NORTHERN PIPELINE AGENCY

ANNUAL REPORT 1994-1995





Northern Pipeline Agency Canada Administration du pipe-line du Nord Canada

ANNUAL REPORT 1994-1995

© Minister of Supply and Services Canada 1995 Cat. No. C88-1/1995 ISBN 0-662-62151-4

Ottawa, Ontario. November 27, 1995.

Dear Sir:

I present herewith the Annual Report of the Northern Pipeline Agency for the fiscal year ending March 31, 1995, together with the report of the Auditor General on the accounts and financial transactions of the Agency for the same period, for submission by you to Parliament as required under Sections 13 and 14 of the *Northern Pipeline Act*.

Yours sincerely,

R. Allen Kilpatrick, Commissioner, Northern Pipeline Agency.

The Honourable Roy MacLaren, P.C., M.P., Minister for International Trade, and Minister Responsible for the Northern Pipeline Agency, House of Commons, Ottawa, Ontario.

Table of Contents

D	5	~	-
	α	ч	e

Overview	1
Major Developments Involving The Alaska Highway Gas Pipeline Project	3
Eastern Leg Expansion	3
Alaskan Developments	4
The Alaskan Pipeline Consortium	4
Developing and Marketing North Slopé Alaskan Gas Reserves	5
Development of the Arctic Natural Wildlife Refuge	6
Replacement of Defective Pipe	6
Pipeline Regulation	7
Finance, Personnel and Official Languages	8
Finance and Personnel	8
Official Languages Plan	8
Appendix	9
Report of the Auditor General of Canada	9

Office of the Agency Mr. R. Allen Kilpatrick, Commissioner,

Lester B. Pearson Building, 125 Sussex Drive, Ottawa, Ontario. K1A 0G2 Tel.: 993-7466 Fax: 998-8787

ALASKA HIGHWAY NATURAL GAS PIPELINE PROJECT



Overview

Following the coming into service of a major expansion in the throughput capacity of the Western Leg of the Alaska Highway Gas Pipeline (AHGP) during the previous year, the main focus shifted during 1994-1995 to a proposal by Northern Border Pipeline Co. for significantly expanding the capacity of the Eastern Leg south of the border.

(Following a second call for the election of space on the proposed expansion that was ordered by the Federal Energy Regulatory Commission, shippers in the summer of 1995 lined up for an increase in throughput capacity to the U.S. mid-west more than triple that originally subscribed.)

The proposed expansion reflected the continuation during 1994 of the prolonged rise in U.S. demand for Canadian gas. During the calendar year, Canadian gas exports increased by some 13 per cent over 1993, growing to 70.8 billion cubic metres -2.5 trillion cubic feet.

In Alaska, there were a number of developments that had a bearing directly or indirectly on the Alaska Natural Gas Transportation System, counterpart to the Alaska Highway Gas Pipeline in Canada. The last remaining U.S. pipeline company in the consortium formed to undertake the ANGTS segment in the state withdrew from membership. As a result, the consortium was reduced to two remaining Canadian companies – Foothills Pipe Lines Ltd., sponsor of the AHGP in Canada, and TransCanada PipeLines Ltd.

During the year, it was subsequently disclosed, the three major owners of natural gas at Prudhoe Bay – Exxon, Arco and BP – examined three possible options for moving the gas to ports where it could be liquefied and shipped by tanker to Pacific Rim countries. The study, undertaken in response to strong pressures from Alaska for the movement of these shut-in reserves to market, was of relevance because these same supplies have also been considered essential by Canadian authorities and the participating companies to underpin the Alaska Natural Gas Transportation System (ANGTS), as it is known in the United States.

In response to these same political pressures from Alaska, there was also a determined move initiated in the Republican-dominated U.S. Congress to permit petroleum exploration and development in the coastal portion of the Arctic National Wildlife Refuge (ANWR) in the northeastern region of the state. The discovery of substantial new gas reserves in the Refuge could have major implications with respect to the future development of North Slope gas supplies. The move to open up the ANWR was opposed by the Clinton Administration and many environmental groups. The Canadian government has also long objected to such a move on the ground that it would have an adverse impact on the Porcupine caribou herd.

During 1994-95, further investigation was undertaken by Foothills Pipe Lines Ltd. into the cause of a rupture on the Eastern Leg near Maple Creek, Saskatchewan, in February, 1994. It revealed that the hydrogen-induced cracking responsible for the break was caused by buoyancy-restraining weights placed on the pipeline in rivers and swamps that contained sulphur. (In the fall of 1995, the National Energy Board approved a program submitted by Foothills for replacing some 900 sulphurcrete weights and by-passing or replacing approximately 6.9 km (4.3 mi) of pipe that could also be defective or become defective in the future.)

Major Developments Involving The Alaska Highway Gas Pipeline Project

Eastern Leg Expansion

One of the most significant developments during the fiscal year was the proposed expansion of the Eastern Leg of the Alaska Natural Gas Transportation System. In February, 1995, Northern Border Pipeline Co., sponsor of the Eastern Leg in the United States, applied to the Federal Energy Regulatory Commission (FERC) under the U.S. Natural Gas Act for authority to expand the throughput capacity of its existing 1 550 km (969 mi) line from the Port of Morgan on the Montana-Saskatchewan border to Harper, Iowa, and to extend the system by a further 423 km (263 mi) to a point near Griffith, Indiana.

Foothills Pipe Lines Ltd., sponsor of the Eastern Leg in Canada, anticipated the expansion proposed by Northern Border would result in an increase in demand for Canadian gas of around 6.5 million cubic metres of gas a day (230 million cubic feet of gas (MMcf/d)). The company considered that it could accommodate this increased throughput essentially by replacing an existing, but obsolete compressor unit.

The proposed increase in throughput capacity and extension of the system eastward toward the Chicago area was based on an Open Season conducted by Northern Border during late 1994, in keeping with current FERC practice. This is a process that is undertaken to determine what volume of firm throughput capacity prospective shippers are prepared to take in a proposed new pipeline, or the expansion or extension of an existing system.

In December, 1994, the nature of the Open Season conducted by Northern Border was challenged by Natural Gas Pipeline Co. of America, which contended that the proposed system of tariffs was skewed in a way that unfairly induced shippers to transport gas over all or part of the proposed extension. The objection by Natural stemmed from the fact that the proposed Northern Border extension would compete with Natural's own plan to obtain additional gas deliveries from Northern Border at Harper for onward transmission through an expansion of its existing pipeline to the Chicago area.

(In May, 1995, FERC upheld the complaint by Natural and ordered Northern Border to conduct a new Open Season that corrected this perceived shortcoming in the original solicitation. In the event, shippers signed up for an additional 19.8 million cubic metres of gas a day (700 MMcf/d) over the existing system to Harper, about triple the increase in capacity originally subscribed. The result would be to increase throughput capacity from the Canadian border and the northern plains region of the United States to Ventura, Iowa, by 42 per cent. Total capacity would rise from 48.1 million cubic metres per day (1.7 billion cubic feet – Bcf/d) to 68 million cubic metres daily (2.4 Bcf/d). Shipments through the expanded system from Ventura to Harper would increase by 27.3 million cubic metres a day (962 MMcf/d). The increased volume on this section of the system compared to that proposed to Ventura is accounted for by the projected shipment of additional gas from Ventura to Harper that is currently being transported by the Northern Natural Gas Pipeline Co. In addition, shippers also sought throughput capacity on the proposed extension from Harper to the Chicago area of some 19.4 million cubic metres a day (684 MMcf/d), an increase of more than 11.3 million cubic metres daily (400 MMcf/d) over that subscribed for in the first Open Season.

(In October, 1995, Northern Border submitted a revised application to the Federal Energy Regulatory Commission. It called for the construction of 358 km (224 mi) of 914 mm pipe (36 inches) and 30 km (19 mi) of 762 mm pipe (30 inches) from Harper, Iowa, to the Chicago area. In addition, 262 km (164 mi) of loops would be installed on the existing pipeline from the Canadian border to Harper. Almost 200,000 additional horsepower of compression would also be added to existing and new compressor stations. Estimated cost of the expansion/extension was \$797 million in 1995 dollars. It is scheduled to be in service in early 1998.

(Shortly after Northern Border filed its revised application to FERC, Natural submitted an application for authority to expand its own system from its interconnection with Northern Border at Harper to the Chicago area in competition with Northern Border's proposed extension.

(In order to deliver the substantially increased volumes of Canadian natural gas that would be required if Northern Border's plans are approved by the FERC – some 19.4 million cubic metres per day (685 MMcf/d) – Foothills anticipated that it would also be necessary to expand the throughput capacity of the Eastern Leg in Canada through a combination of looping of existing pipeline and the addition of further compression).

Alaskan Developments

The Alaskan Pipeline Consortium

In 1978, when plans were being developed for the construction of the Alaska Natural Gas Transportation System, a consortium made up of a number of major U.S. interstate and intrastate pipelines was established to undertake the most difficult and complex part of the project – construction of the proposed pipeline from Prudhoe Bay on the North Slope of Alaska to Canada's Yukon border. It was known as the Alaskan Northwest Natural Gas Transportation Co. general partnership. The Northwest Alaskan Pipeline Co. was subsequently named as operator in charge of overseeing the building and operation of the Alaskan segment of the ANGTS.

As prospects for launching second-stage construction of the ANGTS at any time within the foreseeable future began to fade in the late 1980s and early 1990s, many of the U.S. pipeline companies that originally made up the consortium began to withdraw in order to take advantage of tax benefits. In the latter years, however, membership in the consortium was expanded by the inclusion of subsidiaries of two Canadian companies – TransCanada PipeLines Ltd. and Foothills. As of the end of 1994, the only remaining U.S. member of the consortium, Northwest Energy, which played the dominant role in mobilizing the entire project south of the border and in directing the Alaskan portion of the project, bowed out of the partnership.

With the withdrawal of Northwest Alaskan, Foothills and TransCanada became the only remaining partners in Alaskan Northwest. Subsequently, Robert L. Pierce, Chairman of Foothills, became Chairman of the Board of Partners. In a submission in January, 1995, to the Federal Energy Regulatory Commission notifying it of an amendment to the Partnership Agreement, Alaskan Northwest said the remaining partners "will shepherd the Partnership, and the ANGTS, through the current relatively-inactive period. While construction of the Alaskan segment is deferred pending future market developments, it is fully expected that the ANGTS will gear up again in the future for completion of the Alaskan segment." The submission went on to take note of a FERC

document issued in mid-December, 1994, which stated that the Commission "remains ready to facilitate the construction of the ANGTS, which Congress has found to be in the public interest."

Developing and Marketing North Slope Alaskan Gas Reserves

Over a number of years, there has been mounting pressure from Alaskan state and congressional representatives for the adoption of measures aimed both at moving existing North Slope natural gas reserves to markets and facilitating exploration for additional oil and gas reserves.

When it appeared that adverse market conditions were likely indefinitely to delay completion of the ANGTS to provide market access to existing Prudhoe Bay reserves, a former Alaskan Governor, Walter Hickel, spearheaded the formation of a company known as Yukon Pacific for the purpose of marketing those reserves in Pacific Rim countries. The company proposed to establish a Trans-Alaska Gas System (TAGS), which envisioned construction of a pipeline from the North Slope to the south coast of Alaska. There the gas – 14 million tons per year – would be liquefied and then transported in a specially-built fleet of tankers to such markets as Japan, Taiwan and Korea. The Reagan and Bush Administrations took the necessary steps to clear away the major regulatory obstacles to the proposed gas export. (In mid-May, 1995, FERC removed the only remaining regulatory hurdle with the approval of the siting, construction and operation of the liquefied natural gas plant at Anderson Bay in the Port of Valdez.)

As in the case of ANGTS, the TAGS project remained suspended, however, because of adverse market conditions. Nevertheless, pressure to explore every means of moving the gas to offshore markets continued to grow over the past several years. This was particularly the case following the 1994 congressional elections that resulted in Republicans gaining control of both the Senate and House of Representatives. The expectations of Alaskans were heightened further with the appointment of Alaskan Senator Frank Murkowski as Chairman of the Senate Energy and Natural Resources Committee, and the appointment of Alaskan Representative Don Young as Chairman of the House Resources Committee.

In response to these political pressures, the three major owners of gas reserves at Prudhoe Bay – Exxon, Arco and BP – engaged in a study during the past fiscal year of possible alternative means for transporting North Slope gas to Pacific Rim markets.

(The fact that the study had been initiated, however, was only revealed at a press conference held by representatives of Arco and BP in mid-July, 1995, following a series of meetings to brief Alaska's Governor Tony Knowles and Alaska's congressional delegation.

(It was disclosed that the study considered the feasibility of extending a pipeline west from Prudhoe Bay to deliver gas to ports at either Wainwright or Kivalina on the Chukchi Sea north of the Bering Strait. The spokesmen for the petroleum companies contended that year-round operation of liquefied natural gas tankers with ice-breaking capability would appear to be possible. The advantage of a pipeline to either port was the considerably shorter distance and lower cost involved compared to a pipeline to the south coast of Alaska. They contended the lower cost would make it economically possible to plan initially for a smaller volume of gas exports, thus making it easier to gain a foothold in Pacific Rim markets.

(In addition to these alternatives, the companies also considered what cost savings might be achieved by building a pipeline south to Valdez that utilized the right-of-way and many of the facilities of the existing oil pipeline to the south coast port, which does not form part of the existing TAGS plan.

(During the press conference, officials of the companies emphasized that none of the options examined was commercially viable at the present time in light of the cost advantages enjoyed by several other natural gas producing countries competing for access to Pacific Rim markets. They estimated that it might only become possible to enter that far-eastern market at some time between 2005 and 2010, and even then much would depend on the kind of royalty, tax and regulatory regimes that were assured over the life of the project.

(In a press release following the meeting of the Alaskan congressional delegation with petroleum company representatives, Sen. Murkowski emphasized his readiness to work with the producers to help develop a project for marketing North Slope gas in the Pacific Rim countries. He also expressed his pleasure at what he described as the "tentative finding" of the study that favoured building a pipeline south to Valdez rather than west to a port on the Chukchi Sea. From his perspective, the advantage of the former was that it would make possible delivery of natural gas to Fairbanks, Alaska.

(In the press release, Sen. Murkowski claimed that, by some estimates, North Slope gas reserves amounted to 50 trillion cubic feet. At the time the ANGTS was approved, established reserves at Prudhoe Bay were estimated to amount to 26 trillion cubic feet. The estimate to which Sen. Murkowski alluded was of significance because up to that time it had never been considered that established reserves had increased by anything approaching that magnitude. ANGTS supporters have opposed the TAGS project on the grounds that they had first claim on the reserves existing at the time their own project was approved by Canada and the United States. They contended that proven reserves were insufficient to support both projects.)

Development of the Arctic Natural Wildlife Refuge

As part of their efforts to promote economic development, both Alaskan congressional and state political representatives have long pressed for legislative authority to undertake oil and gas exploration in the coastal portion of the 19-million-acre Arctic Natural Wildlife Refuge (ANWR), which abuts on the Alaska-Yukon border. In the face of strong opposition from environmental groups, and from the Canadian government because of what it considers would be the adverse impact on the Porcupine caribou herd that calves in the area, Congress previously has rejected such a move. During the fiscal year, however, with the Republicans in control of both houses of Congress and Alaskan representatives serving as chairmen of two powerful Senate and House committees concerned with the issue, there was a strong push for legislation that would permit limited petroleum exploration in the ANWR.

(While a bill that would clear the way to ANWR development worked its way through both chambers in the fall of 1995, there was widespread speculation that President Clinton might veto any authorizing legislation approved by Congress or resort to a 1906 Act to designate the area as a national monument, which could forestall the proposed development.)

Replacement of Defective Pipe

As noted in the last annual report, a section of the Eastern Leg of the Alaska Highway Gas Pipeline near Maple Creek, Saskatchewan, ruptured in February, 1994, causing an explosion and fire. Subsequent investigation by both Foothills and the Transportation Safety Board of Canada indicated the rupture was caused by a condition known as hydrogen-induced cracking (HIC). This is a rare phenomenon that in the past has only been associated with the transmission of so-called sour gas containing a high level of hydrogen sulphide. By contrast, gas flowing through the Eastern Leg is classified as sweet gas, which does not contain this chemical.

(Both Foothills and the Transportation Safety Board concluded that the problem on the Eastern Leg was caused by weights containing a high proportion of sulphur that were installed during construction in the early 1980s to counteract the buoyancy of pipe in rivers and swamps. In place of the usual concrete mix, a proportion of sulphur was added to the aggregate, known as sulphurcrete, as part of a provincial program aimed at reducing a substantial surplus existing when the Eastern Leg was being built in the early 1980s. Up until the time of the investigation of the rupture on the Eastern Leg, neither the industry nor regulatory authorities were aware of the adverse interaction between the sulphur in the weights and the steel pipe.

(In mid-September, 1995, Foothills submitted an application to the National Energy Board to remedy the problem. The program was approved by the Board the following month. In all, more than 900 weights were replaced, some 6.9 km (4.3 mi) of existing pipe by-passed by looping, and 7 km (4 mi) of pipe replaced. Foothills shut down its Eastern Leg for four days in November, 1995, to complete the work.)

Pipeline Regulation

During 1994-95, the major focus of the Northern Pipeline Agency was on overseeing completion of the installation of a new back-up compressor unit at Foothills Station 394 near Monchy, Sask., on the Eastern Leg. This unit came into service in August, 1994.

In late January, 1995, the Honourable Roy MacLaren, Minister for International Trade, was appointed by Order in Council to succeed the Honourable A. Anne McLellan, Minister of Natural Resources, as Minister responsible for the Northern Pipeline Agency. R. Allen Kilpatrick, Deputy Minister for International Trade in the Department of Foreign Affairs continued to serve also as Commissioner of the Agency. Roy Illing, a member of the National Energy Board, remained the NPA's Administrator and Designated Officer. He is based in Calgary.

During the fiscal year, as for the past several years, the NPA continued to rely on the staff of the NEB for the provision of technical and administrative support services. The Board is reimbursed for these services by the Agency, which recovers all of its costs from Foothills in keeping with the provisions of the *Northern Pipeline Act*.

In the United States, responsibility for carrying out certain regulatory functions involving the Alaska Natural Gas Transportation System was transferred under legislation adopted in late 1993 from the Office of the Federal Inspector to the Secretary of Energy, currently the Honourable Hazel O'Leary. In the Republican-controlled Congress, there was significant pressure to abolish or substantially reduce the role of the Department of Energy, possibly by transferring some of its functions to other federal departments or agencies. It remained unclear what disposition might be made of regulatory responsibilities for the ANGTS that have been delegated to the Secretary of Energy.

Finance, Personnel and Official Languages

Finance and Personnel

Section 13 of the *Northern Pipeline Act* provides for an annual audit of the accounts and financial transactions of the Agency by the Auditor General of Canada and for a report thereon to be made to the Minister. Section 14 of the Act requires the Auditor General's report to be laid before Parliament together with the Minister's annual report on the operations of the Agency. To comply with these requirements, the report of the Auditor General of Canada on the accounts and financial transactions of the Northern Pipeline Agency for the year ended March 31, 1995, is reproduced as an appendix.

Estimates for 1994-95 provided \$250,000 for the operation of the Agency. Expenditure for the year totalled \$129,000. At year end, only one full-time employee was on staff. The National Energy Board provides administrative support as well as technical information and advice, for which the Agency reimburses the Board.

Section 29 of the Northern Pipeline Act provides for recovery of the costs of the Agency from the company constructing the pipeline in accordance with regulations made under section 24.1 of the National Energy Board Act. During the year, \$303,000 were recovered from Foothills Pipe Lines Ltd., the Canadian sponsor. In addition, \$30,400 in Yukon easement fees were collected from Foothills, of which \$2,800 were remitted to the Government of the Yukon Territory. Amounts collected were credited to the Consolidated Revenue Fund.

Official Languages Plan

Although the Northern Pipeline Agency is a separate employer under Part II of the *Public Service Staff Relations Act* and is not subject to the *Public Service Employment Act*, the language policies and procedures established for other government departments and agencies have generally been applied. In addition, the Agency conforms as fully as possible with the provisions of the *Official Languages Act*.

In order to allow members of the public to comment on the linguistic aspect of services provided, enquiries may be made by telephoning (613) 993-7466 or by writing to the Office of the Northern Pipeline Agency, Lester B. Pearson Building, 125 Sussex Drive, Ottawa, Ontario, K1A 0G2.



AUDITOR GENERAL OF CANADA

VÉRIFICATEUR GÉNÉRAL DU CANADA

AUDITOR'S REPORT

To the Minister responsible for the Northern Pipeline Agency

I have audited the statement of expenditures and receipts of the Northern Pipeline Agency for the year ended March 31, 1995. This financial statement is the responsibility of the Agency's management. My responsibility is to express an opinion on this financial statement based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statement is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, this financial statement presents fairly, in all material respects, the expenditures and receipts of the Agency for the year ended March 31, 1995 in accordance with the accounting policies set out in Note 2 to the statement.

Deputy Auditor General for the Auditor General of Canada

Ottawa, Canada July 26, 1995

NORTHERN PIPELINE AGENCY

Statement of Expenditures and Receipts

for the year ended March 31, 1995

	<u>1994-95</u>	<u>1993-94</u>
Expenditures		• • •
Salaries and employee benefits Professional and special service Rentals and office accommodation Travel and communications Material, supplies and maintenance Information Repair and upkeep Office equipment	\$ 64,430 37,689 19,644 2,612 2,534 2,010	\$ 62,016 80,638 18,892 4,178 885 3,315 3,262 2,639
Total expenditures	<u>\$ 128,919</u>	<u>\$175,825</u>
Receipts		
Recovery of expenditures Net easement fee	\$302,918 27,594	\$247,844 27,594
Total Receipts	<u>\$ 330,512</u>	<u>\$275,438</u>

Approved by:

Commissioner

Senior Financial Officer

NORTHERN PIPELINE AGENCY

Notes to the Statement of Expenditures and Receipts

for the year ended March 31, 1995

1. Authority and objective

The Agency was established in 1978 by the Northern Pipeline Act. The objective of the Agency is to facilitate the efficient and expeditious planning and construction of the Alaska Highway Gas Pipeline in a manner consistent with the best interests of Canada as defined in the Act.

The Agency's expenditures are funded by parliamentary appropriations. However, in accordance with the Act and the National Energy Board Cost Recovery Regulations, the Agency is required to recover all its annual operating costs from the companies holding certificates of public convenience and necessity issued by the Agency. Currently, Foothills Pipe Lines Ltd. is the sole holder of such certificates.

Receipts are deposited to the Consolidated Revenue Fund and are not available for use by the Agency.

On May 1, 1982, the United States sponsors for the Alaska Highway Gas Pipeline and Foothills Pipe Lines Ltd. announced that the target date for completion had been set back until further notice and all parties scaled down their activities.

2. Accounting policies

Expenditures

Expenditures include the cost of work performed, goods received or services rendered prior to April 1, except for the cost of the employees' contingency and termination plans which are charged to expenditures when paid. Capital acquisitions are charged to expenditures in the year of purchase. Expenditures also include costs incurred on behalf of the Agency by government departments.

Receipts

Receipts are recorded on a cash basis.

Employee contingency plan

Senior and certain other key employees who remain with the Agency until completion of their responsibilities and whose service exceeds two years are entitled to an allowance upon separation of 13% of their gross salary earned during their period of service.

NORTHERN PIPELINE AGENCY

Notes to the Statement of Expenditures and Receipts

for the year ended March 31, 1995

3. Lease commitment

The Agency has entered into a five year occupancy lease, which expires during 1999, with Public Works and Government Services Canada, for its office space in Ottawa, Ontario.

Future lease payments are as follows:

1995-96 1996-97 1997-98 1998-99	\$ 18,699 18,699 18,699 <u>18,699</u>
	<u> </u>

4. **Related party transactions**

The expenditures include \$48,215 (1993-94: \$88,162) for the cost of services by other federal government departments and agencies. Professional and special services and office accommodation represent the main services provided by the related parties.