



National Energy Board

Reasons for Decision

**Federated Pipe Lines
(Northern) Ltd.**

OH-3-96

April 1997

Facilities

National Energy Board

Reasons for Decision

In the Matter of

Federated Pipe Lines (Northern) Ltd.

Application dated 12 November 1996 for the
Taylor to Belloy Pipeline Project

OH-3-96

April 1997

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represented by the National Energy Board

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Abbreviations

Act	<i>National Energy Board Act</i>
AEUB	Alberta Energy and Utilities Board
AIA	Archaeological Impact Assessment
B.C.	British Columbia
CEAA	<i>Canadian Environmental Assessment Act</i>
Certificate	Certificate of Public Convenience and Necessity
Dow	Dow Chemical Canada Inc.
Express	Express Pipeline Ltd.
Federated Northern	Federated Pipe Lines (Northern) Ltd.
Federated Western	Federated Pipe Lines (Western) Ltd.
FPL	Federated Pipe Lines Ltd.
GLJ	Gilbert Lausten Jung Associates Ltd.
Home	Home Oil Company Limited
HRIA	Historical Resources Impact Assessment
Imperial	Imperial Oil Limited
Kinetic	Kinetic Resources (LPG)
Morrison	Morrison Petroleum Ltd.
NCL	Novagas Clearinghouse Ltd.
NCPL	Novagas Clearinghouse Pipelines Ltd.
NGL	natural gas liquid(s)
Peace	Peace Pipe Line Ltd.
Pouce Coupé	Pouce Coupé Pipe Line Ltd.
PTA	Pipeline Transportation Agreement
Solex	Solex Gas Liquids Ltd.
Trans Mountain	Trans Mountain Pipe Line Company Ltd.
WEI	Westcoast Energy Inc.

Recital and Appearances

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

IN THE MATTER OF an application dated 12 November 1996 by Federated Pipe Lines (Northern) Ltd. for a Certificate of Public Convenience and Necessity under Part III of the Act for proposed facilities and Orders pursuant to Part IV of the Act for tolls which would be applicable to the proposed pipeline; and

IN THE MATTER OF Hearing Order OH-3-96;

HEARD in Calgary, Alberta on 24, 25, 26 and 27 February 1997.

BEFORE:

A. Côté-Verhaaf	Presiding Member
K.W. Vollman	Member
J.A. Snider	Member

APPEARANCES:

R.M. Perrin	Federated Pipe Lines (Northern) Ltd.
H.R. Huber	
A.Z. Menzies	Alberta Natural Gas Company Ltd.
S.H. Castonguay	Amoco Canada Resources Ltd.
S. Hutchinson	Chevron Canada Resources and Chevron Canada Limited
K.F. Miller	Dow Chemical Canada Inc.
D.G. Davies	Imperial Oil Limited; Kinetic Resources (LPG); Solex Gas Liquids Ltd.
G.M. Nettleton	Interprovincial Pipe Line Inc.
K.C. Carr	Morrison Petroleums Ltd.
K.L. Mayer	Northwest Pacific Energy Marketing Inc.
A.S. Hollingworth	Novagas Clearinghouse Pipelines Ltd.
D. Wood	
F.R. Foran, Q.C.	Peace Pipe Line Ltd. and Pouce Coupé Pipe Line Ltd.
S. Lee	
M.W.P. Boyle	Trans Mountain Pipe Line Company Ltd.
C.J.C. Page	Alberta Department of Energy
C. McKinnon	Board Counsel

Chapter 1

Introduction

1.1 Background

On 12 November 1996 Federated Pipe Lines (Northern) Ltd. ("Federated Northern", "the Applicant" or "the Company") applied, pursuant to section 52 of the *National Energy Board Act* ("the Act"), for a Certificate of Public Convenience and Necessity ("Certificate") to construct an oil pipeline from Taylor, British Columbia ("B.C.") to Belloy, Alberta. At Taylor the applied-for pipeline would connect to oil and natural gas liquid ("NGL") facilities of Federated Pipe Lines (Western) Ltd. ("Federated Western"), Morrison Petroleums Ltd. ("Morrison") and Solex Gas Liquids Ltd. ("Solex"). At Belloy, the applied-for pipeline will connect to a pipeline proposed by Federated Pipe Lines Ltd. ("FPL") and recently approved by the Alberta Energy and Utilities Board ("AEUB"). The applied-for pipeline is illustrated in Figure 1-1.

The applied-for facilities consist of 171.7 kilometres of 273.1 mm outside diameter pipeline, interconnecting pipelines and pumping and metering facilities at Taylor, an intermediate pumping station near Bonanza, Alberta, a truck delivery terminal near Spirit River, Alberta and metering facilities at the Belloy junction. The facilities are designed to transport, in batch mode, up to 8250 m³/day of crude oil and NGL from receipt points at Taylor and Spirit River to the Belloy junction. From this point, the oil and NGL will be transported on the proposed FPL pipeline to existing facilities of FPL near Judy Creek, Alberta which will provide transportation to NGL storage, fractionation and marketing facilities at Fort Saskatchewan, Alberta and to crude oil storage and marketing facilities at Edmonton, Alberta.

The Board issued Hearing Order and Directions on Procedure OH-3-96 on 17 December 1996 which set Federated Northern's application down for an oral public hearing. The hearing was held in Calgary on February 24 -27, 1997.

Figure 1-1 illustrates two other proposed pipeline projects competing for supply in the Taylor area and proposing pipeline transportation to the Edmonton and Fort Saskatchewan areas. The proposal of Novagas Clearinghouse Ltd. ("NCL") and Novagas Clearinghouse Pipelines Ltd. ("NCPL") would source NGL at Taylor and various points in Alberta and would transport these liquids to NCL's storage and proposed fractionation facility near Redwater, Alberta. The intra-Alberta portion of the pipeline project were recently approved by the AEUB.

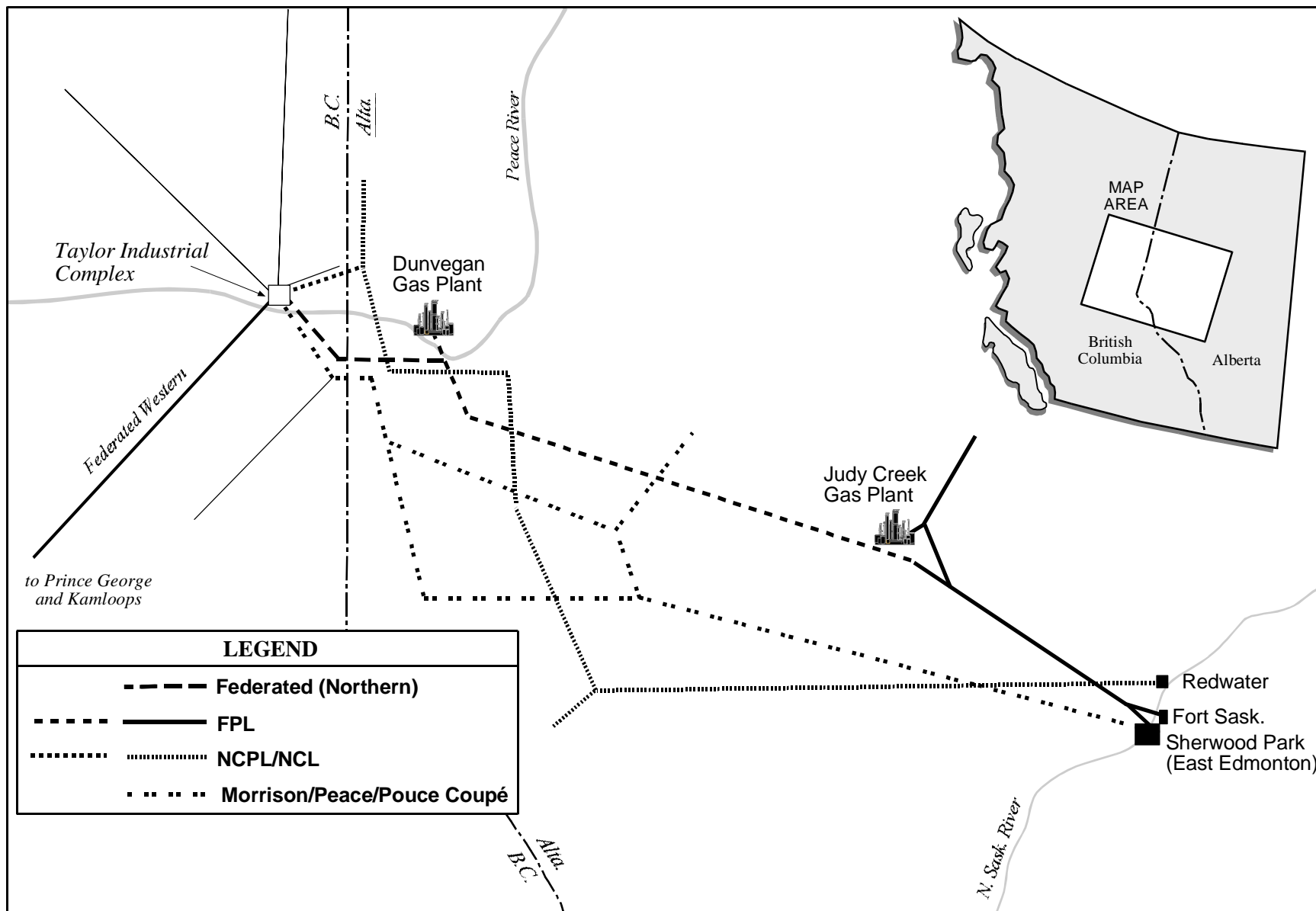
The other pipeline proposal is a joint project of Peace Pipe Line Ltd. ("Peace"), Pouce Coupé Pipe Line Ltd. ("Pouce Coupé") and Morrison. Peace operates a crude oil and NGL transmission system which provides transportation from points in northwestern Alberta to Edmonton and Fort Saskatchewan. Peace recently obtained AEUB approval to loop a portion of its system which will provide additional crude oil and NGL capacity. Pouce Coupé, a subsidiary of Peace, owns an interprovincial oil line running from Dawson Creek, B.C. to a point of connection with the Peace system near Gordondale, Alberta. Morrison proposes to build a pipeline from Taylor to connect with the Pouce Coupé pipeline at Dawson Creek.

The proponents of these other pipeline projects intervened in OH-3-96.

1.2 Environmental Screening

The Board conducted an environmental screening of the applied-for facilities in compliance with section 18 of the *Canadian Environmental Assessment Act* ("CEAA"). The Board ensured that there was no duplication in the requirements under the CEAA and the Board's own regulatory process.

Figure 1-1
Federated Northern - Location Map



Chapter 2

Supply

2.1 Overall Supply

Federated Northern retained a petroleum consultant, Gilbert Lausten Jung Associates Ltd. ("GLJ"), who provided a detailed report titled, "Oil and Natural Gas Liquids Supply Forecast." This report defined a study area which focused on northeastern B.C. acreage surrounding Taylor and to a lesser extent, offsetting Alberta acreage.

Natural gas supply information was provided in this report because ethane plus volumes become available by extraction during natural gas processing. Thus, a long-term supply of natural gas would provide a long-term supply of NGL. The reserve life index for natural gas in the B.C. area was estimated to be 14.5 years based upon remaining raw gas reserves of $152.4 \times 10^9 \text{ m}^3$ (5.4 Tcf) as at December 31, 1995. Intervenors did not present evidence that questioned the adequacy of the overall supply of natural gas and NGL.

From compositional information and regional gas reserves, a natural gas liquids production forecast was prepared by GLJ for B.C. acreage. GLJ's best case estimate was that NGL production is expected to peak in the year 1999 at a rate of $6.3 \times 10^3 \text{ m}^3/\text{d}$ (40 Mbbl/d).

Oil supply was estimated by adding existing oil production to potential reserve additions. For Alberta and B.C. acreage the best case estimate of total oil production was forecast to decline gradually and amounted to $9.3 \times 10^3 \text{ m}^3/\text{d}$ (59 Mbbl/d) for 1998. The overall total available production of oil and NGL for the study area was forecasted to peak in 1999 at a rate of $15.1 \times 10^3 \text{ m}^3/\text{d}$ (95 Mbbl/d).

2.2 Project Supply

The evidence and arguments presented in this proceeding demonstrated the intense competition underway for supply in the Taylor area among Federated Northern and the other project proponents described previously in these Reasons for Decision. This competition focused on rights to extract ethane and other NGL from the various processed natural gas streams in the Taylor area and the commitments of shippers to each of the competing projects.

Federated Northern provided supply information for natural gas, crude oil, condensate, ethane plus and propane plus at Taylor, and crude oil and segregated condensate at Spirit River. The total residue gas exiting the Westcoast Energy Inc. ("WEI") McMahon gas plant is approximately $19.8 \times 10^6 \text{ m}^3/\text{d}$ (700 MMcf/d) and Federated Northern estimated its supply of ethane plus would be extracted from $15.6 \times 10^6 \text{ m}^3/\text{d}$ (550 MMcfd). Liquid volumes available to the project are summarized as follows:

Table 2-1: Available Liquid Volumes

<u>Product</u>	<u>m³/d</u>
Ethane	2400
Propane plus	1685
Crude Oil	1700
Subtotal	<hr/> 5785 (committed)
Crude Oil & NGL	1588 (under negotiation)
Total	<hr/> 7373

Evidence indicated that the ethane volumes of 2400 m³/d are controlled by a shipper, Kinetic Resources (LPG) ("Kinetic") who has a marketing agreement with Solex. However, Solex has not yet secured ethane extraction rights for gas exiting the WEI McMahon gas plant. Federated Northern argued that Solex is still in an excellent position to secure these rights. Further, even if ethane volumes were eliminated from the total, Federated Northern still has in excess of 3300 m³/d (21 Mbbl/d) of committed volumes.

NCPL, Peace and Pouce Coupé argued that the Federated Northern pipeline was not required principally because it has tenuous natural gas liquids supply arrangements originating with the Solex straddle plant.

Trans Mountain Pipe Line Company Ltd. ("Trans Mountain") argued that there was no new or growing oil supply to justify the applied-for pipeline taking into account existing pipeline capacity serving the area.

Views of the Board

The Board notes the ongoing competition among Federated Northern and other project proponents for supply in the Taylor area. The Board notes further that certain questions related to Federated Northern's entitlement to some of the supply have not been resolved as yet. In particular, certain extraction rights underpinning the supply for the applied-for facilities have yet to be ascertained. Therefore, a significant portion of the available supply is not yet committed to any one project. Nonetheless, from the evidence and arguments presented in this proceeding, the Board is satisfied that there is an adequate overall supply of oil and NGL to justify the applied-for facilities. Furthermore, the Board is of the view that Federated Northern has provided sufficient evidence of shipper support to demonstrate the need for the applied-for facilities. Lastly, the Board notes that market forces will probably determine how the remaining available supply is committed for transportation from Taylor.

Chapter 3

Transportation and Markets

3.1 Crude Oil and Natural Gas Liquids

Currently, limited pipeline facilities exist for the shipment of crude oil and NGL from the Taylor area. According to Federated Northern, owners of certain crude oils may enjoy higher netbacks if a pipeline connection permitted these oils to be delivered into the Edmonton market. Similarly, construction of Federated Northern's pipeline will make available new markets for NGL produced in the Taylor area and northeastern B.C., or will allow producers of NGL to reduce transportation costs and thus increase their netbacks. Federated Northern estimated these netbacks would result in 130 million dollars of increased revenue to producers over the economic life of the pipeline because of the pipeline access provided to the Edmonton area markets.

Presently, B.C. produced crude oil (including B.C. light and Boundary Lake), along with smaller volumes of Northwest Alberta crude oil (including light sweet and Boundary Lake), are delivered to the Taylor area via pipelines and trucks. From this point, the crude oil is shipped on the Federated Western pipeline to a refinery at Prince George, B.C. or to Kamloops, B.C., where it is transported on the Trans Mountain pipeline to refineries on the West Coast.

Federated Northern submitted that after construction of its pipeline B.C., crude oil producers will have the option of delivering their production to the West Coast market or to the Edmonton and eastward markets, depending on which market yields the highest netbacks. The majority of the crude oil delivered to Edmonton is exported to the U.S. Midwest by the Interprovincial Pipe Line /Lakehead Pipe Line system. The U.S. Midwest market also uses U.S. crude production and imported crude via the Gulf Coast to balance refinery runs. Historically, B.C. crudes have been discounted in price because they are captive to supplying only the West Coast market.

A study prepared by Purvin & Gertz on behalf of Federated Northern concluded that crude prices in Edmonton and eastern markets are expected to rise relative to prices on the West Coast as the demand for imported crude in the U.S. Midwest rises to replace declining U.S. mid-continent production. The study further concluded that with respect to Boundary Lake crude oil, markets in Edmonton presently exist, and that with respect to B.C. light crude oil, markets in Edmonton will exist periodically until the year 2002, when higher netbacks for this product would likely make Edmonton the market of choice.

Trans Mountain argued that the Purvin & Gertz report has identified, but not properly considered or analyzed, a number of factors that will influence the overall supply and demand equilibrium in both the U.S. mid-continent and West Coast markets. It further argued that the report tends to simply extrapolate from previously experienced pricing relationships. Trans Mountain submitted that Purvin & Gertz's examination of the Edmonton and mid-continent markets is so deficient in its analysis that it cannot be relied on by the Board to support reasonable conclusions that expected markets and netbacks will materialize, and that the proposed pipeline is needed and justified. Trans Mountain also submitted that, with a current capacity of 7500 cubic metres per day, the Federated Western Pipeline is capable of handling the full range of current or forecast crude oil volumes at Taylor.

The NGL produced in the Taylor area and Northeastern B.C. includes ethane and propane plus mix. Ethane volumes are currently either left in the gas stream or are extracted and subsequently reinjected into the gas stream due to the lack of NGL pipeline transportation from northeastern B.C. Propane plus volumes are delivered considerable distances by truck and rail to either local markets or to truck terminals at existing pipelines.

The Fort Saskatchewan area is a major North American, and the principal Western Canadian, NGL hub, receiving volumes of NGL as ethane plus and propane plus mixes and various specification products. These products are fractionated and/or stored and then distributed by a variety of transportation systems to North American markets. The numerous facilities in the area, including petrochemical plants and others consuming NGL as feedstock, are generally interconnected, and there is significant efficiency and synergy associated with the cluster of facilities. A major feature of the hub is that it functions as an important trading and price setting centre.

Federated Northern submitted that producers of NGL can enhance or optimize netbacks by having competitive transportation access to alternate markets, which would be provided by the proposed pipeline. The proposed pipeline would provide NGL producers in northeastern B.C. with a connection to the Alberta FPL pipeline system which provides pipeline access to the major market hub at Fort Saskatchewan. It would allow ethane to move into the Alberta petrochemical and hydrocarbon miscible flood market, as opposed to being left in, or reinjected into, the gas stream, therefore enabling the owners of this ethane to realize a premium to the energy value presently received. The owners of propane plus produced in the area should also realize higher netbacks due to the reduced costs of transporting their product to market via pipeline, as compared to truck or rail.

A study prepared by Marengo Energy Associates on behalf of Federated Northern concluded that both the Fort Saskatchewan hub and North American markets can effectively accommodate the NGL volumes associated with the proposed pipeline. In addition, relatively small facility additions may be required later in the next decade, depending on market conditions, but they will be incremental to established infrastructure.

Imperial Oil Limited ("Imperial"), Kinetic and Solex argued that given the evidence in this proceeding, the Board should be satisfied that there are markets for crude oil and NGL volumes requiring pipeline transportation from Taylor.

3.2 Transportation Agreements and Committed Volumes

As a result of discussions with producers held in the summer of 1996, Federated Northern concluded that sufficient interest existed to warrant construction of a pipeline for transportation of crude oil, segregated condensate and NGL from northeastern B.C. to markets in the Edmonton area. Subsequently, Federated Northern conducted an open season during the months of September and October of 1996 on the basis of a draft term sheet, outlining the general terms of service and a toll schedule. Parties interested in committing to transportation service were to advise of their desired transportation requirements in that period. Potential shippers were also provided, on a confidential basis, a draft pipeline transportation agreement and were requested to comment on this document.

Federated Northern stated that as a result of the open season, a final Pipeline Transportation Agreement ("PTA") was developed, along with tariffs for the transportation of petroleum including segregated condensate, and NGL on the proposed pipeline. During cross-examination, the Company

also stated that, although the open season is closed, additional shippers can still sign up for the service identified in the PTA.

Federated Northern filed information on the commitments from shippers which total 5785 cubic metres per day of products, details of which are presented in Table 3-1. In addition, evidence indicated that the Company has reached agreement in principle with producers who are prepared to commit an additional 1 588 cubic metres per day of products.

Table 3-1: Committed Volumes (m³/d)

<u>Product</u>	<u>10 Years</u>	<u>20 Years</u>	<u>Total</u>
Ethane Plus	--	3980	3980
Propane Plus	45	60	105
Crude Oil	<u>900</u>	<u>800</u>	<u>1700</u>
Total	945	4840	5785

Potential shippers on the Federated Northern system can choose from three types of service: Firm Transportation, Dedicated Facility or Uncommitted.

- (a) Firm Transportation - Shippers selecting this service must sign a PTA and commit to fixed demand and largely fixed commodity charges for a specified volume of product to be tendered at specific receipt points for transportation on the pipeline. Shippers can select a 5 or 10-year term, with the tolls for the 10-year term being lower. This service also entitles the shipper to full system priority and renewal options.
- (b) Dedicated Facility - Under this service, the resource owner signs a PTA and commits for the delivery to, and transportation on, the pipeline of all, or a defined portion, of its owned or controlled volumes produced at a given facility or from a specified field or pool, subject to local market exclusion and, with respect to crude oil, an option to ship on the Federated Western system to satisfy the obligations under the PTA. The toll, consisting of only a commodity charge paid on the actual volume transported, is higher than the toll for Firm Transportation service to recognize the higher risk of delivery of these volumes to the pipeline. Shippers can select a 5, 10 or 20-year term with decreasing tolls for longer terms of contract. This service entitles shippers to system priority subject only to Firm Transportation shipments. The shipper also has renewal options and an option to convert to Firm Transportation service.
- (c) Uncommitted - Shippers opting for this service would pay a toll for the delivery and transportation of product intended to be delivered periodically at the resource owner's discretion to any receipt point on the pipeline. Tolls payable by an Uncommitted shipper are not guaranteed as this shipper has no obligation to utilize the pipeline. The proposed toll for these volumes is higher than the tolls for the other types of service. Uncommitted shippers are not required to sign a PTA.

All of the current commitments to Federated Northern's system are for Dedicated Facility service.

Federated Northern submitted that the commitments received to date for transportation on the proposed pipeline clearly demonstrate the Company's ability to attract products to its pipeline. In addition, the fact that these commitments extend for many years into the future supports the proposition that

Federated Northern has the ability to attract products to its system over the long-term. During cross-examination, the Applicant stated that shippers indicated that their preference at this point in time was for the Dedicated Facility service, but they did indicate that they would like some flexibility in the future to switch to Firm Transportation service.

Imperial, Kinetic and Solex argued that given the evidence in this proceeding, the Board should be satisfied that Federated Northern has the ability to attract shippers to its system.

NCPL questioned the level of commitment that a shipper makes to the proposed pipeline by signing a PTA for Dedicated Facility service. The Company argued that due to the terms and conditions covering the Dedicated Facility service, to the extent that a shipper does not sell product in the local market or, in the case of crude oil, move product down the Federated Western line, that shipper will have an obligation to ship whatever production it has down the Federated Northern pipeline. Since only a commodity charge is payable there is no financial penalty for volumes sold in the local market or shipped on the Federated Western line.

Trans Mountain also questioned the level of commitment that a shipper makes to the proposed pipeline by signing a PTA for Dedicated Facility service. The Company argued that due to the flexibility provided by the PTA, a shipper of crude oil who has committed for Dedicated Facility service on the Federated Northern system can instead elect to ship on the Federated Western system without penalty. Therefore, there is no assurance that committed volumes will in fact move on and provide toll support for the Federated Northern system.

Views of the Board

The Board is of the view that the assessment provided by Federated Northern of the overall markets for crude oil and NGL accessible through the proposed pipeline is sufficient for the purpose of assessing the need for this pipeline. The Board is satisfied that sufficient overall market demand will exist in the market regions accessible through the proposed pipeline, and that facilities, existing and proposed, and pipeline take-away capacity will be sufficient to service the market regions accessible via the proposed pipeline.

The Board notes that due to the current lack of pipeline transportation for NGL from the Taylor area and due to limited transportation options for crude oil from the area, the producers in the area have not realized the full value of their production. The Board is of the view that producers in the service area of the proposed pipeline will likely realize higher netbacks on their production as a result of the access to markets provided by the proposed pipeline.

The Board considers the existence of signed long-term PTAs to be strong evidence of the need for the proposed pipeline. Some parties argued that the strength of these commitments is questionable given their terms and conditions, while Federated Northern stated that the terms and conditions were negotiated with potential shippers and reflect the transportation requirements defined by the shippers. The Board is of the view that market participants have made sufficient commitments to demonstrate that the applied-for facilities will be used and useful. Furthermore, the pipeline will access profitable markets for crude oil and NGL produced in the service area.

Chapter 4

Traffic, Tolls and Tariffs

4.1 Market-based Toll Methodology

As outlined in the previous chapter, potential shippers on the Federated Northern system can select from three categories of service. For all three service categories, Federated Northern proposed that it charge market-based tolls rather than tolls derived using the traditional cost-of-service approach. Federated Northern stated that it developed its market-based tolls in consultation with its shippers by assessing and balancing four key elements; namely, producer economics, market requirements, competition alternatives, and pipeline economics.

Federated Northern argued that, even in the face of competition from both Peace and NCPL, it was able to obtain signed PTAs for crude oil and NGL volumes totalling 5785 cubic metres per day, with agreement in principle for a further 1588 cubic metres of day. Federated Northern argued that this demonstrates that its proposed tolls are indeed market-based.

Federated Northern asserted that its proposed tolls are just and reasonable, within the meaning of section 62 of the Act, and non-discriminatory within the meaning of section 67 of the Act. Each shipper receiving a given type of service will pay the same unit toll, regardless of the volumes nominated for transportation.

Furthermore, Federated Northern stated that its proposal that Firm Transportation shippers receive lower tolls and preferred access over Dedicated Facility shippers who, in turn, receive lower tolls and preferred access over Uncommitted shippers was consistent with what the Board decided for Express Pipeline Ltd. ("Express") in its OH-1-95 Decision. In that decision, the Board was of the view that lower tolls, renewal rights, and preferred access for contract shippers are justified by the support those shippers provide for the financing of the pipeline and their sharing with Express of the risks associated with the pipeline.

In addition to the tolls for the above three service categories, any shipper tendering products for transportation at a truck terminal on an uncommitted basis would pay a terminalling fee of \$1.25 /m³. Federated Northern explained that shippers who have made a commitment to the pipeline would receive a benefit for their commitment by not paying this terminalling fee. Federated Northern also explained that the \$1.25 /m³ fee was market based as it was representative of other truck terminal fees in the marketplace.

Views of the Board

In view of the consultative process that Federated Northern has undertaken with its shippers to develop its proposed tolls, together with the transportation agreements that Federated Northern has been able to sign to date in a highly competitive market, the Board is satisfied that the proposed market-based tolling methodology is appropriate.

Concerning Federated Northern's proposal to give shippers who sign transportation agreements lower tolls and preferred access over uncommitted shippers, the Board continues to hold the view that lower tolls, renewal rights, and preferred access for contract shippers are justified by the support those shippers provide for the financing of the pipeline and their sharing of the risks associated with the pipeline.

4.2 Financial Matters

Federated Northern explained that its parent corporation, FPL, will provide the financing required to construct the pipeline through the use of its cash flow in excess of current requirements, drawings under existing credit facilities and the issuance of additional short and long-term debt, as required.

Federated Northern included an opinion from Scotia McLeod Inc. in its application which stated that FPL has the capacity to finance the construction of the pipeline while meeting all of its other existing and contemplated capital requirements.

Concerning the issue of financial risk, Federated Northern stated that it is prepared to assume the full risk associated with its tolls providing recovery of, and adequate return on, its invested capital.

Views of the Board

The Board has no concerns about FPL's ability to finance the proposed pipeline facilities.

4.3 Form of Regulation

For purposes of NEB toll and tariff regulation, Federated Northern applied for an order designating it as a Group 2 company. Federated Northern considered the Group 2 method of regulation to be the most appropriate since transportation tolls would be subject to commercial agreements between Federated Northern and its shippers and therefore cost-of-service information would not be required. In addition, Federated Northern maintained that the competitive environment, as evident from proposed competing pipeline applications, will ensure that tolls will be "just and reasonable". Federated Northern argued that its proposed tolling methodology and smaller rate base, in comparison to Group 1 companies, made Group 2 regulation more appropriate. Federated Northern also argued that Group 2 regulation is appropriate because competing pipeline companies, namely NCPL and Pouce Coupé, are regulated as Group 2 companies.

Views of the Board

Pursuant to the Board's Memorandum of Guidance on the Regulation of Group 2 Companies that was issued on 6 December 1995, the financial regulation of Group 2 companies is carried out on a complaint basis, with a consequential reduction in financial reporting requirements. The Board finds the Group 2 complaint-basis of regulation to be acceptable for Federated Northern. The Board notes that the Applicant has included in its Tariffs the explanatory note set out in Schedule B of the Memorandum of Guidance indicating that persons who cannot resolve traffic, toll and tariff issues with the Company may file a complaint with the Board.

As it is the Board's normal practice to deal with the tolls and tariffs of Group 2 companies under paragraph 60(1)(a) of the NEB Act, the Board does not consider it necessary to issue an order approving Federated Northern's proposed tolls and tariffs. Federated Northern will, however, be required to file its final tolls and tariffs with the Board prior to the commencement of operation and will be required to file annual audited financial statements in accordance with paragraph 5(2)(b) of the *Oil Pipeline Uniform Accounting Regulations*.

4.4 Common Carrier Obligations

Section 71 of the Act provides:

71(1) Subject to such exemptions, conditions or regulations as the Board may prescribe, a company operating a pipeline for the transmission of oil shall, according to its powers, without delay and with due care and diligence, receive, transport and deliver all oil offered for transmission by means of its pipeline.

(2) The Board may, by order, on such terms and conditions as it may specify in the order, require the following companies to receive, transport and deliver, according to their powers, a commodity offered for transmission by means of a pipeline:

- (a) a company operating a pipeline for the transmission of gas; and
- (b) a company that has been issued a certificate under section 52 authorizing the transmission of a commodity other than oil.

(3) The Board may, if it considers it necessary or desirable to do so in the public interest, require a company operating a pipeline for the transmission of hydrocarbons, or for the transmission of any other commodity authorized by a certificate under section 52, to provide adequate and suitable facilities for

- (a) the receiving, transmission and delivering of the hydrocarbons pipeline,
- (b) the storage of the hydrocarbons or other commodity, and
- (c) the junction of its pipeline with other facilities for the transmission of the hydrocarbons or other commodity,

if the Board finds that no undue burden will be placed on the company by requiring the company to do so.

Subsection 71(1) generally reflects the common law interpretation of common carrier obligations in respect of oil pipelines. An oil pipeline must receive and transmit all oil offered for transmission by means of its pipeline, if the Board finds that no undue burden will be placed on the company by requiring the company to do so.

Further, section 67 of the act stipulates:

A company shall not make any unjust discrimination in tolls, service or facilities against any person or locality.

Taken together, sections 71 and 67 require an oil pipeline to offer service under the same terms and conditions to any party wishing to ship oil on its pipeline.

The common carrier obligations of an oil pipeline were recently set out by the Board in its decision in MH-4-96, an application for an order requiring Interprovincial Pipe Line Inc. to transport natural gas liquids for PanCanadian Petroleum Limited. In that decision, the Board stated:

As an oil pipeline, IPL is subject to a statutory obligation to "receive, transport and deliver all oil offered for transmission" on its pipeline. This statutory obligation, which is in the nature of a common carrier obligation, is limited only by two factors. Firstly, the company is only obligated to act "according to its powers" which means the powers devolved upon the company by statute law and by its corporate constitution. Secondly, the obligations of an oil pipeline are limited, for practical purposes, by its published tariffs. However, since the obligations of an oil pipeline company to receive, transport and deliver oil are statutory obligations, no provision in the company's tariffs may detract from those obligations which are imposed by the NEB Act.

Federated Northern submitted that, although long-term committed shippers would receive lower tolls and preferred access to its pipeline, this does not constitute unjust discrimination within the meaning of section 67 of the Act. The Company referenced the Board's decision in the Express pipeline proceeding in which the Board held that "lower tolls, renewal rights and preferred access for contract shippers are justified by the support those shippers provide for the financing of the pipeline and their sharing with the pipeline of the risks associated with the pipeline." Federated Northern submitted that the differentiation with respect to tolls and service contained in the three types of pipeline transportation services is justified for these same reasons.

During cross-examination, Federated Northern stated that it will accept any volumes delivered to the proposed pipeline under the terms and conditions of the PTA. Federated Northern also stated that the tolls provided in the application are available to all shippers who wish to obtain transportation service on the proposed pipeline.

Federated Northern argued that there are existing facilities for the receipt of all products to access its pipeline which are either owned by Federated Northern or affiliated companies, owned by other parties and Federated Northern has contracted for their use, or are owned by other parties and are operated as common carrier facilities under the provincial regulations. In addition, Federated Northern submitted that Federated Western, with whom the applicant has contractual arrangements, has made an Application to the B.C. authorities for approval to construct a crude oil truck terminal and a connecting pipeline which would enable shippers to access Federated Northern's system, should the Applicant be unable to guarantee access to its system via the third party common carrier facilities.

Dow Chemical Canada Inc. ("Dow") argued that each shippers has an equal opportunity to select the service arrangements offered by Federated Northern which best suits that shipper's business interests. Dow also noted that similar toll arrangements were approved by this Board for Express pipeline.

Imperial, Kinetic and Solex submitted that the Board should approve the application as the proposed pipeline will be an open-access common carrier pipeline.

NCPL argued that Federated Northern will not own any tankage in the Taylor crude storage area and does not control the pipelines from that area into its pumping station. NCPL further argued that Federated Northern essentially relies upon facilities additions to meet the requirements of subsection 71(1) of the Act.

Views of the Board

As articulated in the MH-4-96 decision, the Board is mindful of the need to ensure that there is open public access to oil pipelines under the Board's jurisdiction. Open public access is something which the Board must be assured of in granting authority to construct and operate any oil pipeline.

The Board has considered Federated Northern's pro forma Pipeline Transportation Agreement, draft tariffs, and arrangements for access and is satisfied that Federated Northern's proposed pipeline meets the common carrier obligations set out subsection 71(1) of the Act. Federated Northern has confirmed that it will accept any volumes delivered to the proposed pipeline under the terms and conditions of the Pipeline Transportation Agreement. The Board is satisfied that the availability of other common carrier pipelines, along with the arrangements Federated Northern has made with other parties, will allow any shipper wishing to ship its volumes on the pipeline full and open access to the line.

The Board further finds that the granting of secure access to shippers supporting the pipeline through long-term transportation agreements does not constitute unjust discrimination under section 67 of the Act. At the same time the Board notes that its statutory powers cannot be constrained by contracts and it retains its jurisdiction to protect the public interest in future proceedings.

Chapter 5

Facilities

5.1 Pipeline

The proposed pipeline consists of a 171.7 km (275 miles) 273.1 mm (10.75 inch) outside diameter pipeline originating at Taylor and terminating at a point of connection near Belloy to the recently approved but unbuilt, FPL pipeline. This FPL pipeline is wholly situated in Alberta and is referred to as the Dunvegan to Judy Creek Pipeline. Figure 5-1 illustrates the layout of the proposed pipeline and associated facilities.

The pipeline originates at the Taylor Complex where products for shipment would be collected in the Federated Western crude oil storage and in the NGL and condensate storage at the Solex straddle plant. The pipeline would also receive crude oil and condensate at a truck terminal near Spirit River. At the Belloy junction, a metering facility will be installed to measure volumes leaving the applied-for facilities and entering FPL's Dunvegan to Judy Creek Pipeline.

The new 273.1 mm outside diameter pipeline between Taylor and Belloy has a design capacity of 8250 m³/d at a maximum operating pressure of 9930 kPa. The minimum operating pressure of the pipeline is dictated by the vapour pressure of the ethane plus batches at 2200 kPa. The pipeline design includes nine remote operated block valves along the route for segment isolation. Three river crossings would have check valve and block valve sites located such that the river crossing segments could be isolated. Federated Northern proposes to directional drill nine watercourse crossings during the construction of the pipeline, including the crossing of the Peace River. The pipeline would have scraper pig sending traps installed at the Taylor Pump Station and the Bonanza Pump Station. Scraper pig receiving traps would be installed at the Bonanza Pump Station and the Belloy meter site.

5.2 Pump Stations

Mainline pumping facilities would be located at the origin of the pipeline, in Taylor, and at the intermediate pump station near Bonanza. Both pump stations will consist of a 1500 kW primary pump and a 1500 kW standby pump. The pumping units will consist of electric driven variable speed motors powering centrifugal pumps. Supervisory control and data acquisition and radio communication would link all pump stations, metering stations and all remotely operated block valves to the existing Operations Centre in Calgary. Federated Northern stated that it had entered into a Management Agreement with Home Oil Company Limited ("Home") whereby Home would provide, or cause to be provided, the services and people required to operate the pipeline.

5.3 Truck Terminal

The truck terminal, located near Spirit River, Alberta, would have an initial receipt capacity of 1000 m³/d. The products to be received at the truck terminal are crude oil and condensate. Four truck docks are proposed at the truck terminal to permit truckers to automatically unload products. The truck terminal will include two storage tanks each 1650 m³ in capacity. Aggregated volumes would be

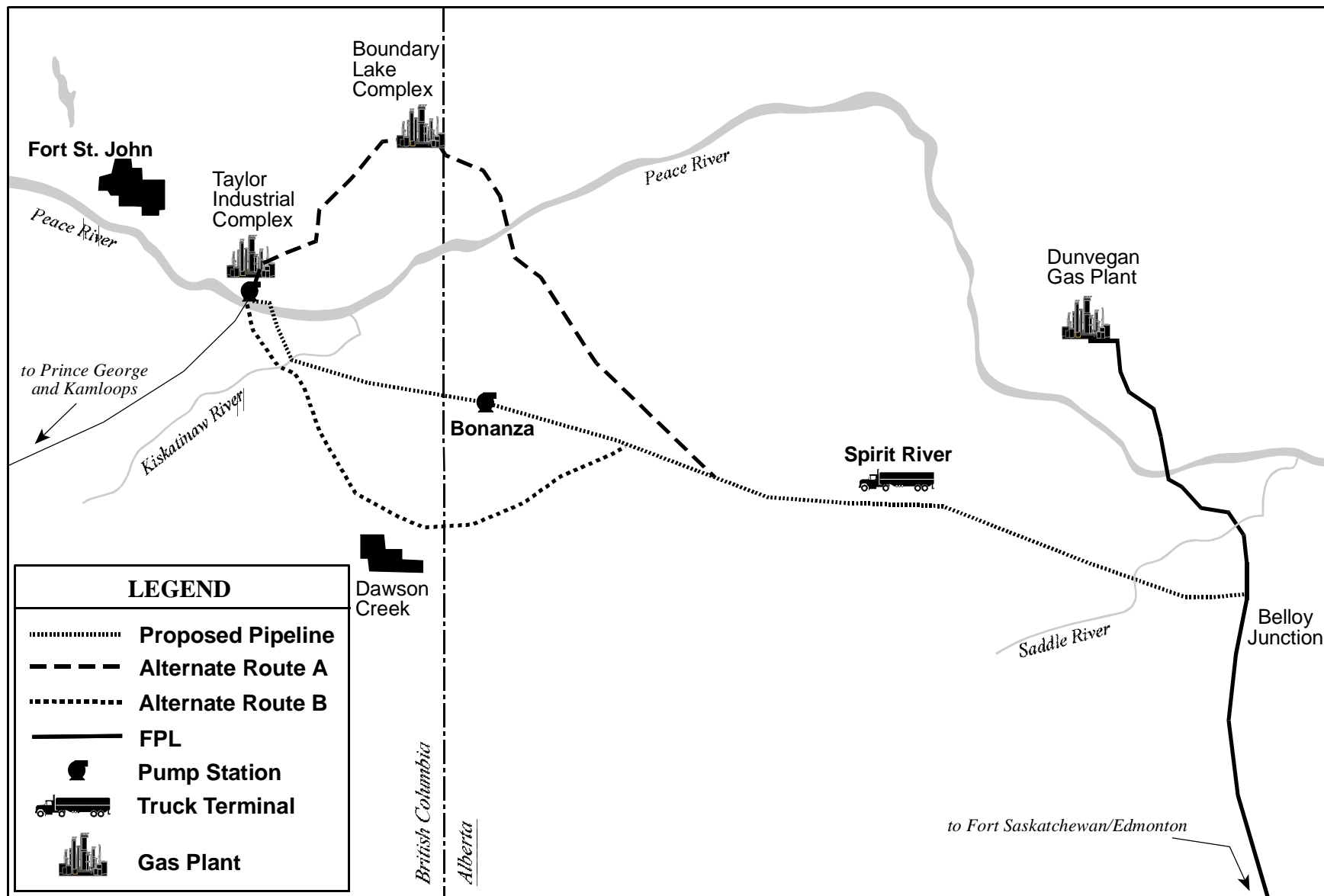
injected into compatible batches in the pipeline. The injection pump station will consist of booster pumps, metering facilities and injection pumps.

Views of the Board

The Board is satisfied that the pipeline, pump stations, truck terminal and associated facilities are appropriate for the purposes of the proposed service. The Board is satisfied that the designs for the foregoing facilities are safe, and that construction will be adequately monitored to ensure that all standards and design requirements are met.

The Board is of the view that Federated Northern has made appropriate arrangements for the operation of the proposed pipeline. The Board notes that Federated Northern agreed during the hearing to file with the Board a copy of the Management Agreement between Federated Northern and Home prior to placing the applied-for facilities in service.

Figure 5-1
Federated Northern - Proposed Facilities and Alternative Routes



Chapter 6

Public Consultation, Environment, Socio-Economics, Land and Right-of-Way

6.1 Public Consultation, Environmental and Socio-Economic Matters

The Board completed an Environmental Screening Report pursuant to the CEAA and the Board's own regulatory process. The Board circulated the Screening Report to those federal agencies that had provided specialist advice on the proposed project, to those parties that had requested a copy, and to the Applicant.

The Board has considered the Environmental Screening Report and comments received on the report in accordance with Hearing Order OH-3-96. The Board is of the view that, taking into account the implementation of the proposed mitigative measures, and those set out in the attached conditions, Federated Northern's proposal is not likely to cause significant adverse environmental effects. This represents a decision pursuant to paragraph 20(1)(a) of the CEAA.

The comments received, and the Board's views, have been attached to the Environmental Screening Report as Appendices I and II of the Screening Report respectively. Copies of the Board's Environmental Screening Report are available upon request from the Board's Regulatory Support Office.

6.2 Land and Right-of-Way Matters

6.2.1 Routing

6.2.1.1 Route Selection Criteria

The Taylor to Belloy pipeline project will be a buried pipeline approximately 171 km in length within an 18 m wide right-of-way. Approximately 130 km would parallel existing right-of-way, while approximately 41 km of new right-of-way, as defined under the CEAA, would be required.

Federated Northern submitted that the selection of the proposed route was based on the following criteria:

(a) Construction/Operation Criteria

- (i) tie-in points;
- (ii) construction/operational difficulties;
- (iii) access; and
- (iv) future system expansion.

(b) Biophysical Criteria

- (i) fish and wildlife;
- (ii) areas of high environmental sensitivity; and
- (iii) areas of unstable/uncertain terrain stability.

(c) Land Use Criteria

- (i) land uses;
- (ii) historical resources;
- (iii) use of existing corridors; and
- (iv) public/regulatory input

For the purposes of route selection, the study area was initially considered to be three corridors, all of which utilize existing linear disturbances for a significant length. Extensive routing outside of this designated project area was not considered practical from an economic perspective, nor warranted from an environmental perspective.

Federated Northern submitted that initial route selection was largely influenced by the following factors:

- maximizing use of existing corridors (rights-of-way, seismic corridors, etc.);
- approaching major watercourses within stable channel reaches and preferably adjacent to existing right-of-way watercrossings;
- positioning of above-ground facilities at existing all-weather access; and
- minimizing overall line length.

6.2.1.2 Preferred Route

Federated Northern considered three route alternatives in its application. These are illustrated in Figure 5-1. The preferred route traverses land primarily used for agricultural purposes. Cultivated and hay land covers approximately 64% of the route, while rangeland and pasture covers 5%, and forested or wooded land covers the remainder.

Federated Northern submitted that it has actively consulted with landowners along the preferred route to identify any concerns they may have with respect to future land use. Federated Northern stated that generally, landowners have agreed with its plans to parallel existing rights-of-way. However, in instances where no right-of-way was present, routing that would minimize impacts to future land use was identified. Federated Northern submitted that during the Early Public Notification process it became aware of minor routing issues which were subsequently resolved by minor revisions to the preferred route. The revisions were reflected in Federated Northern's application.

As part of its Early Public Notification program, Federated Northern held public meetings in the vicinity of its proposed pipeline routes. Federated Northern submitted that no objections to the pipeline were expressed at any of the public meetings and that it is unaware of any outstanding issues, other than compensation for right-of-way. Federated Northern noted that it has obtained the consent of almost every landowner to the issuance of a Certificate with respect to the applied-for facilities. Federated Northern also noted that consents have been received from all occupants of Crown lands.

Federated Northern noted, however, that the selected route traverses an active gravel pit operation managed by the Province of British Columbia and that on the boundaries of the gravel pit operation, a private landowner also has gravel that is available for extraction. Concerns related to gravel sterilization and future land use and have been raised by both parties. Federated Northern noted that it is finalizing the measures that will be taken to resolve these concerns and has undertaken to resolve these concerns prior to any land acquisition for the aggregate resource area.

Views of the Board

The Board is satisfied with the route selection criteria adopted by Federated Northern as well as Federated Northern's approach in applying those criteria in the determination of the proposed pipeline route. The Board finds the general route proposed to be acceptable. With respect to concerns related to aggregate resources through which the preferred route will pass, the Board notes Federated Northern's undertaking to resolve these concerns prior to land acquisition and the Board will condition any Certificate granted accordingly.

6.2.2 Land Requirements

Federated Northern submitted that it intends to acquire an 18 m right-of-way and 3 to 8 m of temporary workspace on portions of the pipeline traversing agricultural lands. On forested lands, temporary workspace would be utilized as necessary to accommodate temporary topsoil or timber storage during construction. Additional temporary workspace would be required at all road, railway, pipeline and watercourse crossings. Federated Northern noted that, although temporary workspace requirements have not been identified to date, previous experience in similar terrain has indicated that temporary workspace requirements are typically 6 to 8 percent of total right-of-way area. Federated Northern further submitted that an application will be made to the Ministry of Environment, Lands and Parks for a Licence of Occupation for the right-of-way within British Columbia, and an application will be made to Alberta Environment Protection for a Pipeline Lease Agreement for right-of-way within Alberta.

With respect to land requirements for associated facilities, Federated Northern submitted that a 47.5 m by 100 m site within the Taylor Industrial Park is required for the Taylor facilities; an 80 m by 60 m site within an agricultural area is required for the pump station near Bonanza; and a 100 m by 140 m site is required for the truck terminal at Spirit River.

6.2.3 Access Development

Federated Northern submitted that the entire pipeline corridor is accessible by existing all-weather roads. No additional access is planned in support of the pipeline. Once constructed, routine pipeline maintenance activities would not require access down the proposed right-of-way since above-ground facilities would be located adjacent to existing all-weather access roads.

Views of the Board

The Board finds that Federated Northern's anticipated land requirements for pipeline construction, installation, access, and operation are reasonable and justified.

Chapter 7

Disposition

The foregoing chapters constitute our Reasons for Decision in respect of the application considered by the Board in the OH-3-96 proceeding. The Board is satisfied from the evidence that the applied-for facilities are and will be required by the present and future public convenience and necessity. The Board is also of the view that the design and location of the applied-for facilities are satisfactory to ensure their safe and environmentally sound construction and operation. The Board will recommend to the Governor in Council that a Certificate be issued, subject to the conditions set out in Appendix I of these Reasons for Decision.

A. Côté-Verhaaf
Presiding Member

K.W. Vollman
Member

J.A. Snider
Member

Appendix I

Proposed Certificate Conditions

General

1. Unless the Board otherwise directs:
 - (a) Federated Northern shall cause the approved facilities to be designed, manufactured, located, constructed and installed in accordance with those specifications, drawings and other information or data set forth in its application, or as otherwise adduced in evidence before the Board, except as varied in accordance with subsection (b) hereof; and
 - (b) Federated Northern shall cause no variation to be made to the specifications, drawings or other information or data referred to in subsection (a) without the prior approval of the Board.
2. Unless the Board otherwise directs, Federated Northern 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 or as otherwise adduced in evidence through the application process.
3. Unless the Board otherwise directs, Federated Northern shall adhere to the construction schedule as described in the Application.

Pre-Construction

4. Unless the Board otherwise directs, Federated Northern shall, at least fourteen days prior to the commencement of construction of the approved facilities, file with the Board:
 - (a) a detailed construction schedule or schedules identifying major construction activities;
 - (b) Federated Northern's field joining program;
 - (c) Federated Northern's construction safety manual.
5. Unless the Board otherwise directs:
 - (a) Federated Northern shall, at least fourteen days prior to the commencement of construction of the approved facilities, file with the Board a copy of the spring and summer Rare Plant surveys; and
 - (b) notwithstanding condition 4(a), a summer rare plant survey is not required for right-of-way and temporary workspace utilized for directionally drilled watercourse crossings.

6. Unless the Board otherwise directs, Federated Northern shall, at least fourteen days prior to the commencement of construction of the approved facilities:
 - (a) file with the Board a copy of the Historical Resources Impact Assessment ("HRIA") and a copy of the Archaeological Impact Assessment ("AIA");
 - (b) serve the HRIA on Alberta Community Development, and serve the AIA on the British Columbia Ministry of Small Business, Tourism and Culture;
 - (c) seek the opinion of each provincial agency described in (b) above concerning the acceptability or non-acceptability of the respective assessments; and
 - (d) advise the Board of the respective opinions of each provincial agency described in subsection (b) above, including any concerns, recommendations and/or requirements.
7. Unless the Board otherwise directs, Federated Northern shall file with the Board, at least fourteen days prior to commencement of directional drilling at any watercourse crossing, a contingency plan covering the detection, control and handling of any inadvertent drilling fluid migration.
8. Unless the Board otherwise directs, Federated Northern shall, at least fourteen days prior to commencing the directional drill of the Peace River, file with the Board its detailed directional drill plan for the Peace River crossing.
9. Unless the Board otherwise directs, Federated Northern shall, prior to the commencement of construction, demonstrate to the satisfaction of the Board that it has acquired the necessary land rights for the aggregate resource areas.

During Construction

10. Unless the Board otherwise directs, Federated Northern shall avoid all raptor nests.
11. Unless the Board otherwise directs, Federated Northern shall directionally drill the Peace River crossing.
12. Unless the Board otherwise directs, Federated Northern shall maintain an information file in the construction office(s), which include copies of permits or authorizations which contain environmental conditions.
13. Unless the Board otherwise directs, Federated Northern shall, during construction, maintain at each construction site, a copy of the welding procedures and non-destructive testing procedures used on the project together with all supporting documentation.
14. Unless the Board otherwise directs, Federated Northern shall file with the Board, at least 14 days prior to the commencement of seeding, a description of the composition of the final seed mixes.

15. Federated Northern shall, at least fourteen days prior to the commencement of pressure testing of the approved facilities, submit to the Board for approval its pressure testing manual.

Post Construction

16. Unless the Board otherwise directs, Federated Northern shall, at least thirty days prior to placing the approved facilities in service, submit to the Board for approval its Emergency Response Plan.
17. Unless the Board otherwise directs, Federated Northern shall, prior to placing the approved facilities in service, file with the Board its operation and maintenance manuals.
18. Unless the Board otherwise directs, Federated Northern shall, within three months after the commencement of operation of the pumping facilities, file with the Board, comprehensive sound level surveys indicating whether post construction noise levels resulting from all equipment operating at full power are in accordance with the noise levels as predicted within Federated Northern's assessment and in accordance with the Alberta Energy and Utilities Board Noise Control Directive (Interim Directive ID-94).
19. Unless the Board otherwise directs, Federated Northern shall within one year after the commissioning of the pumping facilities, file with the Board a status report of any noise complaints received as a result of pumping operations, including the mitigative measures Federated Northern would undertake to address those complaints.
20. Unless the Board otherwise directs, Federated Northern shall file with the Board a post-construction environmental report within six months of the date that each approved facility is placed in service. 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) provide a description of all minor amendments to practices, procedures and recommendations which have been implemented during the construction process;
 - (b) indicate the issues resolved and those unresolved; and
 - (c) describe the measures Federated Northern proposes to take in respect of the unresolved issues.
21. Unless the Board otherwise directs, Federated Northern shall file with the Board, on or before the 31 December that follows each of the first two complete growing seasons following the filing of the post-construction environmental report referred to in Condition 20:
 - (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 Federated Northern proposes to take in respect of any unresolved environmental issues.

22. Unless the Board otherwise directs prior to 31 December 1998, this certificate shall expire on 31 December 1998 unless the construction and installation with respect to the applied for facilities has commenced by that date.