

National Energy Board

Reasons for Decision

Northstar Energy Corporation

GH-1-98

May 1998

Facilities

Reasons for Decision

In the Matter of

Northstar Energy Corporation

Application dated 23 May 1997

GH-1-98

May 1998

© Her Majesty the Queen in Right of Canada 1998 as represented by the National Energy Board

Cat. No. NE22-1/1998-4E ISBN 0-662-26865-2

This report is published separately in both official languages.

Copies are available on request from:

The Publications Office National Energy Board 311 Sixth Avenue S.W. Calgary, Alberta, T2P 3H2 E-Mail: orders@neb.gc.ca Fax: (403) 292-5503 Phone: (403) 292-3562 1-800-899-1265

For pick-up at the NEB office: Library Ground Floor

Printed in Canada

© Sa Majesté la Reine du Chef du Canada 1998 représentée par l'Office national de l'énergie

N° de cat. NE22-1/1998-4F ISBN 0-662-82944-1

Ce rapport est publié séparément dans les deux langues officielles.

Exemplaires disponibles sur demande auprès du:

Bureau des publications Office national de l'énergie 311, sixième avenue s.-o. Calgary (Alberta), T2P 3H2 Courrier électronique: orders@neb.gc.ca Télécopieur: (403) 292-5503 Téléphone: (403) 292-3562 1-800-899-1265

En personne, au bureau de l'Office: Bibliothèque Rez-de-chaussée

Imprimé au Canada

Table of Contents

Lis	st of Tables	. ii
Lis	st of Figures	. ii
Lis	st of Appendices	. ii
Ab	breviations	iii
Re	cital and Appearances	iv
1.	Introduction	1
2.	Board Rulings	3
3.	Environment	11
4.	Routing and Lands 4.1 Route and Site Selection 4.1.1 Route Selection 4.1.1.1 Proposed Route 4.1.2 Site Selection 4.2 Land Requirements	12 12 12 12 12 13 13
5.	Engineering 5.1 Facilities 5.2 Design and Safety Considerations 5.2.1 Karst Topography 5.2.2 Blasting	15 15 15 15 16
6.	Financial Matters, Tolls, Tariffs, and Transportation6.1 Financial Matters6.2 Tolls, Tariffs, and Transportation	17 17 17
7.	Public Interest Considerations	18
8.	Disposition	29

List of Tables

4-1	Paralleling Lengths	13
6-1	Proposed Tolls	17

List of Figures

1-1	Coleman Pipeline Project		2
-----	--------------------------	--	---

List of Appendices

Ι	GH-1-98 List of Issues	 •														•				 	•	30
II	Order XG-N150-29-98	 •	 •		 •	• •	•	 •	•		•	• •			•	•	•	 •	 •	 		31

Abbreviations

$10^{3}m^{3}/d$	thousand cubic metres per day
$10^{6} {\rm m}^{3} / {\rm d}$	million cubic metres per day
10^{9}m^{3}	billion cubic metres
Advantage	Advantage Pipeline Company Inc.
A/BC border	Alberta/British Columbia border
ADOE	Alberta Department of Energy
AEUB	Alberta Energy and Utility Board
AEP	Alberta Environmental Protection, Land and Forest Service
ANG	Alberta Natural Gas Company Ltd
Bcf	billion cubic feet
Board or NEB	National Energy Board
Canadian 88	Canadian 88 Energy Corp.
CAN/CSA	Canadian Standards Association
CEAA	Canadian Environmental Assessment Act
FAN	Federation of Alberta Naturalists
GJ	gigajoule
Gas Plant	Coleman Gas Plant
Husky	Husky Oil Operations Ltd.
km	kilometre(s)
KP	kilometre post
kPa	kiloPascal(s)
LRS	Load Retention Service
m	metre(s)
Mcf	thousand cubic feet
mm	millimetre(s)
MMcf/d	million cubic feet per day
MOU	Memorandum of Understanding
NEB Act	National Energy Board Act
NEC	Northstar Energy Corporation
NGTL	NOVA Gas Transmission Ltd.
Novagas	Novagas Clearinghouse Pipeline Ltd.
NPS	nominal pipe size (in inches)
O.D.	outer diameter
OPR	Onshore Pipeline Regulations
Pan-Alberta	Pan-Alberta Gas Ltd.
Pass	the Phillips Pass
Shell	Shell Canada Limited
the Report	the Environmental Screening Report
WAS	Western Alberta System
Westcoast	Westcoast Energy Inc.
Westminster	Westminster Resources Ltd.
Ziff	Ziff Energy Group

Recital and Appearances

IN THE MATTER OF the *National Energy Board Act* (the "NEB Act") and the Regulations made thereunder; and

IN THE MATTER OF an application dated 23 May 1997 from Northstar Energy Corporation for an order pursuant to section 58 of the NEB Act in respect of the proposed Coleman Pipeline Project.

IN THE MATTER OF the National Energy Board Directions on Procedure, Order GH-1-98.

EXAMINED by means of an oral hearing held 30 and 31 March and 1, 2, and 6 April 1998.

BEFORE:

J.A. Snider	Chair
R.J. Harrison	Member
D. Valiela	Member

APPEARANCES:

D.G. Davies H.R. Huber	Northstar Energy Corporation
R. MacDonald	Alberta Fish and Game Association
N.J. Schultz B. Troicuk	Canadian Association of Petroleum Producers
M. Posey	Federation of Alberta Naturalists
A.L. McLarty B.J. Roth	Advantage Pipeline Company Inc.
R.W. Graw	Alberta Natural Gas Pipeline Company Ltd
J.J. Ruitenschild	Amoco Canada Petroleum Company Ltd.
D.C. Edie	Canadian 88 Energy Corp.
J.H. Smellie J. Gagnon	NOVA Gas Transmission Ltd.
D.M.K. Ellerton	Pacific Gas and Electric Company

R. Hunter	PG&E Gas Transmission, Northwest Corporation
G.W. Toews	TransCanada Gas Services
C.J.C. Page	Alberta Department of Energy
H. Ganske	Irene Elaine Mielke
C. McKinnon	Board Counsel

Chapter 1

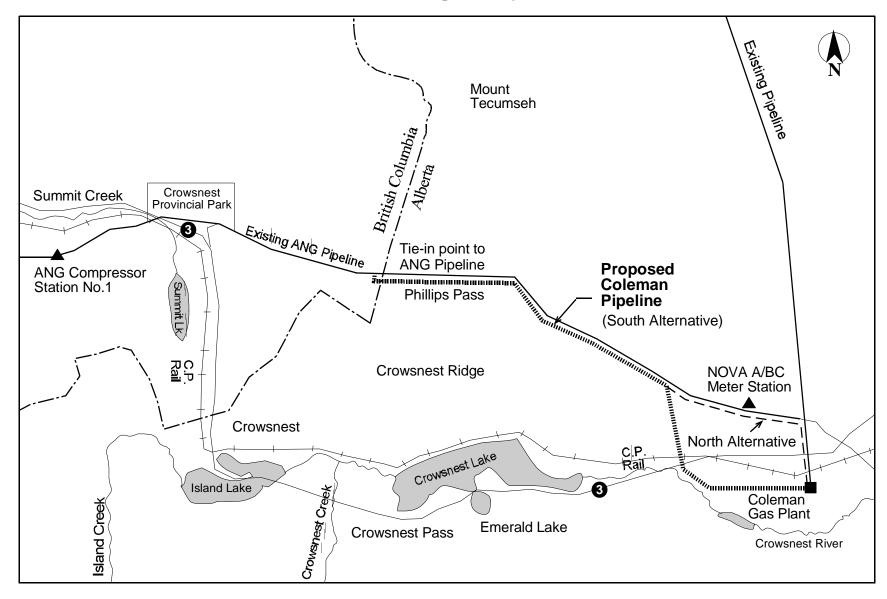
Introduction

On 23 May 1997, Northstar Energy Corporation ("NEC") applied to the National Energy Board (the "Board" or "NEB") for an order, pursuant to Part III, section 58, of the *National Energy Board Act* ("NEB Act") to construct and operate a natural gas pipeline. The 406 mm outside diameter ("O.D.") pipeline would extend approximately 7.2 km from NEC's Coleman Gas Plant, located west of Coleman in Savanna, Alberta 2-11-8-5 W5M, through the Phillips Pass ("the Pass"), and would connect to the Alberta Natural Gas Company Ltd ("ANG") main transmission pipeline approximately 10 m west of the Alberta/British Columbia border ("A/BC border"). The applied-for pipeline, referred to as the Coleman Pipeline, is illustrated in Figure 1-1. The capital cost of the project is estimated to be \$6,467,000. The initial contracted capacity of sweet natural gas would be approximately 1042 10³m³/d (37 MMcf/d).

The Board decided to consider the application in an oral hearing. Hearing Order GH-1-98, issued 8 January 1998, set out the Directions on Procedure for the oral hearing of the application. The Hearing was held in Calgary on 30 March to 2 April and 6 April 1998.

Two preliminary motions were filed prior to the commencement of the oral portion of the Hearing. The Alberta Department of Energy ("ADOE") filed a motion in respect of the Board's jurisdiction over the applied-for pipeline. Advantage Pipeline Company Inc. ("Advantage") raised a motion in which it argued that NEC should have applied under section 52 of the NEB Act rather than section 58. These motions were heard 6 April 1998, and the rulings, which are incorporated as Chapter 2 of these Reasons, were issued 24 April 1998.

Figure 1-1 Coleman Pipeline Project



Chapter 2

Board Rulings

2.1 Board Ruling on Alberta Department of Energy Motion

Prior to the commencement of the oral portion of the proceedings, the ADOE filed a preliminary motion in respect of the Board's jurisdiction over the applied-for pipeline. A notice of constitutional question was duly served on the appropriate attorneys general by the ADOE as required by the *Feder-al Court Act*.

Arguments by Parties

Alberta Department of Energy

The ADOE position was that, because the proposed pipeline would only extend 10 m across the A/BC border, the application before the Board constituted a colourable attempt to avoid provincial jurisdiction on the part of NEC. It was the ADOE's position that the true character of the pipeline is that of an intra-provincial undertaking, such that the pipeline, as applied for, is a subterfuge on the part of NEC to evade provincial jurisdiction.

In support of its motion, the ADOE relied principally on the decision of the Privy Council in A.G. Ontario v. $Winner^{1}$. In that case, the court said:

In coming to this conclusion their Lordships must not be supposed to lend any countenance to the suggestion that a carrier who is substantially an internal carrier can put himself outside provincial jurisdiction by starting his activities a few miles over the border. Such a subterfuge would not avail him... Just as the question whether there is an interconnecting undertaking is one depending on all the circumstances of the case, so the question whether it is a camouflaged local undertaking masquerading as an interconnecting one must also depend on the facts of each case and on a determination of what is the pith and substance of the act or regulation.

Ms. Page, counsel for the ADOE, argued that the inherent character of the Coleman pipeline is to carry on an intra-provincial business; it is not a federal undertaking. There is no technical or business reason for the interconnection to be in British Columbia, other than NEC's attempt to ensure that the pipeline falls under NEB jurisdiction. NEC indicated that the reason the project was designed to cross the border was to eliminate uncertainty over NEB jurisdiction and to avoid delay if jurisdiction was questioned. It is clear that the project was artificially designed to cross the border, not to carry on an interprovincial business. The true object and purpose of the project does not have an interprovincial character. The pipeline only extends 10 m across the border and is roughly 99.9 percent in Alberta and 0.1 percent in British Columbia.

¹ [1954] A.C. 541, at 582.

This miniscule extra-provincial component is overwhelming evidence of the colourability and the lack of the essential inter-connecting purpose and object which is needed for an interprovincial work or undertaking. The conclusion that NEC has made a colourable attempt to influence jurisdiction is inescapable. The law is that such a subterfuge will not avail.

As a result, the ADOE submitted that the NEB should dismiss the Coleman application for want of jurisdiction.

Advantage Pipeline Company Inc.

Advantage supported the ADOE motion. Mr. Roth, on behalf of Advantage, submitted that the issue of whether the Board has constitutional jurisdiction over the Coleman pipeline must be answered without regard to the fact that the pipeline crosses the A/BC border. There is no functional or operational purpose for extending the pipeline project beyond the border.

The only potential ground for arguing that the Coleman pipeline could be federal is that, since 100 percent of the supply to be transported on Coleman is destined for interprovincial markets, it is part of a single federal undertaking with ANG. Mr. Roth contended that, according to the Supreme Court decision in *Westcoast* v. *Canada (National Energy Board)*¹, such a finding could not be made in the absence of common management, control and direction.

Northstar Energy Corporation

Mr. Huber, on behalf of NEC, argued that the issue raised by the ADOE could be resolved very simply by asking one factual question: Does this pipeline cross the A/BC border? The answer is that it does, and it therefore follows that this is an interprovincial work. He further argued that the Coleman pipeline would be a federal pipeline whether or not it extended beyond the border, as it would be built for the sole and exclusive purpose of exporting gas from the province of Alberta and would interconnect with ANG's federally-regulated pipeline.

NEC argued that, while it may be possible to camouflage an undertaking to give it an artificial federal component, the same is not possible with a physical work such as a pipeline. The *Westcoast* decision says that the way in which an undertaking might have been structured, or the manner in which similar undertakings are carried on, is irrelevant. NEC submitted you must also take a physical work as you find it. The fact is that the Coleman pipeline will physically connect the provinces of Alberta and British Columbia and, as such, will fall squarely within both the exception contained in section 92(10)(a) of the *Constitution Act, 1867* and the definition of pipeline in section 2 of the NEB Act.

In response to ADOE's contention that there is no legitimate federal component to the NEC pipeline, NEC asked what could be more legitimately federal than exporting natural gas? One hundred percent of the gas on the Coleman line is destined for export.

¹ Unreported, Supreme Court of Canada File No. 25259, March 19, 1998.

Views of the Board

The Board is of the view that, in the context of this motion, there is an important distinction between a "work" and an "undertaking". In *Montreal* v. *Montreal St. Ry*¹ it was held that a work is a physical thing. An undertaking, on the other hand, has been held to be an arrangement under which physical things are used.² A pipeline is clearly a "work" in the ordinary sense of that term. While the operation of the pipeline, and associated works, may constitute an "undertaking" there can be no dispute that a pipeline is a physical thing that is a "work" within the meaning of section 92(10)(a).

The ADOE did not provide any precedent that found that a work that crossed a border was not properly within federal jurisdiction. There were not even any dicta to this effect. The cases cited by the ADOE concerned undertakings, rather than works. In each of those cases, the court found that the undertaking in question was federal because a component of the undertaking was interprovincial. Ms. Page sought to distinguish the facts in those cases on the basis that the undertakings in question had a <u>legitimate</u> federal component. She could not, however, direct the Board to any case law where the court actually found that there was a non-legitimate federal component to an interprovincial undertaking.

If the Board were to grant the ADOE motion and decline jurisdiction, the Alberta Energy and Utilities Board ("AEUB") would not be able to regulate the proposed Coleman pipeline, because it crosses a provincial border. Aside from being constitutionally inappropriate, it would be a contravention of the NEB Act for the AEUB to assume jurisdiction over an interprovincial pipeline. In this case, the Coleman pipeline might have been designed to connect with ANG in Alberta, but it was not. The proposed Coleman pipeline is a federal work because it crosses a provincial border. The definition of pipeline in the NEB Act refers to a line that connects a province with any other province or provinces or extends beyond the limit of a province. The Coleman pipeline clearly falls within this definition and, in the view of the Board, is properly under NEB jurisdiction.

The ADOE motion is therefore dismissed.

2.2 Board Ruling on Advantage Pipeline Company Inc. Motion

Advantage raised a preliminary motion in which it argued that NEC should have applied under section 52 of the NEB Act rather than section 58, because the new 7.2 km federal pipeline, coupled with certain upstream NEC facilities, would constitute a pipeline greater than 40 km in length. On 25 March 1998, the Board advised parties that it would hear this motion at the conclusion of the evidentiary portion of the hearing.

¹ [1912] A.C. 333, at 342.

² Re Regulation and Control of Radio Communication in Can. [1932] A.C. 304, at 315.

At the commencement of the hearing the Panel provided the following direction to parties intending to present argument on the Advantage motion:

The Panel is interested in hearing argument on the question of whether the Board can grant a section 58 order for the 7.2 km pipeline only, assuming for the purposes of this argument that the upstream facilities and the 7.2 km pipeline together constitute an undertaking that is under NEB jurisdiction. Bearing in mind that the existing upstream facilities are not presently operated under NEB authority, would the company, with that assumption, be required to apply under section 52 for the whole of the facilities or can it apply under section 58 for the new 7.2 km pipeline only?

Parties were accordingly asked to speak to this issue in addition to the motion as framed by Advantage.

Arguments by Parties

Advantage Pipeline Company Inc.

Mr. Roth, speaking on behalf of Advantage, submitted that 71 km of raw gas gathering pipe connecting the Savanna Creek compression facility with the Coleman gas plant and the proposed Coleman pipeline come under the jurisdiction of the Board. As a result, he argued, NEC must bring a properly constituted section 52 application for a certificate of public convenience and necessity for all of these facilities, rather than making application under section 58 solely in respect of the proposed 7.2 km Coleman pipeline. Mr. Roth submitted that the 71 km gas gathering line, the gas plant and the proposed Coleman line are functionally and operationally integrated, and are commonly owned, managed, controlled and directed. According to the Supreme Court decision in *Westcoast Energy Inc.* v. *Canada (National Energy Board)*¹ these facilities therefore constitute a single federal undertaking. The Federal Court of Appeal ruled in *A.G. Alberta* v. *National Energy Board*² (the Pesh Creek Reference) that once it is established that the NEB has jurisdiction over a single undertaking, consisting of a pipeline greater than 40 km in length, the Board has no jurisdiction under section 58 to approve that pipeline.

With respect to the question posed by the Board, Mr. Roth submitted that section 58 was meant to deal with branches of or extensions to existing pipelines that were already approved by a certificate or order under the NEB Act. In answer to a question from the Panel, he stated that a section 58 order could also be granted to authorize the extension to a provincial pipeline undertaking if the extension itself was a federal pipeline. However, assuming that the upstream facilities are under federal jurisdiction, the proposed undertaking before this Board is for one pipeline greater than 40 km in length. The Board does not have the jurisdiction to approve the construction and operation of such a pipeline under section 58. It would make no sense for the Board to issue the section 58 order in respect of the Coleman pipeline, because for some reason, environmental or otherwise, it might not later be able to issue a certificate of public convenience and necessity for the upstream system, which is essential to the operation of the Coleman Line.

¹ Unreported, Supreme Court of Canada File No. 25259, March 19, 1998.

² Alberta (Attorney General) v. Westcoast Energy Inc. (1997), 208 N.R. 154 (Fed. C.A.).

Alberta Department of Energy

The ADOE did not support Advantage's motion respecting the jurisdiction over the upstream facilities, arguing that the facts in the present situation are distinguishable from those considered important by the Supreme Court in *Westcoast*. Ms. Page submitted that the transmission undertaking that NEC would be engaging in with the operation of the Coleman pipeline would be a separate undertaking from the upstream production and exploration phase.

The ADOE submitted, however, that if the Board did find that it had jurisdiction over the upstream system, it could not issue a section 58 order; NEC would have to file a section 52 application in respect of the whole undertaking. The Board would then have to determine whether the whole of the undertaking was in the public convenience and necessity. The Pesh Creek Reference decision has determined that the NEB cannot approve only part of an undertaking under section 58.

Northstar Energy Corporation

Mr. Huber, on behalf of NEC, submitted that the proposed pipeline and the upstream facilities would not constitute part of a single interprovincial undertaking once the Coleman pipeline was constructed and put into operation. NEC distinguished its operations from those of Westcoast on a number of grounds and suggested that the jurisdictional line should be drawn at the outlet of the gas plant.

With respect to the question posed by the Board, Mr. Huber argued that, even if the upstream assets were determined to be under federal jurisdiction, it would still be entirely appropriate to issue a section 58 order in respect of the applied-for pipeline. NEC would not need approval to construct assets that are already operating pursuant to valid provincial approvals. The upstream facilities would not form part of a federal undertaking until the Coleman pipeline was actually constructed and placed into operation. Until that time, there is no question that the Coleman upstream assets remain under provincial jurisdiction.

Mr. Huber further submitted that Mr. Roth's argument on section 58 gave that provision a construction that it could not reasonably bear. Section 58 applies to pipelines or extensions of pipelines. Mr. Huber submitted that Mr. Roth ignored the words "pipelines or" in the first part of section 58.

There is no requirement under section 58 to have a certificated pipeline in existence before a company can apply under that section.

Finally, in the alternative, Mr. Huber submitted that the Board could issue an order under section 58 granting an exemption from section 31 of the NEB Act to enable NEC to construct the Coleman line. Prior to placing the line in service, NEC could apply for a certificate under section 52 to operate the Coleman pipeline and upstream assets.

Views of the Board

The application by NEC was made under subsection 58(1) of the NEB Act. This provision reads as follows:

The Board may make orders exempting

- (a) pipelines or branches of or extensions to pipelines, not exceeding in any case forty kilometres in length, and
- (b) such tanks reservoirs, storage facilities, pumps, racks, compressors, loading facilities, interstation systems of communication by telephone, telegraph or radio, and real and personal property connected therewith, as the Board considers proper,

from any or all of the provisions of sections 29 to 33 and 47.

Section 52 of the NEB Act provides:

The Board may, subject to the approval of the Governor in Council, issue a certificate in respect of a pipeline if the Board is satisfied that the pipeline is and will be required by the present and future public convenience and necessity and, in considering an application for a certificate, the Board shall have regard to all considerations that appear to it to be relevant, and may have regard to the following:

- (a) the availability of oil or gas to the pipeline;
- (b) the existence of markets, actual or potential;
- (c) the economic feasibility of the pipeline;
- (d) the financial responsibility and financial structure of the applicant, the methods of financing the pipeline and the extent to which Canadians will have an opportunity to participate in the financing, engineering and construction of the pipeline; and
- (e) any public interest that in the Board's opinion may be affected by the granting or the refusing of the application.

Advantage argued that it is not possible to grant a section 58 order for an extension to a pipeline unless there is already a certificate of public convenience and necessity in place for the pipeline that is to be extended. We do not accept this argument. The Board regularly grants section 58 orders to small pipeline undertakings where a section 52 certificate is not in place. In our view, this practice is clearly supported by the words in paragraph 58(1)(a): "*pipelines or* branches of or extensions to pipelines". Mr. Roth's argument focussed on the words "branches of or extensions to pipelines", to the total exclusion of the first word of that paragraph, "pipelines". However, the first word of paragraph 58(1)(a) grants the Board authority to provide exemption orders in respect of "pipelines". The definition of "pipeline" in the NEB Act does not mention length at all, but refers to a line that connects one province to another or that extends beyond the limits of a province. There is no basis upon which one can conclude that the word "pipeline" in section 58 has a different meaning from the definition contained in section 2 of the NEB Act.

The Board is of the view that the facts before it in this case are distinguishable from those before the Federal Court of Appeal in the Pesh Creek Reference. In that case, Novagas Clearinghouse Pipeline Ltd. ("Novagas") filed an application under section 58 of the NEB Act for approval of a 16.5 km "sausage link" pipeline between British Columbia and Alberta. Novagas-related companies sought provincial approvals for the upstream and downstream facilities in British Columbia and Alberta, respectively. Prior to the Board's consideration of the Novagas application, Westcoast Energy Inc. questioned the Board's statutory jurisdiction to review the sausage link pipeline under section 58, arguing that the whole of the facilities should have been applied for under section 52 of the NEB Act. The Board referred the question of its jurisdiction over the upstream and downstream facilities to the Federal Court of Appeal. However, prior to the reference being heard, the Board granted the applicant's section 58 application, provincial approvals for the other facilities were obtained, and all of the facilities were placed into operation. The Federal Court held that it was not open to the Board to partition a project into multiple sections in order to consider all or some of them under section 58 of the NEB Act. The granting of the application for the section 58 pipeline implied a prior finding by the Board that the Pesh Creek Pipeline was not part of a unified pipeline chain encompassing the upstream and downstream facilities. As a result, the court determined that the Reference was not properly before it since the question posed to the Court was academic and could be of no effect on proceedings below. The Reference was therefore quashed.

The facts we are faced with here are quite different from those in the Pesh Creek Reference. In Pesh Creek, the project involved the construction of an entirely new undertaking, not a just a new pipeline connecting to a pre-existing, provinciallyregulated upstream facility. The issue raised before the Board in Pesh Creek was whether the whole of the Pesh Creek facilities - that is, the upstream, downstream and the sausage link pipeline - should all have been before the NEB for approval under section 52. In the present application, the NEC upstream facilities are clearly under provincial jurisdiction and have been in operation for several decades. There is no evidence of any proposal before this Board, or any other agency, to construct additional facilities in conjunction with the Coleman pipeline, aside from what has been applied for in the present application. The only thing that could possibly bring the upstream facilities under federal jurisdiction is their connection to the interprovincial Coleman pipeline. Such a connection has not happened; there are simply no facts at this juncture that would enable the Board to declare the upstream facilities to be a federal work or undertaking. This determination could only be made after the construction of the pipeline for which NEC has made its section 58 application.

We are therefore of the opinion that it is neither necessary nor appropriate to make a ruling on the question of whether the upstream assets would be under federal jurisdiction if the Coleman pipeline were to be constructed. If the pipeline were built, factors such as ownership or operation of various components of the facilities could

change before the pipeline was put into operation. Any determination at this time of jurisdiction over the upstream facilities would be premature. The only thing that is totally clear is that the existing NEC facilities are not, at the present time, under federal jurisdiction. The conclusion, therefore, is that NEC applied under the appropriate section of the NEB Act for the construction and operation of the Coleman pipeline.

Accordingly, the Advantage motion is dismissed.

Chapter 3

Environment

The Board conducted an environmental screening of the applied-for facilities in compliance with the *Canadian Environmental Assessment Act* ("CEAA") and completed an Environmental Screening Report ("the Report") pursuant to the CEAA and the Board's own regulatory process. In addition to matters directly pertaining to the environment, the Report also addresses matters pertaining to public consultation.

The Report was released on 24 April 1998 to parties who requested an opportunity to comment. The Board has considered the Report and is of the view that, taking into account the implementation of the proposed mitigative measures and those set out in the attached conditions, the Coleman Pipeline project is not likely to cause significant adverse environmental effects. This represents a decision pursuant to paragraph 20(1)(a) of the CEAA.

Copies of the Report are available upon request from the Board's Regulatory Support Office.

Chapter 4

Routing and Lands

4.1 Route and Site Selection

4.1.1 Route Selection

NEC stated that the primary control points considered for the pipeline were the source and delivery points. These were:

- Source Point: NEC Coleman Gas Plant
- Delivery Control Point: Tie-in with existing ANG 914 mm O.D. pipeline west of the A/BC border

NEC indicated that in its initial review stage it identified two alternative routes. The north and south routes are shown in Figure 1-1.

NEC used the following criteria to evaluate the route alternatives:

- follow existing linear developments to the extent feasible;
- minimize pipeline length;
- take into consideration requests of various provincial government agencies, the public and special interest groups;
- accommodate landowner requests to the extent feasible;
- minimize length in sensitive wildlife habitats;
- avoid or minimize disturbance to areas which will be slow or difficult to reclaim;
- cross watercourses at straight and stable reaches with low, stable approach slopes and banks; and
- optimize road, rail and foreign line crossings.

4.1.1.1 Proposed Route

NEC stated that, from an environmental perspective, both alternatives were acceptable. The south alternative was chosen as the proposed route for the following reasons:

- (i) this route was preferred by landowners;
- (ii) it avoided a flowing spring; and
- (iii) the potential for reclamation success was considered to be somewhat enhanced due to the likelihood of deeper soils.

Approximately 2.8 km of the pipeline would be located on new right of way. NEC also provided the following Table 4-1 where it identified the length of the pipeline that would be located adjacent to existing rights of way.

Table 4-1Paralleling Lengths

Adjacent Right of Way	Length (m)
NOVA P/L R/W Plan 2992 I.C.	4273
ANG P/L R/W Plan 2992 I.C.	403
Transmission Line 567 GJ	3945
Road Plan 2443 AZ	2858
Power Line R/W Plan 426 F.C.	2485
Foothills P/L R/W Plan 841 0202	1747

4.1.2 Site Selection

NEC set out the following criteria for selecting the location of the metering facility:

- locate site adjacent to facilities at existing gas plants;
- locate the site on or adjacent to the proposed pipeline route;
- avoid sites where significant grading is required;
- locate the stations on relatively well-drained sites;
- avoid sites where impairment of surface drainage patterns will occur; and
- avoid locating the site in proximity to site-specific important wildlife habitat or rare plant communities.

NEC chose to locate the metering facility and a valve stem at the existing Coleman Gas Plant. No alternatives were identified within the constraints indicated above.

Intervenors

During the hearing Ms. Mielke submitted that, if the pipeline had to be built, her preferred option would be for NEC to reroute the proposed right of way to an existing road allowance adjacent to the south boundary of her property.

In final argument, NEC indicated that it would work with Ms. Mielke to see if a solution could be found to her concerns. Specifically, NEC stated that her suggested reroute to the south of her property would be investigated. However, NEC stated that it "would be reluctant to select an alternate route which, while it might appease one landowner, would create more significant environmental effects in the area."

4.2 Land Requirements

NEC submitted that it would require a 20 m wide permanent easement on patented (private) lands, a 10 m wide permanent easement, and a 10 m wide temporary work space on Crown lands.

In an information request from the Board, NEC was asked whether it would use space on adjacent rights of way to reduce the width of its own permanent and/or temporary work space. NEC responded that it had requested temporary work space from NOVA Gas Transmission Ltd. ("NGTL") but was refused. However, under cross examination by NEC, the NGTL panel stated that if it would be prepared to share workspace with NEC if the Board approved the NEC application. NGTL indicated

that "Yes, NOVA would be prepared to do whatever would reduce costs for the total Basin for a properly certificated pipeline".

With respect to land acquisition, NEC indicated that all landowners have been served with a section 87 notice but that land rights acquisition is still underway.

Views of the Board

The Board finds the criteria identified by NEC to be acceptable for the purpose of route and site selection. The Board further finds that NEC's approach to route and site selection was acceptable and resulted in an appropriate route for the pipeline and site for the metering facilities. The Board acknowledges NEC's commitment to work towards a mutually acceptable routing solution with Ms. Mielke. It should be noted, however, that route alterations outside the corridor considered as part of this application would require a further application to and approval by the Board.

The potential impacts of the construction of the pipeline on affected landowners, including the amount of land required for easements and temporary work space, have been carefully considered by the Board. The Board finds that NEC's anticipated requirements for easements and temporary work space are reasonable and justified in this application.

As land rights have yet to be obtained, the Board, as a condition to the approval, will require NEC to demonstrate that all land rights have been acquired prior to the commencement of any construction.

Chapter 5

Engineering

5.1 Facilities

The Coleman Pipeline would have an O.D. of 406 mm (NPS 16) with a wall thickness of 6.4 mm and an estimated design capacity of 5635 10^3 m³/d (200 MMcf/d). The pipeline would be fabricated from Grade 359 Category II steel and would have a maximum allowable operating pressure of 7067 kPa. NEC indicated that, although it had not reached a final decision, the pipeline would probably be externally coated with fusion bond epoxy and that a two-part epoxy coating would probably be used for the field joints. A regularly monitored cathodic protection system would supplement the external pipeline coating to provide corrosion protection for the entire pipeline system.

The facilities would also consist of: a remotely-operated flow control and custody transfer metering station to be located at the Coleman Gas Plant; a below ground isolation valve assembly with fenced above ground operator, to be located at the tie-in point on the existing 914 mm O.D. (NPS 36) main ANG transmission pipeline; and a check valve. The metering facility would use volumetric measurement equipment suitable for custody transfer and energy values would be determined using online gas component analysis equipment. The meter station would be connected to a Supervisory Control and Data Acquisition system that would supply measurement and energy values directly to ANG.

NEC indicated that, although specific provision was not made for pig traps, it would not design the pipeline with fittings, or any other features, that would inhibit the future use of an in-line inspection tool.

NEC stated that the design, construction and operation of the Coleman Pipeline would meet or exceed the requirements of the Board's *Onshore Pipeline Regulations* ("OPR"), the Canadian Standards Association CAN/CSA-Z662-96, *Oil and Gas Pipeline Systems*, and all applicable standards, specifications and codes that are incorporated by reference into that standard.

NEC plans to commence construction of the pipeline in August of 1998, and complete the project in October of 1998.

5.2 Design and Safety Considerations

5.2.1 Karst Topography

An issue was raised regarding the possibility of encountering karst formations during construction. NEC indicated that it is difficult to be certain of the location of karst topography. NEC indicated that there was no record of karst-related problems occurring during the construction of the ANG line or either of the two NGTL lines through the Phillips Pass. NEC also submitted that the soils work conducted revealed an accumulation of several colluvial deposits in the bottom of the Pass which helped verify that the probability of encountering karst features during trenching activities would be low. NEC indicated that the use of shallow ground-penetrating radar was one method of identifying karst formations. However, NEC pointed out that the technology is limited with respect to the size of voids that can be detected. NEC also indicated that cores could be drilled into the rock to the depth required, to ensure that the foundation was sound. Although NEC does not believe it will encounter karst features, it indicated that it is still considering the need for further investigation.

5.2.2 Blasting

NEC indicated that if there was a requirement for blasting it would not be a safety concern, even given the proximity to the existing high-pressure pipelines, because NEC would take appropriate engineering precautions; have its charges designed properly; and have the proper expertise on site. NEC also indicated that blasting is not expensive and is done quite regularly in industry.

Views of the Board

The Board is satisfied that the design of the Coleman Pipeline and related facilities is safe and appropriate for the purposes of the proposed service. However, the Board is not persuaded that NEC should be exempted from section 47 of the NEB Act. Accordingly, prior to the commencement of operation of the pipeline, NEC will be required to seek approval pursuant to section 47 of the NEB Act for leave to open the pipeline.

With respect to karst formations, the Board is of the view that it is unlikely that these features would be encountered. Although blasting is not expected, a condition was identified in the screening of the project requiring the submission of NEC's Blasting Control Plan for Board approval.

Financial Matters, Tolls, Tariffs, and Transportation

6.1 Financial Matters

The proposed pipeline will be owned 100 percent by NEC. The Company intends to finance the \$6,467,000 project through internal sources of funds, credit facilities arranged with financial institutions or a combination of these two methods. NEC indicated that it will assume all the financial risks of the proposed facilities for the life of the applied-for facilities.

6.2 Tolls, Tariffs, and Transportation

NEC proposed a five and ten year toll structure and incorporated it into its Memorandum of Understanding ("MOU"). The MOU is binding until a formal Transportation Agreement is signed or the Project is terminated. Both Husky Oil Operations Ltd. ("Husky") and Westminster Resources Ltd. ("Westminster") have executed the MOU with NEC. NEC also indicated that 77 percent of the initial throughput forecast of 1043 10³m³/d (37 MMcf/d) will be shipped by NEC with the remaining 23 percent shipped by third parties (18 percent by Husky and 5 percent by Westminster).

Term of Service	Toll (\$ per Mcf)	Toll (\$ per 10 ³ m ³)
5 years	0.09	3.19
10 years	0.08	2.84

Table 6-1 Proposed Tolls

Views of the Board

The Board considered NEC's proposed Transportation Agreement, as well as its proposed General Terms and Conditions, and is satisfied that capacity on NEC's pipeline will be available on an open access basis to all potential shippers.

The accounting treatment of the cost of the pipeline construction should conform with generally accepted accounting principles pursuant to subsection 5(2) of the *Gas Pipeline Uniform Accounting Regulations*. In addition, the cost of this project, including any overruns, may be subject to examination pursuant to the Board's responsibilities under Part IV of the NEB Act.

Chapter 7

Public Interest Considerations

Views of Parties

Parties submitted evidence on several matters related to the public interest. These matters included the appropriate sizing of the pipeline, the physical and environmental restrictions in the area, duplication and offloading of the NGTL system, and the issue of competition and shipper choice. Parties' views on these matters are summarized in the following sections.

Northstar Energy Corporation

NEC submitted that two main issues had been raised by intervenors in this hearing. The first issue was whether it would be in the public interest to allow NEC to build a pipeline to ship gas from the Coleman Gas Plant to the ANG system. The second issue was whether the diameter of the pipeline should be larger than the 406 mm (NPS 16) proposed.

NEC submitted that a market-response competitive alternative to the NGTL system would clearly be in the public interest. NEC stated that the objective of the project is to achieve lower gas transportation costs for NEC and southern Alberta Foothills producers. NEC submitted that the Coleman Pipeline would enable NEC to have long term control over its sales gas transportation costs and thereby extend the viability of its existing facilities, improve the economics of bringing gas reserves onstream, and extend the economic life of the existing reserve base processed at the Coleman Gas Plant.

In respect of the sizing of the pipeline, NEC stated that the Coleman Pipeline is sized to transport gas from the Coleman Gas Plant and approximately 2817 10³m³/d (100 MMcf/d) of gas from Shell Canada Limited's ("Shell") Waterton Gas Plant. NEC submitted that the volumes of gas available to the pipeline are proven producing sales gas reserves of 5.24 10⁹m³ (186 Bcf), established sales gas reserves of 1.63 10⁹m³ (58 Bcf), and exploration risked reserves of 13.41 10⁹m³ (476 Bcf), giving a total reserve base of about 20.28 10⁹m³ (720 Bcf). NEC forecast a peak average day raw gas production in 2001 of 2753 10³m³/d (approximately 100 MMcf/d). NEC noted that its forecast is limited by the capacity of the Coleman Gas Plant but that the Plant could be expanded. The licensed capacity of the Coleman Gas Plant is 2811 10³m³/d (approximately 100 MMcf/d) of raw gas with a current estimated maximum daily capacity of 1690 10³m³/d (60 MMcf/d).

With respect to requirements for transportation from the southern Foothills area, NEC noted that only two third-party producers, Husky and Westminster, have come forward, bringing the total volumes at start-up to approximately 1042 10³m³/d (37 MMcf/d). With respect to capacity requirements beyond the southern Foothills, NEC submitted that the Coleman Pipeline would provide additional capacity to be filled, thereby obviating the need for NGTL's system to be expanded by that amount. NEC further noted that NGTL established it could expand its system with the Coleman Pipeline in place. In respect of Advantage's position that a larger pipeline would be required, NEC noted that Advantage only undertook an assessment of the reserves potential in the area. Advantage did not assess deliverability, nor was it able to provide evidence to demonstrate a need for more than 5635 10³m³/d (200 MMcf/d) of additional capacity to the A/BC border.

Another matter raised with respect to the sizing of the pipeline was whether there would be room for an additional pipeline through the Phillips Pass. NEC submitted that the dispute was over the relative difficulties of constructing a fourth pipeline through the Pass and the economics that would be associated with such construction. NEC submitted that its proposed pipeline could be powered up and looped, perhaps doubling its capacity. NEC also estimated that NGTL could achieve a total capacity of 134 10⁶m³/d (4760 MMcf/d) through the Phillips Pass by adding a 1219 mm (NPS 48) loop, whereas NGTL could achieve approximately 128 10⁶m³/d (4560 MMcf/d) of capacity if it truncated the loop at KP 80, the east end of the Phillips Pass. NEC submitted that the issue of appropriate pipeline sizing was rendered academic by NGTL's evidence that the NGTL system could be looped without building through the restrictive portion of the Pass, and that NGTL would be prepared to share workspace allowing NEC to move the Coleman Pipeline away form the north cliff, closer to the most northerly NGTL pipeline.

Parties also raised the issue of whether one large diameter pipeline should be considered, in order to avoid, or minimize, the environmental effects associated with the installation of additional pipelines. NEC submitted that there is no compelling evidence to suggest that a fourth pipeline would ever be installed through the Pass. NEC further submitted that its environmental evidence demonstrated that, particularly with cooperation among the proponents, the cumulative effects of an additional pipeline, or pipelines, could be managed such that the effects would be of short duration and low magnitude.

NEC and other producers contracting capacity on the proposed pipeline indicated that the gas is to serve existing long- and short-term domestic and export markets.

NEC submitted that there is no good reason that NEC should be required to construct a larger diameter pipeline. However, NEC noted that, if the Board found that it was in the public interest to have a larger diameter pipeline constructed, it would undertake to do so.

Federation of Alberta Naturalists

The Federation of Alberta Naturalists ("FAN") urged the Board to adopt NEC's offer to build a 1219 mm (NPS 48) pipeline. FAN recognized that another pipeline will be built through the Phillips Pass and that, in its view, such construction will close the Pass to further pipelines. FAN submitted that the next pipeline through the Phillips Pass should be of the maximum possible size in order to ensure that further construction is held off for the greatest length of time possible. This would allow for improvements in construction and reclamation technology prior to another first impact on, and access to, another Rocky Mountain pass or passes. FAN submitted that the 406 mm (NPS 16) Coleman Pipeline would not serve that purpose.

FAN submitted that, though the chokepoint of the Phillips Pass is not the most environmentally sensitive portion of the route, repeated construction, regardless of the definition of chokepoint used, has the potential to increase both the magnitude and the duration of environmental impacts and to make them less manageable. FAN also expressed concern over NEC's time forecast of 10 years for determining the size of the pipeline rather than 20 to 25 years. It noted that the history of pipelining in Alberta in the last 15 to 20 years was for looping at 15 to 20 year intervals.

Advantage Pipeline Company Inc.

Advantage submitted that the Coleman application is not a sound application. Advantage submitted that there is a better way to meet the objectives sought by NEC and, regardless of who may ultimately build facilities, the facilities should provide gas transportation services to all potential users on a competitive basis, both now and in the future. Advantage stated that it sees a need for, firstly, competitive transportation rates for producers in southern Alberta, and, secondly, to establish sufficient capacity so as to effectively and economically utilize the remaining space through the restricted area of the Phillips Pass. Advantage submitted that this could be achieved by building one large pipeline through the area now, such as that proposed in Advantage's application to the AEUB for a 1219 mm (NPS 48) pipeline. Advantage stated that an appropriately sized pipeline would provide for future capacity needs, mitigate environmental impacts, and avoid the unnecessary future cost of building the next increment of capacity.

Advantage stated that in the future there will be a requirement for considerably more pipeline capacity than would be provided by the Coleman Pipeline. In support of this position, Advantage provided a Natural Gas Supply Potential Study by Ziff Energy Group ("Ziff"). The Ziff Study looked at potential gas supply in southwestern Alberta. Advantage submitted that there is potential for at least 8495 10^3 m³/d (300 MMcf/d) of deliverability over the next eight years in addition to the existing pipeline capacity out of the southwestern portion of Alberta. Advantage further stated that it believes 8495 10^3 m³/d (300 MMcf/d) would be possible for approximately 36 years. In addition to the issue of supply, Advantage submitted that adequate consideration should be given to future market or supply growth. Advantage submitted that the market shows potential growth between 1996 and 2010 of some 39 840 10^3 m³/d (1407 MMcf/d).

Advantage stated that, in its view, the Board does not have discretion to conditionally approve the pipeline subject to NEC constructing a larger diameter pipeline. Not only would the Board have to determine what size pipeline should be built, but it would also have to specify the location where that pipeline should be built.

Alberta Natural Gas Company Ltd

ANG requested that, if NEC's application is approved, it be made conditional on NEC constructing a larger diameter pipeline through the Phillips Pass to the interconnection with ANG in order to accommodate present and future capacity requirements and to minimize cumulative environmental impacts on the region. ANG expressed the concern that a 406 mm (NPS 16) pipeline connecting with ANG would not provide sufficient capacity for future reserve additions.

ANG noted that it has entered into an agreement with NEC for an interconnection to its system.

Canadian 88 Energy Corp.

Canadian 88 Energy Corp. ("Canadian 88") opposed the application to construct a 406 mm (NPS 16) pipeline but stated that it would have no objection if the Board made its approval conditional on the construction of a 1219 mm (NPS 48) pipeline. Canadian 88 expressed concern that there is only room for one more economic pipeline through the region.

Canadian 88 shared NEC's concern that the postage stamp transportation rates on the NGTL system from the southwest Alberta Foothills region do not reflect the cost of shipping that gas. Canadian 88 submitted that lower transportation costs could be accomplished through Shell's Crowsnest Pipeline, if that project is resurrected. Canadian 88 noted that it anticipates approximately 1980 10³m³/d (70 MMcf/d) of production from its Burmis or North Waterton Fields in the near future and that Canadian 88 has obtained Pipeline Permit Approvals from the AEUB to construct a gathering system from those wells to the Shell Waterton Gas Plant. Canadian 88 observed that, with present Shell Waterton sales gas volumes of 2817 10³m³/d (100 MMcf/d) and NEC's approximately 1830 10³m³/d (65 MMcf/d) of sales gas (translated from NEC's raw gas forecast of 2817 10³m³/d (100 MMcf/d)), only 986 10³m³/d (35 MMcf/d) would be available to third-party shippers.

NOVA Gas Transmission Ltd.

NGTL requested that the application be denied. NGTL submitted that neither a large diameter pipeline, nor any pipeline, is required to be authorized. NGTL noted NEC's statement that a 406 mm (NPS 16) pipeline is a stretch, and submitted that it would only be warranted having regard to the potential, but uncommitted, volumes from the Shell Gas Plant at Waterton.

NGTL noted that its proposed expansion, the Western Alberta System ("WAS") Mainline Loop #2 (Sentinel Section), together with the WAS Mainline Loop (Jumping Pound Section), could add $3.2 \ 10^6 \text{m}^3/\text{d}$ (115 MMcf/d) of additional capacity to the A/BC border. NGTL stated that, when it was determined that its customers did not want NGTL to build advance capacity, it withdrew its application for the Sentinel Section. NGTL forecasts that the need for capacity to the A/BC border will grow from 74 661 $10^3 \text{m}^3/\text{d}$ (2650 MMcf/d) in 1999 to 88 748 $10^3 \text{m}^3/\text{d}$ (3150 MMcf/d) by 2005.

NGTL noted that the sole justification for Coleman Pipeline is NGTL's current postage stamp rate for Firm Service Delivery from the Coleman Gas Plant to the interconnection with ANG's facilities west of the A/BC border. NGTL noted that although NEC's position is that the industry is moving into a competitive environment, in NGTL's view the industry is not there yet. NGTL stated that the pricing issue which NEC's application seeks to address results from a rate design that is fair and equitable, according to the regulator which prescribed it.

NGTL submitted that the volumes intended to flow on the proposed pipeline can, at present and in the future, be transported on the facilities of NGTL. NGTL further submitted that its system can move a further 11 270 10^3 m³/d (400 MMcf/d) without any additional facilities. Further, NGTL submitted the following reasons that the proposed Coleman Pipeline is not necessary:

- the capital cost to build new and unnecessary facilities;
- the environmental disturbances that would be associated with the project;
- the duplicative nature of NEC's proposal;
- not in accordance with NGTL's historical function of ensuring that appropriate access for all Alberta gas is maintained to the A/BC border;
- right of way issues; and
- toll considerations for NGTL's remaining shippers.

NGTL submitted that the interests to be considered are not the proprietary fortunes of an applicant, but the interests of the public at large. In respect of the basis for the Board making a decision regarding a project NGTL stated:

"your criteria and mandate, most assuredly, do not say that an assessment of the merits of an application for duplicative and unnecessary pipeline facilities is necessary and that it should be approved 'because the market may decide whether the line gets built or not'."

NGTL noted that it did not offer NEC a Load Retention Service Rate ("LRS") because, in its view, the AEUB had provided a cautionary note that NGTL should not rely on LRS as a rote response to bypass proposals. NGTL further noted that it responded to the AEUB's specific call for comprehensive rate design alternatives with its Service Offering and Products Pricing Filing.

With respect to whether NEC could be required to construct a larger diameter pipeline, NGTL stated that NEC has put before the Board a case for authority to build a 406 mm (NPS 16) pipeline. NGTL questioned the basis on which the Board could authorize a totally different facility than has been applied-for.

Pan-Alberta Gas Ltd.

Pan-Alberta, a shipper on the NGTL system, requested that the application be denied. Pan-Alberta's concern related to the potential commercial impacts of the proposed pipeline on NGTL's existing infrastructure and the impact that the application may have on future capacity expansion. Pan-Alberta submitted that the pipeline is not needed to transport the existing or forecast gas and that it has been proposed solely to achieve lower transportation costs for NEC and third-party shippers.

Ms. I.E. Mielke

Ms. Mielke requested that the Board not act on the proposed Coleman Pipeline until there are further negotiations and compromises between the industry parties. It was submitted that if the transportation costs could be resolved, this pipeline would not be required. It was further submitted that, in Ms. Mielke's view, no price can adequately compensate for the resulting forest cover removal from her land and the adverse effects and inconvenience she would endure during construction. As an alternative, it was suggested that the pipeline be rerouted to the existing road allowance along the south boundary of Ms. Mielke's property. Barring the reroute, Ms. Mielke indicated that NGTL's proposed 1219 mm (NPS 48) Sentinel Section Pipeline would be preferable to the Coleman Pipeline as it would result in less tree clearing and would eliminate the need for any foreseeable pipeline development.

Alberta Department of Energy

The ADOE noted in its argument that there was an outstanding motion as to whether the Board had the jurisdiction to consider NEC's application. The ADOE stated that it makes no submissions as to whether there is a physical constraint, the merits of the proposed pipeline, or which of the alternatives discussed would be the best option.

The ADOE stated that in the past its position has been that, where there are competing projects, assuming that they are technically satisfactory, in the public interest and send true market signals, there is no need to hold comparative hearings as each project should be looked at on its own merits. With respect to the Coleman application, the ADOE stated that if there is truly a constraint that would physically preclude the building of a competitive pipeline perhaps it is appropriate to hold a

comparative hearing to decide which of the competing proposals is best in the public interest, or in the public convenience and necessity. The ADOE submitted that if a physical constraint does exist, the Board should give more consideration to these alternatives than would normally be necessary in a purely market-based environment.

Alberta Environmental Protection, Land and Forest Service

In a letter received by the Board on 10 April 1998, Alberta Environmental Protection, Land and Forest Service ("AEP") indicated that it was aware of two potential pipeline projects applying for routes through the Phillips Pass west of Coleman, Alberta. These two projects are the Crowsnest Pipeline, proposed by Shell and ATCO Gas Services Ltd., and the Coleman Pipeline, proposed by NEC.

AEP noted that the Phillips Pass is a very narrow pass already accommodating pipelines and a power line. AEP stated that its concern was that the area could not withstand the effects of two separate additional pipelines being constructed. AEP suggested that the two companies begin communications to enter into a form of agreement so that construction of those pipelines would be limited to one time frame and one year only.

Communication, Energy and Paperworkers Union of Canada

In support of the application, the Communication, Energy and Paperworkers Union of Canada stated, in its letter dated 24 March 1998, that the proposed pipeline would provide an improvement to the economic longevity of the feedstock reserves to the Coleman Gas Plant and, as such, provide job security to its members.

Views of the Board

Pipeline Sizing/Supply

Gas supply for the proposed facility will come from the Coleman Gas Plant and a possible future interconnect with Shell's Waterton Gas Plant. The Board has reviewed the reserves and productive capacity information filed by NEC and is of the view that there will be at least $2753 \ 10^3 \text{m}^3/\text{d}$ (97 MMcf/d) of raw gas available for processing at the Coleman Gas Plant, which has a current processing capacity of $2817 \ 10^3 \text{m}^3/\text{d}$ (100 MMcf/d). The sales gas available to the Coleman Pipeline from the plant would be approximately 1790 10³m³/d (63 MMcf/d), assuming that future reserves would have a similar composition to those processed today. The proven reserves and ultimate potential in the Coleman area are adequate to maintain the plant at capacity for at least 20 years. Approximately 2817 103m3/d (100 MMcf/d) of additional supply could be available from the Waterton area should Shell decide to reactivate its Crowsnest Pipeline project. Further, Canadian 88 anticipates that it will have approximately 1980 10³m³/d (70 MMcf/d) of future production from its Burmis or North Waterton Fields which will be processed at Waterton. Accordingly, the Board is satisfied that adequate reserves exist in the southwestern Alberta area to supply the proposed 406 mm O.D. pipeline.

While there is adequate supply for the 406 mm O.D. Coleman Pipeline, the Board was not persuaded by Advantage's argument that there would be adequate reserves in

southwestern Alberta to support a 1219 mm O.D. pipeline through the Phillips Pass. There was no direct evidence that those reserves would be available for delivery to a 1219 mm O.D. facility, nor was there any firm evidence to indicate that future markets, accessible through the Phillips Pass, would require the requisite supply from southwestern Alberta.

As noted above, several parties expressed the view that the proposed facilities were inappropriately sized for the current and prospective demand. Various estimates of necessity ranging from there being no need for a new pipeline right now, to a requirement for a 1219 mm O.D. pipeline have been put on the record. These parties suggest that, because NEC's pipeline is not the correct size, the application should be either denied by the Board or the Board should require a larger pipe size. There is considerable evidence that some new pipeline space will be required in the future. NGTL's evidence states that it could provide 11 270 10³m³/d (400 MMcf/d) of this capacity without any new facilities with more potential if new facilities are built upstream. NEC's project, as designed, would provide an additional 5635 10³m³/d (200 MMcf/d). Both parties stated that they would be willing to coordinate and share workspace with any party building a pipeline through the area.

Even if future markets and reserves were developed that required capacity in excess of that proposed by NEC, a 1219 mm O.D. pipeline through the Phillips Pass may not be necessary. NEC estimated that NGTL could deliver a total of 128 400 10^3 m³/d (4560 MMcf/d) through the Phillips Pass by simply looping its existing mainline with 1219 mm O.D. pipeline and truncating the looped section east of the Pass. NGTL stated that it could move as much as 14 160 10^3 m³ (500 MMcf/d) to the A/BC border without any facility additions in either the Phillips Pass, or from Coleman to the border. Advantage suggested that market growth could be as much as 39 840 10^3 m³/d (1407 MMcf/d) by 2010. The Board is satisfied that both NEC's proposed facility and NGTL's existing facilities could be expanded to provide incremental capacity significantly greater than the potential market growth forecast by Advantage through to the year 2010, without the need for future looping through the Phillips Pass.

Given the above analysis, the Board believes that the proposed Coleman Pipeline is appropriately sized for present and anticipated demand for service through the Phillips Pass. There is a reasonable expectation that the required reserves will be developed to fill the Coleman Pipeline, and future capacity needs can be achieved without further disturbance of the Pass. It should be noted that, as an NEB-regulated pipeline, NEC would fall under the requirements of section 71 of the NEB Act, which gives the Board authority to order it to provide service to potential shippers and even to expand to provide that service, if a need arises.

Physical Restrictions and Potential Future Projects

NEC believes that there is additional space within the Pass to construct two pipelines, provided NGTL shares work space. NEC indicated that a sharing of work space would allow the Coleman Pipeline to be constructed at approximately the same clearance distance as exists between the two 914 mm NGTL pipelines and it would

leave room at the north end of the restricted portion of the Pass to construct another pipeline. NGTL indicated during the proceeding that, if the Board approved the Coleman Pipeline, it was prepared to share work space with NEC.

In the event that workspace was not shared, NEC submitted that there would be alternatives for providing additional future capacity through the restricted portion of the Pass should the Coleman Pipeline be constructed. NEC expressed its view that these alternatives would be particularly economically viable for large diameter pipelines due to the associated volumes and the nominal capital cost for shipment of those volumes.

While the AEP expressed a concern that the Pass could not withstand the effects of two pipelines being constructed, it did not participate actively in the hearing, nor did it present any evidence to support its view.

The Board is of the view that no other party demonstrated that it would be technically or economically impractical to construct another pipeline through the Pass if the Coleman Pipeline were to be installed. The Board believes that, should the Coleman Pipeline be constructed, it would be possible to construct another pipeline through the Pass if it were needed. Future projects would, of course, be subject to environmental and other regulatory scrutiny, as required by relevant legislation.

Offloading and Duplication

At this time, all the volumes shipped out of the province from the Coleman Gas Plant are shipped on NGTL's system. Currently $1042 \ 10^3 \text{m}^3/\text{d}$ (37 MMcf/d) of processed gas are contractually dedicated to the project and, should it go ahead, these volumes would no longer be shipped on the NGTL system. NGTL claimed that the appropriate figure from which to measure the offloading effects is $5635 \ 10^3 \text{m}^3/\text{d}$ (200 MMcf/d), the capacity of the Coleman Pipeline. The Board heard ample evidence that there exists the potential for enough gas to be produced in the southern Foothills region to fill the Coleman Pipeline. However, these volumes are not all currently being produced. NEC's witnesses indicated that development of incremental volumes upstream of the Coleman Gas Plant would be very expensive and this development would not likely take place under the current postage-stamp tolling regime on NGTL. NGTL's testimony stated that its system is designed and constructed for not just contracted capacity but also for reserves which are forecast to be developed and produced at each receipt point. These volumes are not under contract to NGTL, nor does NGTL have a franchise within the area that might confer the exclusive right to transport them. The Board is of the view that the potential offloading of volumes over and above the $1042 \ 10^3 \text{m}^3/\text{d}$ (37 MMcf/d) currently flowing on the NGTL system is speculative and the probability that negative effects will result is low. The Board has also considered the materiality of the offloaded volumes relative to the NGTL system as a whole. The volume dedicated to Coleman, $1047 \ 10^3 \text{m}^3/\text{d}$ (37 MMcf/d), represents less than two percent of the volume of natural gas currently flowing through NGTL to the ANG system.

As a result of this project being built, the NGTL system would be offloaded to the extent that transportation contracts for currently-flowing volumes are not renewed. However, there was agreement among all parties that within six or seven years there would be incremental demand for transportation capacity into the ANG system. The actual amount of demand was much in debate. When the volumes contracted to the Coleman Pipeline leave the NGTL system, there would be extra capacity for NGTL to meet this incremental need. The effects of offloading of the NGTL system would be temporary in nature and would likely be offset by incremental production both from the southern Foothills area and Alberta as a whole.

The Coleman Pipeline would duplicate NGTL's system to the extent that both would have similar receipt and delivery points and both transport natural gas. Beyond this, the similarity ends. The NGTL system is costly for shippers in the southern Foothills area to use, but can offer shippers a wide variety of services (backhaul, load balancing, multiple delivery points, etc). NEC, on the other hand, while offering a lower price than NGTL, can offer little more than direct transmission of gas from the plant gate into ANG. From an economic standpoint, these differences are material in that they will affect the demand for transportation significantly. To the extent that the NEC toll is lower than that of NGTL, the existence of an economic transportation alternative would make currently unexploited reserves economic and extend the life of current reserves. Both of these factors would contribute to the economic efficiency of the gas industry as a whole, in addition to contributing to the profitability of the companies that exploit those resources.

Competition and Choice

The Coleman Pipeline is clearly a competitive alternative to the NGTL system for shipping gas from the Coleman Gas Plant into ANG. As noted above, the two systems offer a different suite of services at significantly different prices. Shippers will have the choice of the full service offering on NGTL, or the more basic service offered by NEC, up to the point where one of these systems is fully utilized. The potential for choice by customers is one of the main forces behind the economic efficiencies that result from competition. If customers do not receive value from one firm, they can move to a different firm. The construction of the Coleman Pipeline will provide incentives for both firms to provide attractive, reliable service at a reasonable price. Market scrutiny of both NEC and NGTL may make direct regulation of their respective services and costs less necessary. It cannot be expected that the whole gas transmission industry will become competitive and efficient with one regulatory decision. However, each step towards a more competitive market will yield incremental gains that are beneficial. The immediate effect of this decision will be the availability of lower transportation costs for NEC and other potential shippers from the southern Foothills area. In the longer term, this decision may help market signals flow to the providers of pipeline transportation, and their regulators, to result in better system planning choices.

While NEC's primary reason for proposing the Coleman Pipeline was to reduce its transportation costs, the benefits of the project would extend beyond NEC.

Public Interest

In reviewing NEC's application, the Board must consider whether the addition of these pipeline facilities to the existing Canadian pipeline infrastructure is in the public interest. In doing so, the Board must, after carefully weighing all of the evidence in these proceedings, exercise its discretion in balancing the interests of a diverse public. The interests of those members of the public who would benefit from the construction of this pipeline must be weighed against the interests of those who may be adversely affected by its construction.

In general, the public interest is served by allowing competitive forces to work, except where there are costs that outweigh those benefits. An important element of competition and market-based solutions in the context of this hearing is the extent to which producers can exercise the choice to have access to alternative means of getting their products to market.

NGTL is a party that could be adversely affected by the construction of the pipeline. However, the Board notes that the impacts on NGTL, as a whole, will be very small. Further, NGTL has, in the past, made accommodations in potential bypass situations to avoid the very issues it now raises. To a large degree, NGTL is able, with the regulatory oversight of the AEUB, to control its own future and to mitigate the impacts of this minor pipeline proposal.

Parties who may wish to build other facilities in the area raised the concern that the Coleman Pipeline would affect them adversely because there is insufficient space in the Phillips Pass for another pipeline. As discussed earlier in these reasons, the Board was not persuaded that there cannot be any further pipeline construction through the Pass. In this regard, the Board was pleased to note the commitments of NEC and NGTL to work together with any future project proponents in the area to minimize difficulties. Moreover, the Board notes that the evidence established that it would be possible to add very large increments of capacity through the Pass without adding facilities in the Pass itself. It should therefore be possible to meet any future capacity needs that may arise in this area.

The Board has carefully weighed the concerns of Ms. Mielke and notes that her interests and those of other landowners in the area are a significant public interest consideration. However, the Board also notes that NEC expressed its commitment to work towards a mutually satisfactory solution with Ms. Mielke with respect to the routing of the pipeline on her land. It should be noted that route alterations outside the corridor reviewed as part of this application would require a further application to and approval by the Board.

The Board is always cognizant of the issue of whether it is in the public interest to disrupt the landscape with the construction of another pipeline, particularly where, as here, construction would be in an environmentally sensitive area and where the initially proposed volumes are currently being transported on existing facilities. The Board notes, firstly, that the environmental screening of this proposal, carried out pursuant to the CEAA, concluded that, with the implementation of proposed mitigative

measures, the project would not be likely to cause significant adverse environmental effects. Secondly, the pipeline is only 7.2 km in length, approximately 4.7 km of which is adjacent to existing rights of way.

In conclusion, the Board is of the view that this pipeline is, on balance, in the public interest.

Chapter 8

Disposition

The foregoing Chapters constitute our Decisions and Reasons for Decision in respect of the application heard before the Board in the GH-1-98 proceedings. The Board has decided, pursuant to section 58 of the NEB Act, to issue an Order granting NEC exemption from sections 30 and 31 of the NEB Act in respect of the proposed Coleman Pipeline.

The Board notes that it has not granted NEC an exemption from the requirements of section 47 of the *National Energy Board Act* ("NEB Act"). NEC will therefore be required, before initiating service, to apply to the Board for leave to open the pipeline.

J.A. Snider Chair

R.J. Harrison Member

> D. Valiela Member

Appendix I

GH-1-98 List of Issues

In the Directions on Procedure the Board identified, but did not limit itself to, the following issues for discussion in the hearing:

- 1. The economic feasibility of the proposed Coleman Pipeline Project.
- 2. The potential commercial impacts of the proposed Coleman Pipeline Project.
- 3. The adequacy of the public consultation process.
- 4. The potential environmental effects and socio-economic effects of the proposed Coleman Pipeline Project including those factors outlined in subsection 16(1) of the *Canadian Environmental Assessment Act*.
- 5. The routing and location of the proposed facilities and the land rights acquisition.
- 6. The design of the proposed facilities.
- 7. The terms and conditions to be included in any order which may be granted.

Order XG-N150-29-98

ORDER XG-N150-29-98

IN THE MATTER OF the *National Energy Board Act* ("the NEB Act") and the regulations made thereunder; and

IN THE MATTER OF an application made pursuant to section 58 of the NEB Act, by Northstar Energy Corporation ("NEC"), filed with the Board under File 3400-N150-1.

BEFORE the Board on 14 May 1998.

WHEREAS the Board has received a section 58 application from NEC, dated 23 May 1997, requesting authorization to construct and operate the Coleman Pipeline which consists of approximately 7.2 km of 406 mm O.D. pipeline, and associated facilities, extending from NEC's Coleman Gas Plant located west of Coleman in Savanna, Alberta to connect to the Alberta Natural Gas Company Ltd main transmission pipeline ten metres west of the Alberta/British Columbia border;

AND WHEREAS pursuant to the *Canadian Environmental Assessment Act* ("CEAA"), the Board has considered the information submitted by NEC and has performed an environmental screening of the proposal;

AND WHEREAS the Board has determined, pursuant to paragraph 20(1)(a) of the CEAA, that taking into account the implementation of NEC's proposed mitigative measures and those set out in the attached conditions, the proposal is not likely to cause significant adverse environmental effects;

AND WHEREAS the Board has examined the application, evidence, and argument presented by NEC and intervenors during the GH-1-98 oral proceeding 30 and 31 March and 1, 2, and 6 April 1998, and considers it to be in the public interest to grant part of the relief requested;

IT IS ORDERED THAT, the Coleman Pipeline, at an estimated cost of \$6,467,000, is exempt from the provisions of sections 30 and 31 of the NEB Act, upon the following conditions:

General Condition

1. Unless the Board otherwise directs, NEC shall implement or cause to be implemented all of the policies, practices, recommendations and procedures for the protection of the environment included in or referred to in its application, the environmental reports filed as part of its application or its undertakings made to other government agencies, or as otherwise adduced in its evidence before the Board during the GH-1-98 proceedings.

Prior to the Commencement of Construction

- 2. Unless the Board otherwise directs, NEC shall, prior to the commencement of construction, demonstrate to the satisfaction of the Board that all required land rights have been obtained along the entire length of the pipeline.
- 3. Unless the Board otherwise directs, at least ten (10) days prior to the commencement of construction of the approved facilities, NEC shall file with the Board a detailed construction schedule or schedules identifying major construction activities, such as wetland/water crossings, and shall notify the Board of any modifications to the schedule or schedules as they occur.
- 4. NEC shall file with the Board copies of any permits or authorizations which contain environmental conditions for the applied-for facilities issued by federal, provincial, and other permitting agencies, as these authorizations or permits are received. In addition NEC shall maintain, in the construction office(s), files containing any such information.
- 5. NEC shall, no later than fourteen (14) working days prior to the commencement of construction of the approved facilities, demonstrate to the Board's satisfaction that it has obtained the necessary approvals and authorizations relating to any federally regulated railway crossings which fall within Transport Canada's mandate.

During Construction

- 6. NEC shall, during construction, ensure that specialized habitat for wildlife and plants with a designated status will be avoided, relocated, or restored in consultation with appropriate regulatory agencies.
- 7. Unless the Board otherwise directs, NEC shall maintain at each construction site a copy of the applicable construction specifications and drawings, including the welding and non-destructive examination procedures.
- 8. Unless the Board otherwise directs, NEC shall, prior to the commencement of seeding, provide confirmation that the approval of any seed mixtures or other revegetation actions, required in the revegetation of work sites, has been received from the appropriate regulatory body.
- 9. Unless the Board otherwise directs, NEC shall file with the Board, prior to seeding, any variations in the recommended seed mixes as outlined in the assessment reports, unless these changes are requested by the landowner.
- 10. In the event that NEC determined that blasting is required, unless the Board otherwise directs, NEC shall submit for Board approval, at least fourteen (14) days prior to the proposed commencement of blasting, NEC's Blasting Control Plan and a map identifying the specific areas for which blasting is proposed.
- 11. Unless the Board otherwise directs, NEC shall have an environmental inspector on site to monitor construction and reclamation activities, with specific attention to potential sediment

transfer, at the locations along the Crowsnest River between kilometre post ("KP") 1.8 and 1.9 and at approximately KP 2.1.

Post Construction

- 12. Unless the Board otherwise directs, NEC shall file with the Board a post-construction environmental report within six months of the date that each approved facility is placed in service pursuant to section 58 of the *Onshore Pipeline Regulations*. The post-construction environmental report shall set out the environmental issues that have arisen up to the date on which the report is filed and shall:
 - (a) where options have been provided for, provide a description of which practices, procedures and recommendations have been implemented during the construction process and the reasons for the choice of the options;
 - (b) indicate the issues resolved and those unresolved; and
 - (c) describe the measures NEC proposes to take in respect of the unresolved issues.
- 13. Unless the Board otherwise directs, NEC shall file with the Board on or before the31 December that follows each of the first two complete growing seasons following the filing of the post-construction environmental report referred to in Condition 12:
 - (a) a list of the environmental issues indicated as unresolved in the report and any that have arisen since the report was filed; and
 - (b) a description of the measures NEC proposes to take in respect of any unresolved environmental issues.
- 14. Unless the Board otherwise directs, this Order shall expire on 31 December 1999 unless the construction of the facilities authorized by this Order has commenced by that date.

NATIONAL ENERGY BOARD

Michel L. Mantha Secretary