

***ALBERTA SECURITIES
COMMISSION***

**Oil & Gas Securities
Taskforce**

January 24, 2001

Alberta Securities Commission Taskforce

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BACKGROUND

In June 1998, The Alberta Securities *Commission* announced the formation of a Taskforce. The stated goals were:

- (1) to develop modern, pertinent, comprehensive, comprehensible minimum disclosure standards which reflect today's activities of *oil* and *gas* issuers and thereby attempt to ensure that the public interest of investors and others is appropriately represented, and
- (2) to ensure that such standards are of such a quality that the industry and their advisers and investors will support them and all the securities commissions of Canada will adopt them.

The Taskforce is comprised of 27 individuals involved in the *oil* and *gas* industry, including accountants, company executives, independent petroleum evaluators, lawyers and securities analysts. A Subcommittee of seven members was formed to identify information needed to meet the goals of the Taskforce and to provide input for matters to be considered by the Taskforce. To January 24, 2001 the Subcommittee held 45 meetings and the Taskforce met 19 times. In addition, five meetings with some *reserves* evaluators and five meetings with some issuers were held to ensure that their concerns were considered.

The Taskforce presents for consideration by the Canadian Securities Administrators (the "CSA") the following recommended standards. Existing *oil* and *gas* disclosure rules, regulations and policies would be replaced by these requirements.

STANDARDS FOR DISCLOSURE OF OIL AND GAS PRODUCING ACTIVITIES

PART 1 - APPLICATION AND DEFINITIONS

1.1 Application¹

This document prescribes disclosure standards for issuers engaged in *oil and gas producing activities*. These standards apply to documents filed under Canadian Securities legislation.²

While this section does not prescribe other disclosure such as news releases, web sites and speeches or presentations at public or private gatherings, disclosure in such form shall use the same terms and definitions as are used in this section.

These are minimum requirements. Issuers are encouraged to provide appropriate additional disclosure designed to result in full, true and plain disclosure within the context of the subject matter of these requirements.

Words in the singular include the plural and vice versa.

At the discretion of the Director, exemptions may be granted.

Materiality

Issuers are required to disclose information that is material. Materiality is a matter of judgment in particular circumstances, and should generally be determined in relation to an item's significance to investors, analysts and other users of the information. An item of information, or an aggregate of items, is considered material if it is probable that its omission or misstatement would influence or change an investment decision with respect to the issuer's securities. In determining whether information is material, both quantitative and qualitative factors shall be taken into account. This concept of materiality is consistent with the financial reporting notion of materiality contained in the Handbook of the Canadian Institute of Chartered Accountants ("CICA Handbook").

No statement need be made in response to any item that is inapplicable. If information is not material and it is not required to meet any other applicable disclosure standards or requirements, it is not required to be disclosed.

¹ It is anticipated that the adoption of these standards by the Canadian Securities Administrators ("CSA") will cause disclosure policy statements and certain other disclosure requirements related to oil and gas issuers to be rescinded.

² Canadian Securities legislation is defined in National Instrument 14-101 - Definitions.

1.2 Definitions³

APEGGA

The Association of Professional Engineers, Geologists and Geophysicists of Alberta.

Audit (in relation to Reserves Data)

The process whereby an independent evaluator carries out procedures designed to allow the independent evaluator to provide reasonable assurance, in the form of an opinion, that the issuer's *Reserves Data* (or specific parts thereof) have, in all material respects, been determined and presented in accordance with principles and definitions established by *SPEE* and are, therefore, free of material misstatement.⁴ Because of the nature of the subject matter and the fact that the independent evaluator relies on the competence of the issuer's staff, the issuer's systems and procedures and controls, and the fact that tests, as opposed to complete *evaluations*, are involved, the level of assurance is designed to be high, though not absolute. The level of assurance cannot usually be described with numeric precision. The level of assurance will usually be less than, but reasonably close to, that of an *evaluation* and considerably higher than that of a *review*. The tests involve examination of underlying documentation supporting the determination of the *reserves* and *future net revenue*.

CIM

The Standing Committee on Reserves Definitions of the Petroleum Society of the Canadian Institute of Mining, Metallurgy & Petroleum.

CIM definitions

The definitions and guidelines issued by *CIM* with respect to *oil* and *gas reserves* estimates and related matters, as amended from time to time and accepted by the *Commission*.

Commission

One or more of the securities regulatory authorities or regulators in Canada. (The various Canadian Securities *Commissions* and their staffs)

Crude oil (or oil)

A mixture that consists mainly of pentanes and heavier hydrocarbons, that may contain sulphur compounds

³ Throughout the text defined terms are italicized.

⁴ Standards for such audits are to be developed through *APEGGA* [and *SPEE*] and are anticipated to be complete for adoption with respect to the third financial year following adoption of these recommendations.

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and that is recoverable at a well from an underground *reservoir* and that is liquid at the conditions under which its volume is measured or estimated and includes all other liquid hydrocarbons so recoverable except *natural gas by-products*.

Developed reserves

Refer to *Reserves*.

Developed non-producing reserves

Refer to *Reserves*.

Developed producing reserves

Refer to *Reserves*.

Development costs

Costs incurred to obtain access to *reserves* and to provide facilities for extracting, treating, gathering and storing the *oil* and *gas*. More specifically, *development costs*, including applicable *operating costs* of *support equipment and facilities* and other costs of development activities, are costs incurred to:

- (i) gain access to and prepare well locations for drilling, including surveying well locations for the purpose of determining specific development drilling sites, clearing ground, draining, road building, and relocating public roads, *gas* lines and power lines, to the extent necessary in developing the *reserves*;
- (ii) drill and equip *development wells*, development type *stratigraphic test wells* and *service wells*, including the costs of platforms and of well equipment such as casing, tubing, pumping equipment and the wellhead assembly;
- (iii) acquire, construct and install *production* facilities such as flow lines, separators, treaters, heaters, manifolds, measuring devices and production storage tanks, *natural gas* cycling and processing plants, and central utility and waste disposal systems; and
- (iv) provide improved recovery systems.

Development well

A well drilled inside the established limits of an *oil* or *gas reservoir*, or in close proximity to the edge of the *reservoir*, to the depth of a stratigraphic horizon known to be productive.

Evaluate

The process whereby an economic analysis is made of a *property* to arrive at an estimate of the *future net*

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revenue resulting from the *production* of the *reserves* associated with the *property*.

Exploration costs

Costs incurred in identifying areas that may warrant examination and in examining specific areas that are considered to have prospects of containing *oil* and *gas reserves*, including costs of drilling *exploratory wells* and exploratory type *stratigraphic test wells*.

Exploration costs may be incurred both before acquiring the related property (sometimes referred to in part as prospecting costs) and after acquiring the property. *Exploration costs*, which include applicable *operating costs of support equipment and facilities* and other costs of exploration activities, are:

- (i) costs of topographical, geochemical, geological and geophysical studies, rights of access to *properties* to conduct those studies, and salaries and other expenses of geologists, geophysical crews and others conducting those studies. (Collectively, these are sometimes referred to as geological and geophysical costs.);
- (ii) costs of carrying and retaining *unproved properties*, such as delay rentals, *taxes, other than income and capital taxes*, on *properties*, legal costs for title defence, and the maintenance of land and *lease* records;
- (iii) dry hole contributions and bottom hole contributions;
- (iv) costs of drilling and equipping *exploratory wells*; and
- (v) costs of drilling exploratory type *stratigraphic test wells*.

Exploratory well

A well that is not a *development well*, a service well or a *stratigraphic test well*.

Field

An area consisting of a single *reservoir* or multiple *reservoirs* all grouped on or related to the same individual geological structural feature and/or stratigraphic condition. There may be two or more *reservoirs* in a *field* that are separated vertically by intervening impervious strata, or laterally by local geologic barriers, or by both. *Reservoirs* that are associated by being in overlapping or adjacent fields may be treated as a single or common operational *field*. The geological terms structural feature and stratigraphic condition are intended to identify localized geological features as opposed to the broader of terms of basins, trends, provinces, plays, areas-of-interest, etc.

Future net revenue

The estimated net amount to be received with respect to the development and production of *reserves*. From estimated revenues are deducted future royalties and future costs related to the development and production

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of *reserves*.⁵ Abandonment and reclamation costs, corporate general and administrative expenses, financing costs and income taxes are not deducted.

Gross

Interest before the interest of others, including royalties.

Heavy crude oil

Crude oil which usually has an API rating of 10 to 22°.

Lease

An agreement granting to the lessee rights to explore, develop and exploit *properties*.

Lifting costs

See *Operating costs*.

Marketable gas

The volume of *gas* measured at the point of sale to a third party, which may occur either before or after removal of *natural gas by-products*. Compositions of the *marketable gas* may vary considerably and therefore are usually expressed in volumes or in terms of energy content.

Natural gas (or gas)

The lighter hydrocarbons and associated non-hydrocarbon substances occurring naturally in an underground *reservoir*, which under atmospheric conditions are essentially *gases*, but which may contain by-products.

Natural gas by-products

Those components recovered from *natural gas* by processing through extraction plants or recovered from field separators, scrubbers or other gathering facilities. These include the hydrocarbon components ethane, propane, butanes and pentanes plus, and sulphur.

Net interest

The issuer's interest after deducting interests of others, including royalties.

⁵ Note that *future net revenue* as defined here differs from Future Net Revenue as defined by CICA Accounting Guideline 5. In the Guideline *abandonment and reclamation costs* are also deducted.

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Oil and gas producing activities

Oil and gas producing activities 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 exploration and/or for the purpose of removing the *oil* or *gas* from existing *reservoirs* on those *properties*, and
- (iii) the construction, drilling and *production* activities necessary to retrieve *oil* and *gas* from its 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 (as in the case of processing *gas* to extract liquid hydrocarbons) and field storage.

Oil and gas producing activities do not include:

- (i) the transporting, refining and marketing of *oil* and *gas*,
- (ii) activities relating to the *production* of natural resources other than *oil* and *gas*, or
- (iii) the *production* of geothermal steam or the extraction of hydrocarbons as a by-product of the *production* of geothermal steam or associated geothermal resources.

Operating costs

Costs incurred to operate and maintain wells and related equipment and facilities, including applicable *operating costs of support equipment* and facilities and other costs of operating and maintaining those wells and related equipment and facilities. They become part of the cost of *oil* and *gas* produced. Examples of *operating costs* (sometimes called *lifting costs*) are:

- (i) Costs of labor to operate the wells and related equipment and facilities,
- (ii) Repairs and maintenance,
- (iii) Materials, supplies, and fuel consumed and supplies utilized in operating the wells and related equipment and facilities,
- (iv) Property taxes and insurance applicable to *properties* and wells and related equipment and facilities,
- (v) Taxes, *other than income and capital taxes*, and
- (vi) Workovers.

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Possible reserves

Refer to *Reserves*.

Probable reserves

Refer to *Reserves*.

Production

Production involves lifting the *oil* and *gas* to the surface and gathering, treating, field processing (as in the case of processing *gas* to extract liquid hydrocarbons), and field storage. The production function is usually regarded as terminating at the outlet valve on the lease or field production storage tank; if unusual physical or operational circumstances exist, it may be more appropriate to regard the production function as terminating at the first point at which *oil*, *gas* or by-products are delivered to a main pipeline, a common carrier, a refinery, or a marine terminal.

Properties

Properties include:

- (i) fee ownership or a lease, concession, agreement, permit, licence or other interest representing the right to extract *oil* or *gas* subject to such terms as may be imposed by the conveyance of that interest;
- (ii) royalty interests, production payments payable in *oil* or *gas* and other non-operating interests in *properties* operated by others; and
- (iii) those agreements with foreign governments or authorities under which an issuer participates in the operation of the related *properties* or otherwise serves as "producer" of the underlying *reserves* (as opposed to being an independent purchaser, broker, dealer, or importer), such as a production sharing contract.

Property acquisition costs

Costs incurred (whether directly or through a corporate acquisition) to purchase, *lease* or acquire a property, including costs of *lease* bonuses and options to purchase or *lease properties*, the portion of costs applicable to hydrocarbons when land including rights to hydrocarbons is purchased in fee, brokers' fees, recording fees, legal costs, and other costs incurred in acquiring *properties*.

Prospect

A geographic or stratigraphic area in which the issuer owns or intends to own one or more *oil* and *gas* interests, which is geographically defined on the basis of geological data and which is reasonably anticipated

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to contain at least one reservoir or part of a *reservoir of oil and gas*.

Proved property

A property or the part of a property to which *proved reserves* have been specifically attributed.

Proved reserves

Refer to *Reserves*.

Reservation (in relation to Reserves Data)

A modification of the standard opinion given by an independent evaluator when the *Reserves Data* are affected by a departure from the principles and definitions established by *SPEE* or the evaluator is unable to form an opinion because of a limitation in the scope of work considered necessary.

Reserves

Estimated remaining quantities of *crude oil* and *natural gas* and related substances anticipated to be recoverable from known accumulations, from a given date forward, based on:

- (i) analysis of drilling, geological, geophysical and engineering data,
- (ii) the use of known technology, and
- (iii) specified economic conditions.

Classification of *reserves*:

Proved reserves

Reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual volume recovered will exceed the *proved reserves* estimate.

Probable reserves

Reserves additional to *proved reserves* that are less certain to be recovered than *proved reserves*. It is equally likely that the actual volume recovered will be greater or less than the sum of the *proved plus probable reserves* estimate.

Possible reserves

Reserves additional to *proved plus probable reserves* that are less certain to be recovered than *probable reserves*. It is unlikely that the actual volume recovered will exceed the

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proved plus probable plus possible reserves estimate.

Development and production status

Each of the *reserves* classifications, *proved*, *probable* and *possible*, may be divided into developed and undeveloped categories.

Developed reserves are those *reserves* that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed that would involve a low expenditure (when compared to the cost of drilling a well) to put the *reserves* on *production*. The developed category may be subdivided into producing and non-producing:

Developed producing reserves are those *reserves* that are expected to be recovered from completion intervals open at the time of the estimate. These *reserves* may be currently producing or, if shut-in, they must have previously been on *production*, and the date of resumption of *production* must be known with reasonable certainty.

Developed non-producing reserves are those *reserves* that either have not been on *production*, or have previously been on *production*, but are shut-in, and the date of resumption of *production* is unknown.

Undeveloped reserves are those *reserves* expected to be recovered from known accumulations where a significant expenditure (when compared to the cost of drilling a well) is required to render them capable of *production*. They must fully meet the requirements of the *reserves* classification (proved, probable, possible) to which they are assigned.

In multi-well pools it may be appropriate to allocate total pool *reserves* between the developed and undeveloped categories or to subdivide the *developed reserves* for the pool between developed producing and developed non-producing. This allocation should be based on the estimator's assessment as to the *reserves* that will be recovered from specific wells, facilities and completion intervals in the pool and their respective development and production status.

Levels of certainty for reported *reserves*:

Reported total *reserves* estimated by deterministic or probabilistic methods, whether comprised of a single *reserves* entity or an aggregate estimate for multiple entities, should target the following levels of certainty under a specific set of economic conditions:

- (i) There is a 90% probability that at least the estimated *proved reserves* will be recovered.
- (ii) There is a 50% probability that at least the sum of the estimated *proved reserves plus probable reserves* will be recovered.

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- (iii) There is a 10% probability that at least the sum of the estimated *proved reserves* plus *probable reserves* plus *possible reserves* will be recovered.

A quantitative measure of the probability associated with a *reserves* estimate is generated only when a probabilistic estimate is conducted. The majority of *reserves* estimates will be performed using deterministic methods that do not provide a quantitative measure of probability. Whether deterministic or probabilistic methods are used, evaluators are expressing their professional judgement as to what are reasonable estimates.

.....

CIM has published definitions and guidelines (Appendix A) designed to assist evaluators in making *reserves* estimates on a reasonably consistent basis and users of evaluators' reports in understanding what such reports entail. *Reserves* for the purpose of these requirements are as defined in the *CIM definitions*. Reference should be made to such definitions and guidelines (including any amendments) for guidance on general requirements for classifying *reserves*, the procedures and methods for estimating *reserves*, confidence levels of individual entity and aggregate *reserves* estimates [and the validating and testing of *reserves* estimates].

Reserves Data :

Reserves Data comprises:

- (a) *Reserves* estimated as at the issuer's most recently completed financial year-end using forecast prices and costs,
- (b) *Reserves* estimated as at the issuer's most recently completed financial year-end using constant prices and costs,
- (c) *Future net revenue* estimated as at the issuer's most recently completed financial year-end employing forecast prices and costs, and
- (d) *Future net revenue* estimated as at the issuer's most recently completed financial year-end employing constant prices and costs.

Reservoir

A *reservoir* or pool is a porous and permeable underground formation containing a natural accumulation of producible *oil* and/or *gas* that is confined by impermeable rock or water barriers and is individual and separate from other *reservoirs*.

Resources

Those quantities of oil and gas which are estimated, on a given date, to be potentially recoverable from known accumulations and undiscovered accumulations.

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Review (in relation to *Reserves Data*)

Steps carried out by the independent evaluator, consisting primarily of enquiry, analytical procedures and discussion related to an issuer's *Reserves Data*, with the limited objective of assessing whether the *Reserves Data* are plausible. "Plausible" is used in the sense of appearing to be worthy of belief based on the information obtained by the independent evaluator as a result of carrying out such steps. Examination of documentation is not required unless the information does not appear to be plausible.

Service well

A well drilled or completed for the purpose of supporting *production* in an existing *field*. Specific purposes of *service wells* include *gas* injection, water injection, steam injection, air injection, salt-water disposal, water supply for injection, observation, or injection for in-situ combustion.

SPEE

The Society of Petroleum Evaluation Engineers - Calgary Chapter.

Stratigraphic test well

A drilling effort, geologically directed, to obtain information pertaining to a specific geologic condition. Such wells customarily are drilled without the intention of being completed for hydrocarbon *production*. This classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration. *Stratigraphic test wells* are classified as (i) "exploratory type" if not drilled in a proved area, or (ii) "development type", if drilled in a proved area. Development type stratigraphic wells are often referred to as evaluation wells.

Support equipment and facilities

Equipment and facilities used in *oil* and *gas producing activities*, such as seismic equipment, drilling equipment, construction and grading equipment, vehicles, repair shops, warehouses, supply points, camps, and division, district, or field offices.

Taxes, other than income and capital taxes

Taxes such as severance taxes and ad valorem taxes levied by governments on *oil* and *gas properties* and *production*.⁶

⁶ In some jurisdictions, taxes levied at the field level may be similar to royalties and the issuer may wish to disclose them separately.

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Undeveloped reserves

Refer to *Reserves*.

Unproved property

A *property* or part of a *property* with no *reserves*.

PART 2 - MEASUREMENT

2.1 Accounting methods

- (1) When preparing financial statements in accordance with Canadian generally accepted accounting principles, an issuer shall use either the successful efforts method or the full cost method of accounting.
- (2) An issuer that follows the successful efforts method shall comply with the accounting and financial reporting disclosure requirements of U.S. Financial Accounting Standards Board Statement of Financial Accounting Standards No. 19.
- (3) An issuer that follows the full cost method shall comply with the accounting and financial reporting disclosure requirements of Accounting Guideline 5 of The Canadian Institute of Chartered Accountants.
- (4) An issuer involved in extraction of *oil* and *gas* from shale, *oil* sands or coal shall report:
 - (a) financial and operating activities using guidance appropriate for mining issuers, and
 - (b) *Reserves Data* considering guidance similar to that which follows.

2.2 Estimating reserves

- (1) *Reserves* shall be estimated employing:
 - (a) forecast prices and costs that are generally accepted as being reasonable, and
 - (b) constant prices and costs that are the issuer's prices and costs at the effective date (reference date) of the evaluation.⁷
- (2) For both cases, when an issuer has contracted for, or is required by legislation to use, fixed or determinable future prices and/or costs, including those for a contract extension period if it is likely the contract will be extended, those prices and costs shall be employed in the estimates. Accordingly, the issuer shall advise the evaluator of such matters and the effects shall be reflected in the *Reserves Data*.
- (3) The timing of recording events and transactions shall be the same for the financial statements and the *reserves* estimates, so that events and transactions recorded in the *reserves* estimates are matched with those recorded in the financial statements at the same date. The issuer shall advise the evaluator of such events and transactions and the evaluator shall reflect such advice in the

⁷ That is, that day's posted price for *oil* and the spot price for *gas*, after historical adjustments for transportation, gravity, etc.

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reserves estimates.

- (4) An issuer's *reserves* shall be estimated based on the assumption that appropriate development will occur and that required funding will be available.
- (5) Abandonment and reclamation costs shall not be included in determining the economic limit for purposes of determination of *reserves*.

2.3 Estimating *future net revenue*

- (1) *Future net revenue* shall be estimated employing *reserves* estimated using:
 - (a) forecast prices and costs, and
 - (b) constant prices and costs.

2.4 *Gas reserves*

- (1) All disclosure of *natural gas reserves* and sales shall report *marketable gas*.
- (2) All disclosure of *natural gas by-products* shall be reported only in respect of volumes that will be recovered prior to the measure of *marketable gas*.

PART 3 - DISCLOSURE

RESERVES DATA

3.1 Requirement to file *Reserves Data* with the *Commission*

- (1) *Reserves* shall be estimated and *Future Net Revenue* shall be calculated as set out herein and in accordance with the definitions and guidelines of *CIM* and *SPEE* as amended and accepted by the *Commission*.
- (2) *Reserves Data* shall be filed with the *Commission* no later than the required filing date for the most recent annual financial statements.
- (3) The issuer shall issue a news release that *Reserves Data* has been filed with the *Commission* or provide such notice in the document containing the financial statements.
- (4) The *Reserves Data* shall state that the *future net revenue* values reported do not represent fair market value.
- (5) The issuer is responsible for the content of the *Reserves Data*.
- (6) The *Commission* may request that a copy of the detailed information supporting the *Reserves Data* be furnished to the *Commission*.

3.2 Reserves

- (1) When an issuer discloses *Reserves Data*:
 - (a) *Reserves* estimated using forecast prices and costs shall be disclosed, on a country-by-country basis, in the following four categories:
 - (i) *proved developed producing*,
 - (ii) *proved developed non-producing*,
 - (iii) *proved undeveloped*, and
 - (iv) *probable*.
 - (b) *Reserves* estimated using constant prices and costs shall be disclosed, on a country-by-country basis, in at least the following two categories:
 - (i) *proved reserves*, and

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- (ii) *proved developed reserves*.
- (2) An issuer may choose to disclose *possible reserves*.
- (3) Each category of *reserves* disclosed shall separately identify:
 - (a) the issuer's *gross interest* and *net interest*,
 - (b) the issuer's royalty interests included in *reserves*, and
 - (c) the types of *reserves* (light and medium *crude oil*, *heavy crude oil*, *natural gas by-products*, *natural gas*).
- (4) If the issuer issues consolidated financial statements, 100 percent of the reserve quantities attributable to the parent company and 100 percent of the reserve quantities attributable to its consolidated subsidiaries (whether or not wholly owned) shall be included. If a significant portion of those reserve quantities at the end of the financial year is attributable to a consolidated subsidiary in which there is a significant non-controlling interest, that fact and the approximate portion of *proved*, *probable* and, if *possible reserves* are *disclosed*, *possible reserves* attributable to the non-controlling interest shall be disclosed.
- (5) If the issuer's financial statements include investments that are proportionately consolidated, the enterprise's reserve quantities shall include only its proportionate share of the investees' *oil* and *gas reserves*.
- (6) The issuer's interest in total proved and *probable reserves* of equity accounted investees shall be presented separately from the issuer's *reserves*.
- (7) A footnote shall state that U.S. estimates of *proved reserves* may differ.

3.3 *Future net revenue*

- (1) When an issuer discloses *Reserves Data*, it shall disclose:
 - (a) *future net revenue* from *reserves* estimated using forecast prices and costs on a country-by-country basis and in total, separately identifying estimated future revenues, royalties, *development costs*, *operating costs* and *future net revenue* from *proved reserves* and *probable reserves*,
 - (b) *future net revenue* from *reserves* estimated using constant prices and costs on a country-by-country basis and in total, separately identifying estimated future revenues, royalties, *development costs*, *operating costs* and *future net revenue* from *proved reserves*,

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- (c) *future net revenue* discounted at:
 - 10%
 - 15%,
 - (d) forecast prices used in estimating *future net revenue* and the issuer's weighted average historical prices for the two preceding years. The forecast prices shall be provided for at least the following five years. Forecast prices disclosed shall be the benchmark reference pricing schedules for the countries where the issuer operates. Issuers may use their own forecast prices or may use their independent evaluator's forecast prices, whether or not they use the same prices for internal management or other purposes provided they disclose the fact they have done so.
 - (e) the issuer's prices at the effective date (reference date) of the evaluation. Prices disclosed shall be based on the benchmark reference pricing schedules for the countries where the issuer operates⁷.
 - (f) year-by-year for the first five years, development costs deducted in the calculation of *future net revenue*,
 - (g) when it believes that it cannot finance future development costs, it shall disclose 1) the fact and 2) the related estimated effects on *reserves* and future net revenue, and
 - (h) *future development costs* included in the estimates of each of the categories of *reserves*.
- (2) If a significant portion of the *future net revenue* is attributable to a consolidated subsidiary in which there is a significant non-controlling interest, that fact and the approximate portion shall be disclosed.
 - (3) *Future net revenue* of equity accounted investees shall be presented separately from *future net revenue* from the issuer's *reserves*.

OTHER ANNUAL DISCLOSURE

3.4 Other disclosure

The following information shall be filed with the *Commission* no later than the required filing date for the most recent annual financial statements.

- (1) *Oil* and *gas* properties:

With respect to the issuer's important *properties*, plants, facilities and installations, and separately for offshore *properties* at the end of the most recently completed financial year:

- (a) the location by province or state or other geographical area if in Canada or the United States and by country otherwise, of all producing wells and all non-producing wells capable of producing, indicating,

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- (i) the total number of wells in each location,
 - (ii) the interest of the issuer therein expressed in terms of *gross* wells and net wells, distinguishing separately *oil* wells and *gas* wells, and
 - (b) information about the age and proximity to pipelines, or other means of transportation, of *properties* that are capable of but are not producing, and
 - (c) the existence, in general, of any statutory or other mandatory relinquishments, surrenders, back-ins or changes in ownership.
- (2) *Unproved properties:*

With regard to interests in *unproved properties* as at the end of the most recently completed financial year:

- (a) the *gross* acreage in which the issuer has an interest,
- (b) the interest of the issuer therein expressed in terms of net leasable acreage, and
- (c) the location of the acreage by country.

With regard to such *properties:*

- (i) an issuer shall report separately with respect to *properties* for which the rights to explore, develop and exploit expire within one year,
- (ii) if the issuer has work commitments on *properties*, the issuer shall disclose the nature (including any bonding requirements), timing and cost of such work commitments, and
- (iii) if the value of such *properties* is stated, the issuer shall disclose the date and source of the valuation and the valuation method.

- (3) *Future net revenue:*

For each of light and medium *crude oil* (combined), *heavy crude oil* and *natural gas*, the net present value as at end of the most recently completed financial year of future net revenue, using forecast prices and costs and discount rates of 10%, of *proved producing*, total *proved* and *proved plus probable reserves*.

- (4) Reconciliations:

- (a) A reconciliation between the beginning and the end of the most recent financial year of the issuer's *net interest in reserves* estimated employing constant prices and costs, in at least the following categories:

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- (i) Total proved, and
- (ii) Total proved plus probable.

The reconciliation shall separately identify, with appropriate explanation of significant changes:

- (a) revisions of previous estimates as a result of changes in previously estimated prices and costs,
 - (b) revisions of previous estimates resulting from information, other than prices and costs estimates, that was not available when the previous estimate was carried out,
 - (c) purchases of *reserves*,
 - (d) extensions, discoveries and improved recovery,
 - (e) *production*, and
 - (f) sales of *reserves*.
- (b) A reconciliation between the beginning and the end of most recent financial year of the issuer's *future net revenue* from *proved reserves* estimated employing constant prices and costs and discounted at 10%.

The reconciliation shall separately identify, with appropriate explanation of significant changes:

- (i) Net change in sales and transfer prices and in *operating costs* related to future *production*,⁸
- (ii) Changes in estimated future *development costs*,
- (iii) Sales and transfers of *oil* and *gas* produced during the period,
- (iv) Net change due to extensions, discoveries and improved recovery,
- (v) Change due to purchases of *reserves*,
- (vi) Change due to sales of *reserves*,
- (vii) Net change due to revisions in quantity estimates,

⁸ The effects of changes in prices and costs shall be computed before the effects of changes in quantities so that changes in quantities shall be stated at year-end prices and costs.

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- (viii) Previously estimated *development costs* incurred during the period,
 - (ix) Accretion of discount,⁹ and
 - (x) Other - explain.
- (5) Reporting less than all *reserves*:
- When there is more than one *property* and the total of *reserves* for all *properties* is reported in the same document, it is permissible to also separately disclose *reserves* for components of the total *reserves*.
- (6) Forward contracts:
- (a) For other than contracts that are financial instruments as contemplated by Section 3860 of the CICA Handbook and contracts and agreements that are disclosed as contractual obligations or commitments under Section 3280 of the CICA Handbook, if an issuer has entered into contracts for *oil* and *gas* transactions, including transportation, which may preclude the issuer from realizing the full future market prices or which protect the issuer from the downside, either for its own account or through aggregators, a description of the terms of such contracts, including dates, volumes and prices.
 - (b) To the extent future transportation obligations or commitments for future physical deliveries of *oil* and *gas* exceed the issuer's expected related future *production* from existing *reserves*, the amount of such excess in volumes and estimated dollars.
- (7) Abandonment and reclamation costs:
- (a) A description of how abandonment and reclamation costs for surface *leases*, wells, facilities and pipelines are estimated.
 - (b) The total number of net wells for which abandonment and reclamation costs will be incurred.
 - (c) The abandonment and reclamation costs expensed during the year.
 - (d) On an undiscounted basis:
 - (i) total abandonment and reclamation costs expected to be incurred on existing *properties*, and
 - (ii) abandonment and reclamation costs expected to be incurred in the next three years.
 - (e) Abandonment and reclamation costs accrued at the balance sheet date.

⁹ 10% of discounted *future net revenue* at the beginning of the financial year.

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(8) Tax horizon

A discussion of the estimated timing as to when income taxes may become payable.

(9) Exploration and development activities:

- (a) Separately for *exploratory wells* and *development wells*, the number of gross and net wells the issuer has drilled or participated in drilling for the most recently completed financial year.
- (b) The number of *gross* and net wells referred to in (a) that were completed as *oil* wells, as *gas* wells and as *service wells* and those that were dry holes.
- (c) If reporting expected results on new *prospects*, appropriate disclosure, often including items such as:
 - Location and name of basin
 - Distance to nearest [analogous] [commercial] *production*
 - Commencement and completion dates
 - Name, age and lithology of target zone
 - Depth of target zone
 - Estimated cost to drill and test a well to target depth
 - Range of pool or *field* sizes expected and probability of success and risks
 - Type of hydrocarbon product expected
 - Gross* working interests and net revenue interest
 - Operator and experience
 - Marketing and transportation arrangements
 - Price environment

(10) Production estimates:

The *production* estimated in the *Reserves* Data for the first year forecast. If one field contributes 20% or more to the total, that field and its estimated *production* shall be disclosed.

(11) Production history

For each of its top ten *fields*, and in total, the issuer's *production* for the most recently completed financial year, by type of *reserves* (light and medium *crude oil*, *heavy crude oil*, *natural gas* and *natural gas by-products*). The *fields* referred to here are the top revenue producers for the most recently completed financial year.

(12) Costs:

- (a) Each of the following types of costs for the most recently completed financial year (whether those costs were capitalized or charged to expense at the time they were incurred):
 - Property acquisition costs*
 - Exploration costs*

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Development costs

- (b) If some or all of *property acquisition costs, exploration costs or development costs* are incurred in foreign countries, separate amounts for each country.
 - (c) If significant costs have been incurred to acquire *proved properties*, those costs separately from the costs of acquiring *unproved properties*.
 - (d) If the issuer's financial statements include investments that are accounted for by the equity method, the issuer's share of the investees' *property acquisition, exploration, and development costs* incurred in *oil and gas producing activities* for the most recently completed financial year, in the aggregate for each country.
- (13) Net asset value and net asset value per share:
- If net asset value or net asset value per share is disclosed, details as to the methods used to value assets and liabilities and the number of shares used in the calculation.
- (14) Valuations
- When reporting values under 3.4 (2) (iii) or results under 3.4 (9) (c) above, for both annual and continuous disclosure, disclosure shall be appropriate in that:
- i) it shall be "full, true and plain" within the context of what is being disclosed and be balanced by including both positive and negative aspects of the matter being disclosed;
 - ii) if estimates of value are disclosed, they shall be based on consideration of the following, in order of preference:
 - (a) if there have been no material changes in the property, the surrounding *properties*, or the general *oil and gas* economic climate since acquisition, the acquisition cost to the issuer;
 - (b) recent sales of interests by others in the same property;
 - (c) monetized terms and conditions of recent farmin agreements related to the property;
 - (d) monetized terms and conditions of recent work commitments related to the property;
or
 - (e) recent sales of similar *properties* in the same general area.

The method used shall be stated and explained. If none of the above methods is considered applicable, this shall be stated and (iii) may be followed;

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- (iii) If estimates of *resources* volumes and related values are disclosed, they shall be prepared or approved by qualified evaluators who are members of *APEGGA*, a Canadian association similar to *APEGGA* or a similar body acceptable to the *Commission*, in accordance with standards accepted by such bodies; In such cases, single point values shall not be disclosed but rather a reasonable three-part range of values, being low or pessimistic, middle or most likely, and high or optimistic, shall be disclosed, based on the expected activity to be followed by the issuer;
 - (iv) the evaluator shall furnish a report to the issuer which shall not contain disclaimers that materially detract from the usefulness of the information or state that the report shall not be relied on;
 - (v) if the issuer discloses the name of the evaluator or discloses information from the evaluator's report, the evaluator's consent shall be first obtained and the evaluator shall first have the opportunity to *review* the manner in which the evaluator's involvement is described; and
 - (vi) estimates of *resources* volumes or values shall be based on the issuer providing all relevant information to the evaluator to enable the evaluator to prepare the evaluator's report and the issuer shall have ultimate responsibility for such disclosure.
- (15) Reserve replacement data:
- If reserve replacement data are disclosed, details as to the method of calculation.
- (16) Netbacks:
- (a) If netbacks are disclosed, separate netbacks for each of *heavy crude oil*, light and medium *crude oil*, and *natural gas* including *natural gas* by-products.
 - (b) If netbacks are disclosed, they shall be calculated using *gross* revenues less royalties and *operating costs*.
- (17) BOEs (Barrels of *oil* equivalent):
- (a) If units are expressed on a BOE basis, *gas* shall be converted to *oil* in the ratio of 6 thousand cubic feet (mcf): 1 barrel (bbl).
 - (b) If BOEs are also reported using a conversion ratio other than 6 mcf: 1 bbl, the conversion ratio used.
 - (c) If BOEs are reported, language alerting the reader that BOEs are very approximate comparative measures that may, in some cases, provide information that could mislead, particularly if used in isolation.
 - (d) If finding and development costs are reported by BOE:
-

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- (i) they shall be calculated by dividing the sum of exploration costs and development costs¹⁰ incurred in the most recently completed financial year and the change during such year in future development costs by:
 - (a) the *proved reserves* additions during such year expressed on a BOE basis, and
 - (b) the sum of *proved reserves* plus *probable reserves* additions during such year expressed on a BOE basis.
- (ii) information shall be provided with respect to the most recently completed financial year, the prior financial year and the weighted average of the three most recently completed financial years.

PROSPECTUSES

3.5 Information required in a prospectus¹¹

- (1) In a prospectus,^{12 & 13} an issuer shall furnish or, where applicable, incorporate by reference, the following information:
 - (a) the information required by the section entitled "*Reserves Data*", and
 - (b) the information required by the section entitled "Other annual disclosure" for each of the years for which financial statements are required, except that information about *properties* and forward contracts is only required for the most recently completed financial year.
- (2) If the prospectus is for an initial public offering and a material change has occurred in the affairs of the issuer since the end of the issuer's most recently completed financial year, the issuer shall provide the information that would have been required if the issuer had previously been a reporting issuer.

¹⁰ *Property acquisition costs* and any related *reserves* and any proceeds of disposition and any related *reserves* shall be ignored.

¹¹ Certain securities regulations require disclosure, described as "prospectus-like", in other forms (e.g., information/proxy circulars) and this information shall be required in those forms.

¹² Section 3.5 would replace the disclosure requirements found in Form 14 at item 9 (3) of many jurisdictions.

¹³ It is assumed that when *Reserves Data* for the most recently completed financial year have not been filed, material changes in *Reserves Data* have been reflected in *Material Change Reports*.

PART 4 REPORTS

4.1 Statement of responsibility

An issuer shall indicate its responsibility for the preparation of *Reserves Data* and other information associated with *oil and gas producing activities*. This may be accomplished by a report such as:

Report on *Reserves Data*:¹⁴

Independent evaluators have audited [or evaluated] the issuer's *Reserves Data*. The report of (insert name of independent evaluator whose report is presented) is presented below. The [*Reserves* Committee of the] Board of Directors has (a) reviewed the issuer's procedures for providing information to the evaluator, (b) met with the independent evaluator to determine whether any restrictions placed by management affect the ability of the independent evaluator to report without *reservation*, [and, because of the proposal to change the evaluator, inquired whether there had been disputes with management] and (c) reviewed the *Reserves Data* with management and the independent evaluator.

The [*Reserves* Committee of the] Board of Directors has reviewed the company's procedures for assembling and reporting other information [including the reserve-based incentive programme] associated with *oil and gas producing activities* and has reviewed that information with management. The Board of Directors has approved the *Reserves Data* on the recommendation of the *Reserves* Committee.

A, President and CEO

B, *Reserves* Officer

(date)

¹⁴ This report may be combined with management's report on financial statements

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4.2 Evaluators and evaluators' reports

- (1) When *Reserves Data* are disclosed:
 - (a) estimates shall be prepared or approved by qualified evaluators who are members of *APEGGA*, a Canadian association similar to *APEGGA* or a similar foreign body acceptable to the *Commission*.
 - (b) the document shall contain a report by an independent¹⁵ evaluator. An independent evaluator shall possess appropriate professional qualifications and experience and be a member in good standing of an appropriate professional organization; and
 - (c) management shall explicitly refer to the evaluator's report in a document in which it takes responsibility for the *Reserves Data* (refer to Section 4.1).
- (2) An issuer shall obtain the consent of the evaluator before naming the evaluator or extracting information from or commenting on the independent evaluator's report.
- (3) If an independent evaluator cannot report without *reservation*, the evaluator's report shall set out the cause of the reservation and the effect, if known, on reported *reserves* and *future net revenue*.
- (4) An evaluator's report containing a *reservation* which the issuer can have removed shall not usually be acceptable.
- (5) The independent evaluators shall *audit* or *evaluate* at least 75% of the *future net revenue* using forecast prices and costs from estimated *proved plus probable reserves* discounted at 10%. The independent evaluator shall *review* the *reserves* and *future net revenue* not independently audited or evaluated.¹⁶

¹⁵ *SPEE* are working on "independence".

¹⁶ Pending development of audit standards for independent evaluators to report on certain *reserves* and *future net revenue*, the following shall apply (percentages are approximate):

Issuers reporting production in excess of 100,000 BOEs per day (6 mcf: 1 bbl) for each of the three most recent financial years, and which have the ability to appropriately estimate their own *reserves* and *future net revenue* need not initially comply with (5), provided independent evaluators *evaluate* at least 15% and *review* at least 10% of the *future net revenue* from *proved plus probable reserves* discounted at 10%, in each of the two consecutive financial years which end following the date of this rule and provided that, by the end of the third such year and annually thereafter, a minimum of 75% has been so evaluated and 25% has been so reviewed. In arriving at such minimum percentages, none of the properties shall be included as being *evaluated* more than once during such two year period.

After the third year, or earlier if acceptable *audit* standards have been developed, *audits* may be substituted for *evaluations*; a combination of *audits* and *evaluations* shall also be acceptable in satisfying

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(6) Evaluators shall report as follows:

Independent evaluator's report:

To the Board of Directors of Issuer (the "Issuer")

1. We have [audited] [evaluated] [and reviewed] the Issuer's *Reserves Data* as at [the issuer's most recently completed financial year-end] . The *Reserves Data* comprises:
 - (a) *Reserves* estimated using forecast prices and costs,
 - (b) *Reserves* estimated using constant prices and costs,
 - (c) *Future net revenue* estimated using forecast prices and costs, and
 - (d) *Future net revenue* estimated using constant prices and costs.
2. These *Reserves Data* are the responsibility of the Issuer's management. Our responsibility is to express an opinion on the *Reserves Data* based on our [audit] [evaluation] [and review].
3. We carried out our [audit] [evaluation] [and review] in accordance with standards established by *SPEE*.
4. 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 [audit] [evaluation] [and review] also includes assessing whether these *Reserves Data* are in accordance with principles and definitions established by *SPEE*.
5. The following sets forth the estimated *proved plus probable future net revenue*, estimated employing forecast prices and costs, discounted at 10% included in the *Reserves Data* [audited] [evaluated] [and reviewed] for the year ended xxxx xx, 20xx:

<u>Independent evaluator</u>	<u>Report dated</u>	<u>Country where reserves are located</u>	<u>Audited</u>	<u>Evaluated</u>	<u>Reviewed</u>	<u>Total</u>
Evaluator A	xx, 20xx	xxx	\$xxx	\$xxx	\$xxx	\$xxx
Evaluator B	xx, 20xx	xxx	\$xxx	\$xxx	\$xxx	\$xxx
Evaluator C	xx, 20xx	xxx	\$xxx	\$xxx	\$xxx	\$xxx
.....						
Evaluator X	xx, 20xx	xxx	<u>\$xxx</u>	<u>\$xxx</u>	<u>\$xxx</u>	<u>\$xxx</u>
			<u>\$xxx</u>	<u>\$xxx</u>	<u>\$xxx</u>	<u>\$xxx</u>

the above percentages and the above production requirement shall not apply.

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6. In our opinion, as at the date of this report, the *Reserves Data* [audited] [evaluated] have, in all material respects, been determined and are presented in accordance with the principles and definitions established by *SPEE*.¹⁷
7. We have no responsibility to update this report for events and circumstances occurring after the date of this report.
8. Since these *Reserves Data* are based on judgments regarding future events, actual results will vary and the variations may be material.

Signed as to our report referred to above:

Evaluator A, City, Province/State, Date
Evaluator B, City, Province/State, Date
Evaluator C, City, Province/State, Date
.....
Evaluator X, City, Province/State, Date

¹⁷ A review sometimes results in the expression of negative assurance using words like "Nothing has come to my attention which would indicate the *Reserves Data* have not been prepared in accordance with principles and definitions established by *SPEE*." Some investors may assume an inappropriately high level of assurance from a report containing negative assurance. Accordingly, such negative assurance shall be included in a report to the issuer's *Reserves* (or similar) Committee but shall not otherwise be disclosed. *Commission* staff understand the limitations of negative assurance and may require the review report in certain circumstances.

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PART 5 RESERVES COMMITTEE OR EQUIVALENT

- (1) The board of directors of an issuer shall expressly assume responsibility for, or assign to a committee of the board comprised of a majority of independent directors, the general responsibility for:
 - (a) reviewing the issuer's procedures for providing information to the independent evaluator,
 - (b) meeting with the independent evaluator to determine whether any restrictions placed by management affect the ability of the evaluator to report without *reservation* on the *Reserves Data*.,
 - (c) reviewing the appointment of the independent evaluator and, if there is a proposal to change the independent evaluator, inquire as to the reason and whether there have been disputes with management,
 - (d) reviewing the reconciliations of changes in *reserves* and *future net revenue*,
 - (e) reviewing [with management and the independent evaluator] and approving, the *Reserves Data* , and
 - (f) reviewing the issuer's procedures for reporting other information associated with *oil* and *gas producing activities*,