed. Reg. 60,726 (1977). In a later delegation, the Secretary divided Section 3 authority between the ERA and the FERC. DOE Delegation Orders Nos. 0204-05 and 0204-06, 43 Fed. Reg. 47,769 (1978) as amended by DOE Order Nos. 0204-54 and 0204-55, 14 Fed. Reg. 56,735 (1979).

All authority to decide Section 3 issues concerning the Alaska Natural Gas Transportation System were delegated to the FERC. DOE Delegation Order No. 0204-8, 45 Fed. Reg. 61,491 (1977).

²Supplemental Order Issuing Certificates of Public Convenience and Necessity, and Authorizing the Importation of Natural Gas, and Order on Rehearing, FERC Docket Nos. CP79-56, et al. (June 13, 1980).

³Findings and Order Issuing Certificates of Public Convenience and Necessity and Authorizing the Importation of Natural Gas. FERC Docket Nos. CP78-123 et al. (April 28, 1980).

Concurrent with these construction authorizations, both governments made significant decisions regarding the volumes to be carried and the prices to be charged for "prebuild" imports. On April 4, 1980, the FERC granted Northwest Alaskan Pipeline Company's application to import 800,000 Mcf/d from Pan Alberta Gas Ltd., to be transported through the eastern-leg facilities of Northern Border.⁴ The import approval prescribed rolled-in price treatment at a border price of \$4.47/MMBtu. The FERC, however, conditioned its approval on a modification in Northwest Alaskan's take-and-pay agreement.

(2) *ANGTS pricing provisions*—The condition imposed by the FERC placed a limitation on the operation of take-and-pay obligations in Northwest Alaskan's contracts with Pan-Alberta. Under the Canadian government's mechanism for setting the border price for export sales to the U.S., the border price is related to the price of imported crude oil. The Commission found that the border price could occasionally rise above the price of alternate fuels, because of its relationship to crude oil prices. In those circumstances, the Commission wanted importers to be able to reduce their takes of high-priced gas and cover with less expensive alternate fuels. Conversely, the Commission recognized that a certain level of revenues must be ensured to finance transportation and production facilities. The Commission attempted to balance these competing interests by placing a ceiling on the value of the gas that the importer could be required to purchase under the minimum take-and-pay provisions. The ceiling was determined by multiplying the minimum amounts of gas specified in the gas purchase contracts times the border price in effect—\$3.45/MMBtu—at the time of the conclusion of the Commission's proceedings concerning ANGTS the pre-build.

The Commission found that these ceilings would provide adequate revenues to finance production and transportation facilities in Canada, while allowing U.S. purchasers to take advantage of changes in market conditions. Absent such flexibility, an artificial market would be maintained for relatively high cost gas suppliers. A similar condition was attached by Commission order of June 13, 1980 to Northwest Alaskan's certificate authorizing the importation of up to 240,000 Mcf/d for transportation through the western-leg pre-build facilities, which certificate had been issued on January 11, 1980, in Docket No. CP78-123, *et al.*

B. ANGTS Pre-build Related Imports

In October, 1979 Northern Natural Gas Company filed with the ERA to purchase 200,000 Mcf/d and up to 73 Bcf annually from Consolidated Natural Gas, Ltd. for importation in the United States using existing border facilities at Emerson, Manitoba from November of 1980 through November of 1981.⁵ After 1981, Northern proposes to import the same volumes through November, 1987, but using in part ANGTS eastern-leg facilities that will be available then at Monchy. The FERC approved importation of 100,000 Mcf/d at Monchy beginning November, 1981.⁶ Independent FERC approval was required for the future deliveries at Monchy because the ERA has no jurisdiction over the ANGTS facilities of Northern Border. The ERA has not yet acted on Northern's application with respect to deliveries at Emerson.

⁴*Id.*

⁵ERA Docket No. 79-24-NG (filed Oct. 11, 1979).

⁶Order Authorizing the Importation of Natural Gas, FERC Docket No. CP80-22 (June 27, 1980).

The Canadian National Energy Board (NEB) similarly acted on several significant export applications and pricing issues involving the ANGTS. In April, 1980, the NEB approved applications by Pan Alberta Gas Ltd. to export 163.5 Bcf into the ANGTS western leg at Kingsgate over a seven-year period beginning in November of 1980, and 279.4 Bcf into the eastern leg at Monchy over a three-year period commencing in November of 1984.

In connection with a new export application from Pan Alberta, however, the NEB reconsidered export approvals granted in 1979 to ten companies for 1.8 Tcf of natural gas exports designated for transmission in the eastern and western legs of the ANGTS from 1980 through 1987. The NEB found that there would be a deficiency in current deliverability if the full volumes were approved for delivery in 1986 and 1987. Accordingly, the NEB did not approve the full volumes sought by Pan Alberta for export in those later years.⁷

C. Other Imports from Canada

Following ERA import approval issued early in July, 1980,⁸ the FERC granted a joint application by Transcontinental Gas Pipe Line Corporation and Tennessee Gas Pipeline Company to import up to 75,000 Mcf/d from Sulpetro Ltd. at the international boundary near Niagara Falls, New York for the limited period ending November, 1980, at the then-current border price of \$4.47/MMBtu.

The ERA has also approved an application filed by Transcontinental Gas Pipe Line Corporation for authority to import up to 10 Bcf of Canadian synthetic natural gas (SNG) annually through displacement from Union Gas Company Ltd. at the prevailing \$4.47/MMBtu Canadian border price.⁹ The gas will come from a processing plant operated by Petrosar Ltd. near Sarnia, Ontario, from which Union has contracted the purchase of SNG volumes. In December, 1980, the FERC also approved the Transcontinental import to the extent that it falls within FERC jurisdiction.¹⁰

D. Pending Applications

Arctic Pilot Project, Inc. applied to the NEB on October 22, 1980 for a license to export approximately 3 Tcf from 1983 through 2005 to U.S. customers¹¹ at various delivery points along the international border. As presently projected, volumes will increase from about 14 BCF in 1983 to a peak of 170 Bcf during the years 1986 to 1997, decreasing thereafter to about 71 Bcf in 2005.

The Arctic Pilot Project contemplates gathering natural gas from wells drilled in Drake Point Field on Melville Island in the eastern Canadian Arctic. After pipeline transmission to Bridgeport Inlet at the south end of the Island, the

⁷See Committee Report on Natural Gas Imports and Exports, 1 *Energy L.J.* 165, 166 (1980).

⁸Order Conditionally Approving Joint Application of Transcontinental Gas Pipeline Company and Tennessee Gas Pipeline Company to Import Certain Volumes of Canadian Natural Gas, ERA Opinion No. 17, ERA Docket No. 79-08-NG (July 7, 1980).

⁹Opinion and Order Approving Application to Import Natural Gas from Canada by Displacement, ERA Opinion No. 24, ERA Docket No. 80-14-NG (Oct. 31, 1980).

¹⁰Findings and Order Alter Statutory Hearing Issuing Certificate of Public Convenience and Necessity, Authorizing Importation of Natural Gas and Granting and Denying Petitions to Intervene, FERC Docket Nos. CP80-372 and CP80-521 (Dec. 15, 1980).

¹¹In June, 1980, four U.S. pipeline companies—Tennessee Gas Pipeline Co., Texas Eastern Transmission Corp., Northern Natural Gas Co. and Columbia Transmission Corp. announced an agreement in principle to purchase from Arctic Pilot Project 450,000 Mcf/d for importation into the United States.

natural gas would be processed and liquified for transmission in ocean-going, ice-breaking LNG carriers. The Pilot Project is the result of extensive gas exploration in the eastern island of the Canadian Arctic since 1961. The rigors of the project are analogous to U.S. development of oil and gas fields on the Arctic ocean at Prudhoe Bay, Alaska, but the Pilot Project poses even greater obstacles due to the absence of an overland passage to southern markets. In recent years, the Project has been stifled by a cash flow inadequate to support development of the multibillion dollar undertaking; the current filings are seen as efforts to attract investment from potential customer pipelines.

Still pending before the FERC is the June, 1980 application of five U.S. pipeline companies to import 300,000 Mcf/d from Progas Ltd., to be transported in part in the ANGTS eastern leg.¹² The Canadian government approved the Progas export application in late 1979. The FERC has delayed action on the import application, *inter alia*, to allow the Progas sponsors to change the delivery point from Emerson, Manitoba to Monchy where transportation could be made by Northern Border in the eastern leg of the ANGTS.

In December, 1980, Transcontinental Gas Pipe Line Corporation and Algonquin Gas Transmission Company filed a joint application with the ERA for authority to import up to 306,000 Mcf/d from Pan-Alberta Gas Ltd. for a 20-year period. The gas will be transported through the New England State Pipeline Company, a new pipeline system to be jointly owned by offshoots of Transco and Algonquin. This system will extend from the Canadian-U.S. border south to a point of interconnection with Algonquin's system in Rhode Island.

In December, 1980 Boundary Gas, Inc. filed applications with both the ERA and FERC seeking authorization to import up to 185,000 Mcf/d for 10 years from Trans-Canada Pipelines, Ltd. at a point near Niagara, Ontario. Boundary proposes to resell the gas to fourteen municipal distribution companies.

II. CANADIAN AND MEXICAN BORDER PRICE DEVELOPMENTS

A. Canadian Export Pricing

Canadian import prices have increased steadily over the past five years, with a dramatic price increase of over 100 percent from \$2.16 to \$4.47/MMBtu occurring during the last year, and a prospective increase to \$4.94/MMBtu effective April 1, 1981. In February, 1980, the ERA concluded in Opinion No. 14 that the \$4.47/MMBtu import price was "not reasonable" with respect to three import applications; ERA nevertheless granted seven applications to continue preexisting service at the increased price pending further review of whether that price was competitive with alternative fuel prices in the lower 48 states.¹³

Thereafter, the United States objected to the large price increase and entered into negotiations with the Canadian government, which culminated in the issuance of a Statement of Principles to govern price determinations in the future. Under the Statement of Principles Canada agreed to a monthly recalculation of its export price based on the following identifiable factors: (1) the f.o.b. price of

¹²FERC Docket No. CP79-332 *et al.* (filed June 3, 1980).

¹³Order Authorizing on an Interim Basis the Transportation of Canadian Natural Gas at the Newly-Established Border Price and Denying Applications to Import New Volumes of Canadian Natural Gas. DOE/ERA Opinion and Order No. 14, ERA Docket Nos. 80-01-NG *et al.* (Feb. 16, 1980).

Canadian oil imports in dollars per MMBtu; less (2) transportation adjustment factors; plus (3) the weighted average transportation cost to the U.S. border. No change will be effected unless a differential of more than 15 cents over the existing border price is realized under this calculation.

The ERA solicited comments on the provisions of the agreement; this review process resulted in the issuance of ERA Opinion No. 14-B on May 15, 1980, permitting nine pipelines to continue indefinitely current Canadian imports at the increased border price of \$4.47/MMBtu. This approval was premised on the ERA's analysis of composite fuel prices based on fuel oil prices in ten major U.S. gas markets for the one-month period of April 8, 1980 to May 8, 1980. The composite is weighted 25 percent toward distillate fuel oil and 75 percent toward residual fuel oil. A comparison price of \$4.37/MMBtu emerged from this analysis. Although the composite fuel price is slightly lower than the current Canadian and Mexican border price, the ERA viewed the results of the analysis as proof that \$4.47/MMBtu fell within the competitive range of prices paid for alternate fuels in the United States at this time. The ERA has not yet made inquiries into the most-recently announced border price increase to \$4.94/MMBtu effective April 1, 1981.

Concurrent with inquiries into the Canadian border price, the ERA decided that further proceedings were necessary to determine whether import approvals at the new Canadian border price should be conditioned in a manner that would compel import users to consider imported natural gas as a marginal source of supply, thereby discouraging "over-dependence" on imported natural gas. In July the ERA issued an order¹⁴ requesting comments on whether ERA should limit the take-or-pay obligation of applicant importers to a fixed dollar amount. Three other issues were also set for comment: (1) whether Canadian imports are secure, economic and reliable; (2) whether each applicant should be required to formulate contingency plans for lessening dependence on Canadian imports; and (3) whether ERA should require other means to reduce reliance on Canadian imports, including direct contracting between end users and importers.

All subsequent approvals of Canadian import applications have been made subject to ERA proceedings on these four issues. Initial and rebuttal comments have been filed by all recent recipients of import authorizations and customer companies in this country. On December 16, 1980, however, the ERA proceedings regarding Canadian imports were suspended pending the outcome of bilateral negotiations between the Department of Energy and the Canadian government¹⁵ concerning Canadian exports and border prices.

2. Mexican Export Pricing

Mexican natural gas exports to the United States began flowing in early 1980 when the ERA granted an application filed by Border Gas Company, a consortium of seven U.S. pipeline companies¹⁶ to import 300,000 Mcf per day from

¹⁴Prehearing Order, ERA Docket No. 80-01-NG *et al.* (July 9, 1980).

¹⁵Order Suspending Consideration of Import Cases Pending Outcome of Intergovernmental Discussion, Docket Nos. 80-01-NG *et al.* (Dec. 16, 1980). The suspension order instructs the Administrator of the ERA to pursue bilateral negotiations under the authority vested in the Department of Energy under 42 U.S.C. § 7183(a)(4)(Supp. II 1976) and in the Administrator under DOE Delegation Order Nos. 0204-54 and 0204-55, 44 Fed. Reg. 56,735 (1979).

¹⁶Consortium members are Tennessee Gas Pipeline Co., Texas Eastern Transmission Corp., El Paso Natural Gas Co., Transcontinental Gas Pipe Line Corp., Southern Natural Gas Co., and Florida Gas Transmission Co.

PEMEX, the national Mexican oil and gas firm, at a rate of \$3.625/MMBtu. Soon thereafter, the ERA granted an increase to \$4.47/MMBtu in the price paid for Canadian imports, and PEMEX demanded an equivalent border price. ERA responded with an interim authorization for the \$4.47/MMBtu border price for Mexican natural gas. Permanent approval of Mexican imports of 300,000 Mcf/d at the \$4.47 rate was given in May, 1980, effective after March 27, 1980.¹⁷ However, the ERA reserved the opportunity to condition Mexican imports in the same manner that it proposed with regard to Canadian imports at the new \$4.47/MMBtu border price—*viz.*, to compel treatment of Mexican imports as marginal sources of supply.¹⁸ After receiving comments from Border Gas and the FERC's Office of Pipeline and Producer Regulation, the ERA issued an opinion in December, 1980 concluding that conditions should not be imposed on Mexican import authorizations because "Mexican natural gas imports are secure sources of supplemental supplies and . . . no overdependence exists at this time."¹⁹ Mexico has since announced that it will raise its border price to \$4.94/MMBtu on April 1, 1980, thereby tracking the announced increase in the Canadian border price. Mexico also announced an interim increase to \$4.82/MMBtu effective January 1, 1981.²⁰

Mexican imports are not likely to increase beyond the 300,000 Mcf/d presently authorized. On November 19, 1980, the Mexican government announced a new policy limiting natural gas exports to the United States to currently approved volumes.²¹

III. LNG IMPORTS

In March, 1980, the natural gas exporter of Algeria, Sonatrach, demanded an increase in the base price of its LNG deliveries (f.o.b. Arzew, Algeria) from \$1.94/MMBtu to \$6.11/MMBtu—thereby realizing an export price roughly equivalent to the price obtained for Algerian crude oil and precipitating a landed cost in the U.S. of nearly \$8.00/MMBtu. El Paso Algeria Corporation, the principal U.S. importer of Algerian LNG, balked at the increase, and Sonatrach terminated shipments to the U.S. on April 1, 1980.²²

One month after the cessation of major Algerian LNG shipments to the U.S., the Congressional Office of Technology Assessment (OTA) released its study on "The Future of Liquefied Natural Gas Imports", as part of a larger report entitled

¹⁷Opinion and Order Granting the Authorization Temporarily Approved in Opinion No. 16, Granting Interventions and Establishing Further Proceedings for Purposes of Final Consideration of Mexican Pricing Issues, ERA Opinion No. 16-A, ERA Docket Nos. 79-31-NG (May 15, 1980).

¹⁸Prehearing Order, ERA Docket No. 79-31-NG (Aug. 11, 1980). See also text accompanying note 13, *supra*.

¹⁹Opinion and Order Amending Previous Orders by Deleting Conditions, ERA Opinion No. 16-B, ERA Docket Nos. 79-31-NG (Dec. 23, 1980).

²⁰This increase would not be effected under the Canadian pricing formula which requires a 15 cent increase in costs before a new price level will be charged. Current agreements between the United States and Mexico call for border price equivalence between Canadian and Mexican imports, but do not bind Mexico to the specifics of the Canadian pricing formula.

²¹Mexican oil exports are limited to 1.5 million barrels per day, with not more than 50% of that total going to any one country.

²²The seventh round of negotiations between the Algerian and U.S. governments ended in late February, 1981 with no agreement on the price of Algerian LNG imports and no agreement to negotiate further. See Oil at Gas Journal, Mar. 2, 1981, at 55. These reports came on the heels of speculations that the two governments were nearing an agreement that would have allowed resumption of Algerian imports at a price determined in accordance with the formula now used to set border prices for Canadian and Mexican imports of natural gas. See, e.g., The Wall Street Journal, Jan. 1, 1981, at 1, col. 2.

Alternative Energy Futures. Foremost among OTA's findings was its conclusion that the U.S. could increase LNG imports from the currently-approved level of 0.8 Tcf per year to between 1.3 and 1.8 Tcf by the mid-1980's. Even at Montana Power Company and Entex, Inc. to show cause why their current authorizations should not be amended to provide that (1) the price they receive for their exports to Mexico or Canada equal the effective rate authorized by ERA for natural gas imported from those countries into the United States, and (2) the amount of difference between the two prices be credited to domestic customers of the exporting company.

Del Norte purchases natural gas from El Paso (a customer of Border Gas) and transports up to 4.1 Bcf of U.S. natural gas annually to two Mexican distributors serving La Ciudad de Juarez. During 1979, Del Norte is reported to have purchased from El Paso approximately 2.1 Bcf at a weighted average unit price of \$1.77/Mcf and another 2 Bcf at a weighted unit price of \$1.84/Mcf. Entex exports natural gas to La Compania de Gas de Nuevo Laredo, L.A. for resale in La Ciudad de Nuevo Laredo, Mexico. Although Entex contracts call for exports of some 3 Bcf annually, no exports were made during 1979. Montana Power is authorized to export 120,000 Mcf annually to Border Utilities Ltd. (Canada) and Canadian Western Natural Gas Company Ltd. Exemplary of ERA's concern regarding import-export price disparities are Montana's 1979 exports of 76,418 Mcf to both companies at a weighted average unit price of approximately \$2.56/Mcf for the 30.1 Bcf that Montana imported that year from Canada.

The ERA grounded its show cause orders on the basis of the policy it earlier announced in Opinion Nos. 18 and 18-D concerning El Paso exports to Mexico. There, the ERA prescribed a policy of equal pricing for gas imports from and exports to the same country.

V. SUMMARY OF RECENT IMPORT-EXPORT DATA

In June of 1980, the Energy Information Administration (EIA) released a statistical abstract of U.S. imports and exports of natural gas for the year 1979. The EIA data reveal the following:

A. Pipeline Imports

During 1979, United States imports of natural gas from Canada totaled 1,000.8 Bcf, an increase of 13.6 percent over the 881.1 Bcf imported in 1978. The average price of these imports rose 19.1 percent from \$2.19 to \$2.61/Mcf. No imports of natural gas from Mexico were reported for 1979. Border Gas Company (the sole U.S. importer of Mexican natural gas) received important authorization in December of 1979 and did not commence actual imports until early in 1980. Net pipeline imports exclusive of U.S. pipeline exports to both countries, increased 13.6 percent from 877.0 in 1978 to 996.4 Bcf in 1979.

B. LNG Imports and Exports

Algerian LNG imports of 1979 totaled 252.6 Bcf, representing approximately a 300 percent increase over 1978 Algerian LNG imports of 84.4 Bcf. The increase is attributable largely to deliveries under 25-year contracts to Columbia LNG Cor-

poration, Consolidated System LNG Company and Southern Energy Company. (Receipts of Algerian LNG by these importers at main U.S. Lng terminals—Cove Point, Maryland and Elba Island, Georgia—came to a halt on April 10, 1980 when El Paso Algeria rejected a price increase demanded by the Algerian exporter, Sonatrach). The average unit price of LNG imports increased 32.4 percent from \$1.53 in 1978 to \$2.03/Mcf in 1979.

During the same period, LNG exports from the Cook Inlet of Alaska for delivery to Tokyo Gas Co., Ltd. and Tokyo Electric Power Company, Inc. of Yokohama, Japan increased 5.9 percent from 48.4 Bcf in 1978 to 51.3 Bcf. Average unit price for these LNG imports increased seven percent from \$2.17 in 1978 to \$2.32/Mcf in 1979.

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