

REGULATION 51-101 RESPECTING STANDARDS OF DISCLOSURE FOR OIL AND GAS ACTIVITIES

Securities Act
(R.S.Q., c. V-1.1, s. 331.1, par. (1), (6), (8) and (34))

PART 1 APPLICATION AND TERMINOLOGY¹

1.1 Definitions²

In this Regulation:

“annual information form” has the same meaning as in Regulation 51-102 respecting Continuous Disclosure Obligations approved by Ministerial Order no. 2005-03 dated May 19, 2005;

“analogous information” means information about an area outside the area in which the reporting issuer has an interest or intends to acquire an interest, which is referenced by the reporting issuer for the purpose, in the opinion of a reasonable person, of drawing a comparison or conclusion to an area in which the reporting issuer has an interest or intends to acquire an interest and may include:

- (i) historic information concerning reserves;
- (ii) estimates of the volume or value of reserves;
- (iii) historic information concerning resources;
- (iv) estimates of the volume or value of resources;
- (v) historic production amounts;
- (vi) production estimates; or
- (vii) information concerning a field, well, basin or reservoir;

¹ Appendix 1 to Policy Statement to Regulation 51-101 respecting Standards of Disclosure for Oil and Gas Activities sets out the meanings of certain terms, including those defined in this Part, that are used in this Regulation, Form 51-101F1, Form 51-101F2, Form 51-101F3 or the Policy Statement.

² National Instrument 14-101, Definitions contains definitions of certain terms used in more than one regulation. It provides that a term used in a regulation and defined in the statute relating to securities of the applicable jurisdiction, the definition of which is not restricted to a specific portion of the statute, will have the meaning given to it in that statute unless the context otherwise requires. National Instrument 14-101, Definitions also provides that a provision or a reference within a provision of a regulation that specifically refers by name to a jurisdiction other than the local jurisdiction shall not have any effect in the local jurisdiction, unless otherwise stated in that regulation.

"anticipated results" means information that may, in the opinion of a reasonable person, indicate the potential value or quantities of resources in respect of the reporting issuer's resources or a portion of its resources, which may include:

- (i) an estimate of volume;
- (ii) an estimate of value;
- (iii) areal extent;
- (iv) anticipated pay thickness;
- (v) flow rates; or
- (vi) hydrocarbon content;

"BOEs" means barrels of oil equivalent;

"CICA" means The Canadian Institute of Chartered Accountants;

"CICA Accounting Guideline ~~516~~" means Accounting Guideline AcG-5 "~~Full cost~~ Oil and gas accounting in the oil and gas industry" ~~- full cost~~ included in the CICA Handbook, as amended from time to time;

"COGE Handbook" means the "Canadian Oil and Gas Evaluation Handbook" prepared jointly by The Society of Petroleum Evaluation Engineers (Calgary Chapter) and the Canadian Institute of Mining, Metallurgy & Petroleum (Petroleum Society), as amended from time to time;

~~"constant prices and costs" means the prices and costs used in an estimate that are:~~

~~(a) the reporting issuer's prices and costs as at the effective date of the estimation, held constant throughout the estimated lives of the properties to which the estimate applies;~~

~~(b) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which the reporting issuer is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended, those prices or costs rather than the prices and costs referred to in subparagraph (a);~~

"effective date", in respect of information, means the date as at which, or for the period ended on which, the information is provided;

"FAS 19" means United States Financial Accounting Standards Board Statement of Financial Accounting Standards No. 19 "Financial Accounting and Reporting by Oil and Gas Producing Companies", as amended from time to time;

"forecast prices and costs" means future prices and costs that are:

- (a) generally accepted as being a reasonable outlook of the future;
- (b) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which the reporting issuer is legally bound by a contractual or other obligation to supply a

physical product, including those for an extension period of a contract that is likely to be extended, those prices or costs rather than the prices and costs referred to in subparagraph (a);

"foreign geographic area" means a geographic area outside North America within one country or including all or portions of a number of countries;

"independent", in respect of the relationship between a reporting issuer and a ~~qualified reserves evaluator or auditor, has the meaning set out in the COGE Handbook;~~ person or company, means a relationship between the reporting issuer and that person or company in which there is no circumstance that could, in the opinion of a reasonable person aware of all relevant facts, interfere with that person's or company's exercise of judgment regarding the preparation of information which is used by the reporting issuer;

"McfGEs" means thousand cubic feet of gas equivalent;

"oil and gas activities"

(a) include:

(i) the search for crude oil or natural gas in their natural states and original locations;

(ii) the acquisition of property rights or properties for the purpose of further exploring for or removing oil or gas from reservoirs on those properties;

(iii) the construction, drilling and production activities necessary to retrieve oil and gas from their natural reservoirs, and the acquisition, construction, installation and maintenance of field gathering and storage systems including lifting the oil and gas to the surface and gathering, treating, field processing and field storage; and

(iv) the extraction of hydrocarbons from oil sands, shale, coal or other non-conventional sources and activities similar to those referred to in clauses (i), (ii) and (iii) undertaken with a view to such extraction; but

(b) do not include:

(i) transporting, refining or marketing oil or gas;

(ii) activities relating to the extraction of natural resources other than oil and gas and their by-products; or

(iii) the extraction of geothermal steam or of hydrocarbons as a by-product of the extraction of geothermal steam or associated geothermal resources;

"preparation date", in respect of written disclosure, means the most recent date to which information relating to the period ending on the effective date was considered in the preparation of the disclosure;

"production group" means one of the following together, in each case, with associated by-products:

- (a) light and medium crude oil (combined);
- (b) heavy oil;
- (c) associated gas and non-associated gas (combined); and
- (d) bitumen, synthetic oil or other products from non-conventional oil and gas activities;

"product type" means one of the following:

- (a) in respect of conventional oil and gas activities:
 - (i) light and medium crude oil (combined);
 - (ii) heavy oil;
 - (iii) natural gas excluding natural gas liquids; or
 - (iv) natural gas liquids; and
- (b) in respect of non-conventional oil and gas activities:
 - (i) synthetic oil;
 - (ii) bitumen;
 - (iii) coal bed methane; or
 - (iv) hydrates;
 - (v) shale oil; or
 - (vi) shale gas;

"professional organization" means a self-regulatory organization of engineers, geologists, other geoscientists or other professionals whose professional practice includes reserves evaluations or reserves audits, that:

- (a) admits members primarily on the basis of their educational qualifications;
- (b) requires its members to comply with the professional standards of competence and ethics prescribed by the organization that are relevant to the estimation, evaluation, review or audit of reserves data;
- (c) has disciplinary powers, including the power to suspend or expel a member; and
- (d) is either:
 - (i) given authority or recognition by statute in a Canadian jurisdiction; or
 - (ii) accepted for this purpose by the securities regulatory authority;

"qualified reserves auditor" means an individual who:

(a) in respect of particular reserves data, [resources](#) or related information, possesses professional qualifications and experience appropriate for the estimation, evaluation, review and audit of the reserves data, [resources](#) and related information; and

(b) is a member in good standing of a professional organization;

"qualified reserves evaluator" means an individual who:

(a) in respect of particular reserves data, [resources](#) or related information, possesses professional qualifications and experience appropriate for the estimation, evaluation and review of the reserves data, [resources](#) and related information; and

(b) is a member in good standing of a professional organization;

"qualified reserves evaluator or auditor" means a qualified reserves auditor or a qualified reserves evaluator;

["reserves" means proved, probable or possible reserves;](#)

"reserves data" means ~~the following estimates, as at the last day of the reporting issuer's most recent financial year: (a) [an estimate of](#) proved reserves and ~~related future net revenue estimated:~~~~

~~(i) [using constant prices and costs as at the last day of that financial year; and](#)~~

~~(ii) [using forecast prices and costs; and \(b\) \[probable reserves and related future net revenue, estimated using forecast prices and costs; and\]\(#\)](#)~~

"supporting filing" means a document filed by a reporting issuer with a securities regulatory authority.

1.2 COGE Handbook Definitions

(1) Terms used in this Regulation but not defined in this Regulation, in National Instrument 14-101, Definitions, adopted by the Commission des valeurs mobilières du Québec pursuant to decision no. 2001-C-0274 dated June 12, 2001 or the securities statute in the jurisdiction concerned, and defined or interpreted in the COGE Handbook, have the meaning or interpretation ascribed to those terms in the COGE Handbook.

(2) In the event of a conflict or inconsistency between the definition of a term in this Regulation, National Instrument 14-101, Definitions or the securities statute in the jurisdiction concerned and the meaning ascribed to the term in the COGE Handbook, the definition in this Regulation, National Instrument 14-101, Definitions or the securities statute in the jurisdiction concerned, as the case may be, ~~shall~~will apply.

1.3 Applies to Reporting Issuers Only

This Regulation applies only to reporting issuers engaged, directly or indirectly, in oil and gas activities.

1.4 Materiality Standard

- (1) This Regulation applies only in respect of information that is material in respect of a reporting issuer.
- (2) Information is material in respect of a reporting issuer if it would be likely to influence a decision by a reasonable investor to buy, hold or sell a security of the reporting issuer.

PART 2 ANNUAL FILING REQUIREMENTS

2.1 Reserves Data and Other Oil and Gas Information

A reporting issuer ~~shall~~must, not later than the date on which it is required by securities legislation to file audited financial statements for its most recent financial year, file with the securities regulatory authority the following:

1. A statement of the reserves data and other information specified in Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information as at the last day of the reporting issuer's most recent financial year and for the financial year then ended;
2. A report by a qualified reserves evaluator or auditor in accordance with Form 51-101F2, Report on Reserves Data by Independent Qualified Reserves Evaluator or Auditor that is:
 - (a) included in, or filed concurrently with, the document filed under item 1; and
 - (b) executed by one or more qualified reserves evaluators or auditors each of whom is independent of the reporting issuer, who ~~shall~~must in the aggregate have:
 - (i) evaluated or audited at least 75 percent of the future net revenue (calculated using a discount rate of 10 percent) attributable to proved plus probable reserves, as reported in the statement filed or to be filed under item 1; and
 - (ii) reviewed the balance of such future net revenue; and
3. A report of management and directors in accordance with Form 51-101F3, Report of Management and Directors on Oil and Gas Disclosure that
 - (a) refers to the information filed or to be filed under items 1 and 2;
 - (b) confirms the responsibility of management of the reporting issuer for the content and filing of the statement referred to in item 1 and for the filing of the report referred to in item 1;
 - (c) confirms the role of the board of directors in connection with the information referred to in paragraph (b);
 - (d) is contained in, or filed concurrently with, the statement filed under item 1;

and

 - (e) is executed by two senior officers and two directors of the reporting issuer.

2.2 ~~News Release~~Notice to Announce Filing

A reporting issuer ~~shall~~must, concurrently with filing a statement and reports under section 2.1, disseminate ~~a news release and file with the securities regulatory authority a notice~~ announcing that filing and indicating where a copy of the filed information can be found for viewing by electronic means.

2.3 Inclusion in Annual Information Form

The requirements of section 2.1 may be satisfied by including the information specified in section 2.1 in an annual information form filed within the time specified in section 2.1.

2.4 Reservation in Report of Qualified Reserves Evaluator or Auditor

(1) If a qualified reserves evaluator or auditor cannot report on reserves data without reservation, the reporting issuer ~~shall~~must ensure that the report of the qualified reserves evaluator or auditor prepared for the purpose of item 2 of section 2.1 sets out the cause of the reservation and the effect, if known to the qualified reserves evaluator or auditor, on the reserves data.

(2) A report containing a reservation, the cause of which can be removed by the reporting issuer, does not satisfy the requirements of item 2 of section 2.1.

PART 3 RESPONSIBILITIES OF REPORTING ISSUERS AND DIRECTORS

3.1 Interpretation

A reference to a board of directors in this Part means, for a reporting issuer that does not have a board of directors, those individuals whose authority and duties in respect of that reporting issuer are similar to those of a board of directors.

3.2 Reporting Issuer to Appoint Independent Qualified Reserves Evaluator or Auditor

A reporting issuer ~~shall~~must appoint one or more independent qualified reserves evaluators or auditors to report to the board of directors of the reporting issuer on its reserves data.

3.3 Reporting Issuer to Make Information Available to Qualified Reserves Evaluator or Auditor

A reporting issuer ~~shall~~must make available to the qualified reserves evaluators or auditors that it appoints under section 3.2 all information reasonably necessary to enable the qualified reserves evaluators or auditors to provide a report that will satisfy the applicable requirements of this Regulation.

3.4 Certain Responsibilities of Board of Directors

The board of directors of a reporting issuer ~~shall~~must

(a) review, with reasonable frequency, the reporting issuer's procedures relating to the disclosure of information with respect to oil and gas activities, including its procedures for complying with the disclosure requirements and restrictions of this Regulation;

(b) review each appointment under section 3.2 and, in the case of any proposed change in such appointment, determine the reasons for the proposal and whether there have been disputes between the appointed qualified reserves evaluator or auditor and management of the reporting issuer;

(c) review, with reasonable frequency, the reporting issuer's procedures for providing information to the qualified reserves evaluators or auditors who report on reserves data for the purposes of this Regulation;

(d) before approving the filing of reserves data and the report of the qualified reserves evaluators or auditors thereon referred to in section 2.1, meet with management and each qualified reserves evaluator or auditor appointed under section 3.2, to

(i) determine whether any restrictions affect the ability of the qualified reserves evaluator or auditor to report on reserves data without reservation; and

(ii) review the reserves data and the report of the qualified reserves evaluator or auditor thereon; and

(e) review and approve

(i) the content and filing, under section 2.1, of the statement referred to in item 1 of section 2.1;

(ii) the filing, under section 2.1, of the report referred to in item 2 of section 2.1; and

(iii) the content and filing, under section 2.1, of the report referred to in item 3 of section 2.1.

3.5 Reserves Committee

(1) The board of directors of a reporting issuer may, subject to subsection (2), delegate the responsibilities set out in section 3.4 to a committee of the board of directors, provided that a majority of the members of the committee

(a) are individuals who are not and have not been, during the preceding 12 months:

(i) an officer or employee of the reporting issuer or of an affiliate of the reporting issuer;

(ii) a person who beneficially owns 10 percent or more of the outstanding voting securities of the reporting issuer; or

(iii) a relative of a person referred to in ~~clause~~subparagraph (a)(i) or (ii), residing in the same home as that person; and

(b) are free from any business or other relationship which could reasonably be seen to interfere with the exercise of their independent judgement.

(2) Despite subsection (1), a board of directors of a reporting issuer ~~shall~~must not delegate its responsibility under paragraph 3.4(1)(e) to approve the content or the filing of information.

- (3) A board of directors that has delegated responsibility to a committee pursuant to subsection (1) ~~shall~~must solicit the recommendation of that committee as to whether to approve the content and filing of information for the purpose of paragraph 3.4(1)(e).

PART 4 MEASUREMENT

4.1 Accounting Methods

A reporting issuer engaged in oil and gas activities that discloses financial statements prepared in accordance with Canadian GAAP ~~shall~~must use

- (a) the full cost method of accounting, applying CICA Accounting Guideline 516; or
- (b) the successful efforts method of accounting, applying FAS 19.

~~4.2 Requirements for Disclosed Reserves Data~~

~~(1) A reporting issuer shall ensure that estimates of reserves or future net revenue contained in a document filed with the securities regulatory authority under this Regulation satisfy the following requirements:~~

~~(a) the estimates shall be~~

~~(i) prepared or audited by a qualified reserves evaluator or auditor;~~

~~(ii) prepared or audited in accordance with the COGE Handbook; and~~

~~(iii) estimated assuming that development of each property in respect of which the estimate is made will occur, without regard to the likely availability to the reporting issuer of funding required for that development;~~

~~(b) for the purpose of determining whether reserves should be attributed to a particular undrilled property, reasonably estimated future abandonment and reclamation costs related to the property shall be taken into account; and~~

~~(c) aggregate future net revenue shall be estimated deducting~~

~~(i) reasonably estimated future well abandonment costs; and~~

~~(ii) future income tax expenses (unless otherwise specified in this Regulation, Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information or Form 51-101F2, Report on Reserves Data by Independent Qualified Reserves Evaluator or Auditor).~~

4.2 Consistency in Dates

~~(2) The date or period with respect to which the effects of an event or transaction are recorded in a reporting issuer's annual financial statements shall~~must be the same as the date or period with respect to which they are first reflected in the reporting issuer's annual reserves data disclosure under Part 2.

PART 5 REQUIREMENTS APPLICABLE TO ALL DISCLOSURE

5.1 Application of Part 5

This Part applies to disclosure made by or on behalf of a reporting issuer

- (a) to the public;
- (b) in any document filed with a securities regulatory authority; or
- (c) in other circumstances in which, at the time of making the disclosure, the reporting issuer knows, or ought reasonably to know, that the disclosure is or will become available to the public.

5.2 ~~Consistency with~~ Disclosure of Reserves Data and Other Information

If a reporting issuer makes disclosure of reserves or other information of a type that is ~~required to be included in a statement filed with a securities regulatory authority under item 1 of section 2.1, the information shall be~~ specified in Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information, the reporting issuer must ensure that the disclosure satisfies the following requirements:

- ~~(a)-~~ (a) estimates of reserves or future net revenue must
 - (i) disclose the effective date of the estimate;
 - (ii) have been prepared or audited by a qualified reserves evaluator or auditor;
 - (iii) have been prepared or audited in accordance with ~~Part 4; and~~ the COGE Handbook;
 - (iv) have been estimated assuming that development of each property in respect of which the estimate is made will occur, without regard to the likely availability to the reporting issuer of funding required for that development; and
 - (v) in the case of estimates of possible reserves or related future net revenue disclosed in writing, also include cautionary language proximate to the estimate to the following effect:

“Possible reserves are those additional reserves that are less certain to be recovered than probable reserves. There is only a 10% probability that the quantities actually recovered will equal or exceed the sum of proved plus probable plus possible reserves.”:

(b) for the purpose of determining whether reserves should be attributed to a particular undrilled property, reasonably estimated future abandonment and reclamation costs related to the property must have been taken into account;

(c) in disclosing aggregate future net revenue it must comply with the requirements for the determination of future net revenue specified in Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information; and

~~(b)-d)~~ the disclosure must be consistent with the corresponding information, if any, contained in the statement most recently filed by the reporting issuer with the securities regulatory

authority under item 1 of section 2.1, except to the extent that such statement has been supplemented or superseded by a report of a material change³ filed by the reporting issuer with the securities regulatory authority.

5.3 Reserves and Resources Classification

Disclosure of reserves or resources ~~shall be consistent with~~must apply the reserves and resources terminology and categories set out in the COGE Handbook and must relate to the most specific category of reserves or resources in which the reserves or resources can be classified.

5.4 Oil and Gas Reserves and Sales

Disclosure of reserves or of sales of oil, gas or associated by-products ~~shall~~must be made only in respect of marketable quantities, reflecting the quantities and prices for the product in the condition (upgraded or not upgraded, processed or unprocessed) in which it is to be, or was, sold.

5.5 Natural Gas By-Products

Disclosure concerning natural gas by-products (including natural gas liquids and sulphur) ~~shall~~must be made in respect only of volumes that have been or are to be recovered prior to the point at which marketable gas is measured.

5.6 Future Net Revenue Not Fair Market Value

Disclosure of an estimate of future net revenue, whether calculated without discount or using a discount rate, ~~shall~~must include a statement to the effect that the estimated values disclosed do not represent fair market value.

5.7 Consent of Qualified Reserves Evaluator or Auditor

(1) A reporting issuer ~~shall~~must not disclose a report referred to in item 2 of section 2.1 that has been delivered to the board of directors of the reporting issuer by a qualified reserves evaluator or auditor pursuant to an appointment under section 3.2, or disclose information derived from the report or the identity of the qualified reserves evaluator or auditor, without the written consent of that qualified reserves evaluator or auditor.

(2) Subsection (1) does not apply to

- (a) the filing of that report by a reporting issuer under section 2.1;
- (b) the use of or reference to that report in another document filed by the reporting issuer under section 2.1; or
- (c) the identification of the report or of the qualified reserves evaluator or auditor in a ~~news release~~notice referred to in section 2.2.

³ "Material change" has the meaning ascribed to the term under securities legislation of the applicable jurisdiction.

5.8 Disclosure of Less Than All Reserves

If a reporting issuer that has more than one property makes written disclosure of any reserves attributable to a particular property

- (a) the disclosure ~~shall~~must include a cautionary statement to the effect that

"The estimates of reserves and future net revenue for individual properties may not reflect the same confidence level as estimates of reserves and future net revenue for all properties, due to the effects of aggregation"; and

- (b) the document containing the disclosure of any reserves attributable to one property ~~shall~~must also disclose total reserves of the same classification for all properties of the reporting issuer in the same country (or, if appropriate and not misleading, in the same foreign geographic area).

5.9 Disclosure ~~Concerning Prospects~~of Resources

(1) If a reporting issuer discloses anticipated results from ~~a prospect~~resources which are not currently classified as reserves, the reporting issuer ~~shall~~must also disclose in writing, in the same document or in a supporting filing, ~~in respect of the prospect~~;

- (a) the reporting issuer's interest in the resources;

- ~~(a) the location and basin name;~~b) the location of the resources;

~~(b) the reporting issuer's gross and net interest in the property, expressed in units of area (acres or hectares);~~

~~(c) in the case of undeveloped property in which the reporting issuer holds a leasehold interest, the expiry date of that interest;~~

- ~~(d) the name, geologic age and lithology of the target zone;~~

~~(e) the distance to the nearest analogous commercial production;~~(f) the product types reasonably expected;

- ~~(g) the range of pool or field sizes;~~

- ~~(h) the depth of the target zone;~~

- ~~(i) the estimated cost to drill and test a well to the target depth;~~

- ~~(j) reasonably expected drilling commencement and completion dates;~~

- ~~(k) the anticipated prices to be received for each product type reasonably expected;~~

- ~~(l) reasonably expected marketing and transportation arrangements;~~

~~(m) the identity and relevant experience of the operator;~~(n) risks and the probability of success; andlevel of uncertainty associated with recovery of the resources; and

~~(e) — the applicable information specified in section 5.10. (e) in the case of unproved property, if its value is disclosed.~~

~~(i) the basis of the calculation of its value; and~~

~~5.10 — Estimates of Fair Value of an Unproved Property, Prospect or Resource~~

~~(ii) whether the value was prepared by an independent party.~~

~~(1) — If a reporting issuer discloses in writing an estimate of the fair value of an unproved property, prospect or resource, or discloses expected results from a prospect, the disclosure shall include all~~
~~(2) — If disclosure referred to in subsection (1) includes an estimate of a quantity of resources in which the reporting issuer has an interest or intends to acquire an interest, or an estimated value attributable to an estimated quantity, the estimate must~~

~~(a) have been prepared or audited by a qualified reserves evaluator or auditor;~~

~~(b) relate to the most specific category of resources in which the resources can be classified, as set out in the COGE Handbook, and must identify what portion of the estimate is attributable to each category; and~~

~~(c) be accompanied by the following information:~~

~~(i) a definition of the resources category used for the estimate;~~

~~(ii) the effective date of the estimate;~~

~~(iii) the significant positive and negative factors relevant to the estimate or expectation;~~

~~(iv) the estimated percentage probability that the issuer will~~

~~(A) discover hydrocarbons in sufficient quantity for them to be tested to the surface, in the case of undiscovered resources or a subcategory of undiscovered resources; or~~

~~(B) commercially extract the volume disclosed, in the case of discovered resources or a subcategory of discovered resources other than reserves;~~

~~(2) — If a reporting issuer discloses in writing an estimate of the fair value of an unproved property, prospect or resource~~

~~(v) in respect of contingent resources, the specific contingencies which prevent the classification of the resources as reserves; and~~

~~(a) — in the case of an estimate of the fair value of an unproved property, except as provided in paragraph (b), the estimate shall be based on the first applicable item listed below, and that item shall be described as the basis of the estimate in the document containing the disclosure or in a supporting filing:~~

~~(vi) cautionary language proximate to the estimate to the effect that:~~

~~1. — the acquisition cost to the reporting issuer, provided that there have been no material changes in the unproved property, the surrounding properties, or the general oil and gas economic climate since acquisition;~~

(A) in the case of discovered resources or a subcategory of discovered resources other than reserves;

~~2. — recent sales by others of interests in the same unproved property;~~

“There is no certainty that it will be economically viable or technically feasible to produce any portion of the resources.”; or

~~3. — terms and conditions, expressed in monetary terms, of recent farm-in agreements related to the unproved property;~~

(B) in the case of undiscovered resources or a subcategory of undiscovered resources;

~~4. — terms and conditions, expressed in monetary terms, of recent work commitments related to the unproved property;~~

“There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be economically viable or technically feasible to produce any portion of the resources.”

~~5. — recent sales of similar properties in the same general area;~~

(3) Paragraphs 5.9(1)(d) and (e) and subparagraphs 5.9(2)(c)(iii),(iv) and (v) do not apply if

~~(b) — in the case of an estimate of fair value to which none of the items listed in paragraph (a) applies~~

(a) the reporting issuer includes in the written disclosure a reference to the title and date of a previously filed document that complies with those requirements; and

~~(i) — the estimate shall be prepared or accepted by a professional valuator (who is not a "related party" of the reporting issuer within the meaning of the term as used in the CICA Handbook) applying valuation standards established by the professional body of which the valuator is a member and from which the valuator derives professional standing;~~

(b) the resources in the written disclosure, taking into account the specific properties and interests reflected in the resources estimate or other anticipated result, are materially the same resources addressed in the previously filed document.

~~(ii) — the estimate shall consist of at least three values that reflect a range of reasonable likelihoods (the low value being conservative, the middle value being the median and the high value being optimistic) reflecting courses of action expected to be followed by the reporting issuer;~~

5.10 Analogous Information

~~(iii) — the estimate, and the identities of the professional valuator and of the professional body referred to in subparagraph (i), shall be set out in the document containing the disclosure or in a supporting filing; and~~

(1) Sections 5.2, 5.3 and 5.9 do not apply to the disclosure of analogous information provided that the reporting issuer discloses the following:

~~(iv) — the reporting issuer shall obtain from the professional valuator referred to in subparagraph (i)~~

(a) the source and date of the analogous information;

~~(A) — a report on the estimate that does not contain~~

(b) whether the source of the analogous information was independent;

~~(I) — a disclaimer that materially detracts from the usefulness of the estimate; or~~

(c) if the reporting issuer is unable to confirm that the analogous information was prepared by a qualified reserves evaluator or auditor or in accordance with the COGE Handbook, cautionary language to that effect proximate to the disclosure of the analogous information; and

~~(II) — a statement that the report may not be relied on; and~~

(d) the relevance of the analogous information to the reporting issuer's oil and gas activities.

~~(B) — the professional valuator's written consent to the disclosure of the report by the reporting issuer to the public.~~

(2) If a reporting issuer discloses information that is an anticipated result, an estimate of a quantity of reserves or resources, or an estimate of value attributable to an estimated quantity of reserves or resources for an area in which it has an interest or intends to acquire an interest that is based on an extrapolation from analogous information sections 5.2, 5.3 and 5.9 will apply to the disclosure of the information.

5.11 Net Asset Value and Net Asset Value per Share

Written disclosure of net asset value or net asset value per share ~~shall~~must include a description of the methods used to value assets and liabilities and the number of shares used in the calculation.

5.12 Reserve Replacement

Written disclosure concerning reserve replacement ~~shall~~must include an explanation of the method of calculation applied.

5.13 Netbacks

Written disclosure of a netback must

(a) ~~shall include separate netbacks for each product type by country (or, if appropriate and not misleading, by foreign geographic area);~~(b) ~~shall~~ reflect netbacks calculated by subtracting royalties and operating costs from revenues; and

(c) ~~shall~~ state the method of calculation.

5.14 BOEs and McfGEs

If written disclosure includes information expressed in BOEs, McfGEs or other units of equivalency between oil and gas

(a) the information ~~shall~~must be presented

(i) in the case of BOEs, using BOEs derived by converting gas to oil in the ratio of six thousand cubic feet of gas to one barrel of oil (6 Mcf:1 bbl);

(ii) in the case of McfGEs, using McfGEs derived by converting oil to gas in the ratio of one barrel of oil to six thousand cubic feet of gas (1 bbl:6 Mcf); and

(iii) with the conversion ratio stated;

(b) if the information is also presented using BOEs or McfGEs derived using a conversion ratio other than a ratio specified in paragraph (a), the disclosure ~~shall~~must state that other conversion ratio and explain why it has been chosen;

(c) if the information is presented using a unit of equivalency other than BOEs or McfGEs, the disclosure ~~shall~~must identify the unit, state the conversion ratio used and explain why it has been chosen; and

(d) the disclosure ~~shall~~must include a cautionary statement to the effect that:

"BOEs [or 'McfGEs' or other applicable units of equivalency] may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf: 1 bbl [or 'An McfGE conversion ratio of 1 bbl: 6 Mcf'] is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead".

5.15 Finding and Development Costs

If written disclosure is made of finding and development costs

(a) those costs ~~shall~~must be calculated using the following two methods, in each case after eliminating the effects of acquisitions and dispositions:

Method 1: $\underline{a+b+c}$

x

Method 2: $\underline{a+b+d}$

y

where

a = exploration costs incurred in the most recent financial year

b = development costs incurred in the most recent financial year

c = the change during the most recent financial year in estimated future development costs relating to proved reserves

d = the change during the most recent financial year in estimated future development costs relating to proved reserves and probable reserves

x = additions to proved reserves during the most recent financial year, expressed in BOEs or other unit of equivalency

y = additions to proved reserves and probable reserves during the most recent financial year, expressed in BOEs or other unit of equivalency

(b) the disclosure ~~shall~~must include

(i) the results of both methods of calculation under paragraph (a) and a description of those methods;

(ii) if the disclosure also includes a result derived using any other method of calculation, a description of that method and the reason for its use;

(iii) for each result, comparative information for the most recent financial year, the second most recent financial year and the averages for the three most recent financial years;

(iv) a cautionary statement to the effect that:

"The aggregate of the exploration and development costs incurred in the most recent financial year and the change during that year in estimated future development costs generally will not reflect total finding and development costs related to reserves additions for that year"; and

(v) the cautionary statement required under paragraph 5.14(d).

PART 6 MATERIAL CHANGE DISCLOSURE

6.1 Material Change⁴ from Information Filed under Part 2

(1) This Part applies in respect of a material change that, had it occurred on or before the effective date of information included in the statement most recently filed by a reporting issuer under item 1 of section 2.1, would have resulted in a significant change in the information contained in the statement.

(2) In addition to any other requirement of securities legislation governing disclosure of a material change, disclosure of a material change referred to in subsection (1) ~~shall~~

~~(a) identify the statement filed under Part 2 that contains the original information referred to in subsection (1); and (b) must~~ discuss the reporting issuer's reasonable expectation of how the material change, ~~had it occurred on or before the effective date referred to in subsection (1), would have affected the~~ has affected its reserves data or other information ~~contained in the document identified under paragraph (a).~~

PART 7 OTHER INFORMATION

7.1 Information to be Furnished on Request

A reporting issuer ~~shall~~must, on the request of the regulator, and in Québec the securities regulatory authority, deliver additional information with respect to the content of a document filed under this Regulation.

PART 8 EXEMPTIONS

8.1 Authority to Grant Exemption

(1) The regulator or the securities regulatory authority may grant an exemption from this Regulation, in whole or in part, subject to such conditions or restrictions as may be imposed in the exemption.

(2) Despite subsection (1), in Ontario only the regulator may grant an exemption.

(3) In Québec, this exemption is granted under section 263 of the Securities Act (R.S.Q., c. V-1.1).

8.2 Exemption for Certain Exchangeable Security Issuers

(1) An exchangeable security issuer, as defined in subsection 13.3(1) of Regulation 51-102 respecting Continuous Disclosure Obligations, is exempt from this Regulation provided that all of the requirements of subsection 13.3(2) of Regulation 51-102 respecting Continuous Disclosure Obligations are satisfied;

⁴ In this Part, "material change" has the meaning ascribed to the term under securities legislation of the applicable jurisdiction.

(2) For the purposes of subsection (1), the reference to “continuous disclosure documents” in clause 13.3(2)(d)(ii)(A) of Regulation 51-102 respecting Continuous Disclosure Obligations includes documents filed in accordance with this Regulation.

PART 9 REGULATION IN FORCE

9.1 Coming Into Force

This Regulation comes into force on August 24, 2005.

**FORM 51-101F1
STATEMENT OF RESERVES DATA AND OTHER OIL AND GAS INFORMATION**

This is the form referred to in subparagraph 1 of section 2.1 of the Regulation.

GENERAL INSTRUCTIONS

- (1) ⁵ Terms for which a meaning is given in the Regulation have the same meaning in this Form.
- (2) Unless otherwise specified in this Form, information under item 1 of section 2.1 of the Regulation shall be provided as at the last day of the reporting issuer's most recent financial year or for its financial year then ended.
- (3) It is not necessary to include the headings or numbering, or to follow the ordering of Items, in this Form. Information may be provided in tables.
- (4) To the extent that any Item or any component of an Item specified in this Form does not apply to a reporting issuer and its activities and operations, or is not material, no reference need be made to that Item or component. It is not necessary to state that such an Item or component is "not applicable" or "not material". Materiality is discussed in the Regulation and its Policy Statement to the Regulation.
- (5) This Form sets out minimum requirements. A reporting issuer may provide additional information not required in this Form provided that it is not misleading and not inconsistent with the requirements of the Regulation, and provided that material information required to be disclosed is not omitted.
- (6) A reporting issuer may satisfy the requirement of this Form for disclosure of information "by country" by instead providing information by foreign geographic area in respect of countries outside North America as may be appropriate for meaningful disclosure in the circumstances.

PART 1 DATE OF STATEMENT

Item 1.1 Relevant Dates

1. Date the statement.
2. Disclose the effective date of the information being provided.
3. Disclose the preparation date of the information being provided.

⁵ [Appendix 1 to Policy Statement to Regulation 51-101 respecting Standards of Disclosure for Oil and Gas Activities sets out the meanings of certain terms that are used in this Form or in the Regulation, Form 51-101F2, Form 51-101F3 or the Policy Statement.](#)

INSTRUCTIONS

(1) For the purpose of Part 2 of the Regulation, and consistent with the definition of reserves data and General Instruction (2) of this Form, the effective date to be disclosed under section 2 of Item 1.1 is the last day of the reporting issuer's most recent financial year. It is the date of the balance sheet for the reporting issuer's most recent financial year (for example, "as at December 31, 20xx") and the ending date of the reporting issuer's most recent annual statement of income (for example, "for the year ended December 31, 20xx").

(2) The same effective date applies to reserves of each category reported and to related future net revenue. References to a change in an item of information, such as changes in production or a change in reserves, mean changes in respect of that item during the year ended on the effective date.

(3) The preparation date, in respect of written disclosure, means the most recent date to which information relating to the period ending on the effective date was considered in the preparation of the disclosure. The preparation date is a date subsequent to the effective date because it takes time after the end of the financial year to assemble the information for that completed year that is needed to prepare the required disclosure as at the end of the financial year.

(4) Because of the interrelationship between certain of the reporting issuer's reserves data and other information referred to in this Form and certain of the information included in its financial statements, the reporting issuer should ensure that its financial auditor and its qualified reserves evaluators or auditors are kept apprised of relevant events and transactions, and should facilitate communication between them.

(5) If the reporting issuer provides information as at a date more recent than the effective date, in addition to the information required as at the effective date, also disclose the date as at which that additional information is provided. The provision of such additional information does not relieve the reporting issuer of the obligation to provide information as at the effective date.

PART 2 DISCLOSURE OF RESERVES DATA

Item 2.1 Reserves Data (~~Constant~~Forecast Prices and Costs)

1. ~~Breakdown of Proved Reserves (Constant Case) — Disclose, by country and in the aggregate, reserves, gross and net, estimated using constant prices and costs, , for each product type, in the following categories:~~

- ~~(a) — proved developed producing reserves;~~
- ~~(b) — proved developed non-producing reserves;~~
- ~~(c) — proved undeveloped reserves; and~~
- ~~(d) — proved reserves (in total).~~

2. ~~Net Present Value of Future Net Revenue (Constant Case) — Disclose, by country and in the aggregate, the net present value of future net revenue attributable to the reserves categories~~

~~referred to in section 1 of this Item, estimated using constant prices and costs, before and after deducting future income tax expenses, calculated without discount and using a discount rate of 10 percent.~~

~~3. Additional Information Concerning Future Net Revenue (Constant Case)~~

~~(a) — This section 3 applies to future net revenue attributable to proved reserves (in total) estimated using constant prices and costs.~~

~~(b) — Disclose, by country and in the aggregate, the following elements of future net revenue estimated using constant prices and costs and calculated without discount:~~

- ~~(i) — revenue;~~
- ~~(ii) — royalties;~~
- ~~(iii) — operating costs;~~
- ~~(iv) — development costs;~~
- ~~(v) — abandonment and reclamation costs;~~
- ~~(vi) — future net revenue before deducting future income tax expenses;~~
- ~~(vii) — future income tax expenses; and~~
- ~~(viii) — future net revenue after deducting future income tax expenses.~~

~~(c) — Disclose, by production group, the net present value of future net revenue (before deducting future income tax expenses) estimated using constant prices and costs and calculated using a discount rate of 10 percent.~~

~~Item 2.2 Reserves Data (Forecast Prices and Costs)1. Breakdown of Reserves (Forecast Case) – Disclose, by country and in the aggregate, reserves, gross and net, estimated using forecast prices and costs, for each product type, in the following categories:~~

- ~~(a) proved developed producing reserves;~~
- ~~(b) proved developed non-producing reserves;~~
- ~~(c) proved undeveloped reserves;~~
- ~~(d) proved reserves (in total);~~
- ~~(e) probable reserves (in total);~~
- ~~(f) proved plus probable reserves (in total); and~~
- ~~(g) if the reporting issuer discloses an estimate of possible reserves in the statement:

 - ~~(i) possible reserves (in total); and~~~~

- (ii) proved plus probable plus possible reserves (in total).

2. **Net Present Value of Future Net Revenue (Forecast Case)** – Disclose, by country and in the aggregate, the net present value of future net revenue attributable to the reserves categories referred to in section 1 of this Item, estimated using forecast prices and costs, before and after deducting future income tax expenses, calculated without discount and using discount rates of 5 percent, 10 percent, 15 percent and 20 percent. Also disclose the same information on a unit value basis (e.g., \$/Mcf or \$/bbl using net reserves) using a discount rate of 10 percent and calculated before deducting future income tax expenses. This unit value disclosure requirement may be satisfied by including the unit value disclosure for each category of proved reserves and for probable reserves in the disclosure referred to in paragraph 3(c) of item 2.1.

3. **Additional Information Concerning Future Net Revenue (Forecast Case)**

(a) This section 3 applies to future net revenue attributable to each of the following reserves categories estimated using forecast prices and costs:

- (i) proved reserves (in total);
- (ii) proved plus probable reserves (in total); and
- (iii) if paragraph 1(g) of this Item applies, proved plus probable plus possible reserves (in total).

(b) Disclose, by country and in the aggregate, the following elements of future net revenue estimated using forecast prices and costs and calculated without discount:

- (i) revenue;
- (ii) royalties;
- (iii) operating costs;
- (iv) development costs;
- (v) abandonment and reclamation costs;
- (vi) future net revenue before deducting future income tax expenses;
- (vii) future income tax expenses; and
- (viii) future net revenue after deducting future income tax expenses.

(c) Disclose, by production group and on a unit value basis for each production group (e.g., \$/Mcf or \$/bbl using net reserves), the net present value of future net revenue (before deducting future income tax expenses) estimated using forecast prices and costs and calculated using a discount rate of 10 percent.

Item 2.2 Supplemental Disclosure of Reserves Data (Constant Prices and Costs)

The reporting issuer may supplement its disclosure of reserves data under item 2.1 by also disclosing the components of item 2.1 in respect of its proved reserves or its proved and probable

[reserves, using constant prices and costs as at the last day of the reporting issuer's most recent financial year.](#)

Item 2.3 Reserves Disclosure Varies with Accounting

In determining reserves to be disclosed:

(a) Consolidated Financial Disclosure – if the reporting issuer files consolidated financial statements:

(i) include 100 percent of reserves attributable to the parent company and 100 percent of the reserves attributable to its consolidated subsidiaries (whether or not wholly-owned); and

(ii) if a significant portion of reserves referred to in clause (i) is attributable to a consolidated subsidiary in which there is a significant minority interest, disclose that fact and the approximate portion of such reserves attributable to the minority interest;

(b) Proportionate Consolidation – if the reporting issuer files financial statements in which investments are proportionately consolidated, the reporting issuer's disclosed reserves must include the reporting issuer's proportionate share of investees' oil and gas reserves; and

(c) Equity Accounting – if the reporting issuer files financial statements in which investments are accounted for by the equity method, do not include investees' oil and gas reserves in disclosed reserves of the reporting issuer, but disclose the reporting issuer's share of investees' oil and gas reserves separately.

Item 2.4 Future Net Revenue Disclosure Varies with Accounting

1. Consolidated Financial Disclosure – If the reporting issuer files consolidated financial statements, and if a significant portion of the reporting issuer's economic interest in future net revenue is attributable to a consolidated subsidiary in which there is a significant minority interest, disclose that fact and the approximate portion of the economic interest in future net revenue attributable to the minority interest.

2. Equity Accounting – If the reporting issuer files financial statements in which investments are accounted for by the equity method, do not include investees' future net revenue in disclosed future net revenue of the reporting issuer, but disclose the reporting issuer's share of investees' future net revenue separately, by country and in the aggregate.

INSTRUCTIONS

(1) *Do not include, in reserves, oil or gas that is subject to purchase under a long-term supply, purchase or similar agreement. However, if the reporting issuer is a party to such an agreement with a government or governmental authority, and participates in the operation of the properties in which the oil or gas is situated or otherwise serves as "producer" of the reserves (in contrast to being an independent purchaser, broker, dealer or importer), disclose separately the reporting issuer's interest in the reserves that are subject to such agreements at the effective date and the net quantity of oil or gas received by the reporting issuer under the agreement during the year ended on the effective date.*

(2) Future net revenue includes the portion attributable to the reporting issuer's interest under an agreement referred to in Instruction 1.

(3) Constant prices and costs are prices and costs used in an estimate that are:

(a) the reporting issuer's prices and costs as at the effective date of the estimation, held constant throughout the estimated lives of the properties to which the estimate applies;

~~(3) — In the disclosure of "abandonment and reclamation costs" referred to in clause 3(b)(v) of Item 2.1 and in clause 3(b)(v) of Item 2.2 include, at minimum, well abandonment costs. The response to Item 6.4 will disclose total abandonment and reclamation costs and (in response to paragraph (d) of Item 6.4) the portion of total abandonment and reclamation costs, if any, not disclosed under clause 3(b)(v) of Item 2.1 and clause 3(b)(v) of Item 2.2.~~

(b) if, and only to the extent that, there are fixed or presently determinable future prices or costs to which the reporting issuer is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended, those prices or costs rather than the prices and costs referred to in paragraph (a).

For the purpose of paragraph (a), the reporting issuer's prices will be the posted price for oil and the spot price for gas, after historical adjustments for transportation, gravity and other factors.

PART 3 PRICING ASSUMPTIONS

Item 3.1 Constant Prices Used in Supplemental Estimates

For if supplemental disclosure under section 2.2 is made, then disclose, for each product type, ~~disclose~~ the benchmark reference prices for the countries or regions in which the reporting issuer operates, as at the last day of the reporting issuer's most recent financial year, reflected in the reserves data disclosed in response to Item ~~2.1~~2.2.

Item 3.2 Forecast Prices Used in Estimates

1. For each product type, disclose:

(a) the pricing assumptions used in estimating reserves data disclosed in response to Item ~~2.2~~2.1:

(i) for each of at least the following five financial years; and

(ii) generally, for subsequent periods; and

(b) the reporting issuer's weighted average historical prices for the most recent financial year.

2. The disclosure in response to section 1 shall include the benchmark reference pricing schedules for the countries or regions in which the reporting issuer operates, and inflation and other forecast factors used.

3. If the pricing assumptions specified in response to section 1 were provided by a qualified reserves evaluator or auditor who is independent of the reporting issuer, disclose that fact and identify the qualified reserves evaluator or auditor.

INSTRUCTIONS

(1) Benchmark reference prices may be obtained from sources such as public product trading exchanges or prices posted by purchasers.

(2) The ~~defined terms~~term "constant prices and costs" and the defined term "forecast prices and costs" include any fixed or presently determinable future prices or costs to which the reporting issuer is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended. In effect, such contractually committed prices override benchmark reference prices for the purpose of estimating reserves data. To ensure that disclosure under this Part is not misleading, the disclosure should reflect such contractually committed prices.

(3) ~~Under~~ subsection 5.7(1) of the Regulation, the reporting issuer must obtain the written consent of the qualified reserves evaluator or auditor to disclose his or her identity in response to section 3 of this Item.

PART 4 ~~RECONCILIATIONS~~RECONCILIATION OF CHANGES IN RESERVES AND FUTURE NET REVENUE

Item 4.1 Reserves Reconciliation

1. Provide the information specified in section 2 of this Item in respect of the following reserves categories:

- (a) ~~net~~gross proved reserves (in total);
- (b) ~~net~~gross probable reserves (in total); and
- (c) ~~net~~gross proved plus probable reserves (in total).

2. Disclose changes between the reserves estimates made as at the effective date and the corresponding estimates ("prior-year estimates") made as at the last day of the preceding financial year of the reporting issuer:

- (a) by country;
- (b) for each of the following:
 - (i) light and medium crude oil (combined);
 - (ii) heavy oil;
 - (iii) associated gas and non-associated gas (combined); ~~and~~

- (iv) synthetic oil and other products from non-conventional;
 - (v) bitumen;
 - (vi) coal bed methane;
 - (vii) hydrates;
 - (viii) shale oil; and
 - (ix) shale gas activities;
- (c) separately identifying and explaining:
- (i) extensions; ~~(ii)~~ and improved recovery;
 - ~~(iii)~~ technical revisions;
 - ~~(iv)~~ discoveries;
 - ~~(v)~~ acquisitions;
 - ~~(vi)~~ dispositions;
 - ~~(vii)~~ economic factors; and
 - ~~(viii)~~ production.

INSTRUCTIONS

(1) *The reconciliation required under this Item 4.1 may be provided in respect of reserves estimated using ~~either constant prices and costs or~~ forecast prices and costs, with the price and cost case indicated in the disclosure.*

(2) *For the purpose of this Item 4.1, it is sufficient to provide the information in respect of the products specified in paragraph 2(b), excluding solution gas, natural gas liquids and other associated by-products.*

(3) *The COGE Handbook provides guidance on the preparation of the reconciliation required under this Item 4.1.*

~~Item 4.2 — Future Net Revenue Reconciliation~~

~~1. — Provide the information specified in section 2 of this Item in respect of estimates of future net revenue (estimated using constant prices and costs and calculated using a discount rate of 10 percent) attributable to net proved reserves (in total).~~

~~2. Disclose changes between the future net revenue estimates referred to in section 1 made as at the effective date and the corresponding estimates ("prior year estimates") made as at the last day of the preceding financial year of the reporting issuer:~~

- ~~(a) by country;~~
- ~~(b) separately identifying and explaining:

 - ~~(i) sales and transfers of oil, gas or other product types produced during the period net of production costs and royalties;~~
 - ~~(ii) net change in sales and transfer prices and in production costs and royalties related to future production;~~
 - ~~(iii) changes in previously estimated development costs incurred during the period;~~
 - ~~(iv) changes in estimated future development costs;~~
 - ~~(v) net change resulting from extensions and improved recovery;~~
 - ~~(vi) net change resulting from discoveries;~~
 - ~~(vii) changes resulting from acquisitions of reserves;~~
 - ~~(viii) changes resulting from dispositions of reserves;~~
 - ~~(ix) net change resulting from revisions in quantity estimates;~~
 - ~~(x) accretion of discount (10 percent of discounted future net revenue at the beginning of the financial year);~~
 - ~~(xi) net change in income taxes; and~~
 - ~~(xii) any other significant factors.~~~~

INSTRUCTIONS

~~(1) For the purpose of this Part 4, compute the effects of changes in prices and costs before the effects of changes in volumes, so that, in respect of constant prices and costs, volumes are reflected at prices as at the effective date.~~

~~(2) Except in respect of clause 2(b)(xi) of Item 4.2, the information to be provided under this Part is pre-tax information.~~

~~(3) For the purpose of clause 2(b)(xi) of Item 4.2, a "net change in income taxes" includes both income taxes incurred during the period and changes in estimated future income tax expenses.~~

PART 5 ADDITIONAL INFORMATION RELATING TO RESERVES DATA

Item 5.1 Undeveloped Reserves

1. For proved undeveloped reserves:

(a) disclose for each product type the volumes of proved undeveloped reserves that were first attributed in each of the most recent ~~five~~three financial years and, in the aggregate, before that time; ~~or~~and

(b) discuss generally the basis on which the reporting issuer attributes proved undeveloped reserves, its plans (including timing) for developing the proved undeveloped reserves and, if applicable, its reasons for not planning to develop particular proved undeveloped reserves during the following two years.

2. For probable undeveloped reserves:

(a) disclose for each product type the volumes of probable undeveloped reserves that were first attributed in each of the most recent ~~five~~three financial years and, in the aggregate, before that time; ~~or~~and

(b) discuss generally the basis on which the reporting issuer attributes probable undeveloped reserves, its plans (including timing) for developing the probable undeveloped reserves and, if applicable, its reasons for not planning to develop particular probable undeveloped reserves during the following two years.

Item 5.2 Significant Factors or Uncertainties

1. Identify and discuss important economic factors or significant uncertainties that affect particular components of the reserves data.

2. Section 1 does not apply if the information is disclosed in the reporting issuer's financial statements for the financial year ended on the effective date.

INSTRUCTION

Examples of information that could warrant disclosure under this Item 5.2 include unusually high expected development costs or operating costs, the need to build a major pipeline or other major facility before production of reserves can begin, or contractual obligations to produce and sell a significant portion of production at prices substantially below those which could be realized but for those contractual obligations.

Item 5.3 Future Development Costs

1. Requirements:

(a) Provide the information specified in paragraph 1(b) in respect of development costs deducted in the estimation of future net revenue attributable to each of the following reserves categories:

- (i) proved reserves (in total) estimated using ~~constant prices and costs;~~(ii) ~~proved reserves (in total) estimated using~~ forecast prices and costs; and :
- (iii) proved plus probable reserves (in total) estimated using forecast prices and costs.
- (b) Disclose, by country, the amount of development costs estimated:
- (i) in total, calculated using no discount ~~and using a discount rate of 10 percent;~~ and
- (ii) by year for each of the first five years estimated.
2. Discuss the reporting issuer's expectations as to:
- (a) the sources (including internally-generated cash flow, debt or equity financing, farm-outs or similar arrangements) and costs of funding for estimated future development costs; and
- (b) the effect of those costs of funding on disclosed reserves or future net revenue.
3. If the reporting issuer expects that the costs of funding referred to in section 2, could make development of a property uneconomic for that reporting issuer, disclose that expectation and its plans for the property.

PART 6 OTHER OIL AND GAS INFORMATION

Item 6.1 Oil and Gas Properties and Wells

1. Identify and describe generally the reporting issuer's important properties, plants, facilities and installations:
- (a) identifying their location (province, territory or state if in Canada or the United States, and country otherwise);
- (b) indicating whether they are located onshore or offshore;
- (c) in respect of properties to which reserves have been attributed and which are capable of producing but which are not producing, disclosing how long they have been in that condition and discussing the general proximity of pipelines or other means of transportation; and
- (d) describing any statutory or other mandatory relinquishments, surrenders, back-ins or changes in ownership.
2. State, separately for oil wells and gas wells, the number of the reporting issuer's producing wells and non-producing wells, expressed in terms of both gross wells and net wells, by location (province, territory or state if in Canada or the United States, and country otherwise).

Item 6.2 Properties With No Attributed Reserves

1. For unproved properties disclose:

- (a) the gross area (acres or hectares) in which the reporting issuer has an interest;
- (b) the interest of the reporting issuer therein expressed in terms of net area (acres or hectares);
- (c) the location, by country; and
- (d) the existence, nature (including any bonding requirements), timing and cost (specified or estimated) of any work commitments.

2. Disclose, by country, the net area (acres or hectares) of unproved property for which the reporting issuer expects its rights to explore, develop and exploit to expire within one year.

Item 6.3 Forward Contracts

1. If the reporting issuer is bound by an agreement (including a transportation agreement), directly or through an aggregator, under which it may be precluded from fully realizing, or may be protected from the full effect of, future market prices for oil or gas, describe generally the agreement, discussing dates or time periods and summaries or ranges of volumes and contracted or reasonably estimated values.

2. Section 1 does not apply to agreements disclosed by the reporting issuer

(a) as financial instruments, in accordance with Section ~~3860~~[3861](#) of the CICA Handbook; or

(b) as contractual obligations or commitments, in accordance with Section 3280 of the CICA Handbook.

3. If the reporting issuer's transportation obligations or commitments for future physical deliveries of oil or gas exceed the reporting issuer's expected related future production from its proved reserves, estimated using forecast prices and costs and disclosed under Part 2, discuss such excess, giving information about the amount of the excess, dates or time periods, volumes and reasonably estimated value.

Item 6.4 Additional Information Concerning Abandonment and Reclamation Costs

In respect of abandonment and reclamation costs for surface leases, wells, facilities and pipelines, disclose:

- (a) how the reporting issuer estimates such costs;
- (b) the number of net wells for which the reporting issuer expects to incur such costs;
- (c) the total amount of such costs, net of estimated salvage value, expected to be incurred, calculated without discount and using a discount rate of 10 percent;
- (d) the portion, if any, of the amounts disclosed under paragraph (c) of this Item 6.4 that was not deducted as abandonment and reclamation costs in estimating the future net revenue disclosed under Part 2; and
- (e) the portion, if any, of the amounts disclosed under paragraph (c) of this Item 6.4 that the reporting issuer expects to pay in the next three financial years, in total.

INSTRUCTION

Item 6.4 supplements the information disclosed in response to clause 3(b)(v) of Item ~~2.1 and clause 3(b)(v) of Item 2.2.2.1~~. The response to paragraph (d) of Item 6.4 should enable a reader of this statement and of the reporting issuer's financial statements for the financial year ending on the effective date to understand both the reporting issuer's estimated total abandonment and reclamation costs, and what portions of that total are, and are not, reflected in the disclosed reserves data.

Item 6.5 Tax Horizon

If the reporting issuer is not required to pay income taxes for its most recently completed financial year, discuss its estimate of when income taxes may become payable.

Item 6.6 Costs Incurred

1. Disclose each of the following, by country, for the most recent financial year (irrespective of whether such costs were capitalized or charged to expense when incurred):

- (a) property acquisition costs, separately for proved properties and unproved properties;
- (b) exploration costs; and
- (c) development costs.

2. For the purpose of this Item 6.6, if the reporting issuer files financial statements in which investments are accounted for by the equity method, disclose by country the reporting issuer's share of investees' (i) property acquisition costs, (ii) exploration costs and (iii) development costs incurred in the most recent financial year.

Item 6.7 Exploration and Development Activities

1. Disclose, by country and separately for exploratory wells and development wells:

- (a) the number of gross wells and net wells completed in the reporting issuer's most recent financial year; and
- (b) for each category of wells for which information is disclosed under paragraph (a), the number completed as oil wells, gas wells and service wells and the number that were dry holes.

2. Describe generally the reporting issuer's most important current and likely exploration and development activities, by country.

Item 6.8 Production Estimates

1. Disclose, by country, for each product type, the volume of production estimated for the first year reflected in the estimates of ~~future net revenue~~ gross proved reserves and gross probable reserves disclosed under Items ~~2.1 and 2.2.2.1~~.

2. If one field accounts for 20 percent or more of the estimated production disclosed under section 1, identify that field and disclose the volume of production estimated for the field for that year.

Item 6.9 Production History

1. To the extent not previously disclosed in financial statements filed by the reporting issuer, disclose, for each quarter of its most recent financial year, by country for each product type:

(a) the reporting issuer's share of average daily production volume, before deduction of royalties; and

(b) as an average per unit of volume (for example, \$/bbl or \$/Mcf):

(i) the prices received;

(ii) royalties paid;

(iii) production costs; and

(iv) the resulting netback.

2. For each important field, and in total, disclose the reporting issuer's production volumes for the most recent financial year, for each product type.

INSTRUCTION

In providing information for each product type for the purpose of Item 6.9, it is not necessary to allocate among multiple product types attributable to a single well, reservoir or other reserves entity. It is sufficient to provide the information in respect of the principal product type attributable to the well, reservoir or other reserves entity. Resulting netbacks may be disclosed on the basis of units of equivalency between oil and gas (e.g. BOE) but if so that must be made clear and disclosure must comply with section 5.14 of the Regulation.

**FORM 51-101F2
REPORT ON RESERVES DATA BY INDEPENDENT QUALIFIED RESERVES EVALUATOR OR
AUDITOR**

This is the form referred to in subparagraph 2 of section 2.1 of the Regulation.

1. Terms to which a meaning is ascribed in the Regulation have the same meaning in this Form.⁶
2. The report on reserves data referred to in item 2 of section 2.1 of the Regulation, to be executed by one or more qualified reserves evaluators or auditors independent of the reporting issuer, shall in all material respects be as follows:

Report on Reserves Data

To the board of directors of [name of reporting issuer] (the "Company"):

1. ~~We have [audited] [evaluated] [and reviewed] the Company's reserves data as at [last day of the reporting issuer's most recently completed financial year]. The reserves data consist of the following:~~

~~(a) — with respect to proved reserves and proved plus probable oil and gas reserves:~~

~~(i) — proved and proved plus probable oil and gas reserves estimated as at [last day of the reporting issuer's most recently completed financial year] using forecast prices and costs; and (ii) the~~
WE HAVE [AUDITED] [EVALUATED] [AND REVIEWED] THE COMPANY'S RESERVES DATA AS AT [LAST DAY OF THE REPORTING ISSUER'S MOST RECENTLY COMPLETED FINANCIAL YEAR]. THE RESERVES DATA are estimates of proved reserves and probable reserves and related ~~estimated~~ future net revenue; ~~and~~

~~(b) — with respect to proved oil and gas reserves: (i) — proved oil and gas reserves estimated as at [last day of the reporting issuer's most recently completed financial year], estimated using constant forecast prices and costs; and (ii) the related estimated future net revenue.~~

2. The reserves data are the responsibility of the Company's management. Our responsibility is to express an opinion on the reserves data based on our [audit] [evaluation] [and review].

We carried out our [audit] [evaluation] [and review] in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook (the "COGE Handbook") prepared jointly by the Society of Petroleum Evaluation Engineers (Calgary Chapter) and the Canadian Institute of Mining, Metallurgy & Petroleum (Petroleum Society).

3. Those standards require that we plan and perform an [audit] [evaluation] [and review] to obtain reasonable assurance as to whether the reserves data are free of material misstatement. An

⁶ Appendix 1 to Policy Statement to Regulation 51-101 respecting Standards of Disclosure for Oil and Gas Activities sets out the meanings of certain terms that are used in sections 1 and 2 of this Form or in the Regulation, Form 51-101F1, Form 51-101F3 or the Policy Statement.

[audit] [evaluation] [and review] also includes assessing whether the reserves data are in accordance with principles and definitions presented in the COGE Handbook.

4. The following table sets forth the estimated future net revenue (before deduction of income taxes) attributed to proved plus probable reserves, estimated using forecast prices and costs and calculated using a discount rate of 10 percent, included in the reserves data of the Company [audited] [evaluated] [and reviewed] by us for the year ended xxx xx, 20xx, and identifies the respective portions thereof that we have [audited] [evaluated] [and reviewed] and reported on to the Company's [management/board of directors]:

Independent Qualified Reserves Evaluator or Auditor Evaluator A Evaluator B Totals	Description and Preparation Date of [Audit/ Evaluation/ Review] Report	Location of Reserves (Country or Foreign Geographi c Area)	Net Present Value of Future Net Revenue (before income taxes, 10% discount rate)			
			Audited	Evaluated	Reviewed	Total
	xxx xx, 20xx	xxxx	\$xxx	\$xxx	\$xxx	\$xxx
	xxx xx, 20xx	xxxx	xxx	xxx	xxx	xxx
			\$xxx	\$xxx	\$xxx	\$xxx ¹

¹ This amount should be the amount disclosed by the reporting issuer in its statement of reserves data filed under subparagraph 1 of section 2.1 of the Regulation, as its future net revenue (before deducting future income tax expenses) attributable to proved plus probable reserves, estimated using forecast prices and costs and calculated using a discount rate of 10 percent (required by section 2 of Item 2.2 of Form 51-101F1).

5. In our opinion, the reserves data respectively [audited] [evaluated] by us have, in all material respects, been determined and are in accordance with the COGE Handbook. We express no opinion on the reserves data that we reviewed but did not audit or evaluate.

6. We have no responsibility to update our reports referred to in paragraph 4 for events and circumstances occurring after their respective preparation dates.

7. Because the reserves data are based on judgements regarding future events, actual results will vary and the variations may be material. However, any variations should be consistent with the fact that reserves are categorized according to the probability of their recovery.

Executed as to our report referred to above:

Evaluator A, City, Province or State / Country, Execution Date _____[signed]

Evaluator B, City, Province or State / Country, Execution Date _____[signed]

FORM 51-101F3

REPORT OF MANAGEMENT AND DIRECTORS ON OIL AND GAS DISCLOSURE

This is the form referred to in subparagraph 3 of section 2.1 of the Regulation.

1. ⁷ Terms to which a meaning is ascribed in the Regulation have the same meaning in this Form.
2. The report referred to in item 3 of section 2.1 of the Regulation shall in all material respects be as follows:

**Report of Management and Directors on
Reserves Data and Other Information**

Management of [name of reporting issuer] (the "Company") are responsible for the preparation and disclosure of information with respect to the Company's oil and gas activities in accordance with securities regulatory requirements. This information includes reserves data, which ~~consist~~ are estimates of ~~the following: (a) — with respect to~~ proved reserves and ~~proved plus~~ probable ~~oil and gas~~ reserves: ~~(i) proved and proved plus probable oil and gas reserves estimated and related future net revenue~~ as at [last day of the reporting issuer's most recently completed financial year], estimated using forecast prices and costs; ~~and~~

~~(ii) — the related estimated future net revenue; and~~

~~(b) — with respect to proved oil and gas reserves:~~

~~(i) — proved oil and gas reserves estimated as at [last day of the reporting issuer's most recently completed financial year] using constant prices and costs; and (ii) the related estimated future net revenue.~~

[An] independent [qualified reserves evaluator[s] or qualified reserves auditor[s]] [has / have] [audited] [evaluated] [and reviewed] the Company's reserves data. The report of the independent [qualified reserves evaluator[s] or qualified reserves auditor[s]] [is presented below / will be filed with securities regulatory authorities concurrently with this report].

The [Reserves Committee of the] board of directors of the Company has

(a) reviewed the Company's procedures for providing information to the independent [qualified reserves evaluator[s] or qualified reserves auditor[s]];

(b) met with the independent [qualified reserves evaluator[s] or qualified reserves auditor[s]] to determine whether any restrictions affected the ability of the independent [qualified reserves evaluator[s] or qualified reserves auditor[s]] to report without reservation [and, because in the event of the proposal to change the independent [qualified reserves evaluator[s] or qualified

⁷ Appendix 1 to Policy Statement to Regulation 51-101 respecting Standards of Disclosure for Oil and Gas Activities sets out the meanings of certain terms that are used in sections 1 and 2 of this Form or in the Regulation, Form 51-101F1, Form 51-101F2 or the Policy Statement.

reserves auditor[s]], to inquire whether there had been disputes between the previous independent [qualified reserves evaluator[s] or qualified reserves auditor[s] and management]; and

(c) reviewed the reserves data with management and the independent [qualified reserves evaluator[s] or qualified reserves auditor[s]].

The [Reserves Committee of the] board of directors has reviewed the Company's procedures for assembling and reporting other information associated with oil and gas activities and has reviewed that information with management. The board of directors has [, on the recommendation of the Reserves Committee,] approved

(a) the content and filing with securities regulatory authorities of the [Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information containing](#) reserves data and other oil and gas information;

(b) the filing of [Form 51-101F2, Report on Reserves Data by Independent Qualified Reserves Evaluator or Auditor which is](#) the report of the independent [qualified reserves evaluator[s] or qualified reserves auditor[s]] on the reserves data; and

(c) the content and filing of this report.

Because the reserves data are based on judgements regarding future events, actual results will vary and the variations may be material. [However, any variations should be consistent with the fact that reserves are categorized according to the probability of their recovery.](#)

[signature, name and title of chief executive officer]

[signature, name and title of a senior officer other than the chief executive officer]

[signature, name of a director]

[signature, name of a director]

[Date]

Regulation to Amend

Regulation 51-101 respecting Standards of Disclosure for Oil and Gas Activities

Regulation 51-101 respecting Standards of Disclosure for Oil and Gas Activities is amended by this Regulation.

Part 1 is amended in section 1.1 by,

a. adding the following definitions:

“analogous information” means information about an area outside the area in which the reporting issuer has an interest or intends to acquire an interest, which is referenced by the reporting issuer for the purpose, in the opinion of a reasonable person, of drawing a comparison or conclusion to an area in which the reporting issuer has an interest or intends to acquire an interest and may include:

- (i) historic information concerning reserves;
- (ii) estimates of the volume or value of reserves;
- (iii) historic information concerning resources;
- (iv) estimates of the volume or value of resources;
- (v) historic production amounts;
- (vi) production estimates; or
- (vii) information concerning a field, well, basin or reservoir;

“anticipated results” means information that may, in the opinion of a reasonable person, indicate the potential value or quantities of resources in respect of the reporting issuer’s resources or a portion of its resources which may include:

- (i) an estimate of volume;
- (ii) an estimate of value;
- (iii) areal extent;
- (iv) anticipated pay thickness;
- (v) flow rates; or
- (vi) hydrocarbon content;

- b. *repealing the definition of “CICA Accounting Guideline 5” and substituting the following:***
- “CICA Accounting Guideline 16” means Accounting Guideline AcG-16 “Oil and gas accounting - full cost” included in the CICA Handbook, as amended from time to time;
- c. *repealing the definition of “constant prices and costs”;***
- d. *striking out* “qualified reserves evaluator or auditor, has the meaning set out in the COGE Handbook” **and substituting** “person or company, means a relationship between the reporting issuer and that person or company in which there is no circumstance that could, in the opinion of a reasonable person aware of all relevant facts, interfere with that person’s or company’s exercise of judgment regarding the preparation of information which is used by the reporting issuer”;**
- e. *after paragraph (b)(iv) of the definition of “product type”, adding the following paragraphs:***
- (v) shale oil; or
- (vi) shale gas;,, *and making the necessary changes*
- f. *in subparagraph (i) of the definition of “qualified reserves auditor”, adding “, resources” after “reserves data”, wherever it occurs;***
- g. *after the definition of “qualified reserves evaluator or auditor”, adding the following:***
- “reserves” means proved, probable or possible reserves;,,
- h. *repealing the definition of “reserves data” and substituting the following:***
- “reserves data” means an estimate of proved reserves and probable reserves and related future net revenue, estimated using forecast prices and costs; and, *and*
- i. *in subsection 1.2(2),***
- i. *striking, in the French text, “Définition” and substituting “Définitions”,***
- ii. *striking out “shall” and substituting “will”.***
- 3. *Part 2 is amended by,***
- a. *in the introductory paragraph of section 2.1, striking out “shall” and substituting “must”,***
- b. *in paragraph 2.1(2)(b), striking out “shall” and substituting “must”,***
- c. *in paragraph 2.1(3)(b) of the English text, striking out “the report referred to in item 1” and substituting “the report referred to in item 2”,***

- d. **in section 2.2, striking out “News Release” at the beginning of the section and substituting “Notice”, and striking out “a news release” after “disseminate” and substituting “and file with the securities regulatory authority a notice”.**
4. **Part 3 is amended by,**
- a. **in section 3.2, striking out “shall” and substituting “must”,**
- b. **in section 3.3, striking out “shall” and substituting “must”,**
- c. **in subparagraph 3.5(1)(a)(iii) of the English text, striking out “clause” and substituting “subparagraph”,**
- d. **in subsection 3.5(2), striking out “paragraph 3.4(1)(e)” and substituting “paragraph 3.4(e)”,**
- e. **in subsection 3.5(3), striking out “paragraph 3.4(1)(e)” and substituting “paragraph 3.4(e)”.**
5. **Part 4 is amended by,**
- a. **in section 4.1, striking out “shall” and substituting “must”,**
- b. **in paragraph 4.1(a),**
- i. **striking out, in the French text, “comptabilisation” and substituting “capitalisation”,**
- ii. **striking out “5” and substituting “16”,**
- c. **repealing section 4.2 and substituting the following:**
- 4.2 **Consistency in Dates** - The date or period with respect to which the effects of an event or transaction are recorded in a reporting issuer's annual financial statements must be the same as the date or period with respect to which they are first reflected in the reporting issuer's annual reserves data disclosure under Part 2.
6. **Part 5 is amended by,**
- a. **repealing section 5.2 and substituting the following:**
- 5.2 **Disclosure of Reserves and Other Information** - If a reporting issuer makes disclosure of reserves or other information of a type that is specified in Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information, the reporting issuer must ensure that the disclosure satisfies the following requirements:
- (a) estimates of reserves or future net revenue must
- (i) disclose the effective date of the estimate;
- (ii) have been prepared or audited by a qualified reserves evaluator or auditor;

- (iii) have been prepared or audited in accordance with the COGE Handbook;
- (iv) have been estimated assuming that development of each property in respect of which the estimate is made will occur, without regard to the likely availability to the reporting issuer of funding required for that development; and
- (v) in the case of estimates of possible reserves or related future net revenue disclosed in writing, also include cautionary language proximate to the estimate to the following effect:

“Possible reserves are those additional reserves that are less certain to be recovered than probable reserves. There is only a 10% probability that the quantities actually recovered will equal or exceed the sum of proved plus probable plus possible reserves.”;

- (b) for the purpose of determining whether reserves should be attributed to a particular undrilled property, reasonably estimated future abandonment and reclamation costs related to the property must have been taken into account;
- (c) in disclosing aggregate future net revenue it must comply with the requirements for the determination of future net revenue specified in Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information; and
- (d) the disclosure must be consistent with the corresponding information, if any, contained in the statement most recently filed by the reporting issuer with the securities regulatory authority under item 1 of section 2.1, except to the extent that such statement has been supplemented or superseded by a report of a material change³ filed by the reporting issuer with the securities regulatory authority.

- b. in Section 5.3, striking out “be consistent with” and substituting “apply” and adding “and must relate to the most specific category of reserves or resources in which the reserves or resources can be classified” after “set out in the COGE Handbook”,**
- c. in section 5.4, adding “the quantities and” after “marketable quantities, reflecting”,**
- d. in section 5.6 of the English text, adding “Market” after “Not Fair”,**
- e. in paragraph 5.7(2)(c), striking out “news release” and substituting “notice”,**
- f. repealing section 5.9 and substituting the following:**

³ “Material change” has the same meaning ascribed to the term under securities legislation of the applicable jurisdiction.

5.9 Disclosure of Resources

- (1) If a reporting issuer discloses anticipated results from resources which are not currently classified as reserves, the reporting issuer must also disclose in writing, in the same document or in a supporting filing:
- (a) the reporting issuer's interest in the resources;
 - (b) the location of the resources;
 - (c) the product types reasonably expected;
 - (d) the risks and the level of uncertainty associated with recovery of the resources; and
 - (e) in the case of unproved property, if its value is disclosed,
 - (i) the basis of the calculation of its value; and
 - (ii) whether the value was prepared by an independent party.
- (2) If disclosure referred to in subsection (1) includes an estimate of a quantity of resources in which the reporting issuer has an interest or intends to acquire an interest, or an estimated value attributable to an estimated quantity, the estimate must
- (a) have been prepared or audited by a qualified reserves evaluator or auditor;
 - (b) relate to the most specific category of resources in which the resources can be classified, as set out in the COGE Handbook, and must identify what portion of the estimate is attributable to each category; and
 - (c) be accompanied by the following information:
 - (i) a definition of the resources category used for the estimate;
 - (ii) the effective date of the estimate;
 - (iii) the significant positive and negative factors relevant to the estimate;
 - (iv) the estimated percentage probability that the issuer will
 - (A) discover hydrocarbons in sufficient quantity for them to be tested to the surface, in the case of undiscovered resources or a subcategory of undiscovered resources; or
 - (B) commercially extract the volume disclosed, in the case of discovered resources or a subcategory of discovered resources other than reserves;
 - (v) in respect of contingent resources, the specific contingencies which prevent the classification of the resources as reserves; and
 - (vi) cautionary language proximate to the estimate to the effect that:

- (A) in the case of discovered resources or a subcategory of discovered resources other than reserves:

“There is no certainty that it will be economically viable or technically feasible to produce any portion of the resources.”; or
 - (B) in the case of undiscovered resources or a subcategory of undiscovered resources:

“There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be economically viable or technically feasible to produce any portion of the resources.”
- (3) Paragraphs 5.9(1)(d) and (e) and subparagraphs 5.9(2)(c)(iii),(iv) and (v) do not apply if:
- (a) the reporting issuer includes in the written disclosure a reference to the title and date of a previously filed document that complies with those requirements; and
 - (b) the resources in the written disclosure, taking into account the specific properties and interests reflected in the resources estimate or other anticipated result, are materially the same resources addressed in the previously filed document.

g. *repealing section 5.10 and substituting the following:*

5.10 *Analogous Information*

- (1) Sections 5.2, 5.3 and 5.9 do not apply to the disclosure of analogous information provided that the reporting issuer discloses the following:
- (a) the source and date of the analogous information;
 - (b) whether the source of the analogous information was independent;
 - (c) if the reporting issuer is unable to confirm that the analogous information was prepared by a qualified reserves evaluator or auditor or in accordance with the COGE Handbook, cautionary language to that effect proximate to the disclosure of the analogous information; and
 - (d) the relevance of the analogous information to the reporting issuer's oil and gas activities.
- (2) If a reporting issuer discloses information that is an anticipated result, an estimate of a quantity of reserves or resources, or an estimate of value attributable to an estimated quantity of reserves or resources for an area in which it has an interest or intends to acquire an interest that is based on an extrapolation from analogous information sections 5.2, 5.3 and 5.9 will apply to the disclosure of the information.,
and

h. *in section 5.13,*

- i.* **adding “must” after “Written disclosure of a netback” in the English text,**
 - ii.* **repealing paragraph (a), and**
 - iii.* **renumbering paragraphs (b) and (c) as paragraphs (a) and (b), respectively,**
- i.* **in subparagraph 5.15(b)(iv) of the French text, striking out “frais d’exploration futurs” and substituting “frais de mise en valeur futurs”.**
- 8. Part 6 is amended by, in subsection 6.1(2),**
- a.* **striking out, in the French text, “mentionné” and substituting “visé”,**
 - b.* **striking out “shall” and substituting “must discuss the reporting issuer’s reasonable expectation of how the material change has affected its reserves data or other information.”, and**
 - c.* **repealing paragraphs (a) and (b).**
- 9. Part 8 is amended by adding the following after section 8.1:**
- 8.2 Exemption for Certain Exchangeable Security Issuers**
- (1) An exchangeable security issuer, as defined in subsection 13.3(1) of Regulation 51-102 respecting Continuous Disclosure Obligations, is exempt from this Regulation provided that all of the requirements of subsection 13.3(2) of Regulation 51-102 respecting Continuous Disclosure Obligations are satisfied;
 - (2) For the purposes of subsection (1), the reference to “continuous disclosure documents” in clause 13.3(2)(d)(ii)(A) of Regulation 51-102 respecting Continuous Disclosure Obligations includes documents filed in accordance with this Regulation.
- 10. With the exception of subsection 1.2(2), all provisions of the English text containing the word “shall” are amended by striking out “shall” and substituting “must”.**
- 11. This Regulation comes into force •.**

Regulation to amend

**Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information,
Form 51-101F2, Report on Reserves Data by Independent Qualified Reserves Evaluator or
Auditor, and
Form 51-101F3, Report of Management and Directors on Oil and Gas Disclosure**

1. Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information, Form 51-101F2, Report on Reserves Data by Independent Qualified Reserves Evaluator or Auditor, and Form 51-101F3, Report of Management and Directors on Oil and Gas Disclosure are amended by this Regulation.

2. Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information is amended by,

(a) repealing Item 2.1 and substituting the following:

Item 2.1 Reserves Data (Forecast Prices and Costs)

1. Breakdown of Reserves (Forecast Case) – Disclose, by country and in the aggregate, reserves, gross and net, estimated using forecast prices and costs, for each product type, in the following categories:
 - (a) proved developed producing reserves;
 - (b) proved developed non-producing reserves;
 - (c) proved undeveloped reserves;
 - (d) proved reserves (in total);
 - (e) probable reserves (in total);
 - (f) proved plus probable reserves (in total); and
 - (g) if the reporting issuer discloses an estimate of possible reserves in the statement:
 - (i) possible reserves (in total); and
 - (ii) proved plus probable plus possible reserves (in total).

2. Net Present Value of Future Net Revenue (Forecast Case) – Disclose, by country and in the aggregate, the net present value of future net revenue attributable to the reserves categories referred to in section 1 of this Item, estimated using forecast prices and costs, before and after deducting future income tax expenses, calculated without discount and using discount rates of 5 percent, 10 percent, 15 percent and 20 percent. Also disclose the same information on a unit value basis (e.g., \$/Mcf or \$/bbl using net reserves) using a discount rate of 10 percent and calculated before deducting future income tax expenses. This unit value disclosure requirement may be satisfied by including the unit value

disclosure for each category of proved reserves and for probable reserves in the disclosure referred to in paragraph 3(c) of item 2.1.

3. Additional Information Concerning Future Net Revenue (Forecast Case)

- (a) This section 3 applies to future net revenue attributable to each of the following reserves categories estimated using forecast prices and costs:
- (i) proved reserves (in total);
 - (ii) proved plus probable reserves (in total); and
 - (iii) if paragraph 1(g) of this Item applies, proved plus probable plus possible reserves (in total).
- (b) Disclose, by country and in the aggregate, the following elements of future net revenue estimated using forecast prices and costs and calculated without discount:
- (i) revenue;
 - (ii) royalties;
 - (iii) operating costs;
 - (iv) development costs;
 - (v) abandonment and reclamation costs;
 - (vi) future net revenue before deducting future income tax expenses;
 - (vii) future income tax expenses; and
 - (viii) future net revenue after deducting future income tax expenses.
- (c) Disclose, by production group and on a unit value basis for each production group (e.g., \$/Mcf or \$/bbl using net reserves), the net present value of future net revenue (before deducting future income tax expenses) estimated using forecast prices and costs and calculated using a discount rate of 10 percent.,
- (b) *repealing Item 2.2 and substituting the following:***

Item 2.2 Supplemental Disclosure of Reserves Data (Constant Prices and Costs)

The reporting issuer may, supplement its disclosure of reserves data under item 2.1 by also disclosing the components of item 2.1 in respect of its proved reserves or its proved and probable reserves, using constant prices and costs as at the last day of the reporting issuer's most recent financial year.,

- (c) *repealing instruction (3) to Part 2, and substituting the following:***
- (3) *Constant prices and costs are prices and costs used in an estimate that are:***

- (a) *the reporting issuer's prices and costs as at the effective date of the constant throughout the estimated lives of the properties to which the estimate applies; or*
- (b) *if, and only to the extent that, there are fixed or presently determinable future prices or costs to which the reporting issuer is legally bound by a contractual or other obligation to supply a physical product, including those for an extension period of a contract that is likely to be extended, those prices or costs rather than the prices and costs referred to in paragraph (a).*

For the purpose of paragraph (a), the reporting issuer's prices will be posted price for oil and the spot price for gas, after historical adjustments for transportation, gravity and other factors.,

- (d) ***in Item 3.1,***
 - i. in the heading, adding "Supplemental" after "Constant Prices Used in",***
 - ii. at the beginning of the paragraph, striking out "For" and substituting "If supplemental disclosure under section 2.2 is made, then disclose, for",***
 - iii. striking out "disclose" after "each product type", and***
 - iv. at the end of the paragraph, striking out "2.1" and substituting "2.2"***
- (e) ***at the end of paragraph 3.2(1)(a), striking out "2.2" and substituting "2.1",***
- (f) ***in instruction (2) to Part 3, striking out "defined terms" and substituting "term", and adding "the defined term" after "constant prices and costs" and",***
- (g) ***in the heading to Part 4 striking out "RECONCILIATIONS OF CHANGES IN RESERVES AND FUTURE NET REVENUE" and substituting "RECONCILIATION OF CHANGES IN RESERVES",***
- (h) ***in the title of Item 4.1 of the French text, striking out "Variations" and substituting "Variation",***
- (i) ***in paragraph 4.1(1)(a) striking out "net" and substituting "gross",***
- (j) ***in paragraph 4.1(1)(b) striking out "net" and substituting "gross",***
- (k) ***in paragraphs 4.1(1)(c), striking out "net" and substituting "gross",***
- (l) ***in paragraph 4.1(2)(b),***
 - v. at the end of subparagraph (iii), striking out "and",***
 - vi. at the end of subparagraph (iv), striking out "and other products from non-conventional oil and gas activities",***
 - vii. adding the following subparagraphs after subparagraph (iv):***
 - (v) bitumen;

- (vi) coal bed methane;
 - (vii) hydrates;
 - (viii) shale oil; and
 - (ix) shale gas;,,
- (m) **in paragraph 4.1(2)(c),**
- viii. in subparagraph (i), adding “and improved recovery”,**
 - ix. repealing paragraph (ii); and**
 - x. renumbering subparagraphs (iii),(iv), (v), (vi), (vii), and (viii) as (ii), (iii), (iv), (v), (vi), and (vii), respectively,**
- (n) **in instruction (1) to Item 4.1, striking out “either constant prices and costs or”**
- (o) **repealing Item 4.2,**
- (p) **repealing the instructions to Part 4,**
- (q) **in paragraph 5.1(1)(a), striking out “five” and substituting “three”, and at the end of the paragraph, striking out “or” and substituting “and”,**
- (r) **in paragraph 5.1(2)(a), striking out “five” and substituting “three”, and at the end of the paragraph, striking out “or” and substituting “and”,**
- (s) **in paragraph 5.3(1)(a)**
- xi. repealing subparagraph (i), and**
 - xii. renumbering subparagraphs (ii) and (iii) as subparagraphs (i) and (ii), respectively,**
- (t) **in subparagraph 5.3(1)(b)(i), striking out “and using a discount rate of 10 percent”,**
- (u) **in subsection 5.3(2) of the French text, striking out “Exposez” and substituting “Exposer”,**
- (v) **in paragraph 6.3(2)(a), striking out “3860” and substituting “3861”,**
- (w) **in the instruction to Item 6.4, striking out of “and clause 3(b)(v) of Item 2.2”,**
- (x) **in subsection 6.8(1), striking out “future net revenue” and substituting “gross proved reserves and gross probable reserves”, and striking out “Items 2.1 and 2.2” and substituting “Item 2.1.”,**

- (y) **in paragraph 6.9(1)(b) of the French text, by striking out “ mpi^3 ”, and substituting “ kpi^3 ”,**
- (z) **in the instruction to Item 6.9 of the French text, striking out “types de produit” and substituting “types de produits”,**
- (aa) **at the end of the instruction to Item 6.9, adding “Resulting netbacks may be disclosed on the basis of units of equivalency between oil and gas (e.g. BOE) but if so that must be made clear and disclosure must comply with section 5.14 of the Regulation.”.**
- 3. Form 51-101F2, Report on Reserves Data by Independent Qualified Reserves Evaluator or Auditor is amended by,**
- (a) **in paragraph 2, striking out “vérificateur” and substituting “vérificateurs”,**
- (b) **in the prescribed form of the “Report on Reserves Data” under section 2,**
- i.* **in paragraph 1, striking out “consist of the following:” and substituting “are estimates of proved reserves and probable reserves and related future net revenue as at [last day of the reporting issuer’s most recently completed financial year], estimated using forecast prices and costs.”,**
- ii.* **repealing subparagraphs 1(a) and (b), and**
- iii.* **in the second paragraph of paragraph 2 of the French text, adding “Oil” after “Canadian”,**
- iv.* **at the end of paragraph 7, adding the following:**
- “However, any variations should be consistent with the fact that reserves are categorized according to the probability of their recovery.”.
- 4. Form 51-101F3, Report of Management and Directors on Oil and Gas Disclosure is amended by, in the prescribed form of “Report of Management and Directors on Oil and Gas Disclosure” under section 2,**
- (a) **in the paragraph beginning “Management of [name of reporting issuer]” striking out “consist of the following:” and substituting “are estimates of proved reserves and probable reserves and related future net revenue as at [last day of the reporting issuer’s most recently completed financial year], estimated using forecast prices and costs.”**
- (b) **after the paragraph beginning “Management of [name of reporting issuer]” repealing subparagraphs(a) and (b),**
- (c) **after the paragraph beginning “The [Reserves Committee of the] board of directors of the Company has”, in subparagraph (b), striking out “because of the” and substituting “in the event of a”,**
- (d) **after the paragraph beginning “The [Reserves Committee of the] board of directors has reviewed”, in subparagraph (a), striking out “the” after “securities**

regulatory authorities of" **and substituting** "Form 51-101F1, Statement of Reserves Data and Other Oil and Gas Information containing",

- (e) **after the paragraph beginning** "The [Reserves Committee of the] board of directors has reviewed", **in subparagraph (b), adding** "Form 51-101F2, Report on Reserves Data by Independent Qualified Reserves Evaluator or Auditor which is" **after** "the filing of", **and**
- (f) **at the end of the paragraph beginning** "Because the reserves data are based on judgements" **adding** "However, any variations should be consistent with the fact that reserves are categorized according to the probability of their recovery."

5. This Regulation comes into force •.