



ACTS: *The Crown Minerals Act*  
*The Freehold Oil and Gas Production Tax Act, 2010*

REGULATIONS: *The Crown Oil and Gas Royalty Regulations, 2012*  
*The Freehold Oil and Gas Production Tax Regulations, 2012*

TOPIC: **ROYALTY/TAX INCENTIVE VOLUME  
FOR  
EXPLORATORY GAS WELLS  
DRILLED  
ON OR AFTER OCTOBER 1, 2002**

This Information Circular has been prepared by the Ministry of the Economy to explain the policies and procedures which are used to administer the Crown royalty and freehold production tax (royalty/tax) incentive volume for exploratory gas wells in accordance with *The Crown Oil and Gas Royalty Regulations, 2012* and *The Freehold Oil and Gas Production Tax Regulations, 2012* (collectively the "regulations"). Reference should be made to the Acts and regulations for an exact statement of the law. In case of a conflict between this Information Circular and the provisions of the Acts and regulations, the Acts and regulations will govern. This Information Circular has no legal force or effect.

Note: This circular replaces Information Circulars PNG94IC04 and EFA-IC04 and is available on The Ministry of the Economy's web site at [www.economy.gov.sk.ca/royaltytaxinfocirc](http://www.economy.gov.sk.ca/royaltytaxinfocirc)

**I. DEFINITION OF TERMS REFERRED TO IN THIS CIRCULAR**

**GAS WELL** means:

- (i) a wellbore:
  - (a) that has been cased and that is not completed or abandoned, and:
    - (I) that has gas indicated as the well objective on the well licence and the minister has not received written notice from the operator indicating the well objective has been changed to an objective other than gas; or
    - (II) that does not have gas indicated as the well objective on the well licence and the minister has received written notice from the operator indicating the well objective has been changed to gas;
  - and includes all reserves within the boundaries of the drainage unit for the zone from which the wellbore is expected to produce; or
  - (b) that is completed in a zone for the purpose of producing gas, and is capable of producing gas from that zone either alone or in association with no more than one cubic metre of oil for every 3,500 cubic metres of gas, and includes all reserves in that zone within the boundaries of the drainage unit for that zone; or
- (ii) any other wellbore or group of wellbores, in conjunction with any reserves, that may be approved by the minister as a gas well.

- NOTE:
- 1) If a wellbore is deepened, any gas well that produces from a zone that was not previously part of the wellbore will be considered a newly drilled well. The finished drilling date of the well will be the date when the deepening of the wellbore was completed.
  - 2) If a wellbore is plugged-back or re-completed up-hole, the resulting gas well will not be considered a newly drilled well. The finished drilling date of the well will be the date when the drilling of the wellbore was completed.

**GAS WELL LOCATION** means a location for which a well licence application:

- (i) has been approved by the minister and has not subsequently been cancelled;
- (ii) indicates gas as the well objective; and
- (iii) has not yet resulted in a wellbore being cased for the purposes of production or abandoned.

**GEOLOGICAL SYSTEM** means the strata, as determined from time to time by the Saskatchewan Geological Survey, deposited during a particular geological period, including the geological periods known as the Cretaceous, Jurassic, Triassic, Mississippian, Devonian, Silurian, Ordovician, Cambrian and Precambrian.

**INTER GAS WELL DISTANCE** means the distance in kilometres measured from the centre of the drainage unit of a gas well or gas well location to the centre of the drainage unit of another gas well or gas well location if:

(i) in the case of a horizontal gas well, the centre of the drainage unit is the centre of the nearest drainage unit that is established for a vertical gas well and that is penetrated by a horizontal section of the horizontal gas well; or

(ii) in the case of a gas well location that is planned to be a horizontal gas well, the centre of the drainage unit is the centre of the nearest drainage unit that is established for a vertical gas well and that is planned to be penetrated by a horizontal section of the gas well location;

**QUALIFYING EXPLORATORY GAS WELL** means a gas well with a finished drilling date on or after October 1, 2002:

- (i) that has gas listed as the well objective on the well licence;
- (ii) that has not had its wellbore, or any portion of its wellbore, utilized for any purpose since December 31, 1983;
- (iii) that, at the time the well is licensed, is located in a drainage unit that has not contained a gas well that produced gas from the same zone; and
- (iv) that first produces gas from the zone noted as the producing zone or formation on the well licence and:
  - (a) at the time the well is licensed, the inter gas well distance from the gas well to any other gas well or gas well location is more than 4.8 kilometres; or
  - (b) produces gas from a zone within an older geological system than the oldest geological system in which:
    - (I) any other gas well is cased through or into, if, at the time the gas well is licensed, the inter gas well distance from the other gas well to the gas well is 4.8 kilometres or less;
    - (II) any other gas well is open-hole completed into, if, at the time the gas well is licensed, the inter gas well distance from the other gas well to the gas well is 4.8 kilometres or less; or

- (III) any other gas well location is licensed through or into, if, at the time the gas well is licensed, the inter gas well distance from the other gas well location to the gas well is 4.8 kilometres or less”;

or a gas well with a finished drilling date on or after October 1, 2002 that is approved by the minister as a qualifying exploratory gas well.

**WELLBORE** means a drilled opening in the ground other than a seismic shot hole or structure test hole and includes the total drilled length of the opening.

**ZONE** means any interval approved by the minister that is definable respecting a geological formation or geological unit.

## **II. CROWN ROYALTY/FREEHOLD PRODUCTION TAX SYSTEM**

### **A. ROYALTY/TAX INCENTIVE VOLUME**

Only gas wells classified as qualifying exploratory gas wells receive an incentive volume.

A **Qualifying Exploratory Gas Well** qualifies for a 25 million cubic metres royalty/tax incentive volume.

### **B. ROYALTY/TAX RATES FOR INCENTIVE VOLUME**

The royalty/tax incentive volume for a qualifying exploratory gas well receives the following royalty/tax rates:

#### **Crown Royalty (applied to gas produced from or allocated to Crown lands)**

A Crown royalty rate equal to the lesser of:

- the “fourth tier gas” Crown royalty rate; and
- 2.5%.

#### **Freehold Production Tax (applied to gas produced from or allocated to freehold lands)**

A freehold production tax rate of 0%.

### **C. ROYALTY/TAX RATES FOR PRODUCTION AFTER INCENTIVE VOLUME**

After the incentive volume noted in section A has been produced, the gas produced from the qualifying exploratory gas well drilled on or after October 1, 2002 will be subject to the “fourth tier gas” royalty/tax rates which are outlined in Information Circular PR - IC02 titled “Natural Gas Price Sensitive Royalty/Tax Structures”.

### **III. INCENTIVE VOLUMES APPLICABLE TO RE-COMPLETED (or PLUGGED-BACK), MULTI-ZONE AND COMMINGLED GAS WELLS**

There are certain situations where the minister may approve the transfer of the unused portion of an incentive volume from a qualifying exploratory gas well to another gas well within the same wellbore. In order to receive approval, an application must be made to Energy and Resources specifically requesting the transfer. Situations which may be considered are as follows:

- (i) the gas well is the result of a re-completion (or plug-back) from the zone of the qualifying exploratory gas well to another zone in the same wellbore and no other gas well in the wellbore has produced the remaining incentive volume.
- (ii) the wellbore is multi-zone completed and both the gas well and the qualifying exploratory gas well simultaneously produce from the same wellbore.
- (iii) gas produced from the gas well is commingled (with minister's approval) with production from the qualifying exploratory gas well.

### **IV. INCENTIVE VOLUME APPROVAL PROCESS**

#### **A. IMPORTANCE OF DRILLING LICENCE INFORMATION**

To assist a company in finalizing drilling plans, the determination of whether or not a gas well qualifies for an incentive volume is made at the time the well is licensed. Qualification for an incentive volume depends on the well's location (distance from other gas wells or gas well locations) and producing zone, both of which are indicated on Part 1 of the Well Licence (Application).

The order in which gas wells are licensed can affect whether or not they qualify for an incentive volume. Therefore, a company that wishes to submit a group of gas well licence applications at the same time must send specific instructions with the applications indicating the particular order in which the wells are to be licensed.

The royalty/tax incentive volume will be available on Petrinex within two business days of the well licence issue date and is determined by the minister based on the information provided on Part 1. The final determination of the incentive volume is made once the minister has reviewed the completion information associated with initial production from the wellbore. In the situation where the wellbore was not completed in accordance with the information provided on Part 1 of the Well Licence and as a consequence, the incentive volume indicated on the query royalty tax attribute of the Petrinex is invalid, the minister will notify the company that the incentive volume has changed.

In cases where the minister receives completion information, the well status has been changed to active prod on the Petrinex or where the Petroleum Royalties Branch (the office of the minister

responsible for administering royalty/tax incentive volumes) receives a letter from a company indicating that the wellbore was not completed or is not expected to be completed in accordance with Part 1 of the Well Licence, the resulting well will be evaluated for incentive purposes based on the following policies:

- (i) If Part 1 of the Well Licence indicates the well objective to be something other than gas and the wellbore is or is expected to be initially completed for purposes of producing gas, the incentive volume for the resulting gas well needs to be determined. This determination will be made based on the conditions that were in place at the time the minister received the completion information, the change of well status to active prod on Petrinex or the letter, whichever is the earliest.
- (ii) If Part 1 of the Well Licence indicates a particular zone to be the producing zone but the wellbore is or is expected to be initially completed in another zone, a different gas well exists and the incentive volume indicated on the query royalty tax attribute of Petrinex may no longer be valid. The incentive volume for the gas well will be determined as if the zone from which the well is producing or is expected to produce had been indicated on Part 1 of the Well Licence as the producing zone. This determination will be made based on the conditions that were in place at the time the Well Licence was approved.

## **B. EFFECT OF GAS WELL LOCATIONS**

The eligibility of a gas well for the incentive volume, which is determined at the time the Well Licence is approved, can be affected by the existence of other gas well locations in the same area. A gas well will be re-evaluated to determine whether it qualifies as a qualifying exploratory gas well if, before the gas well is spudded, the Petroleum Royalties Branch (the office of the minister responsible for administering this section) is notified by a royalty/tax payer that the gas well should be re-evaluated. A re-evaluation will be performed if each gas well location that affected the gas well's qualification has either:

- (i) had its licence cancelled;
- (ii) been drilled and subsequently abandoned;
- (iii) been drilled and completed as something other than a gas well; or
- (iv) been drilled and not cased into the geological system in which the expected producing zone or formation is situated.

## **V. MONTHLY ROYALTY/TAX CALCULATION**

For each month in which the cumulative amount of gas produced from a qualifying exploratory gas well is less than 25 million cubic metres, the Crown royalty and freehold production tax shares are determined by applying the appropriate royalty/tax rates as outlined in section B of Part II to the monthly gas production from the gas well.

For the first month in which the cumulative amount of gas produced from a qualifying exploratory gas well exceeds 25 million cubic metres, the total royalty/tax share is determined by adding the results of the following two calculations:

- (i) multiply the portion of the gas for the month required to reach 25 million cubic metres by the appropriate royalty/tax rate as noted in section B of Part II; and
- (ii) multiply the remaining portion of the gas for the month (cumulative amount of gas in excess of 25 million cubic metres) by the "fourth tier gas" royalty/tax rate. The MGP (Monthly Gas Production) factor used in the royalty/tax rate formula is based on the entire amount of gas produced from the qualifying exploratory gas well for the month.

(Note: See example calculation in APPENDIX)

For each month thereafter, the "fourth tier gas" royalty/tax rates apply.

## APPENDIX

**EXAMPLE CROWN ROYALTY CALCULATION****ASSUMPTIONS:**

- The gas well:
  - (i) is on Crown land;
  - (ii) is classified as a “qualifying exploratory gas well” eligible to receive the 25,000 10<sup>3</sup>m<sup>3</sup> incentive volume; and
  - (iii) produced a cumulative 24,150.7 10<sup>3</sup>m<sup>3</sup> of gas prior to the current reporting month and 1,100.8 10<sup>3</sup>m<sup>3</sup> of gas during the current reporting month.
- The Crown royalty rate for the current reporting month =  $(K_g - X_g/MGP) = 14.28792\%$   
This rate is based on the fourth tier royalty formula factors noted below and a MGP = 1,100.8 10<sup>3</sup>m<sup>3</sup>:

$$PGP = \$1.80/GJ \quad K_g = 15.18 \quad X_g = 982$$

**CALCULATIONS:**

Since the current reporting month is also the month in which the gas well produced its total incentive volume of 25,000 10<sup>3</sup>m<sup>3</sup> (24,150.7 + 1,100.8 = 25,251.5), the Crown royalty share of the 1,100.8 10<sup>3</sup>m<sup>3</sup> produced in the month is determined as follows:

- (a) Calculate the Crown royalty share of 849.3 10<sup>3</sup>m<sup>3</sup> (the portion of the 1,100.8 10<sup>3</sup>m<sup>3</sup> produced in the current reporting month that was required for the well to reach the total volume incentive of 25,000 10<sup>3</sup>m<sup>3</sup> [25,000 – 24,150.7 = 849.3]):

$$\text{Royalty rate} = \text{the lesser of the “fourth tier gas” rate (14.28792\%) and 2.5\%} = 2.5\%$$

$$\text{Royalty share} = 2.5\% \text{ of } 849.3 \text{ } 10^3\text{m}^3 = \underline{21.23250 \text{ } 10^3\text{m}^3}$$

- (b) Calculate the royalty share of remaining 251.5 10<sup>3</sup>m<sup>3</sup> (1,100.8 – 849.3 = 251.5):

$$\text{Royalty rate} = \text{the “fourth tier gas” rate} = 14.28792\%$$

$$\text{Royalty share} = 14.28792\% \text{ of } 251.5 \text{ } 10^3\text{m}^3 = \underline{35.93412 \text{ } 10^3\text{m}^3}$$

The total Crown Royalty Share of the 1,100.8 10<sup>3</sup>m<sup>3</sup> produced in the current reporting month equals the amount determined in (a) plus the amount determined in (b):

$$\text{Total Crown royalty share} = \underline{57.16662 \text{ } 10^3\text{m}^3}$$



**FOR FURTHER INFORMATION, PLEASE CONTACT:**

The Ministry of the Economy  
Petroleum Royalties Branch  
200, 2101 Scarth Street  
Regina, Saskatchewan S4P 2H9

Phone: (306) 798-9511  
or: (306) 787-2604