CONCEPT RELEASE ON POSSIBLE REVISIONS TO THE DISCLOSURE REQUIREMENTS RELATING TO OIL AND GAS RESERVES

AGENCY: Securities and Exchange Commission.

ACTION: Concept release.

SUMMARY: The Commission is publishing this Concept Release to obtain information about the extent and nature of the public’s interest in revising oil and gas reserves disclosure requirements which exist in their current form in Regulation S-K and Regulation S-X under the Securities Act of 1933 and the Securities Exchange Act of 1934. The Commission adopted the current oil and gas reserves disclosure requirements between 1978 and 1982. In the decades that have passed since the adoption of these rules, there have been significant changes in the oil and gas industry. Some commentators have expressed concern that the Commission’s rules have not adapted to current practices and may not provide investors with the most useful picture of oil and gas reserves public companies hold.

DATES: Comments should be received on or before February 19, 2008.

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission’s Internet comment form (http://www.sec.gov/rules/concept.shtml); or
• Send an e-mail to rule-comments@sec.gov. Please include File Number S7-29-07 on the subject line; or


Paper comments:

• Send paper submissions in triplicate to Nancy M. Morris, Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number S7-29-07. This file number should be included on the subject line if e-mail is used. To help us process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet Web site (http://www.sec.gov/rules/concept.shtml). Comments also are available for public inspection and copying in the Commission’s Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. All comments received will be posted without change; we do not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

FOR FURTHER INFORMATION CONTACT: Questions on this Concept Release should be directed to Mellissa Campbell Duru, Attorney-Advisor or Dr. W. John Lee, Academic Petroleum Engineering Fellow at (202) 551-3740, Division of Corporation Finance; or Mark Mahar, Associate Chief Accountant, Office of the Chief Accountant at
Throughout the Commission’s history, our focus on the information needs of investors in public companies has caused us to continually re-evaluate the disclosure requirements of the federal securities laws. The extent and pace of changes in the oil and gas industry, and public concern that our oil and gas reserves disclosure requirements are not fully aligned with current industry practice, have led us to reconsider those requirements. Through this Concept Release, the Commission seeks public comment on our oil and gas reserves disclosure requirements.\(^1\) While we set forth a number of general and specific questions, we welcome comments on any other concerns commenters may have related to these issues.

\(^1\) The Commission is currently considering the use of International Financial Reporting Standards as published by the International Accounting Standards Board by U.S. public companies. The International Accounting Standards Board is also undertaking a project with respect to the convergence of accounting and disclosure reporting practices related to all extractive industries. This concept release is not seeking comment with respect to those matters.
The current oil and gas reserves disclosure requirements have been in place for some time. The Energy Policy and Conservation Act of 1975 directed the Commission to “take such steps as may be necessary to assure the development and observance of accounting practices to be followed in the preparation of accounts by persons engaged, in whole or in part, in the production of crude oil or natural gas in the United States.” In 1978, the Commission issued Accounting Series Release No. 253, which amended Regulation S-X by adding new Rule 3-18, the precursor to Rule 4-10 of Regulation S-X. Rule 4-10 prescribes the financial and reporting standards for companies engaged in oil and gas producing activities. Rule 4-10 defines what constitutes oil and gas producing activities and proved reserves. Item 102 of Regulation S-K, which the Commission adopted in 1982, requires that companies disclose their proved reserves and prohibits them from disclosing other categories of reserves. There have been significant technological advancements, changes in the oil and gas markets, and changes in the types of projects in which companies invest since the Commission adopted these rules and disclosure requirements. Many in the oil and gas industry, including some oil and gas companies, professional organizations and analysts, believe that our oil and gas reserves

---

2 See 42 U.S.C. 6201-6222.
4 17 CFR 210.4-10. See Release No. 33-6233 (Sept. 25, 1980) [45 FR 63660] (adopting amendments to Regulation S-X, including Rule 4-10).
5 17 CFR 210.4-10(a).
6 Item 102 of Regulation S-K [17 CFR 229.102]. In 1982, the Commission adopted Item 102 of Regulation S-K. Item 102 contains the disclosure requirements previously located in Item 2 of Regulation S-K. See Release No. 33-6383 (March 16, 1982) [47 FR 11380]. The Commission also “recast[]… the disclosure requirements for oil and gas operations, formerly contained in Item 2(b) of Regulation S-K, as an industry guide.” See Release No. 33-6384 (March 16, 1982) [47 FR 11476].
disclosure requirements have not kept pace with industry changes.\textsuperscript{7} Other commentators suggest that our reserves disclosure requirements prevent an investor from viewing the company through management’s eyes. These commentators also believe that our rules prevent companies from fully presenting the reasons for their oil and gas project investment decisions.\textsuperscript{8}

II. Definition of Oil and Gas Reserves

Even though they do not appear on a company’s balance sheet, oil and gas reserves are among the most significant assets of an oil and gas company. Given that they lie in deeply buried geological formations, oil and gas reserves are difficult to measure and, until a company extracts them, it can only estimate their volume.

Item 102 of Regulation S-K sets forth the disclosure requirements for the physical property of a company. Instruction 3 to Item 102 requires an oil and gas company to disclose material information about its proved reserves. Instruction 5 to Item 102 prohibits a company from disclosing reserves estimates other than proved reserves in any filing it makes with the Commission. Instruction 6 to Item 102 states that the definitions in Rule 4-10 of Regulation S-X shall apply to Item 102 with respect to oil and gas operations.\textsuperscript{9}

Rule 4-10(a)(2) defines proved reserves as “the estimated quantities of crude oil, natural gas, and natural gas liquids which geological and engineering data demonstrate


\textsuperscript{8} See, for example, Christopher Hope, “Oil Majors Back Attack on SEC Rules,” The Daily Telegraph (London) (February 24, 2005).
with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions, i.e., prices and costs as of the date the estimate is made.”

While the rule does not define “reasonable certainty,” the staff has interpreted this term to mean a level of certainty such that, as more information about a reservoir becomes available, it is more likely than not that the additional data will confirm or enhance the company’s original estimate of the quantity it can ultimately recover. The staff has historically interpreted the requirement that the reserves be recoverable “under existing economic … conditions,” referred to in Rule 4-10(a)(2)(i) as “economic producibility,” to mean that the company can sell the resources for more than its cost to extract and transport them to market. In other words, the company may classify its reserves as proved only if it can economically produce them. Although Rule 4-10 does not specify the price a company should use to make this determination, the staff has historically applied the fiscal year end price requirements set forth in two related accounting standards – Statement of Financial and Accounting Standard No. 19 and Statement of Financial and Accounting Standard No. 69.

Rule 4-10(a)(2) also requires that a company be able to recover resources “under existing …operating conditions” before classifying them as proved reserves. In the

---

9 17 CFR 229.102.
10 17 CFR 210.4-10(a)(2).
12 Id.
absence of a definition of “existing operating conditions,” the staff has historically interpreted this to include a ready market and a means to transport resources to that market. For oil, these conditions are generally deemed to be met because a company can easily transport oil to a sales point. For gas, there must be a pipeline to transport the gas to a sales point. If a company does not have a current means to transport gas, the staff assumes a ready market for gas does not exist. Therefore, the staff does not consider gas without a means of transport, known as stranded gas, to qualify for classification as proved reserves under Rule 4-10.

To estimate whether it can economically produce its oil and gas resources, a company relies on different methods to evaluate a reservoir where it believes reserves exist. Rule 4-10(a)(2)(i) specifies the tests a company must conduct and the type of data it must consider to estimate, with reasonable certainty, its proved reserves. The company must support its economic producibility conclusion by either actual production from a reservoir or by a conclusive formation test. Although not defined in Rule 4-10, the staff has historically considered a conclusive formation test to include a combination of drilling and well flow testing.

---


15 An alternative is to convert the gas to a liquid. Historically, however, such conversion projects have been capital intensive and have not always been economically justified given the quantity of reserves.


17 Id.

18 Under a particular set of circumstances, the staff viewed this requirement slightly differently. See the subsequent discussion in note 24 for details regarding companies operating in the deepwater Gulf of Mexico.
Rule 4-10(a)(4) allows a company to classify, as part of its proved reserves, the proved undeveloped reserves that it expects to recover from “new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required.”\(^{19}\) Proved undeveloped reserves are restricted to “offsetting productive units that are reasonably certain of production when drilled.”\(^{20}\) In the absence of a definition of the term “offsetting” in Rule 4-10(a)(4), the staff has historically interpreted this to mean immediately adjacent.\(^{21}\) Rule 4-10(a)(4) does not specify a period of time during which a company should expect to commence drilling the new well or the period of time in which a company will incur a relatively major expenditure. Some industry commentators have expressed concern that companies continue to categorize quantities of proved undeveloped reserves for extended periods of time without taking any action to develop these reserves.\(^{22}\) This raises the question as to whether such quantities originally met, or currently meet, the reasonable certainty requirement.

Finally, Rule 4-10(a)(4) allows a company to claim resources as proved undeveloped reserves for other undrilled units “only where it can be demonstrated with certainty that there is continuity of production from the existing productive formation.”\(^{23}\) Many companies are utilizing new technologies, such as 3-D seismic, to provide estimates, which they believe are reasonably certain, of proved undeveloped reserves

---

\(^{19}\) 17 CFR 210.4-10(a)(4).

\(^{20}\) Id.


\(^{22}\) See, for example, Leslie Haynes, “Defining PUDs,” Oil & Gas Investor; Volume 244; Issue 5 (May 1, 2004).

\(^{23}\) 17 CFR 210.4-10(a)(4).
more than one offset away. Nevertheless, given Rule 4-10(a)(4)’s requirement of certainty versus reasonable certainty, the staff has considered the requirement of certainty to have a relatively higher threshold than reasonable certainty and, therefore, has not accepted estimates of proved undeveloped reserves based on such technologies. Some commentators have expressed concern that, in practice, this constitutes absolute certainty which they believe is too stringent a criterion.

III. The Impact of Technology

Technological advances since 1978 have improved how companies may identify oil and gas resources. Advances such as 3-D and 4-D seismic interpretation provide increased information about reservoirs and their boundaries. Reservoir description tools and computer reservoir simulation models continue to improve as technology changes.

While a company may currently choose to use new techniques to help it decide where to drill additional wells, the staff has, in nearly all cases, continued to require that, in the absence of actual production, a company support economic producibility through a conclusive formation test. With one exception, the staff interprets this to mean direct contact with the reservoir through drilling and a well-flow test.24

Given the scarcity of relatively accessible petroleum reserves that companies can

---

24 In a particular set of circumstances, the staff does not object to companies operating in the deepwater Gulf of Mexico asserting reasonable certainty and economic producibility without a well-flow test. In 2002 and 2003, the staff reviewed the disclosure of oil and gas companies operating in the deepwater Gulf of Mexico. In response to staff comments, companies provided extensive data from open hole logs, core samples, wire line conveyed sampling and seismic surveys to support their position that a traditional well-flow test was not necessary in that specific location. Given the results of this data, the staff does not object to classification of proved reserves in the absence of a traditional well flow test as long as a company’s conclusions are supported by all four tests. This position, however, is limited to this specific geographic location. See the Division of Corporation Finance: Letter to Companies With Oil and Gas Operations in the Gulf of Mexico (April 15, 2004) available at http://www.sec.gov/divisions/corpfin/guidance/oilgastlr04152004.htm.
extract using conventional techniques, companies are increasingly looking to resources that are more difficult to access due to their geologic or geographical location or require specialized extraction techniques. Among these resources are tar sands and oil shales, both of which contain chemical compounds which can be processed into oil. When the Commission adopted the proved reserves definitions in 1978, the only effective way to extract these compounds was through traditional mining techniques. Since 1978, however, companies have developed techniques to extract these compounds using oil and gas drilling techniques. Despite these technological advances, Rule 4-10 prohibits a company from including the oil it extracts from tar sands and oil shales in its estimation of proved reserves. Rule 4-10 states that “oil and gas producing activities do not include …[t]he extraction of hydrocarbons from shale, tar sands, or coal.”

Rule 4-10 excludes “crude oil, natural gas, and natural gas liquids, that may be recovered from oil shales, coal, gilsonite and other such sources” from the definition of proved reserves. Notwithstanding a company’s ability to economically extract oil from tar sands and oil shales, Rule 4-10 prevents it from including these amounts in its estimates of proved reserves.

IV. Alternative Classification Systems

The Commission’s proved reserves definitions are those used by the Department of Energy in 1978 and were based upon definitions used by the Society of Petroleum Engineers.

---

25 17 CFR 210.4-10(a)(1)(ii)(D).
26 17 CFR 210.4-10(a)(2)(iii)(D).
27 Canadian regulators have revised their definitions of oil reserves to include non-traditional resources such as bitumen, which is extracted from tar sands. See, for example, Statements of the Alberta Securities Commission with respect to National Instrument (NI) 51-101 (National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities) available at www.albertasecurities.com.
Engineers and the general industry at that time. Since 1978, the Society of Petroleum Engineers has made several significant revisions to its classification framework. It released its most recent version, the “Petroleum Resources Management System,” in February 2007.28 This system was jointly sponsored by the World Petroleum Council, the American Association of Petroleum Geologists and the Society of Petroleum Evaluation Engineers. The classification framework defines a broad range of reserves categories, contingent resources and prospective resources.29 We understand that oil and gas companies may use this classification framework to prepare reserves estimates for purposes other than their SEC filings and that investors in private financing transactions and participants in business combinations may use this framework as well.

The International Accounting Standards Board is currently consulting with the Society of Petroleum Engineers Oil and Gas Reserves Committee regarding oil and gas company accounting requirements.30 The United Nations Economic Commission for Europe and the United Nations Economic and Social Council are currently working together to establish an international classification system to classify resources in the oil and gas and mining industries.31 Finally, other jurisdictions, such as Canada, have

29 Id.
adopted disclosure requirements that share characteristics with the Petroleum Resources Management System.  

V. Independent Preparation, Assessment or Evaluation of Reserves Disclosure

Although a company may engage a third party to prepare its reserves estimates, assess its estimates, or evaluate the proved reserves information in the filings that it makes with us, our rules do not require it to do so. While some professional organizations may require their members to follow certain standards in providing such services, it does not appear that these standards are binding or that these professional organizations have any specialized enforcement mechanisms to assure compliance with them.

VI. General Request for Comment

As noted above, in light of the extent and pace of changes in the oil and gas industry and public concern that our oil and gas reserves disclosure requirements are not fully aligned with current industry practice, we are reconsidering our oil and gas reserves disclosure requirements. The Commission seeks public comment on our oil and gas reserves disclosure requirements and related issues.

Questions:

1. Should we replace our rules-based current oil and gas reserves disclosure requirements, which identify in specific terms which disclosures are required and which are prohibited, with a principles-based rule? If yes, what primary disclosure principles should the Commission consider? If the Commission were

---

32 See SPE Oil and Gas Reserves Committee, Mapping Subcommittee Final Report (December 2005) – Comparisons of Selected Reserves of Selected Reserves and Resources Classifications and Associated Definitions.
to adopt a principles-based reserves disclosure framework, how could it affect disclosure quality, consistency and comparability?

2. Should the Commission consider allowing companies to disclose reserves other than proved reserves in filings with the SEC? If we were to allow companies to include reserves other than proved reserves, what reserves disclosure should we consider? Should we specify categories of reserves? If so, how should we define those categories?

3. Should the Commission adopt all or part of the Society of Petroleum Engineers – Petroleum Resources Management System? If so, what portions should we consider adopting? Are there other classification frameworks the Commission should consider? If the Commission were to adopt a different classification framework, how should the Commission respond if that framework is later changed?

4. Should we consider revising the current definition of proved reserves, proved developed reserves and proved undeveloped reserves? If so, how? Is there a way to revise the definition or the elements of the definition, to accommodate future technological innovations?

5. Should we specify the tests companies must undertake to estimate reserves? If so, what tests should we require? Should we specify the data companies must produce to support reserves conclusions? If so, what data should we require? Should we specify the process a company must follow to assess that data in estimating its reserves?
6. Should we reconsider the concept of reasonable certainty? If we were to replace it, what should we replace it with? How could that affect disclosure quality? Should we consider requiring companies to make certain assumptions? Should we prohibit others?

7. Should we reconsider the concept of certainty with regard to proved undeveloped reserves? Should we allow companies to indefinitely classify undeveloped reserves as proved?

8. Should we reconsider the concept of economic producibility? If we were to replace it, what should we replace it with? How could that affect disclosure quality? Should we consider requiring companies to make certain assumptions? Should we prohibit others?

9. Should we reconsider the concept of existing operating conditions? If we were to replace it, what should we replace it with? How could that affect disclosure quality? Should we consider requiring companies to make certain assumptions? Should we prohibit others?

10. Should we reconsider requiring companies to use a sale price in estimating reserves? If so, how should we establish the price framework? Should we require or allow companies to use an average price instead of a fixed price or a futures price instead of a spot price? Should we allow companies to determine the price framework? How would allowing companies to use different prices affect disclosure quality and consistency? Regardless of the pricing method that is used, should we allow or require companies to present a sensitivity analysis that would quantify the effect of price changes on the level of proved reserves?
11. Should we consider eliminating any of the current exclusions from proved reserves? How could removing these exclusions affect disclosure quality?

12. Should we consider eliminating any of the current exclusions from oil and gas activities? How could removing these exclusions affect disclosure quality?

13. Should we consider eliminating the current restrictions on including oil and gas reserves from sources that require further processing, e.g., tar sands? If we were to eliminate the current restrictions, how should we consider a disclosure framework for those reserves? What physical form of those reserves should we consider in evaluating such a framework? Is there a way to establish a disclosure framework that accommodates unforeseen resource discoveries and processing methods?

14. What aspects of technology should we consider in evaluating a disclosure framework? Is there a way to establish a disclosure framework that accommodates technological advances?

15. Should we consider requiring companies to engage an independent third party to evaluate their reserves estimates in the filings they make with us? If yes, what should that party’s role be? Should we specify who would qualify to perform this function? If so, who should be permitted to perform this function and what professional standards should they follow? Are there professional organizations that the Commission can look to set and enforce adherence to those standards?
In addition to the areas for comment identified above, we are interested in any other issues that commenters may wish to address and the benefits and costs relating to investors, issuers and other market participants of the possibility of revising disclosure rules pertaining to petroleum reserves included in Commission filings. Please be as specific as possible in your discussion and analysis of any additional issues. Where possible, please provide empirical data or observations to support or illustrate your comments.

By the Commission.

Florence E. Harmon
Deputy Secretary

December 12, 2007