



National Energy
Board

Office national
de l'énergie

Reasons for Decision

**Shiha Energy
Transmission Ltd.**

January 2000

Facilities

National Energy Board

Reasons for Decision

In the Matter of

**Shiha Energy
Transmission Ltd.**

January 2000

IN THE MATTER OF an Application dated 30 July 1999, as amended, by Shiha Energy Transmission Ltd. pursuant to Section 58 of the National Energy Board Act for an Order authorizing the Construction of a Natural Gas Pipeline from the Northwest Territories to the Province of British Columbia, referred to as the Shiha Pipeline.

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Chapter 1

Introduction

1.1 The Application

On 30 July 1999, Shiha Energy Transmission Ltd. (Shiha, the Company, or the Applicant) applied to the National Energy Board (Board) pursuant to section 58 of the *National Energy Board Act* (NEB Act) for an order approving the construction of a natural gas pipeline from the Fort Liard area in the Northwest Territories (NWT) to the Maxhamish area in northeastern British Columbia (B.C.).¹ More specifically, the application sought exemption from the provisions of sections 30 through 33 and 47 of the NEB Act in respect of the pipeline.

The Liard Pipeline Project, depicted in Figure 1, would transport natural gas from the F-36 discovery area in the NWT to a proposed gas plant near Maxhamish, B.C. The facilities for which Shiha sought approval from the Board comprised (i) approximately 15 kilometres (km) of wet gas flow lines having diameters of 168 and 218 millimetres (mm), (ii) a central gas battery where the gas would be dehydrated, and (iii) approximately 24 km of 324 mm diameter raw gas pipeline from the outlet of the battery to the inlet of the proposed Maxhamish Gas Plant. The proposed in-service date of the pipeline is 1 April 2000.

In separate applications to the Province of B.C., Paramount Resources Ltd. (Paramount) and Berkley Petroleum Corp. (Berkley) proposed to construct the Maxhamish Gas Plant and an approximately 164 km long, 324 mm diameter pipeline from the proposed Maxhamish Gas Plant to a point of interconnection with the existing system of Westcoast Energy Inc. just south of the Fort Nelson Gas Plant. The proposed gas plant and connecting downstream pipeline are collectively referred to as the Downstream Facilities.

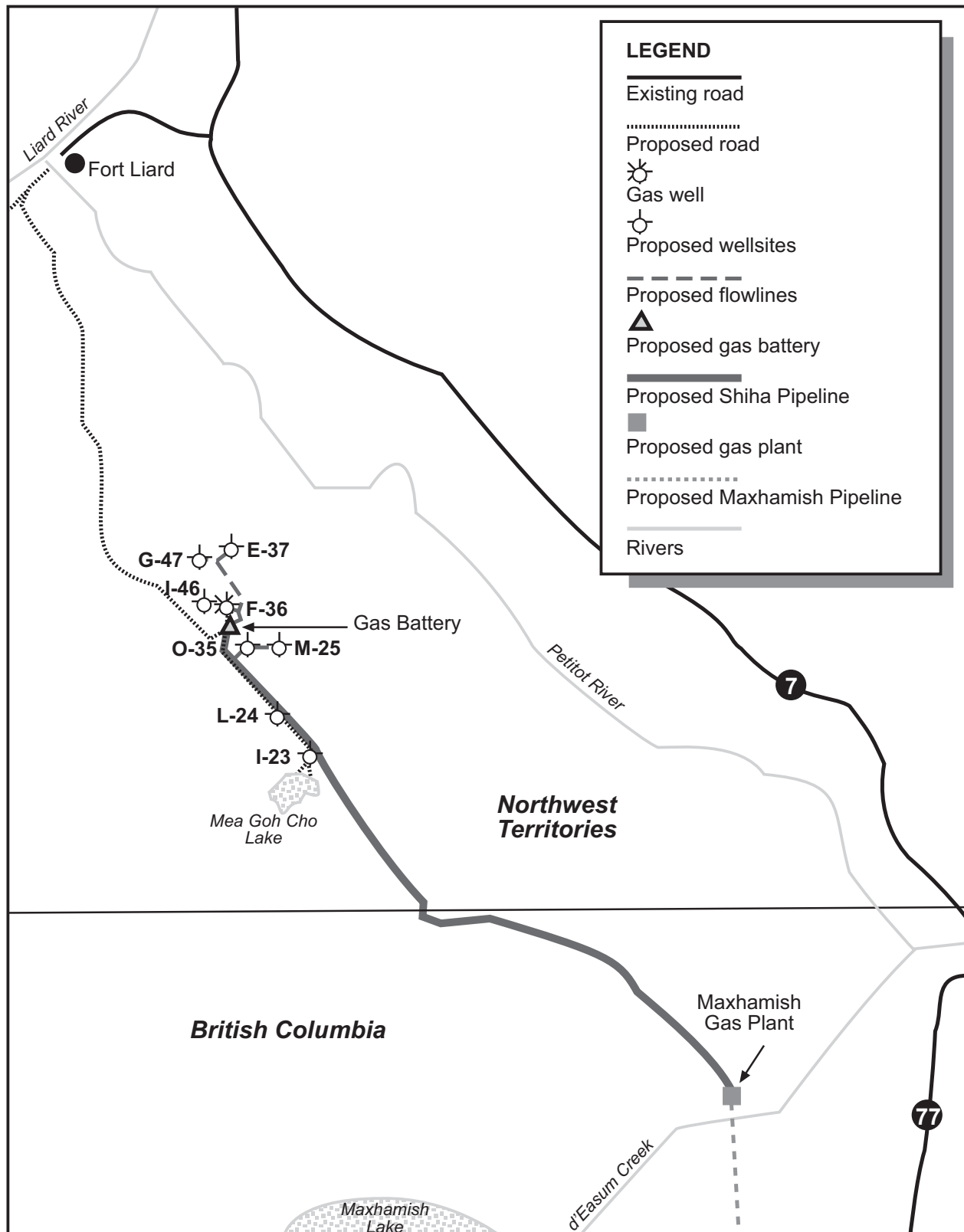
1.2 Delineation of Facilities Subject to the NEB Act

By letter to Shiha dated 3 September 1999, the Board raised a potential jurisdictional issue with respect to the proposed Downstream Facilities. In its letter, the Board invited Shiha to either revise its application to include the Downstream Facilities or to comment on the completeness of its application.

In its response dated 13 September 1999, Shiha indicated that it disagreed that the Downstream Facilities may come under federal jurisdiction and provided a number of reasons to support its position.

¹ Shiha is a company incorporated pursuant to the *Canadian Business Corporations Act* and is owned 45% by Paramount, 45% by Berkley, and 10% by the Fort Liard Band.

Figure 1-1
Liard Pipeline Project



Having considered Shiha's application and correspondence, the Board, on 23 September 1999, directed that a preliminary question of jurisdiction be raised for determination and issued a Notice of Constitutional Question under the *Federal Court Act*.¹ In accordance with the MH-4-99 Directions on Procedure, the Board considered the preliminary question at an oral proceeding held in Calgary on 7 October 1999.

At the conclusion of the one-day proceeding, the Board determined that the Downstream Facilities, together with the applied-for Liard Pipeline Project, do not form a single work or undertaking subject to section 52 of the NEB Act, nor are the Downstream Facilities integral to the applied-for Liard Pipeline Project. Therefore the Downstream Facilities were not subject to federal regulation. The Board, accordingly, indicated that it would proceed with the processing of the Shiha application².

In the MH-4-99 oral proceeding, Shiha stated that its section 58 application under the NEB Act encompassed the flow lines from the F-36 discovery well and the central gas battery in addition to the 24 km pipeline from the battery to the proposed Maxhamish Gas Plant. However, in a letter to Shiha dated 28 October 1999, the Board expressed the view that the flowlines and gas battery come within the ambit of the *Canada Oil and Gas Operations Act* (COGOA) rather than the NEB Act.³ The Board further clarified that the point of demarcation between COGOA and NEB Act jurisdiction would be at the downstream side of the flow meter at the outlet of the central gas battery. Consequently, on 1 November 1999, Shiha filed an application pursuant to paragraph 5(1)(b) of the COGOA for the construction of the flowlines, gas battery and associated wellsite facilities (together referred to as the Liard Gathering Project) and amended its section 58 application under the NEB Act accordingly.

Therefore, the facility considered by the Board pursuant to section 58 of the NEB Act is the 24 km raw gas pipeline from the outlet of the proposed central gas battery to the inlet of the proposed Maxhamish Gas Plant. This facility is referred to herein as the Shiha Pipeline. The Liard Gathering Project and the Shiha Pipeline are together referred to herein as the Liard Pipeline Project.

1.3 Assessment of Application on its Merits

Comments concerning the process to consider the Shiha application were received from Canadian Forest Oil Limited (CFOL), Manitoba's Future Forest Alliance (MFFA), and from the Citizen's Oil & Gas Council (COGC). After considering these comments and the submissions of Shiha, the Board decided that it would continue to process the application in the usual manner for section 58 applications, without an oral hearing. By letter dated 29 October 1999, the Board established a procedure for CFOL, MFFA, and COGC to (i) provide comments on the scoping of the environmental assessment, (ii) pose

¹ The preliminary question of jurisdiction read as follows: "Are the proposed Downstream Facilities [consisting of the proposed Maxhamish Gas Plant and connecting downstream pipeline] within federal jurisdiction under s. 92(10)(a) of the *Constitution Act, 1867* because they together with the applied-for Liard Pipeline Project constitute a single federal work or undertaking and properly subject to section 52 of the National Energy Board Act? If not, do they come within federal jurisdiction because they are integral to the applied-for Liard Pipeline Project?"

² Paramount and Berkley received approval from the Province of B.C. to construct and operate the Downstream Facilities in December 1999.

³ As noted in Section 1.4 of these Reasons, the COGOA is also administered by the Board.

information requests, and (iii) make submissions on the application, including its environmental assessment.

As further explained in Chapter 3, opportunities to comment on the environmental screening carried out by the Board pursuant to the *Canadian Environmental Assessment Act* (CEAA) were also extended to federal and territorial government agencies and departments, First Nations, and other interested persons.

1.4 Related Applications

The Board has regulatory powers under the COGOA and certain provisions of the *Canada Petroleum Resources Act* (CPRA) for oil and gas exploration and development as well as production activities on frontier lands in the NWT. As more particularly described below, certain authorizations are also required under this legislation in order for the Liard Pipeline Project to proceed.

Coincident with the filing by Shiha of its application pursuant to section 58 of the NEB Act, Paramount, on behalf of itself and Berkley (Paramount et al) filed an application with the Board pursuant to section 35 of the CPRA and section 28.2 of the NEB Act. This application sought a Commercial Discovery Declaration in respect of the natural gas field discovered by Paramount et al in early 1999 with the drilling of the F-36 discovery well approximately 18 km southeast of the Hamlet of Fort Liard.¹ Paramount concurrently filed an application with the Board pursuant to subsection 5.1(2) of the COGOA for approval of a Development Plan² for the F-36 gas field.

The Board issued a Commercial Discovery Declaration for the Paramount et al F-36 gas field on 15 December 1999, and issued Order DP-1-99 on 6 January 2000 approving the F-36 Development Plan, subject to the consent of the Governor in Council in relation to Part I of the Development Plan.³ Gas from the F-36 well and other potential wells would be transported by the Liard Pipeline Project. As noted in Section 1.2, Shiha filed an application with the Board pursuant to paragraph 5(1)(b) of the COGOA for the construction and installation of the wellsite facilities, flow lines, and central gas battery contemplated by Paramount's Development Plan. This application received approval on 28 January 2000.

¹ The Commercial Discovery Declaration is required before the Minister of Indian Affairs and Northern Development can issue a production licence under section 38 of the CPRA. As defined in the CPRA, Commercial Discovery means a discovery of petroleum that has been demonstrated to contain petroleum reserves that justify the investment of capital and effort to bring the discovery to production.

² A Development Plan provides a description of the general approach of developing a pool or field with supporting technical information. Approval of a Development Plan is required before certain authorizations to carry on work or activity in relation to developing a pool or field may be granted under the COGOA.

³ Governor in Council consent followed on 12 January 2000 by Order in Council P.C. 2000-48.

Chapter 2

Facilities Description and Engineering Matters

The Shiha Pipeline would be a 24 km long, 324 mm diameter gas pipeline connecting a proposed gas battery near the F-36 wellsite in the Northwest Territories (60° 5' N, 123° 22' W) to the proposed Maxhamish Gas Plant in northeastern British Columbia (36-I/94-O-14). The pipeline is designed to transport volumes of up to 3 000 10³m³/d (106 MMcf/d) of raw natural gas by reservoir pressure of approximately 6 895 kPa (1,000 psi). With additional compression the capacity could be increased to approximately 4 370 10³m³/d (154 MMcf/d). Hydrocarbon liquids removed at the gas battery would either be trucked for sale locally or re-injected into the gas stream for removal at the Maxhamish Gas Plant. The pipeline would be equipped with facilities to allow regular pigging operations. Emergency shut down valves and block valves within the gas battery and gas plant would allow the pipeline to be isolated and evacuated. Shiha stated that Paramount would provide the operational services to Shiha during an initial growth period under a construction and operating services arrangement.

Construction is proposed to commence by February 2000 with machine clean-up scheduled for completion before spring break-up in late March or early April 2000. The estimated capital cost of the proposed Shiha Pipeline is \$5,658,200.

Shiha indicated that the pipeline would be designed, constructed, and tested in accordance with *Canadian Standards Association Standard Z662-99 Oil and Gas Pipeline Systems* (CSA Z662-99), the NEB Act, the *Onshore Pipeline Regulations, 1999* (OPR) and other appropriate governing codes. The pipe would be of two types, Grade 414 steel of 7.9 mm wall thickness and Grade 359 steel of 11.1 mm wall thickness. Both types of pipe would meet the notch toughness requirements for Category II designation, and would be designed to sour gas specifications in order to provide for the possible future transport of sour gas.¹ The proposed design Maximum Operating Pressure of the pipeline is 10 240 kPa (1,485 psi).

In its application, Shiha submitted a document entitled *Emergency Response Plan For Fort Liard Gas Field* applicable to the construction phase of the project. Shiha also submitted a document entitled *Pipeline Pneumatic Test Procedure* and subsequent correspondence in which it proposed that the pipeline be air tested. Shiha stated that it would do above-grade soap tests of approximately 1.6 km long pipe segments at a pressure of approximately 700 kPa. The pipe would then be joined and backfilled in the trench before commencing the pneumatic test on the entire 24 km length of pipeline. The pneumatic test would be a combined 24 hour strength and leak test at 140% maximum operating pressure. In response to a request by the Board for further information, Shiha submitted, among other things, that its procedure goes beyond the requirements of CSA Z662-99 in providing for visual, radiographic and soap tests.

¹ Sour gas will not be transported on the Shiha Pipeline without further regulatory approval.

Views of the Board

Subject to the conditions discussed below, the Board is satisfied with the proposed design of the Shiha Pipeline.

Although Shiha has indicated that the pipeline is designed for sour service, the Board notes that no information has been provided with respect to the potential environmental effects that may result if the proposed facilities are operated for sour service. As discussed in the CEAA Screening Report, the Board, therefore, will impose a condition that the Shiha Pipeline shall be operated for sweet gas transmission only.

The Board will also impose conditions requiring various documents prescribed by the OPR to be submitted prior to the construction or operation of the Shiha Pipeline. More specifically, Shiha would be required to file (i) a joining program, (ii) a construction safety manual, (iii) an operations and maintenance manual, (iv) a maintenance safety manual and (v) an emergency response manual for the operational phase of the pipeline.¹

With respect to the proposed pneumatic testing of the pipeline, the Board is of the view that Shiha has not demonstrated that the test procedure will comply with CSA Z662-99. The Board does not consider Shiha's proposed visual, radiographic and soap tests to be acceptable substitutes for a leak test as addressed in Clause 8.2.6.2 of CSA Z662-99 and, furthermore, is of the view that Shiha's proposed leak test would be inconclusive. The Board, therefore, will condition Shiha to pressure test the pipeline using a liquid test medium in accordance with CSA Z662-99.

Because Shiha is a new company, the Board has denied the Company's request for exemption from section 47 of the NEB Act. Shiha will therefore be required to file a leave to open application in compliance with Part IX of the Board's *Guidelines for Filing Requirements*.

¹ Refer to sections 16, 20, 27, 31, and 32 of the OPR.

Chapter 3

Environmental, Socio-Economic, and Land Matters

3.1 Environmental Assessment

As discussed in Chapter 1.2 of these Reasons, two facilities applications have been received by the Board: a section 58 application under the NEB Act in respect of the Shiha Pipeline; and, a paragraph 5(1)(b) application under the COGOA in respect of the Liard Gathering Project. The Board is required to carry out an environmental screening of the Shiha Pipeline under the CEAA. The Liard Gathering Project is subject to the *Mackenzie Valley Resource Management Act* (MVRMA) under which the Board is a designated regulatory agency and, in this case, is required to carry out a preliminary screening.

In its draft scope for the section 58 application under the NEB Act dated 9 November 1999, the Board determined that the proposed Shiha Pipeline and the proposed Liard Gathering Project should be considered to form a single project for the purpose of conducting the environmental assessment, and accordingly, the Board exercised its discretion pursuant to section 15 of the CEAA. The Board also broadened its consideration of the terms "environment" and "environmental effects" as defined in the CEAA to encompass the definitions of "environment" and "impact to the environment", respectively, in the MVRMA.

The draft scope for the Liard Pipeline Project was provided to the Mackenzie Valley Environmental Impact Review Board (Review Board) on 9 November 1999, together with a notification that the Board would conduct a preliminary screening of the Liard Gathering Project under the MVRMA. Further, the Board provided to the Review Board, and requested that Shiha and all interested persons provide to the Review Board, copies of all correspondence, filings and information related to Shiha's applications throughout the environmental assessment process.

On 31 December 1999, following the comment period on the draft scope, further information requests to and responses from Shiha and consultation with other federal and territorial authorities on Shiha's applications and evidence, the Board completed a draft Environmental Screening Report under the CEAA (draft screening report) for the Liard Pipeline Project. The Board invited comments on the draft Screening Report by 14 January 2000 and provided Shiha with an opportunity to respond by 18 January 2000.

Under cover of letter dated 31 December 1999, the Board submitted the preliminary screening report (PSR) for the Liard Gathering Project to the Review Board, pursuant to paragraph 125(1)(a) of the MVRMA. The Board indicated in the PSR that, in its opinion, the Liard Gathering Project was not likely to have a significant adverse impact on the environment or be a cause of public concern and that the regulatory process should proceed. By letter dated 25 January 2000, the Review Board indicated that, upon consideration of the PSR and the draft CEAA Screening Report, it concurred with the Board's determination that the Liard Gathering Project proceed into the regulatory process.

Following the comment period established in the 31 December 1999 letter, the Board completed an environmental screening and an Environmental Screening Report (CEAA Screening Report). The CEAA Screening Report is based on Shiha's environmental assessment and all other environment-related evidence and submissions placed on record with the Board. The CEAA Screening Report describes the proposal, the environmental assessment process, the assessment methodology, the potential environmental effects and Shiha's proposed mitigative measures. The CEAA Screening Report also provides the Board's conclusions and recommendations regarding the significance of the project's potential adverse environmental effects, as well as a proposed set of environmental conditions to be included, if the application were to be approved, in any section 58 order that might be issued.

As noted above, and as more particularly described in the CEAA Screening Report, opportunities to comment on the scoping, Shiha's applications and the draft Screening Report were extended by the Board to federal departments and territorial and provincial agencies, CFOL, MFFA, COGC, the Review Board, Shiha and other persons who expressed an interest. A summary of comments received on the draft Screening Report and the Board's CEAA determination are included in section 6 of the CEAA Screening Report.

The CEAA Screening Report is a public document and copies are available from the Board on request.¹

Views of the Board

As indicated in the CEAA Screening Report dated 26 January 2000, the Board is of the view that, with the implementation of Shiha's proposed mitigative measures and the proposed conditions set out in the CEAA Screening Report, the Shiha Pipeline, as described, is not likely to cause significant adverse environmental effects. This constitutes a decision pursuant to paragraph 20(1)(a) of the CEAA. For the purposes of meeting its environmental assessment obligations under the NEB Act, the Board is satisfied with the conclusions in the CEAA Screening Report related to the potential environmental effects of the proposed project and will impose, the conditions set out in the CEAA Screening Report.

3.2 Socio-Economic and Land Matters

Socio-economic and land matters are addressed in Section 4.6 of the aforementioned CEAA Screening Report. The specific subject areas covered are (i) public consultation; (ii) land and routing matters; (iii) traditional land and resource use; (iv) access and trespass; (v) local services, facilities and infrastructure; (vi) social cohesion and structure; (vii) health and safety; (viii) heritage and spiritual resources; (ix) aesthetics; and (x) economic benefits.

The Board notes that Shiha's proposed 18 metre wide right-of-way for construction purposes would be on Crown Lands with approximately 12 km in the Northwest Territories and 12 km in British Columbia. Where the pipeline would parallel a road, the right-of-way would be reduced to a 10 m width. In these areas Shiha would retain a permanent right-of-way of a 7 m width. Notices were served pursuant to

¹ Copies of the CEAA Screening Report may be obtained through the Board's library in Calgary or by contacting the Board's Publication Coordinator in accordance with the instructions on the inside front cover of these Reasons.

section 87 of the NEB Act on the Department of Indian Affairs and Northern Development (DIAND) and the Province of British Columbia, and copies were also sent to potentially affected trappers. Shiha intends to apply for licenses of occupation from DIAND and from the Province of British Columbia.

Views of the Board

The Board is satisfied with the conclusions regarding socio-economic matters set out in sections 4.6 and 6 of the CEEA Screening Report. The Board is satisfied with Shiha's socio-economic commitments as well as the Company's land use and route selection approach.

Chapter 4

Economic Feasibility

The Shiha Pipeline is an "at-risk" pipeline that would be equally financed through internal sources of funds from Berkley and Paramount and any revenue shortfall would be covered by these companies. Further, Paramount and Berkley have each entered into agreements with Shiha to transport $1.4 \times 10^6 \text{ m}^3/\text{d}$ (50 MMcf/d) of natural gas for a term of 10 years.

Shiha stated in its application that it is proposing the Liard Pipeline Project in response to a need to transport raw natural gas produced in the Fort Liard area to market. Paramount and Berkley would incorporate the production from the Liard Pipeline Project into their corporate gas supply pools to serve both existing and future gas sales contracts.

Initial gas deliverability for the project is planned to come from the Liard Mattson pool and would be supplied by both the existing well (F-36) and three to seven delineation locations, as shown on Figure 1. These new delineation wells are planned to be drilled and completed by April 2000 in order to meet the project start-up. As noted in Section 1.4, the Board has issued a Commercial Discovery Declaration for the Paramount et al F-36 gas field and approved the related Development Plan.

Shiha stated in its application that it had discussed alternatives to its project for the transportation of gas from the Fort Liard area with Westcoast Energy Inc. and TransCanada PipeLines Limited, but that commercially acceptable arrangements could not be reached with either company.

Views of the Board

The Board finds that the Shiha Pipeline is economically feasible and that the pipeline would likely be used at a reasonable level over the life of the project.

The Board considers that Shiha could provide a competitive benefit for third-party producers in the area who would have an additional option for shipping their gas.

Chapter 5

Traffic, Tolls & Tariffs

CFOL stated that it is currently negotiating with Shiha for transportation service on the Shiha Pipeline.¹ CFOL seeks to ensure fair and equitable third-party access to transportation service on the Shiha Pipeline on reasonable terms and conditions, including rates.

In its final submission, CFOL stated that it would rely upon Shiha's commitments to prepare a tariff for third-party service, to file the terms of agreement with shippers, including the tolls to be charged, and to comply with section 62 of the NEB Act, which requires that tolls be just and reasonable.² With respect to fair and equitable access, CFOL clarified that it was not requesting the Board to specifically condition any order that may be granted, on the understanding that, failing satisfactory resolution of tolls and tariff or access issues with Shiha, CFOL has a right to return to the Board with a request for specific relief.

In its application and subsequent submissions, Shiha indicated that the pipeline would have the capability to transport natural gas for third parties. The Company also provided the Board and CFOL with a pro forma transportation agreement that it would use as its tariff once the pipeline is operational.

Shiha agreed that CFOL has the right to seek relief from the Board failing satisfactory resolution of terms of access, tolls, and tariffs. Shiha stated that it expects to be regulated as a Group 2 pipeline company and noted that, as such, it would be subject to regulation by complaint, with its tariff containing that specific caution.

Views of the Board

Pursuant to the Board's *Memorandum of Guidance on the Regulation of Group 2 Companies* dated 6 December 1995, Group 2 companies are subject to a lesser degree of regulation than Group 1 companies. The financial regulation of Group 2 companies is carried out on a complaint basis, with a consequential reduction in financial reporting requirements. In the Board's view, it would be appropriate to regulate Shiha as a Group 2 company.

As there are currently no third party shippers, the Board hereby exempts Shiha from the requirements to file audited financial statements pursuant to subsection 129 (1.1) of the NEB Act. However, Shiha is required to inform the Board should it start to charge tolls to any shippers other than Paramount or Berkley or should there be any other significant change affecting its tolls or tariff. At that time, it may be necessary for the Board to reconsider the exemption from filing audited financial statements. Further, the

¹ CFOL is a working interest owner of mineral rights in lands comprising Exploration Licence 381, adjacent to the proposed Shiha Central Gas Battery near F-36, and is a member of the Liard Valley Producers Group.

² Section 62 of the NEB Act states: "All tolls shall be just and reasonable, and shall always, under substantially similar circumstances and conditions with respect to all traffic of the same description carried over the same route, be charged equally to all persons at the same rate."

accounting treatment of this project should conform with generally accepted accounting principles.

The Board notes Shiha's commitment to provide third-party access, and confirms that CFOL would have the right to complain to the Board if unable to resolve toll and tariff or access issues with Shiha.

Chapter 6

Disposition

The foregoing constitutes our Reasons for Decision in respect of the Shiha Pipeline application. The Board has decided, pursuant to section 58 of the NEB Act, to issue Order XG-S56-9-2000 (reproduced as Appendix 1) granting Shiha exemption from sections 30 through 33 of the NEB Act in respect of the proposed Shiha Pipeline.

Further to the discussion in Chapter 2 of these Reasons, the Board has not granted Shiha an exemption from the requirements of section 47 of the NEB Act. Shiha will therefore be required to apply to the Board for leave to open before initiating service.

J.S. Bulger
Presiding Member

R.J. Harrison
Member

J.-P. Théorêt
Member

January 2000
Calgary, Alberta

Appendix I

ORDER XG-S56-9-2000

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

IN THE MATTER OF an application, pursuant to section 58 of the NEB Act, by Shiha Energy Transmission Ltd. (Shiha), filed with the National Energy Board (Board) under File 3400-S056-1.

B E F O R E the Board on 26 January 2000.

WHEREAS the Board has received an application from Shiha dated 30 July 1999 for an order pursuant to section 58 of the NEB Act authorizing the construction and operation of a natural gas pipeline from the Northwest Territories to the Province of British Columbia, referred to as the Shiha Pipeline;

AND WHEREAS Shiha amended its application by letter dated 1 November 1999 so as to exclude the flow lines and central gas battery leading from the F-36 discovery area (Liard Gathering Project) after the Board expressed the view in a letter dated 28 October 1999 that those facilities are within the ambit of the *Canada Oil and Gas Operations Act*;

AND WHEREAS the application, as amended, that is before the Board pursuant to section 58 of the NEB Act is, therefore, limited to the 24 km raw gas pipeline from the outlet of the proposed central gas battery to the inlet of the proposed Maxhamish Gas Plant;

AND WHEREAS, pursuant to section 15 of the *Canadian Environmental Assessment Act* (CEAA), the Board determined that the scope of the project in relation to which an environmental assessment is to be conducted should include both the Shiha Pipeline and the Liard Gathering Project, collectively referred to as the Liard Pipeline Project;

AND WHEREAS, pursuant to the CEAA, the Board has considered the information submitted by Shiha and all other documents on the public registry, including submissions received on the draft Environmental Screening Report that was issued by the Board on 31 December 1999, and has conducted an environmental screening of the Liard Pipeline Project and has prepared an Environmental Screening Report;

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

AND WHEREAS a preliminary screening of the Liard Gathering Project has been conducted under the *Mackenzie Valley Resource Management Act* (MVRMA) and the Board has provided the Mackenzie Valley Environmental Impact Review Board (Review Board) with copies of all information submitted in relation to the Liard Pipeline Project, including a copy of the draft Environmental Screening Report;

AND WHEREAS the Review Board has advised the Board that it concurs with the Board's preliminary screening determination under the MVRMA *that the proposed development proceed into the regulatory process*;

AND WHEREAS the Board has examined the application and considers it to be in the public interest to grant part of the relief requested therein;

IT IS ORDERED THAT pursuant to section 58 of the NEB Act, the Shiha Pipeline, comprising a 324 millimetre diameter pipeline approximately 24 kilometres in length from the outlet of the proposed central gas battery in the F-36 discovery area of the Northwest Territories to the inlet of the proposed Maxhamish Gas Plant in northern British Columbia, is exempt from the provisions of sections 30 through 33 of the NEB Act, upon the following terms and conditions:

General

1. The pipeline facilities in respect of which this order is issued shall be the property of Shiha and, unless the Board otherwise directs, shall be operated by Paramount Resources Ltd. on behalf of Shiha.
2. The Shiha Pipeline shall be operated for sweet gas transmission only.
3.
 - (a) Unless the Board otherwise directs, and except as provided by paragraphs (b) and (c), Shiha 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.
 - (b) Unless the Board otherwise directs, Shiha shall pressure test the approved facilities with a liquid medium and submit the associated test program to the Board for approval at least 21 days prior to the commencement of pressure testing, pursuant to sections 7 and 23 of the *Onshore Pipeline Regulations, 1999* (OPR).
 - (c) Shiha shall cause no variation to be made to the specifications, drawings, or other information or data referred to in paragraphs (a) and (b) without the prior approval of the Board.
4. Unless the Board otherwise directs, Shiha shall implement or cause to be implemented all of the policies, practices, and procedures for the protection of the environment included in or referred to in its Application or otherwise adduced in evidence before the Board.

Prior to the Commencement of Construction

5. Unless the Board otherwise directs, Shiha shall file with the Board, at least 10 days prior to the commencement of construction, a detailed construction schedule identifying major construction activities and shall notify the Board of any modifications to the schedule as they occur.

6. Unless the Board otherwise directs, Shiha shall file with the Board for approval, at least 15 days prior to the commencement of clearing or other construction activities, an Environmental Protection Plan.
7. Unless the Board otherwise directs, Shiha shall file with the Board for approval, at least 15 days prior to the commencement of clearing or other construction activities, the Technical Construction Specifications provided to the contractor as part of the bid tender. The specifications shall reflect the construction practices and mitigation measures as committed to or described in its Application submissions, evidence and Environmental Protection Plan.
8. Unless the Board otherwise directs, Shiha shall file with the Board for approval, at least 15 days prior to the commencement of clearing or other construction activities, the qualifications and experience of the Environmental Inspector(s) assigned to the project.
9. Unless the Board otherwise directs, Shiha shall file with the Board for approval, at least 15 days prior to the commencement of clearing or other construction activities, a specific monitoring plan for water quality, plus confirmation of consultation with appropriate regulatory agencies and Environment Canada in developing the methodology.
10. Shiha shall file with the Board, at least 14 days prior to the commencement of construction, the following documents:
 - (a) the construction safety manual required pursuant to section 20 of the OPR; and
 - (b) the joining program required pursuant to section 16 of the OPR.

During Construction

11. Unless the Board otherwise directs, if any previously unidentified significant habitat features, specialized habitat for wildlife with a designated status, or raptor nests are discovered during construction, Shiha shall, in consultation with the Board, Environment Canada and appropriate regulatory agencies, avoid, relocate, or restore these features or areas in accordance with the procedures described in its Application or as otherwise adduced in evidence before the Board.
12. Unless the Board otherwise directs, Shiha shall file construction progress reports with the Board on a weekly basis in a form satisfactory to the Board. The reports will include information on the activities carried out during the reporting period, environmental issues, environmental compliance, and resolution of each issue.
13. Shiha shall maintain a file in each construction office containing:
 - (a) any information relating to applicable environmental undertakings as set out in the Application or as otherwise adduced in evidence before the Board; and
 - (b) copies of all applicable permits or authorizations containing environmental conditions.
14. Unless the Board otherwise directs, Shiha shall file with the Board for approval, at least 30 days prior to the commencement of reclamation activities, a revegetation plan. The revegetation plan

shall be developed in consultation with the Northwest Territories Department of Resources, Wildlife and Economic Development, Environment Canada, and the local communities, where appropriate, and shall describe the methodology for re-establishing areas disturbed by construction activities to pre-project productivity, including seed mixes and reforestation efforts.

Prior to the Commencement of Operation

15. Unless the Board otherwise directs, Shiha shall file with the Board for approval, at least 30 days prior to the commencement of operation or no later than 15 May following construction, whichever comes first, a monitoring program to test Shiha's predictions of the effects associated with the constructed facilities on migratory birds.
16. Unless the Board otherwise directs, Shiha shall file with the Board for approval, at least 30 days prior to the commencement of operation, an emergency procedures manual for use during operation, as required pursuant to section 32 of the OPR.
17. Unless the Board otherwise directs, Shiha shall file with the Board for approval, at least 30 days prior to the commencement of operation, an Environmental Protection Program for operation, as required pursuant to section 48 of the OPR, for the purposes of anticipating, preventing, mitigating, and managing conditions which have a potential to adversely affect the environment.
18. Shiha shall file with the Board, at least 14 days prior to the commencement of operation, the following documents:
 - (a) the operations and maintenance manual required pursuant to section 27 of the OPR; and
 - (b) the maintenance safety manual required pursuant to section 31 of the OPR.

Post-Construction

19. Shiha shall file with the Board:
 - (a) within six months after the commencement of operation a report identifying and describing each permafrost location encountered, including depth, extent, terrain, vegetation and mitigation implemented; and
 - (b) on an annual basis for a period of five years following construction, a report containing the results of monitoring at each permafrost location that includes slope stability, trench subsidence, evidence of floating pipe, vegetation re-establishment and heat effects to vegetation composition.
20. Shiha shall file with the Board, within six months after the commencement of operation a report on the results of the archaeological/heritage monitoring, including the treatment of any archaeological/heritage site encountered during construction and any consultation with regulatory authorities and any affected First Nation.

21. Shiha shall file with the Board for approval within six months following the completion of construction and on an annual basis for five years following construction, a report:
- (a) analyzing in detail the effectiveness of roll-back of slash in limiting unauthorized access along the right-of-way;
 - (b) including a plan to be developed in consultation with the appropriate provincial or territorial authorities, containing additional measures to be employed to further limit access where problems have been observed; and
 - (c) describing the results of Shiha's assessment of the establishment of vegetation cover on areas disturbed during construction.
22. Shiha shall file with the Board a post-construction environmental report within six months of the date that the approved facilities are 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) identify the environmental issues resolved and those unresolved, including documentation of any instances of environmental non-compliance;
 - (b) describe the measures Shiha proposes to take in respect of the unresolved issues;
 - (c) provide a list of locations where additional monitoring is required, including areas of possible subsidence and locations where additional remediation may be required to establish vegetation;
 - (d) describe communications with government agencies and the public regarding environmental compliance during construction; and
 - (e) provide a list and suitable map indicating all designated access routes and the location and type of all temporary facilities.
23. Unless the Board otherwise directs Shiha shall file with the Board, on or before the 31 January that follows each of the first two complete growing seasons following the filing of the post-construction environmental report referred to in Condition 22:
- (a) a list of the environmental issues indicated as unresolved in the report and any that have arisen since the report was filed;
 - (b) a description of the measures Shiha proposes to take in respect of any unresolved environmental issues; and
 - (c) locations where re-vegetation has been unsuccessful and the proposed remediation plan.

Expiration of Order

24. Unless the Board otherwise directs prior to 31 December 2001, this Order shall expire on 31 December 2001 unless the construction and installation of the Shiha Pipeline has commenced by that date.

NATIONAL ENERGY BOARD

Michel L. Mantha
Secretary