Report of the Committee on International Energy Transactions

The following is an overview of major international energy developments that occurred in the United States, Canada, and Mexico in 1991.

I. DEVELOPMENTS IN THE UNITED STATES

A. Rate Issues

1. Legislative Developments Relating to Rate Design

On April 24, 1991, the Senate Energy and Natural Resources Committee adopted amendments to the National Energy Security Act of 1991¹ designed to prevent Canadian natural gas producers from gaining a perceived unfair competitive advantage over domestic suppliers. The amendment was fostered by U.S. producer concerns that Canada's use of straight fixed variable rate design (SFV) effectively lowers the marginal cost of Canadian gas to the competitive disadvantage of domestic production.²

The amendment, introduced by Senators Tim Wirth (D-CO) and Pete Domenici (R-NM), proposed to transfer the Department of Energy's import/export licensing authority to the Federal Energy Regulatory Commission (FERC or Commission) and direct the FERC to consider potential anticompetitive impacts of disparate U.S./Canadian rate structures. It states:

Section 3 of the Natural Gas Act is amended by adding the following at the end of the section: "The Commission shall condition any import authorization pursuant to this section to redress anti-competitive impacts on United States' natural gas producers including, but not limited to, competitive disparities resulting from different rate designs applied to the pipeline transportation of domestic natural gas and the pipeline transportation of imported natural gas."³

The purported goal of the amendments is to "eliminate or offset [the] artificial competitive advantage [of Canadian gas]."

The Wirth-Domenici amendment was met by administration concerns that the amendment threatens the U.S.-Canada Free Trade Agreement.⁵ The subcommittee of the House Energy and Commerce Committee also adamantly opposed the amendment, viewing it as an impediment to competition. The House subcommittee responded by approving an amendment that directly counters the Wirth-Domenici amendment and would preclude the FERC from considering, in domestic pipeline rate cases, the rates of foreign entities not subject to its jurisdiction. The House Subcommittee provision would also preclude federal or state governments from imposing any new test, rate adjust-

^{1.} Introduced as S. 341 by Sen. Bennett Johnson (D-LA) and subsequently renumbered to S.1220.

^{2.} Under SFV, pipelines recover all fixed costs through the demand component of their rates. Modified Fixed Variable rate design (MFV), mandated for U.S. pipelines since 1983, requires the pipeline to recover return on equity and related taxes in the commodity component of their rates.

^{3.} National Energy Security Act of 1991, S. REP. No. 102-72, 102d Cong., 1st Sess. 524 (1991).

^{4.} Id. at 422.

^{5.} Canada-United States Free Trade Agreement, Jan. 6, 1988, 27 I.L.M. 281.

ment or standard for import projects that would treat imports differently from domestic gas.

The Senate bill, renumbered as S. 2166, was brought to the floor for consideration by the full Senate on February 4, 1992. During deliberations the Senate, on February 6, approved without opposition a motion by Senators Bill Bradley (D-NJ) and John Seymour (R-CA) to strike the anti-import provisions from the bill. Facing the reality that the opposition to the anti-import provisions was insurmountable, Senators Wirth and Domenici also joined in the motion to strike. According to Senator Wirth, the Mega-NOPR (see 2. below) provisions on rate design made the anti-import provisions unnecessary.⁶

There has been no action in the House since the House Energy Commerce Subcommittee on Energy and Power reported H. 776 to the full Committee on October 31, 1991. The Energy and Commerce Committee is expected to take up the bill now that the Senate has passed its version, S. 2166, by a 94-4 margin. (Feb. 19, 1992).

2. The FERC Adopts SFV Rate Design

Domestic producer concerns about the disparity between Canadian and U.S. rate designs also made an impact at the federal regulatory level. On July 31, 1991, the Commission released a Notice of Proposed Rulemaking on Pipeline Service Obligations (Mega-NOPR) that proposed to mandate adoption of SFV rate design by U.S. pipelines.⁷ The Mega-NOPR, however, does not directly address the "rate tilt" argument. Rather, it concludes that MFV "under most circumstances distorts the gas purchaser's decision by subjecting the wellhead or field prices of gas merchants (net backs) to differing pipeline equity ratios," hindering gas on gas competition.

3. Incremental Rates on Great Lakes Gas Transmission L.P.

On October 31, 1991, the Commission issued two orders adopting incremental rates for mainline expansions of the Great Lakes Transmission system.⁹ The principal expansions were for TransCanada Pipelines Limited, totalling approximately \$538 million in facility costs relating to the Niagara Import Point projects. The Commission's order in Docket No. RP89-186 reversed an initial decision which found that the facility costs should be rolledin to system-wide rates (Opinion No. 368). The Docket No. RP91-143 order followed a paper hearing which had been convened to specifically determine

^{6.} See 138 Cong. Rec. \$1160-66 (daily ed. Feb. 6, 1992) (statement of Sen. Wirth).

^{7.} Notice of Proposed Rulemaking, In Re Pipeline Obligations and Revisions to Regulations Governing Self-Implementing Transportation, Docket No. RM91-11-000, F.E.R.C. Stats. and Regs. ¶ 32,480 [Proposed Regs.] (July 31, 1991). The FERC proposed to use its authority under section 5 of the Natural Gas Act to hold that MFV is unjust and unreasonable and require pipelines to adopt SFV unless the parties otherwise agree. Id. at 32,559.

^{8.} Id. at 32,557.

^{9.} Great Lakes Gas Transmission L.P., 57 F.E.R.C. ¶ 61,140 (1991) (RP89-186); Great Lakes Gas Transmission L.P., 57 F.E.R.C. ¶ 61,141 (1991) (RP91-143).

whether the facility costs should be rolled-in or incrementally priced (Opinion No. 367).

TransCanada argued in the paper hearing and on rehearing of the October 31 orders that the Commission's adoption of incremental rates for its facilities violated the Transit Treaty¹⁰ and the Canada/U.S. Free Trade Agreement. The Transit Treaty applies to pipelines carrying hydrocarbons originating in one country for re-delivery to the same country. It requires that regulatory agencies treat transit pipelines in a nondiscriminatory manner with respect to "rates, tolls, tariffs and financial regulations relating to pipelines." Similarly, TransCanada argued that incremental rates would discriminate against new volumes of Canadian gas in violation of the Free Trade Agreement.

The Commission rejected both arguments. While voicing its commitment to the international agreements, it stated neither requires the Commission to "approve rates that create cross-subsidies, encourage uneconomic investment, and are unduly discriminatory to Great Lakes' existing customers." It also noted that its determination in the case was based on traditional ratemaking principles and had nothing to do with either the origin or destination of gas on the Great Lakes system.

The Commission issued orders tolling the requests for rehearing of Opinion Nos. 368 and 367 on December 12 and 27, respectively.

B. Developments Affecting Sales of Gas Into the United States

The U.S. Court of Appeals for the D.C. Circuit denied a petition by Tenngasco Exchange Corporation, an affiliate of Tennessee Gas Pipeline Co., to review a FERC order asserting jurisdiction over the sales for resale of natural gas imported from Canada.¹³ It did so, however, without ruling on the substantive question in issue, namely, whether the FERC has the jurisdiction to certificate or otherwise regulate "sales for resale in interstate commerce" if the gas being sold is produced outside the United States.

1. Background¹⁴

The Natural Gas Act (NGA) gives the FERC jurisdiction over the sale of gas for resale in interstate commerce.¹⁵ The FERC's NGA jurisdiction was eroded by the passage of section 601 of the Natural Gas Policy Act (NGPA), which generally exempted "first sales" from certificate requirements.¹⁶ Marketers of Canadian gas have argued that the "first sales" provisions of the NGPA deprive the FERC of NGA jurisdiction over sales of imported gas.

^{10.} Agreement Between the Government of the United States and the Government of Canada Concerning Transit Pipelines, Jan. 28, 1977, U.S.-Can., 28 U.S.T. 7449, T.I.A.S. No. 8720.

^{11.} Id. at 7454.

^{12.} Great Lakes Gas Transmission L.P., 57 F.E.R.C. ¶ 61,140, at 61,525.

^{13.} Tenngasco Exchange Corp. v. FERC, 952 F.2d 535 (D.C. Cir. 1992).

^{14.} For a more detailed discussion, See Report of the Committee on International Energy Transactions, 12 ENERGY L.J. 435, 445-46 (1991).

^{15. 15} U.S.C. § 717(b) (1988).

^{16. 15} U.S.C. § 3431(a)(1)(A) (1988).

The FERC had avoided directly ruling on the issue by granting restricted certificates that applied only to gas subject to Title 1 of the NGPA, which is by definition gas "produced in the United States." Salmon Resources Ltd. filed an application to amend its limited marketer's certificate to authorize the sale for resale of gas imported from Canada. Despite intervenor arguments that no Commission authorization is needed to make sales for resale of Canadian gas, the Commission granted the amendment. Tenngasco, an intervenor in the Salmon proceedings, who has also obtained a section 7(c) certificate to sell Canadian gas, 19 petitioned for review.

2. D.C. Circuit Opinion

The D.C. Circuit dismissed Tenngasco's petition for lack of standing. The court noted that Tenngasco petitioned to review only the *Salmon* order, even though Tenngasco held its own section 7(c) certificate. Tenngasco had argued that the FERC's decision in *Salmon* had forced marketers of imported gas to endure the time and expense of obtaining section 7(c) certificates and to bear the risk of the FERC asserting jurisdiction over rates and abandonment at some future date.

The court determined, however, that even if it found that sales of gas by Salmon Resources were "first sales", Tenngasco would be afforded no relief. Section 2(21)(B) of the NGPA²⁰ provides that first sale exemptions do not apply to sales by affiliates of interstate pipelines unless the gas is produced by the pipeline or its affiliate. Thus, the court reasoned, regardless of whether the first sale exemption applies to unaffiliated marketers, like Salmon Resources, Tenngasco's affiliation with an interstate pipeline would bar the NGPA exemption.²¹ Thus, because Tenngasco could not show that any injury it suffered was likely to be redressed by a favorable decision to Salmon, the petition was dismissed.²²

A legislative solution to the question may be in the offing. At the House Energy and Power Subcommittee's markup of the energy bill, H.R. 776, it voted out a provision that would give "first sale" status to imports.²³

C. California Developments

1. California Issues Capacity Brokering Rules

The California Public Utilities Commission (CPUC) issued rules, effective October 1, 1992, for brokering of interstate pipeline capacity held by Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SoCal) and San Diego Gas & Electric Company.²⁴ Designed to improve

^{17. 15} U.S.C. § 3311(b)(4)(A) (1988).

^{18.} Salmon Resources Ltd., 50 F.E.R.C. ¶ 61,101, reh'g denied, 51 F.E.R.C. ¶ 61,148 (1990).

^{19.} ANR Supply Co., 50 F.E.R.C. ¶ 61,422 (1990), reh'g denied, sub nom., Enron Gas Marketing, Inc., 57 F.E.R.C. ¶ 61,257 (1991).

^{20. 15} U.S.C. § 3301(21)(B) (1988).

^{21.} Tenngasco Exchange Corp. v. FERC, 952 F.2d 535, 537 (D.C. Circuit 1992).

^{22.} Id.

^{23.} Supra note 1.

^{24.} Order Instituting Rulemaking, Decision No. 91-11-025, 127 PUR4th 417(1991). The program is

access to firm capacity to direct purchasers of gas, the new rules may undermine PG&E's long-term obligations to purchase gas from Alberta producers. The CPUC decision also terminates the "access agreement" which was negotiated in September 1990 between utilities, their customers, and the Alberta & Southern Gas Co. (A&S) supply pool. The access agreement permitted producers supplying PG&E with access to 250 MMcf/d on Pacific Gas Transmission (PGT) for direct sales to California's end users for a four-year period.

The CPUC determined that the access agreement did not go far enough in promoting competition since it delayed full brokering of PGT capacity until 1994 and gave PG&E's electric department priority access to capacity. The CPUC was not persuaded that PG&E has contractual obligations that would preclude open access over PGT. It concluded that, while A&S has contractual obligations to Canadian producers and PGT has contractual obligations to A&S, PG&E has no legal obligations to purchase gas from either Canadian producers or A&S. PG&E therefore failed to prove the existence or terms of contractual obligations which preclude open access over PGT.

The CPUC also determined that no FERC or other government agency rules preclude open access over PGT. It found no likely conflict with FERC policies "given FERC's commitment to open access and competition." The CPUC rejected arguments that the National Energy Board (NEB) export licenses to A&S prevented arrangements with other third-party shippers. To the contrary, the CPUC noted, the testimony of the Canadian Petroleum Association's own witness suggested that most NEB approved gas exported from Canada moves under agreements which do not mirror the A&S contracts. 29

The CPUC's final rule, issued November 6, 1991, provides noncore endusers with full access to unbundled firm interstate pipeline capacity which is allocated equally between the pipeline systems. The program also: (1) reserves 1,200 MMcf/d of capacity on PG&E and 1,067 Mmcf/d on SoCal for core customers; (2) retains the existing core subscription service for noncore customers who do not wish to participate in competitive market programs; (3) establishes firm and interruptible levels of intrastate transportation service for noncore customers at rates equivalent to fully-allocated costs of

subject to implementation hearings and to the FERC granting capacity brokering certificates to the interstate pipelines serving the state. The FERC issued capacity brokering certificates last March to both El Paso Natural Gas Co. and Transwestern Pipeline Co., but subsequently vacated the certificates because of insufficient compliance filings, concerns about the extent of LDC control over pipeline capacity, and the Mega-NOPR proposal to replace existing citygate brokering programs with pipeline-administered capacity relinquishment procedures. El Paso Natural Gas Co., 54 F.E.R.C. ¶ 61,318, vacated, 56 F.E.R.C. ¶ 61,289 (1991); Transwestern Pipeline Co., 54 F.E.R.C. ¶ 61,319, vacated, 56 F.E.R.C. ¶ 61,288 (1991).

^{25.} Nearly 1 Bcf of Canadian gas is imported by PG&E under long-term contractual arrangements with Alberta & Southern Gas Co. Ltd. (A&S), its affiliated pooling agent. Under the CPUC rules, some of the capacity needed to move A&S gas is transferred away from PG&E to individual California end users.

^{26. 127} PUR4th 417, 426 (1991).

^{27.} Id. at 433.

^{28.} Id.

^{29.} Id.

service; (4) requires utility electric generators to bid competitively for firm capacity, allowing them to elect core subscription service for up to fifty percent of their average annual loads in the first two years of the program and decreasing percentages thereafter; and (5) reserves firm interstate capacity for core loads of the wholesale customers of PG&E and SoCal.

The CPUC action generated a strong reaction from Canadian officials. Alberta Energy Minister Rick D. Orman announced Alberta's intention to enact a regulation (to be in place by February) designed to prevent interruptible service from being used in a way that undermines current long-term firm supply arrangements. The draft regulation would prevent short-term sales until all of the long-term supply under contract is taken. It would further require NOVA pipeline system to monitor volumes and ensure that no interruptible gas associated with term or spot contracts flows to California until the buyer takes all contracted firm gas.

At the Canadian federal level, Energy Minister Jake Epp pledged to take the issue to the dispute settlement panel of the Canada-U.S. Free Trade Agreement. Meanwhile, the NEB, in response to a request by the Canadian Petroleum Association, agreed to review A&S's existing export licenses to decide if they are still valid in light of the CPUC's actions. The Board concluded that a review of its 1989 decision³⁰ to extend A&S's export license was warranted on the basis of new facts and changed circumstances, including the CPUC capacity brokering plan. It expressed concern that the brokering decision might have a significant negative effect on existing sales and transportation arrangements with California.

In addition, on February 4, 1992, the NEB announced interim measures "to prevent the potential erosion of long-term contracted natural gas exports to Northern California." The NEB will require companies planning to export gas under existing or new short-term export orders at the Kingsgate, British Columbia export point to obtain prior permission from the Board. The exporter will be required to file information relating to the pipeline systems to be used, the destination of the gas and the ultimate end-user. The Board also suspended the right of A&S to release or transfer any of the firm capacity it holds on ANG. The interim orders are to remain in effect until the NEB completes its review of PG&E's existing export licenses.

2. Capacity Expansions

a. Pacific Gas Transmission Co.

On August 1, 1991, the FERC conditionally authorized PGT to construct 430 miles of pipeline loop from the international border to Malin, Oregon, where PGT's system interconnects with PG&E.³² The added capacity will allow PGT to transport an additional 775,000 Mcf/day of Canadian gas

^{30.} A&S currently is authorized to export 1.1 Bcf annually to PGT for delivery to northern California through October 1994. In May 1989, A&S was granted a new license to export 4.1 Tcf to northern California for an 11-year period beginning November 1994.

^{31.} National Energy Board News Release 91/07, issued Feb. 4, 1992.

^{32.} Pacific Gas Transmission Co., 56 F.E.R.C. ¶ 61,192 (1991).

to California and an additional 148,000 Mcf/day to the Pacific Northwest. The order was conditional, however, on PGT addressing concerns that the transaction involved an illegal "tying" of interstate and intrastate capacity between PGT and PG&E.

The FERC had earlier questioned whether the service to be offered by PGT is illegally tied, in that new shippers receiving service on the PGT expansion to the Malin delivery point were required to receive service on PG&E expansion facilities from Malin to a single delivery point at Kern River in southern California.³³ Concerned that the joint PGT/PG&E service was designed to prevent competition in PG&E's northern service territory, the Commission ordered PGT to remove tariff language requiring the joint service.³⁴

In June 1991, the CPUC issued two orders addressing the issue.³⁵ It determined that PGT shippers could take delivery in northern California but would have to pay the PG&E expansion incremental postage-stamp rate based on service to Kern River and an additional intrastate transportation rate on PG&E's existing facilities.

The FERC's August 1 order found the PGT/PG&E arrangement approved by the CPUC to be discriminatory and refused to make the requisite public convenience and necessity finding until the "anticompetitive nature of the tying arrangement is eradicated." PGT was directed not to commence construction until it assured the Commission that PGT shippers are receiving nondiscriminatory access to California markets by means other than on PG&E.

PG&E responded by filing for a partial rolled-in rate for its transportation service under which there would be one tariff for volumes up to 253 MMcf/d of California-bound supplies and a postage-stamp rate for deliveries to southern California. The CPUC filed comments challenging the FERC's jurisdiction over what it views as an intrastate rate issue. The matter remains pending before the FERC.

b. Altamont Gas Transmission Co.

The FERC issued an optional expedited certificate to Altamont Gas Transmission Co. on August 1, 1991, for a 620 mile pipeline from Western Canada to California.³⁷ The pipeline will run from Wild Horse, Montana, on the Canadian border, to Opal, Wyoming, where it will interconnect with the planned Kern River Gas Transmission Co. pipeline project to California. The

^{33.} Pacific Gas Transmission Co., 54 F.E.R.C. § 61,035, at 61,156 (1991).

^{34.} *Id*.

^{35.} Decision No. 91-06-017 issued on June 5, 1991 and Decision No. 91-06-053, issued on June 19, 1991.

^{36.} Pacific Gas Transmission Co., 56 F.E.R.C. ¶ 61,192, at 61,725 (1991).

^{37.} Altamont Gas Transmission Co., 56 F.E.R.C. ¶ 61,199 (1991).

pipeline, scheduled for completion in late 1993, has a design capacity of 719 MMcf/d.

II. DEVELOPMENTS IN CANADA

A. Capacity Expansions to Serve the U.S. Northeast

1. Gananoque Extension

On March 13, 1991, the NEB denied TransCanada Pipelines' application to construct a 15.6 mile pipeline from its mainline near Joyceville, Ontario, to the international border near Wolfe Island on the St. Lawrence River.³⁸ The Gananoque extension was to transport 279 Bcf of gas for Western Gas Marketing Ltd. for export to Niagara Mohawk Power Corp. over a fifteen year period beginning November 1, 1991. The project called for Niagara Mohawk to construct twenty six miles of pipeline from Watertown, New York, (the TransYork Extension) to connect the Gananoque extension.

The NEB rejected the application in the face of intense local opposition to the project based on environmental grounds and concerns about use of the area for recreational purposes. The FERC subsequently conditionally authorized Niagara Mohawk to construct the U.S. facilities.³⁹ The FERC conditioned its approval on the outcome of the pending appeal of the NEB's rejection of the Gananoque extension.

2. Blackhorse Extension

On July 4, 1991, the NEB denied an application by TransCanada Pipelines to construct the Blackhorse Extension to connect TransCanada's Niagara Line to the proposed Empire State Pipeline at Grand Island, New York. The Blackhorse Extension is a 12.8 mile line designed to deliver up to 117,500 Mcf/d of U.S. gas and 64,300 Mcf/d of Canadian gas. The extension is essential to the Empire State project, a proposed 155 mile pipeline from Grand Island, New York, to the facilities of Rochester Gas & Electric (RG&E) in Syracuse, New York. The Empire State project was hotly contested in both federal and state forums by Tennessee Gas Pipeline, CNG Transmission Corp., and National Fuel Gas Supply Corp.

The NEB found that, with additional compression, the New York markets could be served by the existing Niagara Line more cheaply and with less environmental impact. The Board accepted Tennessee's arguments that existing border facilities have sufficient available capacity to accommodate Empire State's shippers and that it was willing and able to provide service to RG&E and other shippers.

Despite the NEB's denial of the application, the FERC issued a limited jurisdiction certificate and presidential permit to Empire, conditioned on NEB authorization of the upstream facilities.⁴¹ At the same time it dismissed com-

^{38.} TransCanada Pipelines Ltd., No. GH4-90 (April 1991).

^{39.} Niagara Mohawk Power Corp., 56 F.E.R.C. ¶ 61,055 (1991).

^{40.} TransCanada Pipelines Ltd., No. GH-1-91 (July 1991).

^{41.} Empire State Pipeline, 56 F.E.R.C. ¶ 61,050, at 61,171 (1991).

peting projects by Tennessee and CNG Transmission.

On August 2, 1991, TransCanada, ANR, St. Clair, and RG&E asked the NEB to review its decision, arguing that the FERC's dismissal of the competing projects was a changed circumstance sufficient to justify review. The NEB granted the request on August 8, 1991.⁴²

B. Regulatory Developments

1. Short Term Import/Export Procedures Amended

The NEB further eased restrictions on short-term imports and exports. On January 29, 1991, the NEB amended its short-term import/export authorization procedure to permit export or import at any border point. Its previous practice was to limit authorizations to a single point of entry or exit. In addition, the NEB eliminated the requirement that deliveries begin within 180 days of the authorization.

2. Changes to Export Licensing Criteria

On August 21, 1991, the NEB proposed a number of changes to its Market-Based procedure for assessing long-term export applications. The Market-Based procedure consists of three parts: (1) an export impact assessment that determines the export's impact on Canadian gas supply and prices; (2) a complaints procedure that gives Canadian consumers an opportunity to comment on a proposed export; and (3) "other public interest considerations."

The complaints procedure provides interested parties with the opportunity to complain against an export application on the ground that they cannot obtain additional gas supplies on terms and conditions similar to those available to an export purchaser. The NEB has proposed making the complaints procedure more effective by ensuring that interested Canadian consumers have a better opportunity for a timely examination of the export proposal. Gas export applicants will be required to file detailed summaries of the terms of the sales contracts, including pricing formulas and the estimated contract price.

The NEB proposes to make the third part of its analysis— "other public interest considerations"—more flexible. It proposes that the "other public interest considerations" consist of: (1) verification of producer support for each license application; (2) verification of contract provisions for payment of transportation charges on Canadian pipelines over the term of the export sales contract; and (3) assessment of the term of the export in light of the adequacy of gas supplies, associated sales and transportation contracts, approvals from other regulatory bodies, environmental impact, and any other relevant evidence.

^{42.} The announcement followed a meeting between NEB Chairman Roland Priddle and Vice Chairman J. G. Fredette and Empire State project sponsors. CNG Transmission appealed the NEB's decision to the Federal Court of Canada on the grounds that the meeting gave rise to a "reasonable apprehension of bias." The Federal Court was convinced, and on October 18, 1991, vacated the order. The Court also prohibited any further participation in the proceedings by the Chairman and Vice-Chairman. On January 13, 1992, the NEB once again determined that changed circumstances warranted a review of its July 1991 rulings.

III. MEXICO

A. North American Free Trade Agreement

On February 5, 1991, the United States, Mexico, and Canada announced their intention to pursue a North American Free Trade Agreement (NAFTA). Trilateral negotiations have followed, aimed at eliminating trade barriers and developing an expeditious dispute resolution mechanism.

Mexico's "basic" petrochemical industries are closed to direct investment.⁴³ Article 27 of the Mexican Constitution of 1917 prohibits direct foreign investment in the basic petroleum sectors. Petrolenos Mexicanos (PEMEX), created by the Mexican government in 1938, has a monopoly on natural gas production, owns the pipelines and all distribution facilities, and sets its own transportation tariffs. Direct investment in secondary petrochemicals is limited to forty percent,⁴⁴ while tertiary products are open to private investment.

Although the negotiations are aimed at increasing foreign equity participation in Mexico's energy infrastructure, Mexico is expected to remain protective of its basic petroleum industries. It appears unlikely that Mexico will consider an amendment to its constitution or permit the sale or private investment in PEMEX.

B. Gas Trade

1. Background

PEMEX is currently importing most of its gas from one point, in south Texas at Hidalgo on Texas Eastern Transmission. Volumes range from 100 to 300 Mmcf/d. Gas exports to Mexico are expected to continue to grow substantially in the short term. Total gas exports to Mexico for the first six months of 1991 were 22 Bcf, compared with 15.7 Bcf in all of 1990. Mexico's decline in older production, the cost to produce newer fields, poor technology, and Mexican efforts at promoting gas as a cleaner fuel are expected to foster increased demand for U.S. supplies.

Mexican exports to the U.S. have been insignificant to date. However, it is estimated that Mexico has 73 Tcf in proven reserves that can be developed in the long-term with improvements to Mexico's production and transmission infrastructure. The Energy Information Administration projects that the U.S. will resume importing Mexican gas in the year 2000 at a level of 38 Bcf annually, rising to 500 Bcf by 2010.⁴⁵

^{43.} For regulatory purposes, the Mexican petrochemical industry is divided into three categories: basic (oil and gas extraction, basic petrochemicals production, and electric power generation), secondary, and tertiary, with service and contracting operations treated separately. Dale A. Kimball, Recent Development, Secondary and Tertiary Petroleum Operations in Mexico: New Foreign Investment Opportunities, 25 Tex. INT'L L.J. 411, 428-30 (1990).

^{44.} Regulations do permit 100% equitable ownership through a twenty year renewable trust mechanism.

^{45.} The forecast is dependent on improved prices and a more open trade policy.

2. New Construction to Increase U.S. Gas Exports to Mexico

Valero Transmission L.P. was granted a presidential permit and an export facility siting certificate to build 1000 feet of pipe to connect the southern portion of its system near Penitas, Texas to a section of the PEMEX system terminating outside Reynosa in Tamaulipas, Mexico.⁴⁶ The interconnection is designed to move up to 400,000 Mcf/day at a construction cost of \$3 million. The connection will allow PEMEX to use over thirty miles of forty-two inch diameter pipeline that was originally constructed to export gas to the U.S. but to date has been used only to store gas as line pack.

Western Gas Interstate Co. was granted authorization under section 3 of the NGA and a presidential permit to operate and maintain a twelve inch 1.5 mile pipeline and two smaller lines that extend from an interconnect with El Paso Natural Gas Co. in Texas to the international border.⁴⁷ Western Gas would transport up to 60,000 MMBtu/day for Libra Marketing Co. that has blanket export authority to electric generating plants in Mexico. Western also has contracts to transport gas for CMEX Energy Inc. and Texas International Gas & Oil Co. using the same facilities.

IV. Hydroelectric Developments

On April 26, 1989, the New York Power Authority (NYPA) signed a \$13 billion contract with Hydro-Quebec to purchase 1,000-megawatts of firm, year-round energy over a twenty-one-year period beginning in 1995. Capacity will come from the Great Whale Project that calls for the development of 18,800 megawatts of hydroelectric power in Northern Quebec. It will require the diversion of five rivers and the flooding of an area in Northern Quebec about the size of Connecticut. Dam construction is scheduled to begin in 1993 and power production is targeted for 1998.

The project has been the focus of conflict over jurisdiction in assessing the environmental impact of the dam. In November 1990, the NEB granted export licenses to Hydro-Quebec allowing it to export power to NYPA and Vermont (a separate C\$ 7.6 billion contract) on the condition that the projects pass a federal environmental review. Hydro-Quebec appealed NEB's decision arguing that the Canadian federal government does not have jurisdiction over provincial matters. In January 1992, the Canadian Supreme Court directed the federal government to use federal guidelines to protect areas under its jurisdiction.

In an effort to coordinate the environmental review of the project and provide for participation of all interested sectors, a Memorandum of Understanding (MOU) was signed in January 1992. The MOU calls for the formation of a "super secretariat" to review the project with representation from the governments of Canada and Quebec and the Cree and Inuit Tribes. Therefore, to allow for proper review, Hydro-Quebec and the NYPA have agreed to November 30, 1992, as the deadline for either party to terminate the contract without penalty.

^{46.} Valero Transmission, L.P., 57 F.E.R.C. § 61,299 (1991).

^{47.} Western Gas Interstate Co., 57 F.E.R.C. ¶ 61,174 (1991).

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