

**SECURITIES AND EXCHANGE COMMISSION**

**17 CFR Parts 210, 229, and 249**

**[Release Nos. 33-8935; 34-58030; File No. S7-15-08]**

**RIN 3235-AK00**

**MODERNIZATION OF THE OIL AND GAS REPORTING REQUIREMENTS**

**AGENCY:** Securities and Exchange Commission.

**ACTION:** Proposed rule.

**SUMMARY:** The Commission is proposing revisions to its oil and gas reporting 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, as well as Industry Guide 2. The revisions are intended to provide investors with a more meaningful and comprehensive understanding of oil and gas reserves, which should help investors evaluate the relative value of oil and gas companies. In the three decades that have passed since adoption of these requirements, there have been significant changes in the oil and gas industry. The proposed amendments are designed to modernize and update the oil and gas disclosure requirements to align them with current practices and changes in technology. The proposed amendments would also codify Industry Guide 2 in Regulation S-K, with several additions to, and deletions of, current Industry Guide items. They would further harmonize oil and gas disclosures by foreign private issuers with the proposed disclosures for domestic issuers.

**DATES:** Comments should be received on or before September 8, 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/proposed.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number S7-15-08 on the subject line; or
- Use the Federal e-Rulemaking Portal <http://www.regulations.gov>. Follow the instructions for submitting comments.

Paper comments:

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

All submissions should refer to File Number S7-15-08. 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 Proposing Release should be directed to Ray Be, Special Counsel, Office of Rulemaking at (202) 551-3430; Mellissa Campbell Duru, Attorney-Advisor, Dr. W. John Lee, Academic Petroleum Engineering Fellow, or Brad Skinner, Senior Assistant Chief Accountant, Office of

Natural Resources and Food at (202) 551-3740; Leslie Overton, Associate Chief Accountant, Office of Chief Accountant for the Division of Corporation Finance at (202) 551-3400, Division of Corporation Finance; or Mark Mahar, Associate Chief Accountant, or Jonathan Duersch, Assistant Chief Accountant, Office of the Chief Accountant at (202) 551-5300; U.S. Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-3628.

**SUPPLEMENTAL INFORMATION:** We are proposing amendments to Rule 4-10<sup>1</sup> of Regulation S-X<sup>2</sup> and Items 102, 801 and 802<sup>3</sup> of Regulation S-K.<sup>4</sup> We also propose to add new Subpart 1200, including Items 1201 through 1209, to Regulation S-K.

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<sup>1</sup> 17 CFR 210.4-10.

<sup>2</sup> 17 CFR 210.

<sup>3</sup> 17 CFR 229.102, 17 CFR 229.801, and 17 CFR 229.802.

<sup>4</sup> 17 CFR 229.

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## **I. Introduction**

### **A. Background**

On December 12, 2007, the Commission published a Concept Release on possible revisions to the disclosure requirements relating to oil and gas reserves.<sup>5</sup> The release solicited comment on the oil and gas reserves disclosure requirements specified in Rule 4-10 of Regulation S-X<sup>6</sup> and Item 102 of Regulation S-K.<sup>7</sup> The Commission adopted these disclosure requirements in 1978 and 1982, respectively.<sup>8</sup> Since that time, there have been significant changes in the oil and gas industry and markets, including technological advances, and changes in the types of projects in which oil and gas companies invest their capital.<sup>9</sup> Prior to our issuance of the Concept Release, many industry participants had expressed concern that our disclosure rules are no longer in

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<sup>5</sup> See Release No. 33-8870 (Dec. 12, 2007) [72 FR 71610].

<sup>6</sup> 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). The precursor to Rule 4-10 was Rule 3-18 of Regulation S-X, which was adopted in 1978. See Accounting Series Release No. 253 (Aug. 31, 1978) [43 FR 40688]. See also Accounting Series Release No. 257 (Dec. 19, 1978) [43 FR 60404] (further amending Rule 3-18 of Regulation S-X and revising the definition of proved reserves).

<sup>7</sup> 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 (Mar. 16, 1982) [47 FR 11476].

<sup>8</sup> The disclosure requirements were introduced pursuant to a directive in the Energy Policy and Conservation Act of 1975 (the “EPCA”). The EPCA 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.” See 42 U.S.C. 6201-6422.

<sup>9</sup> See, for example, Daniel Yergin and David Hobbs: “The Search for Reasonable Certainty in Reserves Disclosure,” *Oil and Gas Journal* (July 18, 2005).

alignment with current industry practices and therefore have limited usefulness to the market and investors.<sup>10</sup>

## **B. Issuance of the Concept Release**

The Concept Release addressed the potential implications for the quality, accuracy and reliability of oil and gas disclosure if the Commission were to:

- Revise the definition of “proved reserves” in our rules, in particular, the criteria used to assess and measure resources that can be classified as proved reserves; and
- Expand the categories of resources that may be disclosed in Commission filings to include resources other than proved reserves.

In addition, the Concept Release questioned whether our revised disclosure rules should be modeled on any particular resource classification framework currently being used within the oil and gas industry. We also asked how any revised disclosure rules could be made flexible enough to address future technological innovation and changes within the oil and gas industry. The Concept Release sought further comment on whether the Commission should require independent third party assessments of reserves estimates that a company includes in its filings.

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<sup>10</sup> See, for example, Greg Courturier, “Standard & Poor’s Urges SEC to Change Disclosure Rules,” *International Oil Daily* (Dec. 3, 2007); Steve Levine, “Tracking the Numbers: Oil Firms Want SEC to Loosen Reserves Rules,” *Wall Street Journal Online* (Feb. 7, 2006); Christopher Hope, “Oil Majors Back Attack on SEC Rules,” *The Daily Telegraph* (London) (Feb. 24, 2005); Barrie McKenna, “Rules undervalue reserves report says: Volumes buried in Canada’s oil sands not counted by SEC’s measure,” *The Globe & Mail* (Canada) (Feb. 24, 2005); and “Deloitte Calls on Regulators to Update Rules for Oil and Gas Reserves Reporting,” *Business Wire Inc.* (Feb. 9, 2005).

In response to the Concept Release, commenters submitted 80 comment letters which addressed all or some of the 15 questions that were raised by the release.<sup>11</sup> We received comment letters from a variety of industry participants such as accounting firms, consultants, domestic and foreign oil and gas companies, federal government agencies, individuals, law firms, professional associations, public interest groups, and rating agencies.

### **C. General Overview of the Comment Letters Received on Key Issues**

Almost all commenters supported some form of revision to the current oil and gas disclosure requirements, particularly given the length of time that has elapsed since the requirements were initially adopted. Commenters diverged significantly, however, in their views about the extent and type of revisions that we should make to our disclosure system. For example, commenters expressed varied opinions regarding whether we should adopt revisions that would result in a principles-based disclosure regime rather than a rules-based disclosure regime. Those who favored a principles-based approach noted that such an approach would be inherently more flexible than a rules-based approach and would allow for greater adaptability as technological advancements and changes occur in the industry.<sup>12</sup> Other commenters, however, expressed concern that a principles-based model is more subjective than a rules-based approach and could result in less consistent and comparable disclosure in the filings made by oil and gas companies.<sup>13</sup>

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<sup>11</sup> The public comments we received are available for inspection in the Commission's Public Reference Room at 100 F St. NE, Washington, DC 20549 in File No. S7-29-07. They are also available on-line at <http://www.sec.gov/comments/s7-29-07/s72907.shtml>.

<sup>12</sup> See, for example, letters from BHP Biliton Petroleum ("BHP"), John R. Etherington ("J. Etherington"), and White & Case, LLP ("White & Case").

<sup>13</sup> See, for example, letters from Apache Corp. ("Apache"), Moody's Investor's Service ("Moody's") and Oil Change International and the Center for Corporate Policy ("Oil Change").



Virtually all of the commenters supported a revision of the definition of proved reserves in some form or another. Most remarked that the definition of proved reserves should be broadened to allow unconventional resources such as oil shales and bitumen to be classified as proved reserves.<sup>14</sup> In addition, while commenters were split on the use of a single fiscal year-end spot price to value the reserves held by an oil and gas company, a majority advocated the use of a different pricing standard to reduce the effects of short-term price volatility.<sup>15</sup>

There were mixed views on whether the Commission should permit disclosure of reserves other than proved reserves in Commission filings. Commenters supporting the inclusion of disclosures about probable and possible reserves in Commission filings suggested that such disclosure would allow investors to gain a more comprehensive understanding of the resources held by an oil and gas company.<sup>16</sup> Commenters opposing disclosure of probable and possible reserves thought that disclosure about these reserves categories would be less reliable than disclosure about proved reserves. Many of these

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<sup>14</sup> See letters from American Association of Petroleum Geologists (“AAPG”), American Clean Skies Foundation (“ACSF”), Apache, American Petroleum Institute (“API”), Center for Audit Quality (“Audit Quality”), BP Plc (“BP,”) Brookwood Petroleum Advisors Ltd. (“Brookwood”), CFA Institute Centre for Financial Market Integrity (“CFA”), Chesapeake Energy Corporation (“Chesapeake”), China National Offshore Oil Corporation (“CNOCC”), CIBC World Markets (“CIBC”), Denbury Resources (“Denbury”), Department of Energy (“DOE”), Deutsche Bank, Devon Energy Corporation (“Devon”), EnCana, Energy Information Administration (of DOE) (“EIA”), Energy Literacy Project (“Energy Literacy”), Eni S.p.A. (“Eni”), Ernst & Young (“E&Y”), J. Etherington, ExxonMobil, Grant Thornton, Imperial Oil Ltd. (“Imperial”), Independent Petroleum Association of America (“IPAA”), Dan Kelly (“D. Kelly”), McBride, Douglas-Morningstar Consultants (“D. McBride”), Moody’s, Nexen Inc. (“Nexen”), Oil Change, Dan Olds (“D. Olds”), Petrobras, Petro-Canada, PriceWaterhouseCoopers (“PWC”), Robert Pinkerton (“R. Pinkerton”), Robinson Petroleum Consulting (“Robinson”), Ross Petroleum Ltd. (“Ross”), Derek Ryder (“D. Ryder”), Sasol Ltd (“Sasol”), Shell International (“Shell”), Society of Petroleum Engineers (“SPE”), Standard & Poor’s (“S&P”), StatoilHydro, Total, S.A. (“Total”), Ashish Verma (“A. Verma”), Robert Wagner (“R. Wagner”), White & Case, and Fred Ziehe (“F. Ziehe”).

<sup>15</sup> See letters from Chesapeake, Devon, and Imperial.

<sup>16</sup> See, for example, letters from Chesapeake, Oil Change, D. Olds, Ross, D. Ryder, and R. Wagner.

commenters were concerned about liability issues associated with such disclosure and the loss of comparability of disclosure between companies.<sup>17</sup>

Several of the comment letters addressed whether third parties should be required to independently evaluate the reserves reported by a company in its filings. There was a divergence in opinion on this issue. Some commenters suggested that an evaluation requirement is necessary to ensure the reliability of the reserves disclosure included in companies' filings.<sup>18</sup> Other commenters, however, believed that a company's internal staff is often in the best position to accurately evaluate the reserves of the company.<sup>19</sup> Some of the commenters that opposed a third-party evaluation requirement noted that there likely would be practical impediments to establishing that type of requirement, such as the lack of availability of qualified professionals to perform the evaluations and the lack of a regulatory or professional body to enforce universal standards that would govern the activities of third-party reserves evaluators or auditors.<sup>20</sup>

Finally, numerous commenters expressed support for the adoption of an alternate resource classification system that would allow for disclosure of a wider range of reserves and resources in Commission filings. Most of these commenters advocated the use of the Petroleum Resources Management System (PRMS) for this purpose.<sup>21</sup> PRMS

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<sup>17</sup> See, for example, letters from Hugh Anderson ("H. Anderson"), Apache, API, ExxonMobil, Imperial, and Shell.

<sup>18</sup> See letters from Fitch Ratings ("Fitch") and White & Case.

<sup>19</sup> See letters from API, Denbury, ExxonMobil, Imperial, Nexen, Shell, and Talisman Energy ("Talisman").

<sup>20</sup> See, for example, letters from the AAPG, API, Devon, and R. Wagner.

<sup>21</sup> See comment letters from the API, Deloitte & Touche, LLP ("D&T"), DOE, ExxonMobil and Netherland, Sewell & Associates ("Netherland"). The Petroleum Resources Management System classification system defines a broad range of reserves categories, contingent resources and prospective resources. See Society of Petroleum Engineers, the World Petroleum Council,

was prepared in 2007 by the oil and gas reserves committee of the Society of Petroleum Engineers and jointly sponsored by the World Petroleum Council, the American Association of Petroleum Geologists and the Society of Petroleum Evaluation Engineers.<sup>22</sup> Other commenters proposed that we consider the rules adopted by regulators in Canada or the resource classification framework currently being created under the auspices of the United Nations Economic Commission for Europe and the United Nations Economic and Social Council in revising our rules.<sup>23</sup> We address the public comments on specific issues in more detail in the relevant sections below.

## **II. Revisions and Additions to the Definition Section in Rule 4-10 of Regulation S-X**

### **A. Introduction**

The proposed revisions and additions to the definition section in Rule 4-10 of Regulation S-X would update our reserves definitions to reflect changes in the oil and gas industry and markets and new technologies that have occurred in the decades since the current rules were adopted. Among other things, the proposed revisions to these

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American Association of Petroleum Geologists, and the Society of Petroleum Evaluation Engineers, Petroleum Resources Management System, SPE/WPC/AAPG/SPEE (2007).

<sup>22</sup> See letters from AAPG, SPE, and the Society of Petroleum Evaluation Engineers (“SPEE”). See also Petroleum Resources Management System, SPE/WPC/AAPG/SPEE (2007).

<sup>23</sup> See letters from Devon, Robinson, and White & Case. The Canadian system is outlined in National Instrument 51-101, “Standards of Disclosure for Oil and Gas Activities,” and the related “Canadian Oil and Gas Evaluation Handbook.” See [http://www.albertasecurities.com/securitieslaw/Regulatory%20Instruments/5/2232/AMENDED%20NI%2051-101%20\\_FULL%20VERSION\\_.pdf](http://www.albertasecurities.com/securitieslaw/Regulatory%20Instruments/5/2232/AMENDED%20NI%2051-101%20_FULL%20VERSION_.pdf). The United Nations Economic Commission for Europe and the United Nations Economic and Social Council are working together to establish an international classification system to classify resources in both the oil and gas and mining industries. See United Nations Framework Classification System for Fossil Energy and Mineral Resources, United Nations Economic Council For Europe (March, 2006) available at <http://www.unece.org/ie/se/pdfs/UNFC/UNFCemr.pdf>.

definitions address three issues that have been of particular interest to companies, investors, and securities analysts:

- The exclusion of activities related to the extraction of bitumen and other “non-traditional” resources from the definition of oil and gas producing activities;
- The limitations regarding the types of technologies that an oil and gas company may rely upon to establish the levels of certainty required to classify reserves; and
- The limitation in the current rules that permits oil and gas companies to disclose only their proved reserves.

In addition, the proposed revisions would change the use of single-day year-end pricing to determine economic producibility of oil and gas reserves. The proposed revisions of, and additions to, the Rule 4-10 definitions attempt to address these issues without sacrificing clarity and comparability, which provide protection and transparency to investors.

Many commenters on the Concept Release suggested that we adopt the PRMS definitions and classification system to the greatest extent possible.<sup>24</sup> They noted that PRMS is rapidly becoming the leading standard for international petroleum resources classifications. Others suggested that we adopt the definitions and classifications used in Canadian National Instrument 51-101 (NI 51-101), adopted in 2003, because they have

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<sup>24</sup> See letters from API, BHP, Brookwood, CFA, China National Offshore Oil Corporation (“CNOOC”), CIBC World Markets (“CIBC”), D&T, Deutsche Bank, DOE, EIA, EnCana, Energy Literacy, Eni, ExxonMobil, Netherland, Newfield Exploration (“Newfield”), D. Olds, Petrobras, Petro-Canada, Questar Market Resources (“Questar”), Sasol, Shell, Leigh Ann Smothers (“L.

been tested in practice as part of a regulatory framework and because they are broadly consistent with PRMS.<sup>25</sup>

We have based many of our proposed new and revised definitions classifications on both PRMS and NI 51-101. The language in NI 51-101 lends itself to a regulatory framework more easily than the language in PRMS, which is primarily a management tool, and we have been guided by the language in NI 51-101 in several instances.

Although the proposed definitions are not totally consistent with either PRMS or NI 51-101, they are significantly more consistent with those standards than our existing rules.

One important difference between the proposed amendments and PRMS or NI 51-101 is that the proposed amendments would continue to require the use of historical prices and costs used to promote comparability. In contrast, NI 51-101 and PRMS afford a reserves estimator more flexibility in choosing among alternative pricing schedules. While this flexibility has its benefits, it impedes comparability of different companies' disclosures. Another significant difference is that the proposed amendments, like the current rules, would require reserves to be "economically producible," meaning that estimated revenues must exceed costs, whereas other classification systems require an extractive project to be "commercial," meaning that a company's investment evaluation guidelines must be met (for example, the extraction project rate of return must exceed some prescribed minimum). There are many different investment evaluation guidelines in use today. However, we believe that our proposed criteria would provide

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Smothers"), SPE, SPEE, Talisman, Total, TRACS International ("TRACS"), Ultra Petroleum Corporation ("Ultra"), White & Case, and Geoff Zakaib ("G. Zakaib").

<sup>25</sup> See letters from Devon, Robinson, and White & Case. NI 51-101 constitutes the Canadian regulatory system for oil and gas company disclosures.

greater comparability among companies' disclosures so that investors can better understand the relative merits of their different investment choices.

In addition, NI 51-101 and PRMS provide definitions of various categories of resources beyond reserves, such as contingent and prospective resources, whereas our proposed rules do not. Given that we are not proposing to allow disclosure of resources that do not qualify as reserves in Commission filings, we are not proposing definitions of other various classifications of resources.

After considering the comments received on the Concept Release, we are proposing to revise the definition of proved reserves. Furthermore, as a result of those changes and also observations made by commenters, we are proposing to revise associated definitions and the disclosures made by issuers regarding the extent, characteristics, and location of their reserves.

## **B. Year-End Pricing**

### **1. 12-month average price**

Most commenters on the Concept Release recommended that we replace our current use of a single-day, fiscal year-end spot price to determine whether resources are economically producible based on current economic conditions with a different test.<sup>26</sup>

Some believed that reliance on a single-day spot price is subject to significant volatility

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<sup>26</sup> See letters from AAPG, American Clean Skies Foundation ("ACSF"), H. Anderson, Apache, API, BHP, BP, Brookwood, Canadian Association of Petroleum Producers ("CAPP"), CFA, Chesapeake, CIBC CNOOC, Davis Family Energy Partners ("Davis"), Denbury, Deutsche Bank, Devon, EIA, EnCana, Energy Literacy, Eni, Etherington, J., ExxonMobil, Grant Thornton, Imperial, IPAA, Robbin Jones ("R. Jones"), D. Kelly, Long Consultants ("Long"), D. McBride, MIT Center for Energy and Environmental Policy Research ("MIT"), Moody's, Netherland, Newfield, Nexen, D. Olds, Oil Change, Petrobras, Petro-Canada, Robinson, Ross, D. Ryder, S&P, Sasol, Shell, Southwestern, SPE, StatoilHydro, Total, TRACS, Ultra, Walter van de Vijver ("W. van DeVijver"), R. Wagner, White & Case, and F. Ziehe.

and results in frequent adjustment of reserves.<sup>27</sup> These commenters expressed the view that variations in single-day prices provide temporary alterations in reserve quantities that are not meaningful or may lead investors to incorrect conclusions, do not represent the general price trend, and do not provide a meaningful basis for determination of reserve or enterprise value.<sup>28</sup>

Of those who commented on this issue, most recommended using a 12-month average price instead of the single-day price.<sup>29</sup> However, others recommended using one of the following alternative pricing options:

- A futures price or the average futures price over a specified period of time;<sup>30</sup>
- Management's forecasted price;<sup>31</sup>
- Average price over three months;<sup>32</sup>
- Average price over two years;<sup>33</sup> or

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<sup>27</sup> See letters from API, Chesapeake, CIBC, ExxonMobil, Imperial, R. Jones, S&P, Ultra, and R. Wagner.

<sup>28</sup> See letters from Chesapeake, Devon, and Imperial.

<sup>29</sup> See letters from H. Anderson, Apache, API, BHP, BP, CAPP, Chesapeake, CIBC, CNOOC, Devon, DOE, EnCana, Eni, ExxonMobil Imperial, IPAA, R. Jones, D. McBride, Moody's, Netherland, Nexen, Oil Change, D. Olds, Petro-Canada, D. Ryder, Shell, StatoilHydro, Total, TRACS, R. Wagner, and F. Ziehe.

<sup>30</sup> See letters from Apache, CFA, Chesapeake, Davis, EIA, IPAA, Southwestern, StatoilHydro, and TRACS.

<sup>31</sup> See letters from AAPG, J. Etherington, Grant Thornton, Robinson, Ross, StatoilHydro, and W. van de Vijver.

<sup>32</sup> See letter from CFA.

<sup>33</sup> See letter from Deutsche Bank.

- Probabilistic future pricing with ranges and explanations for the pricing basis.<sup>34</sup>

Each of the options above, involving historical price averages, futures prices, futures price averages, and price forecasts developed, or relied on, by management, has advantages and disadvantages. For example, historical price averages provide a high level of comparability among oil and gas companies and are relatively easy to compute because the underlying data is readily available to companies. However, they may not reflect the prices that a company could reasonably expect to receive for its production in the future.

Prices based on oil and gas futures are forward-looking, and therefore may better approximate the economic value of the reserves as they are ultimately produced and sold. These prices, however, are not necessarily available for all products in all geographic areas and would require adjustments. To provide comparability of disclosures among oil and gas companies, we likely would have to specify certain private-sector publications for use in such pricing. Price forecasts developed by management of an oil and gas company would provide investors with better insight into the prices that management of the company foresees and, therefore, the prices upon which management bases its investment and operating decisions, but may provide limited comparability between companies.

We propose to revise the definitions in Rule 4-10 of Regulation S-X to change the price used in calculating reserves from a single-day closing price measured on the last day of the company's fiscal year to an average price for the 12 months prior to the end of

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<sup>34</sup> See letter from Energy Literacy.



the company's fiscal year.<sup>35</sup> This pricing standard is consistent with the PRMS's default guidelines for the term "current economic conditions." This price would be calculated as the unweighted arithmetic average of the closing price on the last day of each month in that 12-month period. Using historical pricing maximizes comparability between companies, which is the primary objective of the oil and gas disclosure. This proposal is intended to maintain reserves disclosure comparability while mitigating the risk that an anomalous single pricing date will distort the proved reserves estimates. It therefore may provide a better basis for economic producibility than single-day pricing.

We recognize that use of historical pricing may not capture management's outlook on the future as well as futures prices or management's planning prices. As noted in detail elsewhere in this release,<sup>36</sup> in order to allow for such disclosures, we are proposing to add a disclosure item that would specifically permit an oil and gas company, at its option, to include a sensitivity case analysis in its filings that would show total reserves estimates based on futures prices, management's planning prices, or other price schedules in addition to the pricing mechanism specifically required.<sup>37</sup>

### **Request for Comment**

- Should the economic producibility of a company's oil and gas reserves be based on a 12-month historical average price? Should we consider an historical average price over a shorter period of time, such as three, six, or

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<sup>35</sup> See proposed Rule 4-10(a)(24)(v).

<sup>36</sup> See Section III.B.3.ii of this release.

<sup>37</sup> See proposed Item 1202(c).

nine months? Should we consider a longer period of time, such as two years? If so, why?

- Should we require a different pricing method? Should we require the use of futures prices instead of historical prices? Is there enough information on futures prices and appropriate differentials for all products in all geographic areas to provide sufficient reporting consistency and comparability?
- Should the average price be calculated based on the prices on the last day of each month during the 12-month period, as proposed? Is there another method to calculate the price that would be more representative of the 12-month average, such as prices on the first day of each month? Why would such a method be preferable?
- Should we require, rather than merely permit, disclosure based on several different pricing methods? If so, which different methods should we require?
- Should we require a different price, or supplemental disclosure, if circumstances indicate a consistent trend in prices, such as if prices at year-end are materially above or below the average price for that year? If so, should we specify the particular circumstances that would trigger such disclosure, such as a 10%, 20%, or 30% differential between the average price and the year-end price? If so, what circumstances should we specify?

## 2. Trailing year-end

Numerous commenters recommended the use of an average price over a period ending some time before the company's fiscal year end.<sup>38</sup> They noted that, with accelerated filing deadlines, it becomes difficult for the larger companies subject to those deadlines to make the required calculations accurately and with the best available data.<sup>39</sup> Most of these commenters recommended that the pricing period end three months prior to the end of the company's fiscal year (for example, a company with a December 31, 2007 fiscal year end, would use the average historical price for the period between October 1, 2006 and September 30, 2007 to calculate its reserves estimates).<sup>40</sup> We are not proposing such a lag in the time between the close of the pricing period and the end of the fiscal year. However, we solicit comment on this issue.

### **Request for Comment**

- Should the price used to determine the economic producibility of oil and gas reserves be based on a time period other than the fiscal year, as some commenters have suggested? If so, how would such pricing be useful? Would the use of a pricing period other than the fiscal year be misleading to investors?
- Is a lag time between the close of the pricing period and the end of the company's fiscal year necessary? If so, should the pricing period close

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<sup>38</sup> See letters from AAPG, API, BP, CAPP, CIBC, Deutsche Bank, EnCana, Eni, ExxonMobil, Imperial, D. McBride, Moody's Netherland, Nexen, D. Ryder, Shell, Total, R. Wagner, and F. Ziehe.

<sup>39</sup> See letters from CAPP and Shell.

<sup>40</sup> See letters from AAPG, API, BP, CAPP, CIBC, Deutsche Bank, EnCana, Eni, ExxonMobil, Imperial, D. McBride, Moody's, Netherland, Nexen, D. Ryder, Shell, Total, R. Wagner, and F. Ziehe.

one month, two months, three months, or more before the end of the fiscal year? Explain why a particular lag time is preferable or necessary. Do accelerated filing deadlines for the periodic reports of larger companies justify using a pricing period ending before the fiscal year end?

### **3. Prices used for accounting purposes**

Notwithstanding our proposal to change the single-day, year-end pricing for the estimation of reserves, we are not proposing to change the prices that are used for accounting purposes. Specifically, companies using either the successful efforts accounting method described in Statement of Financial Accounting Standard No. 19 (SFAS 19) prescribed by the Financial Accounting Standards Board (FASB) or the full cost accounting method, set forth in Rule 4-10(c)<sup>41</sup> of Regulation S-X, would continue to depreciate property, plant, and equipment related to oil and gas producing activities using a units-of-production basis over proved developed reserves or proved reserves, as applicable, using single-day, year-end rates. In addition, companies using the full cost accounting method would continue to use the single-day, year-end rate for purposes of determining the limitation on capitalized costs (i.e., the ceiling test).

However, to provide consistency between the reserves disclosures required by proposed new Subpart 1200 and SFAS 69, we believe that the information required by SFAS 69 should be prepared using the average price as described above. This would result in two different presentations of proved reserves using two different economic producibility assumptions. For purposes of Subpart 1200, a company would use a value for proved reserves based on average prices. Conversely, for purposes of applying the

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<sup>41</sup> 17 CFR 210.4-10(c).

successful efforts method and the full cost accounting method, a company would use a value of proved reserves based on a single-day, year-end price. We intend to discuss such possible changes with FASB.

### **Request for Comment**

- Should we require companies to use the same prices for accounting purposes as for disclosure outside of the financial statements?
- Is there a basis to continue to treat companies using the full cost accounting method differently from companies using the successful efforts accounting method? For example, should we require, or allow, a company using the successful efforts accounting method to use an average price but require companies using the full cost accounting method to use a single-day, year-end price?
- Should we require companies using the full cost accounting method to use a single-day, year-end price to calculate the limitation on capitalized costs under that accounting method, as proposed? If such a company were to use an average price and prices are higher than the average at year end or at the time the company issues its financial statements, should that company be required to record an impairment charge?
- Should the disclosures required by SFAS 69 be prepared based on different prices than the disclosures required by proposed Section 1200?
- If proved reserves, for purposes of disclosure outside of the financial statements, other than supplemental information provided pursuant to SFAS 69, are defined differently from reserves for purposes of

determining depreciation, should we require disclosure of that fact, including quantification of the difference, if the effect on depreciation is material?

- What concerns would be raised by rules that require the use of different prices for accounting and disclosure purposes? For example, is it consistent to use an average price to estimate the amount of reserves, but then apply a single-day price to calculate the ceiling test under the full cost accounting method? Would companies have sufficient time to prepare separate reserves estimates for purposes of reserves disclosure on one hand, and calculation of depreciation on the other? Would such a requirement impose an unnecessary burden on companies?
- Will our proposed change to the definitions of proved reserves and proved developed reserves for accounting purposes have an impact on current depreciation amounts or net income and to what degree?
- If we change the definitions of proved reserves and proved developed reserves to use average pricing for accounting purposes, what would be the impact of that change on current depreciation amounts and on the ceiling test? Would the differences be significant?

### **C. Extraction of Bitumen and Other Non-Traditional Resources**

Our current definition of “oil and gas producing activities” explicitly excludes sources of oil and gas from “non-traditional” or “unconventional” sources, that is, sources

that involve extraction by means other than “traditional” oil and gas wells.<sup>42</sup> These other sources include bitumen extracted from oil sands, as well as oil and gas extracted from coalbeds and shales, even though some of these resources are sometimes extracted through wells, as opposed to mining and surface processing. However, such sources are increasingly providing energy resources to the world due in part to advancements in extraction and processing technology.<sup>43</sup> As noted earlier, many commenters supported such disclosure.<sup>44</sup>

The proposed revised definition of “oil and gas producing activities” would include the extraction of the non-traditional resources described above.<sup>45</sup> The proposal is intended to shift the focus of the definition of oil and gas producing activities to the final product of such activities, regardless of the extraction technology used. The proposed definition would state specifically that oil and gas producing activities include the extraction of marketable hydrocarbons, in the solid, liquid, or gaseous state, from oil sands, shale, coalbeds<sup>46</sup> or other nonrenewable natural resources which can be upgraded

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<sup>42</sup> See 17 CFR 210.4-10(a)(1)(ii)(D).

<sup>43</sup> According to one commenter, some estimates indicate that such resources already provide 40% of the natural gas produced in the United States. See letter from Chesapeake Energy.

<sup>44</sup> See letters from AAPG, ACSF, Apache, API, Audit Quality, BP, Brookwood, CFA, Chesapeake, CIBC, CNOOC, Denbury, Deutsche Bank, Devon, DOE, EIA, EnCana, Energy Literacy, Eni, J. Etherington, ExxonMobil, E&Y, Grant Thornton, Imperial, IPAA, D. Kelly, D. McBride, Moody’s, Nexen, Oil Change, D. Olds, Petrobras, Petro-Canada, R. Pinkerton, PWC, Robinson, Ross, D. Ryder, S&P, Sasol, Shell, SPE, StatoilHydro, Total, A. Verma, R. Wagner, White & Case, and F. Ziehe.

<sup>45</sup> See proposed Rule 4-10(a)(16).

<sup>46</sup> Although the proposed definition would encompass activities such as extracting coalbed methane from a deposit of coal, it would not include the extraction of the coal itself, even if the company intends to use that coal as feedstock into processing activities that result in oil and gas products, such as coal gasification. We recognize that as technologies progress, it may become appropriate to include such processes as oil and gas producing activities.

into natural or synthetic oil or gas, and activities undertaken with a view to such extraction.

However, the proposed definition would continue to exclude activities relating to:

- Transporting, refining, processing (other than field processing of gas to extract liquid hydrocarbons), or marketing oil and gas;
- The production of natural resources other than oil, gas, or natural resources from which natural or synthetic oil and gas can be extracted; and
- The production of geothermal steam.

Consistent with historical treatment, we continue to believe that, once a resource is extracted from the ground, it should not be considered oil and gas reserves. Thus, the current definition of the term “oil and gas producing activities” does not, and the proposed definition would not, permit companies that only transport, process, and/or market oil or gas to disclose, as reserves, amounts of oil or gas received from, and extracted from the ground by, another company. In addition, if a company extracting the resources also builds its own processing plant on-site or near the extraction location (other than field processing of gas to extract liquid hydrocarbons), we do not believe it would be appropriate for that company to use the price of its processed product to determine the economic producibility of the unprocessed product. For example, if a company builds a bitumen processing plant to convert raw bitumen into synthetic crude oil, its calculation for the economic producibility of reserves from that location should be based on the prices for the raw bitumen, as though it were providing the bitumen to a third party processor. This will facilitate comparability among companies.



We recognize, however, that excluding the listed activities from the definition of “oil and gas producing activities” would not permit a company to reflect the result of building its own processing plant on the price estimates and other considerations that may be used in making the company’s business decisions. Such a processing plant can significantly enhance the value of the upgraded product, enabling the company to use lower costs (or higher prices) in its internal decision-making. As noted elsewhere in this release, we are proposing to allow companies to voluntarily present an analysis of the sensitivity of reserves estimates based on varying prices, including the expected product prices used by management for its own planning purposes.<sup>47</sup> Such supplemental disclosure would permit companies to disclose other pricing and cost considerations, including advantages gained by internal processing of raw products that may add value to the final product sold by the company.

**Request for Comment**

- Should we consider the extraction of bitumen from oil sands, extraction of synthetic oil from oil shales, and production of natural gas and synthetic oil and gas from coalbeds to be considered oil and gas producing activities, as proposed? Are there other non-traditional resources whose extraction should be considered oil and gas producing activities? If so, why?
- The extraction of coal raises issues because it is most often used directly as mined fuel, although hydrocarbons can be extracted from it. As noted above, we propose to include the extraction of coalbed methane as an oil

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<sup>47</sup> See proposed Item 1202(c).

and gas producing activity. However, the actual mining of coal has traditionally been viewed as a mining activity. In most cases, extracted coal is used as feedstock for energy production rather than refined further to extract hydrocarbons. However, as technologies progress, certain processes to extract hydrocarbons from extracted coal, such as coal gasification, may become more prevalent. Applying rules to coal based on the ultimate use of the resource could lead to different disclosure and accounting implications for similar coal mining companies based solely on the coal's end use. How should we address these concerns? Should all coal extraction be considered an oil and gas producing activity? Should it all be considered mining activity? Should the treatment be based on the end use of the coal? Please provide a detailed explanation for your comments.

- Similar issues could arise regarding oil shales, although to a significantly less extent, because those resources currently are used as direct fuel only in limited applications. How should we treat the extraction of oil shales?
- If adopted, how would the proposed changes affect the financial statements of producers of non-traditional resources and mining producers?

#### **D. Reasonable Certainty and Proved Oil and Gas Reserves**

The current definition of the term “proved reserves” states that these reserves are “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.”<sup>48</sup> Although “reasonable certainty” is, and has been, the standard used in the definition of proved oil and gas reserves, the current rules do not define that term. As a result, the meaning of the term “reasonable certainty” has been the subject of significant disagreement within the industry relating to the level of probability necessary to meet this standard. Although some believe that this standard is clear and has established a consistent guideline for establishing proved reserves,<sup>49</sup> others do not believe that this has been the case.<sup>50</sup> To avoid ambiguity, we propose to add a definition of the term “reasonable certainty” to Rule 4-10 of Regulation S-X.<sup>51</sup>

We propose to define the term “reasonable certainty” as “much more likely to be achieved than not.” In addition, we would clarify that, when deterministic methods<sup>52</sup> are used to estimate oil and gas reserves, as changes due to increased availability of geoscience (geological, geophysical, and geochemical), engineering, and economic data are made to estimated ultimate recovery (EUR)<sup>53</sup> with time, reasonably certain EUR is much more likely to increase than to either decrease or remain constant. The proposed definition also would explain that, when probabilistic methods are used to estimate

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<sup>48</sup> See Rule 4-10(a)(2) of Regulation S-X [17 CFR 210.4-10(a)(2)].

<sup>49</sup> See letters from R. Jones and Moody’s.

<sup>50</sup> See letters from D. Olds, Raymond Schutte (“R. Schutte”), L. Smothers, R. Wagner, and Sir Philip Watts (“P. Watts”).

<sup>51</sup> See proposed Rule 4-10(a)(26).

<sup>52</sup> See Section II.D.2 of this release for a discussion regarding deterministic methods and probabilistic methods.

<sup>53</sup> We propose to define the term “estimated ultimate recovery” as the sum of reserves remaining as of a given date plus the cumulative production as of that date. See proposed Rule 4-10(a)(11).

reserves, reasonable certainty means that there is at least a 90% probability that the quantities actually recovered will equal or exceed the stated volume.<sup>54</sup>

### **Request for Comment**

- Is the proposed definition of “reasonable certainty” as “much more likely to be achieved than not” a clear standard? Is the standard in the proposed definition appropriate? Would a different standard be more appropriate?
- Is the proposed 90% threshold appropriate for defining reasonable certainty when probabilistic methods are used? Should we use another percentage value? If so, what value?

#### **1. New technology**

The current rules limit the use of alternative technologies as the basis for determining a company’s reserves disclosures. For example, under the current rules, a company generally must use actual production or flow tests to meet the “reasonable certainty” standard necessary to establish the proved status of its reserves. However, in the past, the Commission’s staff has recognized that flow tests can be impractical in certain areas, such as the Gulf of Mexico, where environmental restrictions effectively prohibit these types of tests. The staff has not objected to disclosure of reserves estimates for these restricted areas using alternative technologies. Some commenters noted that a case-by-case exemption from the flow test requirement imposes unequal standards for establishing reasonable certainty based on geographic location.<sup>55</sup>

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<sup>54</sup> This is consistent with the PRMS definition of “proved reserves.”

<sup>55</sup> See letters from Petrobras, D. Ryder, and White & Case.

In addition, we recognize that technology will continue to develop, improving the quality of information that can be obtained from existing tests and creating entirely new tests that we cannot yet envision. We propose to add a definition of the term “reliable technology” to Rule 4-10 of Regulation S-X to clarify the types of technology that can be used to establish reasonable certainty. We propose to define “reliable technology” as “technology (including computational methods) that, when applied using high quality geoscience and engineering data, is widely accepted within the oil and gas industry, has been field tested and has demonstrated consistency and repeatability in the formation being evaluated or in an analogous formation. Consistent with current industry practice, expressed in probabilistic terms, reliable technology has been proved empirically to lead to correct conclusions in 90% or more of its applications.”<sup>56</sup>

The proposed definition is intended to permit broader use of new technologies to establish the proper classification for reserves and to lessen the need for frequent updates to our reserves definitions as technology continues to evolve. Because companies would now be able to select the technology that it uses, we are proposing to require a company to disclose the technology used to establish the appropriate level of certainty for material properties in a company’s first filing with the Commission and for material additions to reserves estimates in subsequent filings.<sup>57</sup> Such disclosure should identify the particular portion of the reserves estimates for which a particular technology was used, including identification of the geographic area, country, field or basin to the extent necessary for

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<sup>56</sup> See proposed Rule 4-10(a)(27).

<sup>57</sup> See proposed Item 1202(a)(4) and proposed Item 1209(a)(2).

investors to determine whether use of that technology was appropriate under the circumstances.

### **Request for Comment**

- Is our proposed definition of “reliable technology” appropriate? Should we change any of its proposed criteria, such as widespread acceptance, consistency, or 90% reliability?
- Is the open-ended type of definition of “reliable technology” that we propose appropriate? Would permitting the company to determine which technologies to use to determine their reserves estimates be subject to abuse? Do investors have the capacity to distinguish whether a particular technology is reasonable for use in a particular situation? What are the risks associated with adoption of such a definition?
- Is the proposed disclosure of the technology used to establish the appropriate level of certainty for material properties in a company’s first filing with the Commission and for material additions to reserves estimates in subsequent filings appropriate? Should we require disclosure of the technology used for all properties? Should we require companies currently filing reports with the Commission to disclose the technology used to establish appropriate levels of certainty regarding their currently disclosed reserves estimates?

## 2. Probabilistic methods

We propose to add definitions of the terms “deterministic estimate” and “probabilistic estimate.”<sup>58</sup> These two terms relate to the two alternative methods by which a company may estimate its reserves amounts. We understand that both methods are, to varying degrees, currently used by the industry. Our proposed definitions are consistent with industry practice. We propose to define the term “deterministic estimate” to mean an estimate that is based on using 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. In addition, we propose to define the term “probabilistic estimate” as an estimate that is obtained when the full range of values that could reasonably occur from each unknown parameter (from the geoscience, engineering, and economic data) is used to generate a full range of possible outcomes and their associated probabilities of occurrence. Although companies currently can use either method to produce reserves estimates, we believe that these proposed definitions will promote consistent usage of the terms “probabilistic estimate” and “deterministic estimate.”

Some of the commenters suggested that we require the use of probabilistic estimates to establish proved reserves because these methods are derived through extensive statistical computer calculations using a wide range of potential values for parameters that affect the reserves estimate, such as possible recovery factors for a

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<sup>58</sup> See proposed Rules 4-10(a)(6) and (a)(19). These definitions are based on the Canadian Oil and Gas Evaluation Handbook (COGEH). This handbook was developed by the Calgary Chapter of the Society of Petroleum Evaluation Engineers and the Petroleum Society of CIM to establish standards to be used within the Canadian oil and gas industry in evaluating oil and gas reserves and resources.

particular field or type of field, and so would be more rigorous than deterministic methods.<sup>59</sup> Conversely, the quality of an estimate derived through deterministic methods depends more heavily on the experience and judgment of the reserves estimator to select the most appropriate value for those parameters. Although we recognize that probabilistic methods can be useful in certain circumstances, requiring the use of probabilistic estimates could significantly increase the costs of reserves estimate preparation, without significant increases in reliability of the results in many cases. One commenter was concerned that companies may not have sufficient staff to calculate all reserves estimates through probabilistic methods.<sup>60</sup> Thus, the proposed definition of “reasonable certainty” would continue to allow companies to estimate reserves amounts using either deterministic or probabilistic methods, leaving companies to determine which method is more appropriate for their particular situations.<sup>61</sup>

### **Request for Comment**

- Are the proposed definitions of “deterministic estimate” and “probabilistic estimate” appropriate? Should we revise either of these definitions in any way? If so, how?
- Are the statements regarding the use of deterministic and probabilistic estimates in the proposed definition of “reasonable certainty” appropriate? Should we change them in any way? If so, how?

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<sup>59</sup> See letters from AAPG, EIA, Long, D. Olds, Rose, and SPE.

<sup>60</sup> See letter from D. Olds.

<sup>61</sup> See proposed Rule 4-10(a)(26).



- Should an oil and gas company have the choice of using deterministic or probabilistic methods for reserves estimation, or should we require one method? If we were to require a single method, which one should it be? Why? Would there be greater comparability between companies if only one method was used?
- Should we require companies to disclose whether they use deterministic or probabilistic methods for their reserves estimates?

### **3. Other revisions related to proved oil and gas reserves**

The current definition of the term “proved oil and gas reserves” also incorporates certain specific concepts such as “lowest known hydrocarbons” which limit a company’s ability to claim proved reserves in the absence of information on fluid contacts in a well penetration,<sup>62</sup> notwithstanding the existence of other engineering and geoscientific evidence.<sup>63</sup> Consistent with our proposal to permit the use of new technologies to establish the reasonable certainty of proved reserves, the proposed revisions to the definition of “proved oil and gas reserves” also include provisions for establishing levels of lowest known hydrocarbons and highest known oil through reliable technology other than well penetrations.

Similarly, the proposed definition would permit a company to claim proved reserves beyond drilling units that immediately offset developed drilling locations if the company can establish with reasonable certainty that these reserves are economically

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<sup>62</sup> In certain circumstances, a well may not penetrate the area at which the oil makes contact with water. In these cases, the company would not have information on the fluid contact and must use other means to estimate the lower boundary depths for the reservoir in which oil is located.

<sup>63</sup> See Rule 4-10(a)(2)(i) [17 CFR 210.4-10(a)(2)(i)].

producible.<sup>64</sup> These revisions are designed to permit the use of alternative technologies to establish proved reserves in lieu of requiring companies to use specific tests. In addition, they would establish a uniform standard of reasonable certainty that could be applied to all proved reserves, regardless of location or distance from producing wells.

Finally, we propose adding a sentence to the definition that would state that, in order for reserves to be proved, the project to extract the hydrocarbons must have commenced or it must be reasonably certain that the operator will commence the project within a reasonable time. This revision is designed to prevent a company from including, in proved reserves, projects in undeveloped areas for which it does not have the intent to develop.

### **Request for Comment**

- Should we permit the use of technologies that do not provide direct information on fluid contacts to establish reservoir fluid contacts, provided that they meet the definition of “reliable technology,” as proposed?
- Should there be other requirements to establish that reserves are proved? For example, for a project to be reasonably certain of implementation, is it necessary for the issuer to demonstrate either that it will be able to finance the project from internal cash flow or that it has secured external financing?

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<sup>64</sup> See proposed Rule 4-10(a)(24)(ii). See Section II.G for a more detailed discussion regarding this proposed revision.

**E. Unproved Reserves—“Probable Reserves” and “Possible Reserves”**

We propose to define the terms “probable reserves” and “possible reserves” because we are proposing to permit companies to disclose these categories of reserves estimates.<sup>65</sup> When producing an estimate of the amount of oil and gas that is recoverable from a particular reservoir, a company can make three types of estimates:

- An estimate that is reasonably certain;
- An estimate that is as likely as not to be achieved; and
- An estimate that might be achieved, but only under more favorable circumstances than are likely.

These three types of estimates are known in the industry as proved, probable, and possible reserves estimates. By proposing to permit disclosure of all three of these classifications of reserves, our objective is to enable companies to provide investors with more insight into the potential reserves base that managements of companies may use as their basis for decisions to invest in resource development.

Some commenters on the Concept Release were concerned that disclosing reserves categories that are less certain than proved reserves could increase the risk of confusion and litigation.<sup>66</sup> Therefore, we are proposing to make these disclosures voluntary.<sup>67</sup> Numerous oil and gas companies currently disclose unproved reserves on their Web sites and in press releases. This practice does not appear to have created confusion in the market. However, we understand commenters’ concerns that probable

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<sup>65</sup> See proposed Rule 4-10(a)(18) and (17), respectively.

<sup>66</sup> See letters from Devon and Imperial.

<sup>67</sup> See proposed Item 1202.

and possible reserves estimates are less certain than proved reserves estimates and so may create increased litigation risk. By making these disclosures voluntary, a company could decide on its own whether to provide the market with this disclosure, despite possible increased litigation risk. In addition, to address the concerns regarding the uncertainty of estimates of unproved reserves, we also are proposing to require disclosure about the person primarily responsible for preparing the company's reserves estimates and, if applicable, about the person primarily responsible for conducting a reserves audit.<sup>68</sup> The proposal would clarify that a "person" may be a business entity or an individual. We address this proposed disclosure in more detail in Section III.B.3.v of this release.

We propose to define the term "probable reserves" as those additional reserves that are less certain to be recovered than proved reserves but which, in sum with proved reserves, are as likely as not to be recovered.<sup>69</sup> The proposed definition would provide guidance for the use of both deterministic and probabilistic methods. The proposed definition would clarify that, when deterministic methods are used, it is as likely as not that actual remaining quantities recovered will equal or exceed the sum of estimated proved plus probable reserves. Similarly, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the proved plus probable reserves estimates. This proposed definition was derived from the PRMS definition of the term "probable reserves."

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<sup>68</sup> See proposed Item 1202(a)(6).

<sup>69</sup> See proposed Rule 4-10(a)(18).

Our proposed definition of “possible reserves” would include those additional reserves that are less certain to be recovered than probable reserves.<sup>70</sup> It would clarify that, when deterministic methods are used, the total quantities ultimately recovered from a project have a low probability to exceed the sum of proved, probable, and possible reserves. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the sum of proved, probable, and possible estimates. As with the proposed definition of probable reserves, the proposed definition of possible reserves is based on the PRMS definition of the term “possible reserves.”

### **Request for Comment**

- Should we permit a company to disclose its probable or possible reserves, as proposed? If so, why?
- Should we require, rather than permit, disclosure of probable or possible reserves? If so why?
- Should we adopt the proposed definitions of probable reserves and possible reserves? Should we make any revisions to those proposed definitions? If so, how should we revise them?
- Are the proposed 50% and 10% probability thresholds appropriate for estimating probable and possible reserves quantities when a company uses probabilistic methods? Should probable reserves have a 60% or 70% probability threshold? Should possible reserves have a 15% or 20% probability threshold? If not, how should we modify them?

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<sup>70</sup> See proposed Rule 4-10(a)(17).

**F. Definition of “Proved Developed Oil and Gas Reserves”**

As noted above, we are proposing to expand the scope of oil and gas producing activities to include resources extracted by technologies other than traditional oil and gas wells, such as mining processes. Similarly, we propose to expand the definition of the term “proved developed oil and gas reserves” to include extraction of resources using technologies other than production through wells.<sup>71</sup> The proposed new definition would state that “proved developed oil and gas reserves” are proved reserves that:

- 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
- 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.

**Request for Comment**

- Should we revise the definition of proved developed oil and gas reserves, as proposed? Should we make any other revisions to that definition? If so, how should we revise it?

**G. Definition of “Proved Undeveloped Reserves”**

**1. Proposed replacement of certainty threshold**

We propose to amend the definition of the term “proved undeveloped reserves” (PUDs) by replacing the requirement that productivity be “certain” for areas beyond the

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<sup>71</sup> See proposed Rule 4-10(a)(22).

immediate area of known proved reserves with a “reasonably certain” requirement.<sup>72</sup>

Currently, the definition of the term “proved undeveloped reserves” 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.<sup>73</sup>

Some commenters believed that requiring “certainty” beyond offsetting, or adjacent, units is not appropriate.<sup>74</sup> They believed that there should be a single criterion—reasonable certainty—to characterize all proved reserves, including proved undeveloped reserves. Two commenters noted that the offsetting unit requirement is a purely mathematical and arbitrary standard for ease of calculation and does not reflect the actual geological characteristics of the reservoir.<sup>75</sup> Other commenters argued that PUDs should be determined by the totality of the engineering and geoscience data available, including seismic data, appropriate analogs, and assessment of reservoir characteristics.<sup>76</sup> One commenter believed that the “one offsetting unit” rule is outdated and does not acknowledge new technology.<sup>77</sup>

The proposed definition would permit the use of evidence gathered from reliable technology that establishes reasonable certainty of economic producibility at any distance from productive units (that is, in units adjacent to the productive units as well as units

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<sup>72</sup> See proposed Rule 4-10(a)(25).

<sup>73</sup> See 17 CFR 210.4-10(a)(4). A drilling unit refers to the spacing required between wells to prevent wasting resources and optimize recovery. These units are typically determined by the local jurisdiction.

<sup>74</sup> See letters from AAPG, API, Denbury, Devon, and DOE.

<sup>75</sup> See letters from CNOOC and Ultra.

<sup>76</sup> See letters from API, Devon, DOE, and ExxonMobil.

<sup>77</sup> See letter from Ultra.

beyond those adjacent units).<sup>78</sup> It would further clarify that proved reserves can be claimed in a conventional accumulation<sup>79</sup> or a continuous accumulation in a given area beyond immediately offset drilling units where economic producibility is reasonably certain, based on engineering, geoscience, and economic data and reliable technology, including actual drilling statistics in the area.<sup>80</sup> However, the proposed definition would prohibit a company from assigning proved status to undrilled locations if a development plan has not been adopted indicating that the locations are scheduled to be drilled within five years, unless it discloses unusual circumstances that justify a longer time, such as particularly complex projects in remote areas that require more time to develop.<sup>81</sup>

### **Request for Comment**

- Are the proposed revisions appropriate? Would the proposed expansion of the PUDs definition create potential for abuses?
- Should we replace the current “certainty” threshold for reserves in drilling units beyond immediately adjacent drilling units with a “reasonable certainty” threshold as proposed?
- Is it appropriate to prohibit a company from assigning proved status to undrilled locations if the locations are not scheduled to be drilled more than five years, absent unusual circumstances, as proposed? Should the proposed time period be shorter or longer than five years? Should it be three years? Should it be longer, such as seven or ten years?

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<sup>78</sup> See proposed Rule 4-10(a)(25)(i).

<sup>79</sup> See Section II.G.2 for a discussion of continuous accumulations and conventional accumulations.

<sup>80</sup> See proposed Rule 4-10(a)(25)(i)(B).

<sup>81</sup> See proposed Rule 4-10(a)(25)(ii).



- Should the proposed definition specify the types of unusual circumstances that would justify a development schedule longer than five years for reserves that are classified as proved undeveloped reserves?

## **2. Proposed definitions for continuous and conventional accumulations**

We propose to adopt definitions for the terms “continuous accumulations” and “conventional accumulations” to assist companies in determining the extent of PUDs associated with these two types of accumulations.<sup>82</sup> PUDs have caused estimation difficulties in the past. The fundamental difficulty in making these estimates is calculating the volume of a resource beyond the immediate area in which wells have been drilled (or beyond the immediate area in which other extraction technology has been installed and is operational) that should be included in the proved category. The answer can be vastly different for continuous accumulations, as opposed to conventional accumulations. Because of this potential difference, we believe that it is important to define these two distinct categories of accumulations in the proposed rules.

The proposed definition of “continuous accumulations” would encompass resources that are pervasive throughout large areas, have ill-defined boundaries, and typically lack or are unaffected by hydrocarbon-water contacts near the base of the accumulation.<sup>83</sup> Examples include, but are not limited to, accumulations of natural bitumen (oil sands), gas hydrates, and self-sourced accumulations such as coalbed methane, shale gas, and oil shale deposits. Typically, such accumulations require specialized extraction technology (e.g., removal of water from coalbed methane

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<sup>82</sup> See proposed Rule 4-10(a)(4) and (a)(5).

<sup>83</sup> See proposed Rule 4-10(a)(4).

accumulations, large fracturing programs for shale gas, steam, or solvents to mobilize bitumen for in-situ recovery, and, in some cases, mining activities). Moreover, the extracted petroleum may require significant processing prior to sale (e.g., bitumen upgraders). This proposed definition is based on the PRMS definition of the term “unconventional resources.”

Conversely, we propose to define “conventional accumulations” as discrete oil and gas resources related to localized geological structural features or stratigraphic conditions, with the accumulation typically bounded by a hydrocarbon-water contact near its base, and which are significantly affected by the tendency of lighter hydrocarbons to “float” or accumulate above the heavier water.<sup>84</sup> This proposed definition is based on the PRMS definition of the term “conventional resources.”

### **Request for Comment**

- Should we provide separate definitions of conventional and continuous accumulations, as proposed? Would separate disclosure of these accumulations be helpful to investors?
- Should we revise our proposed definition of “continuous accumulations” in any way? For example, should the proposed definition provide examples of such accumulations? If so, how should we revise it?
- Should we revise our proposed definition of “conventional accumulations” in any way? If so, how should we revise it?

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<sup>84</sup> See proposed Rule 4-10(a)(5).

### **3. Proposed treatment of improved recovery projects**

The proposed definition of proved undeveloped reserves also would be broadened to permit a company to include quantities of oil that can be recovered through improved recovery projects in its proved undeveloped reserves estimates. Currently, a company can include such quantities only where techniques have been proved effective by actual production from projects in the area and in the same reservoir. The proposed amendments would expand this definition to permit the use of techniques that have been proved effective by actual production from projects in an analogous reservoir in the same geologic formation in the immediate area or by other evidence using reliable technology that establishes reasonable certainty.<sup>85</sup>

#### **Request for Comment**

- Should we expand the definition of proved undeveloped reserves to permit the use of techniques that have been proven effective by actual production from projects in an analogous reservoir in the same geologic formation in the immediate area or by other evidence using reliable technology that establishes reasonable certainty?

#### **H. Proposed Definition of Reserves**

To add clarity to the definition of the term “proved reserves,” we also propose to add a definition of the term “reserves.”<sup>86</sup> We propose to describe more completely the criteria that an accumulation of oil, gas, or related substances must satisfy to be considered reserves (of any classification), including non-technical criteria such as legal

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<sup>85</sup> See proposed Rule 4-10(a)(25)(iii).

<sup>86</sup> See proposed Rule 4-10(a)(28).

rights. We propose to define reserves as the estimated remaining quantities of oil and gas and related substances anticipated to be recoverable, as of a given date, by application of development projects to known accumulations based on:

- Analysis of geoscience and engineering data;
- The use of reliable technology;
- The legal right to produce;
- Installed means of delivering the oil, gas, or related substances to markets, or the permits, financing, and the appropriate level of certainty (reasonable certainty, as likely as not, or possible but unlikely) to do so; and
- Economic producibility at current prices and costs.

The definition would clarify that reserves are classified as proved, probable, and possible according to the degree of uncertainty associated with the estimates. This proposed definition is based on the PRMS definition of the term “reserves.”

### **Request for Comment**

- Is the proposed definition of “reserves” appropriate? Should we change it in any way? If so, how?

#### **I. Other Proposed Definitions and Reorganization of Definitions**

We are proposing additional definitions primarily to support and clarify the proposed definitions of the key terms discussed above. These supplementary definitions include:

- “Analogous formation in the immediate area,” which appears in the definition of proved reserves;<sup>87</sup>
- “Condensate”;<sup>88</sup>
- “Development project”;<sup>89</sup>
- “Estimated ultimate recovery,” which appears in the definition of proved reserves;<sup>90</sup> and
- “Resources,” which are often confused with reserves.<sup>91</sup>

Most of these supporting terms and their proposed definitions are based on similar terms in the PRMS. The proposed definition of “resources” is based on the Canadian Oil and Gas Evaluation Handbook (COGEH).

We also are proposing to alphabetize the definitional terms in Rule 4-10(a), including existing and proposed definitions. Currently, the terms defined in Rule 4-10(a) are organized by placing the key terms ahead of supporting terms. The proposals would significantly increase the number of terms defined in this section. With the proposed addition of numerous new definitions, we believe that alphabetizing these definitions would make specific definitions easier to find.

### **Request for Comment**

- Are these additional proposed definitions appropriate? Should we revise them in any way?

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<sup>87</sup> See proposed Rule 4-10(a)(2).

<sup>88</sup> See proposed Rule 4-10(a)(3).

<sup>89</sup> See proposed Rule 4-10(a)(8).

<sup>90</sup> See proposed Rule 4-10(a)(11).

<sup>91</sup> See proposed Rule 4-10(a)(30).

- Are there other terms that we have used in the proposal that need to be defined? If so, which terms and how should we define them?
- Should we alphabetize the definitions, as proposed? Would any undue confusion result from the re-ordering of existing definitions?

### **III. Proposed Amendments to Codify the Oil and Gas Disclosure Requirements in Regulation S-K**

The Concept Release primarily solicited comment on certain key definitions in the oil and gas disclosure regime, and whether oil and gas companies should be permitted to disclose probable and possible reserves. In this release, we are proposing, and soliciting comment on, a broader scope of amendments. In particular, we are proposing to update and codify Securities Act and Exchange Act Industry Guide 2: Disclosure of Oil and Gas Operations (Industry Guide 2).<sup>92</sup> Industry Guide 2 sets forth most of the disclosures that an oil and gas company provides regarding its reserves, production, property, and operations. Regulation S-K references Industry Guide 2 in Instruction 8 to Item 102 (Description of Property), Item 801 (Securities Act Industry Guides), and Item 802 (Exchange Act Industry Guides). However, Industry Guide 2 itself does not appear in Regulation S-K or in the Code of Federal Regulations. We propose to codify the contents of Industry Guide 2 in Regulation S-K.

Included in the proposals are several new disclosure items that we believe are necessary in light of the proposed amendments to the definitions in Rule 4-10, such as disclosure of technology used to determine levels of certainty because we propose to permit companies to choose the appropriate technology for that purpose. We also are

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<sup>92</sup> Exchange Act Industry Guide 2 merely references, and therefore is identical to, Securities Act Industry Guide 2.

proposing to eliminate several disclosures in Industry Guide 2 because we believe that they are no longer necessary, such as reporting of production through processing plant ownership. We address these proposals in detail below.

**A. Proposed Revisions to Items 102, 801, and 802 of Regulation S-K**

The instructions to Item 102 of Regulation S-K, in conjunction with Items 801 and 802 of Regulation S-K, currently reference the industry guides. Because we are proposing to move the disclosures from Industry Guide 2 into a new Subpart 1200 of Regulation S-K, we propose to revise the instructions to Item 102 to reflect this change.<sup>93</sup> We also propose eliminating the references in Items 801 and 802 to Industry Guide 2 because that industry guide will cease to exist if the proposals described in this release are adopted.<sup>94</sup>

In addition, Instruction 5 to Item 102 of Regulation S-K currently prohibits the disclosure of reserves other than proved oil and gas reserves. Because we are proposing to permit disclosure of probable and possible oil and gas reserves, we would revise Instruction 5 to limit its applicability to extractive enterprises other than oil and gas producing activities, such as mining activities.<sup>95</sup> Similarly, Instruction 3 of Item 102, regarding production, reserves, locations, development and the nature of the company's interests, would no longer need to apply to oil and gas producing activities if the proposals are adopted, so we also propose to limit that instruction to mining activities.<sup>96</sup>

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<sup>93</sup> See proposed Instructions 4 and 8 to Item 102.

<sup>94</sup> See proposed Item 801 and 802.

<sup>95</sup> See proposed Instruction 5 to Item 102. Extractive enterprises include enterprises such as mining companies that extract resources from the ground.

<sup>96</sup> See proposed Instruction 3 to Item 102.

Finally, we propose to eliminate Instruction 4 to Item 102 regarding the ability of the Commission's staff to request supplemental information, including reserves reports. This instruction is duplicative of Securities Act Rule 418<sup>97</sup> and Exchange Act 12b-4,<sup>98</sup> regarding the staff's general ability to request supplemental information.

### **Request for Comment**

- Is the proposed amendment to Instruction 3, limiting it to extractive activities other than oil and gas activities, appropriate? Should we simply call them mining activities?
- Are there any other aspects of Item 102 that we should revise? If so, what are they and how should they be revised?

#### **B. Proposed New Subpart 1200 to Regulation S-K Codifying Industry Guide 2 Regarding Disclosures by Companies Engaged in Oil and Gas Producing Activities**

##### **1. Overview**

We are proposing to add a new Subpart 1200 to Regulation S-K that would codify the disclosure requirements related to companies engaged in oil and gas producing activities. This proposed subpart would largely include the existing requirements of Industry Guide 2. However, we have revised these requirements to update them, provide better clarity with respect to the level of detail required in oil and gas disclosures, including the geographic areas by which disclosures need to be made, and provide formats for tabular presentation of these disclosures. In addition, the proposed Subpart

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<sup>97</sup> 17 CFR 230.418.

<sup>98</sup> 17 CFR 240.12b-4.



1200 would contain the following new disclosure requirements, many of which have been requested by industry participants:

- Disclosure of reserves from non-traditional sources (i.e., bitumen, shale, coalbed methane) as oil and gas reserves;
- Optional disclosure of probable and possible reserves;
- Optional disclosure of oil and gas reserves' sensitivity to price;
- Disclosure of the development of proved undeveloped reserves, including those that are held for five years or more and an explanation of why they should continue to be considered proved;
- Disclosure of technologies used to establish additions to reserves estimates;
- Disclosure regarding material changes due to technology, prices, and concession conditions;
- Disclosure of the objectivity and qualifications of the business entity or individual preparing or auditing the reserves estimates;
- Filing a report prepared by the third party if a company represents that it is relying on a third party to prepare the reserves estimates or conduct a reserves audit; and
- Disclosure based on a new definition for the term "by geographic area."

We discuss each of these proposed new Items below.

## 2. **Proposed Item 1201 (General instructions to oil and gas industry-specific disclosures)**

We propose to add new Item 1201 to Regulation S-K. This item would set forth the general instructions to Subpart 1200. The proposed item would contain three paragraphs that would:

- Instruct companies for which oil and gas producing activities are material to provide the disclosures specified in Subpart 1200;<sup>99</sup>
- Clarify that, although a company must present specified Subpart 1200 information in tabular form, the company may modify the format of the table for ease of presentation, to add additional information or to combine two or more required tables; and
- State that the definitions in Rule 4-10(a) of Regulation S-X apply to Subpart 1200.

### **Request for Comment**

- Are the proposed general instructions to Subpart 1200 clear and appropriate? Are there any other general instructions that we should include in this proposed Item?
- For disclosure items requiring tabulated information, should we require companies to adhere to a specified tabular format, instead of permitting companies to reorganize, supplement, or combine the tables?

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<sup>99</sup> This paragraph would maintain the existing exclusion in Industry Guide 2 for limited partnerships and joint ventures that conduct, operate, manage, or report upon oil and gas drilling or income programs, that acquire properties either for drilling and production, or for production of oil, gas, or geothermal steam or water.

- In particular, should we permit a company to disclose reserves estimates from conventional accumulations in the same table as it discloses its reserves estimates from continuous accumulations?

### **3. Proposed Item 1202 (Disclosure of reserves)**

Existing Instruction 3 to Item 102 of Regulation S-K requires disclosure of an extractive enterprise's proved reserves. With respect to oil and gas producing companies, we are proposing to replace this Instruction by adding a new Item 1202 to Regulation S-K that would contain a similar disclosure requirement regarding a company's proved reserves.<sup>100</sup> However, the proposed new Item would expand on the requirements of Item 102 by specifically permitting the disclosure of probable and possible reserves and permitting the disclosure of reserves from continuous accumulations. Proposed Item 1202 would organize reserves disclosure into the following three tables:

- An oil and gas reserves from conventional accumulations table;
- An oil and gas reserves from continuous accumulations table; and
- An optional sensitivity analysis table.

#### **i. Oil and gas reserves tables**

Proposed Item 1202 would require disclosure, in the aggregate and by geographic area,<sup>101</sup> of reserves estimated using prices and costs under existing economic conditions, for each product type, in the following categories:

- Proved developed reserves;
- Proved undeveloped reserves;

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<sup>100</sup> See proposed Item 1202.

<sup>101</sup> See Section II.B.3.iv for a discussion about geographic area specificity.

- Total proved reserves;
- Probable reserves (optional); and
- Possible reserves (optional).

The proposed Item would provide for separate tables for reserves in conventional accumulations<sup>102</sup> and continuous accumulations.<sup>103</sup> However, a company may combine these two tables.<sup>104</sup> If a company does so, it must present different products in different columns. For example, because refining and processing, other than field processing of gas to extract liquid hydrocarbons, are not oil and gas producing activities, we believe that a company that extracts and processes oil sands into synthetic crude oil should report the first salable product, bitumen, as its reserves. The activity of processing bitumen into synthetic crude oil at a plant, even if on or near the extraction location, is a refining process. Forms of these two proposed tables are set forth below:

**Summary of Oil and Gas Reserves in Conventional Accumulations as of Fiscal-Year End Based on Average Fiscal-Year Prices**

	Reserves	
	Oil	Natural Gas
Reserves category	(mbbls)	(mmcf)
<b>PROVED</b>		
<b>Developed</b>		
Continent A		
Continent B		
15% Country A		
15% Country B		
10% Field A in Country B		
Other Fields in Country B		
Other Countries in Continent B		
<b>Undeveloped</b>		
Continent A		

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<sup>102</sup> See proposed Item 1202(a).

<sup>103</sup> See proposed Item 1202(b).

<sup>104</sup> See proposed Item 1201(b).

Continent B		
15% Country A		
15% Country B		
10% Field A in Country B		
Other Fields in Country B		
Other Countries in Continent B		
<b>TOTAL PROVED</b>		
<b>PROBABLE</b>		
<b>POSSIBLE</b>		

**Summary of Oil and Gas Reserves from Continuous Accumulations as of  
Fiscal-Year End Based on Average Fiscal-Year Prices**

	<b>Reserves</b>		
	<b>Product A<sup>105</sup></b>	<b>Product B</b>	<b>Product C</b>
Reserves category	(measure)	(measure)	(measure)
<b>PROVED</b>			
<b>Developed</b>			
Country A			
Country B			
10% Field A in Country B			
Other Fields in Country B			
<b>Undeveloped</b>			
Country A			
Country B			
10% Field A in Country B			
Other Fields in Country B			
<b>TOTAL PROVED</b>			
<b>PROBABLE</b>			
<b>POSSIBLE</b>			

<sup>105</sup>

The product should be based on the product that is the result of the oil and gas producing activity, such as bitumen, which is extracted from oil sands.

A company may, but would not be required, to disclose probable or possible reserves in these tables. If a company discloses probable or possible reserves, it must provide the same level of geographic detail as with proved reserves. The proposal would require a company to update such reserves tables as of the close of each fiscal year. The table would be categorized by the products (Product A, Product B, etc.) that are the result of oil and gas producing activities. Thus, an oil and gas company should not disclose, as reserves, products that are not the result of oil and gas producing activities, including refined or processed products such as synthetic crude oil.<sup>106</sup> Of course, a company may provide supplemental disclosure regarding the amount of synthetic crude oil or other refined or processed product that may be extracted ultimately from the product of oil and gas producing activities. The proposal would also clarify that, if the company discloses amounts of a product in barrels of oil equivalent, it must disclose the basis for such equivalency.

The reserves to be reported in these proposed tables would be aggregations (to the company total level) of reserves determined for individual wells, reservoirs, properties, fields, or projects. Regardless of whether the reserves were determined using deterministic or probabilistic methods, the reported reserves should be simple arithmetic sums of all estimates at the well, reservoir, property, field, or project level within each reserves category.

The proposed items would require companies that previously have not disclosed reserves estimates in a filing with the Commission to disclose the technologies used to

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<sup>106</sup> Rule 4-10(a)(16)(ii) specifically excludes from oil and gas producing activities refining and processing (other than field processing of gas to extract liquid hydrocarbons) of oil and gas.

establish the appropriate level of certainty for reserves estimates from material properties included in the total reserves disclosed. However, the particular properties would not need to be identified. Similarly, proposed Item 1209 would note that companies should discuss the technologies used to establish the appropriate level of certainty for material additions to, or increases in, reserves estimates.<sup>107</sup> The proposal would not require a company to disclose the technologies used to determine levels of certainty for reserves disclosed prior to effectiveness of the proposed amendments, if adopted, because the current definitions limit technologies to prescribed types, such as production or flow tests or actual observation of oil-water contacts in the wellbore.

If probable or possible reserves are disclosed, the proposed item would also require the company to disclose the relative risks related to such reserves estimations. Because we are proposing to permit disclosure of probable and possible reserves, an instruction to this proposed Item would revise existing Instruction 5 to Item 102 of Regulation S-K to continue to prohibit disclosure of estimates of oil or gas resources other than reserves, and any estimated values of such resources, in any document publicly filed with the Commission, unless such information is required to be disclosed in the document by foreign or state law.<sup>108</sup> We continue to believe that such resources are too speculative and may lead investors to incorrect conclusions. However, consistent with Instruction 5, a company could disclose such estimates in a Commission filing related to an acquisition, merger, or consolidation if the company previously provided those

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<sup>107</sup> See proposed Item 1209.

<sup>108</sup> See proposed Instruction 5 to Item 102.

estimates to a person that is offering to acquire, merge, or consolidate with the company or otherwise to acquire the company's securities.<sup>109</sup>

### **Request for Comment**

- Should we permit companies to disclose their probable reserves or possible reserves? Is the probable reserves category, the possible reserves category (or both categories) too uncertain to be included as disclosure in a company's public filings? Should we only permit disclosure of probable reserves? What are the advantages and disadvantages of permitting disclosure of probable and possible reserves, from the perspective of both an oil and gas company and an investor in an oil and gas company that chooses to provide such disclosure? Would investors be concerned by such disclosure? Would they understand the risks involved with probable or possible reserves?
- Would the proposed disclosure requirements provide sufficient disclosure for investors to understand how companies classified their reserves? Should the proposed Item require more disclosure regarding the technologies used to establish certainty levels and assumptions made to determine the reserves estimates for each classification?
- Should companies be required to provide risk factor disclosure regarding the relative uncertainty associated with the estimation of probable and possible reserves?

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<sup>109</sup>

Id.



- Should we allow filers to report sums of proved and probable reserves or sums of proved, probable, and possible reserves? Or, to avoid misleading investors, should we allow only disclosure of each category of reserves by itself and not in sum with others, as proposed?
- Should we require disclosure of probable or possible reserves estimates in a company's public filings if that company otherwise discloses such estimates outside of its filings?
- Should we require all reported reserves to be simple arithmetic sums of all estimates, as proposed? Alternatively, should we allow probabilistic aggregation of reserves estimated probabilistically up to the company level? If we do so, will company reserves estimated and aggregated deterministically be comparable to company reserves estimated and aggregated probabilistically?
- Should we revise the proposed form and content of the table? If so, how should we revise the table's form or content?
- Should we eliminate the current exception regarding the disclosure of estimates of resources in the context of an acquisition, merger, or consolidation if the company previously provided those estimates to a person that is offering to acquire, merge, or consolidate with the company or otherwise to acquire the company's securities? If so, would this create a significant imbalance in the disclosures being made to the possible acquirer, as opposed to the company's shareholders?

**ii. Optional reserves sensitivity analysis table**

Our current rules require determining whether oil or gas is economically producible based on the price on the last day of the fiscal year. As discussed in Section II.B.1 above, this single-day price has been the subject of some criticism from commenters in the past because it is sensitive to short-term price volatility and does not account for seasonal variations in the prices of different products. Although we are proposing to require that reserves estimates be based on a 12-month average of historical prices, we are proposing to permit companies to include an optional reserves sensitivity analysis table in their filings that would show what the reserves estimates would be if based on 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. The company would be free to choose the different scenario or scenarios, if any, that it wishes to disclose in the table. If the company chooses to provide such disclosure, it would be required to disclose the price and cost schedules and assumptions on which the alternate reserves estimates are based. Similarly, companies should remember that Item 303 of Regulation S-K (Management's Discussion and Analysis of Financial Condition and Results of Operations)<sup>110</sup> requires discussion of known trends and uncertainties, which may include changes to prices and costs. A form of this optional reserves sensitivity analysis table is set forth below.

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<sup>110</sup> See Item 303 of Regulation S-K [17 CFR 229.303].

**Sensitivity of Reserves to Prices  
By Principal Product Type and Price Scenario**

Price Case	Proved Reserves			Probable Reserves			Possible Reserves		
	Oil	Gas	Product A	Oil	Gas	Product A	Oil	Gas	Product A
	mbbls	mmcf	measure	mbbls	mmcf	measure	mbbls	mmcf	measure
Scenario 1									
Scenario 2									

**Request for Comments**

- Should we adopt such an optional reserves sensitivity analysis table?  
Would such a table be beneficial to investors? Is such a table necessary or appropriate?
- Should we require a sensitivity analysis if there has been a significant decline in prices at the end of the year? If so, should we specify a certain percentage decline that would trigger such disclosure?
- Should we revise the proposed form and content of the table? If so, how should we revise the table's form or content?
- As noted above in this release, SFAS 69 currently uses single-day, year-end prices to estimate reserves, while the reserves estimates in the proposed tables would be based on 12-month average year-end prices. If the FASB elects not to change its SFAS 69 disclosures to be based on 12-month average year-end prices, should we require reconciliation between the proposed Item 1202 disclosures and the SFAS 69 disclosures? What other means should we adopt to promote comparability between these disclosures?

### **iii. Geographic specificity with respect to reserves disclosures**

There have been differing interpretations among oil and gas companies as to the level of specificity required when a company is breaking out its reserves disclosures based on geographic area as required by Instruction 3 of Item 102 of Regulation S-K.<sup>111</sup> Some companies currently broadly organize their reserves only by hemisphere or continent. SFAS 69 requires reserves disclosure to be separately disclosed for the company's home country and foreign geographic areas. It defines "foreign geographic areas" as "individual countries or groups of countries as appropriate for meaningful disclosure in the circumstances." Since SFAS 69 was issued, the operations of oil and gas companies have become much more diversified globally. For many large U.S. oil and gas producers, the majority of reserves are now overseas, with material amounts in individual countries and even individual fields or basins. We think that greater specificity than simply disclosing reserves within "groups of countries" would benefit investors and currently are necessary to meet the requirements of Item 102 of Regulation S-K, in cases where a particular country, sedimentary basin, or field constitutes a significant portion of a company's reserves, particularly if that country, sedimentary basin, or field is subject to unique risks, such as political instability. Thus, instructions to proposed Item 1202 would state that, in general, disclosures need only be broken out by continent, except where:

- A particular country contains 15% or more of the company's global oil reserves or gas reserves, or

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<sup>111</sup> 17 CFR 229.102.

- A particular sedimentary basin or field contains 10% or more of the company’s global oil reserves or gas reserves.<sup>112</sup>

This proposed amendment would differ from the existing guidance in SFAS 69, which would permit disclosure based on broader geographic areas. In addition, under the proposals, a company would be permitted, but not required, to provide more detailed disclosure, such as countries or fields containing less than the specified percentages.

### **Request for Comment**

- Should we provide the proposed guidance about the level of specificity required when a company discloses its oil and gas reserves by “geographic area”?
- Are the proposed 15% and 10% thresholds appropriate? Should either, or both, of these percentages be different? For example, should both be 15%? Should both be 10%? Would 5% or 20% be a more appropriate threshold for either or both?
- What would be the impact to investors if companies are permitted to omit disclosures based on the individual field or basin due to concerns related to competitive sensitivities? Would investors be harmed if disclosure based on the individual field or basin is omitted due to concerns related to competitive sensitivities? Is there a better way to provide disclosure that a company heavily dependent on a particular field or basin may be subject to risks related to the concentration of its reserves?

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<sup>112</sup> See proposed Instruction to Item 1202.

- Would greater specificity cause competitive harm? Is so, how can the rules mitigate the risk of harm?
- In the event that the FASB does not amend SFAS 69, should we require companies to supplement their SFAS 69 disclosure with greater geographic specificity? If the FASB does not amend SFAS 69, should we require that companies reconcile the differences between the reserves estimates shown in the SFAS 69 disclosure with the estimates presented in the proposed tables?

**iv. Separate disclosure of conventional and continuous accumulations**

Under proposed Item 1202, companies would be required to disclose reserves from conventional accumulations separately from reserves in continuous accumulations. Several commenters on the Concept Release believed that it is important to disclose such reserves separately.<sup>113</sup> Although proposed Item 1201 would permit a company to combine these two tables, it would not permit a company to combine columns of different tables. Thus, for example, if a company decided to combine the two tables, it would have to represent reserves in conventional natural gas reservoirs separately from gas reserves in coalbeds or gas shales.

**Request for Comment**

- Should we require separate disclosure of conventional accumulations and continuous accumulations, as proposed?

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<sup>113</sup> See letters from Brookwood, D. McBride, Moody's, and Oil Change.

- Should we permit combining of columns if the product of the oil and gas producing activity is the same, such as natural gas, regardless of whether the reserves are in conventional or continuous accumulations?

**v. Preparation of reserves estimates or reserves audits**

In the Concept Release, we sought comment on whether the rules should require a company to retain an independent third party to prepare, or conduct a reserves audit on, the company's reserves estimates. Most commenters urged the Commission not to adopt such a requirement.<sup>114</sup> Some believed that a company's internal staff, particularly at larger companies, is in a better position to prepare those estimates.<sup>115</sup> In addition, commenters pointed out a potential lack of qualified third party engineers and other professionals to conduct the increase in work that would need to be accomplished if we adopted such a requirement.<sup>116</sup> Others were concerned about the added costs that would be associated with such a requirement.<sup>117</sup> However, some commenters believed that the participation of an independent third party would provide heightened assurance regarding the accuracy of the reserves estimates.<sup>118</sup>

In light of the commenters' concerns, we are not proposing to require an independent third party to prepare the reserves estimates or conduct a reserves audit. However, several commenters noted that it is important that persons preparing or auditing

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<sup>114</sup> See letters from API, BHP, BP, CFA, CNOOC, Denbury, Devon, Eni, Energy Literacy, ExxonMobil, Imperial, R. Jones, D. McBride, Newfield, Nexen, Petro-Canada, Ross, D. Ryder, Sasol, Shell, Talisman, Total, and W. van de Vijver.

<sup>115</sup> See letters from API, Denbury, ExxonMobil, Imperial, Nexen, Shell, and Talisman.

<sup>116</sup> See letters from AAPG, API, BP, Devon, ExxonMobil, Imperial, D. McBride, Newfield, D. Ryder, and Sasol.

<sup>117</sup> See letters from Sasol and Nexen.

<sup>118</sup> See letters from CIBC, EnCana, Fitch, D. Kelly, Petrobras, Robinson, Ultra, and White & Case.

the reserves estimates be objective and qualified to perform the work that they are doing.<sup>119</sup> In addition, because we are proposing to broaden permissible technologies for establishing levels of certainty of reserves, we believe that the proper application of such technologies in particular situations requires a heightened level of judgment. Therefore, we propose to require disclosure regarding the qualifications of the person primarily responsible for preparing the reserves estimates or, if the company represents that a reserves audit was conducted, conducting a reserves audit.<sup>120</sup> In addition, we propose to require disclosure regarding the objectivity of third parties that conduct such service for an oil and gas company and measures taken to assure the independence and objectivity of employees. We based these qualifications largely on the reserves audit guidance of the Society of Petroleum Engineers (SPE).<sup>121</sup> In particular, we propose to require the company to disclose the following information about the technical person<sup>122</sup> primarily responsible for preparing the reserves estimate or, if the company represents that such a reserves audit was conducted, conducting the reserves audit:

- (1) If the person is an employee of the company,

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<sup>119</sup> See letters from Brookwood, Denbury, D. McBride, Petro-Canada, Robinson, and Total.

<sup>120</sup> See proposed Item 1202(a)(6).

<sup>121</sup> See Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information of the SPE (SPE Reserves Auditing Standards).

<sup>122</sup> With regard to the objectivity of a technical person, the “person” could be an individual or an entity, as appropriate. However, with regard to the qualifications of a person, the disclosure would relate to the individual who is primarily responsible for the technical aspects of the reserves estimation or audit. Thus, this individual is not necessarily the individual generally overseeing the estimation or audit, but the individual who is primarily responsible for the actual calculations and estimation or audit.



- The fact that an employee of the company had primary responsibility for preparing the reserves estimate (but the employee would not have to be identified); and
  - Measures taken to assure the independence and objectivity of the estimate;
- (2) If the person is not an employee of the company,
- The identity of the person;
  - The nature and amount of all work that the person has performed for the company during the past three fiscal years, other than preparing the reserves estimate or conducting the reserves audit, as well as all compensation and fees (in any form) paid to that person for all such services; and
  - Whether the person has any other interests in the company or other conflict of interests;
- (3) Whether the person (regardless of whether an employee or third party) primarily responsible for the estimating or auditing of reserves:
- Has a minimum of three years of practical experience in petroleum engineering or petroleum production geology, with at least one full year of this experience being in the estimation and evaluation of reserves if the person was in charge of preparing the reserves estimates;
  - Has a minimum of ten years of practical experience in petroleum engineering or petroleum production geology, with at least five

- years of this experience being in the estimation and evaluation of reserves and the conducting of reserves audits if that person conducted a reserves audit of the registrant's reserves estimates;
- Has received, and is maintaining in good standing, a registered or certified professional engineer's license or a registered or certified professional geologist's license, or the equivalent thereof, from an appropriate governmental authority or a recognized self-regulating professional organization; and
  - Has a bachelor's or advanced degree in petroleum engineering, geology, or other discipline of engineering or physical science, and if so, the specific degree earned by the person; and
- (4) Any memberships, in good standing, of the person (regardless of whether an employee or third party) with a self-regulatory organization of engineers, geologists, other geoscientists, or other professionals whose professional practice includes reserves evaluations or reserves audits, that:
- Admits members primarily on the basis of their educational qualifications;
  - Requires its members to comply with the professional standards of competence and ethics prescribed by the organization that are relevant to the estimation, evaluation, review, or audit of reserves data; and
  - Has disciplinary powers, including the power to suspend or expel a member.

For purposes of the proposed disclosure, the “person” could be either an individual or an entity. If the person is an entity, then the disclosures regarding technical qualifications in the paragraphs (3) and (4) would apply to the individual within the entity who is responsible for the technical aspects of the reserves estimation or audit. To the extent that the person does not have all of the technical qualifications above, the company would be required to discuss the reasons why it believes that the person is otherwise qualified to prepare the estimates or conduct the reserves audit, as applicable, and any risks associated with reserves estimates not prepared or audited by persons with such qualifications.<sup>123</sup>

### **Request for Comments**

- Should we require companies to disclose whether the person primarily responsible for preparing reserves estimates or conducting reserves audits meets the specified qualification standards, as proposed? Should we, instead, simply require companies to disclose such a person’s qualifications?
- Should we require disclosure regarding a person’s objectivity when a company prepares its reserves estimates in-house? Should the proposed disclosures regarding objectivity be required only if a company hires a third party to prepare its reserve estimates or conduct a reserves audit, as proposed?
- If a company prepares its reserves estimates in-house, should we require disclosure of any procedures that the company has taken to preserve that

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<sup>123</sup> See proposed Item 1202(a)(6)(v).

person's objectivity? Should we require disclosure of whether the internal person meets specified objectivity criteria? For example, should we apply the some of the same criteria that we propose to apply to third party preparers? If so, which ones?

- Consistent with the SPE's auditing guidance regarding internal auditors, should we require companies to disclose whether that person (1) is assigned to an internal-audit group which is (a) accountable to senior level management or the board of directors of the company and (b) separate and independent from the operating and investment decision making process of the company and (2) is granted complete and unrestricted freedom to report, to one or more principal executives or the board of directors, any substantive or procedural irregularities of which that person becomes aware?
- Should we require disclosure with other specific independence or objectivity standards and, if so, what?
- Should we revise any of the proposed provisions regarding a person's objectivity or technical qualifications? Should the proposal require disclosure of other criteria that would have bearing on determining whether the person is objective or qualified?
- Should a company be required to present risk factor disclosure if its reserves estimates were not prepared by a person meeting the objectivity and technical qualifications?

- Because of the inherent uncertainty regarding estimates of probable and possible reserves, should we require the proposed disclosure only if a company chooses to disclose probable or possible reserves?
- Should we require that a third party prepare reserves estimates or conduct a reserves audit if a company chooses to disclose probable or possible reserves estimates?
- Should we require the proposed disclosure only if the company is using technologies other than those which are allowed in our current definitions to establish levels of certainty?

**vi. Contents of third party preparer and reserves audit reports**

Currently, if the company represents that it relied on a third party for a portion of its filing, it must obtain consent from that third party.<sup>124</sup> In order to clarify which portion of the disclosures the third party is expertising, we propose that, if a company represents that its estimates of reserves are based on estimates prepared by a third party, the company must file a report of the third party as an exhibit to the relevant registration statement or report.<sup>125</sup> The proposal would require that report to include the following disclosure:

- The purpose for which the report is being prepared and for whom it is prepared;
- The effective date of the report and the date on which the report was completed;

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<sup>124</sup> See 17 CFR 229.601(b)(23).

<sup>125</sup> See proposed Item 1202(a)(7).

- The proportion of the company’s total reserves covered by the report and the geographic area in which the covered reserves are located;
- The assumptions, data, methods, and procedures used to conduct the reserves audit, including the percentage of company’s total reserves reviewed in connection with the preparation of the report, and a statement that such assumptions, data, methods, and procedures are appropriate for the purpose served by the report;
- A discussion of primary economic assumptions;
- A discussion of the possible effects of regulation on the ability of the registrant to recover the estimated reserves;
- A discussion regarding the inherent risks and uncertainties of reserves estimates;
- A statement that the third party has used all methods and procedures as it considered necessary under the circumstances to prepare the report; and
- The signature of the third party.

Similarly, if the company represents that a third party conducted a reserves audit of the reserves estimates, the company would be required to file a report of the third party as an exhibit to the relevant registration statement or report. We are not proposing that these reports be the full “reserves report” that is often very detailed and voluminous. Rather these proposed reports would summarize the scope of work performed by, and conclusions of, the third party. The proposed contents of these reports mirror the guidance issued by the Society of Petroleum Evaluation Engineers regarding the preparation of such reports.

We propose to define the term “reserves audit” as the process of reviewing certain of the pertinent facts interpreted and assumptions made that have resulted in an estimate of reserves prepared by others and the rendering of an opinion about the appropriateness of the methodologies employed, the adequacy and quality of the data relied upon, the thoroughness of the reserves estimation process, the classification of reserves appropriate to the relevant definitions used, and the reasonableness of the estimated reserves quantities.<sup>126</sup> The proposed definition would state that, in order to disclose that a “reserves audit” has been conducted, the report resulting from this review must represent an examination of at least 80% of the portion of the company’s reserves covered by the reserves audit. This definition is largely derived from the SPE’s reserves auditing guidelines.<sup>127</sup>

We propose to require that the report associated with such a reserves audit must include the following disclosure, based on the Society of Petroleum Evaluation Engineers’s audit report guidelines:

- The purpose for which the report is being prepared and for whom it is prepared;
- The effective date of the report and the date on which the report was completed;
- The proportion of the company’s total reserves covered by the report and the geographic area in which the covered reserves are located;

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<sup>126</sup> See proposed Item 1202(a)(9).

<sup>127</sup> Consistent with the SPE’s auditing guidelines, we note that a “reserves audit” is significantly different from a financial audit. See SPE Reserves Auditing Standards.

- The assumptions, data, methods, and procedures used to conduct the reserves audit, including the percentage of company's total reserves reviewed in connection with the preparation of the report, and a statement that such assumptions, data, methods, and procedures are appropriate for the purpose served by the report;
- A discussion of primary economic assumptions;
- A discussion of the possible effects of regulation on the ability of the registrant to recover the estimated reserves;
- A discussion regarding the inherent risks and uncertainties of reserves estimates;
- A statement that the third party has used all methods and procedures as it considered necessary under the circumstances to prepare the report;
- A brief summary of the third party's conclusions with respect to the reserves estimates; and
- The signature of the third party.

### **Request for Comment**

- Should we require a company to file reports from third party reserves preparers and reserves auditors containing the proposed disclosure when the company represents that a third party prepared its reserves estimates or conducted a reserves audit? As an alternative, should we not require that the third party's report be filed, but that the company must provide a description of the third party's report? If so, should we specify that the



company's description of the third party's report should contain the information that we propose to require in the third party's report?

- Should we specify the disclosures that need to be included in third party reports? If so, is the disclosure that we have proposed for the reserves estimate preparer's and reserves auditor's reports appropriate? Should these reports contain more or less information? If they should include more information, what other information should they include? If less, what proposed information is not necessary?
- In an audit, should we specify the minimum percentage of reserves that should be examined and determined to be reasonable? If so, what should that percentage be? Should it be 50%, 75%, 90% or some other percentage? If so, why?
- If the company engages multiple third parties to conduct reserves audits on different portions of its reserves, should the definition of reserves audit be conditioned on each third party evaluating at least 80% of the reserves covered by its reserves audit, as proposed? Is the scope of a reserves audit defined by geographic areas? If so, should the definition of a reserves audit be based on the third party's evaluation of 80% of the reserves located in the geographic areas covered by the reserves audit?
- Would disclosure that a company has hired a third party to audit only a portion of its reserves be confusing to investors? Is there a danger that investors will not be able to ascertain the extent of the reserves audit? Should we require that a company could not disclose that it has conducted

a reserves audit unless 80% of all of its reserves have been evaluated by a third party or, if the company hires multiple third parties, by all of the third parties collectively?

- Is the proposed definition of “reserves audit” appropriate? Should we revise this proposed definition in any way?

**vii. Solicitation of comments on process reviews**

The Society of Petroleum Engineer’s reserves auditing standards reference a third type of review, which it calls a “process review.”<sup>128</sup> It defines a process review as an investigation by a person who is qualified by experience and training equivalent to that of a reserves auditor to address the adequacy and effectiveness of an entity’s internal processes and controls relative to reserves estimation. However, it notes that a process review should not include an opinion relative to the reasonableness of the reserves quantities and should be limited to the processes and control system reviewed. The SPE’s standards state that, although such reviews may provide value to the entity, an external or internal process review is not of sufficient rigor to establish appropriate classifications and quantities of reserves and should not be represented to the public as being equivalent to an audit of reserves. We are not proposing requiring disclosure of whether a company has conducted a process review, as defined by the SPE. In so doing, we note the SPE’s admonition that such reviews are not as rigorous as a reserves audit. We are not proposing to prohibit disclosure of such process reviews because we believe that they may be beneficial to companies and shareholders. However, in order to help prevent confusion between the different levels of third-party participation, companies

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<sup>128</sup> See SPE Reserves Auditing Standards.

should clearly disclose the level and scope of work that was performed. In addition, a company should avoid using language which may lead investors to erroneously believe that a higher level of third-party review was performed.

### **Request for Comment**

- Should we require disclosure of whether a company has conducted a process review? Notwithstanding the relative lack of rigor of a process review compared to a reserves audit, would investors find such information useful?
- The proposal does not prohibit disclosure of process reviews. Is there a danger that the public may be confused by such disclosure? Should we prohibit disclosure of any type of reserves-related activity other than the preparation of the reserves estimates or a reserves audit?

#### **4. Proposed Item 1203 (Proved undeveloped reserves)**

We are proposing to require disclosure of the aging of proved undeveloped reserves (PUDs). Some of the commenters responding to the Concept Release expressed concerns regarding companies that carry alleged PUDs for lengthy time periods.<sup>129</sup> Long holding periods of such reserves raise the question whether the company has a bona fide intention or the capability to develop those reserves, even though the company has determined them to be economically producible. Several commenters recommended that we require a company to remove PUDs that have remained so classified for five years or

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<sup>129</sup> See letters from CIBC, Devon, EIA, D. McBride, Robinson, D. Ryder, and SPE.

longer.<sup>130</sup> PRMS guidelines indicate that five years is a benchmark for a reasonable timeframe to initiate the development of reserves, although they recognize that this timeframe depends on the specific circumstances. However, others suggested that a company should be able to characterize PUDs as such for longer than a five-year period if there are exceptional circumstances (such as extensive offshore projects) that justify continued inclusion of such reserves in the proved category.<sup>131</sup>

We propose to address these concerns through disclosure. We believe that the need for such disclosure is heightened as a result of our proposed amendments that would ease the requirements for recognizing PUDs and thereby increase the amount of PUDs disclosed in filings, even though the properties representing such proved reserves have not yet been developed and therefore do not provide the company with cash flow.

Proposed Item 1203 would require an oil and gas company to prepare a table showing, for each of the last five fiscal years and by product type, proved reserves estimated using current prices and costs in the following categories:

- Proved undeveloped reserves converted to proved developed reserves during the year; and
- Net investment required to convert proved undeveloped reserves to proved developed reserves during the year.<sup>132</sup>

A form of the proposed PUDs development table is set forth below:

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<sup>130</sup> See letters from Devon, EIA, D. McBride, D. Olds, SPE, and Ultra. This is consistent with PRMS guidance. See Section 2.1.3.2 of PRMS.

<sup>131</sup> See letters from Denbury, Devon, EIA, D. McBride, D. Olds, Robinson, SPE, and StatoilHydro.

<sup>132</sup> See proposed Item 1204.

### Conversion of Proved Undeveloped Reserves

Fiscal Year	Proved Undeveloped Reserves Converted to Proved Developed Reserves			Investment in Conversion of Proved Undeveloped Reserves to Proved Developed Reserves, \$
	Oil (mmbbls)	Gas (mmcf)	Product A (measure)	
2004				
2005				
2006				
2007				
2008				

This table would allow investors to assess how a company is managing its PUDs. In addition, proposed Item 1203 would require disclosure, by product type, of any PUDs which have remained undeveloped for five years or more and the reasons for the lack of development. The proposed item would also require a company to disclose its plans to develop PUDs and to further develop proved oil and gas reserves. Finally, the company would be required to discuss any material changes to PUDs.

**Request for Comment**

- Should we adopt the proposed table? Alternatively, should we simply require companies to reclassify their PUDs after five years?
- Should the table require disclosure of other categories of changes to the status of PUDs, such as acquisitions, removals, and production? Should we add any categories?
- Some of the abuse related to PUD disclosure may be related to companies' desire to show proved reserves in light of our prohibition on disclosure of probable reserves. Would the proposed rules permitting disclosure of

probable reserves reduce the incentive to categorize reserves as PUDs? If so, is the proposed table necessary?

- Should we require disclosure of the reasons for maintaining PUDs that have been classified as PUDs for more than five years, as proposed? If not, why not?
- Should we require a company to disclose its plans to develop PUDs and to further develop proved oil and gas reserves, as proposed? If not, why not?
- Should we require the company to discuss any material changes to PUDs that are disclosed in the table? If not, why not?

**5. Proposed Item 1204 (Oil and gas production)**

Item 3 of Industry Guide 2 currently requires disclosure, by geographic area, of oil and gas production. We propose codifying that requirement in proposed Item 1204 of Regulation S-K.<sup>133</sup> In addition, the proposed Item would require such disclosure to be made in tabular form for ease of presentation. As a practical matter, it appears that most companies already provide this disclosure in tabular form. A form of the proposed table is set forth below:

**Oil and Gas Production, Sales Prices, and Production Costs**

Location	Oil			Gas			Product A		
	Production (mbbls)	Sales Price (\$US/bbl)	Production Cost (\$US/boe)	Production (mmcf)	Sales Price (\$US/mcf)	Production Cost (\$US/mcfe)	Production (measure)	Sales Price (\$US/measure)	Production Cost (\$US/measure)
<b>Geographic Area A</b>									
2005									
2006									
2007									
<b>Geographic Area B</b>									

<sup>133</sup> See proposed Item 1204.

Geographic Area C									
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The disclosure that proposed Item 1204 would require is very similar to the disclosure called for by existing Industry Guide 2, but would be modified in two respects. First, proposed Item 1204 would use the definition of the term “geographic area” in proposed Item 1201(d), rather than use the current reference to SFAS 69, which only requires disclosure by country or, if appropriate, groups of countries.<sup>134</sup>

In addition, we propose to eliminate existing instructions to Item 3 of Industry Guide 2 that we believe are no longer necessary. These instructions relate to the following topics:

- Separate reporting of production through processing plant ownership;
- Inclusion of only marketable production of gas on an “as sold” basis, including the exclusion of flared gas, injected gas, and gas consumed in operations;
- Determination of transfer price of oil and gas; and
- Means to calculate average production costs.

We believe that these instructions are no longer necessary in light of changes in the oil and gas industry and markets and relate to issues that are commonly understood and do not require additional instruction. Several of these instructions have very limited application.

**Request for Comments**

- Should we adopt the proposed table?

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<sup>134</sup> See SFAS 69.

- Should the disclosure be made based on the proposed definition of “geographic area,” or should we continue to follow the definition set forth in SFAS 69?
  - Should we eliminate the instructions listed above, as proposed? If not, which instructions should we retain? Please explain why those instructions continue to be useful.
- 6. Proposed Item 1205 (Drilling and other exploratory and development activities)**

Item 6 of Industry Guide 2 currently calls for disclosure of drilling activities by geographic area. We propose to codify this disclosure as Item 1205 of Regulation S-K, in tabular form.<sup>135</sup> A form of the proposed table is set forth below:

**Drilling Activities  
[Geographic area]**

	Exploratory Wells		Development Wells		Extension Wells	
	Gross	Net	Gross	Net	Gross	Net
Oil						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Natural Gas						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Product A						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Suspended						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Dry						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Total						

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<sup>135</sup> See proposed Item 1205.



We are also proposing several revisions to the existing disclosures. First, the existing item calls for disclosure by geographic area. We propose to clarify that, for purposes of this item, disclosure should be made pursuant to the definition of “geographic area” set forth in proposed Item 1201(d). Second, we propose to add two categories of wells:

- Extension wells and
- Suspended wells.

Currently, Industry Guide 2 only calls for disclosure of the drilling of exploratory and development wells. However, we believe that distinguishing between extension well drilling and exploratory drilling is important because exploratory drilling typically is associated with the discovery of new fields, and thus new sources of oil and gas, rather than merely the extension of an existing field. Thus, we believe that disclosure of extension wells should be distinct from disclosure about exploratory wells.

Similarly, companies sometimes suspend drilling of a well before completion. Because the definition of a dry well requires that the company report the well as abandoned, these suspended drilling projects are not reflected as drilling activities under the current disclosure requirements. Although suspension of drilling does not necessarily mean that the company has abandoned the well, such activities can consume significant capital resources. Thus, we propose to include this category of drilling activity in the disclosure item.

Proposed new Item 1205 would also require disclosure of any other exploratory or development activities that the company has conducted over the prior three years, including implementation of mining methods for the extraction of oil or gas. We

recognize that resources in continuous accumulations often require extraction methods that differ significantly from the extraction methods used in connection with traditional oil or gas wells. This proposed new disclosure would provide investors with information about an oil and gas company’s full spectrum of exploratory and development activities.

**Request for Comment**

- Should we adopt the proposed table? Should the disclosures be made based on the definition of “geographic area” in proposed Item 1201(d)?
- Should we require separate disclosure about the two new proposed categories of wells—extension wells and suspended wells? Does distinguishing these types of wells from exploratory wells and dry wells provide enough clarity regarding the types of exploratory or development activities?

**7. Proposed Item 1206 (Present activities)**

Proposed Item 1206 would codify existing Item 7 of Industry Guide 2, which calls for disclosure of present activities, including the number of wells in the process of being drilled (including wells temporarily suspended), waterfloods in process of being installed, pressure maintenance operations, and any other related activities of material importance.<sup>136</sup> We are proposing no substantive changes to the existing disclosure item except clarification that the meaning of the term “geographical area” would be based on the proposed definition of that term in proposed Item 1201(d).<sup>137</sup>

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<sup>136</sup> See proposed Item 1206.

<sup>137</sup> See proposed Item 1206(a).

### **Request for Comment**

- Should the disclosure of present activities be made based on the definition of “geographic area” in proposed Item 1201(d)?
- Should we adopt any other changes to the disclosures currently set forth in existing Item 7 of Industry Guide 2 that we propose to codify in Item 1206?

#### **8. Proposed Item 1207 (Delivery commitments)**

Proposed Item 1207 would codify existing Item 8 of Industry Guide 2, which calls for disclosure of arrangements under which the company is required to deliver specified amounts of oil or gas and how the company intends to meet such commitments.<sup>138</sup> We are not proposing any substantive changes to the disclosure currently called for by Item 8. However, we are proposing a significant amount of restructuring and rewording of the disclosure item to make it easier to understand. These proposed changes largely involve separating embedded lists into separate subparagraphs and general plain English revisions but are not intended to change the substance of the disclosures.

### **Request for Comment**

- Are the proposed revisions appropriate? Do the proposed revisions make any unintended substantive changes to the existing disclosures?
- Should we adopt any substantive changes to the disclosures currently set forth in Item 8 of Industry Guide 2 that we propose to codify in Item 1207?

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<sup>138</sup> See proposed Item 1207.

- Is this disclosure requirement still necessary? Do oil and gas companies still enter into such delivery commitments? Are they material?

**9. Proposed Item 1208 (Oil and gas properties, wells, operations, and acreage)**

Proposed Item 1208 would codify existing Items 4 and 5 of Industry Guide 2.

The proposed item also would require new disclosures not currently called for by Industry Guide 2 that are described below.

**i. Enhanced description of properties disclosure requirement**

Item 102 of Regulation S-K provides a very broad, general description of the properties and facilities that a company must disclose in its filings. We propose to add a paragraph to Item 1208 that better illustrates the types of properties and the types of disclosures for those properties that apply to oil and gas companies.<sup>139</sup> The proposed paragraph would require a company to do the following:

- Identify and describe generally its material properties, plants, facilities, and installations;
- Identify the geographic area in which they are located;
- Indicate whether they are located onshore or offshore; and
- Describe any statutory or other mandatory relinquishments, surrenders, back-ins, or changes in ownership.

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<sup>139</sup> See proposed Item 1208(a).

## **Request for Comment**

- Are the proposed disclosure enhancements regarding oil and gas properties appropriate? Would this enhanced disclosure be helpful to investors?
- Should the disclosures be made based on the definition of “geographic area” in proposed Item 1201(d)?
- Do we need to define any of the terms in the proposed language?

### **ii. Wells and acreage**

Proposed Item 1208 would require separate tabular disclosure of the number of the registrant’s producing wells, expressed in terms of both gross wells and net wells, by geographic area.<sup>140</sup> These disclosures are currently called for by Items 4 and 5 of Industry Guide 2. This proposed table would illustrate oil wells and gas wells in both conventional and continuous accumulations and other wells for products from continuous accumulations. A form of the proposed table is set forth below:

#### **Wells**

Location	Producing Wells	
	Gross	Net
Geographic Area A		
Oil Wells		
Natural Gas Wells		
Product A Wells		
Total		
Geographic Area B		
Oil Wells		
Natural Gas Wells		
Product A Wells		
Total		

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<sup>140</sup> See proposed Item 1208(b) and (c).

Similarly, it would require tabular disclosure, by geographic area, of the company’s total gross and net developed acres (that is, acres spaced or assignable to productive wells) and undeveloped acres, including leases and concessions.<sup>141</sup> A form of the proposed table is set forth below:

**Acreage**

	Developed Acres		Undeveloped Acres	
	Gross	Net	Gross	Net
Geographic Area A				
Geographic Area B				
Geographic Area C				
Total				

**Request for Comment**

- Is the proposed table appropriate? Is there a better way to disclose such information?
- Should the disclosures be made based on the definition of “geographic area” in proposed Item 1201(d)?
- Is it necessary to disclose wells and acreage in conventional accumulations separate from wells and acreage in continuous accumulations, as proposed?
- Is this disclosure requirement still necessary? Is disclosure of the number of wells and acreage material? Should we require the disclosures related to wells and acreage only if there is a high concentration of production or reserves attributable to a few wells or limited acreage? If so, should we specify what that concentration would be?

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<sup>141</sup> See proposed Item 1208(e) and (f).

**iii. New proposed disclosures regarding extraction techniques and acreage**

As noted previously, some oil and gas resources require extraction techniques other than traditional oil and gas wells. Because we are adding non-traditional resources, such as bitumen, to the definition of oil and gas producing activities, we believe that it is appropriate for companies to describe the techniques that the company is using to extract the resources if it is not using a well. Thus, we are proposing to add a new requirement for companies extracting hydrocarbons through means other than wells to provide a discussion of such operations.<sup>142</sup> This disclosure requirement has been drafted broadly to allow for unanticipated developments in extraction technologies.

Proposed Item 1208 also would require a company to disclose, for unproved properties:

- The existence, nature (including any bonding requirements), timing, and cost (specified or estimated) of any work commitments; and
- By geographic area, the net area of unproved property for which the registrant expects its rights to explore, develop, and exploit to expire within one year.<sup>143</sup>

Finally, the proposed Item would continue to require disclosure of areas of acreage concentration, and, if material, the minimum remaining terms of leases and concessions.<sup>144</sup>

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<sup>142</sup> See proposed Item 1208(d).

<sup>143</sup> See proposed Item 1208(g).

<sup>144</sup> See proposed Item 1208(h).

## **Request for Comment**

- Should we require more specific disclosure regarding extraction activities that do not involve wells? Should this proposed item remain open-ended to permit description of unanticipated technologies?
- Is the proposed disclosure for unproved properties appropriate? Should the proposed disclosure for unproved properties be set forth in proposed Item 1208? Should we move such disclosure to the reserves table in proposed Item 1202, where reserves are discussed?

### **10. Proposed Item 1209 (Discussion and analysis for registrants engaged in oil and gas activities)**

We propose to add new Item 1209, which would provide topics that a company should address either as part of Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A)<sup>145</sup> or in a separate section. First, the proposed Item would require companies to discuss material changes in proved reserves and, if disclosed, probable and possible reserves, and the sources to which such changes are attributable, including changes made due to:

- Changes in prices;
- Technical revisions; and
- Changes in the status of any concessions held (such as terminations, renewals, or changes in provisions).

We note that SFAS 69 currently requires reconciliation of changes to reserves estimates. This proposal is intended to supplement the SFAS 69 disclosure because SFAS 69

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<sup>145</sup> See 17 CFR 229.303.



currently does not provide for these categories of changes. We believe such disclosure would be helpful because developments in the oil and gas industry and markets, including more liquid commodities markets and expansion of interests in foreign countries involving concessions, have made distinguishing changes resulting from these factors more important.

The proposed Item also would require companies to discuss technologies used to establish the appropriate level of certainty for any material additions to, or increases in, reserves estimates. Finally, the proposed Item would list matters that a company should consider in discussing known trends, demands, commitments, uncertainties, and events that are reasonably likely to have a material effect on the company. These matters include, but are not limited to, the following:

- Prices and costs;
- 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 registrant's recent ability to convert proved undeveloped reserves to proved developed reserves, and, if disclosed, probable reserves to proved reserves and possible reserves to probable or proved reserves;
- Anticipated capital expenditures directed toward conversion of proved undeveloped reserves to proved developed reserves, and, if disclosed,

probable reserves to proved reserves and possible reserves to probable or proved reserves;

- Anticipated exploratory activities, well drilling, and production;
- 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; and
- Potential effects of different forms of rights to resources, such as production sharing contracts, on operations.

The MD&A is typically presented in a self-contained section of the registration statement or report. However, the disclosure requirements that would comprise proposed new Subpart 1200 of Regulation S-K would cause a substantial amount of an oil and gas company's disclosure to appear in tabular format, providing an outline of much of a company's operations. Because the tables will present many of the types of changes that management often discusses in its MD&A, we believe it may be more helpful to investors to locate such discussion close to the tables themselves. Thus, to the extent that any discussion or analysis of known trends, demands, commitments, uncertainties, and events that are reasonably likely to have a material effect on the company is directly relevant to a particular disclosure required by Subpart 1200, the company would be able to include that discussion or analysis with the relevant table, with appropriate cross-references, rather than including it in its general MD&A section.<sup>146</sup>

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<sup>146</sup> See proposed Item 1209(b).

## **Request for Comment**

- Proposed Item 1209 is not intended to increase a company's disclosure requirements, but specify disclosures already required generally by MD&A. Is such an item helpful?
- Are the proposed topics that an oil and gas company should consider discussing as part of MD&A, whether in the main MD&A section or in conjunction with the relevant table, appropriate? Are there other topics that an oil and gas company should consider discussing?
- Should we permit such discussions in conjunction with the relevant table as proposed? Would this aid comparability of the disclosures? Or should we keep MD&A as a self-contained section?

## **IV. Proposed Conforming Changes to Form 20-F**

Form 20-F is the form on which foreign private issuers file their annual reports and Exchange Act registration statements. Currently, Form 20-F contains instructions that are similar to those in Item 102 of Regulation S-K. However, rather than referring to Industry Guide 2 for disclosures regarding oil and gas producing activities, Form 20-F contains its own “Appendix A to Item 4.D—Oil and Gas” (Appendix A) that provides guidance for oil and gas disclosures for foreign private issuers.<sup>147</sup> Appendix A is significantly shorter, and provides far less guidance regarding disclosures, than proposed Subpart 1200 or Industry Guide 2.

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<sup>147</sup> See Appendix A to Item 4.D—Oil and Gas of Form 20-F [17 CFR 249.220f].

We believe that the proposed Subpart 1200 would be appropriate disclosure for all public companies engaged in oil and gas producing activities, including foreign private issuers. The added guidance in Subpart 1200 should promote more consistent and comparable disclosures among oil and gas companies. It is our understanding that many of the larger foreign private issuers already provide disclosure in their filings with the Commission comparable to the disclosure provided by domestic companies. Thus, we are proposing to revise Form 20-F to incorporate Subpart 1200 with respect to oil and gas disclosures and delete Appendix A to Item 4.D in that form.<sup>148</sup> We propose to revise the Instructions to Item 4 of Form 20-F to refer to Subpart 1200 instead of Appendix A.<sup>149</sup>

Thus, the proposal would continue to require the same type of disclosure currently required by Appendix A regarding reserves and production. In addition, the proposal would require foreign private issuers to comply with the following disclosures currently in Industry Guide 2 that we propose to codify in Subpart 1200 of Regulation S-K:

- Drilling and other exploratory and development activities (Item 1205);
- Present activities (Item 1206);
- Delivery commitments (Item 1207); and
- Oil and gas properties, wells, operations, and acreage (Item 1208).

Finally, applying the proposed Subpart 1200 on foreign private issuers would impose the completely new disclosures that we are proposing for domestic companies in this release, including the following:

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<sup>148</sup> We are not proposing changes to Form 40-F, which is the form on which Canadian companies reporting under the multi-jurisdictional disclosure system file Exchange Act registration statements and annual reports with the Commission, because the disclosures regarding oil and gas activities for those companies are not currently governed by our rules.

<sup>149</sup> See proposed Instruction 2 to Item 4.

- Reserves from non-traditional sources (i.e., bitumen, shale, coalbed methane);
- Optional disclosure of probable and possible reserves;
- Optional disclosure of oil and gas reserves' sensitivity to price;
- Proved undeveloped reserves held for five years or more and an explanation of why they should continue to be considered proved;
- Technologies used to establish additions to reserves estimates;
- Material changes due to technology, prices, and concession conditions;
- The objectivity and qualifications of any third party primarily responsible for preparing or auditing the reserves estimates, if the company represents that it has enlisted a third party to conduct a reserves audit;
- The qualifications and measures taken to ensure the independence and objectivity of any employee primarily responsible for preparing or auditing the reserves estimates; and
- Filing of the report of a third party if a company represents that it is relying on a third party to prepare the reserves estimates or conduct a reserves audit.

Appendix A currently allows a foreign private issuer to exclude required disclosures about reserves and agreements if its home country prohibits the disclosures. Because these considerations still apply to such foreign private issuers, we propose to

move that provision from Appendix A, which we propose to delete, to the Instructions to Item 4 of Form 20-F.<sup>150</sup>

Also, similar to our revisions to Item 102 of Regulation S-K, we propose to limit the Instruction to Item 4.D of Form 20-F to extractive enterprises conducting activities other than oil and gas producing activities because Subpart 1200 would cover companies conducting oil and gas producing activities.<sup>151</sup>

### **Request for Comment**

- Should we delete Appendix A and refer to Subpart 1200 with respect to Form 20-F, as proposed? Why? Should we expand the requirements of Form 20-F to require more disclosure than currently required by Appendix A, as proposed? Conversely, should we only update Appendix A to reflect the proposed new definitions and formats for disclosing reserves and production?
- Would the proposed reference to Subpart 1200 in Form 20-F significantly change the information currently disclosed by foreign private issuers? If so how? Would such a change be appropriate?
- Is the proposed exception for foreign laws that prohibit disclosure about reserves and agreements appropriate? Do such laws affect domestic companies as well? Should Subpart 1200 have a general instruction with respect to such foreign laws?

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<sup>150</sup> Id.

<sup>151</sup> See proposed Instruction 4.D of Form 20-F.

- Are the proposed revisions to Instructions to Item 4.D appropriate with respect to foreign private issuers that have extractive activities other than oil and gas producing activities?

## **V. Impact of Proposed Amendments on Accounting Literature**

### **A. Consistency with FASB and IASB Rules**

Several commenters noted that changing the definition of the term “proved reserves” in Rule 4-10(a) of Regulation S-X would affect both the full cost accounting treatment of Rule 4-10(c) and the successful efforts accounting treatment of Statement of Financial Accounting Standard No. 19 (SFAS 19).<sup>152</sup> One commenter suggested the Commission consider the impact on the required immediate expensing of seismic tests under SFAS 19.<sup>153</sup> In addition, a revised definition could affect the primary inputs to the standardized measure, such as static operating conditions, year-end prices and costs and the 10% discount rate, which would affect the full cost ceiling under the full cost accounting treatment.<sup>154</sup> These changes could also affect how costs are expensed.<sup>155</sup> Companies should clearly explain the changes in their filings.<sup>156</sup> Commenters recommended that the Commission coordinate corresponding rule changes with the FASB and IASB to ensure consistency of the rules.<sup>157</sup> Some commenters remarked that the IASB is currently considering establishing a set of guidelines for oil and gas

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<sup>152</sup> See letters from D&T, Grant Thornton, and KPMG.

<sup>153</sup> See letter from Audit Quality.

<sup>154</sup> See letters from Audit Quality, KPMG, and PWC.

<sup>155</sup> See letter from KPMG.

<sup>156</sup> Id.

<sup>157</sup> See letters from Audit Quality, CFA, KPMG, and PWC.

extractive activities, including a definition of oil and gas reserves, and recommended that the Commission align its regulations with those guidelines. We intend to discuss our rulemaking project with the FASB and IASB and work with them to harmonize the rules upon effectiveness of the proposed rules, if adopted.

**B. Change in Accounting Principle or Estimate**

One commenter noted that the proposals would raise the question of whether a change in the definition of proved reserves is a change in accounting principle (which requires retroactive revision of past years) or a change in an estimate caused by a change in accounting principle under SFAS 154.<sup>158</sup> The proposed change in the definition of proved reserves and the change from using single-day year-end price to an average price should be viewed as a change in accounting principle, or a change in the method of applying an accounting principle, that is inseparable from a change in accounting estimate. Therefore, this change would be considered a change in accounting estimate pursuant to Statement of Financial Accounting Standard No. 154 “Accounting Changes and Error Corrections” (SFAS 154) and would be accounted for prospectively.

**Request for Comment**

- Are the proposed changes more properly characterized as a change in accounting principle or a change in estimate under SFAS 154?
- Would it be appropriate to consider the changes as a change in accounting principle, but specify that no retroactive revision of past years would be required?

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<sup>158</sup> See letter from Audit Quality.



- If we required retroactive revision of past years, would companies have the historical engineering and scientific data to make such revisions? If not, are there alternatives to retroactive revision that we should consider?

**C. Differing Capitalization Thresholds Between Mining Activities and Oil and Gas Producing Activities**

As noted elsewhere in this release, extraction of products such as bitumen would be considered oil and gas producing activities, and not mining activities, if we adopt the proposals. Under current U.S. accounting guidance, costs associated with proven plus probable mining reserves may be capitalized for operations extracting products through mining methods, like bitumen. Under the proposed rules, bitumen extraction and operations that produce oil or gas through mining methods would be included under oil and gas accounting rules, which only permit capitalization of costs associated with proved reserves.<sup>159</sup> Moreover, the mining guidelines do not provide specified percentages for establishing levels of certainty for proven or probable reserves for mining activities. It is possible that these differences could result in changing reserves estimates for these resources during the transition to the new rules, if adopted.

**Request for Comment**

- How should we address these inconsistencies between oil and gas accounting rules and mining accounting rules?
- Should we permit companies that extract, through mining methods, materials from which oil and gas can be produced to continue to capitalize costs under mining rules, or should we require them to capitalize costs

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<sup>159</sup> See Rule 4-10(c) of Regulation S-X [17 CFR 210.4-10(c)].

based on oil and gas rules? Are there circumstances involved with mining operations, different from oil and gas operations, that justify capitalization of costs of proved plus probable reserves, as opposed to only costs of proved reserves?

**D. Price Used to Determine Proved Reserves for Purposes of Capitalizing Costs**

Statement of Financial Accounting Standard No. 19 “Financial Accounting and Reporting by Oil and Gas Producing Companies” (SFAS 19) requires the units-of-production method to be used for amortizing acquisition costs of proved properties and development costs. As noted above, we are not proposing to change the use of the period end price assumption when determining reserves for accounting purposes. Changes in the definition of reserves and the price used to determine whether resources are reserves (i.e., whether they are economically producible) would impact the determination of the quantity of reserves, and therefore would impact the amount of amortization expense that is recorded in the income statement. It is expected that, for most companies, based on the relationship between the amount of proved reserves and the production in a given period, the impact of such a change on the financial statements would not be significant and would not have a significant impact on comparability between periods.

**Request for Comment**

- Would the effect of such changes be material or have a material effect on historical amortization levels?
- Would the effect of such changes be material or have a material effect on comparability? Please provide any empirical evidence to support your conclusion.

- Would it be appropriate to continue to require the use of the year-end price for purposes of determining reserves for purposes of amortization expense while using a different price for purposes of disclosing reserves estimates in Commission filings? This would result in a different value associated with the use of the term “proved reserves” for purposes of disclosure, as opposed to the use of that term for purposes of accounting. Would this be confusing? Should we use a different term? Should we otherwise clarify the two different meanings of that term in different contexts?

## **VI. Impact of the Proposed Codification of Industry Guide 2 on Other Industry Guides**

There currently are six Securities Act Industry Guides:

- Guide 2—Disclosure of oil and gas operations;
- Guide 3—Statistical disclosure by bank holding companies;
- Guide 4—Prospectuses relating to interests in oil and gas programs;
- Guide 5—Preparation of registration statements relating to interests in real estate limited partnerships;
- Guide 6—Disclosures concerning unpaid claims and claim adjustment expenses of property-casualty insurance underwriters; and
- Guide 7—Description of property by issuers engaged, or to be engaged, in significant mining operations.

There also are four Exchange Act Industry Guides:

- Guide 2—Disclosure of oil and gas operations;
- Guide 3—Statistical disclosure by bank holding companies;

- Guide 4—Disclosures concerning unpaid claims and claim adjustment expenses of property-casualty underwriters; and
- Guide 7—Description of property by issuers engaged, or to be engaged, in significant mining operations.

As discussed above, the specific disclosures that relate to oil and gas operations currently are set forth in both Securities Act and Exchange Act Industry Guide 2, as well as Securities Act Industry Guide 4. The codification of the Industry Guide 2 disclosures that we are proposing in this release should not have any impact on the manner in which the other Industry Guides are applied to company disclosures. Those guides will remain in effect in their current form and companies in the industries to which the guides relate will continue to include disclosure in response to the guides in their Securities Act and Exchange Act filings. In the future, the staff plans to review and update each of the Industry Guides; as part of the initiative to update a particular guide, we would propose to codify it as a new subpart of Regulation S-K.

### **Request for Comment**

- Is it appropriate to codify Industry Guide 2 separately from the other industry guides? Should we merely amend Industry Guide 2 and codify it with all of the other industry guides when they have been updated?
- Would the codification of Industry Guide 2 overrule or otherwise affect any of the disclosures required in the other Industry Guides?

### **VII. Solicitation of Comment Regarding the Application of Interactive Data Format to Oil and Gas Disclosures**

Many oil and gas companies already present much of their oil and gas disclosure in tabular form. In this release, we propose to require that disclosure in tabular form.

Such tabular disclosure appears to be conducive to presentation in an interactive data format that uses a standard list of electronic tags that a variety of software applications can recognize and process. We recently proposed to require that financial statement information be presented in interactive data format in addition to the currently required format.<sup>160</sup> We seek comment on the desirability of rules that would permit, or require, oil and gas companies to present the tabular disclosures in proposed Subpart 1200 in interactive data format in addition to the currently required format. We note that at this time, there is no well-developed standard list of electronic tags for the tabular disclosure proposed in this release.

### **Request for Comment**

- Should we adopt rules that require oil and gas disclosures to be provided in interactive data format? Instead of requiring such formatting, should we only permit the filing of oil and gas disclosures in interactive data format? What are the principal factors that we should consider in making these decisions?
- If we require oil and gas disclosures to be filed in interactive data format, should we provide for a voluntary phase-in period to create a well-developed standard list of electronic tags? Without a requirement, would the development of products for using interactive data meet the needs of investors, analysts, and others who seek to use interactive data? Would a large percentage of oil and gas companies provide interactive data voluntarily and follow the same standard, if not required to do so?

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<sup>160</sup> See Release No. 33-8924 (May 30, 2008) [73 FR 32794].

- Would investors, analysts, and others find presentation of oil and gas disclosures helpful if presented in interactive data format? In what ways would such users of the information find such a format beneficial?
- As we note above, there is not currently a well-developed standard list of electronic tags for the oil and gas disclosures. Are there any obstacles to creating a useful standard list of electronic tags for the oil and gas disclosures? Is the type of data presented in the proposed table conducive to interactive data format? Would it be particularly difficult to create standard electronic tags for any of the proposed data? Would there be any obstacles to providing comparable data in interactive format?
- Would it be useful for the data in the proposed tables to interact with other data in Commission filings? If so, which data?
- If we adopt rules requiring oil and gas disclosures in interactive data format, should we require the use of the eXtensible Business Reporting Language (XBRL) standard? Are any other standards becoming more widely used or otherwise superior to XBRL? What would the advantages of any such other standards be over XBRL?

### **VIII. Proposed Implementation Date**

We propose to require companies to begin complying with the proposed disclosure requirements, if adopted, 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 December 31, 2009, and after. We believe that this time period would be appropriate to enable companies to familiarize themselves with the new rules. We would require that

all companies begin complying with the disclosure requirements at the same time to maximize comparability of disclosure. Therefore, we would not permit early adoption of the proposed disclosure requirements.

### **Request for Comment**

- Should we provide a delayed compliance date, as proposed above? If so, is the proposed date appropriate? Should we provide more or less time for companies to familiarize themselves with the proposed amendments?
- If we provide a delayed compliance date, should we permit early adoption by companies?

### **IX. General Request for Comment**

We request and encourage any interested person to submit comments regarding:

- The proposed rule changes and additions that are the subject of this release;
- Additional or different changes; or
- Other matters that may have an effect on the proposals contained in this release.

We request comment from the point of view of registrants, investors, and other users of information about the disclosures that should be required with regard to oil and gas companies and the corresponding definitions of terms used in those disclosure requirements.

## **X. Paperwork Reduction Act**

### **A. Background**

The proposed rules and amendments contain “collection of information” requirements within the meaning of the Paperwork Reduction Act of 1995.<sup>161</sup> We are submitting these to the Office of Management and Budget for review and approval in accordance with the Paperwork Reduction Act.<sup>162</sup> The titles for this information are:

- (1) “Regulation S-K” (OMB Control No. 3235-0071);<sup>163</sup>
- (2) “Industry Guides” (OMB Control No. 3235-0069);
- (4) “Form S-1” (OMB Control No. 3235-0065);
- (5) “Form S-4” (OMB Control Number 3235-0324);
- (6) “Form F-1” (OMB Control Number 3235-0258);
- (7) “Form F-4” (OMB Control Number 3235-0325);
- (8) “Form 10” (OMB Control No. 3235-0064);
- (9) “Form 10-K” (OMB Control No. 3235-0063); and
- (10) “Form 20-F” (OMB Control No. 3235-0063).

We adopted all of the existing regulations and forms pursuant to the Securities Act and the Exchange Act. These regulations and forms set forth the disclosure requirements for annual reports<sup>164</sup> and registration statements that are prepared by issuers

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<sup>161</sup> 44 U.S.C. 3501 *et seq.*

<sup>162</sup> 44 U.S.C. 3507(d) and 5 CFR 1320.11.

<sup>163</sup> The paperwork burden from Regulation S-K and the Industry Guides is imposed through the forms that are subject to the disclosures in Regulation S-K and the Industry Guides and is reflected in the analysis of those forms. To avoid a Paperwork Reduction Act inventory reflecting duplicative burdens, for administrative convenience we estimate the burdens imposed by each of Regulation S-K and the Industry Guides to be a total of one hour.

<sup>164</sup> The pertinent annual reports are those on Forms 10-K and 20-F.



to provide investors with the information they need to make informed investment decisions in registered offerings and in secondary market transactions.

Our proposed amendments to these existing forms are intended to modernize and update our reserves definitions to better reflect changes in the oil and gas industry and markets and new technologies that have occurred in the decades since the current rules were adopted, including expanding the scope of permissible technologies for establishing certainty levels of reserves, reserves classifications that a company can disclose in a Commission filing, and the types of resources that can be included in a company's reserves, as well as providing information regarding the objectivity and qualifications of any third party primarily responsible for preparing or auditing the reserves estimates, if the company represents that it has enlisted a third party to conduct a reserves audit, and the qualifications and measure taken to assure the independence and objectivity of any employee primarily responsible for preparing or auditing the reserves estimates. The proposals also are intended to codify, modernize, and centralize the disclosure items for oil and gas companies into Regulation S-K. Finally, the proposals are intended to harmonize oil and gas disclosures by foreign private issuers with disclosures by domestic companies. Overall, the proposed amendments attempt to provide improved disclosure about an oil and gas company's business and prospects without sacrificing clarity and comparability, which provide protection and transparency to investors.

The hours and costs associated with preparing disclosure, filing forms, and retaining records constitute reporting and cost burdens imposed by the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number.

Much, but not all, of the information collection requirements related to annual reports and registration statements would be mandatory. There would be no mandatory retention period for the information disclosed, and the information disclosed would be made publicly available on the EDGAR filing system.

## **B. Summary of Information Collections**

The proposals would increase existing disclosure burdens for annual reports on Forms 10-K<sup>165</sup> and 20-F and registration statements on Forms 10, 20-F, S-1, S-4, F-1, and F-4 by creating the following new disclosure requirements, many of which were requested by industry participants:

- Disclosure of reserves from non-traditional sources (i.e., bitumen, shale, coalbed methane) as oil and gas reserves;
- Optional disclosure of probable and possible reserves;
- Optional disclosure of oil and gas reserves' sensitivity to price;
- Disclosure of the development of proved undeveloped reserves, including those that are held for five years or more and an explanation of why they should continue to be considered proved;
- Disclosure of technologies used to establish additions to reserves estimates;

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<sup>165</sup> The proposed disclosure requirements regarding oil and gas properties and activities are in Form 10-K as well as the annual report to security holders required pursuant to Rule 14a-3(b) [17 CFR 240.14a-3(b)]. Form 10-K permits the incorporation by reference of information in the Rule 14a-3(b) annual report to security holders to satisfy the disclosure requirements of Form 10-K. The analysis that follows assumes that companies would either provide the proposed disclosure in a Form 10-K only, if the company is not subject to the proxy rules, or would incorporate the required disclosure into the Form 10-K by reference to the Rule 14a-3(b) annual report to security holders if the company is subject to the proxy rules. This approach takes into account the burden from the proposed disclosure requirements that are included in both the Form 10-K and in Regulation 14A or 14C.

- Disclosure regarding material changes due to technology, prices, and concession conditions;
- The objectivity and qualifications of any third party primarily responsible for preparing or auditing the reserves estimates, if the company represents that it has enlisted a third party to conduct a reserves audit;
- The qualifications and measures taken to assure the independence and objectivity of any employee primarily responsible for preparing or auditing the reserves estimates;
- If a company represents that it is relying on a third party to prepare the reserves estimates or conduct a reserves audit, filing a report prepared by the third party; and
- Disclosure based on a new definition of the term “by geographic area.”

In addition, the amendments would harmonize the disclosure requirements that apply to foreign private issuers with the disclosure requirements that apply to domestic issuers with respect to oil and gas activities. In particular, the proposal would require foreign private issuers to disclose the information required by proposed Items 1205 through 1208 of Regulation S-K regarding drilling activities, present activities, delivery commitments, wells, and acreage, which they are not required to provide currently under Appendix A to Form 20-F. These proposed disclosure items present the substantive disclosures currently called for by Items 4 through 8 of Industry Guide 2, but are not included specifically in Appendix A to Form 20-F, although much of this disclosure may be included in the more general discussions of business and property on that form.

### **C. Paperwork Reduction Act Burden Estimates**

For purposes of the Paperwork Reduction Act, we estimate the total annual increase in the paperwork burden for all affected companies to comply with our proposed collection of information requirements to be approximately 7,472 hours of in-house company personnel time and to be approximately \$1,659,000 for the services of outside professionals.<sup>166</sup> These estimates include the time and the cost of preparing and reviewing disclosure, filing documents, and retaining records. Our methodologies for deriving the above estimates are discussed below.

Our estimates represent the burden for all oil and gas companies that file annual reports or registration statements with the Commission. Based on filings received during the Commission's last fiscal year, we estimate that 241 oil and gas companies file annual reports and 67 oil and gas companies file registration statements. Most of the information called for by the new proposed disclosure requirements, including the optional disclosure items, is readily available to oil and gas companies and includes information that is regularly used in their internal management systems. These proposed disclosures include:

- Information on the company's development of proved undeveloped reserves;
- Technologies that the company used to establish additions to reserves estimates;

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<sup>166</sup> For administrative convenience, the presentation of the totals related to the paperwork burden hours have been rounded to the nearest whole number and the cost totals have been rounded to the nearest thousand.

- Material changes to reserves estimates due to technology, prices, and concession conditions;
- The objectivity and qualifications of any third party primarily responsible for preparing or auditing the reserves estimates, if the company represents that it has enlisted a third party to conduct a reserves audit;
- The qualifications and measures taken to assure the independence and objectivity of any employee primarily responsible for preparing or auditing the reserves estimates;
- The report of a third party preparer or reserves auditor, if one is used;
- Disclosure of reserves by geographic area; and
- Optional disclosure of probable and possible reserves and a sensitivity analysis.

We estimate that, on average, companies will incur a burden of 35 hours to prepare these disclosures in an annual report or registration statement.

The proposed amendments would not require, or request, companies to disclose probable and possible reserves. Rather, the proposed rules only would remove the current prohibition on companies from disclosing this information in their filings with the Commission. As we have noted, many companies already disclose this information on their Web sites. Similarly, commenters on the Concept Release noted that many companies already use such estimates in their business decisions. Our rules also do not dictate how companies generate estimates for probable and possible reserves. Thus, we have not included an estimate of the burden and cost of preparing probable and possible

reserves estimates in this PRA analysis, but we have included the burden and cost of disclosing such information.

The proposed amendments would apply several disclosure items to foreign private issuers that previously did not apply to them. As noted above, many of these disclosure items, such as drilling activities, wells and acreage, would require the issuer to provide more specificity about its business and property. Foreign private issuers that do not currently provide such specificity would incur an added burden to present such disclosures in their filings. We estimate that this burden would be 20 hours per foreign private issuer.

The proposed amendments would include reserves from non-traditional sources (e.g., bitumen and oil shale) as oil and gas reserves. Such reserves currently are required to be disclosed as reserves related to mining operations. Although there are differences in the way such reserves may be calculated, such as different levels of certainty, the processes involved in estimating such reserves do not differ significantly. We believe that there would be no change in the relative burden for estimating these reserves under the oil and gas rules, as opposed to the mining rules.

Consistent with current Office of Management and Budget estimates and recent Commission rulemakings, we estimate that 25% of the burden of preparation of registration statements on Forms S-1, S-4, F-1, F-4, 10, and 20-F is carried by the company internally and that 75% of the burden is carried by outside professionals retained by the issuer at an average cost of \$400 per hour.<sup>167</sup> We estimate that 75% of the

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<sup>167</sup> In connection with other recent rulemakings, we have had discussions with several private law firms to estimate an hourly rate of \$400 as the average cost of outside professionals that assist issuers in preparing disclosures and conducting registered offerings.

burden of preparation of annual reports on Form 10-K or Form 20-F is carried by the company internally and that 25% of the burden is carried by outside professionals retained by the company at an average cost of \$400 per hour. The portion of the burden carried by outside professionals is reflected as a cost, while the portion of the burden carried by the company internally is reflected in hours. The following tables summarize the changes to the PRA estimates:

Table 1: Calculation of Incremental Paperwork Reduction Act Burden Estimates for Exchange Act Periodic Reports

Form	Annual Responses	Incremental Hours/Form	Incremental Burden	75% Issuer	25% Professional	\$400 Professional Cost
	(A)	(B)	(C)=(A)*(B)	(D)=( C)*0.75	(E)=(C)*0.25	(F)=(E)*\$300
10-K <sup>168</sup>	206	35	7,210	5,408	1,803	721,000
20-F	35	55	1,925	1,444	481	192,500
Total	241		9,135	6,851	2,284	913,500

Table 2: Calculation of Incremental Paperwork Reduction Act Burden Estimates for Securities Act Registration Statements and Exchange Act Registration Statements

Form	Annual Responses	Incremental Hours/Form	Incremental Burden	25% Issuer	75% Professional	\$400 Professional Cost
	(A)	(B)	(C)=(A)*(B)	(D)=( C)*0.25	(E)=(C)*0.75	(F)=(E)*\$300
10	5	35	175	44	131	52,500
20-F	2	55	110	28	83	33,000
S-1	38	35	1,330	333	998	399,000
S-4	17	35	595	149	446	178,500
F-1	2	55	110	28	83	33,000
F-4	3	55	165	41	124	49,500
Total	67		2,485	621	1864	745,500

#### D. Request for Comment

We request comment in order to evaluate the accuracy of our estimate of the burden of the collections of information. Any member of the public may direct to us any comments concerning the accuracy of these burden estimates. Persons who desire to submit comments on the collection of information requirements should direct their

<sup>168</sup> The burden estimates for Form 10-K assume that the proposed requirements are satisfied by either including information directly in the annual reports or incorporating the information by reference from the Rule 14a-3(b) annual report to security holders.

comments to the OMB, Attention: Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Washington DC 20503, and should send a copy of the comments to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549-1090, with reference to File No. S7-15-08. Requests for materials submitted to the OMB by us with regard to this collection of information should be in writing, refer to File No. S7-15-08, and be submitted to the Securities and Exchange Commission, Records Management Branch, 100 F Street NE, Washington, DC 20549-1110. Because OMB is required to make a decision concerning the collections of information between 30 and 60 days after publication, your comments are best assured of having their full effect if OMB receives them within 30 days of publication.

## **XI. Cost-Benefit Analysis**

### **A. Background**

We are proposing revisions to the oil and gas reserves disclosure requirements of Regulation S-K and Regulation S-X under the Securities Act of 1933 and the Securities Exchange Act of 1934 and Industry Guide 2. The proposed revisions are intended to modernize and update the Commission's oil and gas disclosure requirements because modern technologies enables better estimates, and therefore more helpful disclosure to investors. The oil and gas industry has experienced significant changes since the Commission initially adopted its current rules and disclosure requirements between 1978 and 1982, including advancements in technology and changes in the types of projects in which oil and gas companies invest. The proposed revisions also are intended to provide investors with improved disclosure about an oil and gas company's business and



prospects without sacrificing clarity and comparability, which provide protection and transparency to investors.

## **B. Description of Proposal**

Currently, Industry Guide 2 specifies many of the disclosure guidelines for oil and gas companies. The Industry Guide calls for disclosure relating to reserves, production, property, and operations in addition to that which is required by Regulation S-K.

Although the Industry Guide itself does not appear in Regulation S-K or in the Code of Federal Regulations, it is referenced in an instruction to Item 102 of Regulation S-K (Description of Property) and also is included in the listing of Industry Guides in Items 801 and 802 of Regulation S-K. Generally, the proposal would codify the existing disclosures of Industry Guide 2 into a new Subpart 1200 of Regulation S-K, while at the same time updating such disclosures, clarifying the level of detail required to be disclosed, and requiring disclosure in a tabular presentation. The proposed changes would accomplish the following:

- Disclosure of reserves from non-traditional sources (e.g., bitumen and oil shale) as oil and gas reserves;
- Optional disclosure of probable and possible reserves;
- Optional disclosure of oil and gas reserves' sensitivity to price;
- Disclosure of the development of proved undeveloped reserves, including those that are held for five years or more and an explanation of why they should continue to be considered proved;
- Disclosure of technologies used to establish additions to reserves estimates;

- Disclosure regarding material changes due to technology, prices, and concession conditions;
- The objectivity and qualifications of any third party primarily responsible for preparing or auditing the reserves estimates, if the company represents that it has enlisted a third party to conduct a reserves audit;
- The qualifications and measures taken to assure the independence and objectivity of any employee primarily responsible for preparing or auditing the reserves estimates;
- If a company represents that it is relying on a third party to prepare the reserves estimates or conduct a reserves audit, filing a report prepared by the third party; and
- Disclosure based on a new definition of the term “by geographic area.”

The proposal also would make revisions and additions to the definitions section of Rule 4-10 of Regulation S-X. These revisions would update and extend reserves definitions to reflect changes in the oil and gas industry and new technologies. The revisions are intended to address perceived inadequacies in existing definitions while maintaining standards of clarity and comparability that provide protection and transparency to investors. In particular, the proposal would:

- Expand the definition of “oil and gas producing activities” to include the extraction of hydrocarbons from oil sands, shale, coalbeds, or other natural resources and activities undertaken with a view to such extraction;
- Add a definition of “reasonable certainty” to provide better guidance regarding the meaning of that term;

- Add a definition of “reliable technology” to permit the use of new, widely accepted technologies to establish proved reserves;
- Define probable and possible reserves estimates; and
- Add definitions to explain new terms used in the revised definitions.

In addition, the amendments would harmonize the disclosure requirements that apply to foreign private issuers with the disclosure requirements that apply to domestic issuers with respect to oil and gas activities. In particular, the proposal would require foreign private issuers to disclose the information required by proposed Items 1205 through 1208 regarding drilling activities, present activities, delivery commitments, wells, and acreage, which they are not required to provide currently under Appendix A to Form 20-F. These proposed disclosure items present the substantive disclosures currently called for by Items 4 through 8 of Industry Guide 2, but are not included specifically in Appendix A to Form 20-F, although much of this disclosure may be included in the more general discussions of business and property on that form.

### **C. Benefits**

We expect that the proposed rules would increase transparency in disclosure by oil and gas companies by providing improved reporting standards. The proposed revisions to the definitions should align our disclosure rules with the realities of the modern oil and gas markets. For example, we believe that the inclusion of bitumen and other resources from continuous accumulations as oil and gas producing activities is consistent with company practice to treat these operations as part of, rather than separate from, their traditional oil and gas producing activities. Similarly, the proposed expansion of permissible technologies for determining certainty levels of reserves recognizes that

companies now take advantage of these technological advances to make business decisions. We expect these proposals to improve disclosure by aligning the required disclosure more closely with the way companies conduct their business.

Allowing companies to disclose probable and possible reserves is designed to improve investors' understanding of a company's unproved reserves. For those companies that already disclose such reserves on their Web sites, the proposals would permit them to make such disclosures more accessible to investors. Disclosure of these categories of reserves beyond proved reserves may foster better company valuations by investors, creditors, and analysts, thus improving capital allocation and reducing investment risk. Because some of the proposed disclosure requirements are optional, the amount of increased transparency will depend on the extent to which companies elect to provide the additional disclosure afforded by the proposal. If companies elect not to provide the optional disclosure, then the benefits from increased transparency would be limited to the extent that the new rules improve the transparency of proved reserves disclosure. We expect that replacing the Industry Guide with new Regulation S-K items would provide greater certainty because the disclosure requirements would be in rules established by the Commission.

By permitting increased disclosure, the proposal provides a mechanism for oil and gas companies to seek more favorable financing terms through more disclosure and increased transparency. Investors may be able to request such additional disclosure in Commission filings during negotiations regarding bond and debt covenants. Thus, we expect that, as a result of competing factors in the marketplace, the proposal would result in increased transparency, either because companies elect to voluntarily provide

increased disclosure, or because investors may discount companies that do not do so. We believe that the benefits and costs of disclosing unproved reserves ultimately will be determined by market conditions, rather than regulatory requirements.

We expect that permitting companies to disclose probable and possible reserves would increase market transparency, provide investors with more reserves information, and allow for more accurate production forecasts. By correlating deterministic criteria to comparable probabilistic thresholds for establishing a given level of certainty, the proposed rules should result in increased standardization in reporting practices which would promote comparability of reserves across companies. The proposal would define the term “reliable technology” to permit oil and gas companies to prepare their reserves estimates using new types of technology that companies are not permitted to use under the current rules. This proposed definition is designed to encompass new technologies as they are developed in the future and become widely accepted, thereby providing investors and the market with a more comprehensive understanding of a company’s estimated reserves.

**1. Average price**

The proposal to change the price used to calculate reserves from a year-end single-day price to an historical average price over the company’s most recently ended fiscal year is expected to reduce the effects of seasonality and facilitate comparability between companies. Many of the commenters to the Concept Release supported the use of an historical price, even though this approach is less useful with respect to a company’s future prospects compared to a futures market price. We believe investors are concerned not only about the quantity of a company’s reserves, but also about the

profitability of those reserves. We recognize that some reserves will be of more value than others due to extraction and transportation costs. As a result, since our proposal would require the use of a single price to estimate reserves, the proposal also gives companies the option of providing a sensitivity analysis and reporting reserves based on additional price estimates. If companies elect to provide a sensitivity analysis, we expect this to benefit investors by allowing them to formulate better projections of company prospects that are more consistent with management's planning price and prices higher and lower that may reasonably be achieved. We expect that companies would be more likely to adopt a sensitivity analysis approach if investors and other market participants determine that this information would reduce investment risk, or if companies believe such disclosure will reduce the cost of capital formation. The proposal would result in increased price stability in determining whether reserves are economically producible. This should mitigate seasonal effects, resulting in reserves estimates that more closely reflect those used by management in planning and investment decisions. We expect this to allow for more accurate company valuations and improve projections of company prospects.

## **2. Probable and possible reserves**

We anticipate that disclosure of probable and possible reserves, if companies elect to do so, would allow investors, creditors, and other users to better assess a company's reserves. The proposed tabular format for disclosing probable and possible reserves should reduce investor search costs by making it easier to locate reserves disclosures and facilitating comparability among oil and gas companies.

While we recognize that many companies already communicate with investors about their unproved and other reserves through alternative means, such as company Web sites or press releases, some commenters remarked that an objective comparison among companies is difficult because different companies have defined such reserves classifications differently. We believe that permitting disclosure of this information in Commission filings would provide a more consistent means of comparison. Although our proposal would make disclosure of probable and possible reserves optional, and large oil and gas producers suggested in their comment letters that such disclosure would be of limited benefit, we believe that competitive pressures within the industry might make it beneficial for large producers to disclose this information. Increased disclosure might, for example, improve credit quality and lower the cost of debt financing, or reduce the risk associated with business transactions between the company and its customers or suppliers.

### **3. Reserves estimate preparers and reserves auditors**

We believe that investors would benefit from a greater level of assurance with respect to the reliability of reserve estimates. The proposed disclosure requirements relating to the objectivity and qualifications of any third party primarily responsible for preparing or auditing the reserves estimates, if the company represents that it has enlisted a third party to conduct a reserves audit, and the qualifications and measures taken to assure the independence and objectivity of any employee primarily responsible for preparing or auditing the reserves estimates should provide greater confidence with respect to the accuracy of reserves estimates. Unproved reserves are inherently less certain than proved reserves. Although not all companies would choose to undertake a

reserves audit, because the proposal would not require such a reserves audit, third party participation in the estimation of reserves should add credibility to a company's public disclosure. The opinion of an objective, qualified person on the reserves estimates is designed to increase the reliability of these estimates and investor confidence.

#### **4. Development of proved undeveloped reserves**

The proposal would require tabular disclosure of the aging of proved undeveloped reserves. We believe that such disclosure supplements our proposed amendments that would ease the requirements for recognizing PUDs and thereby increase the amount of PUDs disclosed in filings, even though the properties representing such proved reserves have not yet been developed and therefore do not provide the company with cash flow.

#### **5. Disclosure guidance**

The proposal also provides guidance about the type of information that companies should consider disclosing in Management's Discussion and Analysis, and would allow companies to include this information with the relevant tables. Locating this discussion with the tables themselves should benefit investors by simplifying the presentation of disclosure, and providing insight into the information disclosed in the tables. Providing the additional guidance should assist companies in preparing their disclosure, improving the quality and consistency of this disclosure.

#### **6. Updating of definitions related to oil and gas activities**

The proposal also updates the definition of the term "oil and gas producing activities" as well as updating or creating new definitions for other terms related to such activities, including "proved oil and gas reserves" and "reasonable certainty." We believe that updating these definitions will help companies disclose oil and gas operations



in the same way that companies manage those operations. This includes resources extracted from nontraditional sources that companies consider oil and gas activities, although our definitions have excluded them from the definition of “oil and gas producing activities.” In addition, adding definitions for terms like “reasonable certainty” (which currently is in the definition of “proved oil and gas reserves,” but not defined) will provide companies with added guidance and assist them in providing consistent disclosures between companies.

#### **7. Harmonizing foreign private issuer disclosure**

We believe that the proposals to harmonize foreign private issuer disclosure would help make disclosures of foreign private issuers more comparable with domestic companies. The oil and gas industry has changed significantly since the rules were adopted. Today, many companies have interests that span the globe. In addition, many of these projects are joint ventures between foreign private issuers and domestic companies. Having differing levels of disclosure for companies that may be participating in the same projects harms comparability between investment choices. The proposal to harmonize foreign private issuer disclosure is intended to promote comparability among all oil companies.

#### **D. Costs**

We expect that the proposed amendments would result in some initial and ongoing costs to oil and gas companies. Although we are proposing to add a new subpart to Regulation S-K to set forth the disclosure requirements that are unique to oil and gas companies, the proposed subpart, for the most part, codifies the substantive disclosure called for by Industry Guide 2. The proposed disclosure requirements have been updated

and clarified, and require the disclosure to be presented in a tabular format. Although many companies already present this information in tabular form, for companies that do not, this proposed requirement could impose a burden on companies as they transition from a narrative to tabular disclosure format. We expect, however, that any increased preparation costs would be highest in the first year after adoption, but would decline in subsequent years as companies adjust to the new format. We think this burden is justified because tabular disclosure will increase comparability and facilitate understanding and analysis by investors.

#### **1. Probable and possible reserves**

Allowing disclosure of probable and possible reserves could create an increased risk of litigation because these categories of reserves estimates are less certain than proved reserves. Companies may choose not to disclose such reserves, in part, because of the risk of incurring litigation costs to defend their disclosures due to the increased risk and uncertainty of these categories. Disclosure of probable and possible reserves may also result in revealing competitive information because it might reveal a company's business strategy, such as the geography and nature of their exploration and discovery. For example, if geographical detail can be inferred from estimates of unproved reserves, this might reveal information about the value of a company's assets to competitors and could put the producer at a competitive disadvantage. We expect companies would incur costs in preparing the additional disclosures such as calculating and aggregating the reserve projections in a prescribed format. If probable and possible categories of reserves have different extraction cost structures, particularly with respect to time, and they are not sufficiently separated from proved reserves, this could result in increased uncertainty

in an investor's assessment of a company's prospects. We believe that making these disclosures voluntary mitigates these concerns. Companies unwilling to bear the added risk can simply opt not to provide this disclosure.

## **2. Reserves estimate preparers and reserves auditors**

If a company chooses to use a third party to prepare or audit reserve estimates, it would incur costs to hire these outside consultants. The proposed amendments would not require companies to hire such a person. If enough companies that currently do not use such consultants begin to hire them, we believe that industry wages could potentially increase due to increased demand for reserves calculating specialists unless that demand is compensated by an increase in the supply of such persons. If wages increased, then all companies, not just those employing third party consultants, would incur added costs.

Large companies may be less likely to hire third parties because they tend to have staff to make reserves estimates. However, if such large companies chose to hire third party consultants, third parties would expend significantly more effort on such projects than for smaller companies because larger companies have more properties to evaluate. Thus, we expect third party fees, and the time required to conduct such projects, would scale upwards with the quantity of company reserves.

Disclosure of unproved reserves without third party certification may present a risk with respect to smaller oil and gas producers. Because smaller companies are likely to have less in-house expertise, and less market reputation, than larger companies, this could increase the need for certification. We believe that making the third party involvement optional is similar to the current approach. Current disclosures of proved reserves do not require a third party to audit the reserves estimates, and oil and gas

producers already release, as discussed above, unproved reserve information through other means. Thus, even if companies do not choose to use a third party to audit their reserves estimates, the disclosure of unproved reserves with improved standards on how such reserves should be reported, should benefit investors.

### **3. Average price**

While the use of an historical average price to calculate reserves should enhance comparability, it would provide investors with less forward-looking information than if we were to adopt a price standard based on futures prices. Forward-looking prices based on futures, however, are not necessarily available for all products in all geographic areas and would require adjustments.

### **4. Consistency with IASB**

Some commenters remarked that the International Accounting Standards Board is currently preparing a set of guidelines for oil and gas extractive activities, including a definition of oil and gas reserves, and recommended that the Commission align its regulations with those guidelines. We intend to monitor this initiative and work with the IASB, but our proposal may differ from the guidelines ultimately established by the International Accounting Standards Board. This could make it more difficult for investors to compare foreign and domestic companies.

### **5. Harmonizing foreign private issuer disclosure**

The proposal to harmonize foreign private issuer disclosure regarding oil and gas activities would increase the burden on foreign private issuers. However, it is our understanding that the large foreign private issuers already voluntarily provide disclosure comparable to the level required from domestic companies. Much of the added new

disclosures relate to the day-to-day business and properties of these companies, including drilling activities, number of wells and acreage. This is information that is central to the activities of oil and gas companies, and therefore is readily known to these companies. We believe that applying the proposed Subpart 1200 to these companies could prompt more detailed disclosure regarding these activities, which would cause these companies to incur some cost. The provision permitting foreign private issuers to omit disclosures if prohibited from making those disclosures by their home jurisdiction could mitigate some of these costs.

#### **E. Request for Comments**

We request comment on all aspects of the Cost-Benefit Analysis, including identification of any additional costs or benefits of, or suggested alternatives to, the proposed amendments. We also request that those submitting comments provide, to the extent possible, empirical data and other factual support for their views.

#### **XII. Consideration of Burden on Competition and Promotion of Efficiency, Competition, and Capital Formation**

Securities Act Section 2(b)<sup>169</sup> requires us, when engaging in rulemaking where we are required to consider or determine whether an action is necessary or appropriate in the public interest, to consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation. Section 23(a)(2) of the Exchange Act<sup>170</sup> requires us, when adopting rules under the Exchange Act, to consider the impact that any new rule would have on competition. In addition, Section 23(a)(2)

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<sup>169</sup> 15 U.S.C. 77b(b).

<sup>170</sup> 15 U.S.C. 78w(a)(2).

prohibits us from adopting any rule that would impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act. Section 3(f) of the Exchange Act<sup>171</sup> requires us, when engaging in rulemaking that requires us to consider or determine whether an action is necessary or appropriate in the public interest, to consider, in addition to the protection of investors, whether the action will promote efficiency, competition and capital formation.

We expect the proposed amendments, if adopted, to increase efficiency and enhance capital formation, and thereby benefit investors, by providing the market with better information based on updated technology as well as increased information covering a broader range of reserves classifications held by a company and reserves found in non-traditional sources of oil and gas. Such increased and improved information would permit investors to better assess a company's prospects. In particular, the existing prohibitions against disclosing reserves other than proved reserves, using modern technology to determine the certainty level of reserves, and including resources from non-traditional sources can lead to incomplete disclosures about a company's actual resources and prospects. The proposals are designed to better align the disclosure requirements with the way companies make business decisions.

We believe that permitting the disclosure of probable and possible reserves will benefit smaller companies, in particular. Larger issuers tend to already have large amounts of proved reserves. The proposals would permit smaller companies, who often participate in a significant amount of exploratory activity, to better disclose their business prospects. Consequently, we anticipate that the proposal, if adopted, could lead to

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<sup>171</sup> 15 U.S.C. 78c(f).

efficiencies in capital formation, as more information would be available regarding the prospects of smaller issuers.

The effects of the proposed amendments on competition are difficult to predict, but it is possible that permitting public issuers to disclose probable and possible reserves will lead to a reallocation of capital, as companies that previously could show few proved reserves would be able to disclose a broader range of its business prospects, making it easier for these issuers to raise capital and compete with companies that have large proved reserves. Although our proposal would make disclosure of probable and possible reserves optional, and large oil and gas producers suggested in their comment letters that such disclosure would be of limited benefit, we believe that competitive pressures within the industry might make it beneficial for large producers to disclose this information. Increased disclosure might, for example, improve credit quality and lower the cost of debt financing, or reduce the risk associated with business transactions between the company and its customers or suppliers.

We request comment on whether the proposals, if adopted, would promote efficiency, competition, and capital formation or have an impact or burden on competition. Commenters are requested to provide empirical data and other factual support for their views, if possible.

### **XIII. Initial Regulatory Flexibility Analysis**

This Initial Regulatory Flexibility Act Analysis has been prepared in accordance with 5 U.S.C. 603. It relates to proposed revisions to disclosure items for oil and gas companies.

## **A. Reasons for, and Objectives of, the Proposed Action**

The Commission adopted the current disclosure regime for oil and gas producing companies in 1978 and 1982, respectively. Since that time, there have been significant changes in the oil and gas industry and markets, including technological advances, and changes in the types of projects in which oil and gas companies invest their capital. On December 12, 2007, the Commission published a Concept Release on possible revisions to the disclosure requirements relating to oil and gas reserves.<sup>172</sup> Prior to our issuance of the Concept Release, many industry participants had expressed concern that our disclosure rules are no longer in alignment with current industry practices and therefore have limited usefulness to the market and investors.

Our proposed amendments to these existing forms are intended to modernize and update our reserves definitions to reflect changes in the oil and gas industry and markets and new technologies that have occurred in the decades since the current rules were adopted, including expanding the scope of permissible technologies for establishing certainty levels of reserves, reserves classifications that a company can disclose in a Commission filing, and the types of resources that can be included in a company's reserves, as well as providing information regarding the objectivity and qualifications of any third party primarily responsible for preparing or auditing the reserves estimates, if the company represents that it has enlisted a third party to conduct a reserves audit, and the qualifications and measures taken to assure the independence and objectivity of any employee primarily responsible for preparing or auditing the reserves estimates. The proposals also are intended to codify, modernize and centralize the disclosure items for

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<sup>172</sup> See Release No. 33-8870 (Dec. 12, 2007) [72 FR 71610].



oil and gas companies into Regulation S-K. Finally, the proposals are intended to harmonize oil and gas disclosures by foreign private issuers with disclosures by domestic companies. Overall, the proposed amendments attempt to provide improved disclosure about an oil and gas company's business and prospects without sacrificing clarity and comparability, which provide protection and transparency to investors.

**B. Legal Basis**

We are proposing the amendments pursuant to Sections 3(b), 6, 7, 10 and 19(a) of the Securities Act and Sections 12, 13, 14(a), 15(d), and 23(a) of the Exchange Act, as amended.

**C. Small Entities Subject to the Proposed Amendments**

The proposals would affect small entities that are engaged in oil and gas producing activities, the securities of which are registered under Section 12 of the Exchange Act or that are required to file reports under Section 15(d) of the Exchange Act. The proposals also would affect small entities that file, or have filed, a registration statement that has not yet become effective under the Securities Act and that has not been withdrawn. Securities Act Rule 157<sup>173</sup> and Exchange Act Rule 0-10(a)<sup>174</sup> define an issuer to be a "small business" or "small organization" for purposes of the Regulatory Flexibility Act if it had total assets of \$5 million or less on the last day of its most recent fiscal year. We believe that the proposals would affect small entities that are operating companies. Based on filing in 2007, we estimate that there are approximately 28 oil and gas companies that may be considered small entities.

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<sup>173</sup> 17 CFR 230.157.

<sup>174</sup> 17 CFR 240.0-10(a).

#### **D. Reporting, Recordkeeping, and Other Compliance Requirements**

The proposed amendments to Regulation S-K would expand some existing disclosures, and eliminate others. In particular, the proposed new disclosure requirements, many of which were requested by industry participants, include the following:

- Disclosure of reserves from non-traditional sources (e.g., bitumen and shale) as oil and gas reserves;
- Optional disclosure of probable and possible reserves;
- Optional disclosure of oil and gas reserves' sensitivity to price;
- Disclosure of the development of proved undeveloped reserves, including those that are held for 5 years or more and an explanation of why they should continue to be considered proved;
- Disclosure of technologies used to establish additions to reserves estimates;
- Disclosure regarding material changes due to technology, prices, and concession conditions;
- Disclosure of the objectivity and qualifications of any third party primarily responsible for preparing or auditing the reserves estimates, if the company represents that it has enlisted a third party to conduct a reserves audit;
- Disclosure of the qualifications and measures taken to assure the independence and objectivity of any employee primarily responsible for preparing or auditing the reserves estimates;

- If a company represents that it is relying on a third party to prepare the reserves estimates or conduct a reserves audit, filing a report prepared by the third party; and
- Disclosure based on a new definition of the term “by geographic area.”

There would be no mandatory retention period for the information disclosed, and the information disclosed would be made publicly available on the EDGAR filing system.

#### **E. Duplicative, Overlapping, or Conflicting Federal Rules**

We believe that there are no federal rules that conflict with or duplicate the proposed rules.

#### **F. Significant Alternatives**

The Regulatory Flexibility Act directs us to consider significant alternatives that would accomplish the stated objectives, while minimizing any significant adverse impact on small entities. In connection with the proposals, we considered the following alternatives:

- (1) Establishing different compliance or reporting requirements which take into account the resources available to smaller entities;
- (2) Exempting smaller entities from coverage of the disclosure requirements, or any part thereof;
- (3) The clarification, consolidation, or simplification of disclosure for small entities; and
- (4) Use of performance standards rather than design standards.

With regard to Alternatives 1 and 2, we believe that separate disclosure requirements for small entities that would differ from the proposed reporting

requirements, or exempting them from these disclosures, would not achieve our disclosure objectives. In particular, we believe the changes that are reflected in the proposed amendments would balance the informational needs of investors in smaller companies with the burdens imposed on such companies by the disclosure requirements. We note that a number of the proposed new disclosure items are voluntary. We believe that small entities are more likely to take advantage of these permitted disclosures, particularly regarding probable and possible reserves, than larger companies, which typically already have significant proved reserves. A wholesale exemption for small entities would thwart our intent to make uniform the application of the disclosure and other requirements that would be amended.

Regarding Alternative 3, we believe the amendments would clarify and consolidate the requirements for all public companies into Regulation S-K, which may make such requirements easier to access. This may simplify the process of preparing a company's annual report or registration statement. In addition, the proposed tabular format for making the disclosures may lead to systemization of the disclosures, making such information simpler to organize.

Regarding Alternative 4, we have used design rather than performance standards in connection with the proposals for two reasons. First, based on our past experience, we believe the proposed disclosure would be more useful to investors if there were specific informational requirements. The proposed mandated disclosures are intended to result in more focused and comprehensive disclosure. Second, the specific disclosure requirements in the proposals would promote more comparable disclosure among public

companies because they would provide greater certainty as to the scope of required disclosure.

#### **G. Solicitation of Comment**

We encourage the submission of comments with respect to any aspect of this Initial Regulatory Flexibility Analysis. In particular, we request comments regarding: (i) the number of small entity issuers that may be affected by the proposed revisions; (ii) the existence or nature of the potential impact of the proposed revisions on small entity issuers discussed in the analysis; and (iii) how to quantify the impact of the proposed revisions. Commenters are asked to describe the nature of any impact and provide empirical data supporting the extent of the impact. Such comments will be considered in the preparation of the Final Regulatory Flexibility Analysis, if the proposed revisions are adopted, and will be placed in the same public file as comments on the proposed amendments.

#### **XIV. Small Business Regulatory Enforcement Fairness Act**

For purposes of the Small Business Regulatory Enforcement Fairness Act of 1996,<sup>175</sup> a rule is “major” if it has resulted, or is likely to result in:

- an annual effect on the U.S. economy of \$100 million or more;
- a major increase in costs or prices for consumers or individual industries;
- or
- significant adverse effects on competition, investment or innovation.

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<sup>175</sup> Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

We request comment on whether our proposals would be a “major rule” for purposes of the Small Business Regulatory Enforcement Fairness Act. We solicit comment and empirical data on: (a) the potential effect on the U.S. economy on an annual basis; (b) any potential increase in costs or prices for consumers or individual industries; and (c) any potential effect on competition, investment, or innovation.

## **XV. Statutory Basis and Text of Proposed Amendments**

We are proposing the amendments pursuant to Sections 3(b), 6, 7, 10 and 19(a) of the Securities Act and Sections 12, 13, 14(a), 15(d), and 23(a) of the Exchange Act, as amended.

### **TEXT OF PROPOSED AMENDMENTS**

#### **List of Subjects**

17 CFR Part 210

Accountants, Accounting, Reporting and recordkeeping requirements, Securities.

17 CFR Parts 229 and 249

Reporting and recordkeeping requirements, Securities.

For the reasons set out in the preamble, title 17, chapter II of the Code of Federal Regulations is proposed to be amended as follows:

#### **PART 210—FORM AND CONTENT OF AND REQUIREMENTS FOR FINANCIAL STATEMENTS, SECURITIES ACT OF 1933, SECURITIES EXCHANGE ACT OF 1934, PUBLIC UTILITY HOLDING COMPANY ACT OF 1935, INVESTMENT COMPANY ACT OF 1940, INVESTMENT ADVISERS ACT OF 1940, AND ENERGY POLICY AND CONSERVATION ACT OF 1975**

1. The authority citation for part 210 continues to read as follows:

Authority: 15 U.S.C. 77f, 77g, 77h, 77j, 77s, 77z-2, 77z-3, 77aa(25), 77aa(26), 78c, 78j-1, 78l, 78m, 78n, 78o(d), 78q, 78u-5, 78w(a), 78ll, 78mm, 80a-8, 80a-20,

80a-29, 80a-30, 80a-31, 80a-37(a), 80b-3, 80b-11, 7202 and 7262, unless otherwise noted.

2. Amend § 210.4-10 by:

a. Redesignating the subparagraphs in paragraph (a) as follows:

Old paragraph number	New paragraph number
(a)(1)	(a)(16)
(a)(2)	(a)(24)
(a)(3)	(a)(22)
(a)(4)	(a)(25)
(a)(5)	(a)(23)
(a)(6)	(a)(34)
(a)(7)	(a)(21)
(a)(8)	(a)(15)
(a)(9)	(a)(29)
(a)(10)	(a)(13)
(a)(11)	(a)(9)
(a)(12)	(a)(32)
(a)(13)	(a)(33)
(a)(14)	(a)(1)
(a)(15)	(a)(12)
(a)(16)	(a)(7)
(a)(17)	(a)(20)

b. Adding new paragraphs (a)(2), (a)(3), (a)(4), (a)(5), (a)(6), (a)(8), (a)(10), (a)(11), (a)(14), (a)(17), (a)(18), (a)(19), (a)(26), (a)(27), (a)(28), (a)(30), and (a)(31); and

c. Revising newly redesignated paragraphs (a)(13), (a)(16), (a)(22), (a)(24), and (a)(25).

The additions and revisions read as follows:

**§ 210.4-10 Financial accounting and reporting for oil and gas producing activities pursuant to the Federal securities laws and the Energy Policy and Conservation Act of 1975.**

\* \* \* \* \*

(a) Definitions. \* \* \*

\* \* \* \* \*

(2) Analogous formation in the immediate area. An “analogous formation in the immediate area” refers to a formation that shares the following characteristics with the formation of interest:

- (i) Same geological formation;
- (ii) Same environment of deposition;
- (iii) Similar geological structure; and
- (iv) Same drive mechanism.

Instruction to paragraph (a)(2): Reservoir properties must be no more favorable in the analog than in the formation of interest. When the geological properties change, the proposed analog formation can no longer be said to be an analogous formation in the immediate area of the formation of interest.

(3) Condensate. Condensate is a mixture of hydrocarbons that exists in the gaseous phase at original reservoir temperature and pressure, but that, when produced, is in the liquid phase at surface pressure and temperature.

(4) Continuous accumulations. Continuous accumulations are resources that are pervasive throughout large areas, have ill-defined boundaries, and typically lack or are unaffected by hydrocarbon-water contacts near the base of the accumulation. Examples include, but are not limited to, natural bitumen (oil sands), gas hydrates, and self-sourced accumulations such as coalbed methane, shale gas, and oil shale deposits. Typically, such accumulations require specialized extraction technology (e.g., removal of water from coalbed methane accumulations, large fracturing programs for shale gas, steam, or solvents to mobilize bitumen for in-situ recovery, and, in some cases, mining



methods). Moreover, the extracted oil or gas may require significant processing prior to sale (e.g., bitumen upgraders).

(5) Conventional accumulations. Conventional accumulations are discrete oil or gas resources related to localized geological structural features or stratigraphic conditions, with the accumulation typically bounded by a hydrocarbon-water contact near its base, and which are significantly affected by the tendency of lighter hydrocarbons to “float” or accumulate above heavier water.

(6) Deterministic estimate. The method of estimating reserves or resources is called deterministic when a single value for each parameter (from the geoscience, engineering, or economic data) in the reserves calculation is used in the reserves estimation procedure.

\* \* \* \* \*

(8) Development project. A development project is the means by which petroleum resources are brought to the status of economically producible. As examples, the development of a single reservoir or field, an incremental development in a producing field, or the integrated development of a group of several fields and associated facilities with a common ownership may constitute a development project.

\* \* \* \* \*

(10) Economically producible. The term economically producible, as it relates to a resource means a resource which generates revenue that exceeds, or is reasonably expected to exceed, the costs of the operation. The value of the products that generate revenue shall be determined at the terminal point of oil and gas producing activities as defined in paragraph (a)(16) of this section.

(11) Estimated ultimate recovery (EUR). Estimated ultimate recovery is the sum of reserves remaining as of a given date and cumulative production as of that date.

\* \* \* \* \*

(13) Exploratory well. A well drilled to find and produce oil or gas in an unproved area or to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir. Generally, an exploratory well is any well that is not a development well, an extension well, a service well, or a stratigraphic test well as those items are defined in this section.

(14) Extension well. A well drilled to extend the limits of a proved reservoir.

\* \* \* \* \*

(16) Oil and gas producing activities. (i) Oil and gas producing activities include:

(A) The search for crude oil, including condensate and natural gas liquids, or natural gas (“oil and gas”) in their natural states and original locations;

(B) The acquisition of property rights or properties for the purpose of further exploration or for the purpose of removing the oil or gas from existing reservoirs on such properties;

(C) The construction, drilling, and production activities necessary to retrieve oil and gas from their natural reservoirs, including the acquisition, construction, installation, and maintenance of field gathering and storage systems, such as:

(1) Lifting the oil and gas to the surface; and

(2) Gathering, treating, and field processing (as in the case of processing gas to extract liquid hydrocarbons); and

(D) Extraction of marketable hydrocarbons, in the solid, liquid, or gaseous state, from oil sands, shale, coalbeds, or other nonrenewable natural resources which can be upgraded into natural or synthetic oil or gas, and activities undertaken with a view to such extraction.

Instruction 1 to paragraph (a)(16)(i): The oil and gas production function shall be regarded as terminating at the first point at which:

a. Oil, gas, or gas liquids are delivered to a main pipeline, a common carrier, a refinery, or a marine terminal; and

b. In the case of marketable hydrocarbons that can be upgraded into natural or synthetic oil or gas, the marketable hydrocarbons are delivered to a main pipeline, a common carrier, a refinery, a marine terminal, or a facility which upgrades such natural resources into synthetic oil or gas from the natural resources.

Instruction 2 to paragraph (a)(16)(i): For purposes of this paragraph (a)(16), the term “marketable hydrocarbons” means hydrocarbons for which there is a market for the product in the state in which the hydrocarbons are delivered.

(ii) Oil and gas producing activities do not include:

(A) Transporting, refining, processing (other than field processing of gas to extract liquid hydrocarbons), or marketing oil and gas;

(B) Activities relating to the production of natural resources other than oil, gas, or natural resources from which natural or synthetic oil and gas can be extracted; or

(C) Production of geothermal steam.

(17) Possible reserves. Possible reserves are those additional reserves that are less certain to be recovered than probable reserves.

(i) When deterministic methods are used, the total quantities ultimately recovered from a project have a low probability of exceeding proved plus probable plus possible reserves. When probabilistic methods are used, there should be at least a 10% probability that the total quantities ultimately recovered will equal or exceed the proved plus probable plus possible reserves estimates.

(ii) Possible reserves may be assigned to areas of a reservoir adjacent to probable reserves where data control and interpretations of available data are progressively less certain. Frequently, this will be in areas where geoscience and engineering data are unable to define clearly the area and vertical limits of commercial production from the reservoir by a defined project.

(iii) Possible reserves also include incremental quantities associated with a greater percentage recovery of the hydrocarbons in place than the recovery quantities assumed for probable reserves.

(iv) The proved plus probable and proved plus probable plus possible reserves estimates must be based on reasonable alternative technical and commercial interpretations within the reservoir or subject project that are clearly documented, including comparisons to results in successful similar projects.

(v) Possible reserves may be assigned where geoscience and engineering data identify directly adjacent portions of a reservoir within the same accumulation that may be separated from proved areas by faults with displacement less than formation thickness or other geological discontinuities and that have not been penetrated by a wellbore, but are interpreted to be in communication with the known (proved) reservoir. Probable or

possible reserves may be assigned to areas that are structurally higher or lower than the proved area if these areas are in communication with the proved reservoir.

(vi) Pursuant to paragraph (a)(24)(iii) of this section, where direct observation has defined a highest known oil (HKO) elevation and the potential exists for an associated gas cap, proved oil reserves should be assigned in the structurally higher portions of the reservoir above the HKO only if the higher contact can be established with reasonable certainty through reliable technology. Portions of the reservoir that do not meet this reasonable certainty criterion may be assigned as probable and possible oil and/or gas based on reservoir fluid properties and pressure gradient interpretations.

(18) Probable reserves. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves but which, together with proved reserves, are as likely as not to be recovered.

(i) When deterministic methods are used, it is as likely as not that actual remaining quantities recovered will exceed the sum of estimated proved plus probable reserves. When probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the proved plus probable reserves estimates.

(ii) Probable reserves may be assigned to areas of a reservoir adjacent to proved reserves where data control or interpretations of available data are less certain, even if the interpreted reservoir continuity of structure or productivity does not meet the reasonable certainty criterion.

(iii) Probable reserves estimates also include potential incremental quantities associated with a greater percentage recovery of the hydrocarbons in place than assumed for proved reserves.

(iv) See also guidelines in paragraphs (a)(17)(iv) through (a)(17)(vi) of this section.

(19) Probabilistic estimate. The method of estimation of reserves or resources is called probabilistic when the full range of values that could reasonably occur for each unknown parameter (from the geoscience, engineering, and economic data) is used to generate a full range of possible outcomes and their associated probabilities of occurrence.

\* \* \* \* \*

(22) Proved developed oil and gas reserves. Proved developed oil and gas reserves are proved reserves that can be expected to be recovered:

(i) In projects that extract oil and gas through wells, through existing wells with existing equipment and operating methods; and

(ii) In projects that extract oil and gas in other ways, through installed extraction technology operational at the time of the reserves estimate.

\* \* \* \* \*

(24) Proved oil and gas reserves. Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible—from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations—prior to the time at which contracts providing the

right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time.

(i) The area of the reservoir considered as proved includes:

(A) The area identified by drilling and limited by fluid contacts, if any, and

(B) Adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or gas on the basis of available geoscience and engineering data.

(ii) In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons (LKH) as seen in a well penetration unless geoscience, engineering, or performance data and reliable technology establishes a lower contact with reasonable certainty.

(iii) Where direct observation from well penetrations has defined a highest known oil (HKO) elevation and the potential exists for an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering, or performance data and reliable technology establishes the higher contact with reasonable certainty.

(iv) Reserves which can be produced economically through application of improved recovery techniques (including, but not limited to, fluid injection) are included in the proved classification when:

(A) Successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed

program in the reservoir or an analogous formation in the immediate area, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and

(B) The project has been approved for development by all necessary parties and entities, including governmental entities.

(v) Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the average price during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the ending price for each month within such period.

(25) Proved undeveloped reserves. Proved undeveloped oil and gas reserves are reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.

(i) Reserves on undrilled acreage shall be limited to those drilling units directly offsetting productive units that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.

(A) In a conventional accumulation, offsetting productive units must lie within an area in which economic producibility has been established by reliable technology to be reasonably certain.

(B) Proved reserves can be claimed in a conventional or continuous accumulation in a given area in which engineering, geoscience, and economic data, including actual drilling statistics in the area, and reliable technology show that, with



reasonable certainty, economic producibility exists beyond immediately offsetting drilling units.

(ii) Undrilled locations can be classified as having proved undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless unusual circumstances justify a longer time.

(iii) Under no circumstances shall estimates for proved undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the area and in the same reservoir or an analogous reservoir in the same geologic formation in the immediate area or by other evidence using reliable technology establishing reasonable certainty.

(26) Reasonable certainty. Reasonable certainty means “much more likely to be achieved than not.” When deterministic methods are used, 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 than to either decrease or remain constant. When probabilistic methods are used, reasonable certainty means that there is at least a 90% probability that the quantities actually recovered will equal or exceed the stated volume.

(27) Reliable technology. Reliable technology is technology (including computational methods) that, when applied using high quality geoscience and engineering data, is widely accepted within the oil and gas industry, has been field tested and has demonstrated consistency and repeatability in the formation being evaluated or in

an analogous formation. Expressed in probabilistic terms, reliable technology has been proved empirically to lead to correct conclusions in 90% or more of its applications.

(28) Reserves. Reserves are estimated remaining quantities of oil and gas and related substances anticipated to be recoverable, as of a given date, by application of development projects to known accumulations based on: analysis of geoscience and engineering data; the use of technology appropriate to establish the degree of certainty of the reserves; the legal right to produce; installed means of delivering the oil, gas, or related substances to markets, or the permits, financing, and the appropriate level of certainty (reasonable certainty, as likely as not, or possible but not likely) to do so; and economic producibility at current prices and costs. The volumes of reserves shall be determined on the basis of their volumes at the terminal point of oil and gas producing activities as defined in paragraph (a)(16) of this section. Reserves are classified as proved, probable, and possible according to the degree of uncertainty associated with the estimates.

Note to paragraph (a)(28): Reserves should not be assigned to adjacent reservoirs isolated by major, potentially sealing, faults until those reservoirs are penetrated and evaluated as economically producible. Reserves should not be assigned to areas that are clearly separated from a known accumulation by a non-productive reservoir (i.e., absence of reservoir, structurally low reservoir, or negative test results). Such areas may contain prospective resources (i.e., potentially recoverable resources from undiscovered accumulations).

\* \* \* \* \*

(30) Resources. Resources are quantities of oil and gas estimated to exist in naturally occurring accumulations. A portion of the resources may be estimated to be recoverable, and another portion may be considered to be unrecoverable. Resources include both discovered and undiscovered accumulations.

(31) Sedimentary basin. A sedimentary basin is a low area in the crust of the earth in which sediments have accumulated. Frequently, sedimentary basins that contain oil and gas reserves contain a number of discrete oil and gas reservoirs.

\* \* \* \* \*

**PART 229—STANDARD INSTRUCTIONS FOR FILING FORMS UNDER SECURITIES ACT OF 1933, SECURITIES EXCHANGE ACT OF 1934 AND ENERGY POLICY AND CONSERVATION ACT OF 1975—REGULATION S-K**

3. The authority citation for part 229 continues to read in part as follows:

Authority: 15 U.S.C. 77e, 77f, 77g, 77h, 77j, 77k, 77s, 77z-2, 77z-3, 77aa(25), 77aa(26), 77ddd, 77eee, 77ggg, 77hhh, 77iii, 77jjj, 77nnn, 77sss, 78c, 78i, 78j, 78l, 78m, 78n, 78o, 78u-5, 78w, 78ll, 78mm, 80a-8, 80a-9, 80a-20, 80a-29, 80a-30, 80a-31(c), 80a-37, 80a-38(a), 80a-39, 80b-11, and 7201 et seq.; and 18 U.S.C. 1350, unless otherwise noted.

\* \* \* \* \*

4. Amend § 229.102 by revising the introductory text of Instruction 3 and Instructions 4, 5 and 8 to read as follows.

**§ 229.102 (Item 102) Description of property.**

\* \* \* \* \*

Instructions to Item 102: \* \* \*

3. In the case of an extractive enterprise, not involved in oil and gas producing activities, material information shall be given as to production, reserves, locations, development, and the nature of the registrant's interest. If individual properties are of major significance to an industry segment:

\* \* \* \* \*

4. A registrant engaged in oil and gas producing activities shall provide the information required by Subpart 1200 of Regulation S-K.

5. In the case of extractive reserves other than oil and gas reserves, estimates other than proven or probable reserves (and any estimated values of such reserves) shall not be disclosed in any document publicly filed with the Commission, unless such information is required to be disclosed in the document by foreign or state law; provided, however, that where such estimates previously have been provided to a person (or any of its affiliates) that is offering to acquire, merge, or consolidate with the registrant, or otherwise to acquire the registrant's securities, such estimates may be included in documents relating to such acquisition.

\* \* \* \* \*

8. The attention of certain issuers engaged in oil and gas producing activities is directed to the information called for in Guide 4 (referred to in §229.801(d)).

\* \* \* \* \*

5. Amend § 229.801 by removing and reserving paragraph (b) and removing the authority citation following the section.

6. Amend § 229.802 by removing and reserving paragraph (b) and removing the authority citation following the section.

7. Add Subpart 229.1200 to read as follows:

**Subpart 229.1200—Disclosure by Registrants Engaged in Oil and Gas Producing Activities**

Sec.

229.1201 (Item 1201) General instructions to oil and gas industry-specific disclosures.

229.1202 (Item 1202) Disclosure of reserves.

229.1203 (Item 1203) Proved undeveloped reserves.

229.1204 (Item 1204) Oil and gas production.

229.1205 (Item 1205) Drilling and other exploratory and development activities.

229.1206 (Item 1206) Present activities.

229.1207 (Item 1207) Delivery commitments.

229.1208 (Item 1208) Oil and gas properties, wells, operations, and acreage.

229.1209 (Item 1209) Discussion and analysis of changes, trends, and uncertainties for registrants engaged in oil and gas activities.

**Subpart 229.1200—Disclosure by Registrants Engaged in Oil and Gas Producing Activities**

**§ 229.1201 (Item 1201) General instructions to oil and gas industry-specific disclosures.**

(a) If oil and gas producing activities are material to the registrant's or its subsidiaries' business operations or financial position, the disclosure specified in this Subpart 1200 should be included under appropriate captions (with cross references, where applicable, to related information disclosed in financial statements). However, limited partnerships and joint ventures that conduct, operate, manage, or report upon oil and gas drilling or income programs, that acquire properties either for drilling and

production, or for production of oil, gas, or geothermal steam or water, need not include such disclosure.

(b) To the extent that Items 1202 through 1208 (§§ 229.1202 – 229.1208) call for disclosures in tabular format, as specified in the particular Item, a registrant may modify such format for ease of presentation, to add information or to combine two or more required tables.

(c) The definitions in Rule 4–10(a) of Regulation S-X (17 CFR 210.4-1-(a)) shall apply for purposes of this Subpart 229.1200.

(d) For purposes of this Subpart 229.1200, the term “by geographic area” means, to the extent allowed by law:

(1) By continent;

(2) By country totals for each country that contains 15% or more of the registrant’s global oil reserves or gas reserves; and

(3) By sedimentary basin or field totals for each sedimentary basin or field that contains 10% or more of the registrant’s global oil reserves or gas reserves.

**§ 229.1202 (Item 1202) Disclosure of reserves.**

(a) Summary of conventional oil and gas reserves at fiscal year end. (1)

Provide the information specified in paragraph (a)(2) of this Item in tabular format as provided below:

**Summary of Oil and Gas Reserves in Conventional Accumulations as of Fiscal-Year End Based on Average Fiscal-Year Prices**

	Reserves	
	Oil	Natural Gas
Reserves category	(mbbls)	(mmcf)
<b>PROVED</b>		
<b>Developed</b>		

Continent A		
Continent B		
15% Country A		
15% Country B		
10% Field A in Country B		
Other Fields in Country B		
Other Countries in Continent B		
<b>Undeveloped</b>		
Continent A		
Continent B		
15% Country A		
15% Country B		
10% Field A in Country B		
Other Fields in Country B		
Other Countries in Continent B		
<b>TOTAL PROVED</b>		
<b>PROBABLE</b>		
<b>POSSIBLE</b>		

(2) Disclose, in the aggregate and by geographic area, reserves from conventional accumulations estimated using prices and costs under existing economic conditions, for each product type, in the following categories:

- (i) Proved developed reserves;
- (ii) Proved undeveloped reserves;
- (iii) Total proved reserves;
- (iv) Probable reserves (optional); and
- (v) Possible reserves (optional).

Instruction 1 to paragraph (a)(2): Disclose updated reserves tables as of the close of each fiscal year.

Instruction 2 to paragraph (a)(2): The registrant is permitted, but not required, to disclose probable or possible reserves pursuant to paragraphs (a)(2)(iv) and (a)(2)(v) of this Item.

Instruction 3 to paragraph (a)(2): If the registrant discloses amounts of a product in barrels of oil equivalent, disclose the basis for such equivalency.

(3) Reported total reserves shall be simple arithmetic sums of all estimates for individual properties or fields within each reserves category. When probabilistic methods are used, reserves should not be aggregated probabilistically beyond the field or property level; instead, they should also be aggregated by simple arithmetic summation.

(4) If the registrant has not previously disclosed reserves estimates in a filing with the Commission, the registrant shall disclose the technologies used to establish the appropriate level of certainty for reserves estimates from material properties included in the total reserves disclosed. The particular properties do not need to be identified.

(5) If the registrant chooses to disclose probable or possible reserves, discuss the relative risks related to such reserves estimates.

(6) Preparation of reserves estimates or reserves audit. Disclose the following information regarding the technical person primarily responsible for preparing the reserves estimates and, if the registrant represents that a third party conducted a reserves audit, regarding the technical person primarily responsible for conducting such reserves audit:

(i) If the person is an employee of the registrant:

(A) The fact that an employee of the registrant had primary responsibility for preparing the reserves estimate (but the employee does not have to be identified); and

(B) Measures taken to assure the independence and objectivity of the estimate;

(ii) If the person is not an employee of the registrant:

(A) The identity of the person;



(B) The nature and amount of all work that the person has performed for the registrant during the past three fiscal years, other than preparing the reserves estimate or conducting the reserves audit, as well as all compensation and fees (in any form) paid to that person for all such services;

(C) Whether the person has any other interests in the company or other conflict of interests;

(iii) Whether the person:

(A) Has a minimum of three years of practical experience in petroleum engineering or petroleum production geology, with at least one full year of this experience being in the estimation and evaluation of reserves if the person was primarily responsible for preparing the reserves estimates;

(B) Has a minimum of ten years of practical experience in petroleum engineering or petroleum production geology, with at least five years of this experience being in the estimation and evaluation of reserves and the conducting of reserves audits if that person conducted a reserves audit of the registrant's reserves estimates;

(C) Has received, and is maintaining in good standing, a registered or certified professional engineer's license or a registered or certified professional geologist's license, or the equivalent thereof, from an appropriate governmental authority or a recognized self-regulating professional organization; and

(D) Has a bachelor's or advanced degree in petroleum engineering, geology, or other discipline of engineering or physical science, and if so, the specific degree earned by that person; and

(iv) Any memberships, in good standing, of the person with a self-regulatory organization of engineers, geologists, other geoscientists, or other professionals whose professional practice includes reserves evaluations or reserves audits, that:

(A) Admits members primarily on the basis of their educational qualifications;

(B) Requires its members to comply with the professional standards of competence and ethics prescribed by the organization that are relevant to the estimation, evaluation, review, or audit of reserves data; and

(C) Has disciplinary powers, including the power to suspend or expel a member; and

(v) To the extent the person does not have all of the qualifications listed in paragraphs (a)(6)(iii) and (iv) of this Item, the reasons why the registrant believes that the person is sufficiently qualified to be primarily responsible for the technical aspects of the reserves estimation or audit, as applicable, and any risks associated with reserves estimates not prepared or audited by persons with such qualifications.

Instruction to paragraph (a)(6): For purposes of this Item, the identified “person” may be an individual or a business entity. To the extent that the person is a business entity, any disclosure regarding the qualifications listed in paragraphs (a)(6)(iii) and (iv) of this Item of that person will relate to the individual that is primarily responsible for the technical aspects of the reserves estimation or audit, as applicable.

(7) Third party preparer reports. If the registrant represents that its reserves estimates, or any estimated valuation thereof, are based on estimates prepared by a third party, the registrant shall file a report of the third party as an exhibit to the relevant registration statement or report. The report must include the following disclosure:

- (i) The purpose for which the report was prepared and for whom it was prepared;
  - (ii) The effective date of the report and the date on which the report was completed;
  - (iii) The proportion of the company's total reserves covered by the report and the geographic area in which the covered reserves are located;
  - (iv) The assumptions, data, methods, and procedures used to estimate reserves quantities, including the percentage of the registrant's total reserves reviewed in connection with the preparation of the report, and a statement that such assumptions, data, methods, and procedures are appropriate for the purpose served by the report;
  - (v) A discussion of primary economic assumptions;
  - (vi) A discussion of the possible effects of regulation on the ability of the registrant to recover the estimated reserves;
  - (vii) A discussion regarding the inherent risks and uncertainties of reserves estimates;
  - (viii) A statement that the third party has used all methods and procedures as it considered necessary under the circumstances to prepare the report; and
  - (ix) The signature of the third party.
- (8) Third party reserves audit reports. If the registrant represents that a third party conducted a reserves audit of the registrant's reserves estimates, or any estimated valuation thereof, the registrant shall file a report of the third party as an exhibit to the relevant registration statement or report. The report must include the following disclosure:

- (i) The purpose for which the report is being prepared and for whom it is prepared;
  - (ii) The effective date of the report and the date on which the report was completed;
  - (iii) The proportion of the company's total reserves covered by the report and the geographic area in which the covered reserves are located;
  - (iv) The assumptions, data, methods, and procedures used to conduct the reserves audit, including the percentage of the registrant's total reserves reviewed in connection with the preparation of the report, and a statement that such assumptions, data, methods, and procedures are appropriate for the purpose served by the report;
  - (v) A discussion of primary economic assumptions;
  - (vi) A discussion of the possible effects of regulation on the ability of the registrant to recover the estimated reserves;
  - (vii) A discussion regarding the inherent risks and uncertainties of reserves estimates;
  - (viii) A statement that the third party has used all methods and procedures as it considered necessary under the circumstances to prepare the report;
  - (ix) A brief summary of the third party's conclusions with respect to the reserves estimates; and
  - (x) The signature of the third party.
- (9) For purposes of this Item 1202, the term "reserves audit" means the process of reviewing certain of the pertinent facts interpreted and assumptions made that have resulted in an estimate of reserves prepared by others and the rendering of an

opinion about the appropriateness of the methodologies employed, the adequacy and quality of the data relied upon, the depth and thoroughness of the reserves estimation process, the classification of reserves appropriate to the relevant definitions used, and the reasonableness of the estimated reserves quantities. In order to disclose that a “reserves audit” has been conducted, the report resulting from this review must represent an examination of at least 80% of the portion of the registrant’s reserves covered by the reserves audit.

(b) Summary of oil and gas reserves from continuous accumulations. (1)

Provide the information specified in paragraph (b)(2) of this Item in tabular format as provided below:

**Summary of Oil and Gas Reserves from Continuous Accumulations as of Fiscal-Year End Based on Average Fiscal-Year Prices**

	<b>Reserves</b>		
	<b>Product A</b>	<b>Product B</b>	<b>Product C</b>
Reserves category	(measure)	(measure)	(measure)
<b>PROVED</b>			
<b>Developed</b>			
Country A			
Country B			
10% Field A in Country B			
Other Fields in Country B			
<b>Undeveloped</b>			
Country A			
Country B			
10% Field A in Country B			
Other Fields in Country B			
<b>TOTAL PROVED</b>			
<b>PROBABLE</b>			
<b>POSSIBLE</b>			

(2) Disclose, in the aggregate and by geographic area, reserves from continuous accumulations (including, but not limited to, bitumen and shale oil, shale gas, and coalbed methane) estimated using prices and costs under existing economic conditions, for each product type applicable to the registrant, in the following categories:

- (i) Proved developed reserves;
- (ii) Proved undeveloped reserves;
- (iii) Total proved reserves;
- (iv) Probable reserves (optional); and
- (v) Possible reserves (optional).

Instruction 1 to paragraph (b)(2): Disclose updated reserves tables as of the close of each fiscal year.

Instruction 2 to paragraph (b)(2): The registrant is permitted, but not required, to disclose probable or possible reserves pursuant to paragraphs (b)(2)(iv) and (b)(2)(v) of this Item.

Instruction 3 to paragraph (b)(2): If the registrant discloses amounts of a product in barrels of oil equivalent, disclose the basis for such equivalency.

(3) Provide the disclosures required by paragraphs (a)(3) through (a)(9) of this Item, as they apply to continuous accumulations.

(c) Reserves sensitivity analysis (optional). (1) The registrant may, but is not required, to provide the information specified in paragraph (c)(2) of this Item in tabular format as provided below:

**Sensitivity of Reserves to Prices  
By Principal Product Type and Price Scenario**

Price Case	Proved Reserves			Probable Reserves			Possible Reserves		
	Oil	Gas	Product A	Oil	Gas	Product A	Oil	Gas	Product A

	mbbls	mmcf	measure	mbbls	mmcf	measure	mbbls	mmcf	measure
Scenario 1									
Scenario 2									

(2) The registrant may, but is not required to, disclose, in the aggregate, an estimate of reserves estimated for each product type based on 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.

(3) If the registrant provides disclosure under this paragraph (c) of this Item, disclose the price and cost schedules and assumptions on which the values disclosed under paragraphs (c)(2)(i) through (c)(2)(iv) of this Item are based.

Instruction to Item 1202: Estimates of oil or gas resources other than reserves, and any estimated values of such resources, shall not be disclosed in any document publicly filed with the Commission, unless such information is required to be disclosed in the document by foreign or state law; provided, however, that where such estimates previously have been provided to a person (or any of its affiliates) that is offering to acquire, merge, or consolidate with the registrant or otherwise to acquire the registrant’s securities, such estimate may be included in documents related to such acquisition.

**§ 229.1203 (Item 1203) Proved undeveloped reserves.**

(a) Provide the information specified in paragraph (b) of this Item in tabular format as provided below:

**Conversion of Proved Undeveloped Reserves**

Fiscal Year	Proved Undeveloped Reserves Converted to Proved Developed Reserves			Investment in Conversion of Proved Undeveloped Reserves to Proved Developed Reserves, \$
	Oil (mbbls)	Gas (mmcf)	Product A (measure)	
Fiscal Year – 4				

Fiscal Year – 3				
Fiscal Year – 2				
Fiscal Year – 1				
Fiscal Year				

(b) For the last five fiscal years, disclose, by product type, proved reserves estimated using current prices and costs in the following categories:

(1) Proved undeveloped reserves converted to proved developed reserves during the year; and

(2) Investments in the conversion of proved undeveloped reserves to proved developed reserves during the year.

(c) Disclose, by product type, any proved undeveloped reserves which have remained undeveloped for five years or more. Explain the reason for the lack of development.

(d) Disclose the registrant’s plans to develop proved undeveloped reserves and to further develop proved oil and gas reserves.

(e) Discuss any material changes to proved undeveloped reserves.

**§ 229.1204 (Item 1204) Oil and gas production.**

(a) Provide the information specified in paragraph (b) of this Item in tabular format as provided below:

**Oil and Gas Production, Sales Prices, and Production Costs**

Location	Oil			Gas			Product A		
	Production (mbbls)	Sales Price (\$US/bbl)	Production Cost (\$US/boe)	Production (mmcf)	Sales Price (\$US/mcf)	Production Cost (\$US/mcfe)	Production (measure)	Sales Price (\$US measure)	Production Cost (\$US/measure)
<b>Geographic Area A</b>									
Fiscal Year – 2									
Fiscal Year – 1									
Fiscal Year									
<b>Geographic Area B</b>									



Geographic Area C									
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(b) Disclose, by geographic area, for the last three years:

(1) Net oil and gas production;

(2) Average oil and gas sales prices, net of any effects as a result of hedging transactions; and

(3) Average production costs (lifting costs, not including severance taxes) per unit of production.

(c) For purposes of this Item 1204, the term “net production” includes only production that the registrant owns and production attributable to the registrant’s interest in projects less royalties and production due to others. In special situations (e.g., foreign operations), the registrant may provide net production before royalties if more appropriate. If the registrant provides “net before royalty” production figures, it must note the change from usage of “net production.”

**§ 229.1205 (Item 1205) Drilling and other exploratory and development activities.**

(a) Provide the information specified in paragraph (b) of this Item in tabular format as provided below:

**Drilling Activities  
[Geographic area]**

	Exploratory Wells		Development Wells		Extension Wells	
	Gross	Net	Gross	Net	Gross	Net
Oil						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Natural Gas						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Product A						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Suspended						
Fiscal Year						

Fiscal Year -1						
Fiscal Year -2						
Dry						
Fiscal Year						
Fiscal Year -1						
Fiscal Year -2						
Total						

(b) Disclose, by geographic area, for each of the last three years, the following information:

(1) The number of gross and net productive, suspended, and dry exploratory wells drilled;

(2) The number of gross and net productive, suspended, and dry development wells drilled; and

(3) The number of gross and net productive, suspended, and dry extension wells drilled.

(c) Definitions. For purposes of this Item, the following terms shall be defined as indicated below.

(1) A dry well is an exploratory, development, or extension well that proves to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

(2) A productive well is an exploratory, development, or extension well that is not a dry well.

(3) A suspended well is a well that has neither been declared dry nor completed for use in field operations.

(4) Completion refers to installation of permanent equipment for production of oil or gas, or, in the case of a dry well, to reporting to the appropriate authority that the well has been abandoned.

(5) The number of wells drilled refers to the number of wells completed at any time during the fiscal year, regardless of when drilling was initiated.

(d) Disclose, by geographic area, for each of the last three years, any other exploratory or development activities conducted, including implementation of mining methods for purposes of oil and gas producing activities.

**§ 229.1206 (Item 1206) Present activities.**

(a) Disclose, by geographical area, the registrant's present activities, such as the number of wells in the process of being drilled (including wells temporarily suspended), waterfloods in process of being installed, pressure maintenance operations, and any other related activities of material importance.

(b) Provide the description of present activities as of a date at the end of the most recent fiscal year or as close to the date that the registrant files the document as reasonably possible.

(c) Include only those wells in the process of being drilled at the "as of" date and express them in terms of both gross and net wells.

(d) Do not include wells that the registrant plans to drill, but has not commenced drilling unless there are factors that make such information material.

**§ 229.1207 (Item 1207) Delivery commitments.**

(a) If the registrant is committed to provide a fixed and determinable quantity of oil or gas in the near future under existing contracts or agreements, disclose material information concerning the estimated availability of oil and gas from any principal sources, including the following:

(1) The principal sources of oil and gas that the registrant will rely upon and the total amounts that the registrant expects to receive from each principal source and from all sources combined;

(2) The total quantities of oil and gas that are subject to delivery commitments; and

(3) The steps that the registrant has taken to ensure that available reserves and supplies are sufficient to meet such commitments for the next one to three years.

(b) Disclose the information required by this Item:

(1) In a form understandable to investors; and

(2) Based upon the facts and circumstances of the particular situation, including, but not limited to:

(i) Disclosure by geographic area;

(ii) Significant supplies dedicated or contracted to the registrant;

(iii) Any significant reserves or supplies subject to priorities or curtailments which may affect quantities delivered to certain classes of customers, such as customers receiving services under low priority and interruptible contracts;

(iv) Any priority allocations or price limitations imposed by Federal or State regulatory agencies, as well as other factors beyond the registrant's control that may affect the registrant's ability to meet its contractual obligations (the registrant need not provide detailed discussions of price regulation);

(v) Any other factors beyond the registrant's control, such as other parties having control over drilling new wells, competition for the acquisition of reserves and supplies, and the availability of foreign reserves and supplies, which may affect the

registrant's ability to acquire additional reserves and supplies or to maintain or increase the availability of reserves and supplies; and

(vi) Any impact on the registrant's earnings and financing needs resulting from its inability to meet short-term or long-term contractual obligations. (See Items 303 and 1209 of Regulation S-K (§§ 229.303 and 229.1209).)

(c) If the registrant has been unable to meet any significant delivery commitments in the last three years, describe the circumstances concerning such events and their impact on the registrant.

(d) For purposes of this Item, available reserves are estimates of the amounts of oil and gas which the registrant can produce from current proved developed reserves using presently installed equipment under existing economic and operating conditions and an estimate of amounts that others can deliver to the registrant under long-term contracts or agreements on a per-day, per-month, or per-year basis.

**§ 229.1208 (Item 1208) Oil and gas properties, wells, operations, and acreage.**

(a) Identify and describe generally the registrant's material properties, plants, facilities, and installations:

- (1) Identify the geographic area in which they are located;
- (2) Indicate whether they are located onshore or offshore; and
- (3) Describe any statutory or other mandatory relinquishments, surrenders, back-ins, or changes in ownership.

(b) Provide the information specified in paragraph (c) of this Item in tabular format as provided below:

**Wells**

Location	Producing Wells
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	Gross	Net
<b>Geographic Area A</b>		
Oil Wells		
Natural Gas Wells		
Product A Wells		
Total		
<b>Geographic Area B</b>		
Oil Wells		
Natural Gas Wells		
Product A Wells		
Total		

(c) For oil wells and gas wells in both conventional and continuous accumulations and for other wells for products from continuous accumulations, disclose separately the number of the registrant's producing wells, expressed in terms of both gross wells and net wells, by geographic area.

(d) To the extent the registrant is extracting hydrocarbons through means other than wells, provide a discussion of such operations.

(e) Provide the information specified in paragraph (f) of this Item in tabular format as provided below:

#### Acreage

	Developed Acres		Undeveloped Acres	
	Gross	Net	Gross	Net
Geographic Area A				
Geographic Area B				
Geographic Area C				
Total				

(f) Disclose, by geographic area, the registrant's total gross and net developed acres (i.e., acres spaced or assignable to productive wells) and undeveloped acres, including leases and concessions.

(g) For unproved properties disclose:

(1) The existence, nature (including any bonding requirements), timing, and cost (specified or estimated) of any work commitments; and

(2) By geographic area, the net area of unproved property for which the registrant expects its rights to explore, develop, and exploit to expire within one year.

(h) Disclose areas of acreage concentration, and, if material, the minimum remaining terms of leases and concessions.

(i) Definitions. For purposes of this Item, the following terms shall be defined as indicated:

(1) A gross well or acre is a well or acre in which the registrant owns a working interest. The number of gross wells is the total number of wells in which the registrant owns a working interest. Count one or more completions in the same bore hole as one well. In a footnote, disclose the number of wells with multiple completions. If one of the multiple completions in a well is an oil completion, classify the well as an oil well.

(2) A net well or acre is deemed to exist when the sum of fractional ownership working interests in gross wells or acres equals one. The number of net wells or acres is the sum of the fractional working interests owned in gross wells or acres expressed as whole numbers and fractions of whole numbers.

(3) Productive wells include producing wells and wells mechanically capable of production.

(4) Undeveloped acreage encompasses those leased acres on which wells have not been drilled or completed to a point that would permit the production of economic quantities of oil or gas regardless of whether such acreage contains proved reserves. Do not confuse undeveloped acreage with undrilled acreage held by production under the terms of the lease.

**§ 229.1209 (Item 1209) Discussion and analysis of changes, trends, and uncertainties for registrants engaged in oil and gas activities.**

(a) Provide, either as part of Management's Discussion and Analysis of Financial Condition and Results of Operations or in a separate section, a discussion of:

(1) Material changes in proved reserves and, if disclosed, probable and possible reserves, and the sources to which such changes are attributable, including changes made due to:

(i) Changes in prices;

(ii) Technical revisions; and

(iii) Changes in the status of any concessions held (such as terminations, renewals, or changes in provisions);

(2) Technologies used to establish the appropriate level of certainty for any material additions to, or increases in, reserves estimates; and

(3) Known trends, demands, commitments, uncertainties, and events that have had, or are reasonably likely to have, a material effect on the company with respect to matters including, but not limited to, the following:

(i) Prices and costs;

(ii) 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;

(iii) Performance of any mining-type activities for the production of hydrocarbons;

(iv) The registrant's recent ability to convert:

(A) Proved undeveloped reserves to proved developed reserves;



- (B) Probable reserves to proved reserves, if disclosed; and
- (C) Possible reserves to probable or proved reserves, if disclosed;
- (v) Anticipated capital expenditures directed toward conversion of:
  - (A) Proved undeveloped reserves to proved developed reserves;
  - (B) Probable reserves to proved reserves, if disclosed; and
  - (C) Possible reserves to probable or proved reserves, if disclosed;
- (vi) Anticipated exploratory activities, well drilling, and production;
- (vii) The minimum remaining terms of leases and concessions;
- (viii) Material changes to any line item in the tables described in §§ 229.1202

through 229.1208; and

- (ix) Potential effects of different forms of rights to resources, such as production sharing contracts, on operations.

(b) To the extent that such discussion or analysis of material changes, known trends, or uncertainties is directly relevant to a particular disclosure required by §§ 229.1202 through 229.1208, the registrant may include such discussion or analysis in response to the relevant section, with appropriate cross-references, rather than including such discussion or analysis in its general response to § 229.303 (Management’s Discussion and Analysis of Financial Condition and Results of Operations).

**PART 249—FORMS, SECURITIES EXCHANGE ACT OF 1934**

8. The authority citation for part 249 continues to read in part as follows:

Authority: 15 U.S.C. 78a et seq., 7202, 7233, 7241, 7262, 7264, and 7265; and 18 U.S.C. 1350, unless otherwise noted.

\* \* \* \* \*

9. Amend Form 20-F (referenced in §249.220f) by:
  - a. Revising “Instruction to Item 4” and the introductory text and paragraph (b) of “Instructions to Item 4.D”; and
  - b. Removing paragraph (c) of “Instructions to Item 4.D” and “Appendix A to Item 4.D—Oil and Gas.”

The additions and revisions read as follows:

[Note: The text of Form 20-F does not, and this amendment thereto will not, appear in the Code of Federal Regulations.]

**FORM 20-F**

\* \* \* \* \*

**Item 4. Information on the Company**

\* \* \* \* \*

**Instructions to Item 4:**

1. Furnish the information specified in any industry guide listed in Part 9 of Regulation S-K (§229.802 of this chapter) that applies to you.
2. If oil and gas operations are material to your or your subsidiaries’ business operations or financial position, provide the information specified in Subpart 1200 of Regulation S-K (§229.1200 et seq. of this chapter). If the required information is not disclosed because a foreign government restricts the disclosure of estimated reserves for properties under its governmental authority, or amounts under long-term supply, purchase, or similar agreements, the registrant shall disclose the country, cite the law or regulation which restricts such disclosure, and indicate that the reported reserves estimates or amounts do not include figures for the named country.

\* \* \* \* \*

**Instruction to Item 4.D:** In the case of an extractive enterprise, other than an oil and gas producing activity:

\* \* \* \* \*

(b) In documents that you file publicly with the Commission, do not disclose estimates of reserves unless the reserves are proved or probable and do not give estimated values of those reserves, unless foreign law requires you to disclose the information. If these types of estimates have already been provided to any person that is offering to

acquire you, however, you may include the estimates in documents relating to the acquisition.

\* \* \* \* \*

By the Commission.

Florence E. Harmon  
Acting Secretary

June 26, 2008