REPORT AND RECOMMENDATIONS

TO THE

LIEUTENANT-GOVERNOR IN COUNCIL

IN THE MATTER OF APPLICATIONS

FOR ENERGY PROJECT CERTIFICATES

BRITISH COLUMBIA UTILITIES COMMISSION

October 22, 1987

TO: The Lieutenant Governor in Council

MAY IT PLEASE YOUR HONOUR:

Pursuant to Order-in-Council No. 552 and the Terms of Reference for Review issued by the Honourable Jack Davis, Minister of Energy, Mines and Petroleum Resources and the Honourable Bruce Strachan, Minister of Environment and Parks, I have the honour to submit my report and recommendations on the Applications for Energy Project Certificates made by Northwood Pulp and Timber Ltd. and Prince George Pulp and Paper Ltd. and Husky Oil Operations Ltd. to construct and operate "Bypass" pipeline facilities for the transmission of natural gas from the Westcoast Transmission Company Limited natural gas mainline to the Applicants' industrial facilities in Prince George.

Respectfully,

British Columbia Utilities Commission

Vern Millard, Commissioner

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Report and Recommendations on
Bypass Application by Northwood and PGPP/Husky

TABLE OF CONTENTS

TABLE OF CONTENTS
(cont'd)

APPENDICES

REPORT AND RECOMMENDATIONS

TO THE

LIEUTENANT-GOVERNOR IN COUNCIL

IN THE MATTER OF
THE UTILITIES COMMISSION ACT
S.B.C. 1980, c. 60, as amended

and

IN THE MATTER OF APPLICATIONS
FOR ENERGY PROJECT CERTIFICATES
TO CONSTRUCT AND OPERATE "BYPASS" PIPELINE
FACILITIES FOR THE TRANSMISSION OF NATURAL GAS
FROM THE WESTCOAST TRANSMISSION COMPANY LIMITED
NATURAL GAS MAINLINE TO THE APPLICANTS' INDUSTRIAL
FACILITIES IN PRINCE GEORGE

APPLICANTS

NORTHWOOD PULP AND TIMBER LTD. ("Northwood")
and
PRINCE GEORGE PULP AND PAPER LTD. ("PGPP") and
HUSKY OIL OPERATIONS Ltd. ("Husky")

OCTOBER 1987

SUMMARY AND RECOMMENDATIONS

Background

Deregulation of the Canadian gas industry began in 1985 with the signing of the Western Accord and the subsequent Agreement on Natural Gas Markets and Prices. The report of the Pipeline Review Panel identified the potential problems of deregulation including the possibility of industrial customers wishing to bypass the utility distribution system should they not be able to obtain low-cost transportation service. That alternative became a reality with the Cyanamid application to the National Energy Board ("NEB") for a bypass pipeline and approval of the application raised the issue of future jurisdictional problems.

In March 1987, the British Columbia government decided to:

1. protect its jurisdiction in these matters by requiring that any proposed pipeline from the Westcoast facilities to an industrial plant obtain an Energy Project Certificate; and

2. provide for the possibility of bypass but seek to avoid the need for construction of bypass pipelines by urging the industrial customer and the utility to negotiate a competitive transportation agreement which would achieve "the best of all possible worlds".

In May, 1987 the government received applications for Energy Project Certificates for proposed bypass pipelines from three industrial consumers in Prince George. They are:

- Northwood Pulp and Timber Ltd. ("Northwood"); and
- Prince George Pulp and Paper Ltd. and Husky Oil Operations Ltd. ("PGPP/Husky")

On June 5, 1987 the applications were referred to the Commission for review by hearing to be followed by a report and recommendations. The Commission was directed to review various matters related to the Applications and to ". . . recommend whether the Energy Project Certificates applied for by Northwood and PGPP/Husky should be issued and, if so, under what conditions".

In August 1987 the Commission received notification from Inland Natural Gas Co. Ltd. ("Inland") that it and PGPP and Husky had negotiated a Transportation Agreement and were applying for approval of the negotiated rates. The Agreement required withdrawal of the bypass Applications following approval of the negotiated rates by the Commission. The Commission has conditionally accepted the Agreements and it is anticipated that PGPP and Husky will withdraw their bypass applications following execution of an Agreement with Inland.

The Hearing

The hearing commenced in Prince George on September 9, 1987 to consider the Northwood Application. Northwood wishes to construct a 5.5 km (3.5 miles) pipeline from the Westcoast main transmission line to Northwood's pulp mill in Prince George. The facility with related regulating and metering facilities would cost up to $1.1 million.

Northwood contends that its Application should be approved because:

- Inland's proposed transportation rates are not competitive with the bypass alternative,
- Northwood is the only bypass candidate,
- the proposed pipeline is safe and efficient,
- the project construction will provide significant benefits to British Columbia,
- the impact on Inland's other customers is insignificant, and
- Northwood has the corporate will to proceed.

Inland contends that the Application should not be granted because:

- its proposed transportation rates are competitive with bypass,
- the facilities are not needed, and
- there would be an unfavourable impact on Inland's other customers and the utility shareholders.

The Commission received submissions from several municipalities including Prince George. They opposed the Application because of possible impacts on franchise fees paid by Inland. Additionally, the municipalities wished to minimize any rate increase that might be incurred by residential and commercial customers. Moreover, they contended that franchise fees should be based on the full value of the gas consumed whether purchased directly at the wellhead or sold by a utility.

The Consumers' Association opposed the Northwood and Inland basis for determining transportation rates competitive with bypass. It suggested a rate somewhat lower than the present rate paid by Northwood ($.46/GJ) but higher than its actual cost of bypass (approximately $.06/GJ).

The British Columbia Petroleum Corporation opposed the Application because Northwood seeks an inducement to stay on the Inland system.

B.C. Hydro opposed the Application because of duplication of existing facilities, higher overall costs and impacts on other customers.

Commission Views

The main issues to emerge from the hearing were:

1. When should bypass be permitted?
2. What is the true cost of the Northwood bypass alternative?
3. What are the impacts of bypass? and

4. What are the alternatives to bypass?

1. When should bypass be permitted?

The March, 1987 government policy statement indicated that:

(a) bypass pipelines are a means of permitting industries in British Columbia to be competitive with industries in other areas and are therefore acceptable.

(b) while the government accepts bypass it prefers that the potential bypass customer and the utility negotiate contracts which reflect the true cost of transportation and thereby avoid the need for a bypass pipeline.

(c) bypass affects the industrial customer, the utility and its other customers and the government believes that negotiating appropriate transportation contracts would benefit all.

While the government has urged negotiation it is not mandatory and if the utility does not offer a competitive transportation contract then a bypass pipeline is the only alternative available to obtain reduced transportation costs. Under those conditions the bypass pipeline should be approved but any incremental costs incurred by the utility as a result of losing the customer should be borne by the utility and not by its other customers.

Where the utility has offered a competitive contract and the industrial customer has not accepted, the government should not grant approval for the bypass pipeline because there is a viable alternative and approval would increase the costs to be borne by the utility's other customers.

A dispute resolution mechanism is required where the parties cannot agree on the true cost of bypass. Inland suggested that the Commission serve this role, which is appropriate, because it must eventually adjudicate on the appropriateness of negotiated rates.

2. What is the true cost of the Northwood bypass alternative?

Both Northwood and Inland agreed that the true cost of transportation on a bypass pipeline should be based on the cost of a new stand-alone facility and should include allowance for both capital and operating costs, and the benefits provided by the terms and conditions of transportation service.

Inland disagreed with Northwood's contention that the rate should include an "inducement" component to compensate the industrial customer for giving up the intangible benefits of having full control over gas delivery to its plant. They also disagreed over whether the rate should include valuation of benefits from being on the Inland system. Another area of disagreement was whether there should be a phase-in period.

The Commission agrees that the rate should reflect the costs of a new stand-alone facility with allowance for capital and operating costs as well as the benefits provided by the terms and conditions of transportation service. It does not agree that it should include an "inducement" for the industrial customer to remain with the utility. Nor does it believe that it should include benefits from being on the Inland system if they are of no value to the industrial customer. Because of the impact on other customers and the desire to minimize "rate shock" the Commission agrees that there should be a phase-in period.

During the course of the hearing there were several changes in the information used to calculate the true bypass cost. The Commission concludes that the competitive rate would be $.20/GJ for the first year and $.06/GJ for the second and subsequent years. The rates can be compared to the current transportation tariff of $.46/GJ and the average rate proposed by Inland in its rate design application of $.30/GJ for industrial customers not having a bypass option.

3. What are the impacts of bypass?

Several estimates of the impact of bypass were made by participants in the hearing, but frequently the base case was not realistic. The Commission has made its estimates based on a comparison of its estimated true cost of transportation and bypass. In order to provide perspective because of the rapidly changing circumstances, it has also included reference to the current costs.

Northwood

Assuming that the Commission's estimated cost is accurate, the only advantage to Northwood of bypass is the intangible benefits of "self-reliance, independence and cost predictability."

Inland

Bypass compared to the Commission's determined rates would reduce revenues from Northwood by $0.6 million in 1987/88 and by $0.18 million in 1988/89 and subsequent years. These reductions in revenues from Northwood would be made up by Inland's other customers. Bypass would reduce revenues to Inland by $1.4 million.

The loss of a major industrial customer could affect the perception of financial markets respecting Inland's future and could lead to higher financing costs.

Inland's Other Customers

Bypass would lead to slightly increased costs as indicated above. A residential customer would pay less than $1 per year more.

Prince George

Northwood agreed to make the same franchise and property tax payments to Prince George as Inland would have made had Northwood remained on the system. Therefore, there are no impacts from bypass.

Provincial and Federal Governments

Since the rate reflects the true cost of bypass, there would be minimum impact on income taxes, but there could be some reduction because of the write-off of additional capital costs.

During the construction period there would be some small spin-off effects through increased industrial activity.

In summary, the impacts of bypass are modest when compared with negotiated rates. Those impacts become more significant if recognition is given to the change in transportation tariffs from current rates. Under the current tariff of 46 cents/GJ, Northwood contributes $1.4 million to Inland's revenue requirements. Under the Commission's assessment of a competitive rate, it would contribute $0.18 million. Therefore, the revenue loss that will have to be made up by Inland's other customers as compared to 1986/87 will be $1.4 million under bypass and $1.22 million under the Commission's rates.

4. What are the options to bypass?

The Commission was directed to review "possible options to the bypass pipeline, including rate-making principles and possible incentives".

The current policy states that bypass is acceptable but urges the negotiation of rates that reflect the true cost of bypass. Under these conditions there are only two alternatives to bypass - continued use of the existing distribution system or conversion to an alternative fuel. The latter is only viable in special cases, and consequently the real option to bypass is the current pipeline delivery system. The Commission assumes that in requesting comments on bypass options, the government wished comments on the efficacy of the current system with the new policy. The Commission suggests that:

(a) the policy be to determine a "reasonably competitive" rate of bypass rather than "the true cost of service" and

(b) a dispute resolution process be instituted to assist the negotiation process and try to avoid divisive and expensive hearings.

RECOMMENDATIONS

Having regard for the evidence presented, the Commission recommends as follows:

1. An Energy Project Certificate not be granted to Northwood, providing that Inland promptly offers Northwood a transportation contract with the rates and conditions specified in Section 6 of the report. The appropriate rates are \$.20/GJ in 1987/88 and \$.06/GJ for years two through ten, depending on final Westcoast costs and tax treatment thereon.

2. The bypass policy be modified to refer to "the reasonably competitive rate of bypass" rather than "the true cost of service"; and

3. A dispute resolution process through the B.C. Utilities Commission be instituted to assist negotiations and try to avoid divisive, costly hearings.

1.0 INTRODUCTION

1.1 Background

With their signing of the Western Accord on March 28, 1985 and the Agreement on Natural Gas Markets and Prices on October 31, 1985, the Federal and Provincial Governments adopted a policy of deregulation in the natural gas industry. Under the Agreement, a Pipeline Review Panel was established to examine the role and operations of interprovincial and international pipelines in Canada.

One facet of deregulation was to permit large industries to make "direct purchases" of natural gas at the wellhead and have it delivered by the main transmission pipeline company. Arranging for direct delivery encountered problems with the regulated local distribution utilities already serving the industrial customers. One way of circumventing those problems was for the industrial customer to construct a pipeline to bypass the utility system. In 1985 Cyanamid, a large industrial customer in Ontario served by Consumers Gas, applied to the National Energy Board ("NEB") for approval to construct a pipeline to bypass the distribution utility system. The NEB granted the application in December 1986.

On March 3, 1987, Northwood Pulp and Timber Limited ("Northwood", "the Applicant") of Prince George published a Notice in the Prince George Citizen stating that it intended to construct a natural gas pipeline pursuant to Section 11 of the Pipeline Act.

Inland Natural Gas Co. Ltd. ("Inland") made Application dated March 6, 1987 requesting the Commission to order Northwood to cease work on the bypass pipeline.

In a press release dated March 19, 1987 entitled "Province Declares Jurisdiction in Pipeline Bypass Issue" (Exhibit 19), the Minister of Energy, Mines and Petroleum Resources declared that:

> "The provincial government has taken steps to protect its jurisdiction over an issue which arises out of natural gas deregulation --- the ability of large industrial users to bypass local gas distribution systems."

By Order-in-Council No. 552 (Appendix A) and the Minister of Energy's press release of March 19, 1987, the B.C. Government stipulated that:

> "Effective immediately, any bypass proposal is designated a "regulated project" under the B.C. Utilities Commission Act. An industry proposing to build a bypass pipeline must therefore obtain an Energy Project Certificate from the Minister of Energy, Mines and Petroleum Resources."

Order-in-Council No. 552 designates that every undertaking of a kind that consists of the building of a natural gas pipeline from Westcoast Transmission Company Limited ("Westcoast"), facilities to any plant as an undertaking significant in the matter of energy if alternative facilities exist for transport of the natural gas from the Westcoast facilities to the plant. On June 5, 1987, pursuant to Sections 19(1)(a) and 20 of the Utilities Commission Act ("the Act"), the Ministers of Energy and Environment referred the Applications of Northwood and Prince George Pulp and Paper Limited ("PGPP") and Husky Oil Operations Ltd. ("Husky") to the Commission for review and appointed Vern Millard as Commissioner with Terms of Reference as specified in Appendix B.

1.2 The Applications

Northwood applied on May 1, 1987 for an Energy Project Certificate to bypass the Inland system. PGPP and Husky applied May 4, 1987 for approval of an Energy Project Certificate.

Northwood proposed to construct a bypass pipeline to serve its operations. In particular, Northwood proposed to construct a 5.5 km (3.5 mile) pipeline from the Westcoast natural gas mainline to its industrial facility in Prince George for the purpose of transporting natural gas. The proposed line would be constructed at a cost initially estimated by the Applicant of approximately $612,200 on land owned or leased by Northwood. The construction of the proposed facilities was scheduled to commence in the summer of 1987 with commissioning prior to November 1, 1987.

PGPP and Husky made a joint application to construct a 6.8 km (4.2 mile) pipeline from the Westcoast natural gas mainline to their facilities in Prince George. The initial capital cost estimate was $900,000. The new pipeline was also planned for commissioning prior to November 1, 1987.

The Applicants stated that their projects would provide certain benefits including reduced gas transportation costs, hence increased profits to the companies, and increased income taxes to the governments. The Applicants calculated that the increased rates to Inland's residential and commercial customers as a result of the bypass would be small, the loss of franchise fees to the City of Prince George was minimal, and the project would have little negative environmental impacts.

Negotiation of a contract for transportation services between Northwood and Inland was unsuccessful because of disagreement over certain terms and conditions together with the rates (Exhibits 55 and 56). Negotiations between Inland and PGPP and Husky, however, were successful and the agreements were filed with the Commission for approval by Inland on August 21 and 27, 1987 respectively. (These agreements were later approved, subject to revision, by letter Decision of the Inland Rate Design Panel dated October 9, 1987.)

In light of the understandings of the Commission at September 1, 1987, and taking into consideration the views of intervenors and applicants in the bypass

Hearings, the Commission issued Order No. G-55-87 (Exhibit 1) ordering the hearing to proceed in two phases.

Phase 1 commencing on September 9, 1987 in Prince George, B.C. and concluding on October 9, 1987 in Vancouver addressed the Application by Northwood and issues common to both applications. Phase 2 dealing with the PGPP/Husky Application scheduled to commence on October 14, 1987 has been deferred as a result of the Commission Decision of October 9, 1987. Assuming the parties execute a formal agreement based on the letter of intent and the Commission approval, PGPP and Husky will withdraw their bypass applications.

Concurrently with the Applications for consideration by this Commission, PGPP and Northwood also made Application to the NEB pursuant to Sections 59(2) and (3) of the NEB Act requesting the NEB to (Exhibit 29):

1. Require Westcoast to transport gas on behalf of the Applicants.

2. Require Westcoast to provide suitable facilities for the junction of its transmission line with facilities of the Applicants.

The NEB considered the Applications via the process of written submission by interested parties and issued a Decision on October 19, 1987. The NEB ordered Westcoast to provide facilities for Northwood after the industrial agrees to pay Westcoast for the facilities.

Evidence for the Applicant of the Phase 1 hearing was presented by Mr. Horst Sander, President of Northwood, and Mr. G. McCurdy, Assistant Secretary-Assistant Treasurer, together were their consultants, Mr. R. Smith of Peat Marwick, Mr. G. Good of Novacorp and Mr. Staniland, an environmental consultant. Appearing for Inland were Mr. R.E. Kadlec, President and Chief Executive Officer, Mr. D.C. Fairbairn, Industrial Marketing and Rates Manager and Mr. W.R. Manery, Manager, Engineering and Construction.

The following witnesses also presented evidence:

- for the City of Prince George, Quesnel and Williams Lake, Mayor J.E. Backhouse, Mr. J.A. Girvin, Mr. A.R. Miller, Mr. C.A. Jeffery and Mr. R.J. Mitchell.

- for ICG Utilities (British Columbia) Ltd., Mr. J. de Grasse, Vice-President and General Manager.

- for the Union of British Columbia Municipalities, Mr. T.G. Pearce.

- for the City of Kamloops, Mr. R.D. Kask.

- for the Corporation of the Village of Salmo, Mr. D.R. Chapman.

- for the Association of Kootenay-Boundary Municipalities, Mayor C. Lakes.

- for the City of Grand Forks, Mayor Y. Sugimoto.

- for the Regional District of Kootenay-Boundary, Mr. W. Brash.

2.0 ENERGY POLICY CONSIDERATIONS

Considerable time was spent at the hearing reviewing and interpreting government policy as it relates to the competitive marketing of natural gas and the potential for large industrial customers to bypass traditional distribution utilities. Inland testified that government policy could be gleaned from the government policy statements over the past several years. Mr. Fairbairn, for Inland, pointed out that the government policies provided a mosaic which could be interpreted to understand the government's view with respect to bypass. In a response to a Commission staff Information Request (Exhibit 24) Inland stated that the concept of bypass can be reconciled with the earlier statements of provincial government policy on the basis that if the rates of the utility are not competitive or "consistent with economic reality" then bypass will be permitted, but if the rates of the utility are competitive and consistent with economic reality then the distribution utilities will retain all rights to carry gas for industrial customers located in their service areas.

Northwood differed in its interpretation of government policy by taking the position that if Northwood and Inland could not negotiate a satisfactory agreement then government policy dictated that Northwood should be allowed to bypass the distributor.

At odds with both the interpretations of Inland and Northwood, Mr. Gathercole, on behalf of certain groups of residential consumers, argued that the word competitive in the Energy Minister's press release dated March 19, 1987, should not be interpreted narrowly. He argued that a rate offered by Inland which may be in excess of the bypass costs of Northwood could be interpreted as being sufficiently competitive for the government to decline the issuance of an Energy Project Certificate. By the liberal interpretation of the competitive rate Mr. Gathercole believed that residential and commercial customers of Inland could be insulated from the full impact that would result from negotiated agreements at rates equalling the industrial customers' own costs of bypass.

An understanding of government policy with respect to bypass is fundamental to the recommendation required from this hearing. A review of relevant documents is provided below.

2.1 A Report on the Marketing of British Columbia Natural Gas, February 1983

The B.C. government's Decision and Comment on the marketing report, prepared by Dr. George Govier, stated "direct sales may be made to direct purchasers but only through the facilities of the appropriate utility company". That portion of the report dealt with a government action to allow designated eligible purchasers to contract directly for natural gas supplies from producers. However, it did not contemplate the construction of bypass pipelines.

2.2 The Western Accord, March 28, 1985

The Western Accord signed between the governments of Canada, Alberta, British Columbia and Saskatchewan signified a fundamental change in government policy with respect to energy. While the Western Accord dealt principally with oil matters, the governments agreed that a more flexible and market oriented pricing regime was required for the domestic pricing of natural gas.

2.3 The Natural Gas Price Act, June 17, 1985

The British Columbia government moved quickly following the Western Accord to pass Bill 52, the Natural Gas Price Act. In a press release dated June 6, 1985 the then Minister of Energy, Mines and Petroleum Resources outlined the objectives of the new legislation. These objectives included the desire to reduce government involvement in the gas industry while encouraging the private sector to become more competitive and aggressive in marketing B.C. gas.

2.4 Agreement on Natural Gas Markets and Prices, October 31, 1985

The October 31, 1985 Agreement between Canada, Alberta, British Columbia and Saskatchewan provided details of the decision by the governments to provide a more flexible and market oriented pricing regime for the domestic pricing of natural gas. The stated intention of the parties to the Agreement was to foster a competitive market for natural gas in Canada, consistent with the regulated character of the transmission and distribution sectors of the gas industry. Section 25 of the Agreement states, "In conjunction with the transition to a more flexible and market oriented pricing regime for domestic natural gas sales, the governments agreed that an early and all encompassing review of the role and operation of inter-provincial and international pipelines engaged in the buying, selling and transmission of gas is in order. Towards this end, the parties agreed that the review would be carried out by an impartial panel appointed by the Minister of Energy, Mines and Resources in consultation with the Ministers representing the governments of Alberta, British Columbia and Saskatchewan."

2.5 Pipeline Review Panel Report, June 1986

The Pipeline Review Panel report provided recommendations on the many contractual and technical requirements necessary to fulfill the government desire for a market oriented pricing regime for domestic natural gas sales. Among the many characteristics of a flexible and market oriented pricing regime, the panel discussed the need for non-discriminatory access for transportation services and the option of bypass. On the matter of bypass, the pipeline review panel stated in Section 3.2.5 that "Subject to regulatory approval, large industrial users should have the right to build, own, and operate their own pipelines to supply their plants and so bypass all or part of the existing pipeline or distribution system. Regulatory approval should be given where the application meets all normal construction and related standards, it can be justified on economic grounds, and where there is no reasonable competitive alternative through the pipeline or distribution system." (emphasis added)

In Section 5.3.5 the review panel went on to state, "In a truly market competitive system a customer should have the option to contract directly with the producer or broker for its gas supply and to select its transportation service, including the right to construct its own pipeline connections to the transmission line. The panel supports the option of bypass of the distribution system subject to approval of the provincial regulatory authority. This option is not now available in all provinces. Bypass may result in a significant increase in costs to other customers, but it will be incumbent on the distributor to offer unbundled transportation rates which will be competitive with the bypass option. Provincial regulators should recognize the justification for special distributor transportation rates where necessary in these circumstances, provided retaining this business at special rates is in the best interests of the core customers." (emphasis added)

2.6 National Energy Board Decision of Cyanamid Canada Pipeline Inc., December 1986

In October 1985, Cyanamid Canada Pipeline Inc. ("CCPI") applied to the National Energy Board for an Order of the Board authorizing the construction and operation of natural gas pipeline facilities necessary to implement a direct sale of Alberta natural gas for use in the ammonia plant of Cyanamid. It estimated that the proposed bypass pipeline would reduce the cost of transporting the gas for Cyanamid from $0.246/GJ to $0.066/GJ. The NEB stated that if those rates were reduced to CCPI's unit costs, or lower, the investment would no longer be profitable and therefore CCPI presumably would not construct the pipeline.

The NEB concluded that "constructing the bypass may be inefficient. A more efficient use of resources would result from a reduction in the Consumers' rate charged to Cyanamid. Such a reduction would require less of an increase in rates to Consumers other customers than if the Cyanamid load were lost because of the bypass. Furthermore it would not require an investment in new facilities". The NEB went on to say that "Even though the circumstances of this case make the bypass privately profitable, the duplication of facilities without the demonstration of a sufficient increase in pipeline throughput or plant output lead the Board to conclude that the bypass would likely be inefficient from a Canadian public interest point of view.

In approving the Cyanamid application the Board stated in Section 7.5 of its report that, "the installation of the bypass could result in less than an optimal use of resources, but outweighing this consideration is the need to allow market signals to flow through to the Ontario Energy Board and the distributor utility."

2.7 B.C. Order-in-Council No. 552, March 18, 1987

On March 18, 1987 the government passed Order-in-Council No. 552 which designates every undertaking of a kind that consists of the building of a natural gas pipeline from Westcoast facilities to any plant as an undertaking significant in the matter of energy if alternate facilities exist for the transport of the natural gas from the Westcoast facilities to the plant. In issuing this Order-in-Council the British Columbia government recognized the National Energy Board ruling with respect to Cyanamid and protected its jurisdiction to review bypass proposals. Before an industrial customer may bypass the local distributor utility an Energy Project Certificate must be obtained from the government.

The press release issued by the Ministry included the following statements by the Honourable Jack Davis:

> "Given our commitment to deregulation we now must allow the bypass alternative. By-pass arrangements have been proposed elsewhere in Canada to reduce the cost of gas to industry, and in order to be competitive we must allow similar market-oriented practices here."
>
> "We are not opposed to industry making its own bypass arrangements. However, other gas users -- residential, commercial and small industrial -- benefit if a compromise can be reached and industry can save the cost of building a bypass pipeline.
>
> If large industries and utilities can negotiate contracts which reflect the true cost of service to all categories of customers, we will have achieved the best of all possible worlds. All users will be treated equitably and the advantages of location will be captured by energy-using industries in British Columbia."

The communique went on to state that if the Prince George Pulp and Paper and Husky Oil proponents could not negotiate a satisfactory arrangement with Inland, their bypass line would be built but construction would require an Energy Project Certificate. Order-in-Council No. 552 and the Minister's press release are provided as Appendix A of this report.

2.8 The Disposition of Applications and Terms of Reference for Review by the British Columbia Utilities Commission, June 5, 1987

The Terms of Reference for this hearing require the Commissioner to consider the impact of the bypass proposals on Inland Natural Gas and its customers. Among other things the Commissioner is required to consider the rates and conditions that Inland should accept to keep the bypass Applicants on the Inland system.

In the Energy Minister's press release dated June 11, 1987, he stated that he was not opposed to industrial customers making bypass arrangements, but there is room for compromise. He said "if Inland and these industrial customers can negotiate rates and terms that would keep them on the Inland system, so much the better. This would avoid the wastefulness of building facilities, that, in effect, duplicate existing ones."

The hearing Terms of Reference are provided in Appendix B of this Report.

2.9 Fibreco Export Inc.

Fibreco is a new industrial enterprise constructing a plant within the service area of ICG Utilities (British Columbia) Ltd. In correspondence from the government Fibreco has been advised Order-in-Council No. 552 will not apply to the Fibreco mill since no alternate facilities serve the plant. Therefore Fibreco will not require an Energy Project Certificate for a pipeline.

2.10 Energy Ministers' Meeting, July 6, 1987

The four Energy Ministers renewed their commitment to the fundamental principles expressed in the Agreement on Natural Gas Markets and Prices on July 6, 1987. The Governments remain committed to the deregulation process including market responsive pricing and open transportation access.

2.11 Commission Views

The record demonstrates the speed with which deregulation activities occurred following the Western Accord. It also reveals that governments have opted to play a major role in moving towards deregulation. For example, the parties to the Agreement on Natural Gas Markets agreed to establish a panel to review the role and operations of interprovincial and international pipelines in Canada. Similarly, following the NEB decision on Cyanamid, the British Columbia government acted to protect its jurisdiction and announced its policy respecting the possible bypassing of utility distribution systems.

The March 19, 1987 press release identified three basic objectives in the B.C. government's policy.

1. Bypass pipelines are a means of permitting industries in British Columbia to be competitive with industries in other areas and are therefore acceptable;

2. While the government accepts bypass it prefers that the potential bypass customer and the utility negotiate contracts that reflect the true cost of transportation and thereby avoid the need for a bypass pipeline.

3. There are three groups potentially affected by bypass -- the industrial customer, the utility, and other customers of the utility -- and the government believes that negotiating appropriate transportation contracts would benefit all three.

While the government has clearly urged the utility and industrial customers that are potential bypass candidates to negotiate transportation contracts that are competitive with the bypass option, there is no requirement that negotiations either take place or reach a successful conclusion. If the utility does not offer the industrial customer a competitive transportation contract then a bypass pipeline is the only alternative available to the industrial consumer to obtain reduced natural gas rates. That appears to have been the position that Cyanamid found itself in respecting its supply of gas. Under those circumstances the bypass pipeline should be approved but any incremental costs incurred by the utility as a result of losing the customer should not be passed on to other utility customers since it was the utility that failed to meet the government's expectations.

On the other hand, where the utility has offered the industrial customer a competitive contract and the industrial customer has not accepted, the government should not grant approval for the bypass pipeline. The industrial customer has a viable alternative to bypass and to approve the pipeline would reduce revenues for the utility which would have to be made up from either the utility shareholders or other customers. Where the utility has met the terms of government policy there is no basis for expecting its shareholders to bear the penalty of the intransigence of the industrial customer. Similarly it is not fair to expect the shortfall in revenue to be made up by other customers. Consequently the bypass application should be denied unless the industrial customer is prepared to compensate the utility and its other customers for the loss in revenue.

It is also necessary to recognize that even with the best of intentions on both sides, negotiations may not be successful and consequently there is a need for a dispute resolution mechanism. Inland suggested that the Commission be called upon to adjudicate in those cases. That appears to be a suitable process and compatible with the Commission's responsibility of deciding whether rates that the parties have successfully negotiated reflect the true cost of service as identified in the March 19, 1987 policy statement.

3.0 HISTORY OF GAS SERVICE IN THE PRINCE GEORGE AREA

Mr. Kadlec, President and Chief Executive Officer of Inland, was called to speak to the history of gas service in the Prince George area. In addition, a large number of the Exhibits discuss in general terms the development of this service. The evidence indicates that Westcoast began planning to construct its pipeline from the Peace River area to the U.S. border at Huntington, B.C. in the early 1950s. To ensure that the transmission pipeline project would be financially feasible, Westcoast entered into three contracts. A contract with the Pacific Northwest Pipeline Corporation which provided for that company purchasing gas from Westcoast at Huntington, B.C. for distribution in the United States, a contract with the British Columbia Electric Company (now British Columbia Hydro and Power Authority ["B.C. Hydro"]) for the supply of gas to the Lower Mainland and Greater Vancouver markets and a contract with Inland for the supply to the interior of British Columbia including Prince George. In return for Inland and B.C. Hydro agreeing to purchase their gas supplies from Westcoast, Westcoast agreed that it would not supply gas to other companies in Inland's and B.C. Hydro's distribution areas. This exclusivity arrangement between Westcoast and Inland can be traced back to a contract signed in 1955.

On January 30, 1956, as amended on April 7, 1956, Inland applied to the then Public Utilities Commission for a Certificate of Public Convenience and Necessity for the whole of the undertaking envisaged by its contract with Westcoast. Inland proposed to install feeder lines from the transmission line of Westcoast to various communities in the interior including Prince George and to operate the distribution systems in these communities.

In the meantime, the residents of Prince George, by referendum, authorized the Prince George City Council to grant a franchise to the Prince George Gas Company Ltd. ("Prince George Gas"), as opposed to Inland, to provide gas service in the Prince George area. Pursuant to this franchise, on March 21, 1956 Prince George Gas applied to the Public Utilities Commission for a Certificate of Public Convenience and Necessity to construct and operate a distribution system to supply natural gas to the City of Prince George and, by amendment, to approve the franchise agreement, or, alternatively, for a Certificate to construct and operate a distribution system for the supply of natural gas to the residents of Prince George and the surrounding area.

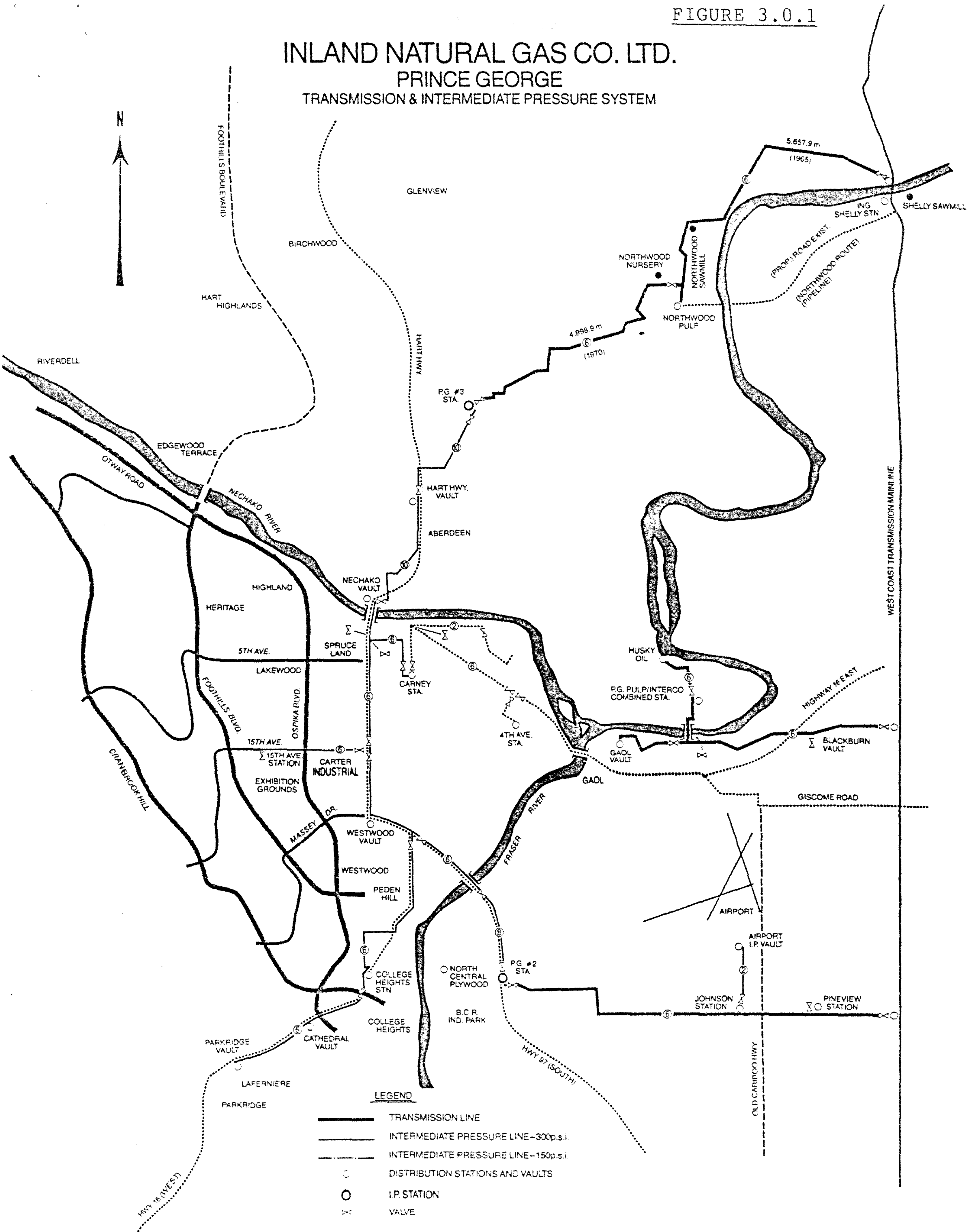
On May 23, 1956, the Commission granted Prince George Gas a Certificate to serve the residents of Prince George subject to the condition that Prince George Gas make suitable arrangements to secure a supply of gas from Inland which would put the Prince George area on a substantially equal footing with other areas served by Inland and at a price that would ensure that a contribution would be made by consumers in the Prince George area to the overall cost of the Inland system.

On the same date, the Commission granted Inland a Certificate as requested in its Application with the exception of service to Prince George and the surrounding area. Subsequently, the Public Utilities Commission granted Inland a Certificate of Public Convenience and Necessity to construct and operate a natural gas distribution system in and about Prince George. This Certificate was subject to the condition that the rights granted by the Certificate would not be effective if Prince George took effective steps before June 1, 1959 to construct and operate a municipal gas system. The residents of Prince George rejected the option to construct and operate their own system and, consequently, Inland's Certificate was further amended on October 7, 1958 to allow it to immediately proceed with the construction and operation of a natural gas distribution system in and about Prince George. On June 12, 1959, Inland's Certificate was further amended to require the payment of franchise fees by Inland to the City in the amount of three percent of the amount received by Inland in each immediately preceding calendar year for gas consumed within the City.

In 1965, Inland completed construction of a six-inch high pressure lateral running from the Westcoast line to Northwood's facilities at a capital cost of $90,156.

In 1970, Inland constructed an eight-inch high pressure branch line from the lateral serving Northwood to connect with its Prince George facilities at a cost of $182,996.

The Inland gas pipeline system for the Prince George area is shown in Figure 3.0.1.


INLAND NATURAL GAS CO. LTD.
PRINCE GEORGE
TRANSMISSION & INTERMEDIATE PRESSURE SYSTEM
N
FOOTHILLS BOULEVARD
GLENVIEW
BIRCHWOOD
HART HIGHLANDS
HART HWY
RIVERDELL
5,657.9 m
(1965)
ING SHELLY STN
SHELLY SAWMILL
NORTHWOOD SAWMILL
NORTHWOOD NURSERY
(PROP.) ROAD EXIST.
(NORTHWOOD ROUTE)
(PIPELINE)
NORTHWOOD PULP
4,996.9 m
(1970)
P.G. #3 STA.
EDGEWOOD TERRACE
OTWAY ROAD
NECHAKO RIVER
HART HWY. VAULT
ABERDEEN
WEST COAST TRANSMISSION MAINLINE
NECHAKO VAULT
HIGHLAND
HERITAGE
SPRUCE LAND
5TH AVE.
LAKEWOOD
CARNEY STA.
HUSKY OIL
P.G. PULP/INTERCO COMBINED STA.
HIGHWAY 16 EAST
FOOTHILLS BLVD.
OSPIKA BLVD.
4TH AVE. STA.
15TH AVE.
15TH AVE. STATION
CARTER INDUSTRIAL
GAOL VAULT
BLACKBURN VAULT
GAOL
EXHIBITION GROUNDS
GISCOME ROAD
CRANBROOK HILL
MASSEY DR.
WESTWOOD VAULT
FRASER RIVER
WESTWOOD
PEDEN HILL
AIRPORT
AIRPORT I.P. VAULT
COLLEGE HEIGHTS STN
NORTH CENTRAL PLYWOOD
P.G. #2 STA
JOHNSON STATION
PINEVIEW STATION
B.C.R. IND. PARK
COLLEGE HEIGHTS
PARKRIDGE VAULT
CATHEDRAL VAULT
HWY 97 (SOUTH)
OLD CARIBOO HWY
LAFERNIERE
PARKRIDGE
HWY 16 (WEST)
LEGEND
TRANSMISSION LINE
INTERMEDIATE PRESSURE LINE-300p.s.i.
INTERMEDIATE PRESSURE LINE-150p.s.i.
DISTRIBUTION STATIONS AND VAULTS
I.P. STATION
VALVE

4.0 THE NORTHWOOD APPLICATION

The Northwood Application dated May 1, 1987 (Exhibit 3) contains details of its Application, project description, economic and environmental impacts, project justification, and ancillary Applications and consultations. Further details and amendments are provided in various hearing exhibits.

4.1 Proposed Facilities

The proposed project consists of the construction of a pipeline, and associated meter and regulating facilities for the purpose of transporting natural gas to the Applicant's industrial facilities in Prince George, British Columbia. Figure 4.1.1 illustrates the pipeline route of the new facilities. The pipeline would be constructed entirely on land owned or leased by the Applicant (Exhibit 3).

Novacorp International Consulting Ltd. ("Novacorp") was retained to prepare a capital cost estimate for a natural gas pipeline and associated regulating facilities required from the Westcoast Transmission mainline to the Northwood pulp mill in Prince George. A site visit to Prince George was completed on June 5, 1987, at which time the existing facilities and proposed pipeline route were examined. Preliminary design requirements were also discussed at that time.

A revised capital cost estimate prepared by Novacorp in August 1987, as appended in Exhibits 4 and 5 specified the required facilities as:

"3.1 PIPELINE

a) The pipeline route proposed in this report follows and makes use of an existing Northwood right-of-way throughout most of its length. The pipeline's main parameters are:

- Pipe size: 168.3 mm OD (6")
- Length: 5.5 km (3.5 miles)
- Maximum operating pressure: 900 psi
- External coating: fusion bond epoxy

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NORTHWOOD LATERALS

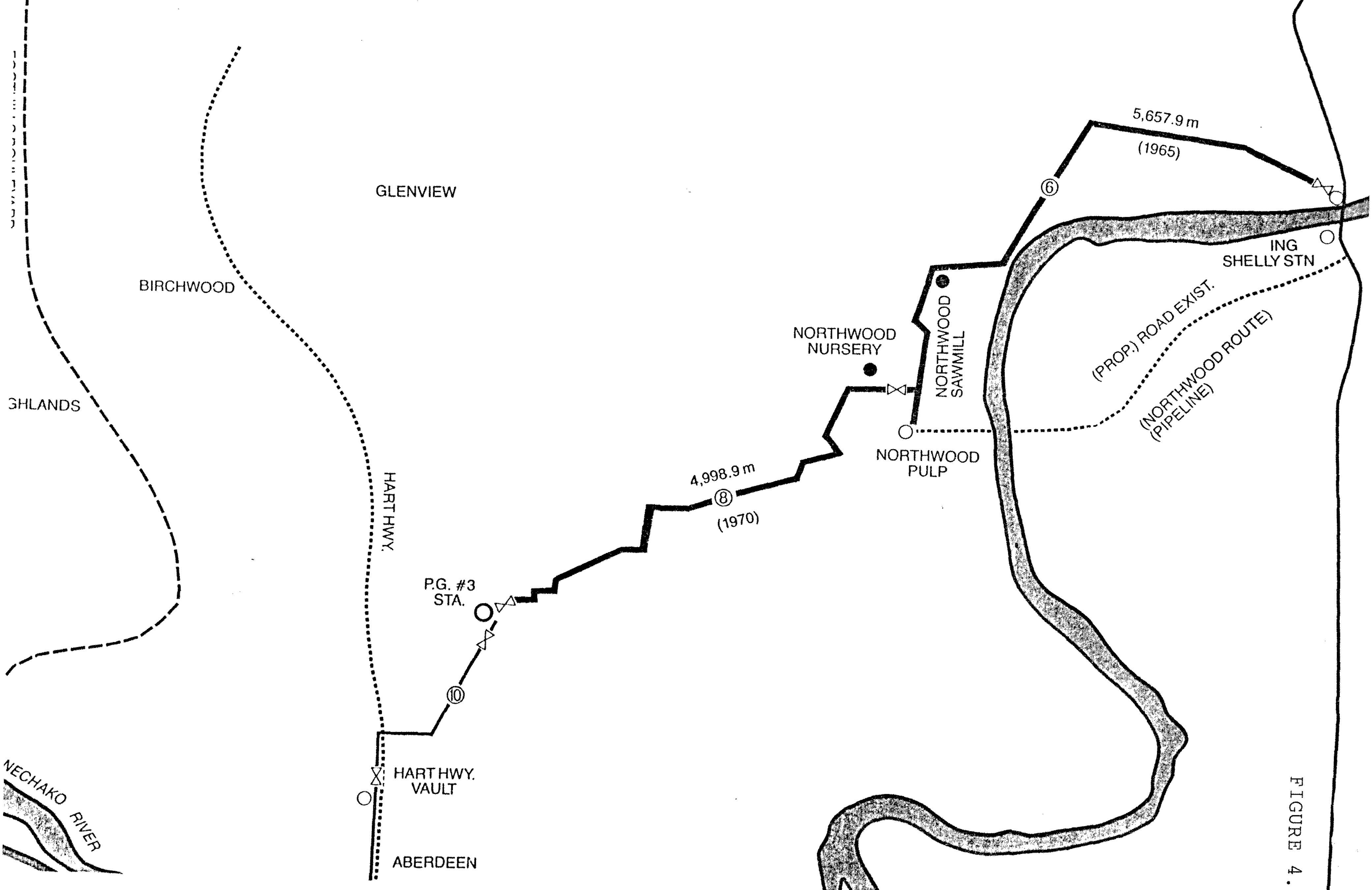

FIGURE 4.1.1

Railroad and road crossings would be bored. The Fraser River crossing would be accomplished by attaching the pipeline to Northwood's existing railway/road bridge.

b) Operation of this pipeline would include right-of-way inspections and maintenance, cathodic protection and periodic leak detection surveys.

3.2 REGULATING STATION

a) This station would generally include the following:

- Pressure reduction facilities
- In-line heater
- Chart recorders for temperature and pressure
- Station isolation valves
- Odorizing equipment

b) Operating Parameters for preliminary design are:

- Maximum volume: $950 \times 10^3 m^3$/day
- Minimum volume: $2 \times 10^3 m^3$/day
- Maximum upstream pressure: 900 psi
- Minimum upstream pressure: 500 psi
- Maximum downstream pressure: 75 psi
- Minimum downstream operating pressure: 60 psi

c) Operation of this regulating station would include periodic inspections, recorder chart control, periodic calibration of pressure control equipment, in-line heater maintenance and general station maintenance."

4.2 Capital and Operating Costs

The Applicant's initial estimate of capital cost was $612,000 (Exhibit 3) which was later revised to $648,000 (Exhibit 4). The capital cost allotted $400,000 for the pipeline construction and $248,000 for the regulating station. In its cost estimate, Novacorp utilized the following major assumptions:

" - Northwood's overhead costs due to this project are not included in this estimate.

- No solid rock would be encountered along the proposed right-of-way during ditching and no significant amount of ditch padding would be necessary for backfilling.

- The pipeline and other facilities would be constructed under summer conditions. Otherwise, pipeline construction could be expected to be $25,000 more expensive.

- All costs for Westcoast's new facilities and gas lost during construction tie-in and commissioning would be additional to estimated costs in this report.

- Existing building at meter station will be utilized. All other materials are new.

- Cost of fuel gas for line heater has been assumed to be $60.00 per thousand cubic meter."

Evidence by a Westcoast witness indicated that Westcoast facilities of $470,000 are required to connect the proposed bypass pipeline (Exhibit 74). Northwood filed revised capital costs totalling $850,000, $400,000 being the pipeline cost, and $450,000 being an integrated Westcoast metering and Northwood regulating station (Exhibit 86).

With respect to annual operating costs, Novacorp's original estimate was $32,000 (Exhibit 3) which was later amended to $24,600 (Exhibit 4).

4.3 Environment/Safety

The Applicant stated that the proposed pipeline will not have any adverse physical, biological or other environmental impacts. An Environmental Statement was prepared by its consultants as Exhibit 6 in its Application (Hearing Exhibit 3). The Statement generally indicated that environmental control agencies were consulted and that the route of construction was selected to:

- provide a direct link between the transmission line and user facilities,

- parallel in part an existing energy transportation corridor, an area committed to the same or similar land use,

- avoid waterbodies and wet, steep or highly erodible terrain wherever possible,
- avoid biologically sensitive areas and habitat,
- avoid areas committed to or planned for non-compatible land use.

The study found that existing right-of-way and clearings in the area show no signs of progressive erosion. There were no problematic soil types identified which could be affected by seedbed material. Intensive wildlife usage and critical habitat have not been identified along the route. Fish habitat was not considered sensitive to the limited disturbance that will result from the construction. No heritage sites have been identified within the right-of-way or adjacent areas and none are anticipated.

The study also indicated that an inspector would be responsible for ensuring that environmental specifications are adhered to and to develop, in cooperation with construction and engineering personnel, appropriate methods to address concerns identified in the field. Protection of the environment, however, would be the responsibility of all company and contract personnel from the inception to completion of the project. The study detailed specific measures used to protect safety of the environment. In evidence Northwood's consultant advised that Novacorp construction personnel would fulfill the requirements of the environmental Inspector.

In addition, the Applicant submitted ancillary Applications to various authorities and undertook consultations to ensure the project would meet approval of all regulatory agencies.

The only significant safety consideration relates to the bridge crossing. The bridge is owned by Northwood and the Company proposes to attach the pipeline to the side of the bridge. The final design and specifications for attaching the pipeline had not been completed by the engineering consultant. However, the engineering consultant advised that a procedure similar to that used by Inland would be followed. This method of affixing the pipeline to the side of the bridge using hoop retainers and rollers has been successfully employed by Inland for many years. In evidence Inland advised that the utility now uses plastic rollers to reduce wear on the pipeline. In other evidence the Applicant stated it did not intend installing stop valves at either end of the bridge. In the event of a leak shut-off would occur at the interconnection with the Westcoast facilities.

Novacorp was to prepare an operating manual for Northwood and the consultant believed Northwood's personnel who were familiar with high pressure piping could safely operate the pipeline and regulating facility.

4.4 Northwood-Inland Negotiations

Inland and Northwood attempted to negotiate a long-term natural gas transportation service agreement. On September 1, 1987, Inland provided Northwood with an offer (Exhibit 21) which detailed certain terms and conditions together with rates of $0.202/GJ for 1987/88 contract year and $0.0669/GJ for subsequent years of a 10 year contract. Exhibit 21 was later revised to reflect an error and the second year rate declined to $0.0536/GJ.

Northwood's own calculation of its bypass cost using a model similar to Inland's model indicates a levelized bypass cost of $.0351/GJ (Exhibit 14). Northwood later revised its estimate down to $.029/GJ assuming higher volumes and Investment Tax Credits (Exhibit 26).

Northwood replied on September 2, 1987 (Exhibit 8) rejecting Inland's offer in its entirety for the reasons that:

> "The indicated rates are considerably in excess of Northwood's cost of bypass. Northwood has provided to Inland its cost of bypass and on numerous occasions has met with Inland to discuss its contents.

These negotiations have been hindered by the refusal of Inland to accept the bypass construction and operating costs provided by Novacorp International Consulting Ltd., the independent pipeline engineering and construction company engaged by Northwood to provide preliminary assistance on the project.

Our understanding is that the mutual objective of Inland and Northwood is to reach an agreement which would include sufficient inducement for Northwood to forgo its By-pass Application. This objective not only has not been achieved but Northwood regrets it is unlikely to be achieved in view of the lack of progress of our negotiations." (Exhibit 8)

Mr. Horst Sander, Northwood's President and CEO gave evidence (Exhibit 2) and substantiated the Company's objectives of self-reliance, independence and cost predictability. He testified that bypass is a viable means to achieve the Company's long-term objectives with respect to natural gas consumption.

Mr. Sander also stated that:

"With this Application, Northwood is availing itself of an opportunity provided by the Government of B.C. and the Western Accord. To quote the Honourable Jack Davis: "Bypass arrangements have been proposed elsewhere in Canada to reduce the cost of fees to industry, and in order to be competitive we want to allow similar market oriented practices here." We support that, that is why we are here.

We have negotiated a contract with a large gas supplier for the requirements of our pulp mill. It is essential that we have unfettered access to the other important component of this gas supply, that being the gas transportation link, to ensure adequate low cost gas supply for our mill.

On reading the Minister of Energy's press release, the Minister as much as said that if the companies cannot negotiate satisfactory arrangements with Inland, then bypass should be allowed. Northwood has not been able to negotiate satisfactory arrangements with Inland.

We recognize that deregulation of energy in the Province of B.C. imposes challenges - but also opportunities. And it is true that if Northwood leaves the system, there will be re-adjustments to some of the costs."

In addition, the Applicant detailed five principal factors other than cost-benefit analysis in favour of bypass (Exhibit 4, Question 18). These factors are: long-term price security, level of control of gas supply and transportation arrangements, operational considerations, administrative costs and regulatory uncertainty.

4.5 Proposed Terms and Conditions

Mr. Sander in his evidence stated that (Exhibit 2, page 11):

> "In this Application, Northwood has offered, as a condition to bypass, a voluntary curtailment of its natural gas deliveries during peak periods, so that Inland may more cheaply serve its residential and other customers. We have also offered payment to the City of Prince George in lieu of franchise fees it would otherwise lose." (Exhibit 7)

With respect to curtailment:

> "The applicant is prepared to continue to allow Inland to interrupt or divert gas from itself for peak shaving purposes, at the same level as Inland has in the past. This will provide Inland's customers with cost savings in the range of $600,000 per year in avoided Westcoast demand charges." (Exhibit 3, S-1)

In examination, Northwood extended its curtailment offer to include an additional five half-days of curtailment provided Inland paid Northwood's incremental costs of using alternative fuel. In addition, the Applicant stated in Exhibit 5, Question 2 that:

> "Northwood is prepared to commit to spending certain amounts required in the construction of the bypass pipeline in either the Prince George area in particular, or the Province of British Columbia in general, as a condition to receiving an Energy Project Certificate."

Northwood estimated these expenditures to be in the range of $246,000 to $293,000.

4.6 Northwood Closing Argument

In closing argument, Mr. Fitzpatrick submitted that Northwood's leaving the Inland system would have no significant impact on the shareholders, residential and commercial customers of Inland; the bypass is cost efficient because Northwood's calculated cost of bypass is less than Inland's actual cost of service; and the Northwood bypass, if approved, will give an "ongoing signal to the distribution utility that it must continue to be competitive with the cost of bypass" (Transcript p. 1555).

Northwood believes that:

> "It is our understanding that the principal value of the Western Accord and the resulting report thereon, is to force a reallocation of prices on the basis of movement towards true cost of service. The benefit of this to our society is that there will result in a more efficient use of our resources." (Transcript p. 1558)

Mr. Fitzpatrick suggested that the Commission should consider the following factors in determining whether the Energy Project Certificate should be granted:

1. Economic Benefits

Northwood's calculated cost of bypass of 2.9 cents/GJ versus Inland's proposal of 7.25 cents/GJ. In addition, Northwood will not be encumbered by the terms and conditions in the proposed agreement per Exhibit 21.

2. Benefits and Cost to Inland

Northwood's leaving the system would cause an annual rate increase of 87 cents to existing customers. But, Northwood, in return, has offered to allow Inland to curtail at peak season.

3. Franchise Fee and Other Taxes

Northwood will pay the City of Prince George for the revenues it would receive had Northwood remained on the system.

4. Income Tax

Northwood believes that income taxes payable to the Governments would increase with bypass.

5. Safety and Environmental Factors

Evidence indicated no areas of concern to the Commission.

Mr. Fitzpatrick contended that Inland was acting in a monopolistic manner, charging what the traffic would bear and ignoring the deregulation principles adopted in the Western Accord to establish competitive rates.

For example, on transcript page 1,565 he stated:

> "In order to determine whether or not the option of building a bypass pipeline should be open to Northwood this Commission should look at the purpose of deregulation. We suggest its purpose is to allow competition so that British Columbia resources can be more efficiently utilized. Here the distributor utility is saying protect the monopoly."

On transcript page 1,566:

> "When you look at the response of Inland in this instance you will see that its monopoly-based response, a response contrary to the competitive approach which has been advocated in the Western Accord and in all of the documentation since the Western Accord, by a monopoly-based response I mean charging what the market will bear, the response by Inland is not a competitive response."

On transcript page 1,566:

> "Inland's contract proposal to Northwood eliminates all risk for Inland's shareholders, the price is not designed to meet the cost of bypass <u>as seen through the eyes of the buyer</u>, nor is there any attempt to relate the price to Inland's cost of service. It's simply based on monopoly pricing." (emphasis added)

On transcript pages 1,567:

> "If Inland wishes to respond as a regulated utility then it must accept the risk that the applicable terms and conditions which, while acceptable in a regulated environment with no competition, may not be appropriate in a competitive market <u>where its customers will be given the choice of the certainty that comes from the ownership of their own bypass pipeline."</u> (emphasis added)

On transcript page 1,575:

> "This leads into the intangible value of meeting the goals of self-reliance, independence and cost predictability as set up by the company. During his appearance before the Commission, Mr. Sander indicated that there would have to be some incentive given to him to give up these intangible benefits." (emphasis added)

In his argument, Mr. Fitzpatrick made several concessions which extended offers previously made by Northwood as conditions of bypass. These include the following:

1. Northwood would pay the City of Prince George the equivalent of franchise fees had Northwood remained on the Inland system.
2. Northwood will indemnify Inland for any volume or revenue credits as a result of Northwood's transferring from a sales schedule to one of transportation services only.
3. Northwood would pay Inland the undepreciated cost of the 143 metre stub line from the Inland mainline to the Northwood pulp mill. Northwood would also consider an additional payment to Inland so that the remaining customers of Inland are not burdened by Northwood leaving the system.
4. Northwood does not believe it should compensate Inland's deferred tax liability.
5. Northwood would purchase Inland's metering facilities at the site at its undepreciated cost.
6. Northwood maintained that it should not be burdened with any additional costs incurred by Inland in its attempt to block Northwood from leaving the system.
7. Northwood would agree to a further five half-days curtailment of its firm contract demand with Westcoast subject to Inland paying Northwood its incremental fuel and operating costs.
8. Other conditions deemed by this Commission as appropriate.

Mr. Fitzpatrick concluded that "other than recommending that Northwood's cost of bypass be accepted as the only true cost of bypass it is extremely difficult to deal with the conditions and rate-making principles.

We have suggested that the terms and conditions presented by Inland do not address the issue" (Transcript p. 1590).

"From our perspective, by staying on the Inland system it is simply impossible to replicate the advantages that we would have off the Inland system" (Transcript p. 1591).

5.0 INTERVENORS' SUBMISSIONS

5.1 Inland

Inland submitted evidence dated August 25, 1987 (Exhibit 20) opposing the Applicant's requests for Energy Project Certificates for the following reasons:

- the bypass pipeline is a duplication of existing facilities,
- Northwood could choose an alternative by accepting negotiated rates,
- the bypass pipeline is contrary to Westcoast/Inland Sales Agreement; provincial policy; and, exclusivities in the Certificates of Public Convenience and Necessity granted to Inland, and
- bypass will lead to losses in revenues to the City of Prince George.

Inland stated it has sufficient delivery capacity and is able to offer prices competitive with the cost of bypass facilities. Inland proposed that ". . . each bypass candidate should receive rates that ensure that such candidate benefits from utilizing the utility's facilities as compared to constructing and utilizing bypass facilities. Instead of negotiations with the threat to bypass, Inland has submitted a rate setting model for each bypass situation that ensures this result. The Commission would be the final arbiter of the determinations under the model."

In support of its proposal, the Inland submission detailed the utility's views on its historical situation, economic efficiency, competitive response to bypass, equitable and competitive rate considerations, impacts on other customers and transitional issues. Inland submitted that bypass should be prohibited generally.

Inland negotiated with Northwood for an agreement of natural gas transportation services for some time. The process of negotiation began in the Spring of 1987 (Exhibits 55, 56). Among other terms and conditions, Inland then offered Northwood a three-year contract with transportation rates of $0.193/GJ for 1987/88, $0.136/GJ for 1988/89 and $0.078/GJ for 1989/90. Negotiations with all the bypass applicants progressed slowly in the Spring of 1987 and accelerated as the bypass hearing date approached.

Inland's latest offer dated September 1, 1987 (Exhibit 21) provides details of terms and conditions of a 10-year contract. The proposed transportation rate for 1987/88 was $0.202/GJ and $0.0669/GJ for 1988/89 and subsequent years. The latter rate was amended to $0.0536/GJ during the hearing (Exhibit 14, Case C). The above rates, if levelized, would be $0.0725/GJ (Exhibit 14, Case D) as compared to Northwood's own calculation of cost of bypass at $0.0335/GJ (Exhibit 26) based on similar methodology but different cost and financing assumptions. Northwood also provided a levelized estimate of $0.0516/GJ, which was calculated based on assumptions given by Commission staff.

The terms and conditions of Inland's offer (Exhibit 21) make provisions and deal with the manner in which present and future prices are determined, the required contract demand volume with Westcoast, authorized overrun availability, indemnity requirements, curtailment, force majeure, volume balancing and franchise fees. Inland further stipulated that: the agreement is subject to BCUC approval that Inland shareholders not be required to bear any resultant revenue deficiencies; acceptance of the transportation agreement would lead to Northwood withdrawing its bypass application; and, Inland would waive its exclusivity rights with Westcoast.

Northwood, during cross-examination and in Exhibit 8, rejected the proposed Inland agreement (Exhibit 21) totally and stated that an agreement "is unlikely to be achieved in view of the lack of progress of our negotiations."

Inland's submission (Exhibit 20) included a request that should Northwood be granted a Bypass Certificate, Inland be allowed to seek indemnification for lost revenues and risk exposure and predatory prices from Northwood until the new facilities were operational.

In his argument on the position of Inland with respect to monopoly and competition, Mr. Johnson, Counsel for Inland contended that ". . . the provision of public utility service even in this era of deregulation is not a situation where we should be without regulation . . ." . He continued to draw reference from evidence of Mr. Fairbairn that:

> "Competition in a free market is a completely different phenomenon than the situation we have in front of us. We have a situation where we have a regulated entity that is undergoing transition. Competition in that environment, the environment we find ourselves in, is very, very different from the competition of a free market. I don't believe that bypass essentially provides fundamental cornerstones for free competition. You have two alternatives. You have service from the utility and you have the service that the customer can provide. To set up a purely competitive market that has forces that are rational and that produce purely competitive results in my view, theoretically at least, you need a multitude of options. We're in the situation that we have this uncomfortable mix with deregulation and regulation and compromises must be made. If compromises are made with respect to the nature of competition then I think it must be so." (Transcript pp. 1636 - 37)

Mr. Johnson explained that:

> ". . . the history of the systems has been very much on the basis that it would be a monopoly that Inland would have franchises, it would be the exclusive distributor. And there's nothing sinister about that, that is how public utilities have traditionally been developed. It is to avoid the duplication of facilities that there are franchises, that there are exclusivities. The duplication of facilities serves no one." (Transcript p. 1642)

He further made reference to evidence of Mr. C.A. Jeffery, witness for the City of Prince George ". . . if investors have made investments based on a condition of the day that they, that those investments should not be jeopardized by new policies" (Transcript p. 1643).

Mr. Johnson continued to state that the expansion of Northwood in 1982 played a direct part in putting Inland into the high contract demand volume with Westcoast. In addition, Northwood has already benefitted from the deregulation process by saving $3 million a year in gas cost and that Inland has further offered reduced rates from the present 46 cents/GJ down to less than 10 cents.

Mr. Johnson suggested that the criteria to be used by this Commission in dealing with the issue of bypass should be drawn from the NEB Cyanamid decision such that "in the circumstances the prices being proposed were not in keeping with economic reality and that bypass should be allowed" (Transcript p. 1658); and therefore the balancing of interests is the criteria. Mr. Johnson submitted that balancing of interest is missing from the Northwood approach.

With respect to the cost of bypass, Mr. Johnson indicated that the cumulative effect of the Inland rate design proposal and the Northwood bypass would be 16.5 cents/GJ additional to existing rates. Mr. Johnson also expressed concern on take-or-pay provisions, indemnity, franchise fees not included in the Northwood model, requirement of Westcoast approval for curtailment rights, income taxes, capital cost allowance resulting in the governments paying part of the bypass cost, intergenerational inequities of deferred taxes upon Northwood leaving the system, possible extra demand cost due to the shifting of Inland's mid-point in the Westcoast system, safety concerns about bypass lines, reduced Inland advantages for storage and peak shaving facilities, increased cost of capital to Inland and overall economic inefficiency.

Mr. Johnson concluded that this Commission should put forward criteria or guidelines and a process regarding when bypass should be allowed.

5.2 Municipal Submissions

5.2.1 The City of Prince George and the Regional District of Fraser-Fort George

Inland distributes gas within the boundaries of the City of Prince George (the "City") under an operating agreement with the City. Under the operating agreement Inland agrees to pay to the City each year a sum equal to three percent of the amount received by Inland for gas consumed within the City in the preceding year. Those amounts have been computed based on three percent of the price of gas service charged by Inland and prior to November 1, 1985 included the commodity cost of gas, charges which Inland incurred on the Westcoast system for transporting the gas and Inland's own charge for transportation. Inland collected those amounts in the rates charged to its customers. For the calendar year 1986 payments by Inland to the City in respect of volumes of gas consumed by Northwood are approximately $278,741.

Starting in November, 1986 pursuant to the change in government policy, Northwood contracted directly with a producer for its supply of natural gas and arranged for Inland to transport this gas. Inland took the position that so long as it was not selling gas to Northwood and receiving payment for same, it was not liable to pay the City three percent on the commodity cost of gas, and therefore reduced its payment to the City in 1986 accordingly. This matter is still in dispute between Inland and the City (and some of the other municipalities).

In its June 17, 1987 Decision with respect to terms and conditions for transportation service on the Inland system, the Commission ordered that in the event that Inland is held liable, at some time in the future, for the payment of franchise fees on the commodity price of direct sale gas, transportation service customers would be required to indemnify Inland for this amount (Commission Order No. G-37-87). The Commission also ordered that transportation service customers should be free to arrange their own transportation contracts with Westcoast. Inland indicated that when it calculated franchise fees it would take the same position on payments made by individuals directly to Westcoast as it has on the commodity cost of direct sale gas.

If Inland were only required to pay the City three percent on the amounts Inland received, the revenue to Prince George from sales to Northwood at negotiated rates could fall to as low as ($.03 \times \$.05/GJ \times 3 \times 10^6 GJ$) $4,500 in 1988/89.

Northwood's position on the issue of franchise fees changed as the hearing progressed. On September 8, 1987 Northwood wrote a letter to the City (Exhibit 7) and offered to pay the City on an annual basis an amount to compensate the City for the loss of franchise fee revenue on Inland transportation services which would have been received by the City if Northwood had stayed on the Inland system. This amount was calculated to be $6,907 and was based on the assumption that no amounts would be payable on the commodity cost of gas or Westcoast charges if Northwood stayed on the Inland system notwithstanding the indemnities contained in Inland's transportation schedules.

Northwood later expanded it's offer to the municipality to include franchise fees on whatever basis Inland may have to pay in future. This offer will leave the municipality in a neutral financial position under bypass.

5.2.2 Municipal Intervenors at Penticton Sessions

At the request of Inland and several municipalities located in the southern section of the Inland service area, the Commission held a public session at Penticton on October 5, 1987 to hear from those municipalities. Submissions were heard from the Union of B.C. Municipalities, the City of Kamloops, the Village of Salmo, the Association of Kootenay-Boundary Municipalities, the City of Grand Forks and the Regional District of Kootenay-Boundary.

The Union of B.C. Municipalities ("UBCM") advised the Commission that it had passed a resolution at its convention held in September of this year. The resolution states "Whereas many municipalities have experienced loss in revenue resulting from the deregulation of the natural gas industry in British Columbia; and whereas this places a serious burden on the taxpayers of those municipalities, therefore be it resolved that the Provincial Government amend Section 407 of the Municipal Act to require specifically the gas companies pay a higher rate than 1% for gas consumption within the municipalities". The resolution was amended to include the following:

> "Therefore be it resolved that the Provincial government amend the Municipal Act to ensure that both the 1% and 3% tax be paid to local government on all gas consumed whether purchased directly from the wellhead, or distributed by a utility."

The UBCM argued that the 4% revenue to municipalities constituted an important source of revenue. They also pointed out that property owners in the municipalities would also face an increase in gas rates as a result of bypass customers leaving the Inland system. For those reasons the UBCM urged the Commission to refuse the bypass applications.

The City of Kamloops supported the UBCM submission and further stated that if large consumers were allowed to escape paying legitimate franchise fees, then this is a form of discrimination against other taxpayers in the community who must pay them.

The Corporation of the Village of Salmo was also opposed to bypass applications for the following reasons:

- The customer base of the utility would deteriorate as a result of large industrials leaving the system.

- Bypassing Inland's system was not available for all companies in British Columbia due to geographic location and this resulted in discrimination of those companies unable to bypass.

- Loss of local government franchise fee and property tax revenue.

- Misallocation of scarce resources resulting in a lower standard of economic welfare to all British Columbians.

Mr. Chapman for Salmo, pointed out that the Village had recently been able to attract two new sawmills, one veneer plant and a mine mill. In cross-examination he stated that he would support the idea that Inland be allowed to negotiate with a customer seeking to locate in Salmo a lower rate so that the customer would not locate in another community which would afford it an opportunity to bypass the Inland system altogether.

Mayor Lakes of the City of Trail presented a brief on behalf of the Association of Kootenay-Boundary Municipalities. The AKBM supported the position taken by the UBCM and the City of Trail Council authorized Mayor Lakes to further express the City's concerns that bypass would result in increased costs to Trail's residential, commercial and industrial users. The increased cost of natural gas would have a negative affect on Trail's efforts to attract industry.

The Commission also heard from the Mayor of the City of Grand Forks and the Chairman of the Regional District of Kootenay-Boundary, both of whom supported the submission of the UBCM.

5.3 Consumers' Association

Mr. R. Gathercole appeared and cross-examined Northwood and Inland witnesses on behalf of the Consumers' Associations of Canada, other citizen groups and generally the residential customers of Inland. Mr. Gathercole submitted that the Commission in the determination of the bypass Application should take into account the full history of the relationship between Inland and its various customer classes and compare the impacts of Northwood's leaving the system with the present situation that faces Inland's other customers. The potential impacts include:

1. The loss of revenue from the bypass customer i.e. approximately 16.5¢/GJ in Northwood's case.
2. Increased demand charges from Westcoast.
3. Take-or-pay liabilities.
4. The bypass of Northwood would encourage other customers to bypass and would increase the above impacts.
5. Possible change in Inland's mid-point on the Westcoast system.
6. Increased cost of capital to Inland due to a deteriorating market perception of Inland's risk as an investment.
7. Deferred tax liability.

Mr. Gathercole recommended that the Commission should not only reject the Northwood Application, but also the Inland proposals, he contended that ". . . Inland has chosen to react to the bypass alternative, not by aggressively opposing it in the interests of its other customers but by giving into it in the interests of its shareholders" (Transcript p. 1612).

Mr. Gathercole suggested the Commission set a rate for Northwood ". . . some- what lower than that present paid by Northwood to Inland for transportation service but higher than its actual cost of bypass would be appropriate" (Transcript p. 1617).

5.4 Other Intervenors

Westcoast made a submission and Mr. Edgeworth appeared as witness with respect to the bypass applications, particularly in the area of capital cost of the bypass meter station and details of contract demand nominations. Mr. Sirett, Counsel for Westcoast in argument stated the bypass facilities are a duplication which is unnecessary and wasteful; bypass would destroy the benefits of the economies of scale on the Westcoast system and remaining customers would have to absorb the cost of unused facilities.

Mr. Moseley, Counsel for BCPC stated in argument that ". . . the Inland proposal was based on the concept of offering Northwood a package which was responsive to the costs that Northwood would experience if it were to build a bypass line" (Transcript p. 1623). BCPC opposed Northwood's Application for the reason that Northwood seeks an inducement in order to stay on the Inland system.

Mr. Hindle, representing B.C. Hydro, submitted that:

> "First, a bypass pipeline, almost by definition, is a duplication of existing resources and is therefore an economically inefficient use of resources. In that case, overall costs to all parties must increase rather than decrease, and any cost saving to one or more parties must result in an equal or greater cost increase to the remaining parties.
>
> Next, any loss of load and associated revenues to a distributor system means that remaining customers bear the effects of that loss" (Transcript pp. 1698 - 99).

6.0 COMMISSION VIEWS

6.1 Monopoly versus Competition

In its closing argument Northwood raised an issue that had not been advanced during the hearing. It contended that Inland was following monopolistic practices in a regulated environment even though the Western Accord and "all other documents since the Western Accord" had advocated a competitive approach to these matters. It argued that as a result of that approach Inland had not been competitive in its offers of transportation service and instead offered what Inland believed the traffic would bear.

The transportation rates proposed by Inland and Northwood will be considered in detail later in this section of the report but before proceeding to evaluate the evidence it is necessary to determine the basis for assessment. Is the objective of deregulation to establish transportation rates that will be competitive with a bypass alternative "as seen through the eyes of the buyer" and which would provide some incentive "to give up these intangible benefits" of the industrial customer having its own gas supply pipeline? Can the distribution utility discard the controls of regulation and revert to a free competitive environment as proposed by Northwood?. Would it be in the public interest to do so?

Clearly, Inland's operations have all the characteristics of a natural monopoly. It has economies of scale as evidenced by the benefits obtained by permitting exclusive franchise areas which avoid duplication of pipeline distribution systems. Because a natural monopoly could charge discriminatory rates, its operations and tariffs are subject to regulation.

The issue in this case is not monopoly versus competition but how can one segment of a utility's operations (i.e. supplying gas to large industrial customers located near the transmission pipeline) be adjusted so that the customer can obtain its gas supply at a cost that represents the "true cost of service" while not unfairly loading costs on the utility's other customers.

The Commission's reading of the Western Accord and subsequent documents does not disclose expectations of a major shift in the utility industry to competitive operation. Indeed, the common theme in these documents as expressed in the report of the Pipeline Review Panel is that "it will be incumbent on the distributor to offer unbundled transportation costs which will be competitive with the bypass option." That was the theme of The Honourable Jack Davis when on March 19, 1987 he stated that:

> "If large industries and utilities can negotiate contracts which reflect the true cost of service to all categories of customers, we will have achieved the best of all possible worlds. All users will be treated equitably and the advantages of location will be captured by energy-using industries in British Columbia."

The Commission sees the challenge as being one of finding the basis for contracts that "reflect the true cost of service". In pursuing that objective, careful consideration must be given to the impact on not only the industrial customer but also on all other customers of the utility.

6.2 The Necessity for Bypass

Northwood contends that its application for an Energy Project Certificate should be approved because:

- Northwood has the corporate will to proceed;
- Inland's proposed transportation rates are not competitive with the bypass alternative;
- Northwood is the only bypass candidate;
- The proposed pipeline is safe and efficient;
- The project will provide significant benefits to British Columbia; and
- The impact on Inland's other customers is insignificant.

Inland contends that the application should not be granted because:

- Its proposed rates are competitive with bypass;
- The proposed facilities are not needed; and
- There would be an unfavourable impact on Inland's other customers and the utility shareholders.

Thus, while Inland and Northwood have attempted to negotiate a transportation agreement they have failed. The heart of the problem appears to be what the parties consider "competitive rates". Each contends its rate is competitive with bypass but the Northwood rate is about one-half that proposed by Inland.

In Section 2 the Commission indicated that if the reason for the parties not being able to reach agreement was due to the utility not offering a transportation contract that reflected the true cost of service, then approval should be granted to the bypass option since that is the only recourse available to the industrial customer. A great deal of evidence was presented at the hearing respecting proposed rates. That evidence will be carefully assessed in the following section to determine whether Inland has offered a realistic and competitive contract.

6.3 The Estimated Transportation Cost for Bypass

The parties agreed that the imputed cost of transportation service on a bypass pipeline should be based on a stand-alone facility. They agreed that allowance should be made for both capital and operating costs and that an allowance should be made for the benefits provided by the terms and conditions of transportation service. They disagreed with respect to whether the rate should include an "inducement" component to compensate the industrial customer for giving up the intangible benefits of having full control over gas delivery to its plant.

In determining an appropriate rate for Northwood's bypass proposal the Commission agrees that the rate should be based on the cost of construction and operation of a stand-alone bypass facility. Added to the cost of the stand-alone facility should be the net quantifiable benefits that the bypass candidate would derive from Inland had he remained on the Inland system. From this aggregate cost one must deduct the cost avoided as a result of leaving the Inland system and any quantifiable other benefits the bypass candidate would enjoy had he bypassed Inland.

Inland and Northwood developed computer models to estimate that rate which Inland would have to offer to meet the cost of bypass as defined above. Much time was spent at the hearing analyzing the factor inputs to the computer model. Table 6.3.1 identifies those factors with the Commission's estimate of the value of each of the factors. Appendix C provides further details of the Commission's determination of the factors and computer runs of the rate determination model for the Commission base case.

The model run for the Commission's estimate of the appropriate rate to meet the cost of bypass generates a levelized rate of $.054/GJ. This run does not include any value for Inland quantifiable benefits that Northwood would enjoy from staying on the Inland system; nor does it value any new quantifiable benefits that Northwood would gain from bypass. With respect to the Inland benefits of monthly balancing and AOR sales, Northwood testified it would not elect schedules which offer these arrangements and consequently they do not provide any benefits. Northwood did not find any additional benefits the company would gain from bypass except for the potential of not being involved in future hearings of Inland's rates. The Commission has not valued this benefit since the involvement of Northwood in Inland rate cases (prior to the current rate design hearing) has been modest.

Table 6.3.1

Bypass Rate Determination Factor Inputs
(Northwood Application)

	Northwood	Inland	BCUC
Gas Volume (GJ)	3,500,000	3,032,900	3,032,900
Capital Cost ($000)	648	700	700
Operating and Maintenance Cost ($000)	24.6	30.0	30.0
Residual Value ($000)	266.7	0	0
Debt Repayment Term (Yrs.)	20	10	20
Investment Tax Credits	Yes	No	Yes
Debt/Equity Ratio	100/0	40/60	50/50
Interest Rate (%)	10	10	10
Discount Rate (%)	10	15	15
Phase-in Period	none	1 yr.	none
Inland Benefits			
- Monthly Balancing	No	Yes	No
- AOR Sales	No	No	No
Northwood Bypass Benefits	No	No	No
Rates (¢/GJ)			
- Levelized	2.9	7.25	5.4
- Phased-in			
1st year	-	20.2	20.2
2nd year	-	5.36	3.2
Rates (¢/GJ) with Westcoast costs			
- Levelized	-	-	7.7
- Phased-in			
1st Year	-	-	20
2nd year	-	-	6

On a separate matter, the Commission heard evidence from Westcoast that Northwood may be required to pay a contribution in aid of construction for the tap and metering facilities Westcoast may put in place for Northwood. The full cost of the facilities was estimated to be $470,000 although the elimination of telemetering equipment and a cash payment in lieu of AFUDC would reduce the cost to about $400,000. In a late filing from Northwood the company proposes to alter its design to effect savings in metering and regulating functions. If this is possible the cost could be reduced to $200,000.

On October 19, 1987 the NEB ruled that Northwood would be required to pay for the Westcoast tap and meter station. The cost to Northwood will range from $200,000 to $400,000. If the additional cost is $400,000 The Commission estimates that the bypass rate to Northwood would rise to between $.068/GJ and $.077/GJ depending on the tax treatment.

6.4 Impact of Negotiated Rates on a Bypass Pipeline

Inland contended that since the policy to sanction either a bypass pipeline, or transportation rates based on bypass was made by the government it would be completely unfair to expect Inland shareholders to bear any of the costs of reduced revenues. It argued that the only alternative would be to increase the rates for its residential and commercial customers. Inland went so far as to include as a condition of its offer that the agreement will become void if Inland's shareholders must bear any portion of the revenue shortfall resulting from the negotiated rate.

Beginning in November 1986, Northwood purchased its gas directly from producers and arranged with Inland for transportation on the Westcoast and Inland pipeline systems. The transportation cost on the Inland system is $0.46/GJ which provides an annual revenue contribution of about $1.4 million to Inland's overall revenue requirement.

The Inland proposal assumed a one-year phase-in with a rate for 1987/88 of \$0.20/GJ which would therefore reduce the revenue contribution from Northwood to \$0.6 million.

Northwood contended that there should be no phase-in period and that the negotiated rate from 1987/88 should be about \$0.03/GJ. On that basis the revenue contribution would be reduced to about \$0.1 million.

If the bypass pipeline was approved and assuming that it was operative for the full 1987/88 heating year then the revenue reduction would be \$1.4 million from existing margins. As shown in Table 6.4.1 the impact on Inland's other customers ranges from \$0.8 to \$1.4 million depending on the transportation alternative.

For the 1988/89 heating year the impact is greater because the phase-in period has expired.

Based on the estimates in Table 6.4.1 the Commission concludes that:

(a) A reduction in transportation costs for Northwood translates into an equal increase in required revenue from Inland's other customers if Inland's shareholders are held unharmed.

(b) Approval of the bypass pipeline results in the maximum impact on the other customers.

(c) The difference in impact between negotiated bypass rates and the bypass alternative is small but always positive.

The Inland offer provides for a phase-in of negotiated rates so that in1987/88 the Inland margin would fall from \$.46/GJ to \$.20/GJ. The rate would then fall in the second year to a negotiated level of about \$0.05/GJ. The Commission recognizes the value of phase-in to avoid the rate shock to residential customers.

TABLE 6.4.1

Estimated Impact on Inland's Residential/Commercial Customers Under Various Transportation Alternatives

($ millions)

Cases	Northwood 1986/87 Contribution	Northwood 1987-1988 Contribution	Increased Residential Commercial Revenue Requirement
Current Inland Margin	$1.4 million		
Inland Bypass Offer Rate		0.6	0.8
Northwood's Rate Calculation		0.1	1.3
Bypass Pipeline Option		0	1.4

The Commission is also aware that due to the construction of the Westcoast tap and meter station, the earliest Northwood could commission a bypass line would be in March 1988. If Northwood were to bypass Inland the company would therefore pay a margin of $.46/GJ until the Rate Design panel issues its report. Thereafter, Northwood might pay a system rate not yet known. After March Northwood would pay its bypass rate of about $.03/GJ. Bearing these realities in mind, the Commission finds that the best average rate Northwood could expect to attain in gas year 1987/88 would exceed the levelized offer rate and could be as high as $.20/GJ. The Commission therefore determines that a rate of $.20/GJ in the 1987/88 year is fair to Northwood and benefits Inland's residential and commercial customers. For consistency with the proposals already accepted for PGPP and Husky the Commission will adjust the second year rate down from the levelized rate so that the discounted average rate over 20 years equals the levelized rate.

6.5 The Merits of the Northwood Application

Section 6.3 shows that the Commission estimates the 20-year annualized cost of constructing and operating the proposed Northwood bypass line to be 5.4 cents/GJ before allowance for any metering facilities required by Westcoast and charged directly to Northwood. The 5.4 cents/GJ can be compared to Inland's last offer (exclusive of Westcoast facilities) of 7.25 cents/GJ and Northwood's estimate of 2.9 cents/GJ.

The NEB has confirmed the Westcoast decision that Northwood would be required to cover the cost of metering facilities, and therefore the bypass levelized cost increases to approximately 6.8 cents/GJ or 7.7 cents /GJ if the additional capital costs are $400,000 and depending on the tax treatment available.

The Commission has taken the higher cost of facilities and the less desirable tax treatment to recalculate an equivalent rate of $.20/GJ in year 1 and $.06/GJ in years two and beyond. The Commission has rounded the cost up to the nearest whole cent/GJ as the precision of the input data does not warrant greater exactness. Northwood will have to demonstrate its reduced capital cost or preferred tax treatment before those considerations can be reflected in the rate.

The Commission's review of Inland's proposed conditions of transportation leads it to conclude that just as the cost of transportation should reflect the special factors that relate to each bypass case, so also should the conditions. Requiring a potential bypass candidate to pay for services such as monthly balancing or AOR sales even though it doesn't want that service causes problems for the negotiating process. Northwood has quite clearly stated it doesn't want those services and the Commission believes Inland should accede to that position.

Northwood contended that it sees intangible benefits from the bypass alternative -- self-reliance, independence, cost predictability and greater certainty as a result of not being part of a regulated pipeline. While one can apply some quantification to the impact of regulatory involvement the other factors are not quantifiable. Furthermore, Northwood did not give any indication as to the amount of inducement that might be required.

On the other side of the ledger of Northwood's corporate benefits are the impacts that either negotiated rates or bypass will have on Inland's other customers. Table 6.4.1 shows that the cost of gas transmission for Northwood in 1986/87 was $1.4 million. Under the Commission rates that would be reduced to $0.6 million in 1987/88 and to $0.18 million in 1988/89. All of those reductions in revenues to Inland will have to be made up by its other customers and according to Inland by its residential and commercial customers. Of course, if bypass were to be accepted then even the $0.18 million would be lost.

Having regard for the foregoing assessment the Commission concludes that:

1. The Inland offer was somewhat higher than the competitive cost of the bypass alternative. As a result of all the evidence presented during 12 days of hearing the Commission concludes the rate should be approximately \$.20/GJ in year 1 and \$.06/GJ in years two and beyond.

2. The Northwood estimate of the competitive cost of bypass was somewhat low, and, as indicated previously, would be even lower with allowance for an "inducement" component which Northwood expected Inland to provide.

3. The Inland offer includes terms and conditions that are not consistent with the needs of Northwood and therefore should be modified.

4. Northwood's gas transportation costs on the Inland system would decline dramatically during the next two heating years under the Inland offer. The current cost of \$1.4 million distribution margin would decrease to \$0.6 million in 1987/88 and to \$0.18 million in 1988/89 and thereafter.

5. Granting Northwood an Energy Project Certificate and permitting it to build the pipeline provides extremely modest benefits to the Applicant even if one assumes that the Commission estimate overstates the true cost.

6. Approval of the bypass line rather than the Commission rates would force Inland's other customers to contribute an additional \$600,000 in 1987/88 and \$180,000 in 1988/89 and subsequent years.

7. Other impacts on Inland and its customers include potential for take-or-pay penalties, contract demand revenue deficiencies, increase future debt costs and a reduced share value.

In the Commission's view the balance of costs and benefits from Northwood's proposed bypass pipeline do not support approval of the project and the Commission therefore recommends that an Energy Project Certificate not be granted.

6.6 Response to Questions in the Terms of Reference

As identified in Appendix B the B.C. government provided the Commission with explicit terms of reference for this hearing. The hearing proceedings dealt with all matters in the terms of reference and the Commission views on the matters requested to be addressed in the terms of reference are provided throughout this report. To assist the government in its review of this report, the terms of reference are revisited in this section with a synopsis of the Commission findings on each point.

6.6.1 The Financial and Economic Costs and Benefits of the Proposal as it would affect:

(a) Northwood

Costs of Bypass

- a capital investment of about $1.1 million.
- an annual operating and maintenance cost of $30,000.

Benefits

- avoiding an annual transportation cost of about $600,000 in 1987/88 and $180,000 in 1988/89 and subsequent years.
- increased independence and self-sufficiency in gas supply.

(b) Inland

Costs of Bypass

- loss of one of its largest industrial customers resulting in reduced revenues.
- less efficient use of the pipeline system.
- opens opportunity for other potential bypass candidates.

- could create image of a declining utility which could increase future financing and borrowing costs.

- shareholders could shoulder a portion of the revenue loss.

Benefits

- none

(c) Inland's Residential, Commercial and Small Industrial Customers

Costs of Bypass

- increased utility rates to compensate for the loss in revenue from Northwood and any increased future debt costs.

Benefits

- none.

(d) Governments

Costs of Bypass

- while initially franchise fees and property taxes would have been reduced, Northwood has agreed to keep Prince George whole (i.e. payments would be the same under either the current Inland system or under bypass).

Benefits

- Assuming that the Commission's estimates of the cost of service is competitive with the bypass alternative, Northwood would not experience any change in revenue and its income taxes would be unaffected when compared with competitive rates. Actually, under this scenario, income tax payments would decline because of capital cost allowance. Even if one assumed that the Commission's cost of servicing estimate was too high, the difference in annual income is so small as to have essentially no impact on income tax payments.

6.6.2 The Continuing Availability of the Curtailment Privilege

Northwood offered to continue the existing curtailment rights of Inland and also offered to provide an additional five half-days of curtailment subject to Inland paying the incremental costs of burning an alternative fuel.

6.6.3 Safety and Environmental Factors

The bypass pipeline would not cause any undue concerns respecting either safety or the environment.

6.6.4 Options to Bypass and Rate Design Incentives

Participants in the hearing as well as the Commission have had difficulty addressing the term of reference relating to options to bypass and rate design incentives. Basically, there appear to be very few alternatives. Indeed, there are really only two alternatives to bypass for an industrial customer - continued use of the existing distribution system or conversion to an alternative fuel. The latter is only viable in special cases and consequently the real option to bypass is the continued service via the current pipeline delivery system. The Commission assumes that in identifying the bypass options as a term of reference the government wished comments on the efficiency of the current system under the new policies of competitive markets.

The Northwood and PGPP/Husky applications were the first to be considered under the new policy. The PGPP/Husky proposals were dealt with quite effectively, but the Northwood application has resulted in an adversarial hearing lasting 12 days with an estimated cost of about one-half million dollars if allowance is made for the costs of all parties.

The difference between the Inland and Northwood estimates of the true cost of the alternate bypass pipeline was about $.04/GJ, which translates into an annual cost to Northwood of about $120,000. This is less than 0.1% of its total plant operating costs of $280 million.

Part of the problem appears to stem from the parties having different interpretations of the government's policy statements. Additionally, because the policy is new, there are no guidelines. However, after further consideration, the Commission believes that there are other factors and submits the following for consideration:

6.6.4.1 Should the Intent of the Policy be to Determine the "True Cost of Service" of the Alternate Bypass Pipeline or to Determine a Reasonably Competitive Cost?

Because the current policy statement specifies "true cost", there is a natural tendency to identify every possible factor and to refine its assessment. That process promotes differences between the parties and hampers negotiation. It tends also to focus on details and ignore the major shifts in costs and revenues that are taking place under the policy.

In Northwood's case the cost of transportation will decrease from the current $.46/GJ to $.06/GJ by 1988. Inland's other customers will have to compensate for Northwood's savings by contributing more than one million dollars annually.

Perhaps, under the circumstances the policy should be directed at negotiating a reasonable rate having regard for all of the factors. By getting away from the "true cost" refinement, the parties could better employ their negotiating skills and arrive at a reasonable competitive cost.

6.6.4.2 Is the Formal Hearing Process the Best Way of Resolving these Negotiation Problems?

Public hearings are costly, and because of their adversarial nature tend to frustrate negotiation and problem-solving. They often result in win/lose conclusions which frequently lead to future problems. The direct and indirect costs of the Northwood hearing substantially exceed the benefits.

While a hearing is a reasonable approach to consider the first bypass application, the Commission believes that future cases should be resolved by an effective dispute resolution process. As stated previously, the Commission should be responsible for administering a suitable process which should be jointly developed by appropriate parties. Only after all avenues have been exhausted should an applicant avail itself of the process of obtaining a bypass Certificate.

6.6.5 The Rates and Conditions Inland Should Accept

The appropriate rate for a ten-year contract has been calculated to be $.20/GJ for November 1, 1987 to October 31, 1988, and $.06/GJ thereafter. The contract proposed by Inland has an option clause to extend it for an additional ten years. The rates assume that the additional cost of Westcoast facilities is $400,000 and the tax treatment on the additional cost will be as if the capital cost of the project were increased to $1,100,000. If Northwood can demonstrate to Inland and the B.C. Utilities Commission that the Westcoast facilities will cost less or that more favourable tax treatment is allowed, the second year rate may be reduced by the Commission.

In reviewing the terms and conditions provided in Inland's final offer to Northwood the Commission believes the following adjustments should be made:

1. The Utilities Commission Act does not allow the Commission to waive its responsibility to ensure that rates remain just, reasonable and not unduly discriminatory. The Commission can only be asked to endorse the contract at this time, including the rate adjustment clause and the determination that Inland shareholders not bear any revenue deficiencies.

2. Clause 2 (ii) should reflect the firm and interruptible nominating options available in the Inland transportation schedules.

3. Northwood should be allowed to select the Inland rate schedule it desires. If that schedule includes monthly balancing or AOR sales, the rates should be adjusted upwards to reflect this Inland benefit.

7.0 RECOMMENDATIONS

Having regard for the evidence presented, the Commission recommends as follows:

1. An Energy Project Certificate not be granted to Northwood, providing that Inland promptly offers Northwood a transportation contract with the rates and conditions specified in Section 6 of the report. The appropriate rates are $.20/GJ in 1987/88 and $.06/GJ for years two through ten, depending on final Westcoast costs and tax treatment thereon.

2. The bypass policy be modified to refer to "the reasonably competitive rate of bypass" rather than "the true cost of service"; and

3. A dispute resolution process through the B.C. Utilities Commission be instituted to assist negotiations and try to avoid divisive, costly hearings.

PROVINCE OF BRITISH COLUMBIA

ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. 552 , *Approved and Ordered* MAR 19 1987

Lieutenant Governor

Executive Council Chambers, Victoria MAR 18 1987

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that

1. Every undertaking of a kind that consists of the building of a natural gas pipeline for the transportation of natural gas from facilities belonging to Westcoast Transmission Company Limited ("company") to any plant is designated as an undertaking significant in the matter of energy.
2. Section 1 applies only when alternate facilities, regulated as a public utility under the *Utilities Commission Act*, exist for the transportation of natural gas from facilities of the company to the plant.

Minister of Energy, Mines and Petroleum Resources

Presiding Member of the Executive Council

(This part is for the records of the Office of Legislative Counsel, and is not part of the Order.)

Authority under which Order is made:

Act and section:— Utilities Commission Act, section 16 (definition of regulated project)

Other (specify):—

Examined by: G. B. Macaulay *(Attorney General examiner)*

March 16, 1987

588/87/aaa

Province of
British Columbia

NEWS RELEASE

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

FOR IMMEDIATE RELEASE

1987:10

March 19, 1987

PROVINCE DECLARES JURISDICTION IN PIPELINE BYPASS ISSUE

Victoria, B.C. - The provincial government has taken steps to protect its jurisdiction over an issue which arises out of natural gas deregulation - the ability of large industrial users to bypass local gas distribution systems.

"However, rather than use its regulatory powers, the province would prefer utilities and industries to work out mutually satisfactory arrangements themselves," said Energy Minister Jack Davis.

Under deregulation, large industries can buy natural gas at source and have their gas moved by the main pipeline company acting as a common carrier. Such industries now have a choice: they can buy gas directly and have it delivered via a bypass from the main transmission pipeline, or they can continue to buy from the local utility as before.

"The National Energy Board recently ruled that utility bypass sales are subject to federal regulation, but British Columbia maintains bypass arrangements are a provincial matter. So, by cabinet order, we have asserted provincial jursidiction in this area," Davis said.

Effective immediately, any bypass proposal is designated a "regulated project" under the B.C. Utilities Commission Act. An industry proposing to build a bypass pipeline must therefore obtain an Energy Project Certificate from the Minister of Energy, Mines and Petroleum Resources.

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"We are not opposed to industry making its own bypass arrangements," Davis said. "However, other gas users - residential, commercial and small industrial - benefit if a compromise can be reached, and industry can save the cost of building a bypass pipeline."

Until recently, British Columbia has required that all gas sold in the province be sold through a utility such as B.C. Hydro and Inland Natural Gas. "Given our commitment to deregulation, we now must allow the bypass alternative," the minister said. "Bypass arrangements have been proposed elsewhere in Canada to reduce the cost of gas to industry, and in order to be competitive we must allow similar market-oriented practices here.

"If large industries and utilities can negotiate contracts which reflect the true cost of service to all categories of customer, we will have achieved the best of all possible worlds. All users will be treated equitably and the advantages of location will be captured by energy-using industries in British Columbia."

The government's action has an immediate effect on two Prince George-area industries. Prince George Pulp and Paper and the Husky Oil refinery want to build four miles of pipeline to bypass the Inland Natural Gas system in the area. If the companies cannot negotiate a satisfactory arrangement with Inland, the bypass line will be built. But construction cannot proceed without an Energy Project Certificate from Victoria.

"The legal requirement of a Project Certificate ensures that provincial jurisdiction is protected in such cases," Davis said.

For further information:
Jake Banky, Director of Communications, (604) 387-5178

IN THE MATTER OF
THE UTILITIES COMMISSION ACT
S.B.C. 1980, c.60
(hereinafter "the Act")

and

IN THE MATTER OF APPLICATIONS
FOR ENERGY PROJECT CERTIFICATES BY:

1) NORTHWOOD PULP AND TIMBER LTD. ("Northwood"); and
2) PRINCE GEORGE PULP AND PAPER LTD. and HUSKY OIL OPERATIONS LTD. ("PG Pulp/Husky")

TO CONSTRUCT AND OPERATE "BYPASS" PIPELINE FACILITIES FOR THE TRANSMISSION OF NATURAL GAS FROM THE WESTCOAST NATURAL GAS MAINLINE TO THE APPLICANTS' INDUSTRIAL FACILITIES IN PRINCE GEORGE.

DISPOSITION OF APPLICATIONS AND
TERMS OF REFERENCE FOR REVIEW
BY BRITISH COLUMBIA UTILITIES COMMISSION

WHEREAS, pursuant to Section 16 of the Act, Order in Council No. 552, March 18, 1987, designates every undertaking of a kind that consists of the building of a natural gas pipeline from Westcoast Transmission Company Ltd. (Westcoast) facilities to any plant as an undertaking significant in the matter of energy if alternate facilities exist for the transport of the natural gas from the Westcoast facilities to the plant;

AND WHEREAS, pursuant to Section 18 of the Act, two Applications for Energy Project Certificates for such pipelines were made to the Minister of Energy, Mines and Petroleum Resources by Northwood and PG Pulp/Husky;

NOW THEREFORE, pursuant to Sections 19(1)(a) and 20 of the Act, the Minister of Energy, Mines and Petroleum Resources, with the concurrence of the Minister of Environment and Parks, refers to the British Columbia Utilities Commission (the Commission) for review, by consolidation into one hearing, the aforementioned Applications. The Commission shall submit a report and recommendations to the Lieutenant Governor in Council after hearing the Applications in accordance with the following:

I. Objective

To recommend whether the Energy Project Certificates applied for by Northwood and PG Pulp/Husky should be issued and, if so, under what conditions.

II. Guidelines

The Commission is directed to review:

1. the financial and economic costs and benefits of the proposals as they would affect:

   a) the Applicants;
   b) Inland Natural Gas Co. Ltd.'s (Inland's):
      i) total gas sales, excluding natural gas for vehicles
      ii) residential, commercial, and small industrial customers
      iii) financial position;
   c) the franchise fee levy, utility taxation levy, and the property tax levied on the proposed pipelines by the City of Prince George and Regional District of Fraser-Fort George; and
   d) the Applicants' income tax payable to British Columbia and Canada.

2. the continuing availability of the curtailment privilege as proposed by the Applicants.

3. safety and environmental factors.

4. possible options to the bypass pipelines, including rate-making principles and possible incentives.

5. the rates and conditions that, in the opinion of the Commission, Inland should accept to keep the Applicants on the Inland system.

6. any other material matters.

III. Approach and Timing

The Commission shall hear the Applications in public hearing and solicit comments from interested parties. The Commission shall expeditiously submit its report and recommendations to the Lieutenant Governor in Council. In the event that there are impediments to the expeditious review of the Applications, the Commission shall advise the Minister of Energy, Mines and Petroleum Resources and indicate how government may assist in expediting the review process.

Order in Council 552/87 and ten copies of each Application are transmitted to the Commission with this Disposition and Terms of Reference.

Honourable Jack Davis Minister of Energy, Mines and Petroleum Resources	Honourable Bruce Strachan Minister of Environment and Parks

Dated this 5th day of June, 1987.

BYPASS RATE DETERMINATION FACTOR INPUTS

This Appendix provides further reasoning for the Commission's determination of those factors which were used in the computer models by Northwood and Inland to determine the appropriate bypass rate. A summary of the factors is displayed in the text on Table 6.3.1.

A. Gas Volume

In determining the gas volume used by Northwood, both Inland and Northwood used a volume of 3,032,900 GJ. This volume of gas represents the forecast of firm and interruptible consumption by Northwood during the last fiscal year of Inland. The trend in gas consumption by Northwood has been decreasing for several years.

During the hearing proceedings Northwood revised its estimate of gas consumption to 3,500,000 GJ. The Company identified that actual consumption of both firm and interruptible gas in a recent period justified this increased volume.

The Commission recognizes that the earlier volume used by Inland and Northwood represents a normal consumption forecast extendable to future years. Also, Northwood gave evidence that the current value of the Canadian dollar against other world currencies provided for buoyant markets for Northwood's products at this time. The Commission therefore determines that the more appropriate volume to use is that volume which Inland and Northwood had previously agreed upon. Therefore, the Commission model run uses a volume of 3,032,900 GJ.

B. Capital Cost

Northwood estimated the capital cost of the construction of its pipeline and regulating facility at $648,000. In examination, Northwood conceded that the regulating facility would not provide for metering of the natural gas. Northwood had also not provided for a separate check valve at the commencement of its pipeline and block valves were not provided for by the company at either end of the Fraser River bridge crossing.

Inland provided a separate estimate of the pipeline regulating and meter facilities which Northwood should put in place. The Inland estimate totalled $742,000 which was later revised to $734,000. For negotiating purposes Inland used a capital cost of $700,000. These costs included metering facilities.

The Commission has determined that the cost of construction will likely exceed the Northwood estimate. At present one can anticipate winter construction which has been valued by Northwood at an additional $25,000. Northwood had not included costs which it had expended for the services of Opportunity Resources before that consulting company was replaced by Novacorp. Also, Inland gave evidence that the basic cost (before extras) for construction it had undertaken this year was equivalent to the total provision for construction costs allowed for by Northwood. To adjust for these additional costs the Commission has used a capital cost of $700,000 in its computer run.

Westcoast estimated its tap and meter facility would cost $400,000 assuming no telemetering equipment and no AFUDC. Northwood planned to reduce this cost in half by integrating its regulating station with Westcoast's meter station. The Northwood plan has not yet been clarified and Westcoast has not agreed that it would take part in the integration. Until the cost savings are demonstrated to the Commission the higher value of $400,000 will be used as an increment to be added to the capital cost of $700,000.

C. Operating and Maintenance Costs

In its first Application Northwood provided a cost of $32,000 for annual maintenance and operating expenditures. The company later reduced that number to $24,600.

Inland had an estimate of $33,500 which it later revised to $30,500. For negotiating purposes Inland used a value of $30,000.

The Commission has chosen an annual maintenance and operating expense of $30,000. This expenditure will provide for odorant of the natural gas. Northwood had expected that Westcoast would provide this service, but Westcoast testified that it historically had not provided odorizing facilities.

D. Residual Value

Northwood included a value in the 20th year of its model for the undepreciated capital cost of its pipeline. That valuation was $267,000.

Inland did not provide any residual value for the pipeline, arguing that any such value would be determined by CCA allocations in the years 21 and beyond. That value would be insignificant. The Commission agrees with Inland on this matter.

E. Debt Repayment Term

Northwood provided for debt repayment over an assumed 20-year project life. Inland also assumed a 20-year project life but required debt repayment over ten years. The Commission believes that the debt repayment should be made over 20 years as this is not uncommon practice in project evaluations.

F. Investment Tax Credits

Northwood testified that it would be allowed investment tax credits on its investment. Inland did not provide for these investment tax credits but the Commission concurs with Northwood that if the company is allowed the investment tax credits then it should be deducted to provide a representative stand-alone cost of the facility.

G. Debts/Equity Ratio

Northwood assumed that the project would be supported by debt only. The accounting arguments made by Northwood failed to recognize that even if short-term debt is used for this project the project is supported by the resources of the company, including the equity in the company. The position of Northwood was in conflict with Northwood Counsel's argument on page 1578 of the transcript where he argued that the shareholders of Northwood would be willing to forego dividends to see this project go ahead.

Inland assumed a debt/equity ratio of 40/60. This is essentially the same ratio used in its successful negotiations with Prince George Pulp and Husky. However, the evidence of Northwood is that the company does not currently have 50% equity, but the attainment of 50% equity was a realistic goal. For this reason the Commission has chosen to use a 50% debt and 50% equity financing of the project.

H. Interest Rate

Both Northwood and Inland assumed a 10% interest rate, and the Commission concurs.

I. Discount Rate

Northwood did not assume a return on equity due to the financing it had chosen. However, Inland assumed a return on equity or discount rate of 15%. The Commission believes that 15% is a fair value to use for this discount rate.

J. Phase-In Period

Northwood assumed that whatever rate it determined from its model would be put in place effective with the start-up of its operations. Inland provided for a phase-in so that the initial year rate would be approximately $.20/GJ and the rate in years two and beyond would be that rate which would equate in a discounted analysis with the levelized rate over the full life of the project. The effect of Inland's calculation is to provide a rate in year two and beyond that is less then the levelized rate.

K. Inland Benefits

Inland argued that the ability of the utility to provide monthly balancing of gas purchases and the provision of utility sales of interruptible gas (AOR sales) were both benefits to a potential bypass customer which should be valued. Inland continued to provide valuation of the monthly balancing benefit, but in later runs Inland removed any value for AOR sales. Northwood argued that it did not intend choosing a transportation schedule with monthly balancing and that the company would not use AOR sales since it would cause the utility to incur higher charges for its direct sales gas purchases. The logic of the company is that a greater volume at a higher load factor will attract lower offer prices from producers.

The Commission believes that benefits that the utility can provide should be valued if the company intends to avail itself of those benefits. Therefore the Commission has provided no value for monthly balancing and AOR sales at this time. In future, if Northwood were to choose monthly balancing schedules or AOR sales then an increment should be added to the rate to reflect this.

L. Northwood Bypass Benefits

Neither of the companies provided for quantifiable benefits that Northwood would experience if it were to bypass the utility. The only benefit which was identified in a way which could be valued related to the reduction in hearing cost expenses that Northwood would experience at B.C. Utilities Commission hearings. The Commission notes that although Northwood has been active in the recent rate design hearing of Inland, the company has not been active at previous hearings of the utility. Any expenses that Northwood incurred as a supporter of the COFI representations to the Commission have been modest. Therefore the Commission provides no value for Northwood bypass benefits in its model run.

M. Westcoast Charges

Inland and Northwood had different estimates of Westcoast charges applicable to the transportation of gas by Northwood under Schedule 21 or by a bypass customer. This issue was resolved by Westcoast when Mr. Edgeworth provided calculations that the estimated charge would be the same for each case. The value provided by Westcoast was $.263/GJ, subject to change for recent NEB Decisions. The Commission notes that provided the same cost is used for the two cases the costs will offset each other in the rate determination model.

BYPASS ANALYSIS
$1,100,000 NORTHWOOD PULP

REVENUE - REDUCED GAS PURCHASE COSTS

Line No.	Particulars		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Total
1	SALES VOLUMES - GJ		3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	30,329,000
2	Less - Strike												0
3	adjustment	0.0%	0	0	0	0	0	0	0	0	0	0	0
7	NET SALES VOLUMES - GJ		3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	30,329,000
12	AVOIDED COSTS $/GJ - ING		$0.2020	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	
13	- WCT		0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	
16			0.4650	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	
17	COST INCURRED - WCT		(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	
20			$0.2020	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	
25	REDUCED PURCHASE COSTS												
27	Avoided costs		$1,410,299	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$10,192,022
29	Cost incurred		(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(7,976,530)
32	Total		$612,646	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$2,215,492

BYPASS ANALYSIS
$1,100,000 NORTHWOOD PULP

REVENUE - REDUCED GAS PURCHASE COSTS

Line No.	Particulars		Bal.Fwd.	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
1	SALES VOLUMES - GJ		30,329,000	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	63,690,900
2	Less - Strike														
3	adjustment	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0
7	NET SALES VOLUMES - GJ		30,329,000	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	3,032,900	63,690,900
12	AVOIDED COST $/GJ - ING			$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	
13	- WCT			0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	0.2630	
16				0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	0.3217	
17	COST INCURRED - WCT			(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	(0.2630)	
20				$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	$0.0587	
25	REDUCED PURCHASE COSTS														
27	Avoided costs		$10,192,022	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$20,925,239
29	Cost incurred		(7,976,530)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(16,750,713)
32	Total		$2,215,492	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$178,094	$4,174,526

BYPASS ANALYSIS
$1,100,000 NORTHWOOD PULP
SUMMARY

Line No.	Particulars		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Total
1	Avoided Inland/WCT costs		$1,410,299	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$10,192,022
3	Incurred WCTL costs		(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(7,976,530)
6	Total available		612,646	178,094	178,094	178,094	178,094	178,094	178,094	178,094	178,094	178,094	2,215,492
8	Operating & maintenance		(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(300,000)
10	Property taxes		(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(82,690)
12	Income before tax		574,377	139,825	139,825	139,825	139,825	139,825	139,825	139,825	139,825	139,825	1,832,802
14	Interest		(55,000)	(52,250)	(49,500)	(46,750)	(44,000)	(41,250)	(38,500)	(35,750)	(33,000)	(30,250)	(426,250)
18	Taxable Income		519,377	87,575	90,325	93,075	95,825	98,575	101,325	104,075	106,825	109,575	1,406,552
19	Capital Cost Allowance		(20,900)	(40,964)	(39,325)	(37,752)	(36,242)	(34,793)	(33,401)	(32,065)	(30,782)	(29,551)	
20	Income Tax		(163,682)	(19,488)	(20,558)	(21,709)	(22,767)	(24,039)	(25,601)	(27,141)	(28,661)	(30,161)	(383,807)
22	Operating cash flow		355,695	68,087	69,767	71,366	73,058	74,536	75,724	76,934	78,164	79,414	1,022,745
23	Equity		(550,000)										(550,000)
24	Debt repayment		(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(275,000)
26	Net cash flow		(221,805)	40,587	42,267	43,866	45,558	47,036	48,224	49,434	50,664	51,914	197,745
29	Income tax rate - current		43.870%	41.810%	40.310%	39.240%	38.210%	37.690%	37.690%	37.690%	37.690%	37.690%	
31	Debt repayment & interest												
32	Debt - B.O.Y.	50.00%	550,000	522,500	495,000	467,500	440,000	412,500	385,000	357,500	330,000	302,500	
33	Repayment over 20 years		(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	
35	Debt - E.O.Y.		522,500	495,000	467,500	440,000	412,500	385,000	357,500	330,000	302,500	275,000	
38	Interest @ 10%	10.00%	55,000	52,250	49,500	46,750	44,000	41,250	38,500	35,750	33,000	30,250	

BYPASS ANALYSIS
$1,100,000 NORTHWOOD PULP
SUMMARY

Line No.	Particulars	Bal.Fwd.	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
1	Avoided Inland/WCT costs	$10,192,022	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$975,747	$20,925,239
2														
3	Incurred WCTL costs	(7,976,530)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(797,653)	(16,750,713)
4														
5														
6	Total available	2,215,492	178,094	178,094	178,094	178,094	178,094	178,094	178,094	178,094	178,094	178,094	178,094	4,174,526
7														
8	Operating & maintenance	(300,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(30,000)	(630,000)
9														
10	Property taxes	(82,690)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(8,269)	(173,649)
11														
12	Income before tax	1,832,802	139,825	139,825	139,825	139,825	139,825	139,825	139,825	139,825	139,825	139,825	139,825	3,370,877
13														
14	Interest	(426,250)	(27,500)	(24,750)	(22,000)	(19,250)	(16,500)	(13,750)	(11,000)	(8,250)	(5,500)	(2,750)	0	(577,500)
15														
16														
17														
18	Taxable Income	1,406,552	112,325	115,075	117,825	120,575	123,325	126,075	128,825	131,575	134,325	137,075	139,825	2,793,377
19	Capital Cost Allowance		(28,369)	(27,234)	(26,145)	(25,099)	(24,095)	(23,131)	(22,206)	(21,318)	(20,465)	(19,647)	(18,861)	
20	Income Tax	(383,807)	(31,643)	(33,107)	(34,554)	(35,985)	(37,400)	(38,800)	(40,185)	(41,556)	(42,914)	(44,259)	(45,591)	(809,801)
21														
22	Operating cash flow	1,022,745	80,682	81,968	83,271	84,590	85,925	87,275	88,640	90,019	91,411	92,816	94,234	1,983,576
23	Equity	(550,000)											0	(550,000)
24	Debt repayment	(275,000)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	0	(550,000)
25														
26	Net cash flow	197,745	53,182	54,468	55,771	57,090	58,425	59,775	61,140	62,519	63,911	65,316	94,234	883,576
27														
28														
29	Income tax rate - current		37.690%	37.690%	37.690%	37.690%	37.690%	37.690%	37.690%	37.690%	37.690%	37.690%	37.690%	
30														
31	Debt repayment & interest													
32	Debt - B.O.Y.		275,000	247,500	220,000	192,500	165,000	137,500	110,000	82,500	55,000	27,500	0	
33	Repayment over 10 years		(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)	0	
34														
35	Debt - E.O.Y.		247,500	220,000	192,500	165,000	137,500	110,000	82,500	55,000	27,500	0	0	
36														
37														
38	Interest @ 10.00%		27,500	24,750	22,000	19,250	16,500	13,750	11,000	8,250	5,500	2,750	0	
39														
40														
41	NPV of cash flow 1987 to 2007 @	15.000%	$0											

LIST OF EXHIBITS

	Exhibit No.
Commission Order No. G-55-87 dated September 1, 1987	1
Opening Statement of Northwood Pulp and Timber Limited	2
Natural Gas Pipeline Project - Northwood Pulp and Timber Limited Energy Project Certificate Application dated May 1, 1987	3
Information Requests and Responses dated July 21, 1987	4
Information Requests and Responses dated July 28, 1987	5
Disposition of Applications and Terms of Reference for Review by British Columbia Utilities Commission	6
Letter dated September 8, 1987 from Northwood Pulp and Timber Limited to City of Prince George re: Payment of Franchise Fees	7
Letter dated September 2, 1987 from Northwood Pulp and Timber Limited re: Cost of By-Pass vs Cost of Transportation	8
Information Request No. 1 of Inland Natural Gas Co. Ltd. including Eighteen Questions and Responses	9
Amended Exhibit #7	10
Amended Exhibit #8	11
Northwood Pulp and Timber Limited - Gas Supply Pipeline - Proposed Schedule Update	12
Bulletin No. 13 - Ministry of Transportation and Highways - Engineering and Inspection Branch	13
Northwood By-Pass Project Financial Analysis Cost of Pipeline By-Pass	14
Letter dated September 8, 1987 from Inland to Davis & Co. with attached Information Response to Northwood Information Request #1	15
Information Request No. 2 of Inland with Responses	16
Response of British Columbia Petroleum Corporation to Information Request No. 1 of Inland Natural Gas Co. Ltd. dated September 1, 1987	17
Copy of Chapter 7 - Views of National Energy Board - Merits on Cyanamid Decision	18

	Exhibit No.
Press Release dated March 19, 1987 re: Jurisdiction in Pipeline By-Pass Issue	19
Written Submission of Inland Natural Gas Co. Ltd. dated August 5, 1987	20
Letter dated September 1, 1987 from Inland to Northwood re: Terms and Conditions of Proposed Contract	21
Letter dated September 4, 1987 from Inland to Davis & Co. with attachments	22
Map showing Pipeline Location	23
Letter dated September 10, 1987 from Inland to BCUC attached Information Request dated September 3, 1987 with Responses	24
Pipeline Map	25
Impact on Northwood's Cost of By-Pass per Exhibit 14, Case "E" from Higher Gas Load and Investment Tax Credits (ITC's)	26
Northwood Pulp and Timber Limited - Summary of Cash Flow Differentials for Years 1 - 3 inclusive before Interest and Debt Repayment	27
Northwood's Firm Cost of Westcoast and Inland Service (Comparison)	28
Letter dated September 11, 1987 from National Energy Board to R.B. Wallace and J.M. Pelrine	29
Information Requests No. 2 of Inland Natural Gas Co. Ltd. with Responses	30
Submission from the City of Prince George dated August 20, 1987	31
Minutes of City of Prince George Council Meeting	32
Photocopy of Article in Prince George Citizen dated September 5, 1987	33
Photocopy of Article in Prince George Citizen dated October 3, 1958	34
Submission of City of Quesnel, B.C.	35
Submission of City of Williams Lake, B.C.	36
Submission of ICG Utilities (British Columbia) Ltd. dated September 8, 1987	37

	Exhibit No.
Press Release dated June 11, 1987	38
Press Release dated July 6, 1987	39
Northwood Pulp and Timber Limited - Pays to Westcoast Indemnities (with Assumptions)	40
BCUC's Request of September 11, 1987 for Northwood to Run its Financial Model per Exhibit 14, Case E with Alternate Assumptions	41
Response to BCUC Information Request - Cost Comparisons between Inland Offer and Northwood By-Pass for Tax Deduction - Operating Costs, etc., for Years 1 and 2	42
Letter from City of Prince George re: Industrial Tax Levy	43
Northwood Pulp and Timber Limited - 10-Year Comparison of By-Pass Option and Inland Proposal	44
Page 2 of Exhibit #44	45
Northwood Pulp and Timber Limited, Case "E" Revised	46
Northwood Pulp and Timber Limited - Calculation of Property Taxes on By-Pass Pipeline	47
Computation of Pulp Mill Gas Cost for period August 1986 to July 1987	48
Northwood Payment to City of Prince George on Account of Franchise Fees re: Inland Service Component of By-Pass	49
Letter dated December 13, 1985 from Northwood to Inland with attachments	50
Inland Natural Gas Co. Ltd. - Cost Estimates for Northwood Pipeline and Bridge	51
Inland Natural Gas Co. Ltd. - Annual Operating and Maintenance - Estimated Expenses	52
Revised Appendix "A" to Exhibit 21	53
Inland Natural Gas Co. Ltd. - Take-or-Pay Costs Related to By-Pass	54
Letter dated April 13, 1987 from R.B. Wallace to W.F.G. Arthur re: Industrial Contract Negotiations	55

	Exhibit No.
Letter dated April 9, 1987 from W.F.G. Arthur to W.A. Matson with attached Sheet on Firm and Interruptible T-Service Inland Margins	56
Inland Natural Gas Co. Ltd. - By-Pass Analysis - $750,000 Northwood Pulp and Timber Summary - Ranges G, H, 5 and 6	57
Inland Natural Gas Co. Ltd. - $750,000 Northwood Pulp and Timber Summary - Ranges I, J, 5, 6, G and H	58
Letter dated August 4, 1987 from Ministry of Energy, Mines and Petroleum Resources to Wallace Hendren with two attached Letters to Michael LaFlamme from Denis O'Gorman	59
Inland Natural Gas Co. Ltd. - By-Pass Analysis $742,000 Northwood Pulp and Timber Summary - Ranges I, J, 5 and 6 dated August 27, 1987	60
Inland Natural Gas Co. Ltd. - By-Pass Analysis $742,000 Northwood Pulp and Timber Summary - Ranges I, J, 5 and 6	61
1985 Inland Natural Gas Co. Ltd. Annual Report	62
1986 Inland Natural Gas Co. Ltd. Annual Report	63
Inland Natural Gas Co. Ltd. - One Interim Report dated September 30, 1986	64
Inland Natural Gas Co. Ltd. - Two Interim Report dated December 31, 1986	65
Submission of City of Kamloops	66
Submission of Union of B.C. Municipalities	67
Submission of Village of Salmo, B.C.	68
Submission of City of Quesnel	69
Submission of District of MacKenzie, B.C.	70
Submission of City of Trail, B.C.	71
Opening Statement of Mr. R.E. Kadlec	72
Letter dated September 17, 1987 from Inland to National Energy Board re: File #1540-N15 - Northwood Pulp and Timber Limited	73
Estimated Capital Cost of Northwood Meter Station	74

A P P E A R A N C E S

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R.B. WALLACE S. CHARLTON	Prince George Pulp & Paper Ltd. and Husky Oil Operations Ltd.
R. GATHERCOLE	Consumers' Association of Canada, B.C. Branch The B.C. Old-Age Pensioners Organization The Federated Anti-Poverty Groups of B.C. The Council of Senior Citizens Organizations
M.M. MacKINNON M.M. MOSELEY	B.C. Petroleum Corporation
C.B. JOHNSON	Inland Natural Gas Co. Ltd.
P. GIBSON R.M. SIRETT	Westcoast Transmission Company Limited
C. JEFFERY	City of Prince George
P. OSTERGAARD	Ministry of Energy, Mines and Petroleum Resources
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BRITISH COLUMBIA

2386

APPROVED AND ORDERED DEC. 10,1987

Lieutenant-Governor

EXECUTIVE COUNCIL CHAMBERS, VICTORIA DEC -9,1987

On the recommendation of the undersigned, the Lieutenant-Governor, by and with the advice and consent of the Executive Council, orders that

WHEREAS, pursuant to Order in Council 522/87 and pursuant to Sections 19(1)(a) and 20 of the Utilities Commission Act, the Minister of Energy, Mines and Petroleum Resources, with the concurrence of the Minister of Environment and Parks, referred to the British Columbia Utilities Commission (the Commission) for review an Application for an Energy Project Certificate by Northwood Pulp and Timber Ltd. (Northwood);

and

WHEREAS, the Commission has submitted a Report and Recommendations to the Lieutenant Governor in Council after hearing the Application by Northwood;

and

WHEREAS, the Commission has recommended that an Energy Project Certificate not be granted to Northwood, provided that Inland Natural Gas Co. Ltd. (Inland) promptly offers Northwood a transportation contract with the rates and conditions specified in Chapter 6 of the aforementioned Report and Recommendations;

THEREFORE, the Lieutenant Governor in Council, pursuant to Section 2 of the Utilities Commission Act, orders that the Energy Project Certificate applied for by Northwood be refused.

MINISTER OF ENERGY, MINES AND PETROLEUM RESOURCES

PRESIDING MEMBER OF EXECUTIVE COUNCIL

(This part is for administrative purposes and is not part of the Order.)

Authority under which Order is made:

Act and section

Other (specify)

Statutory authority checked by R.D. ADAMSON
(Signature and typed or printed name of Legal Officer)

3502/87.