

## **1 INTRODUCTION**

### **1.1 Submissions**

The Alberta Energy and Utilities Board (Board) received submissions from Gulf Canada Resources Limited (Proceeding No. 960952) and Norcen Energy Resources Limited (Proceeding No. 960953) requesting that the drilling for and/or production of associated gas on specific oil sands leases be prevented. Gulf also requested that a general review of the impact of associated gas production on bitumen recovery on its oil sands leases be conducted. Concern was that pressure depletion of the gas cap in association with the oil sands zone will adversely affect bitumen recovery operations.

The Board subsequently requested and received submissions from the gas owners affected by the applications providing their views on the issue. Upon review of the information the Board denied the immediate requests by Gulf and Norcen to restrict production on the leases in question. However, recognizing the broad implications of the issue on existing and future operations, the Board issued General Bulletin GB 96-15 advising that it would convene a general meeting of all interested parties to discuss the scope of a general review. Subsequent to the meeting, Norcen withdrew its request to cease drilling and production pending the results of further drilling on its leases. The Board will re-consider the Gulf application upon completion of the general inquiry.

### **1.2 Meeting**

The issue was considered at a public meeting on 21 January 1997 at the Board's office by F. J. Mink, Presiding Member, J. D. Dilay, Board Member, and W. J. Schnitzler, Acting Board Member.

A list of the meeting participants is provided below.

**THOSE WHO APPEARED AT THE MEETING**


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Principals (Abbreviations used in Report)	Representatives
Gulf Canada Resources Limited (Gulf)	F. R. Foran, Q.C. N. Dilts M. Krause
Northstar Energy Corporation (Northstar) NAL Resources NAL Energy Inc. Canadian Forest Oil Ltd. UMC Resources Canada Ltd. Paramount Resources Ltd. Wascana Energy Inc. Giant Grosmont Petroleum Ltd.	K. F. Miller
Giant Grosmont Petroleums Ltd.	R. Watson
Wascana Energy Inc.	P. Sidey
Paramount Resources Ltd.	R. Duncan
Norcen Energy Resources Limited	B. Dozzi S. Sills M. Jennings B. Kurtz
Campbell River Engineering Ltd. Elk Point Gas Ltd.	D. Campbell
Petro-Canada	G. Sinclair
Mobil Oil Canada	D. Searle K. Dembicki N. Amoozegar
Canadian Occidental Petroleum Ltd.	J. Wansleben
Talisman Energy Inc.	J. Harding
Tarragon Oil and Gas Limited	R. Rosine

**THOSE WHO APPEARED AT THE MEETING (cont'd)**


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Principals	Representatives
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(Abbreviations used in Report)

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Minerals Tenure Branch of the Alberta Department of Energy (ADOE)	D. Coombs
Rio Alto Exploration Ltd.	R. Cones
Ranger Oil Limited	D. Drall
Alberta Energy and Utilities Board Staff	G. Dilay K. Sadler T. Byrnes

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## 2 MATTERS RAISED

The matters raised at the meeting fall into the following general categories:

- \$ the identification of interested parties,
- \$ the issues to be considered, and
- \$ the process and timing.

## 3 IDENTIFICATION OF INTERESTED PARTIES

Some 105 individuals from 58 companies registered for the exploratory meeting.

At the meeting, the representatives identified the following parties that should take an interest in and participate in an inquiry of the matters before the Board.

- \$ Alberta Department of Energy,
- \$ the holders of oil sands leases,
- \$ the holders of natural gas leases overlying and owners of facilities in the vicinity of oil sands leases,
- \$ Nova Gas Transmission Ltd. (NGTL),
- \$ Elk Point Gas Ltd., and
- \$ gas distribution utilities.

The Board accepts the list of interested parties as put forward as those having a particular interest in the subject and will direct correspondence of the proceeding to them. The Board will include mineral rights holders and owners of other facilities operating in oil sands areas. The Board intends to issue a general notice of the inquiry purpose and scheduling in order to allow for the broad participation of all segments of the industry.

## 4 THE ISSUES

4.1 The participants at the meeting submitted the following issues for consideration at the proposed Board inquiry:

- \$ the efficiency of and advancements in bitumen recovery technologies,

- \$ the effect of depletion of gas caps in association with oil sands zones on bitumen recovery,
  - \$ the recovery of resources, on an energy basis, of gas caps and the affected oil sands under various options of recovery,
  - \$ evaluation of the economic benefits of both natural gas and bitumen production under various options of recovery,
  - \$ policies and procedures to maximize the production of hydrocarbons where oil sands have overlying gas caps or water sands in communication with gas caps,
  - \$ policies and procedures for future leases of hydrocarbon lands where oil sands have overlying gas caps or water sands in conjunction with gas caps,
  - \$ identification and assessment of the possible impacts of in situ oil sands projects on associated gas development,
  - \$ identification and assessment of possible mitigative measures for potential in situ oil sands projects using currently available technology that could avoid detrimental effects,
  - \$ discussion of gas and bitumen production priority in the event that concurrent production is not desirable, and
  - \$ if gas or bitumen production is prevented, how the appropriate resource holder will be compensated and by whom.
- 4.2 The Board has reviewed the issues put forward and believes that the following list should form the basis for the proposed inquiry:
- (a) Extent of Affected Reserves
    - \$ Methodology used to establish the presence of "associated" gas.
    - \$ Tabulation of the amount of recoverable reserves, on an energy basis, of associated gas caps and the potentially affected oil sands.

## (b) Impact on Recovery

- \$ Identification of factors and evaluation of the possible effect of depletion of associated gas caps on bitumen recovery if mitigative measures are not used.
- \$ Identification of potential mitigative measures and discussion of relative effects if mitigative measures are used to optimize resource recovery.
- \$ Study of the possible effect of bitumen recovery on associated gas caps, whether or not the gas is produced.
- \$ Evaluation of the efficiency and advancements in primary and thermal bitumen recovery technologies that could impact the resource recovery.

## (c) Economic Impact

A cost/benefit evaluation showing the optimum depletion strategy for recovering the resources. Such studies should include:

- \$ a production and price forecast of the gas and oil sands reserves,
- \$ an assessment of the likely timing of resource recoveries,
- \$ an evaluation of the possible loss of revenue, gas contract obligations, and capital investment,
- \$ an evaluation of the possible impact on gas distribution companies whose gas supplies are mostly from the affected fields. This should include discussion on the issue of security of supply, alternative supplies, and cost of accessing them, as well as the size of possible stranded investment, and
- \$ an assessment of the impact on NGTL's facilities servicing the affected gas producing areas as a result of a shut-in order.

## (d) Policy Considerations

- \$ If co-development is not possible, an identification of the priority of development and reasons for the preference.
- \$ Views on resource conservation policies and procedures to maximize the recovery of hydrocarbons where oil sands have overlying gas caps or water sands in communication with gas caps.
- \$ An identification of possible regulatory changes that could provide for optimum co-development of hydrocarbon resources.

## (e) Guidelines

- \$ Rules and procedures to be used for specific development applications in terms of contacting oil sands or P & NG leaseholders and providing opportunities for

objection.

(f) Lease Tenure and Related Issues

Discussion of land tenure and related matters are issues outside the jurisdiction of the Board. The Board understands that the Department of Energy will be conducting its own review of current leasing policies and procedures in parallel with this inquiry (see attached letter). The Board recognizes the interest by parties submitting evidence to this proceeding to discuss all implications of the subject before the Board. If the parties see some merit in tabling information on these issues, the Board will summarize this information and related findings from the inquiry and forward it to the government for consideration in context of the conclusions by the Board.

### 4.3 The Process and Timing

On the basis of the suggested process from the participants and the nature of the issues raised at the 21 January 1997 meeting, the Board is prepared to proceed with the general inquiry of gas/bitumen development. The participants requested that the Terms of Reference be finalized and that the proceeding get underway as soon as practical. The Terms of Reference for the inquiry are laid out under section 4.2 of this report and the Board will adopt the following timetable to receive submissions and to consider the evidence.

Filing of coincident initial submissions	25 April 1997
Filing of responses to initial submissions	9 May 1997
Commencement of inquiry	27 May 1997

With respect to interim procedures for oil sands or gas applications for projects and/or facilities, the Board proposes to consider these under its normal rules and procedures. That is, in the absence of valid objections, the Board will continue to issue approvals for wells, facilities, etc., in the oil sands areas. Parties should recognize that affected facilities are subject to normal regulatory risks that may result from the finding of the inquiry. Where objections have been filed related to the Terms of Reference for this inquiry, the Board will hold these applications in abeyance pending the outcome of the inquiry. The Board also takes this opportunity to remind operators that it is their responsibility to monitor developments which may be of interest to them.

On the matter of costs related to the preparation of submissions and for the retention of experts in specific fields, the Board's view is that each party filing a submission will be responsible for all associated costs. This includes costs for the preparation or review of submissions as well as those for appearing at the inquiry.

## 5 CONCLUSION

The Board is prepared to proceed with a general inquiry into the issue of gas/bitumen development and invites interested parties to submit information on any or all of the items noted in the Terms of Reference. The inquiry will commence on 27 May 1997 at the Board's office in Calgary, Alberta. The Terms of Reference will be as set out under section 4.2 of this report. A Notice of Inquiry will be published in Alberta newspapers and distributed broadly.

DATED at Calgary, Alberta, on 19 February 1997.

### **ALBERTA ENERGY AND UTILITIES BOARD**

F. J. Mink, P.Eng.  
Board Member

J. D. Dilay, P.Eng.  
Board Member

W. J. Schnitzler, P.Eng.\*  
Acting Board Member

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- Mr. Schnitzler was not available but agrees with the contents of the report.



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February 14, 1997

Ms. Céline Bélanger  
Chair, Alberta Energy and Utilities Board  
640 - 5 Avenue SW  
Calgary, Alberta, T2P 3G4

Dear Ms. Bélanger:

RE Gas/Bitumen Inquiry - EUB

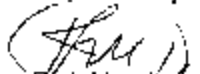
We understand that a number of participants at the recent EUB meeting on the Gas/Bitumen Inquiry suggested that land tenure issues be considered in the Inquiry. I believe we have arrived at an appropriate approach to this question through subsequent discussions between the Department and Board members and staff regarding the EUB's responsibility for conservation issues and the Department's for tenure.

The Department would like to accept the EUB's offer to collect comments on tenure-related concerns that industry may wish to raise at the Inquiry. It is understood that the EUB will simply gather information, summarize it, and forward it to the Department without any recommendations.

In parallel with the EUB's investigations, the Department will be proceeding with its own review of tenure policies that relate to gas/bitumen production. Tenure-related information received from the EUB will be addressed by the Department as part of this review.

The Department would like to support the EUB's Inquiry in two ways. We are prepared to have staff at the Inquiry who are qualified to provide clarification of current policies and historical records, should such information be requested by the Board. The Department has also carried out some preliminary, narrowly-focused research on the possible impact of gas production on the recovery of associated bitumen zones for a limited number of cases. We will release our report on this work when it has been finalized in the coming weeks. Department staff who prepared the study will also be available to the Inquiry to address any questions there may be about their work.

The Department contact for the gas/bitumen issue is David Coombs (422-9430) who is also the Project Leader for the Department's review of tenure-related issues.

  
Rick Hyndman