National Energy Board

Reasons for Decision

Unigas Corporation

GH-7-92

June 1993

Volume II

Gas Exports

National Energy Board

Reasons for Decision

In the Matter of

Canadian Hydrocarbons Marketing Inc.

CanWest Gas Supply Inc.

Enron Gas Marketing, Inc.

New York State Electric & Gas Corporation

Unigas Corporation

Applications Pursuant to Part VI of the *National Energy Board Act* for Licences to Export Natural Gas

GH-7-92

June 1993

Volume II
Gas Exports

Cat. No. NE22-1/1993-6-2E
ISBN 0-662-20629-0

Cat. No. NE22-1/1993-6-2F
ISBN 0-662-98351-3

This report is published separately
in both official languages.

Ce rapport est publié séparément dans les deux
langues officielles.

Copies are available from:

Regulatory Support Office
National Energy Board
311 Sixth Avenue S.W.
Calgary, Alberta
T2P 3H2
(403)292-4800

For pick-up at NEB office:
Library
Ground Floor

Printed in Canada

Exemplaires disponibles auprès du:

Bureau du soutien de la réglementation
Office national de l'énergie
311, 6e Avenue s,-o.
Calgary (Alberta)
T2P 3H2
(403)292-4800

En personne, au bureau de l'Office :
Bibliothèque
Rez-de-chaussée

Imprimé au Canada

Table of Contents

List of Tables

List of Figures

List of Appendices

Abbreviations

Act	*National Energy Board Act*
ANG	Alberta Natural Gas Company
APMC	Alberta Petroleum Marketing Commission
Archer	Archer Resources Ltd.
Bcf	billion cubic feet
Board	National Energy Board
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
FERC	(United States of America) Federal Energy Regulatory Commission
GHR-1-87	*Review of Natural Gas Surplus Determination Procedures*
GJ	gigajoule(s)
MBP	Market-Based Procedure
MDQ	Maximum Daily Quantity
MMBtu	million British thermal units
MMcf	million cubic feet
NEB	National Energy Board
NOVA	NOVA Corporation of Alberta
Part VI Regulations	*National Energy Board Part VI Regulations*

PG&E	Pacific Gas & Electric Company
PGT	Pacific Gas Transmission Company
SoCalGas	Southern California Gas Company
Speak Up	Speak Up for Wildlife Foundation
Unigas	Unigas Corporation
Three Cities	The cities of Burbank, Glendale and Pasadena

Recital and Appearances

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

AND IN THE MATTER OF applications under Part VI of the *National Energy Board Act* for new licences to export natural gas by:

Canadian Hydrocarbons Marketing Inc.; CanWest Gas Supply Inc.; Enron Gas Marketing, Inc.; New York State Electric & Gas Corporation; and Unigas Corporation;

AND IN THE MATTER OF Hearing Order GH-7-92, as amended;

HEARD in Calgary, Alberta on 22 and 23 February 1993.

BEFORE:

R.L. Andrew, Q.C.	Presiding Member
R.B. Horner, Q.C.	Member
C. Bélanger	Member

APPEARANCES:

R.B. Brander	Canadian Hydrocarbons Marketing Inc. and Centra Gas Ontario Inc.
S. Carscallen	CanStates Gas Marketing
L.G. Keough	CanWest Gas Supply Inc. and Enron Gas Marketing, Inc.
N.M. Gretener	New York State Electric & Gas Corporation
D.G. Davies	Unigas Corporation and Northwest Natural Gas Company
N.W. Boutillier	Alberta and Southern Gas Co. Ltd.
D.G. Hart, Q.C. A.G. Menzies	Alberta Natural Gas Company Ltd. and Pacific Gas Transmission Company
J.H. Smellie	CNG Transmission Corporation
J. Scott	Crestar Energy
C. Macfarlan	Foothills Pipe Lines Ltd.
M.J. Samuel	TransCanada PipeLines Limited

G. Britton	Western Gas Marketing Limited
W.M. Moreland	Alberta Petroleum Marketing Commission
J. Robitaille	Procureur général du Québec
J. Syme D. Champagne	Board Counsel

Chapter 1

Part VI - Gas Export Licence Applications

1.1 The Applications

During the GH-7-92 proceeding, the National Energy Board ("the Board") examined six applications for eight gas export licences from the following parties:

1. Canadian Hydrocarbons Marketing Inc.,
2. CanWest Gas Supply Inc.,
3. Enron Gas Marketing, Inc.,
4. New York State Electric & Gas Corporation,
5. Unigas Corporation ("Unigas") for export to Northwest Natural Gas Company, and
6. Unigas for export to each of the cities of Burbank, Glendale and Pasadena (collectively "Three Cities").

The gas export licence application of CanStates Gas Marketing ("CanStates") was to have been considered by the Board in GH-7-92. However, by letter dated 3 February 1993, CanStates requested that the Board suspend consideration of its application. The Board granted this request.

The application by Unigas for export to Three Cities is dealt with herein. All other applications were dealt with in Volume I.

(Table 1-1)

Table 1-1

Summary of Applied-for Licences

GH-7-92

Application	Buyer (Type of market)	Term	Export Point	Maximum Quantities Applied For: Daily 10^3m^3 (MMcf)	Annual 10^6m^3 (Bcf)	Term 10^6m^3 (Bcf)
1. CHMI	Cascade (system supply)	1 Nov. 1992 to 31 Oct.1996	Huntington, British Columbia	136.4 (4.8)	49.8 (1.8)	199.3 (7.0)
2. CanWest	T.M. Star (cogen. plant)	15 years following first deliveries	Huntingdon, British Columbia	273.2 (9.6)	100.0 (3.5)	1495.0 (53.0)
3. Enron	Sithe/ Independence (cogen. plant)	First deliveries to 31 Oct. 2004	Chippawa, Ontario	805.0 (28.4)	294.0 (10.4)	2940.0 (104.0)
4. NYSEG	NYSEG (system supply)	10 years following first deliveries	Chippawa, Ontario	283.3 (10.0)	103.5 (3.7)	1035.0 (37.0)
5. Unigas	Northwest Natural (system supply)	6 years from later of first deliveries and 1 Nov. 1993	Kingsgate, British Columbia	396.6 (14.0)	144.8 (5.1)	868.6 (30.7)
6. Unigas	City of Burbank (power generation)	Later of first delivery and 1 Nov. 1993 to 31 Oct. 1999	Kingsgate, British Columbia	136.5 (4.8)	49.8 (1.8)	298.9 (10.5)
7. Unigas	City of Glendale (power generation)	Later of first delivery and 1 Nov. 1993 to 31 Oct. 1999	Kingsgate, British Columbia	115.4 (4.1)	42.1 (1.5)	252.7 (8.9)
8. Unigas	City of Pasadena (power generation)	Later of first delivery and 1 Nov. 1993 to 31 Oct. 1999	Kingsgate, British Columbia	115.4 (4.1)	42.1 (1.5)	252.7 (8.9)

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-7-92, 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.

Unigas for export to Three Cities submitted that the development of new gas transmission facilities under the Board's jurisdiction were required to accommodate the applied for exports. These facilities had already been approved by the Board and, as a result, Unigas 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.

By letter dated January 1993, the Speak Up for Wildlife Foundation ("Speak Up") intervened in GH-7-92. By letter dated 21 January, Speak Up advised the Board that it was concerned about the impact oil and gas exploration, production and export have on Western Canada's wildlife and wilderness ecosystems, fisheries, and the energy security and future of Canadian residential and industrial natural gas consumers.[1] Speak Up submitted that the GH-7-92 export applications would draw gas from a vast area from southern Alberta to northeastern British Columbia - representing prairie, foothill, mountain and boreal forest ecosystems, and encompassing a wide range of environmental issues. Finally, Speak Up submitted that the proposed exports involve hundreds of wells, dozens of fields, many jurisdictions, and an untold number of wildlife populations and habitats, and fisheries populations and watersheds.

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 the application of Unigas for export to Three Cities falls within the ambit of Note 3 of the Board's Exclusion List.[2]

Speak Up raised a number of issues with respect to all of the proposed exports' environmental impact on upstream gas development and production areas. However, subsection 92(A)(1) of the *Constitution Act, 1867*, confers upon the Provinces exclusive jurisdiction to make laws in relation to "exploration for non-renewable natural resources" and "development, conservation and management of non-renewable natural resources and forestry resources in the province, including laws in relation to the rate of primary production therefrom". Therefore, as a federal regulatory body, the Board does not have jurisdiction to consider the environmental effects of the proposed exports on gas development or production areas.

---

1. The issue of energy security, ie: ensuring that gas proposed for export is surplus to reasonably foreseeable Canadian requirements, is addressed in section 1.3 on the Market-Based Procedure.

2. 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".

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.

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-7-92.

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 finds 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.[3]

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.

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 supplies available to the export licence applicant to support the applied-for volumes over the requested licence term;

3. 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.

(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.

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 supplies 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 reviews the term and volume of the transportation arrangements.

Markets

The applications dealt with in GH-7-92 were for sales to three types of end-use markets: sales for system supply, sales for power generation and sales to cogeneration facilities, which are defined as facilities that produce 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 and for power generation, 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 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 Unigas application for export licences to the Three Cities in the GH-7-92 proceeding.

Unigas adopted the Board's most recent EIA, dated 7 September 1989. 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 Unigas application for export to Three Cities 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 next chapter of these Reasons reviews the evidence of Unigas 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 the chapter.

Chapter 2
Unigas Corporation for Export to Three California Cities

2.1 Application Summary

By application dated 14 September 1992, Unigas sought, pursuant to Part VI of the Act, three licences for the export of natural gas for sale to the cities of Burbank, Glendale and Pasadena, all in California, with the following terms and conditions:

<u>City of Burbank</u>

Term	- commencing on the later of the date of first delivery and 1 November 1993 to 31 October 1999
Point of Export	- Kingsgate, British Columbia
Maximum Daily Quantity	- 136.5 10^3m^3 (4.8 MMcf)
Maximum Annual Quantity	- 49.8 10^6m^3 (1.8 Bcf)
Maximum Term Quantity	- 298.9 10^6m^3 (10.5 Bcf)
Tolerances	- ten percent per day and two percent per year

<u>City of Glendale</u>

Term	- commencing on the later of the date of first delivery and 1 November 1993 to 31 October 1999
Point of Export	- Kingsgate, British Columbia
Maximum Daily Quantity	- 115.4 10^3m^3 (4.1 MMcf)
Maximum Annual Quantity	- 42.1 10^6m^3 (1.5 Bcf)
Maximum Term Quantity	- 252.7 10^6m^3 (8.9 Bcf)
Tolerances	- ten percent per day and two percent per year

City of Pasadena

Term	- commencing on the later of the date of first delivery and 1 November 1993 to 31 October 1999
Point of Export	- Kingsgate, British Columbia
Maximum Daily Quantity	- 115.4 10^3m^3 (4.1 MMcf)
Maximum Annual Quantity	- 42.1 10^6m^3 (1.5 Bcf)
Maximum Term Quantity	- 252.7 10^6m^3 (8.9 Bcf)
Tolerances	- ten percent per day and two percent per year

The gas to be exported to Three Cities would be produced from pools in Alberta. The gas would be transported in Canada on Nova Corporation of Alberta ("NOVA") and Alberta Natural Gas Company ("ANG") to the international border near Kingsgate, British Columbia. From the international border, the gas would flow through the Pacific Gas Transmission Company ("PGT"), Pacific Gas & Electric Company ("PG&E") and Southern California Gas Company ("SoCalGas") systems for delivery to Three Cities.

2.2 Gas Supply

2.2.1 Supply Contracts

Unigas has executed gas purchase contracts with four producers: Archer Resources Ltd. ("Archer"), Blue Range Resource Corporation, Co-Enerco Resources Ltd., and Pinnacle Resources Ltd.. Under the provisions of the contracts, each producer has dedicated certain specific lands and reserves to Unigas, and is contracted to deliver its Maximum Daily Quantity ("MDQ") over a six-year term. The contract terms range over the period 1 July 1991 to 31 October 1999.

The producers have an obligation to supply Unigas with volumes up to their individual MDQs and, upon failing to supply their MDQ over any four-week period, they have the option of restoring their deliverability during a six-month period or accepting a reduced MDQ.

In addition to the gas purchase contracts arranged with the four producers for the Three Cities supply, Unigas has a "Market Contract" with Archer. Unigas states that this contract dedicates additional Archer supply to Unigas, which Unigas can use to backstop Archer's supply commitments to Unigas for the Three Cities market or for other markets. Some of this supply is currently under contract to Western Gas Marketing Ltd. ("WGML") but will be available to Unigas in 1994 when decontracting takes place.

2.2.2 Reserves

Table 2-1 shows that the Board's estimate of Unigas' gas reserves is higher than that of Unigas'; however, the Board's estimate is as of 31 December 1991, whereas Unigas' estimate is as of 1 November 1993. As of that date, when adjusted for estimated production, the Board's estimate would be about 11 percent lower than the applicant's, but four percent higher than the applied-for volume.

Table 2-1

Comparison of Estimates of Unigas' Established Gas Reserves with the Applied-for Term Volume

10^6m^3
(Bcf)

Unigas[1]	NEB[2]	Applied-for Volume
943 (33.3)	998 (35.2)	804 (28.4)

1. As of 1 November 1993.
2. As of 31 December 1991. The Board's estimate of remaining established reserves would be approximately 162 10^6m^3 (5.7 Bcf) less than shown if adjusted for production from 1 January 1992 to 31 October 1993.

While the Board's total estimate of reserves for the four producers is 11 percent lower than Unigas' as of 1 November 1993, largely as a result of reservoir parameters, the Board's estimate of Archer's reserves is 26 percent lower than Archer's with differences primarily in the Sunnynook Field. These differences result from lower estimates of net pay and pool area in four Lower Cretaceous pools, and a production decline estimate having been used rather than a volumetric estimate in another pool.

Unigas submitted estimates of additional reserves under its Market Contract with Archer, which are available for backstopping. These reserves, amounting to some 654 10^6m^3 (23 Bcf), are not yet allocated to any specific market. The Board's estimate for these reserves is approximately 425 10^6m^3 (15 Bcf). As noted earlier, some of these reserves are under contract to WGML until 1994.

Unigas also provided a summary of its corporate supply and demand. This summary suggests that there is not an adequate amount of uncommitted gas in Unigas' corporate supply to backstop producer shortfalls over an extended period of time.

2.2.3 Productive Capacity

Figure 2-1 compares the Board's and Unigas' projections of productive capacity with Unigas' applied-for annual requirements based on Unigas' expected 90 percent load factor for the Three Cities contracts. Both projections indicate that Unigas would be able to meet the applied-for volumes for approximately three and one half years of the proposed term. Both Unigas and the Board determined that one of the producers, Archer, could meet its obligations for only one year from those reserves dedicated to Unigas for the Three Cities markets. Archer's shortfall has a significant impact on Unigas' overall productive capacity since Unigas' producers are not required to backstop each other in the event of supply shortages.

Unigas stated that it could alleviate possible deficiencies in either reserves or deliverability by requesting that the producers dedicate additional reserves, by entering into additional gas purchase contracts, or by using its corporate supply to backstop potential shortfalls on a temporary basis.

Image not supplied
by author
or
Image not available

Unigas did not indicate whether the three producers other than Archer were willing or able to dedicate additional reserves to Unigas. As well, Unigas did not provide evidence on its ability to enter into gas purchase contracts with new producers.The additional supply available to Unigas under its Market Contract with Archer could be used to alleviate the majority of Archer's identified shortfalls, but would not likely also be adequate to alleviate the projected shortfall of all the producers to the Three Cities markets which is forecast to occur after about four years.

Unigas indicated that, in the event the Board determined that the gas supply underpinning an export application was inadequate, it preferred to have a reduced term volume rather than a reduced daily volume or licence term.

2.3 Transportation

Sufficient capacity on NOVA has been secured by Unigas. The Cities of Glendale and Pasadena have executed 30-year firm service agreements with ANG while the City of Burbank has a 15-year agreement with an option to extend the term. Unigas has been appointed as the agent for Three Cities for the purposes of operating and administering the ANG firm service agreements. In the U.S., Three Cities have executed 30-year firm transportation service agreements with PGT and PG&E. Service on SoCalGas will be available under Rate Schedule No. GT-60.

New facilities are required on each system in Canada and the U.S.

2.4 Markets

Three Cities are located in the Los Angeles Basin. They are municipal corporations engaged in the generation, transmission, distribution and purchase of electric power for consumption within each of their boundaries. The proposed export volumes will be used by Three Cities as base load supply for the generation of electricity for their residential, commercial and industrial customers. Currently, Three Cities obtain natural gas from the U.S. southwest through interruptible transportation arrangements. When curtailed, Three Cities rely on third party electrical power suppliers to meet demand. The proposed export volumes will displace, in part, Three Cities' current gas supply.

The City of Burbank has a population of 91,000. Its current natural gas purchases average 184 $10^3m^3/d$ (6.5 MMcfd). Long-term electrical system demand is expected to grow at an average annual rate of between two and three percent. This expected growth in electrical demand is primarily attributed to projected growth in the commercial sector.

The City of Glendale has a population of 167,000. Its current natural gas purchases average 269 $10^3m^3/d$ (9.5 MMcfd). Average growth of peak electrical demand is expected at an annual rate of 2.1 percent from 1991 to 2009.

The City of Pasadena has a population of 140,000. Its current natural gas purchases average 278 10^3m^3 (9.8 MMcfd). Growth of electrical demand over the proposed export term is expected to be between two and three percent annually.

2.5 Gas Sales Contracts

Unigas and each of the Three Cities executed gas sales contracts dated 15 October 1990, as amended 5 September 1991. Except for different volume obligations, the contracts are substantially the same. The term of the contracts commences on the date of first deliveries and continues to 31 October 1999. The contracts are automatically extended for one-year terms thereafter unless either party gives notice of termination. The contracts can be terminated by either party unless the necessary long-term Canadian and U.S. regulatory authorizations, and transportation agreements, are obtained by 1 November 1993.

Unigas stated that the contracts were negotiated at arm's length. As well, Unigas received a finding of producer support from the Alberta Petroleum Marketing Commission ("APMC") on 16 October 1991.

The contracts provide for a Daily Contract Quantity ("DCQ") of 136.5 10^3m^3 (4.8 MMcf) for the City of Burbank, and a DCQ of 115.4 10^3m^3 (4.1 MMcf) each for the Cities of Glendale and Pasadena. If Three Cities fail to purchase at least 90 percent of the sum of their expected DCQs in any given year, the minimum annual contract quantity, then they must pay Unigas a deficiency charge equal to 18 percent of the commodity price multiplied by the shortfall volume. Should Unigas fail to deliver the quantity of gas nominated on any day, then Unigas will indemnify Three Cities for the incremental costs incurred in purchasing replacement energy from other sources.

The contract price consists of two components: a commodity charge and a transportation charge.

The commodity charge is the product of a base price of $U.S. 1.30/GJ ($U.S. 1.37/MMBtu) multiplied by a base index price. The latter component is based on the price of gas purchased in Alberta and the price of gas produced in the U.S. southwest and delivered to interstate pipelines which serve the southern California market.

The transportation charge consists of the demand charges on NOVA and ANG as well as the commodity, fuel and related charges under the NOVA and ANG firm service agreements.

Unigas has also offered Three Cities an incentive volumes price, which is 85 percent of the commodity price in a given year, for volumes purchased in excess of the minimum annual contract quantity.

Any dispute which the parties agree to arbitrate shall be dealt with under the British Columbia International Commercial Arbitration Centre Rules.

Unigas estimated that the price under the terms of this contract at the British Columbia/Alberta border on 1 January 1993 would have been $Cdn. 1.64/GJ ($Cdn. 1.73/MMBtu).

2.6 Status of Regulatory Authorizations

Unigas has applied to the Energy Resources Conservation Board ("ERCB") for a gas removal permit. The applied-for volumes and term of the removal permit are commensurate with the applied-for export. A decision from the ERCB is pending. As well, Unigas obtained a finding of producer support from the APMC on 16 October 1991.

In the U.S., each of the Three Cities has received the necessary import authorization from the DOE/FE.

2.7 Views of the Board

The Board notes that Three Cities are obligated to purchase a minimum annual quantity in order to avoid a deficiency charge. In addition, the Board recognizes the growing demand for electrical power in the three cities and notes that the proposed export volumes will be used as base load supply for electrical generation. The Board is therefore satisfied that there is a reasonable expectation that the volumes to be licensed will be taken.

The Board notes that the contract price is market sensitive. In addition, the Board notes Unigas' evidence that it was not aware of any circumstances under which the gas sales contract would be terminated. 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 sales contracts between Unigas and Three Cities and notes that they have been negotiated at arm's length.

The Boad is satisfied that the Unigas sales to Three Cities have producer support.

The gas sales contracts require Three Cities to reimburse Unigas for demand charges on NOVA and ANG. The Board is therefore satisfied 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 contracts.

Although the Board's estimate of reserves exceeds the applied-for volume by four percent, both the Board's and Unigas' estimates of productive capacity show that Unigas can meet its requirements from existing supply for only three and one-half years of the proposed term at a 90 percent load factor. The

Board has concerns about Unigas' ability to satisfy the productive capacity shortfalls over the remaining term. The Board believes that the additional Archer supply under Unigas' Market Contract will be required to mitigate the forecast Archer shortfall. However, Unigas did not convince the Board that the Archer supply would be available since it could also be used to satisfy other Unigas requirements as well as the proposed export. Additionally, if this gas were available, Unigas would still only be able to supply slightly over four years of the proposed term. Further, the Board is not convinced that Unigas has adequate additional uncommitted corporate supply available to mitigate shortfalls over an extended period.

The Board notes that the term of the gas sales contracts is identical to the applied-for term of the proposed export. Transportation has been arranged on all required pipelines for the proposed export term. The Board also notes that the applied-for regulatory authorizations are for a term and volume commensurate with the requested licences. The Board is therefore satisfied that the term for the three licences is appropriate.

2.8 Decision

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

For the reasons discussed in section 2.2.3, the Board has decided to reduce the applied-for term volume by one-sixth.

Chapter 3
Disposition

The foregoing chapters constitute our Decisions and Reasons for Decision in respect of the application heard by the Board in the GH-7-92 proceedings and included in this Volume.

R.L. Andrew, Q.C.
Presiding Member

R.B. Horner, Q.C.
Member

C. Bélanger
Member

Calgary, Alberta
June 1993

Appendix I

Terms and Conditions of the Licences to be Issued

Terms and Conditions of the Licence to be Issued to Unigas Corporation for Export to the City of Burbank.

1. (a) Subject to condition 1(b), the term of this Licence shall commence on the later of the date of first deliveries and 1 November 1993 and shall end on 31 October 1999.

   (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 Unigas may export under the authority of this Licence shall not exceed:

   (a) 136 500 cubic metres in any one day;

   (b) 49 800 000 cubic metres in any consecutive twelve-month period ending on 31 October; or

   (c) 249 000 000 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 Kingsgate, British Columbia.

Terms and Conditions of the Licence to be Issued to Unigas Corporation for Export to the City of Glendale

1. (a) Subject to condition 1(b), the term of this Licence shall commence on the later of the date of first deliveries and 1 November 1993 and shall end on 31 October 1999.

   (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 Unigas may export under the authority of this

Licence shall not exceed:

(a) 115 400 cubic metres in any one day;

(b) 42 100 000 cubic metres in any consecutive twelve-month period ending 31 October; or

(c) 210 500 000 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 Kingsgate, British Columbia

Terms and Conditions of the Licence to be Issued to Unigas Corporation for Export to the City of Pasadena

1. (a) Subject to condition 1(b), the term of this Licence shall commence on the later of the date of first deliveries and 1 November 1993 and shall end on 31 October 1999.

(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 Unigas may export under the authority of this Licence shall not exceed:

(a) 115 400 cubic metres in any one day;

(b) 42 100 000 cubic metres in any consecutive twelve-month period ending on 31 October; or

(c) 210 500 000 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 Kingsgate, British Columbia.