National Energy Board

Reasons for Decision

CanWest Gas Supply Inc.

ProGas Limited

GH-3-93

July 1993

Gas Exports

National Energy Board

Reasons for Decision

In the Matter of

CanWest Gas Supply Inc.

Application Pursuant to Part VI of the *National Energy Board Act* for a Licence to Export Natural Gas

ProGas Limited

Application Pursuant to Section 21 and Part VI of the *National Energy Board Act* to Amend a Licence to Export Natural Gas and for a Licence to Export Natural Gas

GH-3-93

July 1993

Gas Exports

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Abbreviations

ACC	Annual Commodity Charge
Act	*National Energy Board Act*
APMC	Alberta Petroleum Marketing Commission
BCPC	British Columbia Petroleum Corporation
Bcf	billion cubic feet
Board	National Energy Board
Bonneville	Bonneville Power Administration
CanWest	CanWest Gas Supply Inc.
Consumers Power	Consumers Power Company
DCQ	Daily Contract Quantity
DOE/FE	(United States of America) Department of Energy, Office of Fossil Energy
EARP Guidelines Order	*Environmental Assessment and Review Process Guidelines Order*
EIA	Export Impact Assessment
ERCB	(Alberta) Energy Resources Conservation Board
Exclusion List	List of automatic exclusions pursuant to the EARP Guidelines Order
FERC	(United States of America) Federal Energy Regulatory Commission
FS	Firm Service
GH-1-92	Hearing Order GH-1-92 in respect of various applications for natural gas export licences; Reasons for Decision dated October 1992
GH-7-92	Hearing Order GH-7-92 in respect of various applications for natural gas export licences; Reasons for Decision dated June 1993
GHR-1-87	*Review of Natural Gas Surplus Determination Procedures*

GIC	Gas Inventory Charge
GJ	gigajoule(s)
GLGT	Great Lakes Gas Transmission Limited Partnership
Klickitat	Klickitat Energy Company
MBP	Market-Based Procedure
MDQ	Maximum Daily Quantity
MMBtu	million British thermal units
MMcf	million cubic feet
MW	megawatt (1000 kilowatts)
NEB	National Energy Board
Northwest	Northwest Pipeline Corporation
NOVA	NOVA Corporation of Alberta
Pentzer	Pentzer Energy Services, Inc.
ProGas	ProGas Limited
ProGas U.S.A.	ProGas U.S.A. Inc.
QF	qualifying cogeneration facility
SDS	SDS Lumber
TETCO	Texas Eastern Transmission Company
TransCanada	TransCanada PipeLines Limited
U.S.	United States of America
Westcoast	Westcoast Energy Inc.

Recital and Appearances

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

AND IN THE MATTER OF an application pursuant to Part VI of the *National Energy Board Act* for a new licence to export natural gas by CanWest Gas Supply Inc.;

AND IN THE MATTER OF an application pursuant to Section 21 and Part VI of the *National Energy Board Act* for an amendment to a licence to export natural gas and a new licence to export natural gas by ProGas Limited;

AND IN THE MATTER OF Hearing Order GH-3-93, as amended;

HEARD in Calgary, Alberta on 28 June 1993.

BEFORE:

J.-G. Fredette	Presiding Member
R.B. Horner, Q.C.	Member
A.B. Gilmour	Member

APPEARANCES:

L.G. Keough	CanWest Gas Supply Inc.
J.R.M. Kowch	ProGas Limited
N.W. Boutillier	Alberta and Southern Gas Co. Ltd.
G.V. Lepine	Centra Gas Ontario Inc.
G. Giesbrecht	Pan-Alberta Gas Ltd.
M.J. Samuel	TransCanada PipeLines Limited
E. Diemert	Western Gas Marketing Limited
W.M. Moreland	Alberta Petroleum Marketing Commission
M.A. Fowke	Board Counsel

Chapter 1

Part VI - Gas Export Licence Applications

1.1 The Applications

During the GH-3-93 proceeding, the National Energy Board ("the Board or NEB") examined applications for gas export licences from the following parties:

1. CanWest Gas Supply Inc. ("CanWest");

2. ProGas Limited ("ProGas").

The gas export licence application of ProGas also requested an amendment, pursuant to subsection 21(2) of the National Energy Board Act ("the Act"), of Licence GL-98 which would reduce the authorized export volumes under GL-98.

Table 1-1 provides a summary of each export licence application reviewed during the GH-3-93 proceeding.

Table 1-1

Summary of Applied-for Licences

GH-3-93

				Maximum Quantities Applied For		
Application	**Buyer (Type of market)**	**Term**	**Export Point**	**Daily 10^3m^3 (MMcf)**	**Annual 10^6m^3 (Bcf)**	**Term 10^6m^3 (Bcf)**
1. CanWest	Klickitat (cogen. plant)	20 years following first deliveries	Huntingdon, British Columbia	300.5 (10.6)	109.7 (3.9)	2 194.0 (77.4)
2. ProGas *	Consumers Power (system supply)	1 Nov. 1993 to 31 Oct. 2003	Emerson, Manitoba	2 124.6 (75.0)	775.5 (27.4)	7 755.0 (273.8)

* ProGas has also applied for an amendment to Licence GL-98 to have these volumes removed.

1.2 Environmental Screening

The purpose of the environmental screening is to enable the Board to reach one of the conclusions required by section 12 of the *Environmental Assessment and Review Process Guidelines Order* ("EARP Guidelines Order"). To that end, the Board performed a screening, pursuant to Hearing Order GH-3-93, wherein it considered submissions from each of the applicants.

Each applicant filed with the Board information concerning the potential environmental effects that would be caused by the sending or taking of gas from Canada.

CanWest submitted that the potential environmental effects and the social effects directly related to those environmental effects that would be caused by the applied-for gas export would be insignificant or mitigable with known technology.

ProGas submitted that no new gas transmission facilities under the Board's jurisdiction would be required to accommodate its applied-for exports. As a result, ProGas submitted that its export licence application fell within the ambit of the Board's List of Automatic Exclusions ("Exclusion List") pursuant to the EARP Guidelines Order.

1.2.1 Views of the Board

The Board, by means of a screening pursuant to the EARP Guidelines Order, has completed its environmental screening of the applications considered in this hearing and has concluded that, as there are no new facilities required, the applications of CanWest and ProGas fall within the ambit of Note 3 of the Board's Exclusion List.[1]

1.3 Market-Based Procedure

The Board, in considering an export application, must take into account section 118 of the Act, which requires that the Board have regard to all considerations that appear to it to be relevant and, in particular, that the Board satisfy itself that the quantity of gas to be exported does not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada having regard to the trends in the discovery of gas in Canada.

In July 1987, pursuant to a *Review of Natural Gas Surplus Determination Procedures* ("GHR-1-87"), the Board implemented a new procedure, known as the Market-Based Procedure ("MBP"), founded on the premise that the marketplace would generally operate in such a way that Canadian requirements for natural gas would be met at fair market prices.

The MBP provides that the Board will act in two ways to ensure that natural gas to be licensed for export is both surplus to reasonably foreseeable Canadian requirements and in the public interest: it will hold public hearings to consider applications for licences to export natural gas, and it will monitor Canadian energy markets on an ongoing basis.

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1. Note 3 provides for the automatic exclusion of "...applications for natural gas exports, imports, exports for subsequent import and imports for subsequent export authorized:

   (ii) by licence where the development of new facilities for production, processing, storage or transmission would not be required".

The public hearing portion of the MBP provides that the Board consider:

- complaints, if any, under the Complaints Procedure;
- an Export Impact Assessment ("EIA"); and
- any other considerations that the Board deems relevant to its determination of the public interest.

The following description of these three components is general in nature and applies to each application heard in GH-3-93.

1.3.1 Complaints Procedure

The basic premise of the Complaints Procedure is that, in a market which is working satisfactorily, Canadian purchasers will be able to obtain domestic natural gas supplies under contract on terms and conditions, including price, similar to those offered to purchasers in the United States of America ("U.S."). In order to test whether the market is in fact working in this manner, in the GHR-1-87 Decision the Board stated that:

> "The inclusion of a complaints mechanism in the new surplus determination procedures is based on the principle that gas should not be authorized for export if Canadian users have not had an opportunity to buy gas for their needs on terms and conditions similar to those of the proposed export. Applicants for export licences will have to be prepared to address any concerns on this score which may be identified in the complaints procedure ...."

The Complaints Procedure seeks to ensure that Canadian gas buyers who have been active in the market have access to gas on terms and conditions no less favourable than export customers. The Complaints Procedure enables these buyers to assess the terms and conditions of the gas sales contracts underlying export licence applications relative to the terms and conditions they are being offered. If the terms and conditions being offered to export customers are more favourable than those available to domestic customers, a Canadian buyer may wish to file a complaint with the Board. The Board would adjudicate each complaint on the basis of an assessment of whether, as a matter of fact, the complainant has or has not been able to obtain additional gas supplies on terms and conditions, including price, similar to those contained in the gas export licence application submitted to the Board.

Domestic gas purchasers who wish to file a complaint must demonstrate that they have attempted to contract for additional gas supplies and that they have not been able to obtain such supplies on terms and conditions similar to those contained in the gas sales contract. At the same time, export licence applicants are expected to respond to concerns expressed by a complainant. If the Board were to find that a complaint is valid, it would then have to determine what action needs to be taken to remedy the situation. This could involve a delay in the licence proceeding, a denial of the export licence application or some other action appropriate to the circumstances of the particular application.

1.3.2 Export Impact Assessment

The purpose of the EIA is to allow the Board to determine whether a proposed export is likely to cause Canadians difficulty in meeting their energy requirements at fair market prices.

The Board periodically produces an EIA using several projections of exports. The study, which is prepared in consultation with the natural gas industry and other interested parties, covers long-term natural gas supply, demand, prices and export levels and endeavours to provide an adequate statement of assumptions and explanation of the analytical technique used.[1]

Applicants and intervenors have the option of using the Board's analysis or of preparing and submitting their own analysis. In the absence of any adjustment-related problems being identified by the Board itself or being raised by interested parties, the Board presumes that the proposed export would not trigger a market-adjustment problem.

The applicants examined in these Reasons adopted the Board's most recent EIA, dated 7 September 1989.

1.3.3 The Other Public Interest Considerations

As part of its assessment of the other public interest considerations, the Board normally:

- makes an assessment of the likelihood that licensed volumes will be taken;
- makes an assessment of the durability of gas sales contracts;
- has regard to whether gas sales contracts were negotiated at arm's length;
- verifies that there is producer support for a gas export application;
- verifies that there are provisions in the gas sales contracts for the payment of the associated transportation charges on Canadian pipelines over the term of the gas sales contract; and
- determines the appropriate length of term for an export licence, having regard to:

    (i) evidence on the adequacy of the gas supply available to the export licence applicant to support the applied-for volumes over the requested licence term;

    (ii) evidence on the necessity of the requested term in light of the terms of the associated gas sales and transportation contracts and the terms of the approvals from other regulatory bodies; and

    (iii) any other evidence which the Board deems to be relevant to the appropriate term of the licence.

The above statement on the other public interest considerations should be interpreted as providing guidance to parties as to which considerations the Board normally has regard to in assessing the merits of gas export licence applications. However, in the context of each specific export licence application, the Board has regard to whatever factors appear to it to be relevant to the Canadian public interest.

1. By letter dated 3 September 1992, the Board announced that it was undertaking to produce its second EIA. A workshop to promote discussion and exchange of information took place in April 1993 and a summary of these discussions was released in June 1993.

In assessing the considerations above, the Board takes into account information regarding gas supply, transportation, markets, sales contracts and the status of regulatory authorizations. This information is provided by the applicant in response to the information filing requirements of the *National Energy Board Part VI Regulations* and during the public hearing process.

Gas Supply

In its assessment of gas supply, the Board reviews the contractual arrangements pertaining to supply and the adequacy of both reserves and productive capacity.

In making its assessment as to the adequacy of the gas supply available to the export licence applicant to support the applied-for volumes over the requested licence term, the Board is flexible but normally expects applicants to demonstrate that established reserves are equal to or exceed the applied-for volume and that productive capacity is adequate to meet the proposed annual export volumes over the majority of the applied-for licence term.

Each applicant is required to provide an estimate of established reserves for those fields from which it intends to produce gas for the proposed export. The Board conducts geological and engineering analyses of each applicant's gas supply in order to prepare its own estimate of the applicant's gas reserves.

In its evaluation of gas reserves, the Board makes use of its gas reserves database, which is maintained on an ongoing basis. The evaluation of gas reserves includes a nomenclature check for correlation purposes, volumetric studies of new pools, re-examination of developing pools and performance analysis of producing pools. A review and an assessment of the ownership and contractual status of all pools included in the applications are also done.

The Board uses its estimate of reserves, along with basic deliverability data for each pool for which estimates of reserves were submitted, in preparing its productive capacity projections. These projections are generally adjusted to reflect production at the annual level of requirements. The adjusted productive capacity is the estimated productive capacity at any point in time, carrying forward for future use the productive capacity resulting from an earlier excess of productive capacity over production. The requirements shown in the productive capacity figures are usually based on an annual load factor of 100 percent and may therefore somewhat overstate each applicant's actual supply requirements. If load factors are lower than anticipated, productive capacity would be sustained beyond the time the Board's analysis indicates.

Transportation

Regarding the transportation arrangements underpinning an export project, the Board reviews the status of upstream and downstream transportation arrangements, including all transportation contracts, either in final form or as precedent agreements. The Board also considers the term and contracted capacity of the transportation arrangements.

Markets

The applications dealt with in GH-3-93 were for sales to two types of end-use markets: a sale for system supply and a sale to a cogeneration facility, which is defined as a facility that produces electricity and thermal energy for use in commercial or industrial operations. The Board's review of these types of markets includes consideration of the following for each market type:

- for exports for system supply, consideration of the purchaser's current and projected requirements and supply portfolio with a view to determining the need for and the role of the Canadian gas supply within that portfolio; and,

- for exports to a cogeneration facility, consideration of the contractual chain, from the gas contract to the power and thermal sales contracts. The Board also considers the markets for the power and thermal output of the facility and the status of project financing and construction schedules.

For each type of end-use market, the review includes consideration, among other items, of the load factors at which the proposed exports are expected to flow.

Sales Contracts

The Board's review of the contractual arrangements includes consideration of the contractual obligations between the Canadian sellers and the U.S. buyers, including executed gas sales contracts. The Board's review also includes any resale arrangements that occur beyond the international boundary sale point, where such arrangements have a direct effect on the international sales agreement, including the filing of these downstream contracts.

Status of Regulatory Authorizations

The Board reviews the status of pertinent regulatory authorizations in Canada and the U.S., including provincial removal authorizations, Department of Energy, Office of Fossil Energy ("DOE/FE") import authorization and, for cogeneration facilities, qualifying cogeneration facility ("QF") certification under the U.S. Public Utility Regulatory Policies Act.

The Board's review also includes evidence of producer support and the status of any necessary state regulatory commission approvals.

1.4 Sunset Clauses

It has generally been Board practice in issuing a gas export licence to set an initial period of time during which, if the export of gas commences, then the licence becomes effective for the full period approved by the Board. This condition in the licence is referred to as a sunset clause because the licence would expire if exports had not commenced within a specified timeframe. Inclusion of the sunset clause is intended to limit outstanding licences to those for which the gas actually starts to flow within a reasonable period after the decision. The Board questioned each applicant concerning the acceptability of a sunset clause in the applied-for licence and in each case the applicant indicated that the inclusion of a sunset clause would be acceptable.

As a matter of general policy, and after questioning each applicant, the Board has set the timeframe by which exports must commence at approximately two years from the expected commencement of the licence term.

1.5 Views of the Board

The Board notes that there were no complaints registered with respect to the applications for export licences in the GH-3-93 proceeding.

As neither the Board nor any interested parties identified any adjustment-related problems, the Board concludes that the proposed exports would not trigger a market-adjustment problem.

Since no complaints were registered with respect to the subject applications and the Board has determined that the proposed exports would not trigger a market-adjustment problem, the Board is satisfied that the quantity of gas to be exported does not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada having regard to the trends in the discovery of gas in Canada.

The remaining chapters of these Reasons review the evidence of each applicant pertaining to the Other Public Interest Considerations. The findings of the Board in respect of these considerations and any other factors the Board has deemed to be relevant are contained in the "Views of the Board" section at the end of each chapter.

Chapter 2

CanWest Gas Supply Inc.

2.1 Application Summary

By application dated 7 April 1993, CanWest sought, pursuant to Part VI of the Act, a natural gas export licence with the following terms and conditions:

Term	- for 20 years following the date that the cogeneration facility begins commercial operation
Point of Export	- Huntingdon, British Columbia
Maximum Daily Quantity	- 300.52 10^3m^3 (10.6 MMcf)
Maximum Annual Quantity	- 109.69 10^6m^3 (3.9 Bcf)
Maximum Term Quantity	- 2 194 10^6m^3 (77.4 Bcf)
Tolerances	- ten percent per day and two percent per year

The gas proposed for export would be produced mainly from pools in British Columbia under contract to CanWest. The gas would be transported on the Westcoast Energy Inc. ("Westcoast") system for delivery to Klickitat Energy Company ("Klickitat") near Huntingdon, British Columbia. The gas would then flow on the Northwest Pipeline Corporation ("Northwest") system and a pipeline to be constructed by Northwest or Klickitat for delivery to a cogeneration facility near Bingen, Washington. Steam and electricity from the cogeneration facility would be sold to the SDS Lumber ("SDS") mill and the Bonneville Power Administration ("Bonneville") respectively.

CanWest requested that the date contained in the sunset clause of the licence be 1 July 1997 since the contract with Bonneville requires the cogeneration facility to be completed and operational by that date.

2.2 Gas Supply

2.2.1 Supply Contracts

CanWest will provide the gas for the proposed export from its contracted supply pool located mainly in British Columbia. This supply pool is characterized by dedicated, reserves-based gas purchase contracts with about 155 producers.

The Board conducted a detailed review of CanWest's gas supply during the GH-7-92 proceeding. Since that time CanWest has contracted additional supply amounting to approximately nine percent of its remaining reserves. CanWest stated that some decontracting has taken place to date and pointed out possible additional decontracting that may occur throughout the term of the proposed export.

Overall, the percentage of reserves which could be decontracted in the future is small (less than three percent) relative to CanWest's total supply.

2.2.2 Reserves

In support of its application, CanWest updated its detailed summary of gas reserves provided in the GH-7-92 proceeding to account for production during 1992 and recently contracted volumes. Recognizing that CanWest's supply situation has remained relatively unchanged, other than newly contracted reserves and decontracting in some pools, the Board did not consider it necessary to conduct a detailed review of all of CanWest's reserves at this time. Rather, the Board has largely confined its analysis to new supply information provided by CanWest. Details of the Board's earlier analysis are provided in the GH-7-92 Reasons for Decision.

Table 2-1 shows that the Board's estimate of CanWest's gas reserves as of 1 November 1992 is 21 percent lower than CanWest's, but exceeds its total requirements, including the proposed export, by 14 percent. Differences in reservoir parameters, the interpretation of production declines, and the methodology used to assign gas reserves to undrilled acreage account for the difference in estimates of reserves.

CanWest's gas supply consists primarily of older producing pools. Since gas production rates in many of these pools have been declining, and water production rates have been increasing, the Board has reduced its estimate of gas reserves in several of those pools.

The majority of CanWest's recently contracted supply is located in the Blueberry and North and South Grizzly Fields which have been on production for a number of years and are now well into decline. Several shut-in single well pools, pools in the Osborne Field and a portion of the Ojay Field were also included by CanWest. In addition, CanWest has included gas reserves for undrilled acreage surrounding its newly contracted lands. The Board has assigned an estimate of reserves on these new lands equal to about half that of CanWest's estimate.

Table 2-1

Comparison of Estimates of CanWest's Established Gas Reserves With the Applied-for Term Volume

10^6m^3
(Bcf)

CanWest[1]	**NEB**[2]	**Applied-for**[3] **Volume**
72 314 (2 552.7)	59 753 (2 109.3)	2 194 (77.4)

1. As of 1 November 1992.
2. As of 31 December 1991. The Board's estimate of remaining reserves would be at least 2 800 10^6m^3 (99 Bcf) less than shown if further adjusted for production to 1 November 1992.
3. This represents about four percent of CanWest's total requirements, which are 49 857 10^6m^3 (1 760 Bcf).

Decontracting of gas reserves in larger, more productive pools such as the Clarke Lake Slave Point A pool and the Sierra Pine Point B, C and D pools has also reduced the total amount of gas reserves under contract to CanWest. The Board estimates that the reduction in reserves estimates due to recent decontracting is about 5 000 10^6m^3 (176 Bcf). This has resulted in an overall decrease in CanWest's total remaining reserves.

In its analysis of CanWest's gas supply, the Board has recognized 320 pools located throughout northeastern British Columbia and one in Alberta. Three pools with remaining marketable reserves larger than 3 000 10^6m^3 (106 Bcf) represent 27 percent of the total reserves. One of these pools, the Yoyo Pine Point A pool has net remaining reserves of 7 738 10^6m^3 (273 Bcf), or 14 percent of CanWest's total remaining reserves.

In summary, the Board's estimate of CanWest's reserves is lower than that provided by CanWest, but exceeds CanWest's total requirements, including the proposed export.

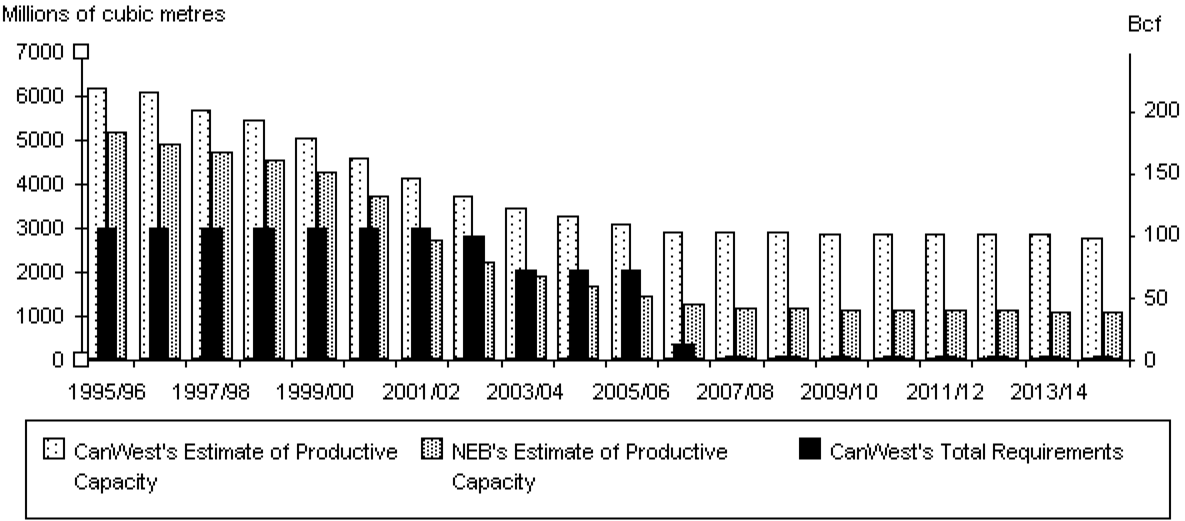
2.2.3 Productive Capacity

Figure 2-1 compares the Board's and CanWest's projections of adjusted productive capacity with CanWest's total requirements at a 100 percent load factor.

The Board's projection of adjusted productive capacity indicates adequate gas supply to meet CanWest's total requirements over the majority of the term of the proposed export. Although the Board's analysis identifies shortfalls in the years 2002 through 2006, CanWest stated that it planned to remedy potential shortfalls in productive capacity by contracting for additional reserves, developing new reserves on existing contracted lands, or curtailing short-term sales.

Figure 2-1

Comparison of CanWest's and NEB's Estimates of Annual Productive Capacity



2.3 Transportation

CanWest executed a firm service ("FS") transportation agreement with Westcoast on 30 April 1992 to deliver the proposed export volumes from receipt points in British Columbia to the interconnect of the Northwest and Westcoast systems near Huntingdon, British Columbia. The contract is renewable on a yearly basis by CanWest. Existing capacity on Westcoast will be utilized.

Pursuant to a Letter Agreement dated 29 June 1992 between Pentzer Energy Services, Inc. ("Pentzer") and Klickitat, Development Associates Inc. (a wholly-owned subsidiary of Pentzer) will provide firm transportation for the gas on the Northwest system.

Delivery of gas from Northwest’s Hood River meter station to the cogeneration facility requires construction of a new pipeline lateral approximately 3.2 kilometres (two miles) long. Northwest is expected to construct it and to receive the necessary regulatory authorizations before mid-1995. No other new facilities will be required on the Northwest system for this export.

2.4 Market

The gas proposed for export would be used to fuel Klickitat’s 49.5 MW natural gas and wood waste fired cogeneration facility to be located at the SDS mill. Construction of the cogeneration facility is expected to be complete by mid-1995. The cogeneration facility is projected to operate at a 90 percent load factor and nominate gas from CanWest at an average 85 percent load factor.

The entire electrical output of the cogeneration facility will be purchased by Bonneville, a regional wholesaler of power that operates three-fourths of the electric transmission grid in the Pacific Northwest. Bonneville has issued an alert bulletin and formed an industry task force to address its growing concern about the potential for a regional blackout in the Puget Sound area due to insufficient generating capacity.

Bonneville has not required Klickitat to obtain QF status from the Federal Energy Regulatory Commission ("FERC"), but Klickitat will likely do so.

2.5 Gas Sales Contract

Klickitat and CanWest executed a gas sales contract on 10 December 1992, with a primary term of 20 years. The term commences on the Start-Up Date, defined as the date specified by Klickitat in writing as being the date upon which the cogeneration facility has been completed and has begun commercial operation. The contract provides for a maximum daily quantity ("MDQ") of 11 579 GJ (11,000 MMBtu).

The contract may be terminated by either party unless financial closing of the project occurs within one year after the date upon which all necessary authorizations are obtained, and the Start-Up Date occurs prior to 31 December 1997. The parties may submit to binding arbitration should any disagreement or controversy arise from the contract. CanWest stated that the contract was negotiated at arm’s length.

CanWest is the only supplier of gas to Klickitat which may not, without CanWest’s consent, purchase gas for the cogeneration facility from any other source until it has satisfied its obligations under the contract.

The price to be paid to CanWest consists of three components: a commodity charge, a demand charge and a gas inventory charge ("GIC"). Commencing 1 January 1994, the commodity charge will be $U.S. 1.25/GJ ($U.S. 1.31/MMBtu) at the international border. The commodity charge escalates by five percent each January 1st up to the fifteenth contract year. In the sixteenth contract year, the commodity charge escalates by ten percent. The rate of escalation in each of the remaining years of the contract is six percent.

The demand charge commences at $U.S. 0.52/GJ ($U.S. 0.55/MMBtu) per day and increases annually starting 1 November 1994 at an escalation rate defined as the average of five percent and the rate of change in the average demand toll charged to CanWest by Westcoast.

Should Klickitat's nominations in any year average less than 50 percent of the MDQ, then Klickitat must pay a GIC in the amount of 100 percent of the commodity charge for the volume not taken below the 50 percent level plus an amount of 15 percent of the commodity charge for a volume of gas equal to 25 percent of the annual contract quantities. Annual nominations averaging between 50 and 75 percent of the MDQ will result in Klickitat paying a GIC of 15 percent of the commodity price on the difference between actual nominations and 75 percent of the MDQ.

CanWest submitted that, on 1 January 1993, the British Columbia border price that would have prevailed under the terms of this contract, assuming a 100 percent load factor, was $Cdn. 2.21/GJ ($Cdn. 2.31/MMBtu).

While no formal thermal energy sales agreement has been executed by Klickitat and SDS, the basic terms have been agreed to in principle. As these are affiliated companies, no problems are anticipated in signing a formal contract.

Klickitat and Bonneville executed a Letter of Intent dated 8 December 1992. Although a power sales agreement has been fully negotiated, completion cannot legally occur until Bonneville has completed its environmental review of the cogeneration facility and associated interconnection facilities. This review is expected to be finalized by January 1994. The purchase price is levelized and assumes a five percent annual rate of inflation. The power purchase agreement has a term of 20 years.

2.6 Status of Regulatory Authorizations

CanWest filed an application for a long-term energy removal certificate from the British Columbia Ministry of Energy, Mines and Petroleum Resources on 30 March 1993. The application was for a term and volume commensurate with the gas sales contract. A decision on the application is pending. CanWest received a finding of producer support from the British Columbia Petroleum Corporation ("BCPC") on 8 March 1993.

An application will be made by Klickitat to the DOE/FE for a long-term import authorization.

2.7 Views of the Board

The Board notes that Klickitat is subject to a GIC should it nominate less than 75 percent of the MDQ on an annual basis. As well, Klickitat may not purchase gas from any other source until it has satisfied its obligations under its contract with CanWest. The Board is also cognizant that the markets for the electricity and thermal energy are likely to be long term and stable. The Board is therefore satisfied that there is a reasonable expectation that the volumes sought to be licensed will be taken.

The Board observes that the escalation rates of the prices under the gas sales contract and the power purchase contract are similar and that the gas sales contract is subject to binding arbitration. The Board is thus satisfied that the gas sales contract will remain attractive to the parties over its proposed term, and is therefore durable.

The Board has reviewed the gas purchase agreement and notes that it has been negotiated at arm's length.

CanWest obtained a finding of producer support from the BCPC on 8 March 1993.

The Board notes that the contract price contains a demand charge component for the recovery of Canadian demand charges throughout the term of the contract. Therefore, the Board is satisfied that there are provisions in the gas sales contract for the payment of the associated transportation demand charges on Canadian pipelines over the term of the gas sales contract.

The Board's estimate of reserves exceeds CanWest's total requirements by 14 percent. In addition, the Board's estimate of adjusted productive capacity shows that CanWest can meet its requirements from existing supply over the majority of the proposed licence term. Backstopping of potential shortfalls could be accomplished by contracting of new supply, further development of contracted lands and the curtailment of short-term sales. As well, the Board observes that the terms of the transportation, gas sales and power purchase contracts and of the applied-for regulatory authorizations are for a term consistent with the requested licence. The Board is therefore satisfied that the requested licence term is appropriate.

Finally, the Board is of the view that a sunset date of 1 July 1997 is reasonable.

2.8 Decision

The Board has decided to issue a gas export licence to CanWest, subject to the approval of the Governor in Council. Appendix I contains the terms and conditions of the licence to be issued.

Chapter 3

ProGas Limited

3.1 Application Summary

By application dated 19 April 1993, ProGas sought, pursuant to Part VI of the Act, a licence for the export of natural gas for sale to Consumers Power Company ("Consumers Power") with the following terms and conditions:

Term	- 10 years from 1 November 1993
Point of Export	- Emerson, Manitoba
Maximum Daily Quantity	- 2 124.6 10^3m^3 (75.0 MMcf)
Maximum Annual Quantity	- 775.5 10^6m^3 (27.4 Bcf)
Maximum Term Quantity	- 7 755 10^6m^3 (273.8 Bcf)
Tolerances	- ten percent per day and five percent per year

In the same application, ProGas also requested an amendment, pursuant to subsection 21(2) of the Act, of Licence GL-98 as follows:

(i) amending Condition 2(c) to provide that, for the period commencing 1 November 1993 and ending on 31 October 2000, the total quantity authorized for export in any one day shall be 7 316 300 cubic metres and the quantity authorized for export in any consecutive twelve-month period shall be 2 325 000 000 cubic metres;

(ii) amending Condition 2(d) to provide that the total quantity of gas that may be exported during the term is 36 796 500 000 cubic metres less the total quantity of gas exported under Licence GL-56; and

(iii) amending Condition 6 to provide that during the period commencing 1 November 1993 and ending 31 October 2000, the quantity of gas that may be exported at Monchy, Saskatchewan shall not exceed 2 124 600 cubic metres per day (75 MMcf/d).

ProGas will provide the gas for the proposed and existing exports from pools contracted to it in Alberta and British Columbia. Gas for the proposed export would be transported on the NOVA Corporation of Alberta ("NOVA") system and on the TransCanada PipeLines Limited ("TransCanada") system to the international border at Emerson, Manitoba. At this point the gas would flow on the Great Lakes Gas Transmission Limited Partnership ("GLGT") system to Consumers Power.

Gas has been exported to Consumers Power since 1 April 1993 under a short-term export order authorized by the Board.

Gas exports under Licence GL-98 are authorized for markets served by Tennessee Gas Pipeline Company of America, Natural Gas Pipeline Company of America, ANR Pipeline Company and Texas Eastern Transmission Corporation ("TETCO").

ProGas terminated its gas sales contract with TETCO on 1 April 1993 as a result of TETCO's compliance settlement under the FERC Order 636. Accordingly, ProGas has requested that Licence GL-98 be amended to reflect the removal of the TETCO export.

3.2 Gas Supply

3.2.1 Supply Contracts

ProGas will provide the gas for the proposed export from its contracted supply pool. This supply pool consists of approximately 600 gas purchase contracts with about 160 producers.

ProGas has provided a supply assurance to Consumers Power within the provisions of the contract, ensuring that its reserves and deliverability are adequate to support its existing sales commitments. In the event that the assurance is not met, ProGas will contract for additional supply, curtail all interruptible sales, and will be precluded from entering into any new long-term firm sales until the supply deficiency is corrected.

3.2.2 Reserves

In support of its application, ProGas relied primarily upon the gas supply evidence that it provided to the Board during the GH-1-92 proceeding, updated with evidence provided in this proceeding.

ProGas provided an estimate of the gas reserves that will be used to meet both its existing commitments and the proposed export to Consumers Power. Table 3-1 shows that the Board's estimate of ProGas' gas reserves as of 31 December 1992 is 17 percent lower than ProGas' estimate, but is 18 percent higher than ProGas' total requirements.

Table 3-1

Comparison of Estimates of ProGas' Established Gas Reserves
With the Applied-for Term Volume

10^6m^3
(Bcf)

ProGas[1]	**NEB**[2]	**Applied-for**[3] **Volume**
106 630 (3 764.0)	94 233 (3 326.4)	7 755 (273.8)

1. As of 31 December 1992.
2. As of 31 December 1991. The Board's estimate of remaining reserves would be about 6 160 10^6m^3 (217 Bcf) less than shown if adjusted for production to year-end 1992.
3. This represents about ten percent of ProGas' total requirements, which are 74 338 10^6m^3 (2 624 Bcf).

In its review of ProGas' gas supply, the Board recognized approximately 1 400 pools of which 37 percent (representing 70 percent of the reserves) are on production. Approximately 85 percent of ProGas' supply is in Alberta and the remainder is in British Columbia. The Board's estimate of ProGas' reserves in Alberta is about 14 percent less than the corresponding ProGas estimate. The Board's lower estimate of reserves is due in part to production decline analysis indicating lower estimates than ProGas' estimates. The Board's estimate of ProGas' reserves in British Columbia is approximately five percent higher than the estimate provided by ProGas.

In summary, the Board's estimate of ProGas' established reserves is lower than that provided by ProGas, but exceeds ProGas' total requirements, including the proposed export.

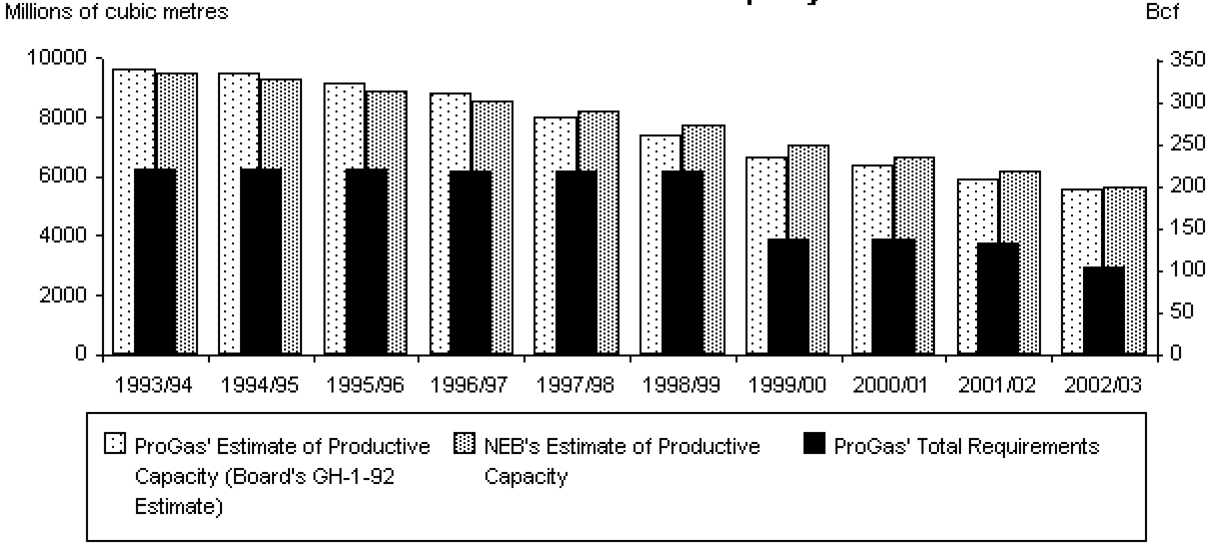
3.2.3 Productive Capacity

Figure 3-1 compares both the Board's and ProGas' projections of productive capacity with ProGas' estimated total requirements, including fuel and shrinkage. ProGas has estimated its annual requirements based on a 90 percent load factor.

ProGas is relying on the Board's previous projection of productive capacity for ProGas provided in the GH-1-92 Reasons for Decision. Both projections of productive capacity shown in Figure 3-1 demonstrate that ProGas has adequate gas supply to meet its total requirements at a 90 percent load factor throughout the proposed export term.

Figure 3-1

Comparison of ProGas' and NEB's Estimates of Annual Productive Capacity



3.3 Transportation

ProGas will utilize its existing FS capacity on the NOVA system to transport the proposed export volumes to Empress, Alberta. The gas will then be shipped to Emerson, Manitoba on the TransCanada system under ProGas' FS contract. ProGas U.S.A., Inc. ("ProGas U.S.A.") will transport the gas on the GLGT system for delivery to Consumers Power at the interconnect with Michigan Gas Storage Company (a subsidiary of Consumers Power) near Chippewa, Michigan.

The contracted daily transportation capacity of 2 125 10^3m^3 (75 MMcf) on the GLGT system was assigned to ProGas U.S.A. by TETCO. The assignment of the transportation service agreement dated 19 September 1990 was approved by the FERC on 31 March 1993. In its agreement dated 2 April 1993 with ProGas U.S.A., GLGT agreed to extend the term of the service agreement to 1 November 2003. This extension is subject to approval from the FERC.

No new facilities are required for the proposed export.

3.4 Market

The gas to be exported will be used by Consumers Power, a local distribution company in Michigan, to diversify its supply portfolio. Consumers Power presently serves 1.4 million customers in the lower peninsula of Michigan. ProGas expects that exports would occur at a load factor in excess of 90 percent.

Consumers Power's present gas supply consists of purchases from Trunkline Gas Company, the spot market, intrastate sources and other Canadian suppliers. Its 1992 system purchases were 6 600 10^6m^3 (233 Bcf) of which Canadian direct purchases amounted to approximately 10 percent of the total. The proposed export by ProGas could increase the Canadian share of Consumers Power's market to 20 percent.

3.5 Gas Sales Contract

ProGas U.S.A. and Consumers Power executed a gas sales agreement dated 22 March 1993. The agreement has a term of 10.5 years from 1 April 1993. The contract provides for a DCQ of 2 125 10^3m^3 (75 MMcf) and can be terminated by either party unless all regulatory authorizations are received and transportation contracts are executed by 1 November 1994.

During the initial six months of the term, that is, 1 April to 31 October 1993, Consumers Power must purchase 100 percent of the DCQ. Commencing on 1 November 1993 and continuing through the remainder of the term, Consumers Power must purchase a minimum monthly quantity equal to 50 percent of the DCQ multiplied by the number of days in the month. On an annual basis, Consumers Power must purchase a minimum quantity of at least 70 percent of the DCQ multiplied by the number of days in the contract year.

Consumers Power must pay a deficiency charge should it fail to purchase the minimum annual quantity. The deficiency charge would be equal to 15 percent of the monthly commodity charge, during the last month of the contract year, multiplied by the deficient volume and the weighted average heating value. However, during the following contract year, Consumers Power may elect to purchase the deficient volume from the previous year at 85 percent of the prevailing monthly commodity charge.

With regard to the delivery obligations, should ProGas fail to deliver the nominated volumes, up to the DCQ, then Consumers Power is relieved of the demand charge obligations on the undelivered quantity. In addition, if ProGas fails to deliver up to 98 percent of the nominated volumes, Consumers Power will be indemnified for the costs of replacement gas. If a delivery level of 85 percent of the nominated volumes is not met over any consecutive 180-day period, Consumers Power may elect to reduce the DCQ by a corresponding amount.

For sales between 1 April 1993 to 31 October 1993, the price was set at $U.S. 1.63/GJ ($US 1.72/MMBtu). For sales throughout the remainder of the term, Consumers Power will pay a demand charge and a commodity charge. The monthly demand charge is equal to $U.S. 0.70/GJ ($U.S. 0.74/MMBtu) multiplied by the DCQ and the number of days in a month, and is non-negotiable for the GLGT and upstream Canadian pipelines. The monthly commodity charge is equal to the Annual Commodity Charge ("ACC"), adjusted yearly, multiplied by the monthly adjustment factor. The initial ACC would be $U.S. 1.47/GJ ($U.S. 1.55/MMBtu) and adjusted annually based on the percentage change in the buyer's Weighted Average Cost of Gas. The commodity charge and commodity charge adjustment mechanisms are subject to renegotiation not more than once every two years.

The contract provides for binding arbitration of the commodity charge, once every three years, in the event that ProGas and Consumers Power are unable to agree on the charge. Arbitration would determine a commodity charge comparable to other commodity charges for long-term gas supplies in the markets available to both parties. The arbitration would be conducted in accordance with the rules of the British Columbia International Commercial Arbitration Centre.

ProGas stated the agreement was negotiated at arm's length.

ProGas submitted that, on 1 January 1993, the Alberta border price would have been $Cdn 2.12/GJ ($Cdn 2.23/MMBtu) under the terms of the contract.

3.6 Status of Regulatory Authorizations

On 15 June 1993, ProGas applied to the Alberta Energy Resources Conservation Board ("ERCB") for an amendment to increase the authorized volumes under its existing removal permit. As well, ProGas U.S.A. intends to apply to the DOE/FE for import authorization.

ProGas has received a finding of producer support from the Alberta Petroleum Marketing Commission ("APMC").

3.7 Views of the Board

The Board notes that Consumers Power must nominate at least 50 percent of the DCQ if it is to avoid incurring penalty charges and an increase in its cost of gas. The Board also recognizes that the market for the gas is likely to be long-term and stable. The Board is therefore satisfied that there is a reasonable expectation that the volumes sought to be licensed will be taken.

The Board has noted the market-oriented approach, including binding arbitration, used to determine the commodity prices on an annual basis. The Board is therefore satisfied that the gas sales contract will remain attractive to the parties over its proposed term, and is therefore durable.

The Board has reviewed the gas sales contract and notes that it has been negotiated at arm's length.

The Board notes that ProGas has obtained a finding of producer support from the APMC.

The Board notes that the contract price contains a non-negotiable demand charge component equal to ProGas' demand charge obligations on all upstream pipelines. Therefore, the Board is satisfied that there are provisions in the gas sales contract for the payment of the associated transportation charges on Canadian pipelines over the term of the gas sales contract.

The Board's estimate of reserves exceeds ProGas' total requirements by 18 percent. As well, the Board's estimate of productive capacity shows that ProGas can meet its requirements throughout the proposed export term. The Board notes that an application to the ERCB has been filed and that an application to the DOE/FE will be made. With the exception of approval from the FERC of the service extension agreement between GLGT and ProGas U.S.A., all other regulatory authorizations are in place. The Board also recognizes that transportation on all required pipelines has been arranged. The terms of these authorizations, transportation arrangements and of the gas sales contract are consistent with the proposed term of the licence. The Board is therefore satisfied that the requested licence term is appropriate.

ProGas has applied for a five percent annual tolerance in order to obtain more flexibility and to possibly sell additional volumes during periods of tight supply. The Board, in response to requests from applicants, has historically included daily and annual operating tolerances in order to accommodate divergences due to operational and measurement discrepancies. Tolerances are not intended to be used to sell additional volumes of gas. The Board is of the view that, if necessary, these sales could be completed under short-term authorizations; consequently, the applied-for annual tolerance is not required. Instead, the Board is prepared to authorize a two percent annual tolerance rather than that applied for. The Board notes that ProGas stated that such a tolerance would be acceptable.

3.8 Decision

The Board has decided to issue a gas export licence to ProGas, and to amend Licence GL-98, subject to the approval of the Governor in Council. Appendix I contains the terms and conditions of the licence to be issued and the amendments to Licence GL-98.

Chapter 4
Disposition

The foregoing chapters constitute our Decisions and Reasons for Decision in respect of those applications heard by the Board in the GH-3-93 proceeding.

J.-G. Fredette
Presiding Member

R.B. Horner, Q.C.
Member

A.B. Gilmour
Member

Calgary, Alberta
July 1993

Appendix I

Terms and Conditions of the Licences to be Issued

Terms and Conditions of the Licence to be Issued to CanWest Gas Supply Inc.

1. (a) Subject to condition 1(b) the term of this Licence shall commence on the date of first deliveries and shall end 20 years following the commencement of the term of this Licence.

   (b) The term of this Licence shall end on 1 July 1997 unless exports commence hereunder on or before that date.

2. Subject to condition 3, the quantity of gas that CanWest may export under the authority of this Licence shall not exceed:

   (a) 300 520 cubic metres in any one day;

   (b) 109 690 000 cubic metres in any consecutive twelve-month period ending on 31 October; or

   (c) 2 194 000 000 cubic metres during the term of this Licence.

3. (a) As a tolerance, the amount that may be exported in any 24-hour period under the authority of this Licence may exceed the daily limitation imposed in condition 2 by ten percent.

   (b) As a tolerance, the amount that may be exported in any consecutive twelve-month period under the authority of this Licence may exceed the annual limitation imposed in condition 2 by two percent.

4. Gas exported under the authority of this Licence shall be delivered to the point of export near Huntingdon, British Columbia.

Terms and Conditions of the Licence to be Issued to ProGas Limited

1. (a) Subject to condition 1(b), the term of this Licence shall commence on 1 November 1993 and shall end on 31 October 2003.

   (b) The term of this Licence shall end on 1 November 1995 unless exports commence hereunder on or before that date.

2. Subject to condition 3, the quantity of gas that ProGas may export under the authority of this Licence shall not exceed:

   (a) 2 124 600 cubic metres in any one day;

(b) 775 500 000 cubic metres in any consecutive twelve-month period ending on 31 October; or

(c) 7 755 000 000 cubic metres during the term of this Licence.

3. (a) As a tolerance, the amount that may be exported in any 24-hour period under the authority of this Licence may exceed the daily limitation imposed in condition 2 by ten percent.

   (b) As a tolerance, the amount that may be exported in any consecutive twelve-month period under the authority of this Licence may exceed the annual limitation imposed in condition 2 by two percent.

4. Gas exported under the authority of this Licence shall be delivered to the point of export near Emerson, Manitoba.

Amendments to Conditions of Licence GL-98 held by ProGas Limited

Conditions 2(c), 2(d) and 6 are revoked and replaced with the following:

2. (c) for the period commencing on 1 November 1987 and ending on 31 October 1993, 9 440 900 cubic metres in any one day or 3 100 000 000 cubic metres in any consecutive twelve-month period ending on 31 October; or

   (d) for the period commencing on 1 November 1993 and ending on 31 October 2000, 7 316 300 cubic metres in any one day or 2 325 000 000 cubic metres in any consecutive twelve-month period ending on 31 October; or

   (e) during the term hereof, 36 796 500 000 cubic metres less the total quantity of gas exported under Licence GL-56 until the date of repeal thereof.

6. The quantity of gas that may be exported at Monchy, Saskatchewan shall not exceed 2 124 600 cubic metres in any one day.