



June 10, 2004

**TO: SASKATCHEWAN OIL AND GAS OPERATORS AND INTERESTED PARTIES**

**RE: Administrative Procedures Pertaining to Implementing  
the Associated Natural Gas Royalty/Tax Regimes**

On October 7, 2002, new "fourth tier gas" Crown royalty and freehold production tax regimes were announced in Saskatchewan. Besides being applicable to natural gas produced from new gas wells drilled on or after October 1, 2002, the regimes are also applicable to natural gas that is gathered for use or sale and is produced from:

- (a) oil wells with a finished drilling date on or after October 1, 2002; and
- (b) oil wells with finished drilling date prior to October 1, 2002, where the individual oil wells have a gas-oil production ratio in any month of more than 3,500 cubic metres of gas for every cubic metre of oil.

The new fourth tier regimes have been incorporated within *The Crown Oil and Gas Royalty Regulations* and *The Freehold Oil and Gas Production Tax Regulations, 1995*. A description of the new regimes is provided in Information Circular PR-IC02 titled "Natural Gas Price Sensitive Royalty/Tax Structures" located at [www.ir.gov.sk.ca/royaltytaxinfocirc](http://www.ir.gov.sk.ca/royaltytaxinfocirc) on the department's Web site.

While the fourth tier regimes were introduced effective October 1, 2002, further review of the administrative procedures was required before the regimes could be fully implemented for natural gas produced from oil wells (referred to as associated gas). Due to the wide variance in the treatment of natural gas within oil batteries, fair and equitable procedures needed to be developed in order to determine the amount of gas at each battery that is "gathered for use or sale". In 2003, the department forwarded a proposal to the industry producer associations for review. The proposal involved the application of a formula applied at a battery level that would be used to determine what portion (fraction) of gas handled by a battery is used or sold.

The department has had further discussions with industry and software vendors on this issue. As a result, new procedures have been developed that are more in sync with the normal operating practices of the oil and gas industry. Instead of implementing a rigid formula for determining the volume of gas "gathered for use or sale" from each oil well within a battery, the department is proposing to use the actual amounts that are allocated to each well by the operator. The department is proposing to modify the current SIR-18 form (Production Report) to enable the lease fuel, flared, vented and delivered volumes of gas allocated to each well, to be reported to the department on a monthly basis. This change ensures the same allocations are used for industry and government purposes.

The department is working towards getting the full administrative process for associated gas automated as soon as possible in 2005. However, since the associated gas royalty/tax structure is effective October 1, 2002, an interim solution needs to be implemented to address this retroactive period. The department will determine the amount of gas “gathered for use or sale” from each oil battery for each month commencing October 2002 on the basis of the formula that was originally proposed last year and which, generally, equates to the formula currently being used by industry. The portion (fraction) of gas volume produced from each well in the battery that will be considered “gathered for use or sale” will be determined as follows:

$$\text{Portion of Gas Volume (PV)} = \frac{TP - FV}{TP}$$

Where: *TP* is the total monthly volume of natural gas produced from the oil wells in the battery and reported on the SIR-61 form (Operator’s Disposition Report) for the oil battery; and

*FV* is the total monthly volume of flared and vented natural gas reported on the SIR-61 form for the oil battery;

Once this formula is implemented, some wells that are currently being assessed royalty/tax on 100% of their production volume will receive a royalty/tax credit for months in which a portion of the gas in the battery was flared or vented. In addition, the department will be estimating and billing the royalty/tax amounts owing on fourth tier gas production from wells that have not previously been assessed.

For purposes of valuing the province’s royalty/tax share of gas production, each operator (including a special operator) who has not already done so, is required to submit a completed EM-720 form (Saskatchewan Natural Gas Price Election Form) to the department electing to use either the provincial average price (PGP) or operator average price (OGP). If the PGP is elected, it is effective the month following the month in which the EM-720 form is received by the department.

The SIR-704 form (Natural Gas Sales Summary) is used for determining the operator’s OGP for each month. In keeping with the policy outlined in Part V of Information Circular PR-IC10 titled “Well-Head Value of Natural Gas”, where an operator has not submitted the SIR-704 report during the retroactive months, the department will proceed with billing the operator using the PGP as an estimate of the operator’s OGP. The operator’s actual OGP for a retroactive month will be incorporated once the department has received the SIR-704 report for the month from the operator.

Once the department has finalized the revisions to the SIR-18 form, operators will have the option of filing their allocated lease fuel, flared, vented and delivered volume amounts for the retroactive months. This will enable corrections to be made to the formula allocation for the unique operating circumstances that may exist at a particular battery.

An example calculation of the “*PV*” factor for a month within the retroactive period is provided in the attached Appendix. This factor reduces the royalty/tax portion that otherwise would be payable if all the gas produced from a gas well was “gathered for use or sale”. In other words:

$$\text{Royalty/Tax Portion} = (\text{Royalty/Tax Rate} \times \text{Gas Production}) \times PV$$

In conclusion, the department will begin working towards implementing the formula to be used in billing the royalty/tax on fourth tier associated gas during the period commencing October 2002 and ending in the month in which the revised SIR-18 form can be fully implemented. If you have any concerns with the process outlined in this letter, please contact Bruce Lerner of the Petroleum Royalties Branch at (306) 787-2748 no later than July 31, 2004.

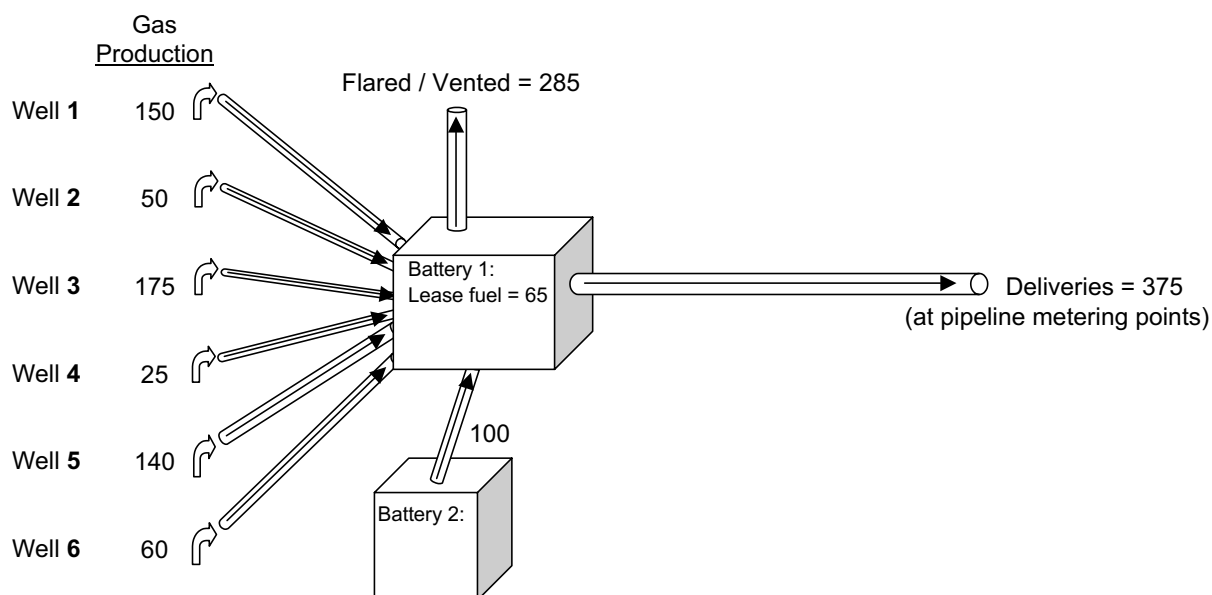
Sincerely,

Dale Fletcher, Director  
Petroleum Royalties Branch

## Example Associated Gas "PV" Calculation

Assumptions: 6 oil wells in Battery 1

- Gas from wells 1 and 2 is classified as "fourth tier" associated gas (wells drilled after October 1, 2002 or GOR>3500).
- Gas from wells 3, 4, 5 and 6 is exempt from royalty/tax (wells drilled prior to Oct. 2002 with GOR<3500, or wells not approved as "concurrent" prior to Oct. 2002).



### Battery 1 Disposition (reported on existing SIR-61 Operator's Disposition Report)

Total Gas Production	Total Receipts	Lease Fuel	Flared	Vented	Metering Difference	Total Deliveries
600	100	65	285	0	(25)	375

### "PV" Calculation:

$$PV = \frac{TP - FV}{TP}$$

where: TP = Total production of gas from the oil battery during the month.

FV = Amount of gas flared and/or vented from the battery during the month.

PV = Portion (fraction) of gas volume that will be considered "gathered for use or sale". Value cannot be less than 0 or greater than 1.

$$= \frac{600 - 285}{600} = 0.525$$

Therefore:

Royalty volume for Well 1 = royalty rate (calculated for 100% of production volume) for the well x 150 x 0.525  
 Royalty volume for Well 2 = royalty rate (calculated for 100% of production volume) for the well x 50 x 0.525