

January 19, 2004

Mr. Neil McCrank, Q.C.  
Chairman  
Alberta Energy and Utilities Board  
640 – 5 Avenue SW  
Calgary, AB T2P 3G4

Re: **General Bulletin 2003 - 28**  
**EUB Defined Liege Field**

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Dear Mr. McCrank:

Paramount Energy Trust (“PET”) is extremely concerned with the EUB’s Regional Geological Study (“RGS”) and its interpretation of the gas pools in the Liege Area and their potential to be deemed associated with economically exploitable bitumen. The specific pools of concern are those currently defined by the EUB as: the Liege Wabiskaw M, N, O, and P pools; the Liege Wabiskaw Undefined 049, 050, 051, 053, 055, 061, 062, 063, 064, and 066 pools; the Liege McMurray V pool; the Liege McMurray Undefined 074 and 076 pools; and the Liege McMurray C pool if indeed it has not been rescinded. These pools will be collectively referred to herein as the Liege gas pools.

This letter is provided to you now in order to highlight several technical issues which have already been identified, understood and accepted by the EUB and the bitumen leaseholders in the area, in their approval to produce gas through extensive review of the gas pools in question over the past five years.

#### **ID 99-1 Process and the Current RGS Process**

Based on your letter of December 17, 2003, it is our understanding that the current RGS review process is not as comprehensive as the process required in ID 99-1. We are troubled that the process the EUB is currently undertaking to redetermine the status of gas wells in the area may result in a determination which is in conflict with these previous reviews as it may not factor in key information available on the subject pools, much of which has been repeatedly reviewed, accepted and endorsed by the EUB over the years.

We note that the RGS report does not in fact evaluate association of gas with potentially recoverable bitumen but rather simply pressure communication of gas with bitumen. In addition, pressure communication was determined primarily by geological means and techniques, not engineering data and techniques, which bring these RGS conclusions regarding association into serious doubt in any case. However, the definition of potentially recoverable bitumen as defined in the report’s glossary (page 163 RGS) is “Bitumen in oil sands that has a minimum thickness of 10 m with a minimum bitumen saturation of 50 per cent. Consideration must be given to the volume of the bitumen encountered, the geological depositional environment, the presence of

associated water zones and the available well control.” Further, commercial bitumen determination also needs to account for the vertical continuity of bitumen, and the presence of any baffles, both of which can have a significant negative impact on SAGD performance. The RGS does not provide specific information regarding the distribution of potentially recoverable bitumen.

An additional but no less important concern relates to process and fairness. Approvals and licenses previously granted by the EUB should not be varied or revoked, without a clear indication as to the basis for doing so, an opportunity to consider the concerns, and a full and fair hearing to question or challenge the proposed action. That is particularly so in the case of approvals recently granted, under existing regulations. As a reminder, ID 99-1 was made part of a regulation. That regulation has not been repealed. The recent EUB Order does not have the effect of repealing a regulation.

### **Lack of Commercial Viability of Bitumen in Liege Area**

Just over 100 wells, excluding bitumen evaluation wells, penetrate the Liege gas pools, approximately 50 of which are currently producing gas wells identified in the RGS report. Since ID 99-1 came into effect, applications have been filed to produce 45 wells within the Liege gas pools. Further, the EUB has approved all 45 wells for gas production after extensive review.

- The EUB cited lack of vertical continuity of bitumen, bitumen less than 10 metres thick, presence of an intra-bitumen aquifer and top water, and low reservoir pressure (less than 500 kPaa) as reasons why the bitumen resource is not considered exploitable by SAGD technology and therefore approved applications to produce gas from April 1999 to December 2003. Attachment No. 1 summarizes the conclusions reached by the EUB in their extensive review of this area through ID 99-1 applications when the 45 wells were approved for production;
- In addition to evidence submitted and agreed to by the EUB as above, additional core evidence has been submitted in past ID 99-1 applications suggesting the net thickness estimation of the bitumen in this region should be reduced from that determined by log analysis to account for thin shales and dense layers;
- Based on 2003 pressure survey data, average gas pool pressures are estimated at 390 kPaa, below the 500 kPaa cutoff established by the EUB in their letter to Industry, December 28, 1998.
- After consultation throughout the ID 99-1 application process, no objections to produce gas have ever been received from bitumen leaseholders in this area. Shell Canada, Petro Canada, Japan Canada Oil Sands, Canadian Occidental and Imperial Oil were bitumen rights holders in the vicinity of the Liege gas pools at the time of applications for approval to produce gas and have always been provided notification as per ID 99-1 requirements;
- Exemptions from Shut-in Order 03-001 were filed for all of the producing wells in the Liege area in September 2003 and not one bitumen leaseholder filed an objection to continued production or notified any operator of any concerns with continued gas production;
- Industry agrees with the EUB’s assessment in the aforementioned EUB approval letters, that the bitumen in the Liege area is not economically exploitable utilizing reasonably

- foreseeable technology. Bitumen leaseholders have surrendered, reduced, and attempted to sell their rights in this area, even though the price to retain these lands was only \$3.50 per hectare. Attachment No. 2 summarizes the historical ownership of the oil sands leases in the Liege area;
- There is no evidence that a SAGD project in the Liege area will ever meet the threshold requirements for a commercial project defined by Petro Canada in their final arguments for the Chard Leismer hearing that a minimum of 15 m of vertically continuous 10 to 12 weight percent bitumen is required across an area greater than 4 sections. While the RGS does not provide mapping for vertically continuous bitumen, we have not been able to identify any well within the region of influence of any pools identified in the RGS in the Liege area which meets Petro Canada's criteria for an economic project using reasonably foreseeable technology;
  - As indicated above, there is no evidence there is recoverable bitumen in the area to enable a viable economical bitumen project. Thus, the value of the gas reserves far exceeds any potential value of the bitumen resource in the Liege area. Using an abandonment pressure of 160 kPaa, remaining recoverable producing reserves of 50 Bcf (net to PET) are estimated by the Trust's independent reserve evaluation engineers for these pools.

Through technical analysis by the EUB and bitumen leaseholders alike, PET maintains that there is no potential to impair incremental bitumen recovery in the Liege area by producing gas. If a commercial project is not reasonably foreseen, then clearly there can be no detrimental effect on bitumen recovery. The above discussion should in no way be construed to suggest that PET agrees with the RGS's conclusions regarding the potential association of gas pools in this region. It simply establishes that the bitumen in this region is not economic utilizing reasonably foreseeable technology and therefore PET concludes that a recommendation to continue the producing production status of gas wells in the Liege gas pools should be forthcoming.

### **Potential Damage to Gas Producers**

Should the pools in the Liege area be recommended for shut-in on January 26, 2004, and subsequently shut-in, the damage to Paramount Energy Trust, and third parties, would be extensive and in part irreparable. A significant amount of such damage would occur with the mere inclusion of these gas pools in a shut-in order, even though all evidence suggests to all parties that have reviewed this area in the past that a subsequent hearing would result in approval to produce gas from these pools. Damages to Paramount Energy Trust could include, but are not limited to, costs related to:

1. Shut-in of approximately 16.6 MMcf/d of natural gas sales net to PET. In the current gas price environment this amounts to lost cash flow of \$85,000 per day, (\$2.6 million per month) which the Trust pays out to its Unitholders;
2. Significantly increased unit operating costs for its Legend East production which is processed through the Legend facility;
3. Deferral beyond the winter activity window of a significant portion of the ongoing \$4 million capital program to establish additional gas production from the field;
4. Removal of the Legend asset from the Trust's borrowing base, therefore impeding the completion of transactions where the Trust has pending purchase and sale agreements;

5. The creation of a material change to the Legend asset affecting purchase and sale arrangements that are scheduled to close in January 2004;
6. Interference with the Trust's ongoing natural gas hedging program as, in combination with other potential gas production at risk as a result of the GB 2003-28 process, PET may have close to 45 percent of its current production identified for shut-in. As the Trust has bank requirements that restrict its hedging activity beyond 50 percent of its production, the Trust may be forced to sell existing natural gas forward sale contracts and is not free to implement additional gas price hedges due to the uncertainty of our future production levels created by the GB 2003-28 process;
7. Obligations for firm transportation contracts with TransCanada Pipelines as these contracts would remain in place with no related natural gas production;
8. Obligations to the Progas aggregator pool which would not be met;
9. Significantly increased unit general and administrative costs;
10. The termination of future development opportunities for the field; and
11. The potential exodus of field staff related to the uncertainty of continued gas production from the Legend facility and the effect on their continued employment.

The scope of the review outlined in the attachment to your December 17th newsletter to Industry suggests that if the Staff Submission Group actually identified this field for shut-in, then the February and March hearing process may be too limited in scope to address all of the issues that EUB staff themselves have identified as reasons to allow production from these gas pools. Lack of available time should not translate into clearly erroneous and contradictory determinations in any area, let alone with respect to one as critical as this property.

PET thereby requests that the information contained herein be considered fully in any well status review in the Liege area. We also request the opportunity to make a technical presentation regarding the above information. At the very least, we look forward to further discussion regarding the above comments. Please contact myself at 269-4442 or alternatively Brett Norris, Vice President, Geosciences & New Ventures or Kevin Marjoram, Vice President, Operations, can be reached at 269-4419 and 269-4422 respectively.

Yours truly,

**PARAMOUNT ENERGY OPERATING CORP.**

“Signed”

Susan Riddell Rose  
President & COO

Enclosures: Attachment 1 – Summary of ID 99-1 Approvals for Wells within Liege Gas Pools  
Attachment 2 - Liege Area Historical Land Summary  
Attachment 2 - Figure 1 Oil Sands Ownership Map

pc: Mr. Andy Warren, Special Projects, EUB  
Mr. Cal Hill, Resources Branch, EUB