

# SEC Adopts Significant Changes to Oil and Gas Reporting Requirements

---

January 2009

**Authors:** [Colin Diamond](#), [Francis Fitzherbert-Brockholes](#), [Glen Ireland](#), [Gary Kashar](#), [Kevin Keogh](#), [John Vetterli](#)

## Overview

The US Securities and Exchange Commission (the “SEC”) last week adopted significant revisions to its oil and gas reporting requirements.<sup>1</sup> The final rules contain a number of significant changes from the proposed rules published in June 2008.<sup>2</sup> The revisions are intended to provide investors with a more meaningful and comprehensive picture of the oil and gas reserves that a company holds. The revisions are also intended to address concerns that existing disclosure requirements, which were originally adopted in 1978 and 1982, do not reflect current industry practices and technological changes in the oil and gas industry.

The new rules will be effective for registration statements filed on or after January 1, 2010, and for annual reports on Forms 10-K and 20-F for fiscal years ending on or after December 31, 2009. Early compliance is not permitted. The revised standards will apply to US domestic issuers and foreign private issuers alike with only limited exceptions for foreign private issuers. However, the new rules will not apply to Canadian companies that are subject to the Multi-Jurisdictional Disclosure System (MJDS).

The key changes implemented by the new rules are as follows:

- Companies will be permitted to disclose “probable” and “possible” reserves (in addition to “proved” reserves).
- The definition of reserves will be revised to reflect current industry practices and expanded to include “non-traditional” and “unconventional” sources, such as bitumen extracted from oil sands and oil and gas extracted from coal and oil shale.
- The “economic producibility” of reserves and the amount of oil and gas exploration costs that may be capitalized under the “ceiling test” will be determined based on a 12-month average annual price, rather than a year-end spot price.
- A wider range of “reliable technologies” will be permitted to determine the existence of reserves.
- Companies will be required to file third-party reports when a third party has estimated or audited the company’s reserves.

---

<sup>1</sup> Modernization of the Oil and Gas Reporting Requirements, Release Nos. 33-8995; 34-59192 (December 31, 2008).

<sup>2</sup> Modernization of the Oil and Gas Reporting Requirements, Release Nos. 33-8935; 34-58030 (June 26, 2008). See also Concept Release on Possible Revisions to the Disclosure Requirements Relating to Oil and Gas Reserves, Release Nos. 33-8870; 34-56945 (December 12, 2007).

## Guidance by Existing Regulatory Frameworks

The disclosure framework reflected in the final rules is guided significantly by Canadian National Instrument 51-101 (NI 51-101), which was adopted in 2003 and governs the Canadian regulatory system for oil and gas company disclosures. This, in turn, draws upon the Petroleum Resources Management System (PRMS), a classification system that defines a broad range of reserves categories, such as “contingent resources” and “prospective resources.” The PRMS classifications are broadly used as references in the oil and gas industry. While the final rules have moved closer in substance and terminology to the PRMS, the final rules still differ in a number of significant ways from the PRMS in order to maintain comparability among different companies’ reserves disclosures, which is a guiding principle of the new SEC disclosure regime.

## Changes to Key Definitions and Concepts

### Non-Traditional and Unconventional Sources

The final rules amend the definition of “oil and gas producing activities” to focus on the final product (e.g., oil or gas ) rather than the particular extraction technology used to obtain it. Under the amended definition, oil and gas producing activities include “extraction of saleable hydrocarbons...from oil sands, shale, coalbeds, or other nonrenewable natural resources, which are intended to be upgraded into synthetic oil and gas.”<sup>3</sup> This reflects the fact, not addressed by the existing rules, that oil and gas are commonly extracted through means other than traditional wells. As a result of this change, companies that use non-traditional extraction techniques will be subject to the oil and gas disclosure requirements contained in the final rules. In addition, companies will be required to include non-traditional sources of oil and gas, such as coal and oil shale, in their reserves estimates to the extent they are intended to be converted into oil and gas.

### Disclosure of Proved, Probable and Possible Reserves

The final rules permit, but do not require, companies to disclose probable and possible reserves.<sup>4</sup> The new definitions of these terms are broadly consistent with the PRMS definitions. Many companies currently

	Proved Reserves <sup>5</sup>	Probable Reserves <sup>6</sup>	Possible Reserves <sup>7</sup>
Confidence level	Reasonable certainty, defined in the new rules as having a high degree of confidence that the reserves will be recovered.	Additional reserves that are less certain to be recovered than proved reserves but which, when added to proved reserves, are as likely as not to be recovered.	Additional reserves that are less certain to be recovered than probable reserves.
Deterministic method	Reasonable certainty that estimated ultimate recovery, or EUR, namely the sum of reserves remaining as of a given date plus the cumulative production as of that date, will increase	As likely as not that actual remaining quantities recovered will equal or exceed the sum of estimated proved plus probable reserves.	Low probability that total quantities ultimately recovered from a project will exceed the sum of proved, probable and possible reserves.

<sup>3</sup> New Rule 4-10(a)(16) of Regulation S-X.

<sup>4</sup> New Instruction 2 to paragraph (a)(2) of Item 1210(a) of Regulation S-K.

<sup>5</sup> New Rules 4-10(a)(22) and 4-10(a)(24). The SEC adopted the “high degree of confidence” standard in the final rules because it mirrors the terminology used in the PRMS. However, the SEC believes “reasonable certainty” and “high degree of confidence” have the same meaning and has clarified that having a “high degree of confidence” means that a quantity is “much more likely to be achieved than not, and, as changes due to increased availability of geoscience (geological, geophysical, and geochemical), engineering, and economic data are made to estimated ultimate recovery (EUR) with time, reasonably certain EUR is much more likely to increase or remain constant than to decrease.”

<sup>6</sup> New Rule 4-10(a)(18) of Regulation S-X.

<sup>7</sup> New Rule 4-10(a)(17) of Regulation S-X.

	rather than either decrease or remain constant.		
Probabilistic method	At least a 90 percent probability that the quantities actually recovered will equal or exceed the stated volume.	At least a 50 percent probability that the quantities actually recovered will equal or exceed the proved plus probable reserves.	At least a ten percent probability that the total quantities recovered will equal or exceed the sum of proved, probable and possible reserves.

disclose this information on their websites and in press releases, but current SEC rules limit disclosure in filings to proved reserves. The final rules continue to prohibit disclosure of estimated oil and gas resources other than those falling into the “proved,” “probable” or “possible” categories, unless required by foreign or state law, or to an acquirer in connection with an acquisition.<sup>8</sup>

The table on the previous page summarizes amendments to the existing definition of proved reserves and the new definitions of probable and possible reserves.

“Deterministic” and “probabilistic” methods are two alternative means of estimating reserves. The SEC is not mandating one method over the other. A “deterministic estimate” is based on a single most appropriate value for each variable in the estimation of reserves, such as the company’s determination of the oil or gas in place in a reservoir, multiplied by the fraction of that oil or gas that can be recovered.<sup>9</sup> A “probabilistic estimate” is obtained when the full range of values that could reasonably occur from each unknown parameter (from the geoscience and engineering data) is used to generate a full range of possible outcomes and their associated probabilities of occurrence.<sup>10</sup>

### Valuation Methodology for Proved Reserves

Under the final rules, companies are required to determine whether proved oil and gas reserves are “economically producible” based on an average price during the company’s fiscal year, rather than the current requirement of a single-day price at year end.<sup>11</sup> The SEC believes that this approach maximizes the comparability of reserves estimates among companies and mitigates the impact of volatility and seasonality that arises with a single pricing date. The average price is calculated using the unweighted arithmetic average of the closing price on the first day of each month in that 12-month period. This is a change from the proposed rules, which contemplated using the last day of each month, and effectively gives companies an additional month to estimate their reserves.

The weighted average valuation methodology differs from that used in NI 51-101 and PRMS, which allow more flexibility in pricing methodology subject to appropriate disclosure. In addition, because disclosure based solely on historical prices will not capture management’s outlook on the future or futures prices, a company will be permitted, but not required, to include a sensitivity analysis that shows total reserves estimates based on futures prices, management’s planning prices, or other price schedules in addition to the 12-month historical average.<sup>12</sup>

### Valuation Methodology for Accounting Purposes

In a change from the proposed rules, the SEC is amending its full-cost accounting rules related to oil and gas reserves.<sup>13</sup> Under the final rules, the limitation or “ceiling” test for oil and gas exploration costs that a company may capitalize will be calculated based on the same average price that will now be used to determine whether

<sup>8</sup> New Instruction 5 to Item 102 of Regulation S-K

<sup>9</sup> New Rule 4-10(a)(5) of Regulation S-X.

<sup>10</sup> New Rule 4-10(a)(19) of Regulation S-X.

<sup>11</sup> New Rule 4-10(a)(22)(v) of Regulation S-X. The final rules maintain the existing exception for situations where prices are defined by contractual arrangements.

<sup>12</sup> New Item 1202(b) of Regulation S-K.

<sup>13</sup> New Rule 4-10(c)4 of Regulation S-X.

---

proved reserves are economically producible rather than a single-day price at year end as required under current rules. The SEC notes that this could result in a company that uses the full-cost accounting method recording a ceiling test write-down in income during periods of rising oil and gas prices. As a result, companies will need to consider disclosure in their MD&A and footnotes to their financial statements if pricing trends indicate the possibility of future write-downs.

An alternate method to the full-cost accounting method is the “successful efforts” method set forth in Statement of Financial Accounting Standard No. 19 prescribed by the Financial Accounting Standards Board. In order to ensure consistency, the SEC has stated its intention to discuss with the FASB aligning SFAS 19 with the average price method described above before the new rules become effective.<sup>14</sup>

## Use of New Technologies to Determine Reserves

Under current rules, a company can generally meet the “reasonable certainty” standard necessary to establish proved reserves only by using actual production or flow tests. However, flow tests are not permitted in all regions and, in addition, new tests are likely to develop as a result of improvements in technology. Therefore, the new rules permit the use of a test based on “reliable technology” to establish reserves.

“Reliable technology” is defined as “one or more technologies (including computational methods) that has been field tested and has been demonstrated to provide reasonable certain results with consistency and repeatability in the formation being evaluated or in an analogous formation.”<sup>15</sup> The definition adopted in the final rules does not contain the requirements from the proposed rules that the technology be “widely accepted” (thereby permitting the use of reliable internally-developed technologies) or require that such technologies must have been proven empirically to lead to correct conclusions in 90 percent or more of its applications (because of the difficulty in establishing and supporting this on an ongoing basis). A concise summary of the particular technology used by a company and the reserves for which it was used must be provided in the company’s first filing that contains reserves estimates or material additions to reserves estimates. The SEC notes in the adopting release that it may continue to request that company’s provide supplemental data, including data supporting a conclusion that a technology is “reliable.”

## Definition of Reserves

The existing rules contain no definition of “reserves.” The new rules define “reserves” for all categories—proven, probable or possible—as follows: “Reserves are estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations. In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce or a revenue interest in the production of oil and gas, installed means of delivering oil and gas or related substances to market, and all permits and financing required to implement the project.”<sup>16</sup> Unlike the definition in the proposed rules, the definition in the final rules is broadly consistent with the PRMS definition except that the PRMS uses the more subjective concept that reserves must be “commercial,” meaning that they must meet internal rates of return or other guidelines, rather than “economic producible,” which means that revenues from them exceed the costs of production.<sup>17</sup>

## Definition of Proved Reserves

Proved reserves are currently defined as “the estimated quantities of crude oil, natural gas, and natural gas liquids which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.” The new definition of proved reserves is reserves that “(i) in projects that extract oil and gas through wells, can be expected to be recovered through existing wells with existing equipment and operating methods, and (ii) in projects that extract oil and gas in other ways, can be expected to be recovered through extraction technology installed and operational at the time of the reserves estimate.”<sup>18</sup> In order for reserves to be considered proved, the project to extract the hydrocarbons must have commenced or it must be reasonably certain that the operator will

---

<sup>14</sup> See Section II.B.2 of the adopting release for the final rules.

<sup>15</sup> New Rule 4-10(a)(25) of Regulation S-X.

<sup>16</sup> New Rule 4-10(a)(26) of Regulation S-X.

<sup>17</sup> New Rule 4-10(a)(10) of Regulation S-X.

<sup>18</sup> New Rule 4-10(a)(22) of Regulation S-X.

---

commence the project within a reasonable time. Proved reserves can therefore only be from areas that the company has a specific intent to develop.

In keeping with the ability to use alternative technologies, the definition of proved reserves includes provisions for establishing levels of lowest known hydrocarbons and highest known oil through “reliable technology” in addition to well penetrations, which is the method required by the current rules.<sup>19</sup>

### **Definition of Developed Reserves**

The final rules clarify that the terms “developed” and “undeveloped” can apply to proved, probable or possible reserves. Reserves are “developed” if they can be expected to be recovered “(i) through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.”<sup>20</sup> This definition is consistent with the PRMS.

### **Definition of Undeveloped Reserves**

The definition of “proved undeveloped reserves” currently imposes a “reasonable certainty” standard for reserves in drilling units immediately adjacent to the drilling unit containing a producing well and a “certainty” standard for reserves in drilling units beyond the immediately adjacent drilling units. The new rules apply a reasonable certainty standard in both cases (in addition to removing the reference to prove since disclosure of undeveloped probable or possible reserves will now be permitted).<sup>21</sup>

The final rules, however, prohibit classifying an undrilled location as proved in the proposed definition if a development plan has not been adopted to drill within the subsequent five years. An exception to this prohibition would only be granted upon showing specific circumstances justifying a longer period of time, such as for particularly complex projects located in remote areas requiring more time to develop. The SEC clarified in the final rule release that it understands that such “specific circumstances” would exist for projects that are expected to run for more than five years, which could include large projects, projects in remote areas and projects in continuous accumulations, such as oil sand.<sup>22</sup>

## **New and Enhanced Disclosure Requirements**

The new rules codify the required disclosures for SEC filings in a new Subpart 1200 to Regulation S-K, which would replace Industry Guide No. 2. The following is a summary of the new and enhanced disclosures. Existing requirements from Industry Guide No. 2 that are merely being codified in new Subpart 1200 are not discussed below unless that codification was not contemplated by the proposed rules.

### **Definition of “Geographic Area” (Item 1201)**

Under the proposed rules, companies would have been permitted to present information on a continent-only basis unless a particular country contained 15 percent or more of the company’s global oil reserves or gas reserves. A particular sedimentary basin or field would have been required to be disclosed separately if it contained ten percent or more of a company’s global oil reserves or gas reserves. It was unclear what geographic disclosure was required with respect to oil and gas production since the proposed rules only addressed geographic disclosure with respect to reserves.

The SEC noted in the adopting release for the final rules that the proposed rules may have resulted in too much detail. The final rules contain a general requirement of disclosure of information by country, groups of countries of continent, as necessary, to provide meaningful disclosure.<sup>23</sup> This general requirement is consistent with SFAS No. 69. The final rules require specific disclosure of:

---

<sup>19</sup> New Rule 4-10(a)(22)(ii) and (iii) of Regulation S-X.

<sup>20</sup> New Rule 4-10(a)(6) of Regulation S-X.

<sup>21</sup> New Rule 4-10(a)(31) of Regulation S-X.

<sup>22</sup> See Section II.F.2 of the adopting release for the final rules.

<sup>23</sup> New Item 1201(d) of Regulation S-K.

- 
- reserves in each country containing 15 percent or more of a company's proved global oil reserves or gas reserves;<sup>24</sup> and
  - production in each country or field containing 15 percent or more of a company's proved global oil reserves or gas reserves,<sup>25</sup> in each case, unless prohibited by the country in which the reserves are located.

## Oil and Gas Reserves Disclosure Tables (Item 1202)

The final rules require companies to include a table showing proved developed, proved undeveloped and total proved reserves. In addition, companies may elect to include probable and possible reserves as stated above. Any company disclosing probable and possible reserves must disclose the relative uncertainty related to the accuracy of each such reserve category. Each reserve category included in the table must be presented by geographic area (as described above) and final product (specifically: oil, natural gas, synthetic oil, synthetic gas and other natural resources).<sup>26</sup>

As discussed above, the determination of economic producibility will be based on a 12-month average of historical prices. However, the final rules permit, but do not require, companies to include an optional reserves sensitivity analysis table in their filings showing what the reserves estimates would be using different price and cost criteria, such as a range of prices and costs that may reasonably be achieved, including standardized futures prices or management's own forecasts. A company electing to include such a table must disclose the assumptions underlying the different scenarios.<sup>27</sup>

The proposed rules had contemplated that disclosure of reserves would be based on the pre-processed resource extracted from the ground. The SEC gives the example of a company that extracts bitumen and processes that bitumen into synthetic oil in its own processing plant. Under the proposed rules, the determination of "economic producibility" would not have taken into account the economics of the processing plant. The final rules do not adopt this approach and instead require companies to disclose only the final product, but also to indicate whether that final product is from traditional oil and gas or the product of synthetic oil and gas (e.g., processing bitumen into synthetic oil).

## Disclosure Regarding Conduct of Estimates and Audits (Item 1202)

The SEC did not adopt the prescriptive disclosure requirements contained in the proposed rules regarding qualifications of personnel involved in reserves estimations or audits. Acknowledging that the proposed rule may have been too rigid in approach, the final rule requires disclosure of the internal controls used by a company in its reserves estimate process and the technical qualifications of the technical person, whether a company employee or an outside third party, primarily responsible for overseeing the preparation of the reserves estimates or for overseeing the conduct of a reserves audit if one was conducted.<sup>28</sup>

A company that represents that it has relied upon a third-party to estimate or audit its reserves will be required to file a report of the third-party as an exhibit to its registration statement or report. The full reserves report, which is often very lengthy, does not need to be filed, but rather a shorter form report based on the audit report guidance issued by the Society of Petroleum Evaluation Engineers. The report must contain a brief summary of the third-party's conclusions with respect to any reserves estimates if the report relates a reserves audit.<sup>29</sup>

The SEC did not adopt the requirement contained in the proposed rules that a reserves audit must result from an examination of at least 80 percent of the company's reserves covered by the audit. The SEC acknowledged that reserves audits are sometimes conducted on a rolling basis and that disclosure of the work done in the report itself would be sufficient.

---

<sup>24</sup> New Item 1202(a)(2). Unlike the proposed rules, the final rules do not require disclosure of reserves by sedimentary basin or field.

<sup>25</sup> New Item 1204(a) of Regulation S-K.

<sup>26</sup> New Item 1202(a) of Regulation S-K.

<sup>27</sup> New Item 1202(b) of Regulation S-K.

<sup>28</sup> New Item 1202(a)(7) of Regulation S-K.

<sup>29</sup> New Item 1202(a)(8) of Regulation S-K.

---

The new rules require that a company that discloses that it has hired a third-party to perform a “process review” must file a report of the third-party as an exhibit to its registration statement or report. A “process review” under the standards of the Society of Petroleum Engineers is an investigation by a person who has qualifications equivalent to that of a reserves auditor to review the adequacy and effectiveness of an entity’s internal controls with respect to the reserves estimates process.<sup>30</sup>

### **Proved Undeveloped Reserves (PUDs) (Item 1203)**

The proposed rules would have required companies to include a table showing, for each of the last five fiscal years and by product type, PUDs converted to prove developed reserves during the year and the net investment required to convert PUDs to prove developed reserves during the year.

The final rules do not adopt the proposed tabular disclosure requirement. The SEC concluded that tabular disclosure would be highly complex and may be confusing to investors because costs incurred in a particular year would not necessarily result in the conversion of PUDs in that year. The final rules instead require narrative disclosure of the total quantity of PUDs at year end, any material changes and conversions of PUDs into proved developed reserves, investments and progress made during the year to effect such conversion and an explanation of why material concentrations of PUDs in individual fields or countries remain undeveloped for five years or more.

### **Table of Oil and Gas Production (Item 1204)**

The proposed rules would have required the inclusion of a table disclosing oil and gas production for the prior three fiscal years by geographic area with more detail than is currently required under existing rules.

The final rules instead codify the existing requirements contained in paragraph 2 of Industry Guide 2 for disclosure of oil and gas production for the prior three fiscal years. The only material change is the requirement described above to disclose production by geographic area.

### **Table of Drilling and Other Exploratory and Development Activities (Item 1205)**

The proposed rules would have continued the existing requirements contained in paragraph 6 of Industry Guide 2 of disclosure by geographic area of three years’ drilling activity, but would have added a requirement to disclose extension wells and suspended wells, and required tabular disclosure. The SEC proposed the addition of extension wells as distinct from exploratory wells because the latter tend to relate to new fields. The SEC believed that disclosure of suspended drilling would be helpful to investors because of the significant capital investment that can be involved.

The final rules instead codify the existing disclosure requirements contained in paragraph 6 of Industry Guide 2 because the SEC concluded that the addition of extension wells and suspended wells would not be useful to investors.

### **Oil and Gas Properties, Wells, Operations and Acreage (Item 1208)**

The proposed rules would have required a more detailed description of the properties and facilities of an oil and gas company in tabular format. In particular, they would have required segmentation of the disclosure by product and by geographic locations.

The final rules instead codify the existing disclosure requirements contained in paragraphs 4 and 5 of Industry Guide 2 because the SEC concluded that the additional information would be burdensome to companies and would not be useful to, and could potentially mislead, investors.

## **Guidance Regarding MD&A**

The proposed rules would have added a new Item 1209 to Regulation S-K specifying topics for discussion in MD&A or in a separate section. The SEC decided not to adopt a formal disclosure requirement and instead provided guidance in the adopting release for the final rules regarding topics that a company might need to discuss based on existing MD&A requirements. The following topics are listed in the SEC’s guidance:

---

<sup>30</sup> New Item 1202(a)(8) of Regulation S-K.

- 
- changes in proved reserves and, if disclosed, probable and possible reserves, and the basis for such changes (e.g., price, technical revisions, changes in status of concessions, etc.);
  - technologies used to establish the level of certainty for material changes to reserves estimates;
  - prices and costs, including the impact on depreciation, depletion and amortization as well as the full-cost ceiling test;
  - performance of currently producing wells, including water production from such wells and the need to use enhanced recovery techniques to maintain production from such wells;
  - performance of any mining-type activities for the production of hydrocarbons;
  - the company's recent achievements in converting proved undeveloped reserves to proved developed reserves and, if disclosed, probable reserves to proved reserves and possible reserves to probable or proved reserves;
  - the minimum remaining terms of leases and concessions;
  - material changes to any line item in the tables described in Items 1202 through 1208 of Regulation S-K;
  - potential effects of different forms of rights to resources, such as production sharing contracts, on operations;
  - geopolitical risks that apply to material concentrations of reserves.

## Application to Foreign Private Issuers

The final rule applies to foreign private issuers the same disclosure requirements contained in Subpart 1200 of Regulation S-K. This is achieved by replacing "Appendix A to Item 4.D – Oil and Gas", which provides guidance for oil and gas disclosures for foreign private issuers. The SEC has retained the existing provision that allows a foreign private issuer to exclude required disclosures about reserves and agreements if its home country prohibits such disclosures.

The final rules clarify that the new disclosures do not apply to Canadian foreign private issuers that are subject to the Multi- Jurisdictional Disclosure System (MJDS) using Form 40-F and that comply with NI 51-101 in Canada.

White & Case LLP  
1155 Avenue of the Americas  
New York, New York 10036-2787  
United States

**T** +1 212 819 8200

White & Case LLP  
5 Old Broad Street  
London EC2N 1DW  
United Kingdom

**T** +44 20 7532 1000

In this publication, White & Case means the international legal practice comprising White & Case LLP, a New York State registered limited liability partnership, White & Case LLP, a limited liability partnership incorporated under English law and all other affiliated partnerships, companies and entities.

This publication is prepared for the general information of our clients and other interested persons. It is not, and does not attempt to be, comprehensive in nature. Due to the general nature of its content, it should not be regarded as legal advice.

ATTORNEY ADVERTISING. Prior results do not guarantee a similar outcome.

NYCDG\_0116/4019