

ALBERTA ENERGY AND UTILITIES BOARD

Calgary, Alberta

**PEACE PIPE LINE LTD., APPLICATION TO CONSTRUCT
AND OPERATE A LOW VAPOUR PRESSURE/CRUDE
OIL PIPELINE AND RELATED FACILITIES**

**FEDERATED PIPE LINES LTD., APPLICATION TO
CONSTRUCT AND OPERATE A HIGH VAPOUR
PRESSURE/CRUDE OIL PIPELINE AND RELATED
FACILITIES, AND AN APPLICATION TO REVERSE
FLOW OF HIGH VAPOUR PRESSURE PIPELINES AND
CONSTRUCT INTERCONNECTING HIGH VAPOUR
PRESSURE PIPELINES BETWEEN JUDY CREEK,
SWAN HILLS, NAMAQ AND FORT SASKATCHEWAN**

**NOVAGAS CLEARINGHOUSE LTD., APPLICATION
TO CONSTRUCT AND OPERATE A HIGH VAPOUR
PRESSURE PIPELINE AND RELATED FACILITIES**

**Decision D 96-13
Applications No. 960198, 960621,
960627 and 960622**

1 INTRODUCTION

1.1 Background

In December 1995, Peace Pipe Line Ltd. (Peace) applied to the Alberta Energy and Utilities Board (the Board) for approval to construct a low vapour pressure (LVP)/crude oil pipeline and related facilities from La Glace to Valleyview. Following receipt of a number of interventions expressing concern about the application, the Board directed that it be considered at a public hearing scheduled for August 1996. In April/May 1996, Federated Pipe Lines Ltd. (Federated) and Novagas Clearinghouse Ltd. (NCL) also applied to the Board for approval to construct high vapour pressure (HVP) pipelines and related facilities in northwestern Alberta, including certain areas in the vicinity of the Peace system. The Board held a pre-hearing meeting on 11 July 1996 to consider the scope of matters and potential issues related to the August 1996 hearing respecting the Peace application. After consideration of the submissions presented at the pre-hearing meeting, the Board decided that the Peace, Federated, and NCL proposals might be of a competitive nature, and that they should accordingly be considered jointly at a public hearing. Consequently, the Board rescheduled the August 1996 hearing to 23 September 1996 to allow time for information requests and responses respecting the various proposals. A Memorandum of Decision (Application No. 960198) dated 23 July 1996 dealt with the various matters arising from the pre-hearing meeting.

1.2 Applications

Pursuant to Part 4 of the *Pipeline Act*, the applicants applied to the Board as follows:

Application No. 960198 — Peace applied for approval to construct and operate approximately 149 kilometres (km) of 323.9-millimetre (mm) outside diameter (OD) LVP/crude oil pipeline and related facilities from the existing La Glace pump station and truck terminal in Legal Subdivision 9, Section 7, Township 73, Range 8, West of the 6th Meridian to the existing Valleyview pump station and truck terminal in LSD 12-10-69-22 W5M. The proposed pipeline was designed to accommodate potential HVP service.

Application No. 960621 — Federated initially applied for approval to construct approximately 275 km of maximum 323.9-mm OD HVP pipeline and related facilities from the existing Dunvegan gas plant in LSD 15-3-81-4 W6M to an existing pipeline tie-in point in LSD 8-25-64-11 W5M near Judy Creek, but later amended its application to change pipe size and include crude oil transportation in the proposed pipeline. The pipe size changes involved a reduction in diameter from 273.1 mm to 219.1 mm for the portion of the pipeline between the Dunvegan Plant and Belloy Junction, and an increase in diameter from 273.1 mm to 323.9 mm for the portion between Belloy Junction and Judy Creek.

Application No. 960627 — Federated applied for licence amendments to reverse the flow of existing HVP pipelines and construct interconnecting HVP pipelines between Judy Creek, Swan Hills, Namao, and Fort Saskatchewan.

Application No. 960622 — NCL initially applied for approval to construct approximately 940 km of maximum 323.9-mm OD HVP pipeline and related facilities from the Chinchaga area in LSD 1-24-96-5 W6M to a proposed fractionation facility in the Redwater area. It later amended the application to delete the Meikle lateral from LSD 1-24-96-5 W6M to 1-13-78-26 W5M, and to add the Hamburg Extension from the existing Hamburg gas plant in LSD 13-29-96-11 W6M to LSD 15-7-88-12 W6M, reducing the total length of the proposed pipeline to 825 km.

The proposed pipeline routes are shown on the attached map.

1.3 Related Applications

The Board was advised at various stages of the application and hearing process that the projects applied for were related to certain other facilities which are the subject of separate applications before the Board or other regulatory agencies.

Peace indicated at the hearing that it was in the process of reaching a business agreement whereby Morrison would apply to B.C. regulatory bodies for an approval to build a pipeline which would cross the Peace River to connect at Taylor, B.C. with Morrison's existing 114.3-mm OD pipeline running to Dawson Creek.

Federated, in its amended application, signalled its intention to apply to the National Energy Board (NEB) for a HVP connector pipeline from Taylor to Belloy.

In NCL's pipeline application, it signalled its intention to apply to the NEB for a HVP connector pipeline from the Fort St. John area to a tie-in point on the Clear Hills lateral near Boundary Lake. In conjunction with its pipeline application, NCL also filed an additional application with the Board for a fractionation plant at Redwater.

During the course of the hearing, NCL advised that it had also filed an application with the Board for LVP/HVP pipelines from its existing Redwater storage facility to its proposed fractionation plant.

1.4 Hearing

The applications of Peace, Federated, and NCL were considered at a public hearing in Calgary, Alberta on 23 September 1996 to 8 October 1996 with Board Members B. T. McManus, Q.C., Dr. B. F. Bietz, P.Biol., and Acting Board Member E. G. Fox, P.Eng. sitting.

THOSE WHO APPEARED AT THE HEARING

Principals and Representatives (Abbreviations used in report)

Witnesses

Peace Pipe Line Ltd. (Peace)
F. R. Foran, Q.C.
L. M. Sali, Q.C.
S. C. Lee

W. R. Stedman
F. E. Webb, P.Eng.
W. Seth, P.Eng.
R. Hildahl
R. B. Michaleski
D. C. Blackadar, P.Eng.

Federated Pipe Lines Ltd. (Federated)
R. M. Perrin

R. H. Seager
R. C. Osborne
K. W. Murchie, P.Eng.
B. Peterson
G. M. Engbloom, P.Eng.

Novagas Clearinghouse Ltd. (NCL)
A. S. Hollingworth
D. Wood

B. F. Olson
W. J. Rousch, P.Eng.
R. J. Findlay, P.Eng.
Dr. G. Lermer
B. Blair
N. T. Stewart, P.Eng.
M. A. Hantzsch, P.Eng.
D. M. Chappell, P.Eng.
R. W. McKay, P.Eng.

Principals and Representatives
(Abbreviations used in report)

Witnesses

Alberta Natural Gas Company Ltd. (ANG)

A. G. Menzes

Amoco Canada Petroleum Company Ltd. (Amoco)

B. Toff

Anderson Exploration Ltd. (Anderson)

L. D. Horne

J. Yaremko

Chevron Canada Resources (Chevron)

J. Ballem, Q.C.

K. S. Archibald

Crestar Energy Inc. (Crestar)

M. Bonli

Dow Chemical Canada Inc. (Dow)

K. F. Miller

S. D. Palmer-Plunkett

Rainbow Pipe Line Company, Ltd. (Rainbow)

K. F. Miller

S. D. Palmer-Plunkett

D. D. Gregor

P. M. Marreck, P.Eng.

D. J. Hawkins, Ph.D., P.Eng.

Gulf Canada Resources Limited (Gulf)

B. C. van Schaayk

Imperial Oil Limited (Imperial)

H. R. Ward

D. D. Armstrong

R. N. McLean

Morrison Petroleum Ltd. (Morrison)

R. G. Panchuk

Petro-Canada

S. R. Miller

B. Pepper

R. Steffensen

Rigel Oil & Gas Ltd. (Rigel)

D. Shantz

Principals and Representatives
(Abbreviations used in report)

Witnesses

Suncor Inc. (Suncor)

R. J. Hall
T. Braun

Alberta Energy and Utilities Board (Board)

R. D. Heggie
S. C. Lee, P.Eng.
T. J. Pesta, P.Eng.
A. R. Burrowes
I. P. Dowsett
P. K. Ferensowicz
D. D. Fraser
M. Jobin
L. Philp
N. Ramdin

The following parties filed submissions, but did not participate in the hearing:

- Alberta Agriculture, Food and Rural Development (Alberta Agriculture)
- Alberta Environmental Protection (AEP)
- Canadian Hunter Exploration Ltd. (CHEL)
- Canadian Natural Resources Limited (CNRL)
- Confederation of Regions Political Party (Confederation)
- Numac Energy
- Ocelot Energy Inc. (Ocelot)
- PanCanadian Petroleum Limited (PCP)
- Talisman Energy Inc.

2 ISSUES

In its review of pipeline applications, the Board must consider various matters which, amongst other things, include any public-interest issues of a social, economic, or environmental nature, any issues relating to safety and risk, any issues regarding compliance with various technical standards and requirements concerning construction, operational and maintenance practices, and any issues relating to pipeline routing or landowner/occupant concerns. These issues must be satisfactorily addressed before the Board will consider approving an application.

The Board must also consider the need for a pipeline, particularly in light of subsection 5(a) of the *Pipeline Act* which provides that the Board may examine any matter relating to "the economic, orderly, and efficient development in the public interest of pipeline facilities in Alberta". In reviewing this question, the Board may consider production volumes, reserve forecasts, and shipper commitments. The Board may also consider, in certain situations, proliferation of facilities and the operation of market competition.

In this decision the Board will deal, firstly, with the various issues other than need and then, secondly, with the question of need and whether or not, in the circumstances of this case, it is appropriate to rely on market competition.

3 GENERAL MATTERS

3.1 Views of the Applicants

Peace, Federated, and NCL filed detailed applications which described the technical, social, economic, and environmental aspects of their respective projects. Likewise, all three applicants filed Conservation and Reclamation reports with Alberta Environmental Protection (AEP). The three applicants responded to Board deficiency statements and also participated in an interrogatory process, which provided for a detailed exchange of information between applicants, the Board, and interveners. None of the applicants argued that there were any overriding public-interest issues of a social, economic, or environmental nature to justify denial of any of the applications. All of the applicants were satisfied that their respective applications were technically complete and met the Board's regulatory requirements.

3.2 Views of the Intervenors

All of the interveners at the proceeding were industry participants. Intervenors questioned the need for each individual project focusing on volume, shipper commitment, tolls and tariffs, tolling methodology, the potential for pipeline proliferation and underutilization, project economics, and the general question of market competition. However, no intervener specifically challenged any of the applications on the basis of failing to meet technical standards and requirements. As well, none of the interveners attempted to raise any overriding social, economic, or environmental public-interest issue which would result in any application being denied.

3.3 Views of the Board

The Board notes the extensive written material filed with the actual applications, with the deficiency and interrogatory responses, and during the course of the hearing. As well, the Board notes the extensive record developed during the 11 days of testimony, cross examination, and oral argument.

The Board notes, with respect to environmental issues, that all required Conservation and Reclamation applications associated with the pipeline proposals have been filed with AEP and that AEP did not file any submission with the Board or attend the hearing to raise any specific concerns. The Board expects that the respective applicants will satisfy all of AEP's regulatory requirements and obtain all applicable AEP environmental approvals prior to the commencement of construction.

With respect to design and operational practice, the Board is satisfied all of the proposed facilities are designed to meet the material and construction specifications for HVP service. The Board does note that the Peace and Federated proposals would involve the use of certain existing pipelines which have, in the past, experienced operational failures. However, after considering the evidence, the Board is satisfied that these pipelines have been repaired, adequately pressure tested, and meet the Board's requirements for the proposed service.

The Board notes that either Peace or Federated will be required to make application should they wish to subject their existing pipelines to operating pressures greater than those currently licensed for. Furthermore, the Board expects Peace to seek Board approval for any change to its operations resulting in an increase in the pressure profile.

The Board notes that all of the applicants have indicated that they have assessed the risks and the consequences associated with a potential release of product from their proposed pipelines and they have confirmed that the risks and consequences are within acceptable limits. The applicants have also indicated that they are familiar with the requirement to have an Emergency Response Plan (ERP) in place prior to the start-up of their proposed facilities. The Board further notes that no specific concern was raised regarding these issues by any intervener. The Board is satisfied that there are no outstanding issues related to public safety or risk.

The Board accepts Peace's confirmation that there are no outstanding land-related issues with respect to its application. The Board notes that landowner/occupant objections were filed with respect to the NCL and Federated applications pursuant to AEP and EUB public advertising. The Board notes that a notice of hearing was sent to those landowners and occupants who had expressed land-related concerns to the Board about the Federated and NCL applications, and that these individuals were also orally notified of the hearing. The Board notes that no landowner or occupant attended the hearing to raise any specific concern. The Board expects that NCL and Federated will make a reasonable attempt to resolve any outstanding landowner/occupant objections prior to the commencement of construction. Subject to the foregoing, the Board is satisfied that there are no apparent or outstanding land issues with any of the proposed pipelines.

Based on the foregoing findings, the Board is satisfied that all of the applications are technically complete and meet the Board's regulatory requirements. The Board is also satisfied that there are no public-interest issues of a social, economic, or environmental nature which would prevent approval of the applications.

4 NEED AND MARKET COMPETITION

Given the conclusions reached in the foregoing section, the Board considers that only one fundamental issue remains to be canvassed - the question of whether there is need for one or more of the proposed pipelines. In addressing this issue, the Board will deal with the related question of market competition.

4.1 Views of the Applicants

4.1.1 Peace

Peace stated that the need for its proposed expansion arises from increased volumes being delivered to its system from the Deep Basin area of Alberta. Peace believed that there was a need to support continued development in the area, but the increased volumes have resulted in a bottleneck in the existing Peace system between La Glace and Fox Creek. Peace stated that its proposal is designed to resolve this present capacity constraint and to also put in place facilities which will be required to serve the anticipated needs of its existing service area. The proposed development would increase capacity by 10,000 cubic metres per day (m^3/d) and, at the same time, result in power cost savings of up to \$1.8 million per year.

Peace advised it was currently trucking volumes between La Glace and Valleyview because of capacity constraints on its Deep Basin pipeline and stated that its proposed expansion would reduce the need for trucking and eliminate the risk of future apportionment between producers shipping on the Peace system. Peace's producer forecasts, which were supported and supplemented by McDaniel & Associates Consultants Ltd., indicated that future volumes would exceed the capacity of the Deep Basin pipeline by as much as 5,000 m^3/d . Peace justified its desire to expand its capacity by 10,000 m^3/d by noting that it could achieve this additional capacity with very little incremental capital cost.

Peace also submitted that transportation reliability and product quality would be improved by its proposal. This would occur because separation of the transportation of crude oil and natural gas liquids (NGLs) would be increased by the use of two separate lines. This would reduce the risk of total shut-in due to operational problems in the southern trunkline and the Deep Basin pipeline. Peace indicated that it had considered other options to increase capacity on the Deep Basin pipeline and believed that the best solution was its proposed expansion, rather than increasing line pressure or flow rate on its existing system. These other options would require significant capital expenditures downstream of Fox Creek.

Peace indicated that shippers on the entire Peace system would likely realize lower tolls as a result of increased throughput originating in the Deep Basin and beyond. Because the Deep Basin expansion would utilize existing spare capacity on the rest of the system, all of Peace's shippers would be entitled to share in any incremental throughput benefits. Peace further noted that all Peace shippers, both existing and future, would be protected from toll increases related to the expansion for a period of ten years by a mechanism referred to as the Downside Protection Plan. Peace considered this plan an extremely significant aspect of its application. It stated that the major risk of the project was that volumes might fail to materialize either because of

reservoir performance or from competitive pressures from other transportation alternatives. Peace indicated that it would insulate its customers from this risk and would ensure that tariffs did not increase from existing levels because of the expansion.

Peace noted that in the Memorandum of Decision, the Board considered that the Peace, Federated, and NCL proposals might be of a competitive nature and, as a result, chose to set all three applications down to be heard jointly. From this Peace concluded that it should be able to demonstrate to the Board its capability to transport volumes from Taylor, BC to Edmonton. To that end, Peace, Pouce Coupé Pipe Line Ltd. (Pouce Coupé), and Morrison had entered into an arrangement whereby Morrison was to apply in B.C. for approval to cross the Peace River to connect Taylor with the Morrison existing 114.3-mm OD line running to Dawson Creek. At Dawson Creek, the existing Morrison line would be tied into the existing Pouce Coupé system, which transported volumes across the Alberta/B.C. border to the Peace system. The Morrison to Pouce Coupé and Pouce Coupé to Peace connections would be able to handle crude oil, condensate, NGLs, and ethane. Peace stated that its total tariff from Taylor to Edmonton would be competitive with all transportation alternatives. Peace stated all of this could be accomplished without having to make application to the NEB for approval to construct an interprovincial pipeline. Peace noted that by establishing the Morrison connection, it had demonstrated that it could respond to competition in an effective and timely manner.

Peace argued that Federated had not provided any evidence to demonstrate that its application was in the public interest or to justify any portion of its proposed pipeline. Peace noted that Federated was able to file very little evidence of shipper support. In an effort to procure support for its project, Federated adopted a six-week open season during which shippers could commit potential volumes. Peace noted that Federated's sole evidence of shipper support included undisclosed preliminary results of Federated's open season and Imperial's agreement to pay a commodity charge. Peace argued that this provided insufficient evidence to allow the Board to approve the proposed Federated pipeline.

Peace noted that Federated did not consider a shorter pipeline connection from Dunvegan to Valleyview because it was under the misapprehension that Peace's northern trunk line downstream of Valleyview was not licensed to transport HVP products. Peace emphasized that it was so licensed.

It appeared to Peace it was only when Federated became aware that another pipeline system would be capable of accessing Taylor volumes with minimal capital investment that Federated responded with an amendment to its application. The amendment included changes in pipeline OD and the addition of crude oil. Federated also signaled its intention to file a connection pipeline application with the NEB. Peace stated that this was largely a defensive measure to protect its shareholders' interests in the Federated West pipeline system.

Peace speculated that "uncommitted shippers", as referenced in Federated's tariff document, would bear the risk of underutilization on Federated's proposed pipeline should Federated fix their tolls annually, as planned. It indicated there was absolutely no assurance that shippers with five-year contracts would not also face dramatic increases in tolls upon expiry of their contracts.

Peace further noted that Federated had refused to provide cost and tolling information for its existing system in order to enable the Board to assess if there would be any cross-subsidization by Federated's existing system users.

Peace stated that the Federated application must be viewed in the context of its ownership structure, and noted that Federated was jointly owned by Imperial and Anderson. Peace indicated that the Board should view Imperial's evidence as coming from a major shareholder of Federated, and that in light of Peace's Downside Protection Plan, Imperial's real motive for intervening was not as a shipper on Peace, but as a competitor to Peace.

With respect to the NCL proposal, Peace argued that the current production from northwestern Alberta did not offer sufficient economic justification for the NCL application. Peace submitted that NCL had secured little if any commitment for its project, and had made no arrangements with area gas plant operators. Peace indicated that NCL appeared to be having difficulty securing volumes from B.C. and argued that, in any event, the Board should not approve a line in Alberta which relied so heavily on B.C. volumes. Peace submitted that if the Board were to find that additional pipeline is required to access reserves in northwestern Alberta, NCL should only be permitted to construct a pipeline from Hamburg to the Peace system near Gordondale.

In summary, Peace argued that if the Board were willing to approve only one application, then its application should be the one, and that it should be approved in a timely fashion in order to permit commencement of winter construction. Peace indicated that it could accept approval of the NCL pipeline, provided such approval did not limit the ability of Peace to compete for liquids volumes. Peace submitted, however, that the Board should reject the Federated application.

4.1.2 Federated

Federated stated that its proposed expansion would permit collection of crude oil, NGLs, and segregated condensate from proposed connections into Taylor, B.C. and from Spirit River and Dunvegan in Alberta, with delivery to Judy Creek and further on to Edmonton. Federated believed its business case demonstrated a need for construction of its proposed pipeline. Federated estimated that 1,000 m³/d of propane plus and 2,500 m³/d of crude oil and condensate from Taylor, and 900 m³/d of propane plus and condensate from the unconnected Dunvegan gas plant, would be available on start-up of its proposed pipeline for delivery to the Edmonton area. Federated submitted that an additional forecast volume of 1,500 m³/d of propane plus in northwestern Alberta could also more economically utilize the truck unloading facilities at Dunvegan.

Federated believed that regional productivity forecasts presented in its application demonstrated the need for its proposed facilities. However, it stated that, as a prudent operator, it was committed to first determining the desire of producers for the construction of its pipeline project through the Open Season process. It further indicated that it would not proceed with its project until it had economic justification to do so. However, Federated believed it already had an

indication of strong endorsement of its project from Imperial for up to 1,000 m³/d of crude oil from its Boundary Lake field and from Anderson for about 320 m³/d of NGLs from its Dunvegan gas plant.

Federated believed that approval of its applications would also optimize use of the existing underutilized tankage at Judy Creek and permit delivery of incremental NGLs to existing surplus cavern storage and fractionation facilities at Fort Saskatchewan. Decline in crude oil production in the Swan Hills area and the winding down of miscible flood operations at Swan Hills, Mitsue, Judy Creek, and Virginia Hills created surplus capacity for movement of crude oil and NGLs between Judy Creek and the Edmonton/Fort Saskatchewan area. Federated stated that its proposal would also allow producers to select different markets in the future.

Federated believed that a contestable market would exist where an existing and largely monopolistic service provider was at capacity and sought expansion. Federated noted that under the circumstances of contestable markets, a new entrant proposing innovative service and competitive pricing could inject competition consistent with the economic, orderly, and efficient development of pipelines in Alberta. Federated believed that its ability to inject competition into its proposed service area was a feature of its application which the Board should take into consideration.

Federated stated that it was important that not only the threat of competition exist, but that a competitor be permitted to install in-the-ground competition to ensure fair pricing to producers for transportation service. Federated noted that while the mere threat of competition from a new entrant had caused Peace to react in a competitive manner, it might not be sufficient to allow the market to capture the full benefits of competition. Federated submitted that the preferred competitive alternative would be for the producers and shippers to have real in-the-ground competition rather than having to rely upon the very few opportunities, such as the current circumstances, where contestable market conditions applied.

Federated submitted that the market would only capture the benefits of the existing competition if there remained a level playing field among the applicants. In particular, it was important that no one applicant should enjoy an undue competitive advantage, as a result of applying conditions to the approvals of the other applicants, which would limit their ability to provide effective competition. Federated believed that, as a party seeking market entry, it should not have any condition placed on its approval which was not placed on the approval of any other party.

Federated argued that Peace lacked sufficient evidence to support its application and that Peace had failed to demonstrate the need to construct its proposed pipeline. It contended that the Peace expansion could not be justified on the current trucked volumes or on its Deep Basin production forecasts and noted that the proposed expansion was larger than even Peace's optimistic forecasts. Federated believed that, as a consequence of increasing flow rates on the Federated system, Peace would have more economic alternatives available to meet the demonstrated needs of the existing Peace shippers. Federated stated that the Peace Downside Protection Plan had significant flaws, since it did not set out how taxes, operating expenses, and depreciation would be addressed.

With respect to the NCL application, Federated submitted that the NCL proposal lacked sufficient information for the Board to determine its need. Federated noted the lack of producer commitment, particularly from gas plant owners which NCL hoped to serve. Federated stated that no assurance had been given by NCL that shippers on its proposed pipeline would be treated equitably on its system or that any mechanism would be provided to protect shippers from having to pay for or subsidize the bundled services offered by NCL.

In summary, Federated argued that the Peace application should be denied since approval of the Federated line would provide adequate transportation for incremental Deep Basin volumes. Federated argued that the NCL application should also be denied as need for the proposed pipeline was not demonstrated. Federated submitted, however, that should the Board determine that in addition to its application, those of Peace and NCL also met the criteria for the Board's approval, then all three applications should be approved.

4.1.3 NCL

NCL submitted that its proposal targeted several liquid production areas in northwestern Alberta, most of which were not directly connected to either the existing Peace or Federated pipeline infrastructure. In particular, NCL hoped to connect up to 20 existing gas plants in Alberta, 18 of which had no pipeline connection for liquids. It believed that these areas were a significant current or potential source of liquids product, and that this view was supported by the Sproule Associates Limited study of liquid reserves in its proposed gathering area. NCL considered there was a current need to install pipeline gathering infrastructure and believed this infrastructure would enhance both the production and processing of liquids, particularly for smaller producers.

NCL indicated that the most northerly point of the 825 km proposed pipeline was in the Hamburg area which was not currently served by a liquids pipeline. NCL intended to access significant liquids volumes from the Fort St. John/Taylor area, and its plans also included greater extraction of liquids from the stream exiting the Westcoast Energy Inc. processing plant at Taylor. NCL proposed to transport 10,300 m³/d of liquids to the Edmonton/Fort Saskatchewan area, resulting in the need for additional fractionation capacity to produce specification ethane product. It argued that its proposal looked beyond the supply of only transportation and would ultimately include a comprehensive offering of services to producers, including fractionation, storage, and delivery services in the Fort Saskatchewan area. NCL believed that approval of its application would result in economic, efficient, and orderly development of Alberta's resources and NCL's integrated approach would optimize long-term benefits to producers.

NCL regarded the introduction of market competition as an important factor, and retained the services of Dr. George Lerner to conduct an analysis of the applications from the standpoint of competition principles. Dr. Lerner noted that competition was measured by the number of options within a market. All other factors being equal, the end result most desired in a competitive context was to provide producers with more options. He also noted that, in some circumstances, efficiency and number of competitors could represent conflicting objectives,

particularly in industries like liquids transmission, where fixed, sunk costs benefit from economies of scale. However, Dr. Lerner concluded that in the special circumstances prevailing in this case, NCL should be permitted to proceed, and the other applications should be denied, in order to maximize competition.

NCL considered that its plan, to move substantially more ethane than the other applicants, was a substantial factor the Board should consider in balancing efficiency and competition in favour of approving a new entrant. NCL noted that its plan, to move and market ethane not proposed to be moved and marketed by the other applicants, allowed it to take advantage of economies of scale and generate competition for the existing Peace and Federated systems. NCL indicated that its project would offer beneficial competition to existing operators in the area, particularly the operators of the Peace system.

NCL noted that Peace's goal was to maintain near monopoly status and ultimately attach most of the areas identified by NCL, including B.C. volumes. NCL submitted that the question which the Board should address was whether approval of the Peace application would foster a competitive atmosphere or be in the overall public interest. NCL submitted that it would not.

NCL indicated that Federated's expert witness, Mr Engbloom, considered the existing situation to be one of a contestable market. The point raised by both Mr. Engbloom and Mr. Hildahl for Peace was that poised potential competition could cause the market to behave as if there was real competition present. However, NCL emphasized that Mr. Engbloom had conceded that contestable markets really only exist where entry and access barriers are not high. NCL noted that because of high sunk costs and absence of portability, the petroleum transportation industry is one with very high entry and access barriers. NCL noted that Mr. Engbloom admitted that contestable markets also only exist where the existing system is at or near capacity. Where the existing system has spare capacity, the incumbent can temporarily lower prices beyond its long-term marginal cost in order to keep potential competition out of the market.

NCL submitted that even if the Board were to accept the dubious proposition that a contestable market could exist with respect to pipelines, this contestable market would exist only when the incumbent pipeline was at or near capacity. As soon as an incumbent pipeline has spare capacity, the contestable market disappears, and poised potential competition ceases to exert any competitive force whatever. NCL stated that in the current context, this meant that any contestable market which existed as a result of Peace's current bottleneck would disappear, were Peace's proposal allowed to proceed. NCL believed that actual competition was more desirable than any effects exerted by poised, potential competition. NCL requested the Board to approve its application exclusively so as to give it at least a 15 to 18-month competitive advantage to establish its project. In seeking approval of only its project, NCL asked the Board to ensure future long-term competition by temporarily restricting short-term competition.

NCL submitted that sole approval of the pipeline portion of its integrated proposal would significantly enhance the liquids infrastructure and industry in Alberta. NCL further commented that of the three projects before the Board, its application promised to provide the greatest number of options to the greatest number of Alberta producers and shippers, and this benefit to Alberta would probably be lost if its proposal were not given exclusive approval.

NCL submitted that both the Peace and Federated applications should be denied, since their approval would not be in the public interest. NCL noted that it had tried to negotiate a common arrangement with Peace, but had been unable to reach a cost-effective arrangement. With respect to Federated, NCL concluded that its desire for an integrated system was not consistent with either the existing or proposed Federated pipeline. NCL recommended that the Rainbow intervention be ignored. NCL stated that the proceeding had been well publicized and Rainbow had not taken adequate steps to become a competing proponent.

4.2 Views of the Interveners

Chevron indicated that there was a need for additional pipeline capacity because of the volumes of NGL being trucked and because of the potential for new production coming on stream. Chevron was concerned that approval of all applications might lead to pipeline duplication. On the other hand, Chevron considered that granting one applicant the exclusive right to service an extensive geographic area, as outlined in the applications, would deny the other applicants the right to compete.

Chevron was also concerned about any possible impact on existing tolls on the Peace and Federated systems. Chevron indicated that its concern in this regard arose from a scenario where the Peace expansion was built along with other competing systems. If the Peace system was underutilized because of such competition, the existing tolls on Peace might not be reduced. In fact, tolls might be increased in order for Peace to reach its permitted rate of return on the rate base for its existing system.

Chevron noted there had been a great deal of discussion about competition and all its various aspects. Chevron also noted the regulatory trend in recent years to let the marketplace determine questions that once were the subject of exhaustive, detailed regulation. Chevron stated that the trend today in the regulatory world was clearly to regulate with "light hands" and to let market forces prevail. Chevron indicated that the best and most practical resolution of the issues before the Board would be to approve all three applications, which were all technically sound, and let the marketplace determine which one, or which combination, gets built. Chevron believed the two objectives of having effective competition without having too much expensive line in the ground would be met.

Dow believed that there was a need for additional pipeline capacity and a need to create a competitive environment in the Deep Basin area. Dow submitted that Peace did not face adequate competition from Federated. It argued that approval of the Peace application would strengthen Peace's market position as the exclusive provider of transportation service west and northwest of Fox Creek, and would diminish competition from Federated since Peace already serviced this area. Dow believed that the construction of the Federated facilities would force Peace to become more competitive. It stated that if Peace's application were approved and Federated's was not, Peace's ability to extract higher tolls at the end of the 10-year term of the Downside Protection Plan would be enhanced due to the lack of direct competition.

Dow believed that NCL failed to demonstrate need and that its integrated approach would enable it to obtain undue market advantage. Dow considered that the construction of NCL's project, if associated with a denial or deferral of the other two applications, would effectively confer upon NCL an exclusive franchise. An exclusive franchise would exacerbate its concerns about the undue market advantage related to the integrated services and the non-arm's length relationship of NCL with NOVA Chemicals. Dow submitted that approval of the NCL application would not only result in the suppression of competition now, but also in the future.

Dow stated that approval of the Federated proposal meant shippers would have a choice between two pipeline systems within the same general geographic region. The selection by shippers of one system over the other would be guided by the tolls and terms and conditions of service offered by each. In summary, Dow submitted that the Federated application should be approved and those of Peace and NCL should be denied.

Gulf noted that each of the applicants had attempted to demonstrate the need for its project based upon forecasts of additional liquid volumes from northeastern B.C. and northwestern Alberta, but there was a wide range in the volumes forecast. While the commercial maturity and timing of some of these volumes was questionable, Gulf believed that the certainty of the forecasts was high when the lower end of the range was considered. Gulf contended that lack of pipeline capacity had necessitated the trucking of significant volumes with negative impacts on costs and local road traffic. It believed that any further delay in capacity addition would lead to serious deterioration, and possibly shutting-in, of Alberta production.

Gulf noted the submissions that to provide effective competition to Peace's transportation services in northwestern Alberta, another trunk pipeline was required. However, Gulf considered that only those volumes, that were not captive by either geography or by contract to an existing provider of transportation services, would stand to benefit from this increased competition. This benefit would primarily be limited to volumes that were currently being trucked or which would arise from new grass roots gas plant construction. Gulf noted captive volumes would pay for the cost of excessive trunk pipeline investment, and the resultant lower economic efficiency. Gulf therefore suggested the Board approve the expansion proposal of Peace, in that it offered the greatest flexibility, quality of service, and economic efficiency.

Imperial believed that there was a need for additional pipeline capacity because the supply potential indicated sufficient production in the area to justify a new pipeline. Imperial submitted in argument that the competing proposals should be assessed based on certain principles. It submitted that any new pipelines should provide open access and multiple egress points and tariffs should be transparent such that all producers using the same point might choose the same tolling agreement. Furthermore, Imperial considered that current shippers should not subsidize expansions unless there was positive consent. Finally, Imperial submitted that the owners of the pipelines must be at risk for their investment equally with shippers.

Imperial believed the applications presented a unique opportunity for the Board to allow a competitive environment to be introduced between pipelines so that the interests of producers, the Crown and pipeline companies would be better served. Imperial noted that to have only one pipeline serve in the area would not enable competitive forces to work. Imperial further noted

that excess capacity had existed in the Peace system until recently, which had prevented the existence of contestable competition. Imperial noted that if the Board only approved the Peace application, the overcapacity created by the expansion would remove the existence of contestable competition. Imperial stated that the introduction of one or more competing pipelines could result in the loss of much of the trucked volume to Peace's Deep Basin pipeline, which would substantially lessen the need for a Peace expansion.

Imperial noted that the liquids pipeline proposed by NCL was part of a much larger project, involving expansion of the fractionation capacity and use of storage facilities located at NCL's Redwater facility. Imperial perceived that implementation of such a project would provide NCL and its affiliate, NOVA Chemical, with undue market power which would readily lead to reduced netbacks for the producer as well as reduced royalties to the Crown. Imperial submitted that in effect NCL sought a franchise for its supply area and, once in operation, producers would have to sell their liquids to NCL upon whatever terms NCL dictated. Imperial considered it obvious that such a situation would be detrimental to any competitive environment and over the long term would result in lower producer netbacks. Imperial believed that to give NCL what it sought would be a move away from a competitive marketplace.

Imperial noted that the proposed Federated facilities would provide direct pipeline transportation for liquids from Taylor, B.C. and Dunvegan, as well as for crude oil from Boundary Lake. The proposed truck terminals would provide access for additional throughput and effective competition for volumes currently trucked to Peace. Imperial urged the Board to grant approval to the Federated application only, because the facilities proposed by Federated best represented economic, orderly, and efficient development of pipelines in the public interest. However, Imperial stated that it was also willing to support approval of all three projects, provided they adhered to the principles outlined in argument by Imperial, and provided construction began within 18 months of approval.

Rainbow had no position on the applications of either Peace or Federated. Rainbow submitted that the NCL application should be denied as it believed that NCL had presented no evidence to demonstrate a need for its project, largely because it had not demonstrated any shipper commitments. Further, Rainbow believed that the area's incremental liquid supply could be serviced by either Peace or Federated, if their projects were approved, and by the existing Rainbow pipeline system. Rainbow was concerned that the approval of NCL's application would effectively confer upon NCL an exclusive franchise which, due to the potential for cross-subsidization, could enable NCL to suppress future competition in the exclusive areas it sought to serve. Rainbow believed that the integration of services by NCL, in conjunction with the efforts of NOVA Chemical to secure ethane supply, was intended to give NCL an undue market advantage with respect to competing pipelines and with respect to its shippers, including those who hold the rights to ethane. Rainbow believed that approval of the NCL project would be a set-back for competition.

Rigel believed that there was a need for additional pipeline capacity and real competition in order to keep costs down. It conceded that Peace showed a need for additional capacity in the Deep Basin pipeline based on the fact that Peace was currently trucking 200 to 400 m³/d of crude oil from La Glace to Valleyview. Rigel noted that a survey of existing Peace shippers

demonstrated a need for approximately 5,000 m³/d of additional capacity. Rigel submitted that an additional 5,000 m³/d of capacity, applied for by Peace, related to volumes that Peace admitted were already being transported on the Federated West pipeline. Rigel believed that approval of the Federated application would make the expansion of the Peace system unnecessary since Federated would attract certain volumes from the Peace system north of Gordondale. Rigel stated that if Peace was the only application approved, there would probably never again be the threat of another pipeline in the area.

Rigel noted that the need for the proposed Federated pipeline would be answered by the response of producers to Federated's open season. If sufficient shippers signed up, need would be confirmed, and a competitive alternative to Peace would be established. Rigel considered that the proposed NCL pipeline was of little significance to Rigel since it produced insignificant volumes of NGLs in the area.

In summary, Rigel requested the Board to approve the Federated application and to deny those of Peace and NCL, in order to meet the need for additional pipeline capacity and to create competition in the Deep Basin area.

5 VIEWS OF THE BOARD

In considering the applications before it, the Board evaluated the individual business needs identified by each applicant. Having heard the evidence regarding the volumes of product being trucked in the area and the volumes forecast to come on production, the Board is satisfied that there is a need for additional pipeline capacity for both crude oil and NGL transportation.

However, the Board considers that, for a number of reasons, it was not clearly established whether or not there is a need for more capacity at this time than would be added by the approval of only one of the pipeline projects. While the Board believes the three projects are essentially competing for the same supply from northeastern B.C. and northwestern Alberta, each of the proposed pipelines is different in terms of project scope, geographic area to be served, and the range of services to be provided. The projects are also different in terms of their proposed related facilities which are the subject of other applications before the Board, as well as before the NEB and regulatory agencies in B.C. Evidence concerning the volumes to be allocated to each of the projects was not conclusive, particularly with respect to the volumes available from B.C. Furthermore, the Board does not consider that additional evidence to address this question could be reasonably obtained. The Board was advised, and tends to believe, that many potential shippers for the projects were reluctant to support one project over another until it was clearly determined which of them, if not all three, might proceed. In addition, the views of certain parties who were prepared to state their positions were challenged, on the basis that those parties allegedly considered other business interests, in addition to those of a potential shipper, when assessing the merits of the competing projects.

Given the difficulty of determining the optimal facilities to serve potential shippers, the Board is particularly receptive to the evidence presented concerning the beneficial aspects of competition for the industry, and the view that producers and shippers, who pay for transportation service costs, will determine which facilities should get built. Reliance by the Board on market forces is

not unique where there are no significant public-interest issues. Various Board decisions have addressed the matter. For example, note the Board's comment at page 6 of Decision D 88-13, a decision which also involved pipeline applications by three different parties:

"The Board believes it is not appropriate for it to intervene in normal business transactions unless issues are related to matters such as conservation or environmental protection or if it found that facilities would be built despite the lack of need for such facilities."

Similarly, note page 5 of Decision D 95-13, a decision which involved two alternate pipeline proposals:

"In the absence of any public, economic, social, or environmental issues, the Board is not prepared to intervene in normal business decisions made in a competitive marketplace."

The Board believes that the applications before it should be considered in light of these comments. With respect to all four applications, the Board does not consider that there are any compelling social, economic, environmental, or technical reasons for rejection. Accordingly, in the circumstances of this case, the Board embraces the concluding comments of Decision D 88-13:

"The Board realizes that the construction of any of the applied-for pipelines is dependent on their commercial viability which hinges in turn on the contractual arrangements in place. The Board realizes it is these arrangements that will partially dictate which pipelines are built."

The Board is prepared to approve all four applications before it and to rely upon business decisions made in the competitive marketplace to ensure economic, orderly, and efficient development of the pipeline facilities.

The Board notes NCL's request that its application be approved exclusively so as to give NCL at least a 15 to 18-month competitive advantage to establish its project. However, the Board considers that this would be an unwarranted intervention in the marketplace. Furthermore, the Board believes it would be inequitable to deny the competing applications which also satisfy all regulatory requirements.

The Board notes that there is considerable evidence indicating the likelihood that not all three projects will proceed at the same time, and that some additional capacity in an area of increasing production will encourage further resource development. The Board believes that, upon issuance of this decision, the applicants will re-evaluate their proposals and proceed prudently with their business plans to ensure economic, orderly, and efficient development. Therefore, the Board is not concerned that approving all three proposals will result in pipeline proliferation.

The Board notes that successful pipeline applicants are given a period of six months within which to commence construction of their proposed facilities. In the event that successful applicants request extensions to the expiry dates of their permits or licences, the Board may revisit the need and necessity for the proposed projects and may grant or deny the extensions at its discretion.

6 DECISION

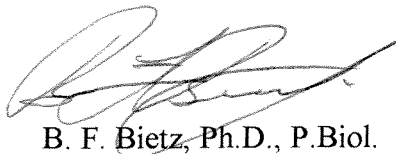
The Board has considered all of the evidence before it regarding the applications and is satisfied that all of the proposed facilities meet the Board's regulatory requirements. The Board is also satisfied there is a need for additional transportation capacity for LVP/crude oil and HVP production in northwestern Alberta, as well as northeastern B.C. Therefore, the Board approves all four applications considered at the hearing, and directs that the appropriate permits and licence amendments be issued.

DATED at Calgary, Alberta, on 24 January 1997.

ALBERTA ENERGY AND UTILITIES BOARD



B. T. McManus, Q.C.
Board Member

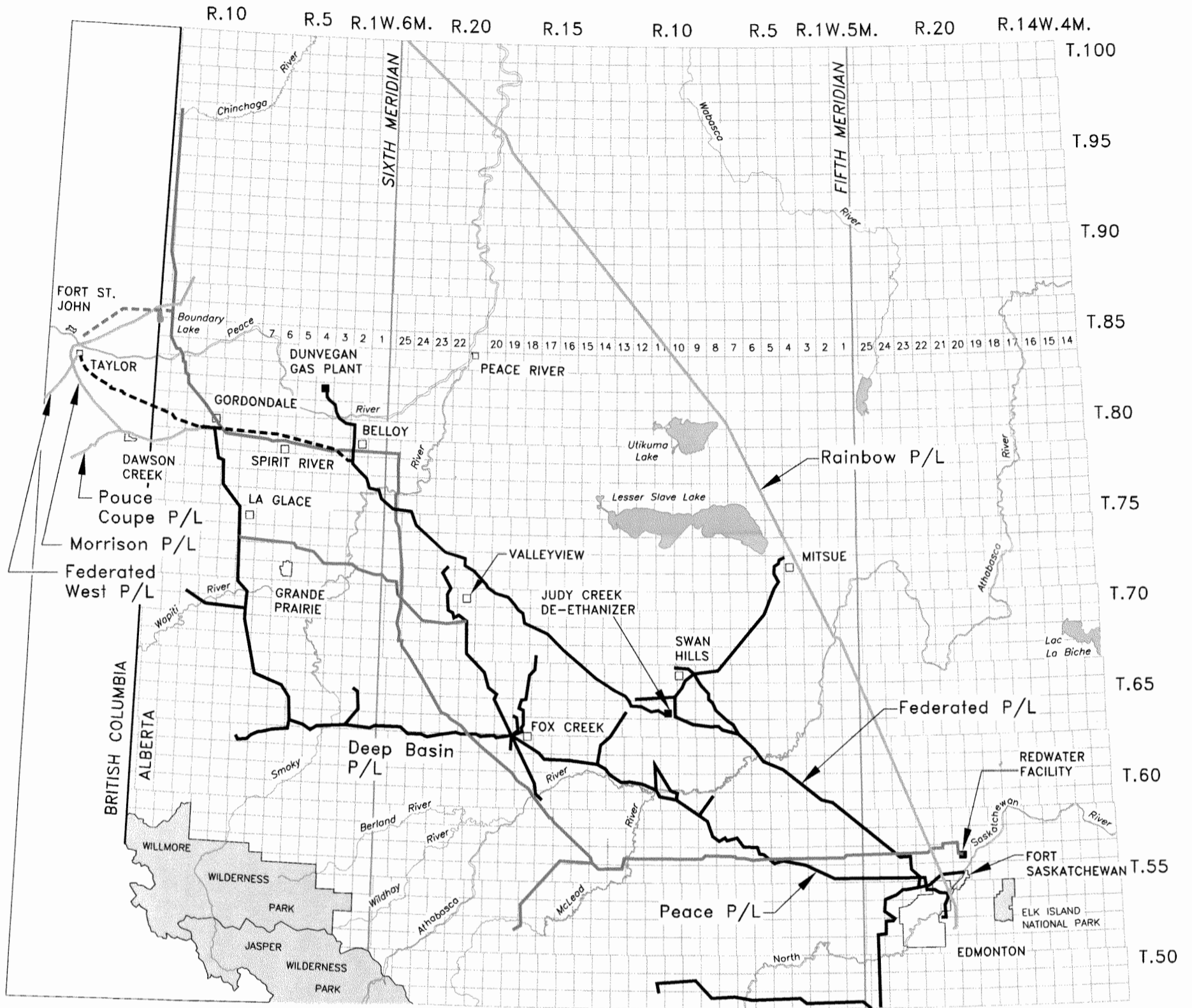


B. F. Bietz, Ph.D., P.Biol.
Board Member



E. G. Fox, P.Eng.
Acting Board Member

Attachment



**PROPOSED CRUDE OIL AND NATURAL GAS LIQUIDS PIPELINES
LA GLACE TO VALLEYVIEW**

Applications No. 960198, 960621, 960627 & 960622

PEACE PIPE LINE LTD., FEDERATED PIPE LINES LTD. & NOVAGAS CLEARINGHOUSE LTD.

Legend

- Proposed NCL HVP pipeline
- - - - - Proposed NCL HVP connector under NEB
- Proposed Federated HVP pipeline
- - - - - Proposed Federated HVP connector under NEB
- Proposed Peace Crude Oil pipeline
- Existing Pipelines