SCOMM

#21:11

The ORGANIZATION for the MANAGEMENT of ALASKA'S RESOURCES, INC.

Beverly Isenson
Executive Director

Paula Pence Easley
Community Relations Director

Olga DeMay
Special Events Director

August 2[illegible] 1976

Dear John,

Attached is the opinion on Canadian provincial powers of Gerald Levey, a Canadian constitutional lawyer. His opinion was sought by our supporters in Seattle. Mr. Levey came to their attention because he was an advisor to a British Columbia interest involving Ross Dam, in which provincial powers were a question.

While Mr. Levey disagrees with Mr. Williston on some points, he agrees on others, and recommends that the proposed hydrocarbon treaty between the U. S. and Canada be amended significantly to protect our interests.

If you have any comments on this, please let me know.

Cordially,

Bev

LEVEY, SAMUELS & GLASNER
BARRISTERS AND SOLICITORS

GERALD S. LEVEY
B. NORMAN SAMUELS
KENNETH J. GLASNER

TELEPHONE 683-4181
AREA CODE 604

306 RAYONIER BUILDING
1111 WEST GEORGIA STREET
VANCOUVER, CANADA
V6E 3G7

REPLY ATTENTION OF MR. Levey

OUR FILE NO. A-1967

May 20, 1976

Mr. William D. Lawrence
Manager, Pacific Coast Office
Transporation Institute
801 Second Avenue, Room 1502
Seattle, Washington 98104
U.S.A.

Dear Mr. Lawrence:

Re: Natural Gas Pipelines

I have now had an opportunity to read and consider the legal opinions given by J.J. Robinette, QC; W.B. Williston, QC, and Campbell, Godfrey, and Lewtas, Barristers and Solicitors, setting forth their views as to the applicable Canadian Constitutional Law relating to the scope of legislative power to enact laws in relation to the control of, and taxation of interprovincial and international gas pipelines.

At the outset, I specifically state that there is no distinction in law between the Canadian Artic proposal and the North-West proposal, the same legal considerations apply. Essentially, the Foothills proposal also encompasses the same considerations of law save and except that the Treaty implications are not involved as the Foothills proposal does not cross international boundaries. It may subsequently link up with the presently existing pipeline systems, this fact could make the Foothills proposal analogous to the others.

In accordance with your instructions, I have not prepared a further definitive and exhaustive legal brief, but rather I have endeavoured to digest and comment upon the aforesaid legal opinions. I have endeavoured to clarify the issues, and, since nearly a year has passed since the aforesaid legal opinions have been rendered,to advise on and bring you up to date on any Constitutional Law decisions rendered by Canadian Courts which has a bearing on the questions posed. I have read and considered all the cases cited by legal counsel. The conclusions I express represent my considered opinion on which of the three opinions you have are the most valid.

...2

Essentially, there are three prime questions that must be considered.

1) How are Treaty obligations implemented in Canada?

2) May the Government of Canada take action detrimental to the operation of a pipeline notwithstanding international Treaty obligations governing an international pipeline and its contents?

3) May a Province affect, regulate or interfere with the operation of an international pipeline or its contents?

I answer these questions.

1) It is important for Americans to understand that there is a substantial difference between the United States law and Canadian law insofar as how the implementation of international Treaty obligations are brought about. In contrast to the United States provision that a Treaty is part of the "supreme law of the land"; there is an absence in Canada of a similar provision making a Treaty obligation part of Canadian Domestic law. Accordingly, there is an inability on the part of the Federal Government of Canada, as an international person, to completely follow through on Treaty obligations and implement them when the subject matter of the Treaty or International Agreement falls outside of the existing jurisdiction of the Parliament of Canada, as declared by the British North America Act and interpreted by the Courts. In effect, it is doubtful that there is complete authority in the Parliament of Canada to implement international Treaty and Convention obligations unless the subject matter, in its entirety, already comes within the Constitutional competence of Parliament. Otherwise the implementation of part or all of a Treaty obligation may vest with the Provinces.

The views expressed by Mr. Williston on page 35 of his opinion are in my view, correct where he states, "A Treaty under Canadian law is not the supreme law of the land." In all cases, a Treaty must be implemented by the appropriate level of Government of Canada, either Federal or Provincial, in order that it have lawful force at law and be binding on Canadians. The Treaty document itself is only a piece of paper until implemented by the appropriate legislation. The Campbell opinion does, of course, reinforce the statements made by Mr. Williston. A practical implication of this, is that the Provinces could enact legislation respecting, for example, direct taxing powers on a pipeline right of way.

....3

The Government of Canada could not interfere and exclude this Provincial taxing power unless it was prepared to exercise the extreme Constitutional power of "reservation and disallowance"of Provincial legislation under Section 90 of the British North America Act, which is a valid and subsisting power. See Reference re power of Governor General in Council to disallow Provincial Legislation (1938) S.C.R.-71. It should be pointed out that the "reservation and disallowance" power has not been used in Canada for some 30 years. It would, in the writer's opinion, cause a major political upheaval if the Government of Canada attempted to exercise it by instructions to the Governor General.

Accordingly, I am of the view and opinion that the implementation of any Treaty respecting pipelines would have to be implemented both Federally and Provincially. I agree with the views expressed by Mr. Williston and the Campbell opinion.

2) American governmental authorities, in dealing with Canada, must bear in mind the fundamental difference in our respective Constitutional Organic Laws. While I am not competent to concisely state the rights of individuals under the American Constitution, I do point out, the essence of the Canadian legal system is that "Parliament is supreme." The only limitations on the Parliament of Canada are those legislative powers which have been given to the Provinces by the British North America Act. I raise this because of the enactment of the "Canadian Bill of Rights Act" in 1960. This Statute (enacted by Parliment) contains the following phrases, inter alia,

a) The right of the individual to life, liberty, security of the person and enjoyment of property, and the right not to be deprived thereof, except by due process of law.

b) The right of the individual to equality before the law and the protection of the law.

These phrases are analogous to those contained in the United States Constitution. The legal effect in Canada is not the same as it is in the United States, and I deliver to you a caveat not to confuse them. The Supremacy of Parliament, through its enactments, is subject to judicial review as to whether its legislation is "in relation to its powers given under Section 91 of the British North American Act," and also to subsequent Parliamentary action, either amending or repealing previous legislation. While the Supreme Court of Canada is able to declare legislation ultra vires or inapplicable, Parliament is quite capable of overriding or amending the Canadian Bill of Rights Act, both insofar as administrative acts are concerned, and also legislatively. Parliamentary sovereignity is the cornerstone of our legal system.

Mr. Williston, at page 36 of his opinion, referred to the enactment of the Emergency Energies Supplies Act in 1974. That Act gives to the Canadian Cabinet, the power to declare a national emergency in respect of energy supplies, and clearly is lawful, notwithstanding the Canadian Bill of Rights Act. Any pre-emption of gas from a pipeline would not be a violation of Canadian Domestic law. I specifically agree with Mr. Williston's opinion on page 36, line 24, to page 38, line 15. Mr. Robinette did not deal or comment on that particular aspect. The Campbell opinion, paragraph 7, referred to and disagreed with Mr. Williston's statements regarding shortages of energies within a Province. The comments of Mr. Williston insofar as a Province pre-empting gas from an international pipeline, are in my view incorrect. On that particular point, I am in accord with the views of Campbell, Godfrey and Lewtas, where they state on page 28, "We can see no reasonable basis for Mr. Williston's proposition." In summary, Parliament could interfere with American gas whilst it is in Canada. I am of the opinion that a Province could not appropriate or expropriate the gas from the pipeline.

I wish to refer back to the provisions of the Canadian Bill of Rights Act. It is my understanding that in the United States there is a doctrine of law that a private party obtaining a statutory license or agreement aquires contractual rights thereunder which are enforceable by the Courts. This is not the case in Canada. It is important that the principal enunciated in Van Buren Bridge Co. v. Municipality of Madawaska and Attorney-General of New Brunswick, (1959) 15 D.L.R. (2d) 763, and Re Lofstrom and Murphy, (1972), 22 D.L.R. (3d) 120, be recognized as expository of the lack of contractual rights. Notwithstanding the phrases set forth in the Canadian Bill of Rights, the operative word is "before", which means - in accordance with the doctrine of Parliamentary Supremacy. In summary, the Government of the United States would be well advised to carefully consider the extent of the rights given by the Canadian Bill of Rights Act before choosing to rely on them. The rights, supposedly protected by the Canadian Bill of Rights, are susceptible to amendment, abrogation or repeal, with or without compensation, although Canadian law presumes that there will be compensation unless the legislation, by clear and unequivocal language takes away that right.

3) The taxation powers of a Province are limited to:

"Direct taxation within the Province in order to the raising of a revenue for Provincial purposes."

...5

This phrase, found in Section 92 (2) of the British North America Act, is of crucial importance in answering the third question as to whether or not a Canadian Province could tax in international pipeline passing through that Province; the pipeline right of way and the gas content of the natural gas pipeline.

The definition of a direct tax as adopted by the Privy Council since Canadian confederation and consistently applied by the Supreme Court of Canada is now one of law and has become a permanent criterian. The validity of the taxing statute must be determined within the classic definition enunciated in Bank of Toronto vs. Lambe (1887) 12 A.C.-575.

> "Taxes are either direct or indirect. A direct tax is one which is demanded from the very persons who it is intended or desired to pay it. Indirect taxes are those which are demanded from one person in the expectation and intention that he shall indemnify himself at the expense of another, such are the customs or excise taxes."

The definition set forth and given by John Stuart Mills,was accordingly taken as a fair basis for testing the character of the tax, not as a legal definition, but as embodying with sufficient accuracy an understanding of the most obvious indicia of direct and indirect taxation such as might be presumed to have been in the minds of those who enacted the British North America Act in 1867. The test of validity in accordance with these tendencies and not according to the results, in isolated or merely particular instances, must be the test. The question of validity cannot be made to impose on the Courts, the task of separating out individual instances in which a tax might operate directly from those to which the general scope of the taxation applies. One must determine what the general tendency of a tax would be on a pipeline. It is difficult to answer this question in the absence of specific legislation. It tends to be one of academic speculation because, as Mr. Williston has said in his opinion, to a large extent it would depend on how the legal draftsman prepared the tax legislation.

The Constitutional jurisdiction granting to a Canadian Province the power to impose a direct tax is contained in Section 92 (2) of the British North America Act referred to herein before. Any international pipeline must pass through the territory of one or more Provinces, and would, in my opinion, be subject to the taxing power of the Province in the sense that the Province could impose property taxes, taxes on income, sales tax and licencing taxes. With regard to the question of income tax, it should be more in mind that the tax

...6

is imposed not on the income per se, but rather on the person or entity earning the income, from whatever source it may arise. Kerr vs. Atty. Gen. of Alberta (1942) S.C.R.-435, is illustrative of the point.

The opinions of Campbell and Williston have spoken of a through-put tax. I agree that a through-put tax as such could not be imposed by a Province on the gas passing through an international pipeline or on the owners of such gas, because it would be an indirect tax. However, if the Provincial taxing legislation was drafted in such a way that there was a tax imposed upon the land, the tax was measured by the value of the products using the land, it would be held, in my opinion to be a direct tax on the land, rather than an article of commerce. See Canadian Pacific Railway Company vs. Atty. Gen. of Saskatchewan (1952) 2 S.C.R.-231. The Court approved of a statement in Atty. Gen. of British Columbia vs. Esquimalt & Nanaimo Railway Company (1950) A.C.-87, and the words receiving the approval were as follows:

> "Because land bears a tax which is measured by the reflected value of its products, is no reason to say that the tax on the land is a colourable tax on its products and that such a tax is not in truth a tax on the land itself."

The following are also of importance:

> "The appellants are the owners of minerals, both severed and unsevered in title from the fee simple, and have brought this action for a declaration that the statute is ultra vires; and the narrow question presented is whether the annual tax of mineral in situ, as a component of the soil, having a special discrete value to be realized upon some manner of removal from the soil, is direct taxation within the meaning of these words as used in head 2 of section 92 of the British North America Act...
>
> "That, for the purposes of a land tax, the assessed value of land can reflect the value of its products, such as timber, even though the timber represents substantially the entire value, was laid down by the judicial committee in the case of A.G. B.C. v. Esquimalt & Nanaimo Ry. Co. (supra). This Court had held the proposed imposts to be a tax in substance on the timber as and when severed, but that view was rejected. I can see no difference, for this purpose, between the reflected value of a 'growing' product and one, such as mineral, of a somewhat disparate character and of a limited quantity or existence: they are all, in contemplation of law, part of the soil."

...7

> "The tax here in question is a tax upon an interest in land and, both within and without the producing area, is imposed irrespective of whether the mineral is being removed or not. The tax within the producing area is higher and in that area may be computed upon an assessment basis or a flat rate of fifty cents per acre, but no distinction is made in either case between the owner removing the mineral and the owner allowing it to remain in situ."

> "The majority of the learned judges appear to have been influenced by the decision of Rex v. Caledonian Collieries Ltd. (supra). There the Province of Alberta imposed a percentage tax upon the gross revenues from coal mines and this gross revenue was interpreted to mean 'the aggregate of sums received from sales of coal,' and to be 'indistinguishable from a tax upon every sum received from the sale of coal.' The parties contesting the validity of the tax in that case were producers of coal and the tax was, therefore, upon coal as a commodity rather than as it rested undisturbed in the soil. In the case at bar the tax is in relation to the mineral or minerals which constitute an interest in land and is imposed upon the owners without regard to whether that interest, or any part of it, will ever be removed from the land. It would, therefore, appear, with great respect, that the Collieries case is quite distinguishable."

Accordingly, I am of the opinion and agree with Mr. Williston in his opinion found on page 26.

Another factor to be considered is a "royalty."

A "royalty," is authorized to the Provinces by Section 109 of the British North America Act.in addition to direct taxation. The statement in Keyes vs. Saskatchewan Minerals (1970) 12 D.L.R. (3d) 637 at 643, is definitive.

> "The term 'royalty'may be used in various senses and with different meanings. It may be used merely to indicate a basis for computing compensation for consideration given and thus establish a contractual right to recover that compensation. It is commonly used to indicate a reservation by the owner of land with mineral rights on the grant of a lease or right to search for or remove the mineral in question."

...8

A pipeline must of necessity cross one or more Canadian Provinces and use Provincial land. The Province may impose a "royalty" for the use of the land and space qua owner. This possibility has not been dealt with in any of the opinions rendered to you previously, however, I am of the opinion that the word "royalties" as used in Section 109 of the British North America Act and belonging to the Provinces in which they are situate or arise is a factor. It has been held in Rex vs. Atty. Gen. of British Columbia (1924) A.C.-213, that "royalties" as used in the British North America Act, is not limited by its association with the words lands, mines and minerals, and this confirms the thinking of the Privy Council in Atty. Gen. of British Columbia vs. Atty. Gen. of Canada (1889) 14 A.C.-295, where a conveyance by the Province to the Dominion of Canada of "public lands" did not imply any transfer of the interest of the Province in revenues arising from the prerogative rights of the Crown. Prerogative rights include the right to charge a "royalty" for the use of land.

I am of the view, that aside from the question of a Province being able to impose direct taxation on a pipeline, it does have the Constitutional power to impose a "royalty" for the use of the land and air space through which an international pipeline may pass and use.

With respect to the views expressed by Mr. Williston on page 31 of his testimony, and in particular, that a Provincial Government would be competent to legislate with respect to construction and safety standard for a pipeline; I must respectfully disagree with his opinion. I have searched the authorities and cannot find any support for that point of view. I concur with the opinion expressed by Campbell, Godfrey and Lewtas, that while Provincial legislation of a general nature and application may incidentally effect an international pipeline, it may not so do where it would have the effect of interfering or destroying the business operation of the international pipeline. See Campbell-Bennett Ltd. vs. Comstock and Trans-Mountain Pipeline Company(1954) S.C.R.-207.

While Parliament enacted S.79 of the National Energy Board Act R.S.C. (1970) Chapter N-6 to allow Provincial legislation to create mechanics' liens on international pipelines, such Act could be repealed and applicable legislation by the Provinces would be null and void without the Federal enabling legislation.

Article III of the draft Treaty between Canada and the United States concerning pipelines states:

> "No public authority in either country impose any fee, duty, tax or any other monetary charge either directly or indirectly that would not be applicable to or for the use of similar pipelines located in the jurisdiction of that public authority other than intra-provincial or intra-estate pipelines."

For the United States, this means a prohibition on through-put taxes or export taxes by Canada.

I understand the position of the Government of Canada is that it could not give such an unqualified guarantee there would be an infringement on Provincial jurisdiction.

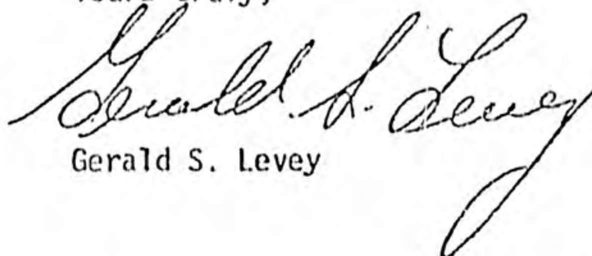
I strongly recommend to you that for the benefit of the American Pacific North-West, you should ask the United States State Department to require the Treaty contain an undertaking by the Government of Canada to "reserve or disallow" any Provincial legislation which would effect or come within the scope of Article III of the draft Treaty.

I believe this latter clause is an essential requirement that the United States should seek in order to protect its own interests. The writer's view is that no Canadian Federal Government could agree to such a clause. The possible effect of a Canadian refusal would be that the All-Alaska route would be built.

I trust the foregoing will be of assistance to you in clarifying the divergent views expressed by Messrs. Campbell, Robinette and Williston. Their comprehensive opinions cover a wide range of topics, some of which have not been definitively ruled upon by the Supreme Court of Canada.

I will be pleased to answer any inquiries that you have arising out of the foregoing review and opinion.

Yours truly,



Gerald S. Levey

STATE OF ALASKA
Inter-Department Route Slip

TO:
MAIL STATION NUMBER 3100
DEPARTMENT Senator Rader's Office
ATTENTION Connie Barlow

- [ ] Approval
- [ ] Signature
- [ ] Comment
- [ ] Contact Me
- [ ] Prepare Reply
- [ ] For Your File
- [ ] Note & Return
- [ ] Initial & Return
- [ ] Return As Requested
- [ ] Return For Approval
- [ ] Necessary Action
- [ ] Your Information

Remarks:

FROM:
MAIL STATION NUMBER 0300
~~DEPARTMENT~~ Fred Boness
BY ______ DATE ______

02-002 (REV.10/73)

38,886

DEPARTMENT OF STATE

Dear Mr. Litt:

In your letter of July 12, you asked the Department of State to respond to several interrogatories submitted by the El Paso Alaska Company concerning the timing of a decision by the Canadian National Energy Board on an Arctic Natural gas transportation system. Joseph Greenwald responded on August 24, indicating that the Canadian Government has informed us that the NEB was unable to indicate at that time what impact "Alcan" and "Polar Gas" applications might have on the timing of a decision on an Arctic natural gas transportation system.

The Canadian Embassy has now informed us that incorporation of the hearings on the Alcan project with those of Canadian Arctic Gas and Foothills may add two months to the hearing time. The Canadian Embassy has further informed us that receipt of an application for the Polar Gas project would have no impact on the present proceedings involving Alcan, Canadian Arctic Gas, and Foothills. The Canadian Government estimates that, based on the present progress of the hearings, the recommendations of the Berger Commission will be in the hands of the Canadian Government by February and the decision of the National Energy Board will be transmitted to the Canadian Government for review and consideration by about May, 1977.

Responses are enclosed to the interrogatories which accompanied your letter of July 12.

Sincerely,

Julius L. Katz
Assistant Secretary Designate
for Economic and Business Affairs

Mr. Nahum Litt,
Presiding Administrative
Law Judge
Federal Power Commission

1. What effect would an application by Foothills, Westcoast and Alberta Gas Trunk Line to implement the Alcan project have upon the time schedule of National Energy Board hearings involving Canadian Arctic and Foothills applications

R. On September 10, 1976, the National Energy Board issued an order incorporating the hearing of applications of Foothills (Yukon) group (Alcan project) with those of Canadian Arctic Gas and Foothills, commencing October 18. It is estimated that the incorporation may add two months hearing time.

2. What effect would an application to the National Energy Board for authorization to construct and operate facilities to deliver gas from the Arctic Islands project known as "Polar Gas" have upon the anticipated dates for completion of National Energy Board hearings involving Canadian Arctic and Foothills applications.

R. No application for a certificate has been received by the National Energy Board from Polar Gas. In the National Energy Board's view, receipt of such an application would have no effect on the present proceedings before it.

3. Would the National Energy Board consider in a separate proceeding an application to certificate Canadian facilities for the transportation of Alaskan North Slope gas (i.e. the Alcan project) apart from any consideration of the delivery system for Mackenzie Delta reserves.

R. As indicated in the answer to the first question, the National Energy Board has decided to hear applications jointly.

Bell

NATIONAL ENERGY BOARD
OTTAWA, ONTARIO
KIA OE5

CANADA

OFFICE NATIONAL DE L'ÉNERGIE
OTTAWA, ONTARIO
KIA OE5

File: D780-4

24 March 1977

RECEIVED
MAR 29 1977
POLICY DEVELOPMENT & PLANNING

Mr. Robert E. LeResche
Director
State Policy Development
and Planning
Office of the Governor
of the State of Alaska
Juneau, Alaska
U.S.A. 99811

Dear Mr. LeResche:

Thank you for your letter of March 10, 1977 and the enclosed reports.

Please be advised that the Office of the Governor of the State of Alaska has been added to our mialing list to receive copies of any material published in relation to natural gas in Canada.

Under separate cover, we are forwarding copies of two reports - "Canadian Oil - Supply and Requirements", and "Canadian Natural Gas - Supply and Requirements", which were compiled as a result of extensive hearings by the National Energy Board in order to ascertain the reserves, domestic demand, effects of conservation and potential for export of oil and natural gas.

I trust the foregoing will help to meet your needs.

Yours truly,

Brian H. Whittle,
Secretary.

March 10, 1977

National Energy Board of Canada
Government of Canada
Ottawa, Canada

Dear Sir:

As decisions regarding transporation of northern gas are moving into their final stages, we find it essential to keep directly in touch with activities in Canada as well as in Washington, D.C. We would, therefore, appreciate being added to your mailing list, and particularly would like to receive hearings transcripts, staff reports, and any other materials regarding to natural gas transportation in Canada.

In turn, we have enclosed several documents portraying Alaskan actions on this issue. We will be pleased to keep you abreast of further developments here.

Best regards,

Robert E. LeResche
Director

Enclosures

bcc: John Rader
Hugh Malone
Lowell Thomas, Jr.
Clark Gruening

Alaska State Legislature
Senate

JUNEAU, ALASKA

4/6/77

TO: Bill Lurria, Division of Policy Development & Planning
FR: Connie Barlow, Senator Rader's Office
RE: reports from the National Energy Board of Canada

Thanks for sending the two NEB reports to our office for our review:

Canadian Natural Gas: Supply & Requirements (April 1975)

Canadian Oil: Supply & Requirements (September 1975)

Since DPDP will be receiving additional materials from the NEB, could you send out notes to the following places whenever new reports come in so we can stop by and see them:

Senator John Rader
Representative Hugh Malone
Elke Kalab (Legislative Affairs)

We'll then make sure the rest of the legislators know about it. (Also tell Terry Dale in Lt. Governor's office.)

I found these 2 reports particularly interesting as they relate to our current interest in federal pricing in the US and Alaska's taxation and royalty rates.

Thanks much.

cc: Hugh Malone
Chancy Croft
Kay Poland
John Huber
Clark Gruening
Elke Kalab
Terry Dale

4/6/77

TO: Sen Rader
FR: Connie
RE: information from Canada's National Energy Board

DPDP is now on the mailing list of the NEB (at our request). They have received 2 reports, and I have asked DPDP to let our office, Hugh Malone, and Elke Kalab know when additional materials come in.

I then give notice to Croft Poland and Huber (anybody else?)

Attached are xeroxed pages from the conclusion of the two reports.

Although the reports are about 2 years old, I found the gas report particularly interesting as an insight into our current deliberations over oil taxation. Interesting elements of the report:

(1) The NEB finds that provincial and federal extraction of royalties and taxation has served as a disincentive to new exploration -- and that oil producers had moved to the US where the government take was not so high. Also, the need for stable and assured government royalty and taxation rates was emphasized.

(2) The companies suggested rate of return needs. Imperial suggested a 35 % industry take was needed after operational expenses. Other suggestions ranged from a 9 to 20 % rate of return.

I've underlined those portions of greatest interest. You might wish to skim thru it.

NOTE: House finance hearings are scheduled for TU, WED, THURS of next week. No one will be allowed to repeat testimony given to Resources Committees; however new testimony will be accepted and Finance may request some industry folks to respond to their questions (right now Finance is poking thru the reports and testimony industry submitted).

Finance will also have data prepared to show the projected state revenue take under varying circumstances of well-head value and tariffs.

Gruening's Ways and Means Subcommittee will be meeting in the near future with the industry to find out the projected production rate, so he can assess the effect on State revenues.

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

ROYALTY OIL AND GAS DEVELOPMENT ADVISORY BOARD

11TH FLOOR, STATE OFFICE BLDG.
POUCH M – JUNEAU 99811

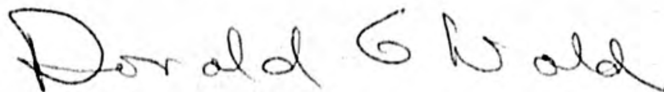
April 1, 1977

The Honorable John Rader
President
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Rader:

The next meeting of the Alaska Royalty Oil and Gas Development Advisory Board is scheduled for Wednesday April 6, 1977, in Anchorage. The meeting will begin at 1 p.m. in the Division of Lands Conference Room in the Mc Kay Building, 323 E. Fourth Street.

Very truly yours,

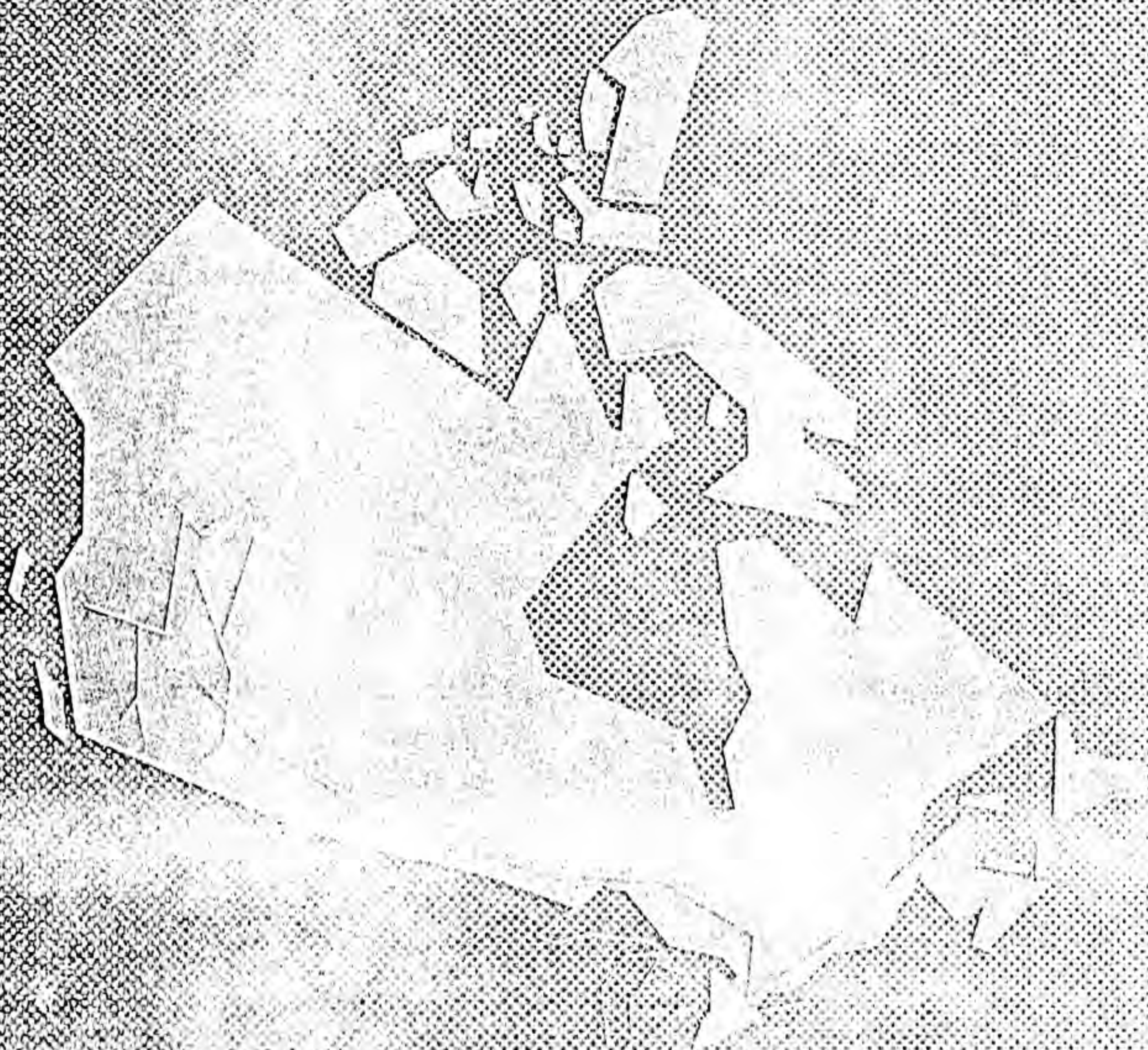


Donald G. Wold
Executive Director

DGW:jl

CANADIAN NATURAL GAS

Supply & Requirements



NATIONAL ENERGY BOARD

April

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CONCLUSIONS & RECOMMENDATIONS

THE SHORTAGE IN SUPPLY

The actual and potential shortage until Frontier gas is connected, if and when adequate reserves are developed, results from two factors:

1. a lack of adequate growth in deliverability resulting from low finding rates and from a lack of incentive for producers to explore for and develop new reserves because of inadequate and uncertain netback. Producers have moved drilling rigs and personnel to the United States and other areas where opportunities at this time appear to be more attractive. The decline in exploration and development activity starting two or more years ago is now being reflected in fewer reserves being available to maintain deliverability. There has been an impairment in deliverability from large gas fields in northern British Columbia; and

2. a high rate of growth in demand in the Canadian market, partly caused by underpricing of gas in relation to alternative fuels. The growth East of Alberta in the past two years would have been greater but for the inability of TransCanada to obtain removal permits from the Province of Alberta and of distributors to contract for the desired supplies of gas.

incentives

pricing

Action to ameliorate the situation is likely to be needed in relation to three factors, namely, deliverability, domestic demand and existing export licences. Of these, improvement in deliverability including development of additional reserves to the extent feasible is the most attractive, since curbing domestic demand below levels which would result from Canadian pricing, conservation, and industrialization policies is not in keeping with the intent of the National Energy Board Act, and reducing exports could have serious consequences for United States' consumers of Canadian gas.

DELIVERABILITY

Improving deliverability is a complex national problem requiring the cooperation and coordinated planning of producers, gathering and transmission companies and distribution utilities, as well as the governments of producing and consuming provinces and the federal government. Furthermore, short term improvements will have to come from gas already found, but there is a lead time generally of about three years between the initiation of development activity and the delivery of the gas in the market place. It therefore seems imperative to mobilize a concerted effort to bring about appropriate action if any significant improvement in deliverability is to be

TransCanada Pipelines Limited, station 17, Regina, Saskatchewan

achieved in the remainder of the 1970's. If Frontier gas were connected — assuming adequate reserves are discovered and suitable transportation arrangements made — the need for and reliance on improved deliverability of gas from the Western Provinces would be reduced after that date.

PRICES, ROYALTIES AND TAXES

An essential component of a solution to the problem of deliverability would appear to be a known system of pricing and a stable system of royalties and taxation adequate to provide producers with the incentive to carry out vigorous exploration and development programs. Despite the recent clarification by the producing provinces and the federal government of the rates of royalties and taxes, uncertainty still appears to pervade the producers' minds. Clarification of the long term pattern of field pricing, royalties and taxes is a vital element in determining future producer netbacks — the key to investment decisions by producers.

The recent changes in Alberta royalties and federal taxation provide clearer indications to the producers of the impact of these costs. What is less certain is whether the many producers who make decisions having an impact on future deliverability regard these recent changes as adequate without clarification of short and long term pricing policy.

In British Columbia the prices offered by the British Columbia Petroleum Corporation for both new and old gas may stimulate some activity but are not likely to be adequate to bring on the level of exploration and development required to offset the impairment in deliverability of the Westcoast system.

For Canada as a whole, evidence at the Hearing clearly indicated that even immediate implementation of pricing of natural gas at full parity with competitive fuels might bring relatively little short run improvement of deliverability, although it would encourage the development of reserves both in the Western Provinces and in the Frontier areas in the 1980's; it would also have an inflationary impact on the Canadian economy.

Further idscussion on the pricing of natural gas is set forth later in the report, but in the Board's view, immediate introduction of full parity pricing linked to international oil prices cannot be regarded as an effective solution to the problem of improving deliverability in the 1970's.

CASH FLOWS FOR REINVESTMENT

A more complex problem is the concern of the producers with the cash flows necessary to maintain an adequate inventory of oil and gas reserves to sustain deliverability in the face of higher royalties, changes in taxation, the high rate of inflation as it affects the oil and gas industry, the higher cost of finding the remaining reserves in the Western Provinces, and the still higher costs in the Frontier areas.

As a preliminary opinion, the Board doubts that cash flows available to companies are sufficient to develop an adequate reserves base to meet growing Canadian needs. For example, the present Alberta royalty on field prices in excess of 36¢ per Mcf is approximately 50 percent for old gas and this royalty is not deductible for federal tax calculation. On the other hand, the Alberta Petroleum Exploration Plan of December 1974 improved the netback to the producer.

The large proportion of the revenue from higher prices accruing to governments from royalties and taxes does not, in the Board's opinion, leave producers with sufficient cash for exploring and developing high cost reserves in a way which will maintain the inventory of reserves necessary for continuing maintenance of deliverability.

Given a national goal of some degree of self-sufficiency in energy, and the share of income from the industry going to governments, a program of investment of public funds in the oil and gas industry seems essential. Syncrude is a good example.

ALBERTA AND SOUTHERN PURCHASING

Another situation which could aggravate the shortage in the Canadian market results from the aggressive and successful gas purchasing activities of Alberta and Southern Gas Co. Ltd. Over 85 percent of Alberta and Southern sales are to the Northern California market. Alberta and Southern has filed an application for additional exports but has not asked the Board to proceed with it at this time; however, it had been buying gas to support its application. Alberta and Southern's reserves under contract are now 9.7 Tcf compared with remaining quantities licenced for export of 5.1 Tcf. The difference of 4.6 Tcf are reserves which, under the Board's 25A4 formula, would be assumed to be available for the protection of the Canadian market. Obviously, in the present circumstances, they are not available for this purpose. Alberta and Southern indicates it needs these reserves because of uncertainty as to the priority claims of Alberta utilities and the need to maintain the future deliverability of its export commitments.

Alberta and Southern is continuing to buy gas in 1975, aided to some extent by a higher payment to producers than other buyers can offer because most of its gas is sold at the export price of $1.00. Alberta and Southern stated that the higher payment of 27¢ per Mcf, when compared with payments to producers providing gas to the TransCanada system, results, after deducting royalties and taxes, in only a net increase of 3¢ per Mcf to the producer. In any event, the Board is recommending that this flow-back system be changed.

Alberta and Southern, it should be noted, has provided some relief to Westcoast Transmission Company Limited to help alleviate its shortfall in deliveries to the Pacific Northwest. In addition, Alberta and Southern is also making some deliveries available to TransCanada on a "best efforts" basis; that is, to the extent it can do so without impairing Alberta and Southern's contract obligations to its export customer. Alberta and Southern has also had to meet new demands by Alberta utilities and production from some of its existing fields has been impaired. The exceptionally high reserves protection by Alberta and Southern of its export contracts, in contrast with the impaired deliverability on the TransCanada system which serves Canadian needs East of Alberta, is clearly a problem requiring resolution in that it ties up reserves which could otherwise be available to meet Canadian requirements.

PAN-ALBERTA

The role of Pan-Alberta Gas Ltd. is also important in relation to the potential shortage in the 1970's. Pan-Alberta has purchased gas under six-year contracts with high rates of deliverability and, in many cases, from marginal pools which might not otherwise be connected. Deliverability of the gas in the 1970's would appear to complement the potential arrival of Frontier gas about 1980. Based on knowledge of Pan-Alberta's current contractual situation, the Board estimates Pan-Alberta might deliver up to the following quantities of gas:

	Bcf
1975	30
1976	50
1977	70
1978	60
1979	50
1980	45

The foregoing includes 14.6 Bcf per year under an initial contract with Gaz Métropolitain under which some gas is now being delivered. Other contracts are indicated to be near completion. There is still some doubt concerning the ability of Pan-Alberta to deliver the volumes indicated in the previous table, and there have been delays in deliveries to Gaz Métropolitain as well as in concluding further contracts. These delays have been caused by pricing problems as well as by the preference of the Ontario Government and Ontario distributors to continue to buy their gas from TransCanada.

There is also a question as to TransCanada's willingness to carry Pan-Alberta gas which is related to the broader problem of Alberta's actions in not approving removal permits to TransCanada even though TransCanada is buying new gas and renegotiating the price of old gas on the basis of the award under the Alberta Arbitration Act. Nevertheless, in the Board's view, it is important that these problems be overcome quickly so that the gas now under contract to Pan-Alberta as well as gas under contract to TransCanada, but not covered by removal permits, can contribute to the alleviation of the impending shortage of natural gas.

EFFECT OF EXPLORATORY ACTIVITY IN THE UNITED STATES

A further problem relates to the competition of the United States in particular, and the energy-short world in general, for drilling rigs, skilled personnel and investment funds. The uncertainty and lack of economic incentive on the Canadian scene in the past two years and the large exploration and development program underway in the United States under more favourable incentives, have caused an exodus of equipment, men and money south of the border. For example, at the present time, royalties in the United States are between 12.5 percent and 16.7 percent and are deductible for tax purposes, compared with royalties of up to 50 percent in Alberta – non-deductible for federal tax purposes – and not particularly attractive field prices, net of royalties, in British Columbia. The price of new gas in intra-state sales in the United States is relatively attractive. The Board therefore recommends that federal and provincial governments review the adequacy of prices, royalties and taxes and the resulting netback to the producer in relation to the incentives needed in Canada to offset the pull of exploration opportunities from the larger United States market. Such a review would necessarily need to cover oil and gas because of the interrelatedness of the exploration for these hydrocarbons.

INCENTIVES

In the Board's opinion, incentives should be particularly aimed at the specific segments which can make the greatest contribution to the solution of the problem, namely, the 2.8 Tcf of unconnected, uncommitted reserves available in Alberta, the 1.0 Bcf in the Suffield Block, and a further 1.0 Tcf of unconnected, uncommitted reserves in British Columbia, as well as any improvement which can be made in deliverability from presently contracted and connected reserves.

Evidence at the Hearing suggested that some improvement in deliverability could be achieved from already connected reserves but that it would not be prudent to rely on a quick and dramatic increase from this source. This is because of the time lags involved, and the fact that existing production is often tied to specific contracts between private parties. Incentives of various kinds will have to be designed in order to induce the desired improvements in deliverability.

As a starting point, better information is needed, for planning purposes, on the amount of gas which producing provinces expect to authorize for removal from the province for each of the next five years. The industry will need to coordinate the planning and execution of:

a) infill drilling;

b) connection of new reserves;

c) development of processing plants;

d) new gathering systems;

e) expansion of transmission systems; and

f) development of greater storage facilities available to distributors.

Some of the investments may have a comparatively short life and cannot be expected to be more than marginally attractive.

Incentives are needed to embrace some or all of the following features:

1) acceptance by distributors and consuming provinces of higher prices;

2) possible advances or prepayments by distributors and by transmission companies;

3) lower royalties for new gas (Alberta and British Columbia have instituted such differentials but they may need further adjustment);

4) faster write-off for tax purposes of expenditures for gas plants and gathering systems with a short life;

5) relaxation by producing provinces of their protection requirements if it becomes apparent that there are good prospects of future availability of Frontier gas; and

6) rate designs to encourage the efficient use of gas; for example, the avoidance of "dumping" of valley gas (gas transported in the system when spare capacity is seasonally available) in the summer.

DOMESTIC DEMAND

Sales of natural gas in Canada until recently have been growing at a rate of 10-11 percent per year partly because gas has been significantly underpriced in relation to other fuels. Gas has therefore not been used in all cases in a way compatible with conservation of a scarce non-renewable resource.

PRICING

Considering first the pricing of natural gas, in the medium term, as indicated earlier, full parity value based on world oil prices would not significantly improve the deliverability of natural gas over that provided by a more modest increase in price. For example, evidence was given that an increase in the field price to 80¢ to $1.00 per Mcf would be sufficient to induce the connection of gas which could improve deliverability in the 1970's. This more modest price increase would avoid some of the adverse inflationary consequences of full parity. In the longer run, prices will have to rise to the level necessary to develop whatever resource base is available under reasonable economic conditions. Nevertheless, movement towards higher prices need not preclude the continuation of a two-price system, one for exports and one for sales in Canada, nor prevent Canada, in particular the producing provinces, from taking advantage in industrial development of Canada's relatively favourable energy base.

If gas should become available from new areas in quantities more than adequate to meet Canadian requirements, the case will be even stronger for using this resource primarily to supply Canadian requirements at a price consistent with the costs of exploration and delivery. The Board therefore does not accept the argument of those submittors advocating full parity pricing, including premiums for form value based on OPEC oil prices, since this would do little to resolve the prospective

medium term shortage, would price all Canadian gas at a level in excess of U.S. levels, thereby impairing Canada's competitive position, and would result in a curtailment of Canadian demand in the 1980's when gas may be in ample supply. Such a policy does not appear to the Board to be in the Canadian public interest.

Agreement between the federal government and producing and consuming provinces on future prices is urgently needed as is agreement on the share of the revenue to accrue to the producers, so that the industry in general can proceed in planning its future courses of action and in making investment decisions with some assurance as to the regime of prices, taxes and royalties likely to prevail in the domestic markets over the next three to five years.

The Board believes that the substantial underpricing of gas in the domestic market relative to the price of other fuels should be progressively eliminated and the price should rise to a level sufficient to induce exploration for and development of major new sources of supply. Therefore, the Board recommends a pricing policy phasing upwards towards commodity value over about a three-year period, using in the 1970's, the equivalent Btu price of Canadian crude oil in the Toronto market as the yardstick of commodity value in this phase-in period, and reassessing the situation in the light of circumstances as they develop.

CONSERVATION

The need for conservation in the use of natural gas is implied in the recognition of it as a scarce non-renewable resource. The federal government has already launched an energy conservation program seeking the voluntary cooperation of Canadians, and more comprehensive programs are being developed. Much of the jurisdiction relating to conservation measures belongs to the provinces, and the Board is aware of conservation programs underway and being studied in several of these provinces. Conservation measures, in the Board's view, should increase the supply of gas which would be available for future use in Canada.

MAJOR NEW REQUIREMENTS

An important aspect of the Canadian demand for gas is that major new requirements which could not be foreseen a few years ago are now developing. These include the use of natural gas as feedstock for the petrochemical industry, the expansion of the gas-based fertilizer industry, and the new opportunities for natural gas in the Québec market for process use in the steel industry.

The new opportunities for chemical industry developments in Canada arise in part from the shortage of oil and gas in the United States and because planned chemical industry developments in the Middle East are likely to take some time to come to fruition. The opportunities include the production of ethylene, ammonia, methanol and their derivatives. These opportunities coincide with the objectives of Alberta to diversify and industrialize its economy.

The Board views with favour the rapid further development of an advanced petrochemical industry aimed largely at the domestic market, but also at export markets, provided there is some assurance of the longer run viability of these plants in the face of potential competition from Middle East production units based on lower cost feedstocks. The Board believes, however, that controls are needed over the export of basic petrochemicals derived from natural gas as a feedstock, particularly during the period when a potential shortage of natural gas for use as fuel in Canada may exist.

In Québec, until recently, natural gas could not compete effectively with oil because of the low price of imported oil and its penetration has been restricted to five percent of the energy market. The relative price of oil and gas has reversed but the Québec distributors have not been able to secure the gas they need to meet growth in existing market areas or to develop new markets, because of the difficulty in contracting for new supplies of gas.

A further problem, discussed later, relates to transporting the gas to the province. Québec desires more of this premium fuel, both for residential use and to develop its industrial base, including the use of gas in industrial processes and for reasons of security of supply. Ontario and Manitoba also have not been able recently to obtain supplies of gas sufficient to meet potential demand.

EFFECT OF FLOW-BACK FROM HIGHER EXPORT PRICES ON GAS PURCHASING

When export prices were increased to $1.00 per Mcf, the federal government required that the benefit from the higher export prices should flow back to producers -- except in B.C. where it would flow initially to the British Columbia Petroleum Corporation in respect of those producers selling gas to it. The initial scheme, which the Board indicated might need to be modified, caused the increased funds to flow back to the producers serving each group of licences. This has meant that producers selling to Alberta and Southern where the gas is shipped almost wholly to export markets, receive a much higher netback than producers selling on the TransCanada sys-

tern where at least 60 percent of the gas is sold in the domestic market. This is inequitable and inhibits gas being purchased for the domestic market. The Board is proposing to modify the export flow-back scheme on the basis that Alberta producers should receive the same flow-back for each Mcf of gas sold.

TRANSMISSION OF GAS BY TRANSCANADA PIPELINES

TransCanada Pipelines has been the major buyer of gas for utilities east of Saskatchewan; some time ago it stated it was willing to carry gas on a contract basis for others. More recently, because of its assessment of the impending impairment of deliverability on its system in relation to its contractual obligations to domestic distributors and export customers, it has refused to enter into further transportation contracts to carry gas for others. At the Hearing, TransCanada indicated that its present policies were based primarily on meeting its contractual obligations to domestic and export customers. It recognized some obligation to renew contracts to Canadian distributors when they expired, but its exact position on this point was not clear.

TransCanada stated that, following this policy, it was buying natural gas both in conventional and Frontier areas only to maintain deliverability, but indicated that at this time it estimated that all gas in Alberta surplus to that province's needs would be required to maintain deliverability on its system in the 1970's. Although it had earlier indicated to distributors that they should negotiate directly with producers for natural gas to meet growth in their own markets, TransCanada now reluctant to carry additional gas for them until it has acquired sufficient gas itself to restore the deliverability on its system.

Part of TransCanada's problem appears to stem from the reluctance of the producers and the Alberta Government to accept TransCanada as the sole buyer of gas for Eastern Canadian utilities, while at the same time, the Government of Ontario insists that TransCanada should be the sole buyer. These attitudes may have had relevance when gas prices were established by arm's length negotiation between private parties. That situation has virtually disappeared with pricing being determined in effect by decisions under the Alberta Arbitration Act. If prices are to be established by government, as seems likely, the producers' netback will not be affected by the identity of the buyer nor indeed by the number of buyers for a given market. In these circumstances, if it is more efficient for TransCanada to the buyer, and if Eastern distributors and the Ontario government wish to operate this way, the Board can see no disadvantage to producers as compared with direct purchase by distributors.

It is understandable in this difficult and complex situation that TransCanada should refuse to enter into new contracts while faced with the threat of impairment of its ability of fulfill existing ones.

From a Canadian public interest point of view, the present situation has the result that facilities will not be provided to meet growing Canadian needs for natural gas.

This situation could be improved if the pricing issue with Alberta is resolved and Alberta releases the outstanding removal permits. The attitude of TransCanada will also be affected by the treatment of existing export commitments recommended by the Board. Nevertheless, it is the Board's view that reasonably foreseeable requirements of Canadians should be supplied and that transmission facilities should be built to deliver the gas under appropriate safeguards to the transmission company.

The Board anticipates that TransCanada will wish to reconsider its present policy in the light of the Board's statement of intent to condition export licences in order to ensure that Canadian requirements are met and its recommendation, discussed later, to create powers of allocation in relation to natural gas. These two actions will place a new perspective on TransCanada's contractual obligations and, provided the company's financial integrity is not impaired, it is anticipated that TransCanada will provide the services expected of a pipeline transportation company in relation to approved Canadian requirements for service.

EXISTING EXPORT COMMITMENTS

Section 83 of the Act prescribes certain tests to be applied by the Board under an application for a licence. In particular the Board must 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.

Under Section 17(2) of the Act the Board may change, alter, or vary a certificate or licence issued by it, but no such change, alteration or variation is effective until approved by the Governor in Council. While this section has never been applied in relation to licences for exports of natural gas, circumstances may require the Board, in the public interest, to modify such licences and the conditions applicable to them.

These provisions of the Act must have been in the contemplation and knowledge of the parties at the time contractual commitments were made. In the view of the Board it is contrary to the provisions and the intent and spirit of the Act

that contractual obligations permitted under export licences should continue to be fulfilled under circumstances in which Canadian requirements for use of Canadian natural gas in Canada cannot be met. The applicable provisions and the powers of this Board under the Act indicate that the requirements for gas for use in Canada must be protected and the terms and conditions of licences can and, in circumstances such as now exist, should therefore be varied.

The Alberta Government conditions removal permits from the province to require that priority be given to the needs of Alberta utilities. This effectively ensures that Alberta consumers obtain the gas they need, including growth above present levels of demand, irrespective of contractual obligations to users outside the province.

It is also interesting to note that Alberta removal permits are conditioned as to the fields from which gas can be taken; similarly existing Canadian export licences will be regarded as conditioned to be limited to gas from currently producing fields and no Frontier gas will be allowed to be exported to meet existing licences without explicit Board approval.

At the present time, the Province of British Columbia does not have a system of removal permits. However, in the present Hearing, the B.C. Energy Commission stated that B.C. gas users would not be limited to their present contractual entitlements even if this meant that contractual obligations to export customers could not be fully met.

Saskatchewan is a net importer of gas and there are indications that applications to remove gas from the province would not be likely to be approved. Each of the three Western producing provinces has indicated that it has taken or is taking steps to protect consumers. Consumers in Manitoba, Ontario and Québec are, however, left without adequate protection.

The existence of the potential shortage makes it most unlikely that applications for licences for new exports of gas, before the connection of Frontier gas, could be granted. Within the constraints of the prospective shortage, the Board will, however, seek to the extent possible and in compliance with the Statute, to avoid or mitigate hardships among export customers isolated from substitute supplies of energy.

The present Canadian situation is, to some estent, understood in the United States as shown by the following quotation from page 19 of the National Gas Survey, Volume 1, "A Time for Decision and Action", preliminary draft published by the United States Federal Power Commission, February 1975.

"It is now clear that we cannot rely on Canada over the near term to continue to serve American export markets for either natural gas or oil at historic prices and levels of service. The potential for future natural gas deliveries from Canada to the U.S. is related to the extent to which Canadian reserve levels may be developed which are in excess of Canadian requirements and to the mutual advantages which may accrue to each through the construction of new oil and gas transportation systems from the as yet undeveloped Canadian frontier areas".

CANADIAN REQUIREMENTS AND EXPORTS

It is the view of the Board that reasonably foreseeable requirements for gas for use in Canada consistent with the pricing, conservation and industrialization policies of Canadian governments, must be given priority over existing export commitments. In this regard, several export licences have a cumulative feature so that gas not exported in any year can be exported in subsequent years. The Board will recommend that the remaining licences not having such a condition be made cumulative so that if an impairment does occur but adequate gas later becomes available, the quantities in the licence could be restored. If licences were to expire before the maximum authorized quantity could be exported, consideration could be given to making up any shortfall in the awarding of new licences, if and when new exports become possible.

NEED FOR ALLOCATION

The Hearing made evident that there is still uncertainty about the size and timing of a future shortage and the effect on peak-days will be more acute than on annual deliveries. Also there is no existing arrangement to ensure that reasonable demands for gas in the non-producing provinces are met, and unreasonable demands discouraged and that equity between the domestic and export markets is achieved. It is also apparent that the price mechanism can give only limited assistance in resolving these problems. While it is not yet clear whether these problems will be relatively light or severe, it is evident that there are, at present, inadequate mechanisms for dealing with them. The Board therefore will be recommending that allocation powers be created to cope with the situations outlined above.

PLANNING

The foregoing review of the problems of coping with the shortage of natural gas in the 1970's has highlighted the complexity of the issues, their national scope and the interrelation among actions by producers, gathering, transmission and distribution companies, and governments.

A coordinated approach is needed if the adverse impact of the shortage is to be minimized, yet no adequate planning mechanism exists to provide a forum for the various parties involved to come together and work out a comprehensive plan of action. A start is being made within the Canadian Gas Association but its forum needs broadening so that it embraces producers, gathering, transmission and distribution companies, consumers, as well as provincial and federal governments. The Board will be recommending the creation of such a body.

RESOURCE DEVELOPMENT AND MANAGEMENT IN THE 1980's

THE NEED FOR GAS

The evidence is clear that if existing export commitments are to be met, new sources of supply will be needed for use in Canada at an early date. The uncertainty as to the extent of the shortage in the 1970's and the fact that major developments for using gas in Canada, such as petrochemicals, may well have to be deferred pending the availability of new sources of gas both point to the prudence of connecting new sources of gas at an early date. Even if existing export commitments are not met, new sources of gas will be needed by Canadians by the mid-1980's.

DEVELOPMENT OF THE RESOURCE BASE

Since there is a demonstrable need for new sources of supply a strategy is needed on the development of the resource base. It is difficult to formulate such a strategy without adequate information and improvement of the knowledge of new sources of supply and alternative options.

The evidence indicated that there is still inadequate information to appraise the size of the Beaufort-Delta and High Arctic resource base. The reserves discovered are relatively small and estimates of the potential cover a wide range. A perspective on the role of Frontier gas cannot be achieved until more information is available. Several producers mentioned the urgent need to clarify jurisdictional matters in offshore areas, and the regulations relating to leasing and royalties in all Frontier areas, in order to stimulate exploration activity.

OPPORTUNITIES FOR CANADIAN USE OF NATURAL GAS

There was some evidence that if Frontier gas were connected to markets it would be likely to flow at first in quantities which would be difficult for the Canadian market to absorb immediately. Yet, on the other hand, there are additional major new uses as well as possibilities for extensions of existing markets for gas in Canada. It would appear that an opportunity exists for Canada to use this energy and feedstock supply to further its own development. Coordinated planning by the federal and provincial governments and industry is vital if full advantage is to be taken of the potential surge in supply which could result from successful Frontier developments.

SURPLUS TESTS – NEW EXPORTS

There was considerable but inconclusive discussion of whether new exports would be a necessary component of a pipeline project to connect Frontier gas. This question will be resolved only when applications are heard and decisions rendered.

The Board's view, given earlier in this report, is that any new exports must be relatively short term and conditional on Canadian needs having continuing priority. A forecast of "reasonably foreseeable requirements for use in Canada" can be overtaken by actual events not adequately foreseen; there is an obvious need to avoid repeating the present difficulty in which gas needed in Canada is committed to export on long term contracts.

There was virtually unanimous agreement among the participants at the Hearing that the Board's 25A4 formula, designed for protection of Canadian requirements, is inadequate in today's conditions to ensure protection of Canadian markets. More emphasis will have to be given to deliverability and to ensuring that Canadian requirements are met on a continuing basis. In addition, the complexities and uncertainties related to Frontier gas require that the Board maintain some flexibility in its attitude to applications for export licences.

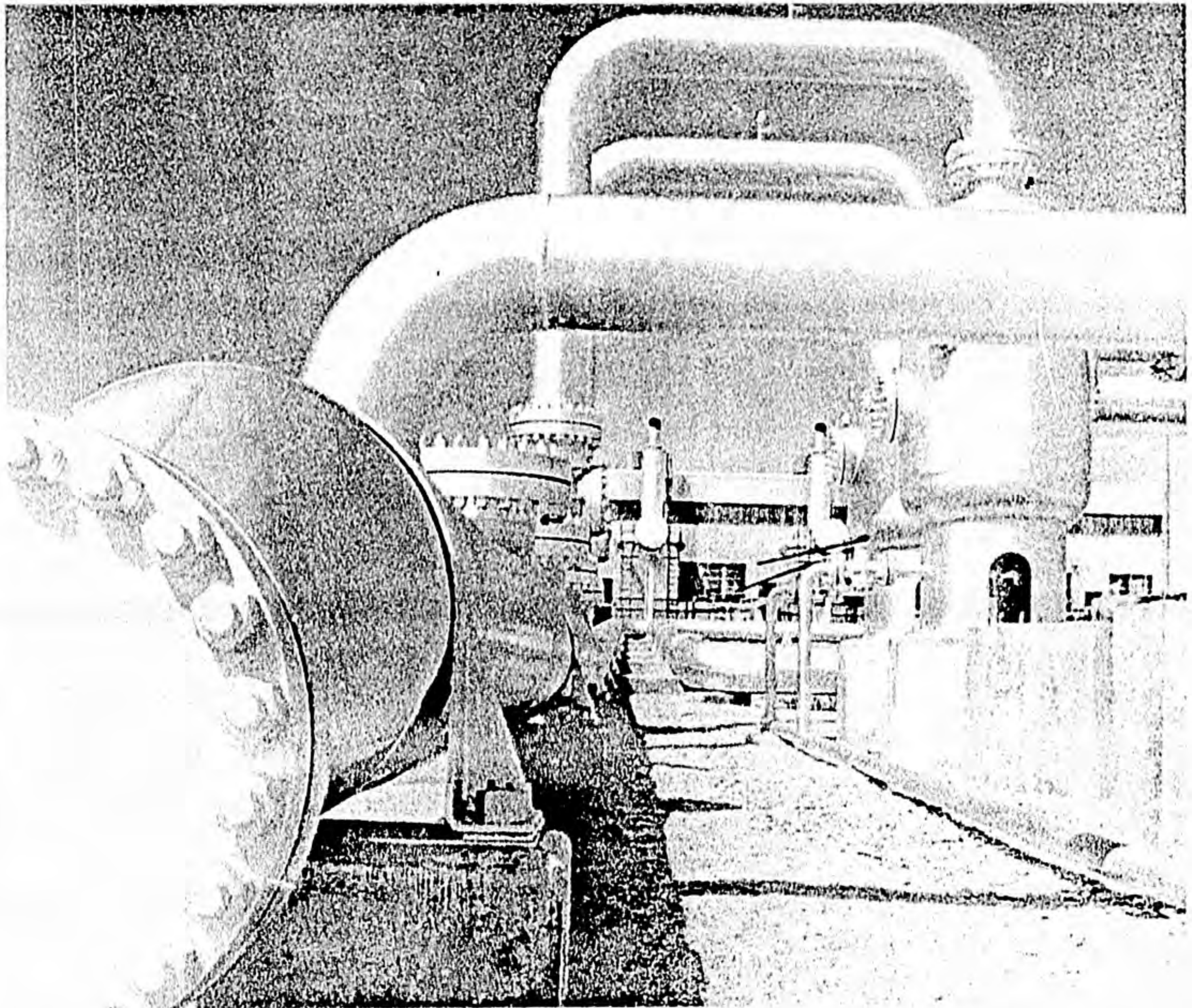
RECOMMENDATIONS

It is probably not possible to avoid a shortage even with a rare combination of optimum decision-making by producers, gathering and transmission companies, distributors, and provincial and federal governments; it would not be prudent to assume this optimum will be achieved. Nevertheless it is the hope of the Board in making its recommendations that the incentives for all parties to avoid the consequences of a shortage will be such that the use of any powers to allocate natural gas can be minimal.

The following recommendations are aimed at alleviating the impending shortage of natural gas in the 1970's, and at developing policies for the longer term when natural gas could once again be available in quantities such that some of it might become surplus to Canadian needs.

In relation to the shortage, the recommendations are of four types. First, there are proposals for improving deliverability; secondly, for raising prices in Canada which will have an effect on curbing demand and stimulating supply; thirdly, the Board recommends the creation of new powers to allocate gas in Canada; and fourthly, the Board indicates action that will be taken to condition existing export commitments so that priority can be given to Canadian demand.

Compressor station, Image, Ontario



DELIVERABILITY

Improvement of deliverability must be achieved to the greatest practicable extent in alleviating the impending shortage in the 1970's.

The most important single step in this regard is the removal of uncertainty from the minds of producers and the assurance of a netback to them which will be adequate to stimulate exploration and development. The necessary actions would appear to include:

1) assurance by provincial and federal governments that the system of taxes and royalties, once established on a basis adequate to stimulate exploration and development, will remain in effect for a sustained period;

2) an appropriate field price in Alberta (including the netback from exports) in 1975 which, in the Board's view, would be adequate to induce greater deliverability would be in the range of 80¢ to $1.00 per Mcf. In this regard, it would be of assistance if governments endorsed the principle that the flow-back from higher export prices should be equalized for Alberta producers.

It would be of assistance to the industry if governments could agree on a formula for pricing gas consumed in Canada over the next three to five years so as to provide the producer with sufficient assurance as to future prices in order that uncertainty in investment decisions could be reduced; there would then be less tendency to defer making them;

3) in the Board's view, the present schedule of field prices in British Columbia, where there is no explicit royalty, is unlikely to lead to a sufficiently vigorous exploration and development program and this will cause a continuation of the existing shortfall in deliverability. If this situation is to be improved, it seems essential that the B.C. Government should review its schedule of field prices in relation to those expected to prevail in Alberta and to the opportunities for exploration which now exist in the United States;

4) review by producers and provincial and federal governments of what further incentives might be needed beyond those identified above to encourage:

   (a) the early connection of discovered but not yet connected reserves; and

   (b) the maintenance and, where possible, increase of deliverability from reserves now connected;

5) assuming the domestic pricing issues have been resolved, it would in the view of the Board be in the public interest of Canada if the Alberta Government, in the light of the new circumstances prevailing, were to release the permits removal for TransCanada Pipelines already approved by the Alberta Energy Resources Conservation Board. It would be helpful to add removal permits to Alberta and Southern's permits so that gas under contract to that company can be more readily made available to relieve shortage East of Alberta. In addition, it would assist in planning measures to relieve the shortage if the Alberta Government were to make available annually a five-year forecast of deliverability, consumption in Alberta, and the quantity of gas which might be authorized for removal from the province.

PRICING

The Board's recommendations on pricing are intended to meet as equitably and fully as possible the interests of producing provinces and of Canadian consumers in such a way as to bring optimum advantage to Canada as a whole. The most appropriate pricing policy, when the bulk of production for use in Canada East of Alberta comes from one province, must recognize the interests of that province.

The Board recommends, for the purpose of conserving a valuable non-renewable natural resource and inducing exploration for the development of new supplies, that domestic prices of gas be phased in to commodity value — using as a major yardstick the Btu equivalent of the price of Canadian crude oil at Toronto — over about a three-year period.

The Board further suggests that the price of natural gas should be high enough when Frontier gas reaches markets to ensure development of the resource base for Canadian use. In the longer term, the Board recommends that consideration be given to maintaining a two price system, one for domestic sales and one for exports, if future supply developments are such that Canadians and Canadian industrial development can take advantage of a favourable natural gas resource base. The price to Canadians should be cost related in the broad sense of being adequate to ensure further development in supply; the price for exports should be related to the cost of alternative energy supplies in the export market.

CONSERVATION

The Board endorses the programs of conservation being undertaken and proposed by federal and provincial governments and would hope to see them strengthened.

In this regard, the Board attaches importance to the absolute saving of energy, rather than merely encouraging gas users to convert to oil, the longer term supply of which may be equally or more uncertain.

NEED FOR ALLOCATION

The Board recommends enactment of legislation to provide for powers of allocation.

The purpose of the legislation would be to ensure that gas to meet approved foreseeable requirements for use in Canada is given priority over exports and that, to the extent that gas available for use within Canada is less than the total Canadian demand, the available supply is delivered on an equitable basis in relation to the requirements of the various provinces in which Canadian gas is consumed.

EXPORTS

The National Energy Board Act requires that Canada's energy needs be protected and permits the export only of surpluses in excess of "reasonably foreseeable requirements for use in Canada". It was never the intent that, should circumstances arise which could not be foreseen when a long term licence was issued, Canadians should be denied the right to use their own energy resource. Export licences, issued by the Board with the approval of the Governor in Council, authorize the export of "not more than" certain daily, annual and total amounts and are not a commitment to maintain the maximum permitted export levels.

The Board proposes to take appropriate action under Section 17 of the Act, for the purpose first, of inserting a condition in all existing export licences making the annual and daily entitlement conditional on approved Canadian requirements being met, and second, of making cumulative those licences which are not now cumulative. Consideration could be given to making up any shortfall in any new export authorizations if and when they may be approved.

The Board recommends to the Government that the Government exert control over the exports of first stage derivative chemicals produced from natural gas as a feedstock which are not now subject to control under the National Energy Board Act. This appears to be essential to safeguard Canadian requirements for natural gas to ensure development in Canada of the secondary and tertiary stages of the chemical industry. The Board controls the export of ethylene but does not have control over such gas-based materials as ammonia and methanol.

With regard to the calculation of surplus for purposes of disposing of export licence applications, the Board will henceforth make a case-by-case assessment of reserves and deliverability both when licences, if any, are issued and at appropriate subsequent intervals. This will include both a Canada-wide assessment and one based on each delivery system. All future exports will be conditioned so that Canadian requirements will have continuing priority.

It is clear that great reliance for Canada's future needs is being placed by many who made submissions to the Board on anticipated gas supplies from the Beaufort-Mackenzie areas and the Arctic Islands. Although the extent of reserves so far discovered in the Beaufort-Delta area and the Arctic Islands is still far short of the amounts needed to resolve all concern about future supply, the Board believes that Arctic or other Frontier reserves are likely to be developed more fully and does not recommend cessation of all natural gas exports at this time. In fact, cutting off all exports at once would extend our period of self-sufficiency only very marginally compared with phasing out exports, as necessary, to meet Canadian needs. See Figure No. 30 on page 72. The same figure shows that such a phasing process does considerably extend the time during which Canadian requirements can be met from non-Frontier sources.

If it becomes apparent that Arctic reserves will not materialize in significant quantities or if whatever reserves may be proven should not be connected to market, the government should then seek an arrangement with the United States under which any further Canadian exports, under existing licences, would be repayable in gas. Further measures may require consideration if the supply and deliverability situation does not materially improve.

PLANNING

The Board recommends that a committee or council with representatives from all sectors of the gas industry and provincial and federal governments be formed:

1) to study and advise upon means to reduce the impact of the impending gas shortage;

2) to study and advise upon means of using to best advantage the surge of natural gas expected to be available and when gas from Frontier regions is connected to markets.

The Board is well aware that the problems we face cannot be solved by any new arrangement for consultation and discussion. The differences of view in Canada reflect real differences

(ii) *Views of the Board*

The Board is required to determine the reasonably foreseeable requirements of natural gas for use in Canada and to consider for export only the surplus, if any, above this amount. Clearly a procedure for calculating or determining surplus is necessary.

The Board considers that any procedure envisaged should have as many of the following characteristics as possible.

1. It should be easily understood and applied.
2. It should incorporate gas deliverability rather than reserves in the supply considerations.
3. It should be flexible to respond to changing circumstances.
4. It should provide continuing protection for Canadian demand throughout any period of export.
5. It should provide incentive and encouragement to the gas industry.
6. Licensed export commitments should be satisfied to the extent possible.
7. It should reserve for Canadians any benefits from conservation restraints undertaken by Canadians.

However, attainment of the primary objective of an immediately usable and effective procedure, with the capacity for incorporation of all of these characteristics at this time, is not considered practical under prevailing circumstances. The Board recognizes the probability of insufficient near term supplies of gas to cover fully both the quantities of gas licensed for export and the quantities required to meet increasing Canadian demand and sees little possibility of this problem being resolved within the next few years. Since the Board intends to carry out its responsibilities under the Act to ensure that supplies of gas are available to meet Canadian demand before allowing gas exports, the real problem lies in the treatment of existing licences for the export of gas, rather than in theoretical schemes to determine conditions and circumstances under which additional exports of gas might be authorized.

Nevertheless, the Board recognizes that, for the guidance of both industry and the public, it is desirable to establish general principles which could form the basis of a surplus calculation procedure in the future.

The surplus calculation procedure would be based on gas deliverability and gas demand schedules developed for as far into the future as reasonable forecasting accuracy and data dependability will permit. The comparison of these two schedules will indicate the feasible volumes, rate and timing of exports. Unsatisfied volumes under existing export licences would normally have prior call upon any amounts of gas that may become surplus and available for export in the future by this procedure. All future export licences will be for short periods and will be conditioned in order that Canadian requirements for gas will be met, on a day to day basis, before any gas is exported.

Therefore, beyond stating these general principles, the Board intends to defer the development of a structured gas surplus calculation procedure until such time as its application can reasonably be expected to be needed.

It will, however, conduct and publish an annual review and reevaluation of the supply, demand and deliverability of natural gas.

CANADIAN OIL SUPPLY and REQUIREMENTS

National Energy Board

September 1975

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Related Matters

rate of return

Financial

i) Views of Submittors

Submittors were generally less optimistic in their producibility forecasts this year than they were a year ago. In terms of producibility from established reserves this was stated to be due mainly to the failure of the larger producing pools to perform as well at the peak as had been predicted. The other major reason cited, and this applies to all categories of supply, was the financial situation of producing companies. This was stated to be affecting exploration and development in two ways:

a) insufficient economic incentive to undertake major capital investment projects in Canada,

b) a general lack of confidence in the Canadian investment climate.

To support these claims, several companies provided estimates of their retained cash per barrel before and after the April 1974 price increase agreed upon by the Federal and Provincial governments. Estimates of retained cash prior to April, 1974, ranged from $1.53 per barrel to $2.04 per barrel. Estimates for a year later, following the $2.70 per barrel price increase and various tax and royalty changes, ranged from $0.24 per barrel to $2.26 per barrel.

In the short term, submittors felt that increases in producibility through major field facility expansions, infill drilling programs, etc. would be discouraged. For the longer term, there would be an adverse effect on exploration efforts, and expensive tertiary recovery programs.

Imperial proposed what it felt was a suitable program to stimulate investment. Firstly, companies must be permitted to retain 35 percent of the revenue stream after operating costs. Secondly, oil prices must be permitted to rise to world levels.

Submittors suggested that for confidence to be restored, they required stability in policy and favourable attitudes by governments.

Several companies were asked for views regarding an acceptable rate of return for the petroleum industry. Estimates ranged from 9 to 20 percent discounted cash flow rate of return. Some companies declined to cite any fixed rate of return because of the uncertainties of inflation.

ii) Views of the Board

The Board did not request financial information in its Notice of Hearing, or in its Outline for Submissions. However, the economic climate obviously has a major effect on producibility forecasting, and the Board has received the information under "related matters".

In its own producibility forecasts, the Board has assumed an economic climate suitable for vigorous petroleum exploration and development activities. The matter of revenue-sharing between producers and governments, and the appropriate crude oil prices are questions involving both levels of government and the Board does not feel it is appropriate to pursue the matter within the context of this report. It is the Board's opinion that the need for an adequate share of revenue flows to remain in the hands of industry is a matter now more fully appreciated by all levels and departments of government.

Licensing Exports by Grade of Crude Oil

This subsection of the report deals with the views received and the Board's views concerning the need to license exports of crude oil by grade. Although the Board did not specifically request views on this matter, evidence was accepted as being appropriate under "related matters".

For the purposes of this subsection, indigenous feedstocks include synthetic crude oil and pentanes plus.

i) Views of Submittors

Most of the evidence received from those addressing this question favoured the adoption of special licensing by crude type, particularly heavy crudes, whereas in previous discussions with interested parties the Board had received a generally negative response to the suggestion of separate licensing.

It was stated that heavy crude oil requires relatively stable producing conditions for maximum efficiency and that abrupt changes in production levels could impair ultimate recovery. It was also suggested that achieving high levels of production is not possible on the basis of the current Canadian market

for these crudes. There was general agreement that once Interprovincial Pipe Line Limited facilities were extended to Montreal, the domestic market could expand to include those Montreal refiners now utilizing imported heavy crudes. This would tend to maintain economic production levels without the need to rely on exports of these crudes. Until that time, however, heavy oil production would be greatly dependent upon export markets. Consequently, it was recommended that separate licensing be introduced to preserve the access of heavy crudes to export markets. Separate licensing was also advocated on the grounds that it would contribute to orderly marketing negotiations. There was some agreement, however, that appropriate pricing of heavy crudes could eliminate the need for such action. The evidence indicated that separate licensing was not required at this time to protect the needs of Canadian refiners.

The AERCB spoke against separate licensing and in favour of the free operation of purchaser nominations as the best method of ensuring maximum production of particular grades. It was stated that separate licensing increases administrative problems arising from unexpected changes in demand for and supply of particular grades and it was recommended that the Board adopt a common licensing system for all grades of crude oil and equivalent.

ii) Views of the Board

The Board has given consideration to separate licensing by grade of crude with respect to safeguarding the supply of specific types of feedstocks for Canadian market requirements and with respect to assuring an export market for heavy crude surplus to Canadian requirements.

Separate licensing by crude type as a method of assuring that the requirements of Canadian refiners are met is warranted whenever there exists sufficient risk of a particular type of crude being exported in preference to satisfaction of the Canadian demand for it. From information currently available, the Board does not see the need, at this time, to license heavy crude separately as a protection procedure for Canadian refineries. Furthermore, although pentanes plus have been licensed separately from other feedstocks since oil export controls were introduced in March, 1973, the Board intends to give consideration to the view expressed by the AERCB that separate licensing should be discontinued. The advantages and disadvantages will be discussed with the parties most affected, primarily from the viewpoint of providing protection for Canadian requirements.

From time to time, pentanes plus and heavy crude, each of which has certain production inflexibilities, have been in surplus supply, creating serious disposal problems. These circumstances provided opportunity for some assessment of the effectiveness of licensing by individual grade as a means of improving the flow of a particular stream to the export market. Experience has shown that the elimination of such surpluses usually turned upon pricing action.

Refiners WOV mainly process light and medium crude oils and, as stated previously in this report, most heavy crude oils are exported. With the projection of a phase-out of crude oil exports, it is understandable that some heavy oil producers anticipate increasing problems in the disposal of their production. The Board recognizes that separate licensing could have some beneficial effects on the marketing of heavy crude oils on the assumption that if export customers are severely limited in their choice of alternative sources of supply, they might be encouraged to purchase greater volumes of Canadian heavy crudes. There are, however, several potential developments which could improve the market demand for heavy crude oils. Some of these potential developments are:

(a) Preferential Import Allocations

Several of the refineries located in the so-called "Northern Tier" of the United States ("U.S.") have historically been the main export customers for heavy crudes. These are, physically, the most dependent of all U.S. refineries on supplies of Canadian crude oil. It is the Board's understanding that the U.S. Federal Energy Administration is reviewing methods whereby these refineries might receive preference in the allocation of Canadian imports. The extension of such preference may present greater opportunity for export sales of heavy crude oil.

(b) Exchange Agreements

Officials of the Canadian and U.S. Governments have had discussions on possible methods of continuing supplies of crude oil to refiners in the Northern Tier in view of the anticipated phasing out of Canadian exports. The method which appears to have greatest promise is the exchange of

crude oils between U.S. and Canadian companies. An example of such an exchange is one in which Canadian crude oil would be delivered to a Northern Tier refinery by a Canadian oil company and the U.S. company would deliver in return U.S. domestic crude oil or equivalent at Chicago for delivery to Ontario by the Lakehead – Interprovincial pipeline system. Such agreements, which it is expected would be on a barrel for barrel exchange basis, could maintain the demand for Canadian heavy crude oil if the United States refinery receiving the Canadian oil were a heavy crude processor.

(c) Increased Canadian Demand

Refineries located in Montreal are capable of processing heavy crude oils. It was stated in evidence that the opportunities to market Canadian heavy crudes would be increased when there is a pipeline connection from Western Canada to the Montreal area.

(d) Wellhead Price Adjustments

The demand for specific crude oils can usually be increased by price reductions. Since November 1974, export flows of heavy oils have been maintained by applying lower export charges than those for light and medium crude oils. It is some time since wellhead prices have been adjusted for quality differentials and action in this regard could increase the marketability of heavy crudes in both Canada and the U.S.

After giving due consideration to all relevant views and information it is the opinion of the Board that:

- demand for any crude type is primarily a function of its price and product yield for individual refiners relative to other feedstocks;
- licensing by grade introduces a degree of inflexibility which may aggravate any surplus problem associated with that grade; and
- licensing by grade for the purpose of expanding the market for particular types of crude would be largely ineffectual.

Licensing Exports by Province of Origin

This subsection of the report deals with the views received and the Board's views concerning the desirability of licensing exports of crude by province of origin. For practical purposes such a procedure would involve only oil from Alberta and Saskatchewan. Evidence on this subject was accepted under "related matters".

i) Views of Submittors

The two major oil producing provinces provided opposing views on this point.

Saskatchewan based its argument in favour of allocating the surplus between provinces on the relative differences in the economics of crude oil production in Alberta and Saskatchewan. It was pointed out that Alberta with its greater number of producing wells and its higher production rate per well has a greater capability for reducing output before reaching the minimum economic level of well production. Saskatchewan suggested that the Board, by not allocating the exportable surplus between provinces, places a disproportionate burden on Saskatchewan.

The imposition of a formal system of sharing the export market between Alberta and Saskatchewan was opposed by the AERCB on the grounds that it would mean not only a loss of provincial control over its energy resources, but would also result in administrative complications and increasing marketing rigidities. Concern was expressed that licensing the exportable surplus by producing province would inevitably lead to further extension of control over the domestic market and to allocation by crude type. It was suggested that experience to date has demonstrated the efficacy of a simple, flexible system of export controls.

ii) Views of the Board

Federal restriction on the export of crude oil inevitably has an effect on provincial control over energy resources. Increasing restriction may further affect provincial controls and might at some point give rise to inequities between individual provinces or producers of differing qualities of oil. Redress, however difficult and administratively complex, may then become desirable.

In the Board's judgment, such a point has not been reached. Moreover the Board is not yet persuaded that the adoption of licensing by province of origin would necessarily provide ready solutions to the multiplicity of problems which future developments could bring. The Board intends to keep the matter under continuing review.

Conclusions

This is a report on the evidence and opinions presented at the second hearing called by the Board in the matter of Canadian oil supply and Canadian oil requirements and volumes of oil surplus to such requirements. The views of submittors and of the Board concerning each of the main subject matters have been recorded in the preceding chapters. The Board's conclusions follow.

Supply

The Board requested that data be provided in a specified format to ensure that supply information for some 160 pools and areas was submitted on a uniform basis. While not all data sheets were complete in all respects, the Board is satisfied that the information provided, together with the detailed studies of its own staff, has resulted in a reliable forecast of the producibility from established reserves. However, this does not obviate the necessity of updating the forecast in the future in the light of changing circumstances.

As described more fully on page 2, the Board has adopted as its measure of potential producibility, the maximum producibility which would be achieved in a field or pool after a period of 90 days for any necessary remedial work. As indicated in Figure 5 on page 25 of the report, the forecast of producibility based on the current data and studies for established crude oil reserves differs little from the forecast presented in last year's report. The slightly lower producibility in the first half of the period is offset by slightly higher estimated producibility in the second half of the 20-year forecast period.

In reviewing the evidence presented and its staff studies, the Board concluded that its forecast of additions to crude oil reserves presented in the October 1974 report remained valid. Its estimate of producibility from these reserves additions as shown in Figure 6, page 27, is somewhat lower than that shown in the last report because reserves which have been added in the interval are now included in established reserves.

Similarly, the Board decided to adhere to its October 1974 forecast of producibility of pentanes plus from established reserves and reserves additions after reviewing the evidence presented at this hearing. This forecast is shown in Figure 7, page 28. A major change in the supply-availability picture results from the evidence presented concerning oil sands producibility. Although the Board has confidence that additional oil sands plants will be built, it has become apparent since the last hearing that such plants will not be constructed at the rate previously anticipated. For the reasons outlined on page 28 the Board has "stretched out" its previous schedule of plant construction, resulting in a million barrels per day productivity level being reached in 1994 instead of in 1991 as previously estimated. The difficulties in financing the Syncrude project have been well documented and need no further comment by the Board. In view of the long lead times required for planning and completion of oil sands plants, there is a need for co-operation between industry and governments to foster development of additional mining and in situ plants with the least possible delay.

In so far as frontier oil reserves are concerned, there has been insufficient change in the situation in the last year to warrant the Board giving any recognition to possible oil producibility from frontier regions within the 10-year protection period.

The Board's current estimate of potential producibility of crude oil and equivalent for the next 20 years is shown in Figure 9, page 31. Reductions in producibility in a particular year from the corresponding estimate in the October, 1974 report range from some 50 Mb/d or 2 percent in 1975 to some 180 Mb/d or 13 percent in 1984, and average some 130 Mb/d or 8 percent over the period to the end of 1993. These reductions are largely due to lower anticipated producibility from established reserves and reserves additions in the earlier years of the forecast and due to the changed outlook for the rate of oil sands development in the later years of the forecast.

Requirements and Conservation Considerations

The Board received more detailed evidence on Canada's requirements for petroleum products and for refinery feedstocks than was available to it for its last report. In addition, at this hearing definition and quantification of conservation as an element in demand forecasting were presented for the first time. The chapter entitled "Requirements and Conservation Considerations" deals with these matters in detail.

The Board appreciates the assistance given to it by submittors in the matter of estimating energy savings which reasonably can be attributed to "conservation". As shown in Figure 10, page 32, the Board presently estimates that conservation will result in a reduction in potential demand for petroleum products in Canada in 1994 of some 445 Mb/d or 13 percent. This is an aspect of demand forecasting which requires additional research and on which additional views will be sought by the Board as more experience is gained. The Board's estimates of requirements for indigenous feedstocks, before and after taking into account anticipated energy conservation, are shown in Appendix E, Table 16. As indicated in the discussion commencing on page 42, the plans of industry with respect to product imports, inter-regional transfers, product exports and therefore expected levels of refinery utilization must all be considered in forecasting feedstock requirements. The Board carefully considered the evidence and also utilized its own knowledge of the plans of individual companies concerning these operating matters.

In the October 1974 report, the Board recognized that security of products supply afforded by incremental refining capacity beyond normal Canadian requirements would be desirable. The report further expressed some concern that exports of refined products resulting from the processing of Canadian crude might increase significantly, but expressed confidence that the existing product licensing requirements provided sufficient checks and balances to ensure that refineries would not be built to process Canadian oil for the sole purpose of serving the export markets. The Board still believes this to be the case but also recognizes that as the level of authorized exports of petroleum products becomes a larger proportion of total exports of crude and products, it may become desirable to take it into account in the calculation of exportable surplus. Views of interested parties will be sought on this matter at the next hearing.

The Board's current estimate of requirements for indigenous feedstocks, including those EOV, before making provision for conservation are in reasonable agreement with those shown in the October 1974 report. For the years 1980, 1985 and 1990 for example, the current estimates are higher by some three to four percent. After allowing for conservation effects, the current estimates are lower than the previous estimates for the years 1980, 1985 and 1990 by 1.9, 4.2 and 6.3 percent, respectively.

Protection for Canadian Requirements

The application of the formula for the protection for Canadian requirements, using the supply and demand data resulting from the hearing has been discussed in the chapter entitled "Protection for Canadian Requirements" commencing on page 44.

As may be seen from Figure 21, page 46, the period of protection for Canadian requirements without conservation, for indigenous crude oil and equivalent would be 6.2 years from 1 January 1976. The time of intersection of the supply and demand curves, i.e. early 1982, compares to the corresponding intersection at the end of 1983 shown in the October 1974 report. The period of protection for the anticipated actual requirements with conservation is estimated to be 6.8 years.

The shortening of the period of protection by even as little as one year (over and above the passage of one year's time) must be regarded as serious when the total period of protection is now indicated to be only some seven years. In view of the extended lead-times required for pipelines and related facilities, there is a requirement for a commitment by both industry and government to a continuing review of the alternatives available to Canada to meet its long-term crude oil needs. Steps should be taken now to achieve this objective.

The strong views of the industry with respect to the need for a greater percentage of cash flow to be retained by industry to finance exploration and development have been recorded elsewhere in this report and in other recent reports of the Board. Steps taken by the Federal government and Provincial governments to reduce the taxation and royalty burdens, since the hearing, undoubtedly will help to restore impetus to the petroleum industry. Whether or not these steps are adequate can only be determined by continued surveillance of the effects on exploration and development activities.

On the demand side, it is the expressed policy of the Federal government to encourage conservation of energy by

all means possible and the provinces are also pursuing the same over-all objective. The matter of reducing demand for Canadian feedstocks through greater restriction of product exports will be a subject for future consideration.

Exports of Crude Oil and Equivalent

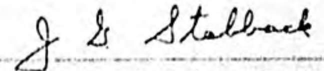
The application of the formula for the protection for Canadian needs results in allowable exports for 1976 of 460 Mb/d, as shown on page 44. However, the Board believes it would be in the interests of the producers and the U.S. export customers to have the formula applied on a monthly basis in 1976, to take into account demand served by the Sarnia-Montreal pipeline plus line fill. This should result in more uniform levels of production and higher levels of exports in the first half of 1976 and lower levels of exports in the second half of 1976 than would otherwise be the case. After 1976, average annual levels of exports could be authorized without causing wide fluctuations in producing rates. It is the Board's intention, therefore, to authorize exports in 1976 initially at the level of 510 Mb/d. After commencement of deliveries of oil to the Montreal pipeline extension at Sarnia, the export levels will be reduced in accordance with the formula. When the throughput of the line reaches the planned level of 250 Mb/d, the authorized level of exports will become 385 Mb/d.

The 1976 levels of exports mentioned above indicate significant reductions from the current level of authorized exports of 750 Mb/d. However, it may be recalled that in announcing the levels of exports for 1975, commencing at 800 Mb/d, the Honourable Donald Macdonald, Minister of Energy, Mines and Resources, indicated the intent to seek a reduced level of exports of 650 Mb/d commencing 1 July, 1975. However, as a result of reduced demands by export customers in the first half of 1975, authorized exports for the last half of the year were adjusted to 750 Mb/d.

The 1976 level of authorized exports forecast in the 1974 report was some 560 Mb/d, on the basis of the supply and demand data available at that time. The new levels of authorized 1976 exports, averaging 460 Mb/d, represent a reduction of some 100 Mb/d from the level anticipated for 1976 a year ago. As indicated in this report, the reduction is largely because of a changed outlook on forecast producibility from western Canadian sources of oil.

Licensing Systems

Finally, the desirability of licensing feedstock exports by grade of crude and/or by province of origin was again reviewed by the Board. In light of the mixed views expressed at the hearing and the Board's own knowledge and experience, the Board does not intend to reduce the flexibility in licensing by such segregation at this time. The system will be kept under continuous surveillance with a view to making such changes as may be warranted by future circumstances.



Associate Vice-Chairman

Member

Member

Alaska State Legislature

Senate

JUNEAU, ALASKA

May 23, 1977

TO: Bill Luria, Division of Policy Development & Planning
Office of the Governor (mailstop 0164)

cc: Gregg Erickson, Legislative Research (mailstop 3100)

FR: Connie Barlow CB

RE: National Energy Board of Canada documents

Thank you for routing the NEB documents to our office. During the interim could you route them to Gregg Erickson, Legislative Research?

Thanks.

Canada's Resources and the National Interest

A Summary of a Report
by an Independent Task Force on the Crisis
in the Development of Canada's Mining
and Petroleum Resources

A Report by an Independent Task Force on the Development of Canada's Mining and Petroleum Resources

SUMMARY

R. D. BROWN, CHAIRMAN
Senior Tax Partner, Price Waterhouse & Co.

E. P. CHAPMAN
Consulting Minerals Engineer

J. E. GANDER
Special Adviser to the Chairman, Economic Council of Canada

THE HONOURABLE ERNEST C. MANNING
The Senate

A. E. PALLISTER
President, Pallister Resource Management Ltd.

D. D. PETERS
Chief Economist, Toronto-Dominion Bank

L. A. THORSSEN
Executive Director, Canada West Foundation

January 1977

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Alberta

ENERGY AND
NATURAL RESOURCES

File No.

Telex 037-3676
Petroleum Plaza — South Tower
9915 - 108 Street
Edmonton, Alberta, Canada
T5K 2C9

April 6, 1977

PUBLICATION NOTICE

ENR REPORT NO. 1 (162 p.)
March, 1977

A History of Crown Rentals, Royalties and
Mineral Taxation in Alberta to December 31, 1972

This review relates to the history of rentals and royalties payable to the Crown on Crown minerals within the Province of Alberta during the administration of the mineral resources:

a) by the Federal Government until the transfer of the natural resources to the Province on October 1, 1930, and

b) by the Provincial Government until the end of 1972.

Companies or individuals wishing to purchase this new publication are asked to write to Alberta Energy and Natural Resources at the address given below. Each purchase should be accompanied by a cheque or money order for the sum of $10.00 Canadian funds.

Alberta Energy and Natural Resources
Information Services, Publication Section
10th Floor (B)
Petroleum Plaza, South Tower
9915 - 108th Street
EDMONTON, Alberta
T5K 2C9

TO: C. Barlow
AA to President Roder
Alaska State Senate

FROM: J. Rhode
AA, House Finance

This booklet summarizes the main findings and recommendations contained in the full Report of the Task Force, which is published as a separate volume. The Task Force has also published the following four research studies as appendices to its main Report:

Taxation of Non-Renewable Resources	*Appendix A*
Canada's Oil and Gas Resources	*Appendix B*
Canada's Mineral Resources	*Appendix C*
An Oil and Natural Gas Energy Plan for Canada 1977-1985	*Appendix D*

The main Report and its accompanying appendices set out in more detail than is possible in this summary the sources of statistics and other material, the methodology and assumptions underlying projections, and the background of recent developments in the resource sector.

Copies of the report of the Task Force and its appendices and additional copies of this summary are available at a price intended to recover publication costs only from: The Canada West Foundation, P.O. Box 1030, Calgary, Alberta T2P 1T4.

Preface

This booklet is a summary of a report prepared by an Independent Task Force on the critical policy choices facing Canada with respect to the development of its mining and petroleum resources.

The Task Force was organized under the initiative of the Canada West Foundation, a non-profit organization supported by individuals, corporations, and provincial governments in Western Canada. However, the Task Force operated entirely independently of the Canada West Foundation, and this summary and the report of the Task Force are issued solely on the responsibility of the Task Force and without any prior review or endorsement by the Canada West Foundation or any other body.

The report of the Task Force represents a culmination of almost two years of research and discussion concerning the fundamental problems facing Canada with respect to the development of its resource industries. The report expresses the concern of the members of the Task Force that, unless action is taken now, Canada will fail to secure the benefits that it should from the use of our national heritage of mineral and petroleum resources.

The main report of the Task Force is accompanied by four major research studies, published as Appendices to the main report, and covering the broad subjects of the taxation of non-renewable resources, a survey of our oil and gas resources, a survey of our other mineral resources, and a possible plan for the development of our oil and gas reserves in the coming decade.

At the beginning of 1976, the Task Force released a preliminary draft of its main report to representatives of federal and provincial governments, industry and other concerned parties for their review and comment. Subsequently, members of the Task Force have had the benefit of many discussions with government and industry representatives on this preliminary draft: the Task Force gratefully acknowledges the assistance which it has received in these meetings, and from other sources, in the preparation of this report.

However, the Task Force accepts sole responsibility for its work, which is not necessarily endorsed by the organizations which have assisted in providing material or by the organizations to which the members of the Task Force themselves belong.

This booklet represents only a summary of the Report's main discussion and conclusions, and readers are referred to the main report itself, and to the accompanying research studies, for a further elaboration of the arguments and conclusions contained herein.

This summary, together with the accompanying report and studies, is being issued by the Task Force to assist in the review of Canada's resource policies and the development of Canada's resources in the national interest.

January 1977

A decline in our living standards and a crippling dependence on foreign fuels: that is the prospect which could face Canadians within the next ten years unless we take action now to reverse the results of our present resource policies.

Without a rationalization of our present mineral and petroleum policies, and encouragement for the massive new resource investment that we require to buttress our economy, The Task Force believes that Canada could suffer by 1985:

– a continuing decline in mining production, employment, and exports

– a multi-billion dollar trade deficit in oil, and a long term dependence on imported fuel.

The combined impact of these two developments would deal a heavy blow to the country's economy, and to the welfare of all Canadians.

A number of factors have contributed to the impending crisis. They include:

– a dramatic increase in the cost of our future resource supplies: our mineral and petroleum reserves are vast but increasingly lean, difficult of access and expensive to extract, process and transport

– extraordinary tax and royalty hikes which have virtually stripped the producing industry of both the ability and the incentive to commit huge sums to resource development

– a climate of uncertainty brought about by federal and provincial government wrangling and a royalty and tax structure which is counter-productive, fails to direct reinvestment to needed high risk developments and imposes burdens unrelated to the industry's ability to pay

– a failure to implement, through specific actions, the general resource policies which have been articulated by governments.

The result is an acute scarcity of new investment capital, and a reluctance on the part of resource industries to invest in high cost, high risk ventures.

Despite numerous conferences, position papers, policy statements and new programs, the blunt fact is that we are not now spending the funds necessary to maintain the relative contribution of the mining sector to our economy in the years ahead, or to bridge the yawning energy gap facing Canada.

Over the past months, both federal and provincial governments have shown increased awareness of the problems which confront resource industries, and have translated some of that awareness into new and positive legislation and policies. While the Task Force welcomes this trend, it believes that the situation is still critical, and calls for more far-reaching, more determined, and more coordinated policies.

> Complete petroleum self-sufficiency for Canada is likely to be extraordinarily expensive to achieve, and is not necessarily desirable. But since oil and gas will jointly continue to contribute the bulk of our energy requirement in the foreseeable future, we must make a concerted effort – now – to recapture at least the ability to produce enough oil and gas combined to either eliminate net imports or reduce them to manageable proportions. The delays which have already occurred in the development of our frontier resources will cost the country billions in additional petroleum imports and lost mineral exports in the years ahead.
>
> At the same time, we must create a more stable and rational environment for our mining industry so as to prevent the probable decline in metal production which will otherwise occur within the next ten years – a decline which will see a serious loss of jobs, tax revenues, and export earnings occurring at the same time when we will face massive bills for imported fuels.

The pursuit of these two objectives will require the active and informed cooperation of governments, industry and the public.

Governments — both federal and provincial — must:

- Place greater emphasis on the national interest in resource development
- Formulate coordinated long term policies for resource development to restore a climate of confidence among investors
- Implement a fair tax and royalty system, designed to attract risk capital and encourage exploration and development, particularly in the high risk but vital frontier areas
- Encourage efforts to develop new energy sources and means of conserving energy
- Work out settlements of native land claims and environmental issues related to resource development.

The resource industry, for its part, must recognize the reality that the era of automatic preferential treatment is at an end, and that future important incentives may well be related to reinvestment in critical new resource projects. The petroleum industry in particular must accept the fact that government involvement in northern and other frontier development has become both politically inevitable and an economic necessity.

Finally, the public will have to accept more rational, consistent and long term policies for the utilization of our common resource heritage. We will have to restrain our insatiable appetite for energy and for metals. Even a decrease of one tenth of one percent in the annual growth rate of our energy consumption would result, by 1990, in savings equivalent to the output of an entire oil sands plant with a cost in excess of $2 billion.

All of these measures must be implemented *now* if they are to have the desired effect. Given the time lag between exploration and the achievement of production from a mine or oil field, 1985 is just around the corner.

OIL

In Canada's economic history, 1975 marked the end of an era. That is the year when the country lost its self-sufficiency in oil, a state which many Canadians had come to regard as their birthright. As late as 1974, our oil exports still exceeded imports by $761 million. In 1975, imports topped exports by $247 million, for a turnaround of more than $1 billion in our trade balance. For 1976, our net oil import deficit is estimated at $870 million (although we still have — temporarily — a net export surplus on oil and gas combined).

That is only the beginning. Our net trade deficit in oil has already embarked on a steep growth curve which certainly will not level off before 1985, and which will quite possibly keep on climbing for the balance of the century. Even in the more immediate future, the continued growth in demand, combined with a drop in discovery rates and a decline in production from established western Canadian

CANADA'S TRADE IN CRUDE OIL AND NATURAL GAS

	$ Million		
	1974	1975	1976 (Estimated)
Crude Oil			
Exports	3,407	3,052	2,150
Imports	2,646	3,299	3,020
Surplus (Deficit)	761	(247)	(870)
Natural Gas			
Exports	494	1,092	1,520
Net balance	+1,255	+845	+650

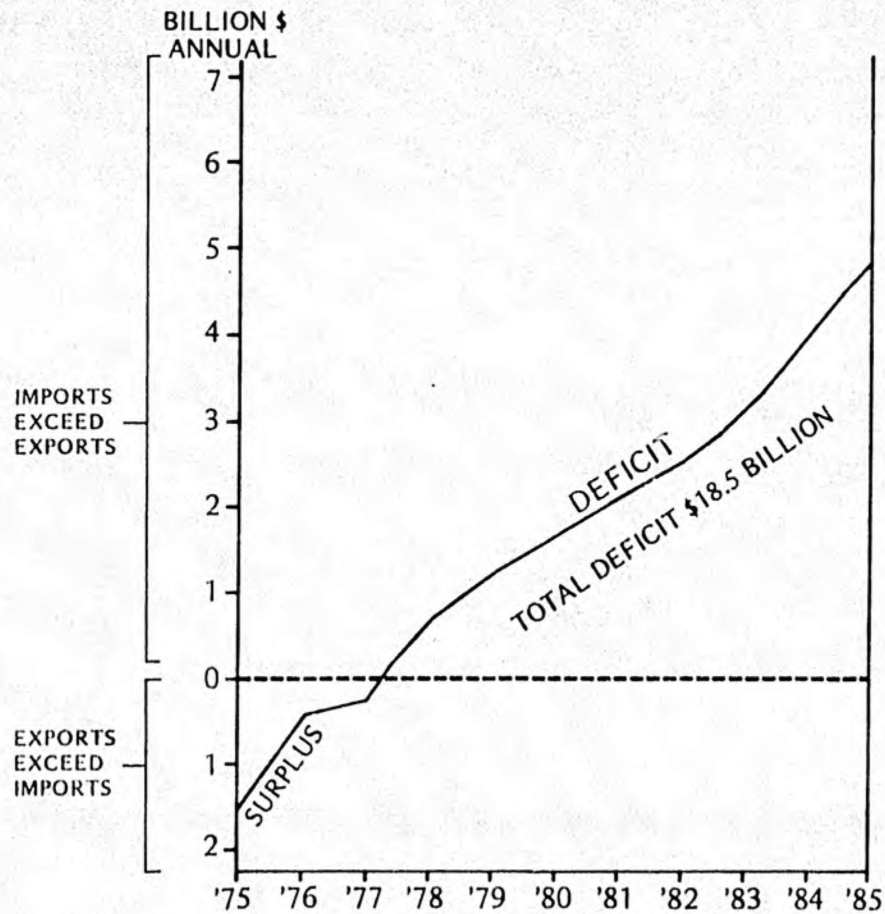
SOURCE: Statistics Canada for 1974 and 1975: preliminary estimate for 1976 supplied by Economics Research Department, Toronto Dominion Bank.

NOTE: Oil exports in 1976 amounted to 173 million barrels, while imports totalled 254 million barrels. Oil exports will be virtually phased out by 1980. Exports of natural gas equalled 960 million m.c.f. in 1976: gas exports are expected to decline in future, at least until substantial new supplies become available.

oil reserves, will cause a shortage of domestic supplies in markets traditionally served by western oil. Indeed, a recent submission to the National Energy Board suggests that the Montreal pipeline may have to be reversed by 1982 in order to supply southern Ontario with imported oil, instead of oil from Western Canada as in the past.

It appears that, by 1985, western conventional reserves will have declined to the extent where, even with some production from the oil sands, the western provinces will be able to meet less than half of the country's oil requirements.

In the longer term, the bulk of Canada's oil production will have to come from such "frontier" areas as the Arctic, the offshore continental shelf, and from the oil sands and heavy oils in Western Canada. But even assuming a vastly stepped up effort in exploration and development – an effort which so far has failed to take place – oil from these new frontier resources is not likely to supply more than 25% of our domestic consumption much before 1990.



NOTE: Above graph based on 1975 National Energy Board projections, which differ slightly from Task Force estimates: graph assumes no major new supplies of arctic gas. Estimates are based on 1975 oil price of $11.51 barrel remaining constant, and subsequent price increases will increase deficit.

The Task Force believes that, under present tax and economic conditions, increased production from the Athabasca oil sands will provide at best minimal relief within the next decade. Even with substantially more favourable tax and royalty policies, the development of our vast oil sands and heavy oil potential will be slow: it may require a breakthrough in technology before a substantial expansion of oil sand and heavy oil production can be achieved. We must therefore rely on the development of our Northern and offshore oil potential to supplement the declining production from the present conventional sources in Western Canada.

Even with some limited supplies coming from the oil sands and from northern areas, our annual oil imports could climb to as much as 450 million barrels in 1985 and to 700 million barrels or more in 1995 (implying annual import bills of perhaps $8.1 billion and $12.6 billion respectively). To put the matter in perspective Canada's total oil consumption in 1975 was 640 million barrels.

NATURAL GAS

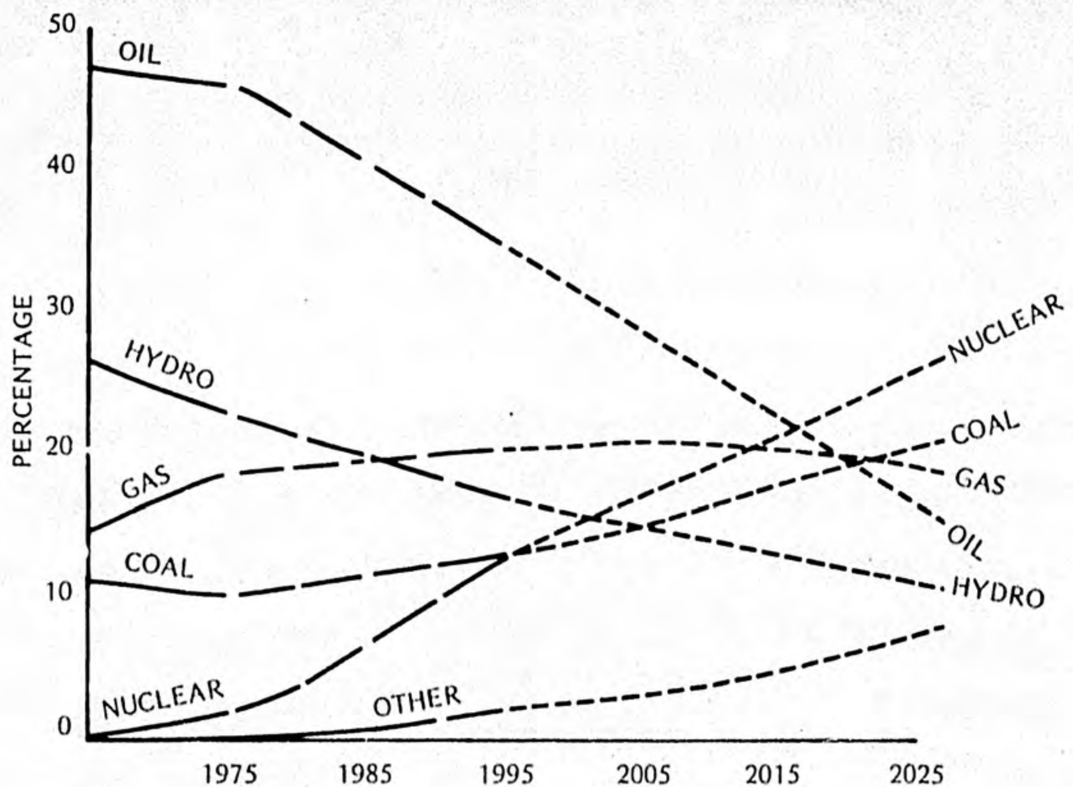
The impending oil crisis can be alleviated to some extent by our relative wealth of natural gas. Present reserves and new discoveries in western Canada should be sufficient to meet both our own requirements and our export commitments up until 1985. In the long run, we are likely to find relatively more gas and less oil in the development of our Northern and other frontiers than we would like to have for our own requirements, possibly justifying some future additional gas exports to help pay for oil imports. But even if natural gas from the Mackenzie Delta and related areas were to become available in the early 1980's, we probably shall not be able to satisfy the demand for natural gas beyond the late 1980's without bringing other new areas into production.

ENERGY

Due to its climate and geography, Canada depends more than most industrialized countries on a steady and growing supply of energy. Canada has one of the highest per capita consumption of energy in the world – and up to last year our appetite for more energy seemed insatiable. The growth in demand for energy can – and should – be slowed by vigorous conservation measures; but barring a major economic upheaval, it will not be halted. Additional energy supplies are needed to provide for a growing population and for a widening of the high standard of living already enjoyed by many Canadians.

Recent events suggest that Canada's recent 5% average annual growth rate in energy consumption may be reduced to below 3.5% within the next ten years, to below 2.5% by the end of the century, and to 1% thereafter. But even if this relatively optimistic forecast should prove correct it would mean that Canada would be consuming 40% more energy by 1985 than in 1975 and over twice as much at the end of the century.

Most of that energy will have to be provided by oil and gas. In spite of growing reliance on nuclear power, coal and new sources of energy, the following chart shows that the contribution of oil and gas to the total energy "mix" can be expected to decline only gradually during the balance of the century from 65% in 1975 to 50% in 2000. In particular, it will take many years before the unconventional sources of energy — such as solar energy and wind or tidal power — can be developed to supply an appreciable portion of our total energy needs.



Source: Appendix D

It is clear that, by 1985 our domestic production of oil and gas will already have fallen short of our still growing energy requirements. Only a massive and prompt investment in exploration, development and infrastructure, can enable Canada to recapture even a reasonable measure of energy self-reliance within this century. Any delay in launching such a program will sharply curtail and possibly close off whatever options we still have to prevent an extraordinary and virtually permanent dependence on imported energy in the years ahead.

The actual quantities of mineral and petroleum resources which can be recovered and made available to Canadians during the remaining years of the twentieth century will depend surprisingly little on the dimensions of the potentially recoverable resources. The real limiting factor is the amount of new investment committed to the discovery and development of these resources.

METALS

Canada's presently operating mines can meet the country's requirements for domestic supplies and exports at something approaching present levels until the mid-1980's. Beyond that, production from presently discovered and developed resources will inevitably decline, and new deposits of copper, lead, molybdenum, zinc and uranium will have to be discovered and developed if mining is to maintain its relative importance to the Canadian economy and to Canadian exports.

Production from our vast mineral reserves has contributed mightily to the building of Canada as a nation, to employment throughout Canada and especially in our remote regions, and to our exports (minerals traditionally have made up about 25% of our total exports).

But the enormous effort required to maintain Canadian mining's economic contribution is simply not taking place. Far from accelerating, exploration activities in Canada have actually been slowing down under the combined impact of rising costs, high taxes, and foreign competition from high grade deposits.

The basic issue is that Canada's mineral resources, while vast, are increasingly lean. Canada has an established international reputation in the field of mining and metal processing technology. Yet in today's adverse environment, the Canadian mining industry is simply not investing the funds required to maintain its relative contribution to the economic well being of all Canadians.

The copper situation is a case in point. Copper has been the second most valuable commodity produced in Canada (second only to petroleum): its sales in 1973 and 1974 amounted to $1.2 and $1.4 billion respectively. But the porphyry type deposits which hold some 45% of our remaining copper reserves are perhaps the lowest grade now being mined anywhere in the world. Because of our low ore grades, high operating costs, and the highly cyclical prices the industry is experiencing difficulty in justifying new commitments.

Canada's iron ore industry, with an annual output of 60 million tons, is losing its traditional markets to higher grade and lower cost ores from such countries as Australia, Brazil, and the United States. Domestic as well as export sales are affected. Mr. C. Bruce Ross, General Manager of Hollinger Mines,

recently told the meeting of the Conference Board in Canada that all of the new iron ore deposits for the expansion of Canada's three major steel plants will be located in the United States. During the years 1970-74 total exploratory drilling for new mines declined in Canada by more than 18%. In 1976, for the first time since World War II, no new mines were under development anywhere in Ontario.

Canada's mineral resources, while vast, are increasingly lean. In today's adverse economic and tax climate, the Canadian mining industry is simply not investing the funds required to maintain its relative contribution to the economic well being of all Canadians.

Without massive new investment in exploration and development, production from our existing mineral resources will decline, especially after 1985 when a number of existing mines will be towards the end of their economic lives. In order to reverse this trend, exploration and development activities have to be expanded – now – to take up the slack of older mines. A possible decline in mineral exports after 1985 would be of extreme concern to Canada, given the fact that we will at the same time be facing large trade deficits in oil.

Unless present trends are reversed, Canada's shortfall in net oil production could amount to some $6.6 billion (1976 dollars) in 1985. The implications of such a massive trade deficit, combined with a presumed decline in metal and natural gas exports, can be summed up under three headings:

BALANCE OF PAYMENTS

Products of mineral industries have always dominated Canada's exports. Along with oil, natural gas and coal, mineral resource exports in 1975 added up to $9.2 billion; historically these have represented 30% or more of our total exports.

Our heavy reliance on primary resource exports has occasionally been criticized as being symptomatic of a "hewer of wood and drawer of water" economy. But the fact remains that Canada's comparative advantage in world trade rests in large part on the country's natural wealth, and our standard of living depends on our ability to find exports to pay for our essential imports of both consumer goods and machinery and equipment. A possible reduction in mineral exports could be viewed with relative equanimity if an increase in other international earnings were readily available to offset the loss. However, there is no evidence that agriculture, manufacturing or the service industries are capable of the vast expansion in foreign markets that would be necessary to redress the balance.

The following table illustrates the hypothetical merchandise trade deficit which would occur in 1985 in the absence of additional fuel and mining development, all other things being equal.

POSSIBLE EFFECTS OF FUEL AND MINING DEVELOPMENT ON CANADA'S BALANCE OF PAYMENTS 1985
(Billions of Current Dollars)

	The Current Situation	No Additional Fuel and Development	Substantial Additional Fuel and Mining Development
	1975	1985	1985
Mineral and Metal Exports	$ 4.6	8.7[1]	20.5[2]
Oil, Natural Gas and Coal Exports	4.6	3.5	5.7[3]
Other Merchandise Exports	23.9	72.5	72.5
Total Merchandise Exports	33.1	84.7	98.7
Merchandise Imports	33.9	97.5	97.5
Merchandise Trade Balance	- 0.8	-12.8	+ 1.2

Department of Economic Research, Toronto-Dominion Bank, July 1976.

Notes:

1. Assuming mining industry achieves 95 per cent utilization of present capacity by 1985 and assuming export prices of minerals and metals increase at average rate of 5 per cent per year. Does not take account of changes in domestic inventories of minerals and metals.

2. In addition to assumption No. 1, capacity volume increase 9 per cent per year.

3. Assumes some natural gas exports from Eastern Arctic in addition to presently licensed export volumes, but no oil exports.

The $12.8 billion annual trade deficit projected in this table for 1985 would, of course, never occur; long before it reached such disastrous proportions, there would have to be a continuing devaluation of the Canadian dollar, accompanied by a sharp reduction in imports of machinery and consumer items, and an accompanying drop in our standard of living, so as to make our effective wage rates again competitive in world markets.

EMPLOYMENT

Although mining is not considered to be a highly labour-intensive industry, it does employ more than 140,000 Canadians in mining and in such related activities as exploration and development, processing, smelting and refining. By including in the total jobs generated indirectly in resource-related industries and communities, the Mining Association of Canada estimates that mining provides a livelihood for 9% of Canada's full time employed labour force. The petroleum and petroleum processing industries generate employment for tens of thousands of other Canadians.

A decline in resource production would therefore seriously curtail job opportunities available to Canadians, particularly in remote areas.

NATIONAL INDEPENDENCE

Failure to recapture a reasonable degree of self-reliance in oil and gas – so that our production came close to meeting our needs – would condemn Canada to a permanent state of dependence on imported oil. Such a position would jeopardize our security, all the more so since the price and supply of oil are largely determined in some of the more volatile parts of the world.

Individually or jointly, these implications are not compatible with the economic health or sovereignty of Canada.

> Canada could well be faced, over the next quarter century, with immense expenditures to develop what could be the highest cost oil and gas in the world. The costs of this effort will be immense: the costs to all Canadians of not undertaking the development could be even higher.

If there is one overriding issue likely to affect the future well being of all Canadians, it is this country's management of our non-renewable resources. There is an urgent need for the formulation and acceptance of clearly defined and generally accepted resource objectives, and — even more importantly — the adoption of specific plans to implement these objectives.

A number of energy and mineral policy statements have been made by governments in Canada. In 1974, the federal and provincial governments adopted a common set of policy guidelines for the development of our mining industry. In 1976, the federal Department of Energy Mines and Resources published *An Energy Strategy for Canada* in which it identified the main issues facing energy developments in Canada and articulated a balanced policy to deal with these problems.

The Task Force finds no major quarrel with the basic policy of "self-reliance" set out in the Federal Government's energy paper, or on its identification of the main issues facing the country and our energy development over the next few years. However, we do disagree with the view implicit in this and other statements by governments that present tax, royalty, regulatory and economic policies will permit the expansion in our energy production identified in these policy documents as essential for our economic well being. In fact, and as discussed later, the Task Force believes the recently proposed federal legislation on the development of federal oil and gas lands will instead work towards making attainment of the federal government's own goals more difficult.

The Task Force similarly approves in principle the earlier policy statement by federal and provincial governments on mining, in which the necessity of continuing the industry's economic contribution was stressed. But federal and provincial governments have not yet implemented regulatory, tax and other policies that would enable mining development to go forward: indeed, they have instead created an unstable environment that actually impedes such progress.

Canada does have an energy policy and a mineral resource policy, but it has not yet implemented programs to make these policies work.

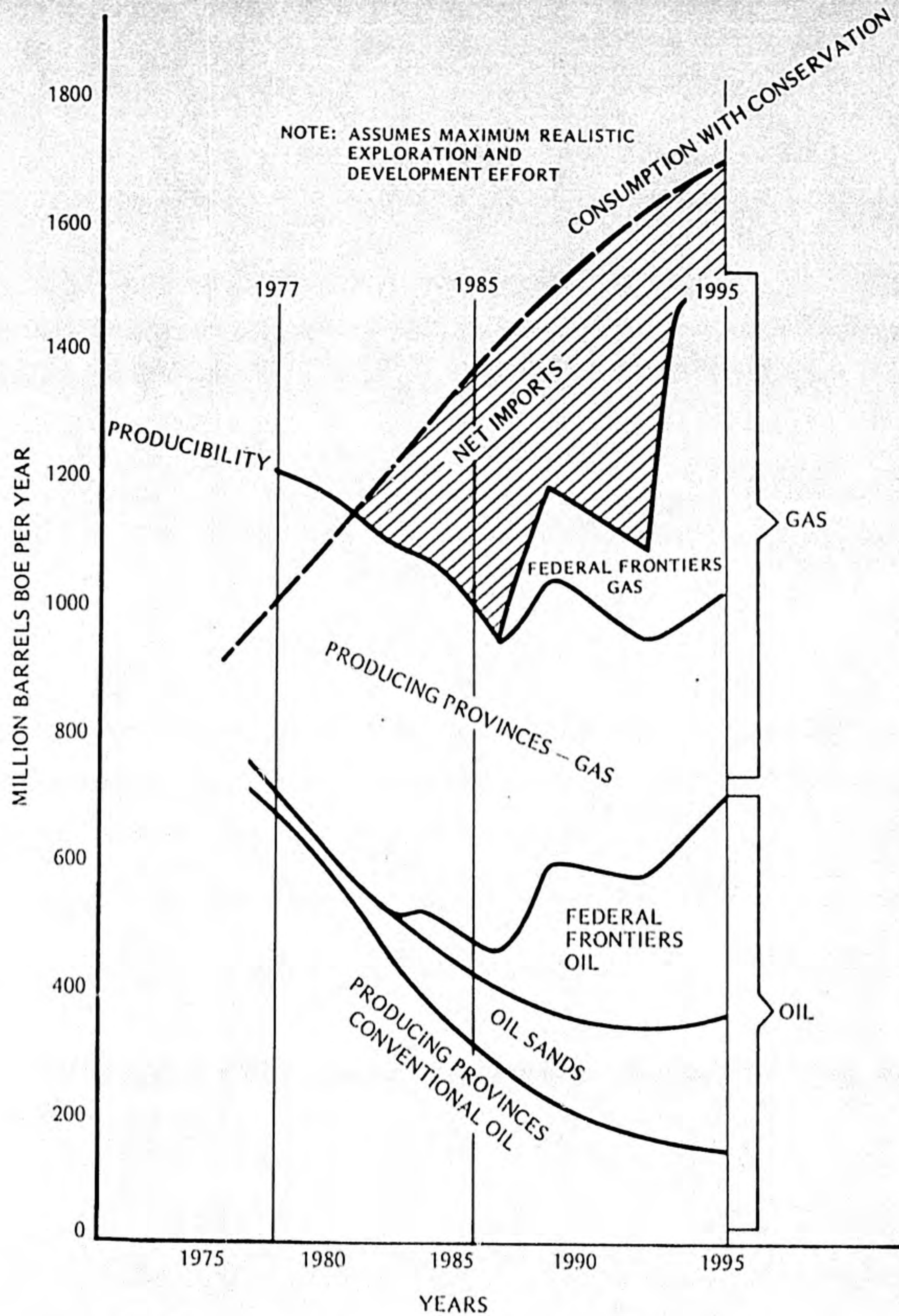
The Task Force believes that a rational goal for Canada is to achieve a high degree of self-reliance with respect to energy supplies. This does not mean that an extravagently expensive crash program can or should be launched in pursuit of oil and gas self-sufficiency by 1985 at any cost. It does mean that Canada should adopt a sustained program to produce enough gas and oil so that it will have the capability to achieve long term net self-reliance should circumstances require the effort and expense.

At the same time, steps should be taken to maintain and enhance the contribution of mineral resources to Canada's export revenues by creating the climate necessary to support increased exploration and development efforts. Such efforts are particularly essential at a time when the country faces mounting petroleum deficits and continued balance of payment problems.

The implementation of such policies calls for a commitment on the part of governments, industry and consumers: it calls for the subordination of the more parochial concerns and partisan allegiances to the national interest; it calls for an enormous investment of money, now and for many years to come.

If such a commitment is made, the following chart Appendix D to the Task Force's report shows a projection as to how oil and gas production from new areas could help to bring Canadian production back up towards our estimated consumption.

The production levels indicated in this table do not represent a prediction of the amount of oil and gas we will actually produce over the next twenty odd years: indeed, the Task Force believes that under present tax and other conditions, our actual production will fall far short of these goals. Rather, the projection shows the production that we might expect to achieve from the maximum exploration and development effort that, from an economic viewpoint, we are realistically capable of mounting under improved taxation and regulatory policies. Even with this enhanced investment program, the chart indicates that Canada can only hope to again approach self-reliance in oil and gas by 1995.



See Exhibits 1 and 2 at the end of this Summary for separate projections of domestic production and producibility for oil and for natural gas.

Within the past few years and months, the Canadian public has been exposed to a wide variety of estimates as to our "ultimate recoverable" resources. Particularly with regard to oil, recent forecasts of our reserves have swung away from blithe euphoria in the direction of profound pessimism or even despair. Although proven reserves have been accurately reported, differences between various present and past estimates of our future potential supplies of minerals and oil have generated confusion and even cynicism on the part of the public.

Frequently forgotten in the controversy is the fact that the actual quantities of mineral resources which can be recovered and made available to Canadians during the remaining years of the twentieth century will depend surprisingly little on the dimensions of the potentially recoverable resources. *The real limiting factor is the amount of new investment committed to the discovery and development of these resources.*

OIL AND GAS

The Task Force commissioned a special study in late 1975 to estimate the possible producibility of oil and gas in Canada during the next twenty years, and the likely costs of such production. The study was based on the assumption that total expenditures on exploration and development would rise rapidly from $1.2 billion in 1974 to $5 billion in 1984, and taper off from 1986 to 1995.

This expenditure assumption is not to be interpreted as a prediction of things to come: indeed current trends in exploration and development spending strongly suggest that we are and will continue to fall far short of that level of investment. The objective of the study was merely to arrive at some indication of the quantities of oil and gas which could theoretically be developed, given a large but realistic capital commitment, consistent with anticipated higher prices and forecast demand and supply.

Future discoveries of oil and gas in four frontier areas were projected on the basis of the historical relationship between investment and discovery, and adjusted for geographic differences in costs and size of reserves. In addition, it was assumed that exploration and development would continue in the western Canada sedimentary basin.

The study led to the conclusion that $65 billion (1974 dollars) spent on exploration and development during 1975-95 could lead to the discovery of 9 billion barrels of new reserves of oil and 14 billion BOE (barrels of oil equivalent) of gas. By way of comparison, $12 billion (current dollars) spent during 1947-74 resulted in the discovery of 18 billion barrels of oil and 15 billion BOE of gas.

The following table illustrates the eightfold escalation in exploration and development costs which can be expected to occur as we become increasingly dependent on high cost frontier resources and increasingly scarce and therefore more costly prospects in Western Canada.

OIL AND GAS – INCREASING EXPLORATION AND DEVELOPMENT COSTS*

	$ Billion	
	Actual 1947-74 (Current $)	Projected 1975-95 (Constant 1974 $)
Exploration	$ 6	$41
Development	6	24
	$12	$65
Reserves discovered and developed (Billion BOE)	33	23

*excluding cost of land, permits, etc., and cost of oil sands developments: Appendix B

The following table, taken from this 1975 study (Appendix B) illustrates the possible range of basic bare costs that we may be facing in order to bring our frontier resources into production. This table shows only the bare projected costs of oil from these new developments: it does not contain any allowance for taxes or royalties, or for a return to the entrepreneur for extraordinary risk. It indicates that required prices for frontier oil can readily exceed current world prices, even before considering the tax element of costs.

PROJECTED COSTS OF FRONTIER OIL EXCLUSIVE OF TAXES, ROYALTIES AND RETURN FOR RISK

$ per barrel of oil (constant 1974 $)

	Discounted Cash Flow Rate of Return Assumed*		
	7-1/2%	10%	12-1/2%
All Canada			
Exploration	1.85	1.85	1.85
Development	1.08	1.08	1.08
Direct cost (pre tax)	2.93	2.93	2.93
Capital employment cost	4.37	6.47	9.27
Developed cost	7.30	9.40	12.20
Operating and transportation costs (will vary by area)	3.50	3.50	3.50
Total delivered cost*	10.80	12.90	15.70

*pre tax rates of return and pre tax delivered cost

The above estimates were prepared in 1975. Today, the cost position facing Canada is in fact even worse, because of the failure to secure the needed exploration and development expenditures in 1975 and 1976, and because of continued cost inflation.

Now – at the beginning of 1977 – it is estimated that expenditures of $47 billion (1976 dollars) on exploration and development will be required during the nine years 1977 – 1985 in order to approach self-sufficiency. This contrasts with the original 1975 estimate of required spending of $38 billion (1974 dollars) for the same period.* Further, the likely delivery date of new energy supplies from our frontier regions has and will continue to be pushed forward as we fail to meet the necessary commitments.

It is clear that our frontier resources – Northern and offshore areas, and the oil sands and heavy oils of Western Canada – have huge potential reserves of oil and gas.

But these reserves are, in the main, rather more difficult to locate and define than we had hoped, and it will clearly cost far more than we had first expected – and take far longer – to bring these supplies to our markets.

Based on the range of projected costs reviewed above, the Task Force believes that Canada could well be faced, over the next twenty years, with spending immense sums on developing what could be the highest cost oil and gas in the entire world.

SELF RELIANCE IN OIL AND GAS – AT ANY PRICE?

We should not aim at self-sufficiency or self-reliance at any price. Rather, we must always compare the costs and risks of producing our oil and gas from our frontier areas against the costs and risks of importing it. But given the deficits in foreign exchange, and the political and economic risks that we would face if we became completely dependent on imports, it is increasingly obvious that we must make the critical decision to commit substantial resources, beginning now, so that we might be in a position in the future to strive towards a rough balance in our overall energy imports and exports.

THE TOTAL COSTS OF ENERGY

In its document "Energy Strategy for Canada", the federal government itself estimated that over $180 billion (in constant 1975 dollars) in capital investment would be required over the next fifteen years to bring our primary energy supplies from all sources up to something approaching our energy needs. (This includes the cost of required electric power, oil gas and coal investments, including infrastructure such as pipelines: however, oil and gas investments come to about half the total, with the bulk to be committed to "frontier" areas in the north, offshore, and in the oil sands.)

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* The updated analysis is contained in Appendix D: The quoted figures here include costs of land, permits, etc.

To look at this investment in another light, our required spending on energy capital would rise from 3½% to perhaps 5% of our Gross National Product over the next five years, and to 6½% in the following five years. Even this staggering commitment may understate our actual capital needs: the Task Force believes that recent government cost projections tend to underestimate the gigantic inflation in the cost of resource development that has occurred in recent years.

MINERALS

A study undertaken by the federal Department of Energy, Mines and Resources estimates that exploration expenditures of some $1.2 billion (in 1974 dollars) will be required for every five year period between now and 1995 if Canada is to meet mineral requirements on the domestic and export markets. Such an investment would triple the mineral exploration expenditures recorded in the recent past.

The study further estimates that capital expenditures for existing mines and those to be developed from known deposits will average $656 million annually between now and the year 2000, or almost double the annual average spent during 1960-74.

Startling though these figures may be, they are overly conservative in the opinion of the Task Force. The government study does not fully take into account the steep rise in costs of operation, construction and capital which occurred between 1973 and 1976 – a rise which far outpaced other price increases.

As a result, the Task Force estimates that exploration expenditures will have to be four and a half times the 1951-70 level (rather than three times as projected by the government study) if Canada's position as a producer and exporter of minerals is to be maintained. Similarly, the government's estimates of development and other capital investment requirements are grossly understated under current conditions.

> Canada has excellent long term potential for new mining developments, and has the capability of continuing to be a major world producer and exporter of many minerals. But the costs of new developments will be high as grades and accessibility decline with new discoveries. Canadian mineral producers will be under increasing pressure from rising costs and from new production from projects abroad, many of them involving higher grades and lower costs than Canadian reserves.

However, the plain fact is that we are not at present spending anything like even the government's estimated requirements: it is therefore clear that, under present trends, our mineral resource production will decline dramatically within the next ten years as new discoveries fail to keep pace with the exhaustion of old reserves.

The gigantic investment required for the development of our mineral and petroleum resources should not be beyond the capacity of Canada's economy, assuming a favourable combination of world economic conditions, domestic growth and appropriate public policies. Increased prices paid by consumers at home and abroad can provide the bulk of the required funds, provided that taxes and royalties are at a level which permit the investment by industry of a sufficient portion of its gross receipts. But the resource industries will have to compete for increasingly scarce capital with other sectors of the economy, and they will do this successfully only if they are allowed to earn reasonable rates of return.

As shown in the table on the following page, Canada's 1985 GNP should amount to approximately $470 billion (in then current dollars) with $79.2 billion available for all business investment. The resource industries would have to attract over 36% of this business capital in order to meet their objectives.

For this reason, the possible advantages of any further measures to restrain foreign ownership of resource industries should be weighed against the probable impact of such measures on the supply of risk capital. There can be no doubt that the extent to which our petroleum and mining industries are owned by non-residents is a matter of concern to many Canadians. On the other hand, it is unlikely that Canadian investors could or would be immediately inclined to fill the vacuum created by a cut-back of the high risk seed capital traditionally provided to our resource industries by foreign-controlled corporations.

CAPITAL SPENDING AND GROSS NATIONAL PRODUCT: GROWTH RATES
(Billions of Dollars)

Year	Housing & Social Capital	Energy	Business Capital Resources	Business Capital Other	Business Capital Total	Total Capital Invest-ment	Energy As % of Total Business	Gross National Product	Total Capital Invest-ment As % of GNP
1965	5.0	1.6	1.2	5.1	7.9	12.9	20.2%	55.4	23.2%
1975	15.1	6.7	2.7	14.9	24.2	39.3	27.7%	161.1	24.4%
CAGR[1] 1965-1975	11.7%	15.4%	8.4%	9.0%	11.8%	11.8%		11.3%	
1985	37.3	29.2	7.7	42.3	79.2	116.5	36.7%	469.1	24.9%
CAGR[1] 1975-1985	9.5%	15.8%	11.0%	11.0%	12.6%	11.5%		11.3%	

[1]Compound Annual Growth Rates

SOURCE: Department of Economic Research, Toronto Dominion Bank
December 1976

Indeed there is evidence that governmental policies may succeed not only in curtailing foreign investment, but also in encouraging some Canadian capital to leave the country in pursuit of greater investment security and more favourable returns in the United States and other parts of the world. If this trend continues, the situation could soon be ripe for still further government involvement in our resource industries. The Task Force believes such a possibility is undesirable from the point of view of ultimate costs as well as its destabilizing effect on private investment.

What is an acceptable rate of return? Variables such as complex taxation rules, rapidly changing rates of inflation and the possibility that project costs may rise at a different rate than the price of the end product conspire against any definite answer. However, three facts do emerge beyond dispute:

1. When it comes to investing in exploration and development of as yet undiscovered resources, it is the prospective rather than the existing rate of return which counts. A rate of return which is acceptable or even favourable for existing operations may still preclude investment in new projects, especially those involving important risks.

2. In the short run, when the industry can estimate with reasonable certainty its capital and operating costs, the determining variables affecting rates of return are

   (a) the price of the end product (or, more precisely, the relationship between direct production costs and product prices)

   (b) the government's slice of the income pie

3. Judging by the capital now available for exploration and development, the investing public and the industry itself clearly do not consider the rate of return in new mining or frontier petroleum developments to be satisfactory.

Another point about profits in the resource sector – particularly in mining – is that they tend to be of a cyclical nature. The fact that the bulk of our minerals are sold on world markets, at fluctuating prices, means that the profits of mining companies at one point in the cycle can appear "excessive", even though over a longer period, including years of depressed prices and profits, average income may be only barely adequate to provide a minimum return.

Equally, in the resource industry as in any other, some firms will be more efficient, better organized, or have better luck than others, and hence will be able to earn a better rate of return.

If tax and royalty policies are such that governments demand a lion's share of the profits from the years of high prices and from the more efficient, while leaving the industry to bear losses and low profits in other cases, then it is clear that on average, the industry will fail to make an adequate return. Governments in Canada have been far too quick to cut themselves in on the supposed bonanza of high resource revenues, without considering whether those revenues represented – in the long run – funds that could be withdrawn from the industry without crippling its incentive and ability to reinvest for future developments.

While the price of most metals is governed, to a large extent, by international market forces, the price of oil and, more recently, gas is increasingly being determined by political considerations. Artificially low oil and gas prices constitute a triple-barrelled attack on Canada's energy supply. Not only do they reduce cash flow available for reinvestment and discourage new investment capital by cutting into the industry's rate of return; they also undermine any attempts to curb the continuing growth in energy demand. A recently published study by the Paris based International Energy Agency revealed that countries which keep their oil and gas prices below world levels have the worst track record in energy conservation.

Though the federal government has accepted the conclusion that oil and gas prices should be allowed to rise to world levels, a number of provinces have in the past imposed retail price controls on oil and, in some cases, natural gas. The Task Force believes that provincial price controls are inconsistent with a national energy policy and should be phased out as quickly as possible.

The Task Force therefore supports an increase in the price level of Canadian oil to world price levels (and gas to its commodity value) as soon as practical – likely within two years. The increase in Canada's oil and gas prices to world levels should be reasonably gradual, and should be timed to coincide, if at all possible, with similar price increases in the United States. Since energy is a significant component in certain manufacturing and processing costs, some sectors of our economy cannot afford a large and permanent price differential with their major competitors south of the border.

This recommendation is based on the assumption that, given an appropriate tax structure, world price levels for oil and gas would be sufficient to call forth the necessary industry response. This appears to be true now in the case of gas but the time may well come when prices even slightly above world levels will be necessary to attract the required capital for oil exploration. It is quite conceivable that the cost of developing our own resources may turn out to be as high or higher than the world price.

Such price increases will inevitably have a negative impact on consumers and energy-hungry industries. Even now, the effect is being felt in the Atlantic provinces, and to a lesser extent in central Canada. The Task Force believes that, painful though such adjustments will be, they are part of the price Canadians must pay for a national energy policy and future energy security. Such a price increase is the most effective way to provide inducements to restrain consumption and achieve an approach to energy self-reliance. The Task Force supports temporary federal programs to ease the transition to higher energy prices in the most directly affected areas of the country, particularly those involving incentives for increased conservation.

During the past few years, dramatic increases in the price of oil, combined with a temporary jump in the price of other minerals, produced record earnings for many resource industries. In an effort to collect what they considered to be their respective fair share of this bonanza, provincial and federal governments launched a tug of war for the resource revenue dollar with little regard for the continued health of the industry or its long term contribution to Canada's economy.

SHARING OF RESOURCE REVENUE
1970/71 to 1975/76

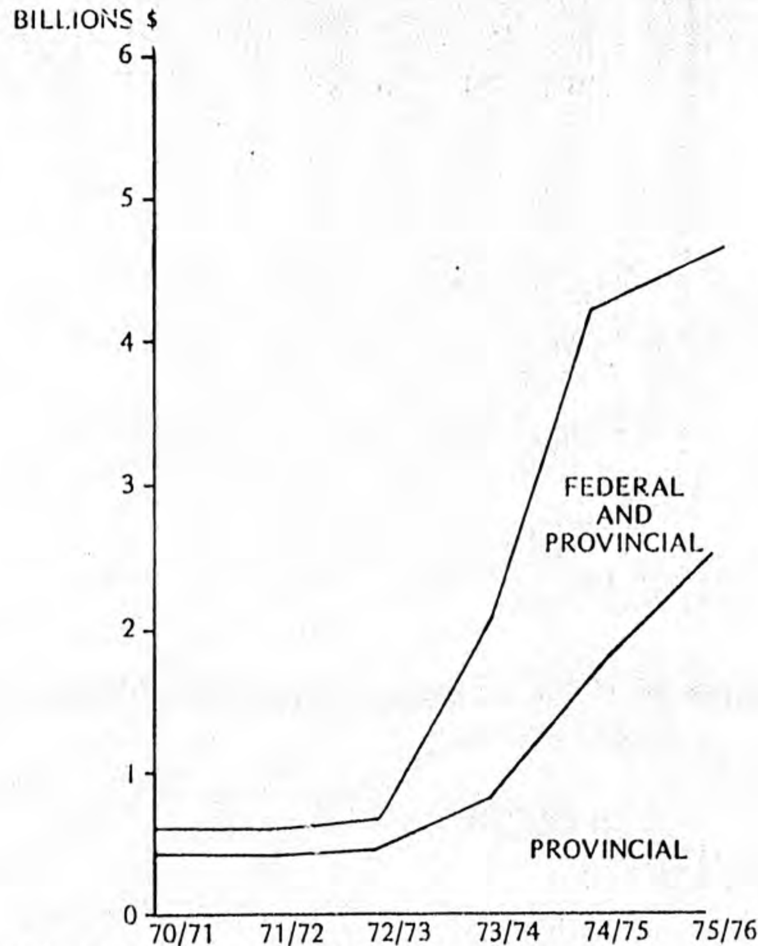
GOVERNMENT RESOURCE REVENUES		Up 650%
Provincial resource revenues	Up 519%	
Federal resource revenues	Up 895%	
PRIVATE ENTERPRISE RESOURCE REVENUES		Up 126%
Corporate net income, after tax		
PRIVATE ENTERPRISE MANUFACTURING REVENUES		Up 135%
Corporate net income, after tax, of all manufacturing companies		

SOURCE: Appendix A

NOTE: Federal resource revenues in the table above, and in the chart on page 27, include the provincial share of corporate income taxes collected by the federal government, due to the difficulty of separating such amounts: accordingly, federal resource revenues are somewhat over-stated, and provincial revenues under-stated in the calculations on which figures are based.

Drastic increases in provincial taxes and royalties, and the subsequent disallowance by the federal government of these levies as tax-deductible items, are the two most important but by no means the only moves and countermoves in this intergovernmental conflict. A rapid succession of far-reaching and totally uncoordinated tax changes has resulted in a situation where tax and royalty rates can range from 30% up to and beyond 100% of net income. Not only has this tax squeeze stripped the industry of its historic tax concessions and incentives; it has transformed it into the most heavily taxed segment of the Canadian economy.

In the five years between 1970/71 and 1975/76, federal and provincial revenues from resource taxes and royalties escalated from $0.6 billion to $4.7 billion — an increase of 650%. Taxes now represent about 71% of the resource industry's pre-tax profits (67% without the oil export tax) compared to 42% five years ago. During the same period, net profits of Canadian resource companies increased from $875 million to just under $2 billion for a rise of 126%. (The net after-tax income of all Canadian manufacturing companies increased by an estimated 135% during the same period, a higher rate of increase than in the resource sector despite relatively lower capital investment.



NOTE: Includes federal Oil Export Tax Revenues

SOURCE: Exhibit 6 of Appendix A, "Taxation of Non-Renewable Resources"

True, recent rationalizations of our tax structure, such as a federal resource allowance and provincial drilling incentives and royalty rebates in Alberta and elsewhere suggest that the country has weathered the most virulent stage of the intergovernmental struggle. However, even with these changes, only about 25% of future increases in current oil and gas prices will accrue to the industry: the balance will be absorbed by governments. This is a distinct improvement over the situation which prevailed during the past four years, when governments obtained about 6½ times as much additional resource revenue as did the resource producers. But it is still not acceptable as a basis of achieving future energy security.

Some relief is also being provided to the mining industry. This is particularly true of British Columbia where new provincial legislation reduces the combined federal and provincial tax rate on mining profits from up to 100% or more under the previous royalty structure to an effective maximum of 57%. Other provinces have either introduced or are contemplating changes in their taxation of mining profits, in some cases to provide new incentives for exploration and for domestic processing.

But more than piecemeal measures are needed to reform a tax and royalty regime which is chaotic, and imposes tax burdens unrelated to the industry's ability to pay. The present tax and royalty system is a hodge podge of extraordinarily high and capricious tax burdens, combined with ad hoc incentives and subsidies designed to offset in part the high marginal rates. It is a "take it away – give it back" system, based in part on ill conceived and unsuccessful efforts by governments to "fine tune" their tax and incentive policies. But short range, narrow incentives are not likely to result in investments being made in the volume or the places where they are required. What would be far more productive for Canada would be an integrated tax system with reasonable and relatively stable rates, and with rational incentives, particularly for high risk investments.

Specifically, the present system:

– combines excessive and widely uneven marginal rates – up to 100% in the case of some oil production in Saskatchewan – with some extraordinarily generous incentives. In Alberta, for instance, it is at least theoretically possible to realize a profit by drilling a dry hole while in Northern Ontario, tax concessions can ensure a 14% or better after-tax return even for an unprofitable processing facility

– encourages an undesirable degree of "high grading" of resources by imposing a large part of the tax burden as a percentage of gross revenues. Such royalties result in a much higher tax rate on net profits and cause expensive low grade reserves which cannot support such taxes to be left underground

– fails to recognize legitimate production costs, such as provincial royalties, as tax deductible expenses

— erects interprovincial trade barriers by offering provincial incentives to companies which locate processing facilities within the province of extraction: such incentives are often equivalent in practical terms to tax penalties on processing minerals in other provinces or countries. While the provinces' desire to create jobs and eliminate regional disparities is both understandable and praiseworthy, the incentives currently available to resource companies constitute interference with free market forces and are not consistent with Canada's best interest. For example, a new smelter in Timmins, Ontario, built with the help of multi-million dollar provincial tax incentives, will do little for the country as a whole if it renders uneconomic other existing processing facilities in Quebec.

The present tax and regulatory environment of the industry not only involves extraordinarily high marginal tax rates, but also uncertainties, disincentives and contradictions which are severely inhibiting new investment. The uncertainties and complexities of the present tax and regulatory system can prove just as inhibiting to private sector investment as the higher tax rates themselves. Faced with the necessity of committing large capital investments years in advance of anticipated pay back, private industry must have assurance of long term relative stability in tax and royalty structure.

Who will pay for the huge capital investments necessary to bring our energy supplies back in line with our consumption, and to maintain our mineral production? In large part, the Canadian consumer will pay. Indeed, he is paying now, in the form of higher oil and gas prices: the question is whether he is getting what he has paid for.

In a study for the Task Force* the total spending of Canadian consumers on domestic oil and gas at wellhead prices in the period from 1977 through 1985 is estimated at about $125 billion. (This excludes retail taxes, and transportation marketing and processing costs.) Something approaching one half or more of this immense sum is likely to flow to federal and provincial governments in the form of taxes royalties and other payments, leaving the industry with the other half to pay all current operating costs, provide for necessary reinvestment to replace the resources being used up, and obtain some element of return on capital investment.

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*Appendix D

The same study estimates that – dealing only with oil and gas – Canada could achieve a high degree of energy self-reliance in the 1990's through the investment of $47 billion (1976 constant dollars) in exploration and development (including land costs) between now and 1985, with the bulk of the investment being made in the frontier areas such as northern territories and offshore. (In addition, perhaps $8 billion will be required for the further development of the oil sands and heavy oil deposits.)

Even this massive spending commitment would not lead to oil production sufficient to balance our consumption but it would allow modest gas production surpluses to be available for export, and would therefore bring us, in dollar and energy terms, back to within close range of a balance in our oil and gas exports and imports.*

The projections in this report show that of the $50 billion in cash flow available to the oil and gas industry in the period through 1985, under present conditions it is possible to assume that a maximum of about $28 billion of this might – under relatively favourable assumptions – be reinvested. The industry is unlikely to be able to achieve any larger reinvestment, given the resources available to it, and the tax and regulatory policies now in effect. But this reinvestment will be almost $20 billion short of the actual investment required by 1985 to bring us in the following decade towards self-reliance. Most of this shortfall will occur in the critical frontier regions, where our main hope of ultimate self-sufficiency lies.

The calculations in this report also illustrate that, with a shift in taxation and royalty policies, the industry could find the funds necessary to bridge this gap. What is required is a package of tax and incentive measures which would see that perhaps 35% of production revenue is channelled back into exploration and development in the industry.

If governments were to take a modest decrease in the revenues that they might otherwise expect from future oil and gas price increases as Canadian prices rise to world levels, they would still obtain higher total revenue than they are now receiving. But they would also allow the industry sufficient cash flow to make the necessary commitments to see Canada moving back towards a reasonable level of self-reliance. This reduction in tax and royalty levels must be accompanied by structural changes in the tax and royalty systems to mobilize the oil and gas industry's reinvestments where they are needed – at our frontier developments in the north, offshore, and in the oilsands. A new level of incentives for high risk investment will be required and as well some measures to allow some of the increased royalties which would otherwise flow to producing provinces from future price hikes to be directed to frontier investments.

The following chart illustrates one approach to the sharing of cumulative production revenues from oil and gas in Canada that would permit an adequate investment program (including the introduction of new investment from outside borrowing and new capital) to achieve a reasonable degree of self-reliance.

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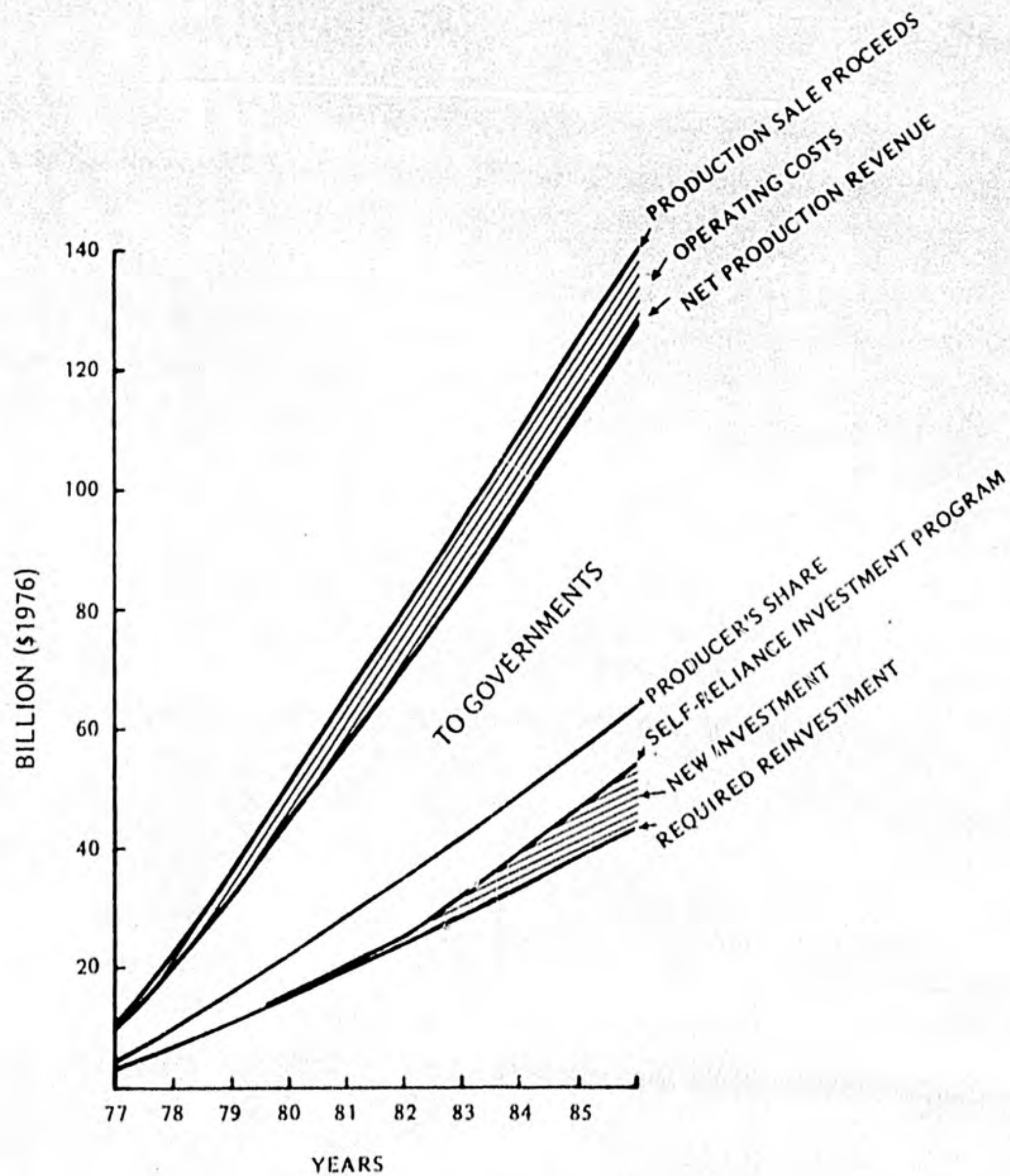
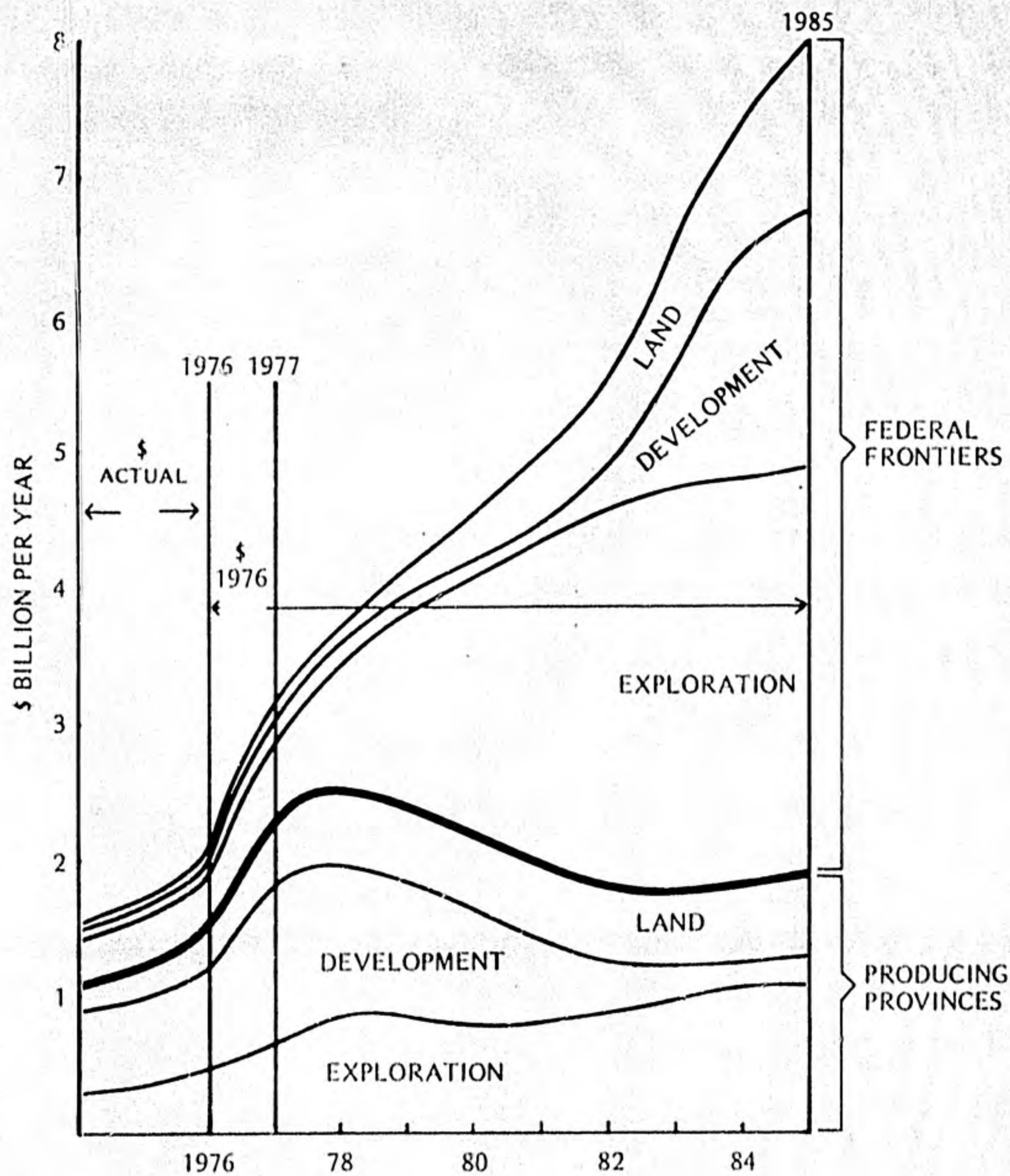
*See Exhibits 1 and 2, at end of Summary



SOURCE: Appendex D: responsibility of author

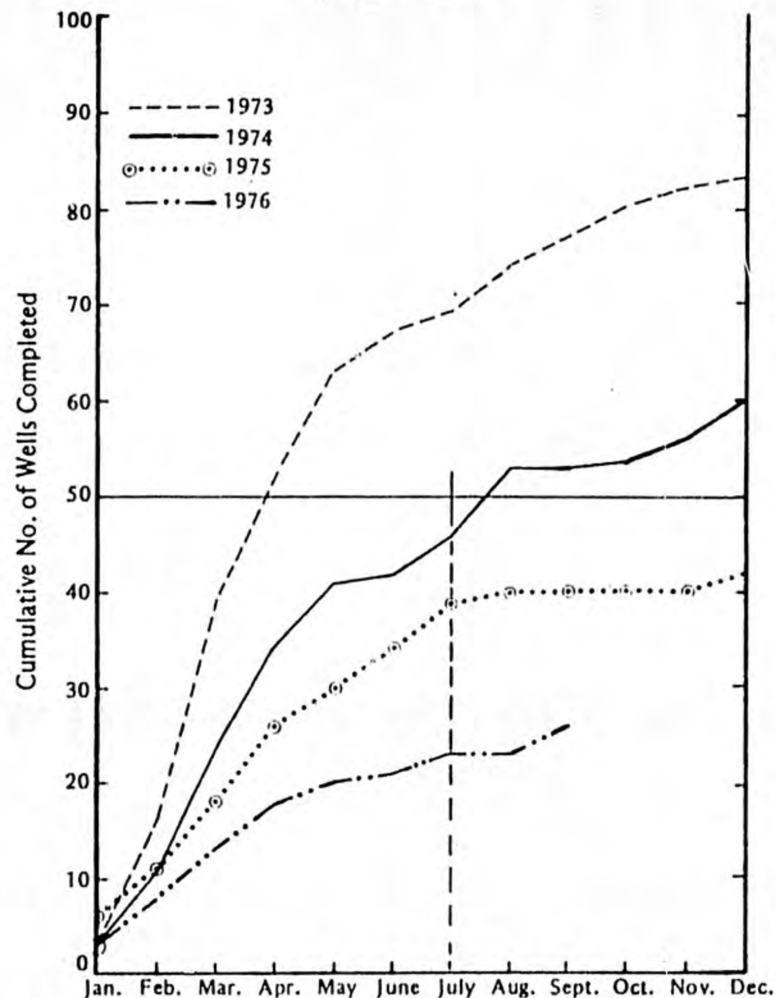
NOTE: The massive increase in exploration and development spending called for in Appendix D would in itself result in a significant reduction in industry's current taxes, provided that it could be claimed immediately against otherwise taxable income. However, it may be questioned whether spending of this magnitude could be all deducted currently, and in any event the present tax and and royalty structure does not appear capable of calling forth the indicated effort from the industry, particularly in the frontier areas (as is indicated in the chart on page 33).

The following diagram illustrates where, in geographic terms, the necessary oil and gas exploration and development funds might be spent.



In order to serve the resource objectives outlined in this report, Canada's resource tax structure must undergo a complete overhaul. Energy self-reliance and maintenance of mineral production will be served only by a system which acknowledges that increased resource prices do not necessarily justify higher taxes, particularly in a period of rising costs. The Canadian resource industry is not entirely a mature industry, but is still in a position where its cash flow must be augmented and directed to new ventures. In a sector subject to enormous risks and violent price fluctuations, profits should be considered extraordinary only if, over a long period of time, they clearly exceed levels required to attract development capital. The Canadian resource industry has not in general achieved this level.

CUMULATIVE NO. OF WELLS DRILLED BY MONTH NORTH OF 60°



Source: North of 60 – Oil and Gas Monthly Activities – Sept. 1976

This does not mean that the resource industry should expect governments to enact policies which would enable companies to provide all development capital from re-invested earnings. The era of automatic special status is gone forever, and there is no reason why the resource industry should not be in a position to rely on new debt and equity issues for some of its capital requirements.

But the industry does have a right to expect adequate rates of return on investment, and sufficient regulatory stability to revive the climate of confidence which once existed among the investing community. It is significant that the Syncrude project could only proceed with substantial government participation and special tax provisions, and that frontier exploration programs are experiencing difficulties in attracting capital. In spite of our impending dependence on frontier resources, the number of oil and gas wells drilled north of 60 degrees of latitude and the expenditures associated with such drilling, have dropped markedly each year since 1973.

Consumers, for their part, have a right to expect that the higher price they have paid and will pay for oil and gas in the future does not simply represent additional transfer payments from the public to the provincial governments in Western Canada and to the federal treasury. Higher oil and gas prices will contribute nothing toward the objectives of a national resource policy unless a sufficient portion of the revenue escapes taxation to flow into exploration and development.

The place that the average Canadian most notices higher resource costs is when he fills up the tank of his car. But he frequently fails to realize that up to 60% of the price paid represents taxes and royalties accruing to governments, with only the balance available to pay all of the costs of exploration, production, refining, transportation, and distribution. Gasoline has joined liquor and tobacco as the most heavily taxed commodities in Canada.

Percentage taken by government will vary with rate of provincial gasoline taxes, and with other factors.

Perhaps the most urgent prerequisite for a rational tax and royalty policy is a prompt settlement of federal/provincial conflicts over resource revenues. Since both levels of government have legitimate claims in this area, it is essential that a joint mechanism be created to work out a compromise designed to serve Canada's resource objectives.

The Task Force believes that the federal government could and should allow some portion of oil royalties and provincial mining levies to be deducted from taxable income but only in return for a national agreement on the basic aspects of resource taxation. Such a compromise would amount to a renunciation, on the part of the federal government of some of the resource tax revenue for the sake of securing a national consensus on the industry's total tax structure. Such an agreement should involve the provincial governments restructuring their levies, particularly royalties, so as to permit increased industry cash flow for reinvestment even outside of the province where the funds are earned.

Suggestions for intergovernmental cooperation may seem unrealistic and utopian in the context of recent and current conflicts; nevertheless, ways of achieving such cooperation have been found in the past, and will have to be found again if Canadians are to avoid a serious erosion in their living standards during the balance of the century.

> Both the federal and provincial governments have particular responsibilities in the design and implementation of resource policies in Canada. The areas of jurisdiction differ, but each level of government must recognize that, in carrying out its responsibilities, it cannot act in isolation, but must have due regard for the interests of the other.

The development of gas, oil and other resources in the areas under federal jurisdiction, such as the Northwest Territories and offshore, is subject to new federal tax, royalty, and land tenure arrangements. With respect to oil and gas, these new rules provide for a complex set of regulations to guide future development of our critically important frontier area, including:

- a basic royalty of 10% of production
- a progressive incremental royalty imposed on net revenues from particular producing areas

– a preferred land tenure position for Petrocan, the federal government's own oil and gas corporation

– more onerous requirements for permit holders to spend money on exploration and development, in order to retain drilling rights.

While the proposed new federal regulations do have positive aspects, the Task Force believes, that, on balance, the provisions are unduly onerous in their treatment of industry, and that they will not permit an early and successful development of our northern production potential.

The federal proposals are biased in favour of obtaining an early and relatively high cost cash flow to the government from profitable developments: they tend to require the operator to accept the bulk of the losses from unprofitable or marginal ventures.

The new regulations appear designed to provide a tax and royalty environment for a mature and profitable industry, rather than adequate incentives for high risk investment in an extraordinarily high cost (and hence low profit potential) environment. The basic point – here and elsewhere – is that the appropriate share of resource revenues that should accrue to the government can only be determined by reference to the surplus that is left after all necessary costs – including an adequate return for capital invested and risk taking – have been satisfied. In our northern and other frontier areas, this surplus is likely to be small – indeed, in some areas it may be non-existent. For governments to demand a return which is disproportionate to the economic value of resources, particularly in situations involving a high degree of risk, means that the remaining resource revenues will be inadequate to call forth the required investment.

The Task Force believes that the federal lands proposals should be re-assessed, and recast into a system that is more in tune with the actual conditions in the frontier areas under federal jurisdiction. It is essential that the potential rewards of a rich strike be available to induce producers to invest in high cost (up to $50 million a well), high risk frontier developments.

> Canada has immense potential resources of oil, gas, and many minerals: there is no physical reason why we should not in the long run continue to have adequate supplies of these products for our own use, and in the case of many minerals and natural gas, for possible export. If we fail to maintain the relative contribution of the resource sector to the Canadian economy, it will only be because we have provided a tax and regulatory environment in which the resource industries cannot commit the needed investment, or because Canadian costs have got out of line with the prices of resources determined in world markets.

It is not the purpose of this Report to formulate highly detailed recommendations. But the Task Force does put forward the following guidelines which it believes to be conducive to the implementation of national resource policies in the country's long term interest:

- The general structure and basic level of taxes imposed on the non-renewable resource sector should be reassessed by provincial and federal governments acting together. A permanent federal/provincial consultative mechanism should be established to coordinate tax and regulatory policies, with the objective of reaching a broad consensus on structure and rates.

- A single definition of resource income, directly related to the ability to pay and mutually acceptable to federal and provincial governments, should serve as a basis for all income-related taxes.

- A compromise solution should be sought concerning the deductibility of provincial royalty and other costs for federal income tax purposes. The Task Force recommends that the federal government allow some stated portion of provincial royalties and similar taxes to be deducted on condition that

  (a) the provincial royalty or other levy meets federal guidelines as to structure and rate and

  (b) the relief is limited to a maximum percentage of the federal income base.

- The basic combined federal and provincial tax rate applicable to the resource industry should be approximately equal to that imposed on other industries.

- Provincial mining taxes should be integrated with provincial corporate income taxes, imposed only at flat rates and based on realistic measurements of mining profits.

- Additional taxes on excess profits are appropriate only where a broad section of the industry is earning – over a long period of time – an extraordinary rate of return because of its access to public resources. Such super taxes should be applicable only to specific areas after all applicable costs have been recovered, and should only tax away a portion of the excess.

- Incentives which allow resource companies to reduce their tax burden are desirable, so long as such incentives are clearly conditional on the companies' past performance or future commitments. A new "second

level" of incentives relating to a high risk investment in the oil and gas "frontier" regions, and to remote mining sites, is desirable in order to direct more reinvestment of industry cash flow in critically important areas.

- Royalties and other levies which impose a "front end" cash load on the industry, in advance of profitable production, increase substantially the required investment and the risk associated with the development of new fields. Such royalties should be replaced, in whole or in part, by taxes on profits or profitability.

- Provincial charges for the right to take oil and gas from Crown reserves should be gradually and partially shifted from royalties based on production to levies based on the income or profitability of production. Flat rate royalties levied on production tend to discourage secondary recovery and the development of marginal fields: incentives provided in such royalty arrangements also tend to lock the industry into reinvestment in the same province or area.

- The entire tax structure on the oil and gas industry needs to be recast, so as to allow us to mobilize reinvestment funds on a national basis – across provincial and territorial boundaries – for needed frontier development. At present, high provincial royalties and related incentives tend to "lock in" reinvestment to the area where the funds were earned: some means of providing royalty relief resulting from reinvestment in new frontier resources – even outside of the province – needs to be explored if we are to marshall our funds where they will be needed.

The potential crisis in our resources has arisen because of a combination of factors, some relating to the cost structure of resources and some to inappropriate policies by both industry and government. Government actions which have contributed to our potential resource crisis in Canada have included a series of rapid tax and regulatory changes that has substantially raised the industry's tax costs, and also resulted in an overall tax system with capricious tax burdens that are not related to ability to pay and work against the most efficient utilization of our resources. While government actions are far from being solely responsible for the present situation, they are in large part the only variable we have to work with to reverse these unfavourable trends and ensure that Canadians get as much out of our resources as they are capable of providing.

- Federally and provincially owned corporations engaged in resource operations should in general be subject to the same taxes and regulatory environment as privately owned companies. At present, provincial governments can establish provincially owned companies to take over the

production, processing and marketing of provincial resources and thereby escape tax liability. The tax system should not provide an artificial inducement for one level of government to beggar the other by expanding government ownership of resources.

- Crown corporations actively engaged in resource operations should not have preferred access to crown lands, or act as a rent collector for governments. Such crown corporations should be designed to add to our total exploration and development effort, rather than detract from private investment; they should also be structured so that their performance can be measured and monitored, rather than being provided with special privileges that make performance of their management virtually impossible to judge.

- Provincial governments should abstain from erecting or maintaining barriers to interprovincial commerce. Specifically, they should agree to discontinue tax incentives designed to lure resource processing facilities away from other provinces.

- Jurisdiction over continental shelf areas should be determined as soon as possible so as to facilitate future developments, but regardless of the disposition of revenues from such areas, the federal government should maintain a strong and direct role in the development of offshore and northern frontier resources. The recent tentative inter-governmental agreement concerning the sharing of revenues from offshore mineral resources, and the establishment of a federal-provincial board to administer such resources are important steps in this direction.

- Governments should take immediate action to resolve, on an equitable basis, native rights and environmental issues which affect the implementation of a national resource policy. However, governments and the public should recognize that all major development – including the settlement of this country – involves some impact on the environment and that the basic objective must be to deal with such changes intelligently and sympathetically, rather than to protest the idea of change.

- Governments, industry and the consuming public should adopt effective measures to restrain demand for energy fuels and, eventually, other minerals. Price increases should not be relied upon as sole instrument of restraint, but higher prices are nevertheless the most effective way to restrict demand. Lower speed limits, incentives for the purchase and use of energy-saving devices, and research directed toward the development of such devices could reduce significantly the demand for energy.

- Governments should encourage, by tax incentives and other policies, investment in industrial research and development relating to alternative energy sources and conservation.

- Tax and royalty policies, once reformed, should remain relatively stable over a long period of years. An industry which requires extraordinarily large investments of capital much of it truly risk capital with long payback terms, must have reasonable assurance of tax stability.

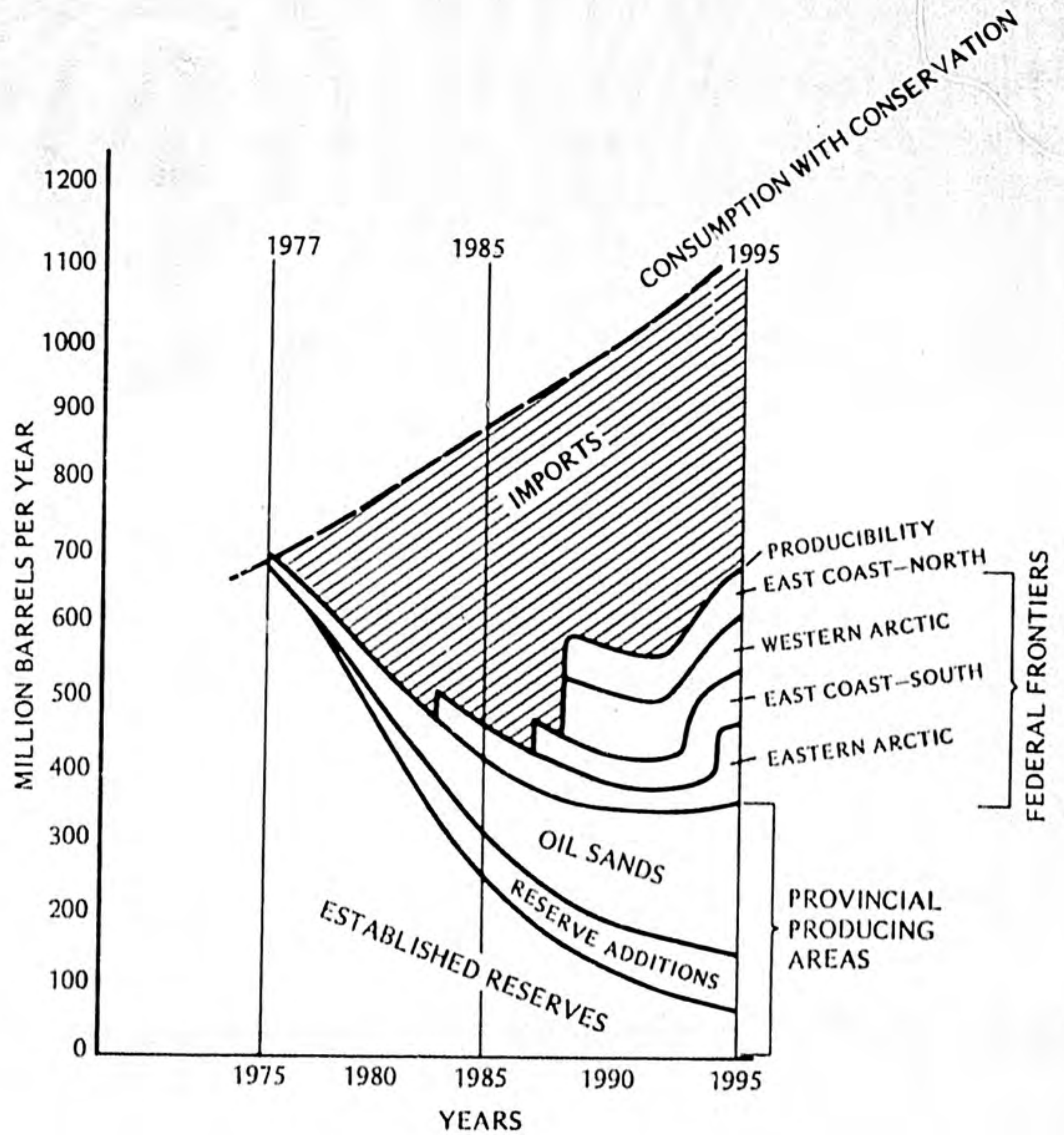
In summary, under our present tax and royalty rules, we do not have sufficient private investment funds from the industry's share of the cash flow from our depleting reserves to bridge the energy gap and get our frontier resources into production: the funds that are available cannot be mobilized on a national basis, and tend to be locked into established areas, and the frontier resources – with high costs, high risks, and long payback periods, do not have sufficient attraction for new capital.

There are hard choices to be made in developing our resources of minerals, oil and gas in the national interest. Even if some of our resources provided bonanzas in the past to both investors and governments, the future is likely to yield adequate returns only after massive commitments of capital and the acceptance of large risks by all concerned.

Unless we are prepared to face up to our challenges, and implement – now – policies that will benefit all Canadians, we will not get the most out of our resources. Without additional commitments to the development of new resources to replace those we are now using, we may all have to freeze in the dark – or buy our warmth and light in uncertain world markets, and with no sure coin to make the purchase.

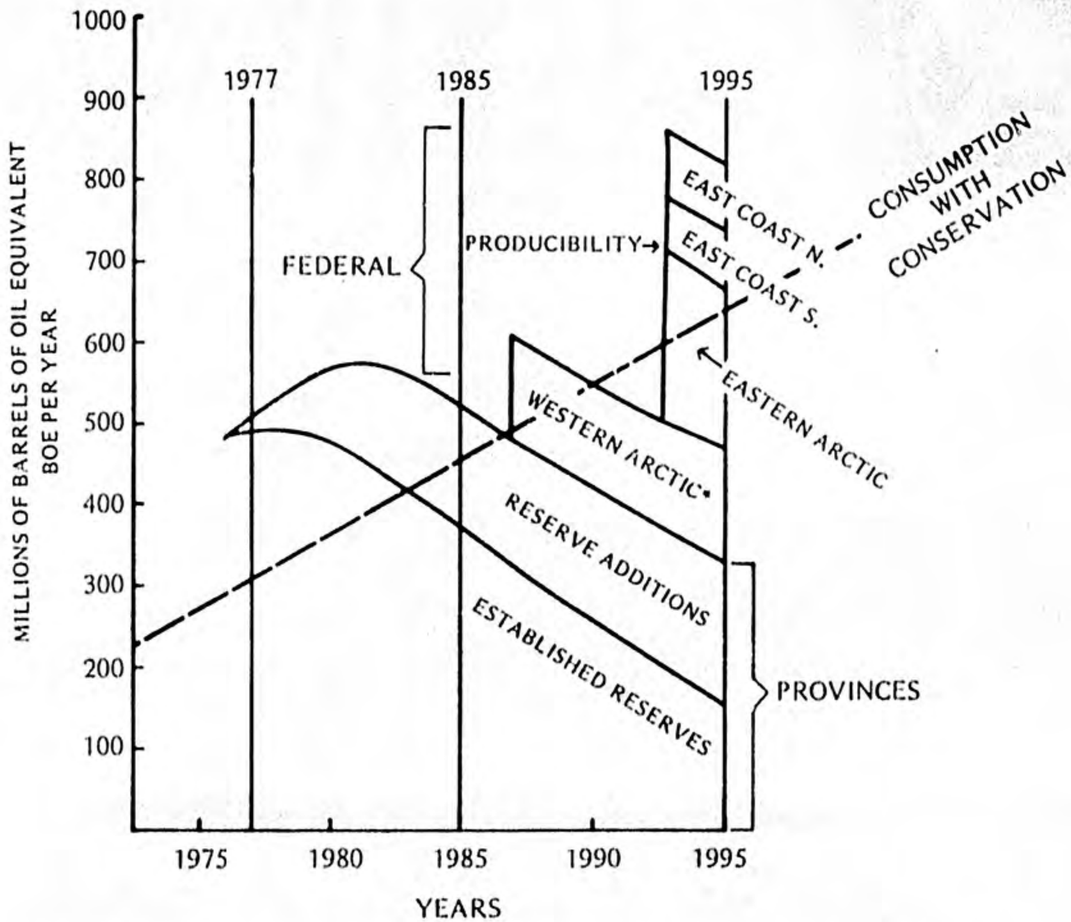
Canadians, informed and motivated, are equal to the challenge. If this Report is successful in stimulating further debate and decision on the resource crisis facing Canada, it will have served its purpose.

EXHIBIT 1



NOTE: Exhibit 1 and 2 are not forecasts of the amount of oil and gas that Canada is likely to produce between now and 1995: rather, they are projections of what might be obtained from the maximum exploration and development effort that we are realistically capable of mounting between now and 1985, and effort that would require changes in our present policies.

EXHIBIT 2



* FROM ALL CANADIAN RESERVES (A JOINT U.S. CANADIAN LINE COULD BE EARLIER)

SOURCE: Exhibit 1 and 2 derived from Appendix D.

Chairman

R. D. Brown, B.Comm, M.A., F.C.A. Senior Tax Partner, Price Waterhouse & Co.; Member of Taxation Advisory Committee, Department of National Revenue; former Co-Chairman of Joint Committee of Taxation of the Canadian Bar Association and the Canadian Institute of Chartered Accountants; special lecturer in advanced income taxes at Osgoode Hall Law School.

E. P. Chapman, Jr., P.Eng. Consulting Minerals Engineer, Vancouver; formerly President and Director of Chapman, Wood & Griswold Ltd.; member of National Committee on Mining.

J. E. Gander, M.A. Special Adviser to the Chairman, Economic Council of Canada, Ottawa; Member, inter-departmental committees of federal government on energy and minerals; formerly Director of Research, Tariff Board.

The Honourable E.C. Manning, P.C., C.C., L.L.D., D.U.C. President, M & M Systems Research Ltd., Edmonton; member, Senate of Canada, Ottawa; former Premier of Alberta, 1943-1968.

A. E. Pallister, B.Sc., P.Geoph. President, Pallister Resource Management Ltd., Calgary; Former Vice Chairman of Science Council of Canada; Past President, Canadian Society of Petroleum Geologists.

D. D. Peters, B.Comm., Ph.D. Vice President and Chief Economist, The Toronto Dominion Bank, Toronto; Participant in economic and industry conferences, and a writer on economic subjects.

L. A. Thorssen, B.Sc., M.A., D.U.C., P.Eng. Executive Director, Canada West Foundation, Calgary; Former Chairman, Alberta Universities Commission; former Administrative Head of Department of Civil Engineering, University of Alberta.

TRANSCRIPTION DE LA CONFERENCE DE PRESSE DU PREMIER MINISTRE AU CERCLE NATIONAL DE LA PRESSE, À WASHINGTON, LE 23 FEVRIER 1977

TRANSCRIPT OF THE PRIME MINISTER'S PRESS CONFERENCE AT THE NATIONAL PRESS CLUB, IN WASHINGTON, FEBRUARY 23, 1977

Q: Paul Racine. Monsieur le Premier ministre, vous avez proposé, dans votre discours au Congrès hier, la possibilité de modifier la Constitution canadienne. Vous en avez déjà parlé à quelques reprises ces dernières semaines, mais, comme en ce moment au Québec, il y a un gouvernement qui est intéressé à toute autre chose ... (inaudible).

R: Cela dépendra un peu des premiers ministres des provinces. Ce que j'ai voulu indiquer et répéter hier, c'est que le Gouvernement fédéral, quant à lui, est prêt à reprendre les discussions constitutionnelles que nous avions entreprises en 1968, jusqu'en 1971. Evidemment, si les provinces ne sont pas intéressées, nous ne les forcerons pas à engager le débat constitutionnel, mais je crois que les Canadiens en général s'y intéressent d'une façon plus vigoureuse et il est possible que nous acceptions de discuter la question avec des groupes de citoyens,mais notre préférence, bien sûr, ce serait d'avoir des conférences fédérales-provinciales sur le sujet constitutionnel. Encore une fois, il ne s'agit pas de forcer la note ou de brusquer les choses, seulement si les provinces le désirent.

Q: Mr. Prime Minister, have you discussed with the President or will you discuss with the President the Arctic Gas pipeline proposal and what is your position on that?

A: Well, we discussed not particularly that proposal, the Arctic Gas one, but we looked at the various alternatives including the Alcan route. There was a great interest on the part of the President of our attitude with regard to pipelines. I was as forthright as I could be within the strictures of the present situation. Canadians generally and certainly our government want to be as helpful to the Americans as we can in this particular aspect. That is what our visit is all about. That is what friendship is all about

and, after all, there is American gas to American consumers and we don't want to be dogs in the manger about it.

I reminded the President, as he knew I am sure, that we have pipelines through the United States servicing Canadian territory and other things being equal we want to be as forthcoming with the Americans. The President knows that there are some problems which have to be solved which are also familiar to Americans: environmental problems and native rights problems and rather complicated economic consequences of a vast injection of capital into Canada, investment capital into Canada and these are problems which are being studied now by the National Energy Board and by a Royal Commission headed by Judge Berger. Until these reports are received, the government will not be even legally in a position to accept or reject any proposition. Our National Energy Board has to make a recommendation on proposals before that Board before the government can act and we are expecting these reports in the first half of this year.

Q: Mr. Prime Minister, we were told that after reading your speech, President Carter asked for a briefing on the Quebec situation and that you then discussed privately for about ten minutes. Can you tell us the kind of response you got from him? Did he express a concern on the possible secession of Quebec?

A: He expressed interest in my views on the situation in Canada in general and Quebec in particular, but was not particularly volunteering any American point of view beyond the very general statements that he has made publicly. Naturally the Americans are looking to the north as a country with stability and duration and I think they are properly sensitive about interfering into our internal political problems and that seems to characterize the attitude of the President.

It was quite clear that if asked a preference the Administration would prefer to see a strong united Canada but beyond that, and I think quite properly, they are not expressing a point of view; just expressing interest.

A: Well, it is kind of technical but a simple way of saying it is that an interim agreement was reached because of the imminence of the 200-mile limit adopted by the Americans. I think the deadline was the 1st of March. We brought it in on the 1st of January. We had very few days to make sure that there wouldn't be a cod war between us and very positive results were obtained in every area except one and the positive results were that we would forbear at least until the end of this year and regardless of our new proclamation of a 200-mile limit we would continue more or less with the status quo anti while the two administrations worked toward a more accurate definition of the line on the east coast or some way of ascertaining what that line should be and the same thing on the west coast. There was one area of difficulty which had not been solved and that was the area of salmon fishing on the west coast and yesterday after a great deal of work on the part of our ambassadors and officials and ministers (and I think with some pressure from the President and myself) accommodation was reached also on the salmon. It is essentially an interim agreement to forbear and not to insist on imposing each of our theses on the other before the 1st of March. In other words, not to start throwing the other person out of one's waters just because the problem hasn't been solved.

Q: Mr. Prime Minister, regarding a possible pipeline route to Canada, you mentioned the issues of the environment and the native claims. Do you anticipate that those can be settled so that your government could make a final decision within, say one year, or is it likely to be longer than one year before Canada gives a definite final answer?

A: We realize we have to give you a final answer whatever it be before the end of the year. The President's deadlines (I believe the ultimate ones) will expire at the end of the geographical year and likely they will expire before so we realize that giving you no answer is an answer in a sense and if there is no pipeline to Canada I suppose there is the El [illegible] route which is the one that the Americans would go for. It [illegible]

a [illegible] costly one for you and it has certain [illegible]

Canada too and therefore we are very aware of the time strictures and we have to give you an answer at whatever deadline the President feels he has. Likely one in September. There will be an answer and I hope it will be in line with the friendship of our country and one which is to the advantage of both countries.

Q: Mr. Prime Minister, a moment ago in answer to Doug Small's question about the choice, you mentioned that Canadians will have to make a mature choice in respect to the accommodation of the Quebec problem. Presumably on the understanding that you cannot convince Quebec to stay in unless the rest of Canada wants Quebec to stay in, how and when will Canadians be asked to and be able to make that mature choice? How will that be done?

A: I think essentially it will be shown in the understanding expressed by English Canada of the reality of the French fact.

I don't think any one event, for instance, or referendum will be needed to show that. I think a different attitude and different understanding towards either our policies as a Liberal government towards one Canada or policies of the Opposition which would be acceptable, too, would be the test of the public. I don't think we can ignore the question. I don't think we can continue to say, "Well, it is not going to happen and we can conduct ourselves as though separation wasn't even a remote possibility." I am really answering you that there is not going to be one event, to my knowledge, which will sort of crystallize the acceptance by English Canada of the French fact. If I had to signal any one event, it would be an event like the Air Traffic Controllers' or the Air Pilots' strike. If too many negative evidences of this kind are given to Quebecers that the French language is not acceptable to the rest of Canada even in Quebec air space, then I think we have begun seriously to lose the battle.