

**SECURITIES AND EXCHANGE COMMISSION**

**17 CFR Parts 210, 211, 229, and 249**

**[Release Nos. 33-8995; 34-59192; FR-78; File No. S7-15-08]**

**RIN 3235-AK00**

**MODERNIZATION OF OIL AND GAS REPORTING**

**AGENCY:** Securities and Exchange Commission.

**ACTION:** Final rule; interpretation; request for comment on Paperwork Reduction Act burden estimates.

**SUMMARY:** The Commission is adopting revisions to its oil and gas reporting disclosures 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 disclosure items, there have been significant changes in the oil and gas industry. The amendments are designed to modernize and update the oil and gas disclosure requirements to align them with current practices and changes in technology. The amendments concurrently align the full cost accounting rules with the revised disclosures. The amendments also codify and revise Industry Guide 2 in Regulation S-K. In addition, they harmonize oil and gas disclosures by foreign private issuers with the disclosures for domestic issuers.

**DATES:** Effective Date: January 1, 2010.

Comment Date: Comments on the Paperwork Reduction Act Analysis should be received on or before February 13, 2009.

**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:** Ray Be, Special Counsel, Office of Chief Counsel at (202) 551-3500; 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, Jonathan Duersch, Assistant Chief Accountant, or Doug Parker, Professional Accounting Fellow, 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 adopting 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 are adding new Subpart 1200, including Items 1201 through 1208, 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 June 26, 2008, the Commission issued a proposing release (Proposing Release) seeking public comment on proposed amendments to the disclosure requirements regarding oil and gas companies.<sup>5</sup> These proposals encompassed issues that were previously addressed more generally in a concept release that the Commission issued on December 12, 2007 (Concept Release),<sup>6</sup> which solicited comment on possible revisions to the oil and gas reserves disclosure requirements specified in Rule 4-10 of Regulation S-X<sup>7</sup> and Item 102 of Regulation S-K.<sup>8</sup> The Proposing Release also contained proposals not addressed by the Concept Release related to the updating and codification of Industry Guide 2.

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<sup>5</sup> Release No. 33-8935 (June 27, 2008) [73 FR 39181].

<sup>6</sup> Release No. 33-8870 (Dec. 12, 2007) [72 FR 71610].

<sup>7</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>8</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].

We initially adopted our oil and gas disclosure requirements in 1978 and 1982.<sup>9</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>10</sup> Prior to our issuance of the Concept Release and the Proposing Release, many industry participants had expressed concern that our disclosure rules are no longer in alignment with current industry practices and therefore limit their usefulness to the market and investors.<sup>11</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 quantify 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.

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<sup>9</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>10</sup> See, for example, Daniel Yergin and David Hobbs: “The Search for Reasonable Certainty in Reserves Disclosure,” *Oil and Gas Journal* (July 18, 2005).

<sup>11</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 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.

In response to the Concept Release, commenters submitted 80 comment letters.<sup>12</sup> We received comment letters from a variety of industry participants such as accounting firms, engineering consulting firms, domestic and foreign oil and gas companies, federal government agencies, individuals, law firms, professional associations, public interest groups, and rating agencies. We considered these comments and addressed many of them in issuing the Proposing Release.

### **C. Overview of the Comment Letters Received on the Proposing Release**

The Proposing Release sought significantly more detailed comment on issues raised in the Concept Release, as well as proposed amendments to the disclosure items in our rules and Industry Guide 2. In response to the Proposing Release, we received 65 comment letters, again from a variety of constituents with interests in oil and gas industry disclosure.

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

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<sup>12</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>.



requirements were initially adopted.<sup>13</sup> Commenters provided significantly more detailed comments on the Proposing Release than on the Concept Release, which did not include specific proposed regulatory text. We discuss those comments in detail in the relevant sections of this release. However, in general, commenters focused on several key issues raised by the Proposing Release. These issues included the following:

- The proposal to permit disclosure of probable and possible reserves;
- The proposed use of average historical prices to represent existing economic conditions to determine the economic producibility of oil and gas reserves for disclosure purposes while continuing to use a single day

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<sup>13</sup> See letters from American Association of Petroleum Geologists (“AAPG”), American Clean Skies Foundation (“American Clean Skies”), American Petroleum Institute (“API”), AngloGold Ashanti Ltd. (“AngloGold”), Apache Corporation (“Apache”), BHP Billiton Petroleum (“BHP”), BP Plc. (“BP”), Brookwood Petroleum Advisors, Ltd. (“Brookwood”), Canadian Association of Petroleum Producers (“CAPP”), Canadian Natural Resources Ltd. (“Canadian Natural”), Center for Audit Quality (“CAQ”), Center for Corporate Policy (“CCP”), CFA Institute Centre for Financial Market Integrity (“CFA”), Chesapeake Energy Corporation (“Chesapeake”), Chevron Corporation (“Chevron”), Coeur d’Alene Mines Corporation (“Coeur”), Cunningham, Peter (“Cunningham”), Davis, Polk & Wardwell (“Davis Polk”), Deloitte & Touche (“Deloitte”), Devon Energy Corporation (“Devon”), EnCana Corporation (“EnCana”), Energen Corporation (“Energen”), Energy Information Administration (of DOE) (“EIA”), Eni S.p.A. (“Eni”), Equitable Resources, Inc. (“Equitable”), Ernst & Young (“E&Y”), Evolution Petroleum Corporation (“Evolution”), ExxonMobil Corporation (“ExxonMobil”), Federal Energy Regulatory Commission (“FERC”), Graff Consulting Group LLC (“Graff Consulting”), Grant Thornton (“Grant Thornton”), Imperial Oil Ltd. (“Imperial”), Independent Petroleum Association of America (“IPAA”), KPMG (“KPMG”), Luscher, Brian (“Luscher”), Magoto, Joseph (“Magoto”), McMoRan Exploration Co. (“McMoRan”), Newfield Exploration Company (“Newfield”), Nexen, Inc. (“Nexen”), Peabody Energy Corporation (“Peabody”), Petro-Canada (“Petro-Canada”), Petroleo Brasileiro S.A. (“Petrobras”), Petroleos Mexicanos (“PEMEX”), PRA International Ltd. (“PRA”), PriceWaterhouseCoopers (“PWC”), Questar Market Resources (“Questar”), RepsolYPF, S.A. (“Repsol”), Ross Petroleum Ltd. (“Ross”), Ryder Scott Company, L.P. (“Ryder Scott”), Sasol Ltd. (“Sasol”), Senator Robert Menendez, Senator Russell D. Feingold, and Senator Bernard Sanders, U.S. Senate (“Three Senators”), Shearman & Sterling (“Shearman & Sterling”), Shell International B.V. (“Shell”), Society of Exploration Geophysicists (“SEG”), Society of Petroleum Engineers (“SPE”), Society of Petroleum Evaluation Engineers (“SPEE”), Southwestern Energy Production Company (“Southwestern”), Standard Advantage (“Standard Advantage”), StatoilHydro (“StatoilHydro”), Swift Energy Company (“Swift”), Talisman Energy Inc. (“Talisman”), Total, S.A. (“Total”), van Wyk, Mike (“van Wyk”), Wagner, Robert (“Wagner”), Zakaib, Geoff (“Zakaib”).

year-end price to determine the economic producibility of reserves for accounting purposes;

- The proposed inclusion of bitumen, oil shales, and other resources in the definition of “oil and gas producing activities”;
- The proposed provision to broaden the types of technology that a company may use to establish reserves estimates and categories;
- The proposed change in the definition of proved undeveloped reserves to eliminate the “certainty” requirement; and
- The increased detail of disclosure that would be required as a result of our proposed definition of “geographic location.”

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

### **A. Introduction**

The revisions and additions to the definition section in Rule 4-10(a) of Regulation S-X<sup>14</sup> 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. Many of the definitions are designed to be consistent with the Petroleum Resource Management System (PRMS).<sup>15</sup> Among other things, the revisions to these definitions address four issues that have been of particular interest to companies, investors, and securities analysts:

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<sup>14</sup> 17 CFR 210.4-10(a).

<sup>15</sup> The Petroleum Resources Management System is a widely accepted standard for the management of petroleum resources developed by several industry organizations. See Society of Petroleum Engineers, the World Petroleum Council, American Association of Petroleum Geologists, and the Society of Petroleum Evaluation Engineers, Petroleum Resources Management System, SPE/WPC/AAPG/SPEE (2007).

- The use of single-day year-end pricing to determine the economic producibility of reserves;
- 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.

The 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. In addition, to the extent appropriate, we have revised our proposals so that the final definitions are more consistent with terms and definitions in the PRMS to improve compliance and understanding of our new rules.

## **B. Pricing Mechanism for Oil and Gas Reserves Estimation**

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

The final rules define the term “proved oil and gas reserves” in part as “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 definition states that the economic producibility of a reservoir must be based on existing economic conditions. It specifies that, in calculating economic producibility, a company must use a 12-month average price, calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month within the 12-month period prior to the end of the reporting period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions.<sup>16</sup>

Most commenters supported the use of a 12-month average price to serve as a proxy for existing economic conditions to determine the economic producibility of reserves.<sup>17</sup> Some noted that a 12-month average price is considered to reflect “current economic conditions” by PRMS.<sup>18</sup> They noted that the use of an average price would reduce the effects of short term volatility<sup>19</sup> and seasonality,<sup>20</sup> while maintaining comparability of disclosures among companies.<sup>21</sup>

Seven commenters recommended the use of first-of-the-month prices<sup>22</sup> instead of the proposed use of end-of-the-month prices because the use of first-of-the-month prices

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<sup>16</sup> See Rule 4-10(a)(22)(v) [17 CFR 210.4-10(a)(22)(v)].

<sup>17</sup> See letters from AngloGold, Apache, API, BHP, BP, Canadian Natural, CAPP, Chesapeake, Chevron, Devon, EIA, EnCana, Equitable, Evolution, ExxonMobil, Newfield, Nexen, Petrobras, Petro-Canada, PWC, Questar, Repsol, Ryder Scott, Sasol, Shell, Southwestern, SPE, Total, and Wagner.

<sup>18</sup> See letters from AngloGold, BHP, Equitable, Ryder Scott, and SPE.

<sup>19</sup> See letters from Apache, API, BHP, BP, Canadian Natural, CAPP, Chesapeake, EIA, EnCana, Equitable, Evolution, ExxonMobil, Imperial, IPAA, Newfield, Petrobras, Petro-Canada, Repsol, Ryder Scott, SPE, Total, and Wagner.

<sup>20</sup> See letters from Apache, Canadian Natural, Devon, EnCana, Evolution, IPAA, Petro-Canada, Repsol, and Ryder Scott.

<sup>21</sup> See letters from BHP, Canadian Natural, CAPP, Deloitte, Devon, IPAA, Newfield, Petro-Canada, Total, and Wagner.

<sup>22</sup> See letters from Apache, BP, Chesapeake, Chevron, Devon, Repsol, and Shell.

would provide companies with more time to estimate their reserves<sup>23</sup> and they thought that these prices better reflect the actual price received under typical natural gas contracts.<sup>24</sup> Conversely, six commenters recommended the use of a 12-month daily average price<sup>25</sup> because they thought that a daily average price would be more appropriate than a monthly average price. These commenters noted that oil sales contracts often are based on daily averages.<sup>26</sup> Two commenters expressed concern that end-of-the-month prices are not representative of actual prices because commodity traders often “clear their books” at the end of the month.<sup>27</sup>

One commenter opposed the use of average prices stating that, conceptually, the use of average prices is poor regulatory policy and may encourage the market to pressure standard setters to use historical average prices for financial instruments and other assets and liabilities associated with volatile markets.<sup>28</sup> It noted that volatility reflects the underlying economics of the oil and gas industry.<sup>29</sup>

The objective of reserves estimation is to provide the public with comparable information about volumes, not fair value, of a company’s reserves available to enable investors to compare the business prospects of different companies. The use of a 12-month average historical price to determine the economic producibility of reserves quantities increases comparability between companies’ oil and gas reserve disclosures,

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<sup>23</sup> See letters from Chesapeake, Devon, and Shell.

<sup>24</sup> See letters from Apache, Newfield, and Repsol.

<sup>25</sup> See letters from Canadian Natural, CAPP, EnCana, Nexen, Petro-Canada, and Repsol.

<sup>26</sup> See letter from Newfield.

<sup>27</sup> See letters from Apache and Shell.

<sup>28</sup> See letter from CFA.

<sup>29</sup> See letter from CFA.

while mitigating any additional variability that a single-day price may have on reserve estimates. Although oil and gas prices themselves are subject to market-based volatility, the estimation of reserves quantities based on any historical price assumption determines those reserves quantities as if the oil or gas already has been produced, even though they have not, and these measures do not attempt to portray a reflection of their fair value. If the objective of reserve disclosures were to provide fair value information, we believe a pricing system that incorporates assumptions about estimated future market prices and costs related to extraction could be a more appropriate basis for estimation.

In order to provide disclosures which are more consistent with the objective of comparability, the amendments state that the existing economic conditions for determining the economic producibility of oil and gas reserves include the 12-month average price, calculated as the unweighted arithmetic average of the first-day-of-the-month price for each month within the 12-month period prior to the end of the reporting period.<sup>30</sup> For example, a company with a reporting year end of December 31 would determine its reserves estimates for its annual report based on the average of the prices for oil or gas on the first day of every month from January through December. Therefore, the use of a 12-month average price provides companies with the ability to efficiently prepare useful reserve information without sacrificing the objective of comparability. We believe that the revised definition of the term “proved oil and gas reserves” will provide investors with improved reserves information thereby enhancing their ability to analyze the disclosures.

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<sup>30</sup> See new Rule 4-10(a)(22)(v) of Regulation S-X [17 CFR 210.4-10(a)(22)(v)].

## 2. Prices used for disclosure and accounting purposes

A proposal that resulted in significant comment was the use of a 12-month average price to estimate reserves for disclosure purposes, but a single-day, year-end price for accounting purposes.<sup>31</sup> All commenters addressing the issue of using different prices to determine reserves for disclosure and accounting opposed the proposal.<sup>32</sup> We are not adopting this aspect of the proposal. Instead, we are revising both our disclosure rules and our full-cost accounting rules related to oil and gas reserves to use a single price based on a 12-month average.<sup>33</sup> We also will continue to communicate with the FASB staff to align their accounting standards with these rules.

Commenters pointed out that the use of two different prices for disclosure and accounting purposes could:

- Confuse investors and other users of financial statements.<sup>34</sup>
- Create misleading information;<sup>35</sup>

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<sup>31</sup> Currently, companies use a single-day, year-end price to determine the quantity of its proved reserves. From an accounting perspective, the quantity of those reserves, while not included on the balance sheet, is used to determine the depreciation, depletion and amortization of certain capitalized costs included on the balance sheet. If the final rule retained a single-day, year-end price for determining reserves for accounting purposes (i.e., for determining depreciation, depletion and amortization), then companies would effectively be required to calculate reserves twice, using two different pricing assumptions—once for disclosure purposes and once for accounting purposes. Similarly, under the full cost rules, the full cost ceiling test, as described in Section III of this release, would have similar implications.

<sup>32</sup> See letters from Apache, API, Audit Quality, BHP, BP, Canadian Natural, CAPP, CFA, Chesapeake, Chevron, Deloitte, Devon, E&Y, EnCana, Energen, Eni, Equitable, Evolution, ExxonMobil, Grant Thornton, Imperial, KPMG, McMoRan, Newfield, Nexen, PEMEX, Petrobras, Petro-Canada, PWC, Questar, Repsol, Ross, Ryder Scott, Sasol, Shell, Southwestern, SPEE, StatoilHydro, Swift, Talisman, Total, and Wagner.

<sup>33</sup> See Rule 4-10.

<sup>34</sup> See letters from Audit Quality, BHP, Canadian Natural, CAPP, Chesapeake, Deloitte, Devon, Evolution, ExxonMobil, Imperial, Newfield, Nexen, Petrobras, Petro-Canada, PWC, Questar, Repsol, Ryder Scott, Shell, Swift, Talisman, Total, and Wagner.

<sup>35</sup> See letters from BP, CFA, Devon, Eni, Nexen, Repsol, and Wagner.

- Harm comparability;<sup>36</sup>
- Decrease transparency;<sup>37</sup>
- Increase costs and burden significantly;<sup>38</sup>
- Increase the complexity of disclosures;<sup>39</sup>
- Double record-keeping burden;<sup>40</sup>
- Require more disclosure to explain the differences in reserves estimates; and<sup>41</sup>
- Break the connection between disclosures and accounting.<sup>42</sup>

Some commenters noted that the disclosure and accounting rules and guidance do not use a different pricing method in other situations.<sup>43</sup> In addition, several commenters believed that changing to the use of an average price to estimate proved reserves would have a minimal impact on depreciation and net income.<sup>44</sup> We believe that changing the rules to use a 12-month average price in reserves estimations is not inconsistent with the principles and objectives of financial reporting in authoritative accounting guidance.

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<sup>36</sup> See letters from Apache, Canadian Natural, CAPP, Questar, StatoilHydro, and Wagner.

<sup>37</sup> See letters from Canadian Natural, CAPP, ExxonMobil, Shell, Swift, and Wagner.

<sup>38</sup> See letters from Apache, Audit Quality, BHP, Canadian Natural, CAPP, Chevron, Deloitte, Devon, Eni, Equitable, Evolution, ExxonMobil, Imperial, McMoRan, Newfield, Nexen, Petrobras, Questar, Petro-Canada, PWC, Ryder Scott, Shell, Swift, Total, and Wagner.

<sup>39</sup> See letters from CAPP, CFA, and Devon.

<sup>40</sup> See letters from Apache, Chesapeake, Eni, Equitable, and Imperial.

<sup>41</sup> See letters from CAPP, Devon, Eni, ExxonMobil, Imperial, and Wagner.

<sup>42</sup> See letters from Apache, Audit Quality, CAPP, CFA, Deloitte, E&Y, Energen, Eni, ExxonMobil, Imperial, KPMG, Newfield, PWC, Repsol, and Total.

<sup>43</sup> See letters from API, CAPP, and Shell.

<sup>44</sup> See letters from API, Canadian Natural, EnCana, ExxonMobil, and Total.



With respect to accounting pronouncements that currently make reference to a single-day pricing regime with respect to oil and gas reserves, we are communicating with the FASB staff to align the standards used in its pronouncements with the 12-month average price used in our new rules, as several commenters recommended.<sup>45</sup> As discussed in more detail below, we are adopting a compliance date that will provide sufficient time to coordinate such activities with the FASB. However, as we discuss our revisions with the FASB, we will consider whether to delay the compliance date further.

### **3. Alternate pricing schemes**

Some commenters on the Proposing Release believed that oil and gas futures prices, or management's forecast of future prices, would better represent the value of the reserves<sup>46</sup> and be better aligned with fair value of the reserves.<sup>47</sup> They indicated that management uses futures prices, not historical prices, in its planning and day-to-day decision making.<sup>48</sup> They suggested that the use of futures prices, combined with disclosure of how management made the estimates, would provide greater transparency<sup>49</sup> and comparability of disclosure.<sup>50</sup> One noted that historical prices have little to do with a company's future investments and values.<sup>51</sup> Another commenter noted that differentials can be calculated through established accounting procedures under SFAS 157.<sup>52</sup>

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<sup>45</sup> See letters from Apache, BHP, Canadian Natural, CAPP, CFA, Deloitte, McMoRan, Newfield, Nexen, Questar, Southwestern, Talisman, and Total.

<sup>46</sup> See letters from CFA, Deloitte, Grant Thornton, and McMoRan.

<sup>47</sup> See letters from CFA and Deloitte.

<sup>48</sup> See letters from CFA, Grant Thornton, and McMoRan.

<sup>49</sup> See letter from Deloitte.

<sup>50</sup> See letters from Deloitte and McMoRan.

<sup>51</sup> See letter from McMoRan.

<sup>52</sup> See letter from CFA.

However, other commenters argued that futures prices are not available for all reserves locations<sup>53</sup> and that applying differentials to prices would require subjective estimates and reduce comparability among companies.<sup>54</sup> Two commenters noted that standard prices are not consistently available in some geographic regions.<sup>55</sup> Similarly, two commenters were concerned that futures price estimates would have to be accompanied by estimates of future costs, which they thought would be very subjective and not comparable for determining future economic conditions.<sup>56</sup> One commenter asserted that the use of future prices would require companies to document assumptions about future costs, or else the disclosure would be very inconsistent among reporting companies.<sup>57</sup> Three commenters believed that futures prices are more subject to market perceptions than market realities and are seldom used in actual physical trading of oil and gas.<sup>58</sup>

We share the concerns of many of these commenters that determinations of expected future prices could require significant estimations which could fall into a wide, albeit reasonable, range. For example, in many situations and parts of the world, natural gas is sold through longer term contracts where observable market inputs are not widely available. As a result, there could be less comparability among different companies depending on their assumptions, which are inherent in determining futures prices.

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<sup>53</sup> See letters from ExxonMobil and Wagner.

<sup>54</sup> See letters from EnCana, Evolution, ExxonMobil, Newfield, Ryder Scott, and Total.

<sup>55</sup> See letters from Ryder Scott and Total.

<sup>56</sup> See letters from SPE and Total.

<sup>57</sup> See letter from SPE.

<sup>58</sup> See letters from Evolution, Ryder Scott, and Wagner.

Difference in assumptions between companies could reduce the comparability of reserves information between those companies.

We believe that the purpose of disclosing reserves estimates is to provide investors with information that is both meaningful and comparable. The reserves estimates in our disclosure rules, however, are not designed to be, nor are they intended to represent, an estimation of the fair market value of the reserves. Rather, the reserves disclosures are intended to provide investors with an indication of the relative quantity of reserves that is likely to be extracted in the future using a methodology that minimizes the use of non-reserves-specific variables. By eliminating assumptions underlying the pricing variable, as any historical pricing method would do, investors are able to compare reserves estimates where the differences are driven primarily by reserves-specific information, such as the location of the reserves and the grade of the underlying resource. We recognize that energy markets are continuing to develop. Therefore, we are not adopting a rule that requires companies to use futures prices to estimate reserves at this time.

#### **4. Time period over which the average price is to be calculated**

Numerous commenters on the Proposing Release recommended that the 12-month period used to calculate the average price for estimating reserves should not coincide with the fiscal year, as we proposed.<sup>59</sup> Most of these commenters recommended a 12-month period running from the beginning of the fourth quarter of the prior fiscal year through the end of the third quarter of the present fiscal year. For example, for a

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<sup>59</sup> See letters from Apache, API, BP, Canadian Natural, CAPP, EnCana, Eni, ExxonMobil, PEMEX, Petro-Canada, Repsol, Ryder Scott, Sasol, Shell, Total, van Wyk, and Wagner.

company with a fiscal year end of December 31, the relevant 12-month period would span from October 1 of the prior year to September 30 of the fiscal year covered by the annual report.<sup>60</sup> Several commenters suggested that we provide a two-month buffer between the end of the measurement period and the end of the company's fiscal year so that reserves estimates would be based on prices from November 1 through October 31 by a company with a fiscal year ending on December 31.<sup>61</sup> Commenters attributed the need for a buffer period to the accelerated filing dates for annual reports<sup>62</sup> and stated that they expected that the additional time would result in better, more accurate disclosure.<sup>63</sup> Others noted that some agreements, like production sharing contracts and other complex concession agreements, can make calculations difficult.<sup>64</sup> One commenter also noted that shifting the relevant measurement period so that it ends three-months prior to the fiscal-year end would align economic calculations with technical calculations, which typically occur at the end of the third quarter.<sup>65</sup>

As noted above, we have considered all of these recommendations. We are adopting a pricing formula based on the average of prices at the beginning of each month in the 12-month period prior to the end of the reporting period. A number of commenters believed that the use of first-of-the-month prices essentially would provide companies

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<sup>60</sup> See letters from Apache, API, BP, Canadian Natural, CAPP, Devon, Eni, ExxonMobil, PEMEX, Petro-Canada, Repsol, Ryder Scott, Sasol, Shell, Total, van Wyk, and Wagner.

<sup>61</sup> See letters from Canadian Natural, CAPP, Eni, Nexen, and Petro-Canada.

<sup>62</sup> See letters from API, Canadian Natural, CAPP, Devon, Evolution, PEMEX, Petrobras, Ryder Scott, Sasol, Shell, Total, and Wagner.

<sup>63</sup> See letters from Canadian Natural, CAPP, Nexen, Petrobras, Petro-Canada, Ryder Scott, Sasol, and Wagner.

<sup>64</sup> See letters from API and Shell.

<sup>65</sup> See letter from Shell.

with one month more to prepare the reserves disclosures,<sup>66</sup> while still aligning the time period with the fiscal year.<sup>67</sup> We agree with the commenters that such an average will provide companies more time to prepare more accurate disclosure, while still tying the pricing formula to the period covered by the annual report.

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

#### **1. Definition of “oil and gas producing activities”**

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>68</sup> These other sources include bitumen extracted from oil sands, as well as oil and gas extracted from coal 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>69</sup> Therefore, the rules we adopt today revise the definition of “oil and gas producing activities” to include such activities.<sup>70</sup>

All commenters on this issue supported including the extraction of unconventional resources as oil and gas producing activities.<sup>71</sup> They believed that such

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<sup>66</sup> See letters from API, Devon, Eni, Evolution, ExxonMobil, PEMEX, Petrobras, PWC, Repsol, and Total.

<sup>67</sup> See letters from Devon and ExxonMobil.

<sup>68</sup> See Rule 4-10(a)(1)(ii)(D) [17 CFR 210.4-10(a)(1)(ii)(D)].

<sup>69</sup> Commenters noted that unconventional resources currently represent 45% of natural gas production in the U.S. See letters from American Clean Skies and IPAA.

<sup>70</sup> See Rule 4-10(a)(16) [17 CFR 210.4-10(a)(16)].

<sup>71</sup> See letters from American Clean Skies, Apache, API, Canadian Natural, CAPP, CAQ, CFA, Davis Polk, Devon, E&Y, EnCana, ExxonMobil, FERC, Imperial, IPAA, KPMG, Nexen,

inclusion would greatly improve the quality and completeness of the disclosures.<sup>72</sup> Eight commenters noted that inclusion would better align disclosure with the way that companies view their operations.<sup>73</sup> Some noted that, although the distinction was reasonable decades ago when traditional resources dominated oil and gas production, the reality of today is that such unconventional resources are mainstream and companies invest significant amounts of capital to develop these resources.<sup>74</sup>

The revised definition of “oil and gas producing activities” that we adopt today includes the extraction of the non-traditional resources described above.<sup>75</sup> This amendment 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 amended definition states specifically that oil and gas producing activities include the extraction of saleable hydrocarbons, in the solid, liquid, or gaseous state, from oil sands, shale, coalbeds, or other nonrenewable natural resources which are intended to be upgraded into synthetic oil or gas, and activities undertaken with a view to such extraction.<sup>76</sup>

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Petrobras, Petro-Canada, PRA, PWC, Repsol, Ryder Scott, Sasol, Shell, SPE, StatoilHydro, Talisman, Total, and Wagner.

<sup>72</sup> See letters from API, CAPP, CAQ, ExxonMobil, Imperial, PWC, Repsol, Ryder Scott, Total, and Wagner.

<sup>73</sup> See letters from API, CAQ, E&Y, ExxonMobil, Imperial, Petro-Canada, PWC, and Total.

<sup>74</sup> See letters from Imperial, IPAA, Repsol, and Total.

<sup>75</sup> See Rule 4-10(a)(16) [17 CFR 210.4-10(a)(16)].

<sup>76</sup> A hydrocarbon product is saleable if it is in a state in which it can be sold even if there is no ready market for that hydrocarbon product in the geographic location of the project. The absence of a market does not preclude the activity from being considered an oil and gas producing activity. However, in order to claim reserves for that hydrocarbon product from a particular location, there must be a market, or a reasonable expectation of a market, for that product.

Currently, two types of natural resources pose a unique problem to establishing oil and gas reserves. Coal and, to a lesser degree, oil shale are used both as direct fuel and as feedstock to be converted into oil and gas. In response to our request for comment on how best to treat these resources, several commenters recommended that the extraction of coal<sup>77</sup> and oil shale<sup>78</sup> be categorized based on the final product. One commenter noted that investment decisions are based on the value and disposition of the final product.<sup>79</sup> We agree with these commenters and have revised the proposal to require a company to include coal and oil shale that is intended to be converted into oil and gas as oil and gas reserves. The adopted rules also, however, prohibit a company from including coal and oil shale that is not intended to be converted into oil and gas as oil and gas reserves.

## **2. Disclosure by final products**

We proposed that disclosure of reserves would be organized based on the pre-processed resource extracted from the ground. For example, under the proposal, a company that extracted bitumen and processed that bitumen into synthetic crude oil in its own processing plant would have had to base its reserves disclosure on the amount of bitumen that was economically producible, not taking into account the economics of the processing plant. This proposal was consistent with our traditional separation of “upstream” activities such as drilling and producing oil and gas from “downstream” activities such as refining. Distinguishing between traditional resources and

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<sup>77</sup> See letters from CAPP, ExxonMobil, Ryder Scott, Sasol, Shell, StatoilHydro, and Wagner.

<sup>78</sup> See letters from CAPP, ExxonMobil, Shell, StatoilHydro, and Wagner.

<sup>79</sup> See letter from ExxonMobil.

unconventional resources can be significant to investors because unconventional resources often involve significantly different economics and company resources than oil and gas from traditional wells.

Several commenters disagreed with our proposal, recommending that the determining factor should be the final product.<sup>80</sup> They believed that a company should be able to consider the prices of self-processed resources when estimating oil and gas reserves because the economics of the processing plant are critical to the registrant's evaluation of the economic producibility of the resources.<sup>81</sup> One commenter was concerned that distinguishing bitumen or other intermediate product from traditional oil and gas creates a false and misleading sense of comparability because producers that upgrade bitumen and sell synthetic crude do not face the same risks and rewards as do producers who sell the bitumen itself.<sup>82</sup>

We are persuaded by these commenters. However, we believe that the distinction between a company's traditional and unconventional activities is an important one from an investor's perspective because many of the unconventional activities are costlier and, therefore, have a much higher threshold of economic producibility. Therefore, we are revising the proposed table in Item 1202 to require separation of reserves based on final product, but distinguishing between final products that are traditional oil or gas from final products of synthetic oil or gas. We believe that with this separate disclosure, investors

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<sup>80</sup> See letters from Apache, Nexen, Petrobras, and Ryder Scott.

<sup>81</sup> See letters from Apache, CAQ, and Nexen.

<sup>82</sup> See letter from Nexen.



will be able to identify resources in projects that produce synthetic oil or gas that may be more sensitive to economic conditions from other resources.

In addition, as proposed, we are amending the definition of “oil and gas producing activities” to include activities relating to the processing or upgrading of natural resources from which synthetic oil or gas can be extracted. However, the definition would continue to exclude:

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

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

We proposed to significantly revise the definition of “proved oil and gas reserves.” We are adopting that definition, substantially as proposed.<sup>83</sup> However, as noted above, we have decided to base the price used to establish economic producibility on 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 first-day-of-the-month price for each month within such period.

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<sup>83</sup> See Rule 4-10(a)(22) [17 CFR 210.4-10(a)(22)].

One commenter recommended against using an average price to calculate existing economic conditions if the price is set by contractual arrangements.<sup>84</sup> We agree that under such circumstances, the appropriate price to use for establishing economic producibility is the price set by those contractual arrangements. Therefore, we have revised the definition to reflect that situation.<sup>85</sup>

The existing definition of the term “proved oil and gas reserves” 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>86</sup> notwithstanding the existence of other engineering and geoscientific evidence.<sup>87</sup> We proposed revisions to the definition that would permit the use of new reliable technologies to establish the reasonable certainty of proved reserves. The proposed revisions to the definition of “proved oil and gas reserves” also included provisions for establishing levels of lowest known hydrocarbons and highest known oil through reliable technology other than well penetrations. We are adopting those revisions as proposed.

We also are adopting, as proposed, revisions that permit a company to claim proved reserves beyond those development spacing areas that are immediately adjacent to developed spacing areas if the company can establish with reasonable certainty that these

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<sup>84</sup> See letter from SPE.

<sup>85</sup> See Rule 4-10(a)(22)(v) [17 CFR 210.4-10(a)(22)(v)].

<sup>86</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>87</sup> See previous Rule 4-10(a)(2)(i) [17 CFR 210.4-10(a)(2)(i)].

reserves are economically producible.<sup>88</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 establish a uniform standard of reasonable certainty that applies to all proved reserves, regardless of location or distance from producing wells.

#### **E. Reasonable Certainty**

Both the existing definition of the term “proved oil and gas reserves,” and the definition of that term that we are adopting in this release, rely on the term “reasonable certainty,” which previously was not defined in Rule 4-10. In the Proposing Release, we proposed to define the term “reasonable certainty” as “much more likely to be achieved than not” to avoid ambiguity in that term’s meaning. However, several commenters recommended that the rules mirror the PRMS definition more closely.<sup>89</sup> Four commenters were concerned that a different definition from the PRMS would cause confusion. They recommended using the PRMS standard of “high degree of confidence that the quantities will be recovered.”<sup>90</sup> One commenter recommended that, because the proposed definition is new, the Commission should adopt a safe harbor, to avoid potential uncertainty until a court interprets the phrase.<sup>91</sup> But others believed that the proposed definition is consistent with the PRMS definition.<sup>92</sup> One commenter opined that the

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<sup>88</sup> See Rule 4-10(a)(22) [17 CFR 210.4-10(a)(22)]. See Section II.G for a more detailed discussion regarding this provision.

<sup>89</sup> See letters from EIA, ExxonMobil, and Zakaib.

<sup>90</sup> See letters from Apache, EIA, Energen, and SPE.

<sup>91</sup> See letter from Evolution.

<sup>92</sup> See letters from EnCana, ExxonMobil, Petrobras, and Ryder Scott.

concept of estimated ultimate recovery (EUR) is appropriate to establish proved oil and gas reserves.<sup>93</sup>

We believe that the terms “high degree of confidence” from the PRMS and “much more likely to be achieved than not” in our proposal have the same meaning. Our proposed language was not intended to change the level of certainty required to establish reasonable certainty. However, we agree that the use of terminology that is consistent with the PRMS will assist in the understanding of those terms. Therefore, we are adopting the “high degree of confidence” standard that exists in the PRMS. We also are clarifying that having a “high degree of confidence” means that a quantity is “much more likely to be achieved than not, and, as changes due to increased availability of geoscience (geological, geophysical, and geochemical), engineering, and economic data are made to estimated ultimate recovery (EUR) with time, reasonably certain EUR is much more likely to increase or remain constant than to decrease” to provide elaboration to the definition of reasonable certainty.

We are adopting a definition of “reasonable certainty” that addresses, and permits the use of, both deterministic methods and probabilistic methods for estimating reserves, as proposed. Nine commenters supported permitting the use of either deterministic methods or probabilistic methods.<sup>94</sup> One commenter believed that each method may be more appropriate for different situations.<sup>95</sup> Other commenters also supported the proposed alignment of the definitions of those terms with the definitions in the PRMS

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<sup>93</sup> Total.

<sup>94</sup> See letters from Apache, Devon, Evolution, Petro-Canada, Ryder Scott, Shell, SPE, Total, and Wagner.

<sup>95</sup> See letter from Wagner.

definitions.<sup>96</sup> The definition that we are adopting states that, if deterministic methods are used, reasonable certainty means a high degree of confidence that the quantities will be recovered.<sup>97</sup> Consistent with the PRMS definition, if probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.

#### **F. Developed and Undeveloped Oil and Gas Reserves**

We proposed to revise the definitions of the terms “proved developed oil and gas reserves” and “proved undeveloped oil and gas reserves.” One commenter noted that the terms “developed” and “undeveloped” are not restricted to proved oil and gas reserves, but could apply to all classifications of reserves, including probable and possible reserves.<sup>98</sup> We agree with that commenter. Although the development of a prospect may provide the company with more information and data to determine reserves amounts more accurately, companies may estimate proved, probable, and possible volumes regardless of the development stage. In the past, these terms were linked to the concept of proved reserves because our disclosure rules permitted the disclosure only of proved reserves. In light of our revision to allow disclosure of probable and possible reserves, the final rules define the terms “developed oil and gas reserves” and “undeveloped oil

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<sup>96</sup> See letters from AAPG, SPE, and Southwestern.

<sup>97</sup> See Rule 4-10(a)(24) [17 CFR 210.4-10(a)(24)].

<sup>98</sup> See letter from SPE. We note that with respect to oil and gas reserves, the term “classification” is used to indicate the level of certainty that estimated amounts will be recovered. Thus, although the terms “developed” and “undeveloped” may be considered means in which to generically “classify” reserves, for clarity, we use that term to be consistent with industry usage.

and gas reserves” to indicate that the development status of the reserves is relevant to all classifications of oil and gas reserves.<sup>99</sup>

### **1. Developed oil and gas reserves**

Other than the change discussed above to eliminate “proved” from the term being defined, we are adopting a definition of “developed oil and gas reserves” substantially as proposed. We proposed to define the term “proved developed oil and gas reserves” as 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.

Two commenters suggested that, consistent with the PRMS, reserves should be considered developed if the cost of any required equipment is relatively minor compared to the cost of a new well or the installed equipment.<sup>100</sup> Again, we agree that consistency with PRMS would improve compliance with our rules. In addition, such a revision is consistent with our existing definition of the term “proved undeveloped reserves” which includes reserves on which a well exists, but a relatively “major” expenditure is required for recompletion.<sup>101</sup> Therefore, the final rules provide that reserves also are developed if

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<sup>99</sup> See Rules 4-10(a)(6) and (31) [17 CFR 210.4-10(a)(6) and (31)].

<sup>100</sup> See letters from SPE and Total.

<sup>101</sup> See previous Rule 4-10(a)(4) [17 CFR 210.4-10(a)(4)].

the cost of any required equipment is relatively minor compared to the cost of a new well.<sup>102</sup>

## **2. Undeveloped oil and gas reserves**

In the Proposing Release, we proposed a significantly revised definition of the term “proved undeveloped oil and gas reserves.” The most significant aspect of the proposed revision was the replacement of the existing “certainty” test for areas beyond one offsetting drilling unit<sup>103</sup> from a productive well with a “reasonable certainty” test.

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>104</sup> All commenters on this issue supported the proposal.<sup>105</sup> Three commenters noted that a single standard—reasonable certainty—should apply to all proved reserves.<sup>106</sup> We are adopting this aspect of the definition as proposed.

Many commenters opposed the proposed language that would have imposed a five-year limit on maintaining undeveloped reserves unless “unusual” circumstances

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<sup>102</sup> See Rule 4-10(a)(6) [17 CFR 210.4-10(a)(6)].

<sup>103</sup> As noted later in this section of the release, we are replacing the term “drilling unit” with the term “development spacing area” in the final rules. However, for purposes of discussing the proposal and the existing rules, we continue to use the term “drilling unit” because that is the term used in the proposal and the existing rules.

<sup>104</sup> See previous Rule 4-10(a)(4) [17 CFR 210.4-10(a)(4)]. A drilling unit refers to the spacing between wells required by some local jurisdictions to prevent wasting resources and optimize recovery.

<sup>105</sup> See letters from American Clean Skies, Apache, API, Canadian Natural, CAPP, Chesapeake, Devon, Evolution, ExxonMobil, McMoRan, Petro-Canada, Questar, Repsol, Southwestern, Shell, SPE, Total, and Wagner.

<sup>106</sup> See letters from Devon, EnCana, and Equitable.

existed.<sup>107</sup> They asserted that large projects, projects in remote areas, and projects in continuous accumulations, such as oil sands, typically take more than five years to develop, but they do not view such projects as “unusual.”<sup>108</sup> One commenter noted that the proposed rule is not consistent with the PRMS, which uses the term “specific circumstances,” rather than “unusual circumstances.”<sup>109</sup> Other commenters suggested that we require the company to explain why it has not developed any undeveloped reserves for more than five years.<sup>110</sup> The intent of the proposal was not to exclude projects that typically take more than five years to develop from being considered reserves. We agree that the rule should allow the recognition of reserves in projects that are expected to run more than five years, regardless of whether “unusual” circumstances exist. Therefore, we have revised the rule to replace the term “unusual” with the term “specific.”<sup>111</sup> We note that, as proposed, Item 1203 of Regulation S-K would require disclosure regarding why such undeveloped reserves have not been developed.<sup>112</sup>

We also proposed to broaden the definition of the term “proved undeveloped reserves” to permit a company to include, in its undeveloped reserves estimates, quantities of oil that can be recovered through improved recovery projects and to expand the technologies that a company can use to establish reserves. Under the existing definition, a company can include such quantities only if techniques have been proved

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<sup>107</sup> See letters from American Clean Skies, Apache, CAPP, Chesapeake, EnCana, ExxonMobil, Luscher, Newfield, Nexen, Petrobras, Petro-Canada, Ryder Scott, Shell, SPE, and Total.

<sup>108</sup> See letters from American Clean Skies, CAPP, Chesapeake, EnCana, ExxonMobil, Newfield, Nexen, Petrobras, Petro-Canada, Ryder Scott, Shell, and Total.

<sup>109</sup> See letter from SPE.

<sup>110</sup> See letters from Devon, Ryder Scott, and Wagner.

<sup>111</sup> See Rule 4-10(a)(31) [17 CFR 210.4-10(a)(31)].

<sup>112</sup> See Item 1203(d) [17 CFR 229.1203(d)].



effective by actual production from projects in the area and in the same reservoir. As proposed, we are expanding this definition of the term “undeveloped oil and gas reserves” to permit the use of techniques that have been proved effective by actual production from projects in the same reservoir or an analogous reservoir or “by other evidence using reliable technology that establishes reasonable certainty.”<sup>113</sup>

We also are making other, less substantive revisions to the definition of “undeveloped oil and gas reserves.” First, commenters suggested that we use the term “development spacing”<sup>114</sup> or “drainage areas”<sup>115</sup> instead of “drilling units” because the term “drilling units” is only relevant in jurisdictions that establish such units. They noted that many foreign jurisdictions do not establish such units. We concur with those commenters and have replaced the term “drilling units” with the term “development spacing areas.”

One commenter also noted that the PRMS guidance on the use of analogs for improved recovery projects does not limit such use to “within the immediate area” and recommended that we delete this phrase from the definition.<sup>116</sup> Again, we agree that consistency with PRMS would be beneficial in this instance and have deleted that phrase from the definition. We also have eliminated two paragraphs of the proposed definition because they were largely repetitive of other aspects of the definition and were unnecessary.<sup>117</sup>

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<sup>113</sup> See Rule 4-10(a)(31) [17 CFR 210.4-10(a)(31)].

<sup>114</sup> See letter from Total.

<sup>115</sup> See letter from SPE.

<sup>116</sup> See letter from SPE.

<sup>117</sup> These paragraphs would have clarified (1) in a conventional accumulation, offsetting productive units must lie within an area in which economic producibility has been established by reliable

## **G. Reliable Technology**

### **1. Definition of the term “reliable technology”**

We are adopting, substantially as proposed, a new definition of “reliable technology” that would broaden the types of technologies that a company may use to establish reserves estimates and categories. All commenters on this topic supported the proposed principles-based definition for reliable technology.<sup>118</sup>

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 must use actual production or flow tests to meet the “reasonable certainty” standard necessary to establish the proved status of its reserves.<sup>119</sup> Similarly, the current rules provide bright line tests for determining fluid contacts, such as lowest known hydrocarbons and highest known oil, which establish the volume of the hydrocarbons in place.

We recognize that technologies have developed, and 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. Thus, the new definition of the term

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technology to be reasonably certain and (2) 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. We do not believe that these statements, based on the terms “conventional accumulation” and “continuous accumulation” which are no longer being defined continue to serve a helpful purpose. See Section II.J.5 of this release.

<sup>118</sup> See letters from AAPG, American Clean Skies, Apache, CFA, Davis Polk, Devon, EnCana, ExxonMobil, Petrobras, Ryder Scott, Sasol, Shell, SPE, Southwestern, and Wagner.

<sup>119</sup> 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.

“reliable technology” permits the use of technology (including computational methods) that has been field tested and has demonstrated consistency and repeatability in the formation being evaluated or in an analogous formation. This new standard will permit the use of a new technology or a combination of technologies once a company can establish and document the reliability of that technology or combination of technologies.

We are adopting certain revisions to our proposed definition of the term “reliable technology.” The proposal also would have required reliable technology to be “widely accepted.” However, some commenters were concerned that this requirement would exclude proprietary technologies that companies develop internally that have proven to be reliable.<sup>120</sup> We concur with these commenters and have removed the “widely accepted” requirement from the final rule.

We also proposed to define the term “reliable technology,” expressed in probabilistic terms, as technology that has been proven empirically to lead to correct conclusions in 90% or more of its applications. Several commenters expressed concern that this proposed 90% threshold would be difficult to verify and support on an ongoing basis.<sup>121</sup> We agree that a bright line test would be difficult to apply to a particular technology or mix of technologies to determine their reliability. Therefore, we are not adopting the 90% threshold as part of the definition.

## **2. Disclosure of technologies used**

The proposal would have required a company to disclose the technology used to establish reserves estimates and categories for material properties in a company’s first

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<sup>120</sup> See letters from Chesapeake, ExxonMobil, Shell, and Total.

<sup>121</sup> See letters from AAPG, Apache, EIA, Evolution, Ryder Scott, Shell, SPE, and Wagner.

filing with the Commission and for material additions to reserves estimates in subsequent filings because, under the proposal, a company would be able to select the technology or mix of technologies that it uses to establish reserves. Two commenters supported the proposal because they believed that disclosure of the technologies used is reasonable if the definition of “reliable technology” is principles-based.<sup>122</sup> However, many other commenters were concerned that the proposed requirement to disclose the technologies used to establish levels of certainty for reserves estimates would lead to very complex, technical disclosures that would have little meaning to investors.<sup>123</sup> Others were concerned that disclosure of the technology, or the mix of technologies, might cause competitive harm.<sup>124</sup>

As an alternative, some commenters recommended that the rule require a more general overview of the technologies used.<sup>125</sup> We are clarifying that the required disclosure would be limited to a concise summary of the technology or technologies used to create the estimate.<sup>126</sup> A company would not be required to disclose proprietary technologies, or a proprietary mix of technologies, at a level of specificity that would cause competitive harm. Rather, the disclosure may be more general. For example, a company may disclose that it used a combination of seismic data and interpretation, wireline formation tests, geophysical logs, and core data to calculate the reserves estimate. As noted, however, the Commission’s staff, as part of the review and comment

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<sup>122</sup> See letters from Davis Polk and Sasol.

<sup>123</sup> See letters from API, Devon, Eni, ExxonMobil, PEMEX, Petro-Canada, Questar, Repsol, Ryder Scott, Shell, Southwestern, StatoilHydro, and Total.

<sup>124</sup> See letters from API, Devon, Evolution, ExxonMobil, Ryder Scott, StatoilHydro, and Total.

<sup>125</sup> See letters from EnCana, Eni, Evolution, Ryder Scott, and Shell.

<sup>126</sup> See Item 1202(a)(6) [17 CFR 229.1202(a)(6)].

process, may continue to request companies to provide supplemental data, consistent with current practice,<sup>127</sup> which, under the new rules, may include information sufficient to support a company's conclusion that a technology or mix of technologies used to establish reserves meets the definition of "reliable technology."

Two commenters supported the proposal to limit the disclosures to technologies used to establish reserves in a company's first filing with the Commission and material additions to reserves.<sup>128</sup> We are adopting this limitation as proposed.<sup>129</sup> If the company has not previously disclosed reserves estimates in a filing with the Commission or is disclosing material additions to its reserves estimates, the company must disclose the technologies used to establish the appropriate level of certainty for reserves estimates from material properties included in the total reserves disclosed and the particular properties do not need to be identified. We believe that requiring such disclosure when reserves, or material additions to reserves, are reported for the first time will discourage the use of questionable technologies to establish reserves. However, we do not believe it is necessary to require a company to disclose the technology or technologies relied upon to establish reserves previously disclosed under our rules because the permitted technologies have been limited to those permitted by our existing rule. In addition, we believe that ongoing disclosure of the technologies used to establish all of a company's reserves would become unnecessarily cumbersome.

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<sup>127</sup> Currently, the Commission's staff requests supplemental data pursuant to Instruction 4 to Item 102 of Regulation S-K [17 CFR 229.102], Rule 418 [17 CFR 230.418], and Rule 12b-4 [17 CFR 240.12b-4]

<sup>128</sup> See letters from Southwestern and Wagner.

<sup>129</sup> See Item 1202(a)(6) [17 CFR 229.1202(a)(6)].

## **H. Unproved Reserves—“Probable Reserves” and “Possible Reserves”**

As discussed more fully in Section IV.B.3 of this release addressing the disclosure requirements of new Subpart 1200, we are adopting the proposal to permit disclosure of probable and possible reserves. Therefore, we are adopting the proposed definitions of the terms “probable reserves” and “possible reserves” as proposed.

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 (1) proved, (2) proved plus probable, and (3) proved plus probable plus possible reserves estimates.

### **1. Probable reserves**

We are adopting the definition of the term “probable reserves” as proposed. It states that “probable reserves” are 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>130</sup> This definition provides guidance for the use of both deterministic and probabilistic methods. The definition clarifies 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 must be at least a 50% probability that the actual quantities recovered will equal or exceed the proved plus probable reserves estimates. This definition was derived from the PRMS definition of the term “probable reserves.” Several commenters agreed with the proposed definition of this term, noting that it is roughly consistent with PRMS.<sup>131</sup>

## **2. Possible reserves**

We also are adopting the definition of the term “possible reserves” as proposed. The new definition states that possible reserves include those additional reserves that are less certain to be recovered than probable reserves.<sup>132</sup> It clarifies 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 must be at least a 10% probability that the actual quantities recovered will equal or exceed the sum of proved, probable, and possible estimates. Several commenters noted that our proposed definition of the term “possible reserves” was consistent with PRMS, which also uses a 10% threshold.<sup>133</sup> One commenter recommended that the threshold for “possible reserves” should be a 25% likelihood of recovery because that percentage would be more meaningful than 10%.<sup>134</sup> We believe that a definition consistent with the PRMS will provide the most certainty and clarity for companies and investors.

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<sup>130</sup> See Rule 4-10(a)(18) [17 CFR 210.4-10(a)(18)].

<sup>131</sup> See letters from Devon, EnCana, SPE, and StatoilHydro.

<sup>132</sup> See Rule 4-10(a)(17) [17 CFR 210.4-10(a)(17)].

<sup>133</sup> See letters from Devon, EnCana, SPE, and StatoilHydro.

<sup>134</sup> See letter from Evolution.

## I. Reserves

We proposed to add a definition of the term “reserves” to our rules. The proposed definition would have described 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 rights. Specifically, we proposed 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 proposed definition also would have clarified that reserves are classified as proved, probable, and possible according to the degree of uncertainty associated with the estimates. We are not adopting the definition as proposed. Four commenters recommended clarification that the term “legal right to produce” extends beyond the initial term of an oil and gas concession if there is a reasonable expectation that the concession will be renewed, consistent with the PRMS and current staff position.<sup>135</sup> We

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<sup>135</sup> See letters from API, CAQ, Grant Thornton, and KPMG.



are adopting a definition of the term “reserves” that more closely parallels the PRMS definition of that term.

Our final rules define the term “reserves” as the estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations.<sup>136</sup> In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce or a revenue interest in the production of oil and gas, installed means of delivering oil and gas or related substances to market, and all permits and financing required to implement the project.

A note to the definition clarifies that reserves should not be assigned to adjacent reservoirs isolated by major, potentially sealing, faults until those reservoirs are penetrated and evaluated as economically producible and that 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).<sup>137</sup>

One notable difference between our final definition of “reserves” and the PRMS definition is that our definition is based on “economic producibility” rather than “commerciality.” One commenter believed that reserves must be “commercial,” as stated in the PRMS definition.<sup>138</sup> However, commerciality introduces a subjective aspect to the

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<sup>136</sup> See Rule 4-10(a)(26) [17 CFR 210.4-10(a)(26)].

<sup>137</sup> See Note to Rule 4-10(a)(26) [17 CFR 210.4-10(a)(26)].

<sup>138</sup> See letter from StatoilHydro.

price used to establish existing economic conditions by factoring in the rate of return required by a particular company before it will commit resources to the project. This rate of return will vary among companies, reducing the comparability among disclosures. Therefore, the adopted definition of the term “reserves” relies on economic producibility, as proposed.

## **J. Other Supporting Terms and Definitions**

We also proposed to define several other terms primarily to support and clarify the definitions of the key terms. We are adopting most of those supporting definitions as discussed in further detail below.

### **1. Deterministic estimate**

A company can derive two different types of reserves estimates depending on the method used to calculate the estimates. These two types of estimates are known as “deterministic estimates” and “probabilistic estimates.”<sup>139</sup> In the Proposing Release, we proposed to define the term “deterministic estimate” as an estimate based on a single value for each parameter (from the geoscience, engineering, or economic data) in the reserves calculation that is used in the reserves estimation procedure. We are adopting that definition as proposed.

### **2. Probabilistic estimate**

We are adopting a new definition of the term “probabilistic estimate” substantially as proposed. The new rule defines the term “probabilistic estimate” as an

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<sup>139</sup> See Rules 4-10(a)(5) and (a)(19) [17 CFR 210.4-10(a)(5) 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.

estimate that is obtained when the full range of values that could reasonably occur from each unknown parameter (from the geoscience and engineering data) is used to generate a full range of possible outcomes and their associated probabilities of occurrence.<sup>140</sup> In response to a comment received, however, we revised the definition so that it does not include the application of a range of values with respect to economic conditions because those conditions, such as prices and costs, are based on historical data, and therefore are an established value, rather than a range of estimated values.<sup>141</sup>

### **3. Analogous reservoir**

We proposed a definition of the term “analogous formation in the immediate area.” As noted above, we received comment indicating that the use of appropriate analogs should not be limited to the immediate area in which the reserves are being estimated.<sup>142</sup> Therefore, we have changed the defined term to “analogous reservoir.”<sup>143</sup> In addition, based on commenters’ remarks, we are defining the term “analogous reservoir” in a manner that is more consistent with the PRMS, which addresses more specifically the types of reservoirs that may be used as analogues. The new definition of the term “analogous reservoir” states that analogous reservoirs, as used in resources assessments, have similar rock and fluid properties, reservoir conditions (depth, temperature, and pressure) and drive mechanisms, but are typically at a more advanced stage of development than the reservoir of interest and thus may provide concepts to

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<sup>140</sup> See Rule 4-10(a)(19) [17 CFR 210.4-10(a)(19)].

<sup>141</sup> See letter from Shell.

<sup>142</sup> See letter from SPE.

<sup>143</sup> See Rule 4-10(a)(2) [17 CFR 210.4-10(a)(2)].

assist in the interpretation of more limited data and estimation of recovery.<sup>144</sup> When used to support proved reserves, an “analogous reservoir” refers to a reservoir that shares the following characteristics with the reservoir of interest:

- Same geological formation (but not necessarily in pressure communication with the reservoir of interest);
- Same environment of deposition;
- Similar geological structure; and
- Same drive mechanism.

As proposed, the new definition includes an instruction that clarifies that reservoir properties must, in the aggregate, be no more favorable in the analog than in the reservoir of interest. The new definition also clarifies that, although an analogous reservoir must be in the same geological formation as the reservoir of interest, it need not be in pressure communication with the reservoir of interest.

#### **4. Definitions of other terms**

We received no comment with regard to several of the proposed supporting definitions. We are adopting those definitions substantially as proposed without material changes. They include the following terms:

- “Condensate”,<sup>145</sup>
- “Development project”,<sup>146</sup>

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<sup>144</sup> See Rule 4-10(a)(2) [17 CFR 210.4-10(a)(2)].

<sup>145</sup> See Rule 4-10(a)(4) [17 CFR 210.4-10(a)(4)].

<sup>146</sup> See Rule 4-10(a)(8) [17 CFR 210.4-10(a)(8)].

- “Economically producible”;<sup>147</sup>
- “Estimated ultimate recovery,”<sup>148</sup>
- “Exploratory well”;<sup>149</sup>
- “Extension well”;<sup>150</sup> and
- “Resources.”<sup>151</sup>

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

In the Proposing Release, we solicited comment on whether we should adopt any other supporting definitions. One commenter submitted an appendix to its letter containing numerous other terms that it thought we should adopt.<sup>152</sup> We have decided not to adopt those additional definitions because we feel that they are unnecessary at this time. However, we have decided to adopt a definition for the term “bitumen.” We believe that providing a definition for this term will lead to more consistency among disclosures because there currently are several competing definitions of that term used in the industry.

We are defining the term “bitumen” as “petroleum in a solid or semi-solid state in natural deposits. In its natural state, it usually contains sulfur, metals, and other non-

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<sup>147</sup> See Rule 4-10(a)(10) [17 CFR 210.4-10(a)(10)].

<sup>148</sup> See Rule 4-10(a)(11) [17 CFR 210.4-10(a)(11)].

<sup>149</sup> See Rule 4-10(a)(13) [17 CFR 210.4-10(a)(13)].

<sup>150</sup> See Rule 4-10(a)(14) [17 CFR 210.4-10(a)(14)].

<sup>151</sup> See Rule 4-10(a)(28) [17 CFR 210.4-10(a)(28)].

<sup>152</sup> See letter from SPE.

hydrocarbons. Bitumen has a viscosity greater than 10,000 centipoise measured at original temperature in the deposit and atmospheric pressure, on a gas free basis.”<sup>153</sup>

This definition is similar to the PRMS definition of “natural bitumen.”

## **5. Proposed terms and definitions not adopted**

We proposed definitions for the terms “continuous accumulations” and “conventional accumulations” to assist companies in disclosing segregated reserves based on these two types of accumulations. As noted elsewhere in this release, the final rules do not require disclosure based on the type of accumulation in which the reserves are found.<sup>154</sup> Therefore, there is no need to define these terms and we are not adopting the proposed definitions.

Similarly, we proposed a definition for the term “sedimentary basin” because it would have been part of our definition of the term “by geographic area.” As noted elsewhere in this release, we have substantially revised the definition of the term “by geographic area”<sup>155</sup> and the term “sedimentary basin” is no longer needed, so we are not adopting this proposed term and definition.

As noted above, one commenter recommended that we adopt a large glossary of terms and definitions that correspond with the PRMS definitions.<sup>156</sup> Rather than defining an extensive glossary of terms in our rules and attempting to constantly update those definitions, we advise companies to look to definitions that are commonly accepted

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<sup>153</sup> See Rule 4-10(a)(3) [17 CFR 210.4-10(a)(3)].

<sup>154</sup> See Section III.B.3.c.

<sup>155</sup> See Section III. B.2.a.

<sup>156</sup> See letter from SPE.

within the oil and gas industry to the extent such definitions are not in, or inconsistent with, our rules.

**K. Alphabetization of the Definitions Section of Rule 4-10**

We are alphabetizing the definitional terms in Rule 4-10(a) because we are adding a significant number of defined terms to this section.

**III. Revisions to Full Cost Accounting and Staff Accounting Bulletin**

As we noted in Section II.B.2 of this release, commenters unanimously opposed our proposal to use different prices for disclosure and accounting purposes. We agree with those commenters and are revising our proposal to use a 12-month average price for accounting purposes. These revisions primarily will appear under the full cost accounting method described in Rule 4-10(c)<sup>157</sup> of Regulation S-X. The full cost accounting method permits certain oil and gas extraction costs to accumulate on a company's balance sheet subject to a limitation test or a "ceiling" as described in Rule 4-10(c)(3)(4). Like reserve disclosures, these capitalized costs and the related limitation test are not fair value based measurements. Rather the capitalized costs represent the accumulated historical acquisition, exploration and development costs (net of any previously recorded depletion, amortization or ceiling test write downs) incurred for oil and gas producing activities, limited to a standardized mathematical calculation (the full cost ceiling) adopted over 25 years ago. Costs that do not exceed the limitation are deferred and amortized over time. The limitation test calculation on capitalized costs is not designed or intended to represent a fair valuation of the related oil and gas assets.<sup>158</sup>

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<sup>157</sup> 17 CFR 210.4-10(c).

<sup>158</sup> While not intended to represent fair value, costs that are written down because they exceed the ceiling limitation are accounted for in the same manner as impairments recognized under

Similar to the single-day, year-end pricing used under the successful efforts method,<sup>159</sup> the application of the full cost method of accounting in Rule 4-10(c) has used “current prices,” interpreted as single-day, year-end prices, as the basis for calculating the limitation on costs that may be capitalized under the full cost method. In order to further the objective of providing comparable oil and gas reserve quantities, our final rule clarifies that the term “current prices” as used in Rule 4-10(c) is consistent with the 12-month average price as calculated in Rule 4-10(a)(22)(v).<sup>160</sup>

However, since these calculations are not designed to result in a calculation of fair value and since the change to the full cost accounting method would effectively eliminate the anomalies caused by the single-day, year-end price currently used in the limitation test, the SEC staff will eliminate portions of Staff Accounting Bulletin (SAB) Topic 12:D.3.c that permit consideration of the impact of price increases subsequent to the period end on the ceiling limitation test.

The combination of adopting a 12-month average pricing mechanism and eliminating portions of SAB Topic 12:D.3.c could have the effect of requiring a company using the full cost accounting method to record a ceiling test write-down in income during periods of rising oil and gas prices. In that situation, it is possible that using a 12-month average price in the ceiling test calculation might result in a write-down that would not otherwise have been required had the full cost company been permitted to use

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accounting generally. That is, once the asset is written down, it becomes the new historical cost basis and cannot be reinstated for subsequent increases in the ceiling. See Rule 4-10(c)(4)(i) of Regulation S-X [17 CFR 210-4-10(c)(4)(i)].

<sup>159</sup> The accounting guidance refers to our definition of proved reserves under existing Rule 4-10(a)(2), which currently uses a single-day, year-end price to establish reserves amounts.

<sup>160</sup> See Rule 4-10(c)(8) [17 CFR 210.4-10(c)(8)].



the single-day, year-end price. Conversely, it is also possible that in periods of declining oil and gas prices, the application of this rule could result in the deferral of ceiling test write-downs. In that situation, it is possible that using a 12-month average price in the ceiling limitation test calculation might not result in a write-down in situations where a write down would have otherwise been required had the full cost company been required to use a single-day, year-end price in its ceiling limitation test calculation.

Because the application of the ceiling limitation test is not a fair-value-based calculation but rather a limit on the amount of certain oil and gas related exploration costs that can be capitalized, portions of which would have resulted in write-downs in prior periods under other methods of accounting, we believe the benefits of using a single pricing mechanism justify the potential changes to the timing of those ceiling test write-downs or amortizations amounts. However, as discussed in Section V of this release, we believe that the company should discuss such situations, if material, particularly when pricing trends indicate the possibility of future write-downs, in Management's Discussion and Analysis and, where appropriate, the notes to the financial statements.

#### **IV. Update and Codification of the Oil and Gas Disclosure Requirements in Regulation S-K**

The Proposing Release proposed to update and codify Securities Act and Exchange Act Industry Guide 2: Disclosure of Oil and Gas Operations (Industry Guide 2).<sup>161</sup> Industry Guide 2 currently 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

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<sup>161</sup> Exchange Act Industry Guide 2 merely references, and therefore is identical to, Securities Act Industry Guide 2.

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. The rules that we adopt today codify the contents of Industry Guide 2 in a new Subpart 1200 of Regulation S-K.

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

The instructions to Item 102 of Regulation S-K, as well as Items 801 and 802 of Regulation S-K, currently reference the industry guides. Because we are codifying the Industry Guide 2 disclosures in a new Subpart 1200 of Regulation S-K, we are revising the instructions to Item 102 to reflect this change.<sup>162</sup> We also are eliminating the references in Items 801 and 802 to Industry Guide 2 because that industry guide will cease to exist upon effectiveness of the amendments we adopt today.<sup>163</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 adopting rules to permit disclosure of probable and possible oil and gas reserves, we are revising Instruction 5 to limit its applicability to extractive enterprises other than oil and gas producing activities, such as mining activities.<sup>164</sup> Similarly, Instruction 3 of Item 102, regarding production, reserves, locations, development and the nature of the company's interests, will no longer apply to oil and gas producing activities, so we also are limiting that instruction to mining activities.<sup>165</sup>

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<sup>162</sup> See revised Instructions 4 and 8 to Item 102 [17 CFR 229.102].

<sup>163</sup> See revised Item 801 and 802 [17 CFR 229.801 and 802].

<sup>164</sup> See revised Instruction 5 to Item 102 [17 CFR 229.102]. Extractive enterprises include enterprises such as mining companies that extract resources from the ground.

<sup>165</sup> See revised Instruction 3 to Item 102 [17 CFR 229.102].

Finally, we are eliminating 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>166</sup> and Exchange Act 12b-4,<sup>167</sup> regarding the staff's general ability to request supplemental information.

**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 adding a new Subpart 1200 to Regulation S-K that codifies the disclosure requirements related to companies engaged in oil and gas producing activities. This new subpart largely includes 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, Subpart 1200 contains the following new disclosure requirements, many of which have been requested by industry participants:

- Disclosure of reserves from non-traditional sources (e.g., bitumen, shale, coal) 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;

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<sup>166</sup> 17 CFR 230.418.

<sup>167</sup> 17 CFR 240.12b-4.

- Disclosure of technologies used to establish additions to reserves estimates;
- Disclosure of a company’s internal controls over reserves estimation and the qualifications of the business entity or individual preparing or auditing the reserves estimates; and
- Disclosure based on a new definition of the term “by geographic area.”

We discuss each of these proposed new Items below.

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

We are adding new Item 1201 to Regulation S-K. This item sets forth the general instructions to Subpart 1200. The new item contains three paragraphs that perform the following tasks:

- Instruct companies for which oil and gas producing activities are material to provide the disclosures specified in Subpart 1200;<sup>168</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;
- State that the definitions in Rule 4-10(a) of Regulation S-X apply to Subpart 1200; and
- Define the term “by geographic area.”

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<sup>168</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.

**a. Geographic area**

We received significant comments regarding the proposed definition of the term “by geographic area.” We proposed to require disclosure by continent, country containing 15% of more of the company’s reserves, and sedimentary basin or field containing 10% or more of the company’s reserves. Several commenters were concerned that the proposed definition would add too much detail to the disclosures, particularly at the basin or field level.<sup>169</sup> They were concerned that this amount of detail would make disclosures too complex and incoherent.<sup>170</sup> They were particularly concerned with the extension of this standard to disclosures other than reserves, such as production, wells, and acreage.<sup>171</sup> Commenters also believed that the disclosures, in particular by field, could cause competitive harm in future property sales transactions, unitization agreements, and other asset transfers.<sup>172</sup>

Some commenters also believed that some of these disclosures may be prohibited by foreign governments.<sup>173</sup> One commenter noted that separate determination of field or basin reserves within a larger production sharing agreement may not be possible due to concession-wide cost sharing terms.<sup>174</sup> Eight commenters recommended that the determination of appropriate geographic disclosure should remain with management,

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<sup>169</sup> See letters from Apache, CAPP, Devon, ExxonMobil, Imperial, Nexen, Repsol, Shell, and StatoilHydro.

<sup>170</sup> See letters from Apache, CAPP, ExxonMobil, Imperial, Nexen, and Repsol.

<sup>171</sup> See letters from ExxonMobil, Imperial, and Total.

<sup>172</sup> See letters from Apache, API, BHP, Canadian Natural, CAPP, Devon, EnCana, Eni, Newfield, Nexen, Petro-Canada, Shell, StatoilHydro, and Total.

<sup>173</sup> See letters from Apache, API, CAPP, Eni, Newfield, Petro-Canada, and Total.

<sup>174</sup> See letter from Apache.

consistent with Statement of Financial Accounting Standard No. 69 (SFAS 69).<sup>175</sup>

However, two commenters indicated that a country-by-country breakdown would be adequate.<sup>176</sup>

Four commenters supported the proposed percentage thresholds for geographic disclosure, stating that they would increase understanding of the total energy supply, leading to better decisions by policy makers.<sup>177</sup> One commenter supported the 15% threshold for countries.<sup>178</sup>

As we noted in the Proposing Release, 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>179</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.

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<sup>175</sup> See letters from Apache, API, Canadian Natural, CAPP, Eni, ExxonMobil, Imperial, and Petro-Canada.

<sup>176</sup> See letters from ExxonMobil and Nexen.

<sup>177</sup> See letters from AAPG, CFA, Chesapeake, and E&Y.

<sup>178</sup> See letter from Shell.

<sup>179</sup> 17 CFR 229.102.

We think that greater specificity than simply disclosing reserves within “groups of countries” would benefit investors and, in certain cases, may be necessary to meet the requirements of Item 102 of Regulation S-K. Some countries in which many of these companies operate and may have significant reserves are subject to unique risks, such as political instability. However, we recognize that disclosure that is too detailed may detract from the overall disclosure. Thus, we have revised the definition of the term “by geographic area” to mean, as appropriate for meaningful disclosure under a company’s particular circumstances:

- (1) By individual country;
- (2) By groups of countries within a continent; or
- (3) By continent.<sup>180</sup>

This definition is substantially the same as the definition currently provided in SFAS 69. However, as proposed, we are adopting specific percentage thresholds to the geographic breakdowns of reserves estimates and production. With respect to production, the final rules require disclosure of production in each country or field containing 15% or more of the company’s proved reserves unless prohibited by the country in which the reserves are located. We are raising the proposed 10% threshold for field disclosure of production to 15% to make the threshold consistent. However, rather than requiring disclosure based on a percentage of the amount of the company’s reserves of an individual product, as proposed, the final rules require disclosure based on a

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<sup>180</sup> See Item 1201(d) [17 CFR 229.1201(d)].

percentage of a company's total global oil and gas proved reserves, based on barrels of oil equivalent.<sup>181</sup>

With respect to reserves estimates, the final rules require disclosure of reserves in countries containing more than 15% of the company's proved reserves. As with the production disclosure, this 15% threshold would be based on the company's total global oil and gas proved reserves, rather than on individual products, as proposed.<sup>182</sup> A registrant need not provide disclosure of the reserves in a country containing 15% or more of the registrant's proved reserves if that country's government prohibits disclosure of reserves in that country.

We are not adopting the requirement that we proposed to disclose reserves by sedimentary basin or field. We share commenters' concerns that there is potential for competitive harm from such disclosure in future property sales transactions, unitization agreements, and other asset transfers. Moreover, we recognize that there may be situations in which a particular field may encompass a significant portion of a company's reserves in a foreign country. To avoid compelling a company to provide, in effect, field disclosure, the rule does not require disclosure of reserves in a country containing 15% of the company's reserves if that country prohibits disclosure of reserves in a particular field and disclosure of reserves in that country would have the effect of disclosing reserves in particular fields.<sup>183</sup> For example, if a company has 25% of its reserves in Country A and Country A's government prohibits disclosure of reserves by field within Country A, if

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<sup>181</sup> See Item 1204(a) [17 CFR 229.1204(a)].

<sup>182</sup> See Item 1202(a)(2) [17 CFR 229.1202(a)(2)].

<sup>183</sup> See Instruction 4 to Item 1202(a)(2).



almost all of that company's reserves in Country A are located in a single field, the company would not be required to specify the amount of its reserves located in Country A.

**b. Tabular disclosure**

We proposed to require much of the reserves disclosures and other disclosures in Industry Guide 2 to be presented in tabular format. Two commenters encouraged using a standardized table for reserves disclosure.<sup>184</sup> Another believed that companies should be able to reorganize, supplement, or combine tables for better presentation of the company's strategy.<sup>185</sup> However, two commenters believed that the rules should not propose a specified tabular format in general.<sup>186</sup> These commenters believed that companies should have the flexibility to present data in a format that is most relevant and meaningful to investors, whether it is tabular or narrative.<sup>187</sup> We continue to believe that in certain circumstances, the required disclosures lend themselves to a tabular disclosure format. We believe that standardizing such tables will improve the readability and comparability of disclosures among companies. However, in response to comments received, we have made several revisions to the individual disclosure items, including whether the disclosure item must be presented in tabular format. We discuss each below.

**3. 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,

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<sup>184</sup> See letters from Devon and Petrobras.

<sup>185</sup> See letter from Petro-Canada.

<sup>186</sup> See letters from Apache and ExxonMobil.

<sup>187</sup> See letters from Apache and ExxonMobil.

we are replacing this Instruction by adding a new Item 1202 to Regulation S-K that contains a similar disclosure requirement regarding a company's proved reserves.<sup>188</sup> However, new Item 1202 expands on the requirements of Item 102 by specifically permitting the disclosure of probable and possible reserves and permitting the disclosure of reserves from non-traditional sources. In addition, because we are no longer distinguishing between types of accumulations, the item contains only one table with separate columns for different final products, specifically, oil, gas, synthetic oil, synthetic gas, and other natural resources sold by the company.

**a. Oil and gas reserves tables**

New Item 1202 requires disclosure, in the aggregate and by geographic area, of reserves estimates using prices and costs under existing economic conditions, for each product type, in the following categories:

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

A form of this table is set forth below:

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<sup>188</sup> See Item 1202 [17 CFR 229.1202].

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

	Reserves				
	Oil	Natural Gas	Synthetic Oil	Synthetic Gas	Product A
Reserves category	(mbbls)	(mmcf)	(mbbls)	(mmcf)	(measure)
<b>PROVED</b>					
<b>Developed</b>					
Continent A					
Continent B					
Country A					
Country B					
Other Countries in Continent B					
<b>Undeveloped</b>					
Continent A					
Continent B					
Country A					
Country B					
Other Countries in Continent B					
<b>TOTAL PROVED</b>					
<b>PROBABLE</b>					
Developed					
Undeveloped					
<b>POSSIBLE</b>					
Developed					
Undeveloped					

**i. Disclosure by final product sold**

The table requires disclosure by final product sold by the company, specifically, oil, gas, synthetic oil, synthetic gas, or other natural resource. Thus, if the company processes a natural resource that it has extracted, such as bitumen, into synthetic oil or gas prior to selling the product, it may include such reserves under the synthetic oil or gas columns. As noted below, we have revised the proposal that would have required disclosure by type of accumulation. In addition, in response to commenters, we have revised the definition of “oil and gas producing activities” so that a company can use the price of that synthetic oil or gas to determine the economic producibility of the reserves

because the economics of the processing activity are relevant to the determination of whether to extract the underlying resource.<sup>189</sup>

However, if a company extracts a resource other than oil or gas, such as bitumen, and sells the product without processing it into synthetic oil or gas, it must disclose reserves of that other natural resource. Although that company's extractive activities would be considered an oil and gas producing activity under the definition of that term, such a company would not benefit from the economics of processing of that resource because the price that determines whether such a company extracts the resource is the price of the unprocessed resource and therefore the company may not establish reserves estimates based on the price of the upgraded product. Similarly, if the company does not itself extract the natural resource, but purchases the natural resource for processing or is paid to process the natural resource, it may not claim reserves either of the resource or of the processed product.

**ii. Aggregation**

As proposed, the reserves to be reported in these 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. Eight commenters agreed that aggregation should not be permitted beyond the field, property or project level, consistent with PRMS.<sup>190</sup>

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<sup>189</sup> See Section II.C.2 of this release.

<sup>190</sup> See letters from Devon, Evolution, ExxonMobil, Ryder Scott, Shell, SPE, Talisman, and Wagner.

### iii. Optional disclosure of probable and possible reserves

A company may, but is not 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 it must with respect to proved reserves and must state whether the reserves are developed or undeveloped. In addition, Item 1202 requires the company to disclose the relative uncertainty associated with these classifications of reserves estimations. By permitting 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.

Most commenters addressing this issue supported permitting the disclosure of probable and possible reserves in filed documents.<sup>191</sup> They believed that such disclosure would provide a more complete picture of a company's full portfolio of opportunities.<sup>192</sup> One commenter noted that this information often is already available on company websites and in press releases.<sup>193</sup> However, several commenters supporting the proposal cautioned that there could be significant variability among disclosures.<sup>194</sup>

Other commenters expressed concern about disclosure of unproved reserves, but conceded that voluntary disclosure would be acceptable.<sup>195</sup> These commenters were

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<sup>191</sup> See letters from CFA, Chesapeake, Deloitte, EnCana, Evolution, McMoRan, Newfield, Petrobras, Petro-Canada, Questar, Ryder Scott, Sasol, Ryder Scott, Shell, SPE, Three Senators, Wagner, and Zakaib.

<sup>192</sup> See letters from CFA, Evolution, Petro-Canada, Ryder Scott, and Wagner.

<sup>193</sup> See letter from Evolution.

<sup>194</sup> See letter from EnCana.

<sup>195</sup> See letters from API, ExxonMobil, Imperial, Repsol, and Total.

concerned that such disclosure may confuse investors and expose companies to increased litigation because of the inherent uncertainty associated with probable and possible reserves.<sup>196</sup> They noted that various technologies may be used to support these estimates.<sup>197</sup>

Several commenters opposed permitting disclosure of probable and possible reserves in Commission filings for similar reasons.<sup>198</sup> Again, they were concerned that the inherent uncertainty associated with such reserves estimates may lead to investor confusion and misunderstanding.<sup>199</sup> They believed that the broad range of technologies and methods used by companies to support these estimates would lead to inconsistent disclosure among companies.<sup>200</sup>

We note that numerous oil and gas companies already 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 and possible reserves estimates are less certain than proved reserves estimates and so may increase litigation risk. By making these disclosures voluntary, a company could exercise its own discretion as to whether to provide the market with this disclosure.

Some commenters were concerned that voluntary disclosure by some companies may raise confusion as to why other companies do not disclose these classifications of

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<sup>196</sup> See letters from API, ExxonMobil, Imperial, and Repsol.

<sup>197</sup> See letters from API, ExxonMobil, and Imperial.

<sup>198</sup> See letters from Apache, Devon, Energen, Eni, and Southwestern.

<sup>199</sup> See letters from Apache, Devon, Eni, and Southwestern.

<sup>200</sup> See letters from Devon, Eni, and Southwestern.

reserves.<sup>201</sup> One commenter was concerned that voluntary disclosure may increase market pressure on all companies to disclose probable and possible reserves estimates.<sup>202</sup> Considering the fact that many companies already make these disclosures public, we do not believe that this is an adequate reason for prohibiting from filings disclosure that may be helpful to investors.

**iv. Resources not considered reserves**

Because we are permitting disclosure of probable and possible reserves, we are revising 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>203</sup> Five commenters recommended that the rules permit disclosure of all categories of resources, including those that do not qualify as reserves.<sup>204</sup> One commenter believed that the prohibition against disclosing all resources deprives public markets of significant information without meaningfully enhancing investor protection and ultimately may harm the efficiency and development of U.S. markets and U.S. companies raising capital.<sup>205</sup> That commenter also thought such a restriction could also encourage companies to form outside of the U.S.<sup>206</sup> Another commenter believed that the

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<sup>201</sup> See letters from Apache and Total.

<sup>202</sup> See letter from Eni.

<sup>203</sup> See Instruction 5 to Item 102 [17 CFR 229.102].

<sup>204</sup> See letters from Davis Polk, Petro-Canada, Shearman & Sterling, SPE, and Zakaib.

<sup>205</sup> See letter from Shearman & Sterling.

<sup>206</sup> Id.

uncertainty of resource estimates is best communicated by reporting the full range of estimates.<sup>207</sup> In addition, another commenter believed that clear disclosure would allay concerns about investor misunderstanding of estimates of resources that do not qualify as reserves.<sup>208</sup> That commenter noted that excluding resources that are not reserves is inconsistent with international standards and the fact that these resources are disclosed in the U.S. on websites and in press releases.<sup>209</sup> We continue to be concerned that such resources are too speculative and may lead investors to incorrect conclusions. Therefore, we are adopting the proposal to prohibit disclosure of resources other than reserves.

However, consistent with existing Instruction 5, a company may continue to disclose such estimates of non-reserves resources in a Commission filing related to 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.<sup>210</sup> Several commenters recommended that the Commission maintain this exception so that the company's shareholders would not be at an informational disadvantage compared to the counterparty when assessing a merger.<sup>211</sup> We agree with these commenters and have retained the exception in the revised Instruction 5 adopted today.

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<sup>207</sup> See letter from SPE.

<sup>208</sup> See letter from Davis Polk.

<sup>209</sup> See letter from Davis Polk.

<sup>210</sup> Id.

<sup>211</sup> See letters from Devon, ExxonMobil, Shell, and Total.



**b. Optional reserves sensitivity analysis table**

The rules that we are adopting require a company to determine whether its oil or gas resources are economically producible based on a 12-month average price. We also proposed, and are adopting, an optional reserves sensitivity table. This table would permit companies to disclose additional information to investors, such as the sensitivity that oil and gas reserves have to price fluctuations. If a company chooses to provide such disclosure, it may choose the different scenario or scenarios, if any, that it wishes to disclose in the table, provided that it also discloses the price and cost schedules and assumptions on which the alternate reserves estimates are based.

Twelve commenters supported permitting such sensitivity analyses.<sup>212</sup> Some believed that this would provide investors with a better view of management's analysis of future prices.<sup>213</sup> One recommended providing a set price change of 10% for the sensitivity analysis.<sup>214</sup> Two other commenters believed that different circumstances may require different types of sensitivity analyses, both with respect to the range of prices used and the format of the presentation.<sup>215</sup> We agree that the appropriate range for a sensitivity analysis may vary depending on the situation, and therefore, as proposed, we are not specifying a range of prices to be used.

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<sup>212</sup> See letters from Canadian Natural, CAPP, CFA, Chesapeake, Deloitte, Devon, Evolution, ExxonMobil, McMoRan, Nexen, Petro-Canada, and Total.

<sup>213</sup> See letters from Chesapeake, Deloitte, and McMoRan.

<sup>214</sup> See letter from CFA.

<sup>215</sup> See letters from Evolution and Total.

However, five commenters specifically opposed requiring such an analysis.<sup>216</sup> They believed that such a requirement would cause confusion and harm comparability.<sup>217</sup> Three commenters opposed such a sensitivity analysis because using different prices could mislead investors.<sup>218</sup> We are adopting this table, as proposed, as a voluntary disclosure rather than a requirement. However, as proposed, the table would require disclosure of the assumptions behind varying estimates. We believe this disclosure will mitigate any investor confusion.

In addition, we remind companies that Item 303 of Regulation S-K (Management’s Discussion and Analysis of Financial Condition and Results of Operations)<sup>219</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.

**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									

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

Under the proposal, new Item 1202 would have required companies to disclose reserves from conventional accumulations separately from reserves in continuous

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<sup>216</sup> See letters from Canadian Natural, CAPP, Devon, EnCana, and ExxonMobil.

<sup>217</sup> See letters from EnCana and Ryder Scott.

<sup>218</sup> See letters from Apache, Petrobras, and Wagner.

<sup>219</sup> See Item 303 of Regulation S-K [17 CFR 229.303].

accumulations. Nine commenters recommended disclosure based on the final product.<sup>220</sup> These commenters opposed segregating disclosure based on the type of accumulation that is involved.<sup>221</sup> They believed that such disclosure would be too complex and detailed and of little use to investors.<sup>222</sup> In addition, seven commenters pointed out that separation may be impossible because some fields contain both conventional and continuous accumulations.<sup>223</sup> This would make allocation of costs arbitrary.<sup>224</sup> However, four commenters supported the definitions and separate disclosure by type of accumulation.<sup>225</sup> One commenter believed that such disclosure would allow investors to assess the impact of unconventional sources on reserves.<sup>226</sup>

Although we agree conceptually that the focus of reserves disclosure should be on the final product, we also recognize that the production of oil and gas from varying sources can have significantly different economics. Extraction of oil and gas from continuous accumulations can be much more labor and resource intensive than extraction of oil and gas from traditional wells. They often require greater ongoing efforts and expense after the initial extraction equipment is in place, making such operations more sensitive to price fluctuations.

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<sup>220</sup> See letters from Apache, API, Canadian Natural, CAPP, EnCana, ExxonMobil, Imperial, Petro-Canada, and Total.

<sup>221</sup> See letters from Apache, API, CAPP, Chesapeake, Devon, ExxonMobil, Imperial, Repsol, and Shell.

<sup>222</sup> See letters from Apache, API, BP, CAPP, Chesapeake, Chevron, Devon, E&Y, EnCana, ExxonMobil, Imperial, Petro-Canada, Repsol, and Southwestern.

<sup>223</sup> See letters from BP, Canadian Natural, CAPP, EnCana, Petro-Canada, Ryder Scott, and Talisman.

<sup>224</sup> See letters from EnCana and Ryder Scott.

<sup>225</sup> See letters from Davis Polk, EIA, Petrobras, and Wagner.

<sup>226</sup> See letter from Wagner.

We agree with the commenters that disclosure based on the end product sold would provide a more effective basis for distinguishing reserves that disclosure based on the type of accumulation in which the reserves are held. Therefore, we have revised the disclosure to be based on the end product that is sold by the company.<sup>227</sup> However, with respect to the end product, new Item 1202 makes a distinction between oil and gas, on the one hand, and synthetic oil and gas, on the other. Synthetic products require processing of the raw resource material, either while it is still in the ground (“in situ”) or after it is extracted, before it can be used as refinery feedstock or as natural gas. Such processes currently include bitumen upgrading as well as coal liquefaction and gasification. However, resources from some continuous accumulations, such as coalbed methane, do not require such processing and therefore are not associated with the same level of ongoing costs once a well has been drilled because the in-ground resource is already oil or gas (in the case of coalbed methane, the in-ground resource is methane, trapped in a coalbed). Thus, coalbed methane would not be considered a synthetic product.

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

In the Proposing Release, we proposed to require a company to disclose whether or not the technical person<sup>228</sup> primarily responsible for preparing the reserves estimate possessed certain specified qualifications and was subject to a list of controls for maintaining objectivity. Most commenters addressing the issue opposed this proposed

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<sup>227</sup> See Item 1202 [17 CFR 229.1202].

<sup>228</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.

requirement.<sup>229</sup> However, many of these commenters appeared to believe that the disclosure requirement would pertain to every person involved with the estimation process.<sup>230</sup> If adopted, they noted that such disclosure would be voluminous, adding unnecessary complexity to disclosures.<sup>231</sup> Four commenters suggested that we clarify that the disclosure is limited to the chief technical person who oversees the company’s overall reserves estimation process,<sup>232</sup> which was the intent of the proposal. Five commenters supported this disclosure because it helps users understand the objectivity and quality of reserves estimates.<sup>233</sup>

It was our intent to limit the disclosure to the technical person primarily responsible for overseeing the reserves estimates. However, there may have been confusion with respect to this point based on a footnote which stated that we sought disclosure about the person who “is primarily responsible for the actual calculations and estimation or audit.” By that term, we did not intend to include any person making “actual calculations.” We recognize that, ultimately, the reserves estimates are overseen by top management, which may or may not have reserves estimation expertise. The focus of the final rule is the primary technical person responsible for overseeing the preparation of the reserves estimation process. We have revised the language in the rule to clarify this point.<sup>234</sup>

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<sup>229</sup> See letters from Apache, API, Chevron, Energen, Eni, ExxonMobil, Newfield, Nexen, PEMEX, Petro-Canada, Ryder Scott, Shell, and Total.

<sup>230</sup> See letters from Apache, API, ExxonMobil, Newfield, Nexen, PEMEX, Ryder Scott, and Total.

<sup>231</sup> See letters from Apache, API, ExxonMobil, Newfield, Nexen, PEMEX, Repsol, and Total.

<sup>232</sup> See letters from API, ExxonMobil, PEMEX, and Petro-Canada.

<sup>233</sup> See letters from CFA, Devon, EnCana, Southwestern, and Wagner.

<sup>234</sup> See Item 1202(a)(7) [17 CFR 229.1202(a)(7)].

Two commenters noted that it was inconsistent to require such precise disclosure about reserves experts, but not other experts.<sup>235</sup> One of those commenters recommended that the rule require expert language, including clear disclosure of which portion of the reserves estimate the third party is expertising and filed consents.<sup>236</sup> The concept of an expert under the Securities Act is different from the disclosures that we seek regarding the qualifications and objectivity of persons responsible for the preparation or audit of oil and gas reserves. Under the Securities Act, disclosure must be made when the company represents that disclosure is based on the authority of an expert. Although the Securities Act concept of experts will continue to be relevant when the reserves disclosures are in, or incorporated into, a Securities Act filing and the company represents that disclosure is based on the authority of an expert, the new rules requiring disclosure about the reserves preparer or auditor in a company's Exchange Act reports are intended to help investors determine whether reserves estimates, which are highly technical, have been prepared by a qualified, objective person, regardless of whether that person is an employee of the company.

However, we agree with commenters that a prescribed list of qualifications and objectivity requirements may be too rigid for all situations. With respect to technical qualifications, several commenters noted that licensing requirements can vary greatly among jurisdictions.<sup>237</sup> Commenters also believed that disclosure of a person's objectivity was unnecessary because management is required to install appropriate

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<sup>235</sup> See letters from API and Deloitte.

<sup>236</sup> See letter from Deloitte.

<sup>237</sup> See letters from AAPG, API, Chevron, Eni, Petro-Canada, Questar, and SPE.

internal controls to ensure the reliability of reserves estimates.<sup>238</sup> In fact, some commenters recommended that we limit the disclosure to a description of a company's internal controls, including the company's technical assessment routine, management and board review and approval processes, the internal audit process, the extent to which the company uses external parties to estimate or audit reserves estimates, and a summary description of the qualifications of the company's typical reserves estimators.<sup>239</sup> We are following these commenters' recommendations and adopting a rule that requires a company to provide a general discussion of the internal controls that it uses to assure objectivity in the reserves estimation process and disclosure of the qualifications of the technical person primarily responsible for preparing the reserves estimates or conducting the reserves audit if the company discloses that such a reserves audit has been performed, regardless of whether the technical person is an employee or an outside third party.<sup>240</sup>

We did not propose, but sought comment on, whether the rules should require a company to retain an independent third party to prepare, or conduct a reserves audit of, the company's reserves estimates. Most commenters urged the Commission not to adopt such a requirement.<sup>241</sup> They believed that a company's internal staff, particularly at larger companies, is generally in a better position to prepare those estimates<sup>242</sup> and that there is a potential lack of qualified third party engineers and other professionals

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<sup>238</sup> See letters from API, Chevron, Energen, ExxonMobil, Newfield, Nexen, Petrobras, Ryder Scott, Shell, StatoilHydro, and Total.

<sup>239</sup> See letters from ExxonMobil, Nexen, Shell, and StatoilHydro.

<sup>240</sup> See Item 1202(a)(7) [17 CFR 229.1202(a)(7)].

<sup>241</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>242</sup> See letters from API, Denbury, ExxonMobil, Imperial, Nexen, Shell, and Talisman.

available to conduct the increased work that would result from such a requirement.<sup>243</sup>

We agree with these commenters and are not adopting a requirement that an independent third party prepare, or conduct a reserves audit of, the company's reserves estimates.

**e. Reserve audits and the contents of third-party reports**

In the Proposing Release, we proposed that, if a company represents that its estimates of reserves are prepared or audited by a third party, the company must file a report of the third party as an exhibit to the relevant registration statement or report. Two commenters believed that a company description of the third party's report would be sufficient because the reports can contain sensitive information.<sup>244</sup> However, another commenter was concerned that not filing the report may lead to mischaracterizations by the company.<sup>245</sup> This commenter supported the filing of a report by the third party reserves estimator or auditor, but believed that the Commission should determine the contents of such a report.<sup>246</sup> Two commenters supported the filing of the report "letter" as an exhibit, but not the full reserves report because it may contain proprietary information.<sup>247</sup>

As proposed, we are adopting a new rule to require that if the company represents that a third party prepared the reserves estimate or conducted a reserves audit of the reserves estimates, the company must file a report of the third party as an exhibit to the

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<sup>243</sup> See letters from AAPG, API, BP, Devon, ExxonMobil, Imperial, D. McBride, Newfield, D. Ryder, and Sasol.

<sup>244</sup> See letters from Evolution and Petro-Canada.

<sup>245</sup> See letter from Wagner.

<sup>246</sup> See letter from Wagner.

<sup>247</sup> See letters from Devon and Ryder Scott.



relevant registration statement or report.<sup>248</sup> These reports need not be the full “reserves report,” which is often very detailed and voluminous. Rather, these reports could be shorter form reports that summarize the scope of work performed by, and conclusions of, the third party. These reports 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;
- 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;

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<sup>248</sup> See Item 1202(a)(8) [17 CFR 229.1202(a)(8)].

- 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.

In addition, if the report is related to a reserves audit, it must contain a brief summary of the third party's conclusions with respect to the reserves estimates. Finally, if the disclosures are made in, or incorporated into, a Securities Act registration statement, the company must file a consent of the third party as an exhibit to the filing.

In the Proposing Release, we proposed 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 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.” We are substantively adopting the first sentence of this definition as proposed.

However, in response to comments received, we are not adopting the proposed second sentence of the definition of the term “reserves audit.” Two commenters supported the proposed 80% threshold regarding the proportion of reserves that a reserves auditor must review in order for the company to characterize that auditor’s work as a

“reserves audit.”<sup>249</sup> Another commenter believed that the 80% threshold was appropriate for preparing reserves estimates.<sup>250</sup> But three commenters believed that an audit should simply disclose the percentage that was audited.<sup>251</sup> One of these noted that it has its reserves audit performed on a rolling basis.<sup>252</sup> We believe that disclosure of the work done in the required third-party report makes a bright-line percentage test unnecessary. If a company conducts its reserves audit on a rolling basis, it is appropriate for its shareholders to be aware of that fact. Therefore, we are not adopting the proposed 80% threshold. We believe that disclosure of the scope of the review will enable investors to assess the significance to attribute to a reserves audit.

**f. Process reviews**

In the Proposing Release, we solicited comment regarding whether we should permit a company to disclose that it has hired a third party to perform a process review under the Society of Petroleum Engineers’ (SPE’s) reserves auditing standards.<sup>253</sup> Those standards define 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, those standards also note 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

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<sup>249</sup> See letters from Evolution and Wagner.

<sup>250</sup> See letter from Ryder Scott.

<sup>251</sup> See letters from Devon, Ryder Scott, and Talisman.

<sup>252</sup> See letter from Talisman.

<sup>253</sup> See SPE Reserves Auditing Standards.

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 a reserves audit.

Five commenters believed that internal process reviews are helpful in promoting accuracy and effectiveness, so companies should be permitted to disclose them.<sup>254</sup>

However, one commenter was concerned that, although a process review can be helpful for a company, disclosure may give investors a false sense of security.<sup>255</sup> Two commenters suggested that, if a company discloses that it performed a process review, it should clearly disclose what a process review is.<sup>256</sup>

We agree that a process review can be helpful to the company and ultimately to investors. However, we also agree that if a company discloses that it has hired a third party to perform a process review, it must clearly disclose the details surrounding that process review. As such, the new rules treat a process review similar to a reserves audit. If the company discloses that it has hired a third party to conduct a process review, it must file a report of the third party as an exhibit to the relevant registration statement or report and, if the disclosures are made in, or incorporated into, a Securities Act registration statement, the company must file a consent of the third party as an exhibit to the filing.<sup>257</sup>

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<sup>254</sup> See letters from Devon, ExxonMobil, Petro-Canada, Ryder Scott, and Shell.

<sup>255</sup> See letter from Wagner.

<sup>256</sup> See letters from Devon and Petro-Canada.

<sup>257</sup> See Item 1202(a)(8) [17 CFR 229.1202(a)(8)].

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

We proposed requiring tabular disclosure of the aging of proved undeveloped reserves (PUDs). Proposed Item 1203 would have required 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>258</sup>

Numerous commenters were concerned that the proposed five-year table would be too complex for investors to understand.<sup>259</sup> They expressed concern that the proposed table may mislead investors by not clearly attributing costs to the year in which the corresponding PUDs are converted because much of the costs may have been spent in previous years.<sup>260</sup> In addition, commenters noted that maintenance of such data would be costly<sup>261</sup> and that companies currently do not always capture this type of information because management does not use it to run the business.<sup>262</sup>

Eight commenters suggested an alternative of disclosing (1) the quantity of undeveloped reserves if material, (2) the progress in converting PUDs, and (3) any

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<sup>258</sup> See Item 1204 [17 CFR 229.1204].

<sup>259</sup> See letters from API, BP, Canadian Natural, CAPP, Chevron, Eni, Equitable, ExxonMobil, Nexen, Petrobras, Repsol, Shell, and Wagner.

<sup>260</sup> See letters from API, ExxonMobil, Petrobras, Ryder Scott, Total, and Wagner.

<sup>261</sup> See letters from API, Canadian Natural, CAPP, Chevron, Eni, Equitable, ExxonMobil, Nexen, Petrobras, Southwestern, and Wagner.

<sup>262</sup> See letter from Apache.

material changes in the current year.<sup>263</sup> Three U.S. Senators recommended requiring disclosure of development plans in addition to the table.<sup>264</sup> They believed that requiring reporting of investments and planned investments in oil and gas development would provide investors with certainty about companies' intentions to develop the federal lands that they have at their disposal.<sup>265</sup> However, three commenters opposed disclosure of a company's plans to drill and expected capital expenditures because disclosing their business plan may cause competitive harm and might expose them to litigation if results differ from their plan.<sup>266</sup> Six commenters supported the proposed table.<sup>267</sup>

We recognize the concern that the PUD table that we proposed may be confusing to investors because it would not attribute capital expenditures to the corresponding reserves as they are developed. As an alternative to the proposed table, we are adopting rules that require a company to disclose the following in narrative form:

- The total quantity of PUDs at year end;
- Any material changes in PUDs that occurred during the year, including PUDs converted into proved developed reserves;
- Investments and progress made during the year to convert PUDs to proved developed oil and gas reserves; and

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<sup>263</sup> See letters from API, Canadian Natural, Chevron, ExxonMobil, Newfield, Nexen, Petrobras, and Ryder Scott.

<sup>264</sup> See letter from Three Senators.

<sup>265</sup> See letter from Three Senators.

<sup>266</sup> See letters from Chesapeake, Devon, and Newfield.

<sup>267</sup> See letters from Chesapeake, Deloitte, Devon, Three Senators, Talisman, and Wagner.

- An explanation of the reasons why material concentrations of PUDs in individual fields or countries have remained undeveloped for five years or more after disclosure as PUDs.<sup>268</sup>

These disclosures would have been required under the proposal, but much of it would have been presented in tabular format. We believe that a narrative approach to these disclosures will provide companies with a better vehicle to explain the status of their PUDs and their track record for developing such reserves. Rather than requiring forward-looking information about a company's plans to develop reserves that may lead to exaggeration of a company's capability to actually convert such reserves, we believe that disclosure of a company's verifiable, established track record of converting such reserves, including its ability to obtain financing for such activities, would be a better indication of the likelihood of that company's success in developing reserves in the future. Specific required disclosure regarding a company's failure to develop material concentrations of PUDs for five or more years should address commenters' concerns that the company may have no intention to develop such reserves.

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

We proposed to codify the Industry Guide 2 disclosure regarding oil and gas production as Item 1204 of Regulation S-K, in tabular form and with greater detail. One commenter did not believe that separating production, sales price and production costs based on whether they were related oil wells or gas wells would be valuable to investors.<sup>269</sup> It believed that companies do not use this information to manage their

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<sup>268</sup> See Item 1203 [17 CFR 229.1203].

<sup>269</sup> See letter from Apache.

business and do not maintain systems to capture this information on that basis, so tracking such data would require costly changes to their systems.<sup>270</sup> Two commenters also believed that it would not be possible to separate production cost by product because many units extract different products.<sup>271</sup> One commenter also recommended that production not be segregated by type of accumulation.<sup>272</sup>

We have decided not to adopt Item 1204 as proposed. Rather, we are codifying the existing Industry Guide 2 disclosure item with several revisions. Consistent with the Industry Guide 2 disclosure item, the Item 1204, as adopted, requires disclosure, for each of the prior three fiscal years, of production, by final product sold, of oil, gas, and other products. In addition, for the same time period, the company must disclose, by geographical area:

- The average sales price (including transfers) per unit of oil, gas and other products produced; and
- The average production cost, not including ad valorem and severance taxes, per unit of production.

However, unlike the Industry Guide disclosure item, this disclosure must be made by geographical area and for each country and field containing 15% or more of the registrant's proved reserves, expressed on an oil-equivalent-barrels basis.

Similarly, we are codifying the instructions to the Industry Guide 2 item. One commenter recommended that we maintain some of the existing instructions from the

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<sup>270</sup> See letter from Apache.

<sup>271</sup> See letters from Total and ExxonMobil.

<sup>272</sup> See letter from ExxonMobil.



Industry Guide.<sup>273</sup> The first instruction codified from the Industry Guide clarifies that net production should include only production that is owned by the registrant and produced to its interest, less royalties and production due others. However, in special situations (e.g., foreign production), net production before any royalties may be provided, if more appropriate. If “net before royalty” production figures are furnished, the change from the usage of “net production” should be noted.

The second instruction, which is also from the Industry Guide, states that production of natural gas should include only marketable production of natural gas on an “as sold” basis. Production will include dry, residue, and wet gas, depending on whether liquids have been extracted before the registrant transfers title. Flared gas, injected gas, and gas consumed in operations should be omitted. Recovered gas-lift gas and reproduced gas should not be included until sold. Synthetic gas, when marketed as such, should be included in natural gas sales.

We are adding a third instruction that was not in the Industry Guide. This instruction states that, if any product, such as bitumen, is sold or custody is transferred prior to conversion to synthetic oil or gas, the product’s production, transfer prices, and production costs should be disclosed separately from all other products. This instruction is necessary because the existing Industry Guide 2 disclosure requirement only required separate disclosure based on whether the end product was oil or gas. This instruction merely clarifies that disclosures under this item must be based on the end product, which may not be oil or gas because the amendments will permit the disclosure of reserves of other end products, such as bitumen.

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<sup>273</sup> See letter from ExxonMobil.

The fourth instruction codified from the Industry Guide states that the transfer price of oil and gas (natural and synthetic) produced should be determined in accordance with SFAS 69. And the fifth instruction codified from the Industry Guide clarifies that the average production cost per unit of production should be computed using production costs disclosed pursuant to SFAS 69. Units of production should be expressed in common units of production with oil, gas, and other products converted to a common unit of measure on the basis used in computing amortization. This instruction also adds products from unconventional sources to the existing disclosure Item in Industry Guide 2.

**6. Item 1205 (Drilling and other exploratory and development activities)**

We proposed to codify the Industry Guide 2 disclosure item regarding drilling activities as Item 1205 of Regulation S-K, in tabular form, with several revisions to that Industry Guide 2 disclosure item, including applying a new definition of the term “geographic area” and adding two categories of wells:

- Extension wells; and
- Suspended wells.

Three commenters believed that the disclosures required under this proposed Item would become too detailed.<sup>274</sup> One of these commenters also believed that the number of wells being drilled does not provide an accurate picture of a company’s drilling activities because of the increased usage of horizontal wells.<sup>275</sup>

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<sup>274</sup> See letters from Apache, ExxonMobil, and Total.

<sup>275</sup> See letter from ExxonMobil.

Some commenters also did not believe that creating new categories for extension wells and suspended wells would be meaningful.<sup>276</sup> They noted the burden of the added detail would exceed the value of the information to investors.<sup>277</sup> One pointed out that determining whether a well constitutes an extension well would be difficult because of multipurpose drilling.<sup>278</sup>

After considering the above comments, we have decided not to adopt all of the proposed revisions to the existing Industry Guide 2 disclosure. We recognize that, for some companies that use advanced drilling techniques, the proposed disclosure may not be a good indicator of the extent of their exploratory and development activities, although we believe that this disclosure is still important for many companies. Therefore, we have decided to codify the existing disclosures found in Industry Guide 2 related to drilling activities without revision and to not require tabular disclosure.<sup>279</sup> However, as proposed, we are adding a new provision to this Item that requires companies to discuss their exploratory and development activities regarding oil and gas resources that are extracted by mining techniques because we are now including such resources under the definition of “oil and gas producing activities.”

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

Item 1206 codifies 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,

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<sup>276</sup> See letters from Apache, API, and Imperial.

<sup>277</sup> See letters from Apache and Southwestern.

<sup>278</sup> See letter from Total.

<sup>279</sup> See Item 1205 [17 CFR 229.1205].

pressure maintenance operations, and any other related activities of material importance.<sup>280</sup> We are adopting Item 1206 substantially as proposed.

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

Item 1207 codifies 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>281</sup> We are not adopting any substantive changes to the disclosure currently called for by Item 8 of Industry Guide 2. However, we are restructuring and rewording the disclosure item to make it easier to understand, including separating embedded lists into separate subparagraphs and making general plain English revisions. As proposed, these revisions are not intended to change the substance of the disclosures.

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

We proposed to codify disclosure about oil and gas properties, wells, operations, and acreage as Item 1208 of Regulation S-K, in tabular form, as well as make several revisions to the existing disclosures, including applying a new definition of the term “geographic area” and adding language that better illustrates the types of properties and the types of disclosures for those properties, including the following:

- Identification and description generally of the company’s material properties, plants, facilities, and installations;
- Identification of the geographic area in which they are located;
- Indication of whether they are located onshore or offshore; and

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<sup>280</sup> See Item 1206 [17 CFR 229.1206].

<sup>281</sup> See Item 1207 [17 CFR 229.1207].

- Description of any statutory or other mandatory relinquishments, surrenders, back-ins, or changes in ownership.

Six commenters believed that it is not necessary to enhance this section from Industry Guide 2 because the requirements are already covered by Item 102 of Regulation S-K.<sup>282</sup> Commenters were particularly concerned with the segmentation of this disclosure by product, by type of accumulation, and by geographic location.<sup>283</sup> They believed that this level of detail would not be helpful to investors and would impose added costs on companies because they currently do not collect this detailed information.<sup>284</sup> Moreover, seven commenters thought that the well count disclosure is no longer meaningful because of technologies such as horizontal drilling.<sup>285</sup> They thought that, in light of these new technologies, well count disclosure could be misleading.<sup>286</sup>

As with the case of drilling activities, we agree that the proposed added detail could make the disclosures too cumbersome. In addition, such disclosure may be of less importance to many companies because of new drilling technology. Therefore, we are merely codifying the existing Industry Guide 2 disclosure, without revision.<sup>287</sup>

## **V. Guidance for Management’s Discussion and Analysis for Companies Engaged in Oil and Gas Producing Activities**

We proposed to add a new Item 1209, which would have specified topics that a company should address either as part of its Management’s Discussion and Analysis of

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<sup>282</sup> See letters from API, Chevron, ExxonMobil, Imperial, Shell, and Total.

<sup>283</sup> See letters from Apache, ExxonMobil, Shell, and Total.

<sup>284</sup> See letters from Apache, ExxonMobil, and Petro-Canada.

<sup>285</sup> See letters from API, BP, Chevron, ExxonMobil, Imperial, StatoilHydro, and Total.

<sup>286</sup> See letters from API and Imperial.

<sup>287</sup> See Item 1208 [17 CFR 229.1208].

Financial Condition and Results of Operations (MD&A) or in a separate section.<sup>288</sup> Four commenters were concerned that, although the proposed Item was intended to provide more guidance regarding the disclosures required, it would effectively require companies to address all of the issues listed in the Item.<sup>289</sup> One recommended that, instead of a detailed list, the requirement should clarify that companies should address “material changes due to technology, prices, concession conditions, commercial terms, known trends, demands, commitments, uncertainties and any events that are reasonably likely to have a material effect on reserves estimates and financial condition.”<sup>290</sup> Similarly, another commenter recommended that the Commission clarify that the Item is limited to material impacts.<sup>291</sup>

We are not adopting the proposed Item as part of Regulation S-K because it is intended to be guidance, rather than a specific disclosure Item. We agree that, if companies were to discuss every issue provided in the list, the disclosure would be too long and detailed to be of much use to most investors. Important issues could be hidden amid unnecessary detail. However, we believe that added guidance would be beneficial to companies regarding the issues that the Commission’s staff commented upon in its review of the MD&A section of filings made by oil and gas companies.

To begin, a fundamental premise of MD&A is that the information provided should be related to issues that are material to a company. Although we discuss a list of topics that a company might need to discuss, a company need only discuss a topic if it

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<sup>288</sup> See Item 303 of Regulation S-K [17 CFR 229.303].

<sup>289</sup> See letters from Chevron, ExxonMobil, Petrobras, and Shell.

<sup>290</sup> See letter from Repsol.

<sup>291</sup> See letter from Total.

constitutes, involves, or indicates known trends, demands, commitments, uncertainties, and events that are reasonably likely to have a material effect on the company. These topics include:

- 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);
- Technologies used to establish the appropriate level of certainty for any material additions to, or increases in, reserves estimates, including any material additions or increases to reserves estimates that are the result of any of the final rules adopted in this release;
- Prices and costs, including the impact on depreciation, depletion and amortization as well as the full cost ceiling test;
- Performance of currently producing wells, including water production from such wells and the need to use enhanced recovery techniques to maintain production from such wells;
- Performance of any mining-type activities for the production of hydrocarbons;

- The company's recent 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;
- The minimum remaining terms of leases and concessions;
- Material changes to any line item in the tables described in Items 1202 through 1208 of Regulation S-K;
- Potential effects of different forms of rights to resources, such as production sharing contracts, on operations; and
- Geopolitical risks that apply to material concentrations of reserves.

The MD&A is typically presented in a self-contained section of the registration statement or report. However, the disclosure requirements that comprise new Subpart 1200 of Regulation S-K will 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 may include that discussion or analysis with the relevant table, with appropriate cross-references, rather than including it in its general MD&A section.



## VI. 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>292</sup> Appendix A is significantly shorter, and provides far less guidance regarding disclosures, than Subpart 1200 or Industry Guide 2. We proposed to revise Form 20-F to eliminate the reference to Appendix A, and rather refer to Subpart 1200, which would expand the disclosures required by foreign private issuers.

Six commenters supported harmonizing the Form 20-F disclosures with Regulation S-K.<sup>293</sup> One noted that the proposal would make disclosure more consistent and comparable among oil companies.<sup>294</sup> It believed the proposal would put all oil companies on a level playing field.<sup>295</sup>

However, one commenter recommended that the Commission exempt companies reporting under International Financial Reporting Standards (IFRS).<sup>296</sup> It also recommended that instead of applying the proposed Subpart 1200 to foreign private issuers, the Commission should revise Appendix A to Form 20-F itself, making

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<sup>292</sup> See Appendix A to Item 4.D—Oil and Gas of Form 20-F [17 CFR 249.220f].

<sup>293</sup> See letters from CAQ, Deloitte, ExxonMobil, KPMG, PWC, and Shell.

<sup>294</sup> See letter from ExxonMobil.

<sup>295</sup> See letter from ExxonMobil.

<sup>296</sup> See letter from Total.

appropriate limitations for foreign private issuers, such as eliminating the disclosure of wells and acreage.<sup>297</sup> Another commenter was concerned because the proposals may hinder, rather than facilitate, transition to the use of IFRS.<sup>298</sup>

We continue to believe that 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 revising 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. We recognize that this requirement may require a foreign private issuer to prepare two different reserves estimates if the rules in their home jurisdiction require a different pricing standard than the 12-month average that we adopt in this release. However, we believe the same conflict would have existed under our previous rule to the extent our pricing method differed from the home jurisdiction's method.

Appendix A currently allows a foreign private issuer to exclude required disclosures about reserves and agreements if its home country prohibits the disclosures. Two commenters suggested that the rule continue to provide an exception for disclosures about reserves and agreements that are prohibited by foreign laws.<sup>299</sup> However, another

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<sup>297</sup> See letter from Total.

<sup>298</sup> See letter from Ross.

<sup>299</sup> See letters from Shell and Total.

commenter believed that a company taking advantage of such an exception should be required to disclose the country, the citation of the relevant law or regulation, and the fact that the disclosed estimates do not include amounts from the named country.<sup>300</sup> We are not revising this provision. Rather, because these considerations still apply to such foreign private issuers, we are moving that provision from Appendix A and adopting it as Instruction 2 to Item 4 of Form 20-F, as proposed.<sup>301</sup>

One commenter recommended clarifying that the new disclosures would not apply to foreign private issuers under the Multi-Jurisdictional Disclosure System (MJDS) using Form 40-F that comply with NI 51-101 in Canada because those rules already are broadly consistent with PRMS.<sup>302</sup> We agree with this commenter and believe that such issuers need not provide disclosures beyond those required in Canada.

## **VII. Impact of Amendments on Accounting Literature**

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

Numerous commenters recommended that the SEC generally coordinate its efforts with the IASB and FASB to create a cohesive whole and not adopt competing models.<sup>303</sup> We have begun, and will continue, to work with both of these organizations to ensure a smooth transition to the new reporting rules.

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

In the Proposing Release, we expressed our view that the change from using single-day year-end price to an average price should be treated as a change in accounting

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<sup>300</sup> See letter from ExxonMobil.

<sup>301</sup> Id.

<sup>302</sup> See letter from Deloitte.

<sup>303</sup> See letters from CAQ, CFA, Eni, Grant Thornton, KPMG, and PWC.

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.

Commenters believed that the change would be best described as:

- A change in accounting estimate;<sup>304</sup>
- A change in accounting principle that is inseparable from a change in accounting estimate; or<sup>305</sup>
- A change in accounting estimate effected by a change in accounting principle.<sup>306</sup>

We believe that any accounting change resulting from the changes in definitions and required pricing assumptions in Rule 4-10, should be treated as a change in accounting principle that is inseparable from a change in accounting estimate, which does not require retroactive revision. We note that pursuant to AU 420.13, such a change requires recognition in the independent auditor’s report through the addition of an explanatory paragraph.

All commenters on the issue agreed that adoption of the rules should not require retroactive revision of past reserves estimates.<sup>307</sup> Some believed retroactive revision of

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<sup>304</sup> See letters from CAQ, Canadian Natural, CAPP, Deloitte, Devon, KPMG, Petrobras, PWC, Repsol, Shell, and StatoilHydro.

<sup>305</sup> See letter from Deloitte.

<sup>306</sup> See letter from Petro-Canada.

<sup>307</sup> See letters from Apache, CAQ, Canadian Natural, CAPP, Deloitte, Devon, Evolution, ExxonMobil, Petrobras, Petro-Canada, PWC, Repsol, Shell, StatoilHydro, and Total.

reserves estimates would be very burdensome or impossible because such data was not maintained.<sup>308</sup> We agree with those commenters and believe that no retroactive revisions will be necessary.

Three commenters recommended that the FASB revise Statement of Financial Accounting Standard No. 19 (SFAS 19) to include unconventional resources currently accounted for as mining activities and also provide guidance that no retroactive revisions would be required in that scenario.<sup>309</sup> We will continue to work with the FASB on this issue.

### **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 now will be considered oil and gas producing activities, and not mining activities. 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 new rules, bitumen extraction and operations that produce oil or gas through mining methods are included under oil and gas accounting rules, which only permit capitalization of costs associated with proved reserves.<sup>310</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.

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<sup>308</sup> See letters from Canadian Natural, Deloitte, Evolution, Petrobras, and Shell.

<sup>309</sup> See letters from CAQ, Petrobras, and PWC.

<sup>310</sup> See Rule 4-10(c) of Regulation S-X [17 CFR 210.4-10(c)].

One commenter believed that the industry would need guidance regarding how to transition operations that are disclosed and accounted for as mining operations to oil and gas disclosure and accounting.<sup>311</sup> It noted that this issue would be relevant not only coincident with the new rules, but could be relevant to future events, such as a coal mining company that in subsequent years changes its operations to in situ coal gasification.<sup>312</sup> That commenter believed that, without guidance, the change from mining treatment to oil and gas treatment could be considered a change in accounting principle which requires retroactive revision.<sup>313</sup> We acknowledge this commenter's concerns. With respect to resources formerly considered mining activities, we view the change from mining treatment to oil and gas treatment as a change in accounting principle that is inseparable from a change in accounting estimate, which does not require retroactive revision.

## **VIII. Application of Interactive Data Format to Oil and Gas Disclosures**

In the Proposing Release, we sought comment on the desirability of rules that would permit, or require, oil and gas companies to present the tabular disclosures in Subpart 1200 in interactive data format in addition to the currently required format. Most commenters addressing the topic supported the use of XBRL for oil and gas disclosures.<sup>314</sup> They believed using interactive data would be very helpful to investors and analysts.<sup>315</sup>

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<sup>311</sup> See letter from KPMG.

<sup>312</sup> See letter from KPMG.

<sup>313</sup> See letter from KPMG.

<sup>314</sup> See letters from Audit Policy, CFA, Deloitte, Devon, E&Y, ExxonMobil, PWC, Shell, Standard Advantage, StatoilHydro, and Zakaib.

<sup>315</sup> See letters from CFA, Devon, E&Y, StatoilHydro, and Zakaib.

However, they also recommended that the Commission wait until a well-developed taxonomy exists.<sup>316</sup> Some recommended that the Commission implement it in stages, initially with a voluntary program.<sup>317</sup> One commenter recommended that the SEC work with other groups like SPE, IASB, and the United Nations to ensure tags ultimately become the industry standard.<sup>318</sup>

We agree that much of the disclosures regarding oil and gas companies would be conducive to interactive data. We intend to continue to work on developing a taxonomy for such disclosure. Once a well-developed taxonomy is created, we will address this issue further. We are not, however, adopting interactive data requirements in this release. We will continue to consider whether to require interactive oil and gas disclosure filings in the future and, if so, when such filings should be required based on the development status of an oil and gas disclosure taxonomy.

## **IX. Implementation Date**

### **A. Mandatory Compliance**

We proposed to require companies to begin complying with the disclosure requirements for registration statements filed on or after January 1, 2010, and for annual reports on Forms 10-K and 20-F for fiscal years ending on or after December 31, 2009. A company may not apply the new rules to disclosures in quarterly reports prior to the first annual report in which the revised disclosures are required.

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<sup>316</sup> See letters from Audit Policy, Deloitte, Devon, E&Y, ExxonMobil, PWC, Shell, StatoilHydro, and Zakaib.

<sup>317</sup> See letters from Audit Policy, Devon, E&Y, PWC, StatoilHydro, and Zakaib.

<sup>318</sup> See letter from Zakaib.

Fifteen commenters agreed that a delayed compliance date would be helpful in allowing companies to familiarize themselves with the new disclosure requirements before having to comply with them.<sup>319</sup> Four commenters supported the proposed January 1, 2010 compliance date of Securities Act filings and Exchange Act filings related to fiscal periods ending on or after December 31, 2009.<sup>320</sup> However, one conditioned this approval upon the adoption of the rules before December 31, 2008.<sup>321</sup> Another suggested one year after adoption of the rules.<sup>322</sup>

Four commenters believed that the proposed compliance date would be too soon.<sup>323</sup> One recommended a compliance date of December 31, 2010 to enable companies to make necessary changes in IT systems and data processing.<sup>324</sup> Another noted the magnitude of the proposed changes, length of time to design, program and implement system changes, and the goal of getting the best possible disclosure.<sup>325</sup> One commenter suggested delaying implementation for two years after adoption.<sup>326</sup>

We continue to believe that the proposed compliance dates are appropriate. However, as we discuss our revisions with the FASB and IASB, we will consider whether to delay the compliance date further.

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<sup>319</sup> See letters from Apache, Chevron, Davis Polk, Deloitte, ExxonMobil, KPMG, Newfield, Petrobras, Petro-Canada, PWC, Ryder Scott, Shell, Southwestern, Talisman, and Total.

<sup>320</sup> See letters from Davis Polk, ExxonMobil, Shell, and StatoilHydro.

<sup>321</sup> See letter from ExxonMobil.

<sup>322</sup> See letter from Talisman.

<sup>323</sup> See letters from Apache, Petrobras, PWC, and Total.

<sup>324</sup> See letter from Petrobras.

<sup>325</sup> See letter from Apache.

<sup>326</sup> See letter from Devon.



## **B. Voluntary Early Compliance**

Seven commenters recommended that early compliance not be permitted to maintain consistency and comparability of disclosure among issuers, which could be misleading or confusing to investors.<sup>327</sup> However, one commenter believed that the Commission should permit early adoption of the new rules because companies with different fiscal year ends are not comparable anyway.<sup>328</sup> One commenter suggested that the Commission permit companies to provide the new disclosures supplementally.<sup>329</sup> We agree that voluntary compliance may make disclosures incomparable. Therefore, companies may not elect to follow the new disclosure rules prior to the effective date.

## **X. Paperwork Reduction Act**

### **A. Background**

Our new rules and amendments contain “collection of information” requirements within the meaning of the Paperwork Reduction Act of 1995 (“PRA”).<sup>330</sup> We submitted the new rules and amendments to the Office of Management and Budget (OMB) for review in accordance with the PRA.<sup>331</sup> OMB has approved the revisions. The titles for these collections of information are:

- (1) “Regulation S-K” (OMB Control No. 3235-0071),<sup>332</sup>

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<sup>327</sup> See letters from Davis Polk, Devon, ExxonMobil, Petrobras, Ryder Scott, Shell, and Wagner.

<sup>328</sup> See letter from Evolution.

<sup>329</sup> See letter from Davis Polk.

<sup>330</sup> 44 U.S.C. 3501 *et seq.*

<sup>331</sup> 44 U.S.C. 3507(d) and 5 CFR 1320.11.

<sup>332</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.

- (2) “Industry Guides” (OMB Control No. 3235-0069);
- (3) “Regulation S-X” (OMB Control No. 3235-0009);
- (4) “Form S-1” (OMB Control No. 3235-0065);
- (5) “Form S-4” (OMB Control No. 3235-0324);
- (6) “Form F-1” (OMB Control No. 3235-0258);
- (7) “Form F-4” (OMB Control No. 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>333</sup> and registration statements that are prepared by issuers to provide investors with the information they need to make informed investment decisions in registered offerings and in secondary market transactions. The industry guides supplement the existing regulations and forms and provide guidance with respect to industry-specific disclosures.

Our 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

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<sup>333</sup> The pertinent annual reports are those on Forms 10-K and 20-F.

reserves, as well as providing information regarding a company's internal controls over reserves estimation and the qualifications of person preparing reserves estimates or conducting reserves audits. The new rules and amendments also are intended to codify, modernize, and centralize the disclosure items for oil and gas companies in Regulation S-K. Finally, the new rules and amendments are intended to harmonize oil and gas disclosures by foreign private issuers with disclosures by domestic companies. Overall, the new rules and 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.

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

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

The new rules and amendments increase existing disclosure burdens for annual reports on Forms 10-K<sup>334</sup> and 20-F and registration statements on Forms 10, 20-F, S-1,

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<sup>334</sup> The 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 from the Rule 14a-3(b) annual report to security holders to satisfy the Form 10-K disclosure requirements. The analysis that follows assumes that companies would either provide the proposed disclosure in a

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 company's progress in converting proved undeveloped reserves into proved developed 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 reserves in a company's initial filing with the Commission and in filings which include material additions to reserves estimates;
- The company's internal controls over reserves estimates and the qualifications of the technical person primarily responsible for overseeing the preparation or audit of the reserves estimates;
- If a company represents that disclosure is based on the authority of a third party that prepared the reserves estimates or conducted a reserves audit or process review, filing a report prepared by the third party; and
- Disclosure based on a new definition of the term "by geographic area."

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Form 10-K or 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 Form 10-K and Regulation 14A or 14C.

In addition, the amendments 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, foreign private issuers must disclose the information required by Items 1205 through 1208 of Regulation S-K regarding drilling activities, present activities, delivery commitments, wells, and acreage, which previously were not specified in Appendix A to Form 20-F. These disclosure items codify the substantive disclosures called for by Items 4 through 8 of Industry Guide 2, although much of this disclosure may have been disclosed by some companies under the more general discussions of business and property on that form.

### **C. Revisions to PRA Burden Estimates**

For purposes of the PRA, we estimated, in the Proposing Release, 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>335</sup> These estimates included the time and the cost of preparing and reviewing disclosure and filing documents. Our methodologies for deriving the above estimates are discussed below.

Our estimates represented 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

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<sup>335</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.

information called for by the new 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 disclosures include:

- 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 company's progress in converting proved undeveloped reserves into proved developed 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 reserves in a company's initial filing with the Commission and in filings which include material additions to reserves estimates;
- The company's internal controls over reserves estimates and the qualifications of the technical person primarily responsible for overseeing the preparation or audit of the reserves estimates;
- If a company represents that disclosure is based on the authority of a third party that prepared the reserves estimates or conducted a reserves audit or process review, filing a report prepared by the third party; and
- Disclosure based on a new definition of the term "by geographic area."

We estimated that, on average, each company would incur a burden of 35 hours to prepare these disclosures in an annual report or registration statement.

The amendments also 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, 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. In the Proposing Release, we estimated that this burden would be 20 hours per foreign private issuer.

We received few comments regarding our estimates. Several large oil companies, and an industry organization that primarily represents large oil companies, believed that the estimates were too low. They believed that the new rules and amendments would increase their burden by 10,000 to 15,000 hours per year. However, these commenters included the initial cost to change their internal systems to provide the new required disclosures in their estimates. Based on conversations with these commenters, the staff understands that they believed that the ongoing burden would be approximately one third of that estimate. For purposes of its Paperwork Reduction Act estimate, the staff considers the ongoing annual burden and spreads the initial transitional burden of compliance with new rules and regulations over a three year period.

In addition, these commenters indicated that the two most significant burdens that stemmed from the proposed use of different prices for disclosure and accounting purposes and the increased detail in disclosures that would result from the proposed definition of the term “geographic area” and the proposed disclosure by type of accumulation. It should be noted that these commenters have significant reserves spread worldwide. Some of these large companies have as much as 10,000 times the amount of

reserves of the median oil and gas company. These large companies likely would be more significantly impacted by the level of detailed disclosure that the proposals would have required compared to the vast majority of oil and gas companies in our reporting system, which do not have such extensive global operations. Therefore, we do not believe that the estimate provided by those large oil and gas companies necessarily would be applicable to most oil and gas companies. However, in response to the concerns that they expressed, the final rules do not require the use of different prices for disclosure and full cost accounting purposes. We also intend to continue to work with the FASB to align the accounting standards with that pricing mechanism. In addition, we have significantly reduced the level of detailed geographic and product disclosure that the rules require. Finally, we are providing for a substantial transition period to allow companies to adjust their systems to comply with the new rules. We believe that these changes will help to mitigate the increased burden of the new rules.

We do, however, believe that our initial burden estimates may have been too low. We are therefore adjusting our burden estimate to reflect an additional increase of 100 hours per company per year. In addition, we are increasing our burden estimate for foreign private issuers by an additional 150 hours per company per year. 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>336</sup> We estimate that 75% of the 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 additional 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)*\$400
10-K <sup>337</sup>	206	100	20,600	15,450	5,150	2,060,000
20-F	35	150	5,250	3,938	1,312	525,000
Total	241		25,850	19,388	6,462	2,585,000

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)*\$400
10	5	100	500	125	375	150,000
20-F	2	150	300	75	225	90,000
S-1	38	100	3,800	950	2,850	1,140,000
S-4	17	100	1,700	425	1,275	510,000
F-1	2	150	300	75	225	90,000
F-4	3	150	450	112.5	337.5	135,000
Total	67		7,050	1762.5	5,287.5	2,115,000

#### D. Request for Comment

We request comment in order to evaluate the accuracy of our estimates of the burden of the revised information collections. Any member of the public may direct to us

<sup>336</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.

<sup>337</sup> The burden estimates for Form 10-K assume that the 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.

any comments concerning the accuracy of these burden estimates. Persons who desire to submit comments on the collection of information requirements should direct their 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 20549-1126. 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 adopting revisions to the oil and gas reserves disclosure regime 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 revisions are intended to modernize and update oil and gas disclosure. The oil and gas industry has experienced significant changes since the Commission initially adopted its current rules and disclosure regime between 1978 and 1982, including advancements in technology and changes in the types of projects in which oil and gas companies invest. The 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.

## **B. Description of New Rules and Amendments**

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.

Generally, the new rules and amendments codify and update the existing Industry Guide 2 disclosures in a new Subpart 1200 of Regulation S-K, clarify the level of detail required to be disclosed, and require reserves disclosure in a tabular presentation. The changes relate primarily to disclosure of the following:

- Disclosure of reserves from non-traditional sources (e.g., bitumen, 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 company's progress in converting proved undeveloped reserves into proved developed 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 reserves in a company's initial filing with the Commission and in filings which include material additions to reserves estimates;

- The company’s internal controls over reserves estimates and the qualifications of the technical person primarily responsible for overseeing the preparation or audit of the reserves estimates;
- If a company represents that disclosure is based on the authority of a third party that prepared the reserves estimates or conducted a reserves audit or process review, filing a report prepared by the third party; and
- Disclosure based on a new definition of the term “by geographic area.”

The new rules and amendments also make revisions and additions to the definitions section of Rule 4-10 of Regulation S-X. These revisions update and extend reserves definitions to reflect changes in the oil and gas industry and new technologies.

In particular, the new and revised definitions:

- 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 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 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 amendments to Form 20-F will

require foreign private issuers to disclose the information required by Items 1205 through 1208 of Regulation S-K regarding drilling activities, present activities, delivery commitments, wells, and acreage, which are not currently specified under Appendix A to Form 20-F, although much of this disclosure is often disclosed by companies under the more general discussions of business and property on that form.

### **C. Benefits**

We expect that the new rules and amendments will increase transparency in disclosure by oil and gas companies by providing improved reporting standards. The 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 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 new rules and amendments 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 new rules and amendments permit them to unify such disclosures into a single, filed document. 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 disclosure items are optional, the amount of increased transparency will depend on the extent to which companies elect to provide the additional disclosures permitted under the new rules. 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.

By permitting increased disclosure and promoting more consistency and comparability among disclosures, the new rules and amendments provide 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 new rules and amendments will 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 will increase market transparency, provide investors with more reserves information, and allow for more accurate production forecasts. By relating standards used in deterministic methods to comparable percentage thresholds used in probabilistic methods for establishing a given level of certainty, the new rules and amendments should result in increased standardization in reporting practices which would promote comparability of reserves across companies. The new rules 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 new definition also is designed to encompass new technologies as they are developed in the future, thereby providing investors and the market with a more comprehensive understanding of a company's estimated reserves.

We expect that replacing the Industry Guide with new Regulation S-K items will provide greater certainty because the disclosure requirements would be in rules established by the Commission. In addition, we believe that disclosure of reserves concentrated in particular countries should provide better information to investors regarding the geopolitical risk to which some companies may be exposed. Overall, we believe that the amendments, as a whole, will provide investors with more information that management uses to make business decisions in the oil and gas industry.

**1. Average price and first of the month price**

The revision 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. In particular, many commenters suggested the use of a 12-month average price to mitigate the risk of a year-end price affected by short-term price volatility such that it does not reflect the true nature of a company investment, planning, and performance. Our Office of Economic Analysis studied the publicly-available pricing data and found evidence of year-end price volatility. The historical volatility of year-end prices is between 16% and 41% higher than the volatility of annual average prices depending on the grade and geography of oil or gas prices considered. This difference demonstrates variability in oil and gas prices,

likely due to seasonal demands, that does not reflect long term fundamental values, but that cannot be immediately corrected due to the costs of transportation and speed of delivery. Given this variability, it is likely that a 12-month average price will yield better reserves estimates—that reflect management planning and investment to the extent that they discount the short-term component of oil and gas prices—than a year-end spot price.

Many of the commenters to the Proposing Release supported the use of an historical price, even though this approach may be less useful in determining the fair value of a company's reserves 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 also recognize that some reserves will be of more value than others due to extraction and transportation costs. As a result, since the new rules and amendments require the use of a single price to estimate reserves and since that price may not be as informative of value as a futures price, the new rules and amendments 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. In particular, it allows companies the flexibility to communicate how their reserves would change under alternative economic conditions, including those that they may believe better reflect their future prospects. 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 new rules and amendments should 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 assessments and improve projections of company prospects.

In addition to an average annual price, many of the commenters suggested that the price be computed on the first day of the month. Two reasons were given. First, beginning month prices would allow an additional month of preparation time in calculating reserves for financial reporting. Second, some commenters suggested that month-end, and in particular year-end, prices were subject to additional short-term volatility because many oil and gas financial contracts expire on those days, resulting in higher than normal trading activity. While the staff of the Office of Economic Analysis did not find systematic evidence of increased volatility around month-end or year-end oil and gas prices relative to other days in the month, we agree that additional preparation time is beneficial because reserves estimations require significant time and resources. An additional month would help reduce errors that might otherwise result from the financial reporting time constraints.

Finally, we believe that revising the full cost accounting method to use the same pricing mechanism as the reserves disclosure requirements should provide consistency between the disclosure and accounting presentations. The use of a single pricing method should also minimize the incremental burden placed on companies as a result of the rule changes because they would not be required to prepare two separate estimates.

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

We anticipate that disclosure of probable and possible reserves, if companies elect to do so, will allow investors, creditors, and other users to better assess a company's reserves. In addition, the 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 will provide a more consistent means of comparison because disclosure in our filings must comply with our definitions. Although our new rules 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 because of the relative uncertainty of those estimates, 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. Regardless, since the disclosure decision is voluntary, it should occur only to the extent that companies find that the benefits justify the costs of doing so.

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 new rules and amendments permit smaller companies, who often participate in a significant amount of exploratory activity, to better disclose their business prospects. Consequently, we anticipate that the new rules and amendments could lead to efficiencies in capital formation, as more information will be available regarding the prospects of smaller issuers.

### **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, particularly if companies are allowed to disclose unproved reserves because unproved reserves are inherently less certain than proved reserves. We proposed disclosure requirements relating to whether the person primarily responsible for preparing reserves estimates or conducting a reserves audit, if the company represents that it has enlisted a third party to conduct a reserves audit, met a specified list of qualifications based on the Society of Petroleum Engineers's reserves audit guidelines. However, commenters expressed concern that many of these qualifications such as membership in professional societies were not standardized worldwide. Without control over those standards, the disclosures would not be comparable. We agree with those commenters and, as suggested, have adopted a more principles-based disclosure requirement. Under the adopted rules, a company must disclose its internal controls over reserves estimations and disclose the qualifications of the primary technical person in charge of overseeing the reserves estimations or reserves audit. We believe that disclosure of the individual qualifications, rather than simple

acknowledgement of meeting certain criteria, which may differ within countries, will provide investors with better information to compare companies and the qualifications of persons in charge of the reserves estimations and reserves audits, which should enable more accurate assessments of the quality of audit reports. We believe that disclosure of a company's internal controls over reserves estimates will allow investors to assess whether a company has implemented appropriate controls without dictating to companies specified criteria for establishing those controls.

Although we do not expect all companies to undertake a third-party reserves audit because our rules do 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 new rules and amendments also require disclosure of a company's progress in developing undeveloped reserves and the reasons why any PUDs have remained undeveloped for five years or more. We believe that such disclosure supplements our amendments that ease the requirements for recognizing PUDs and thereby should 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. We believe that the disclosure requirements will increase the accountability of companies that disclose reserves for extended periods of time without adequate justification for their failure to develop those reserves.

## **5. Disclosure guidance**

The release also provides guidance about the type of information that companies should consider disclosing in Management's Discussion and Analysis, and allows companies to include this information with the relevant tables. Providing the additional guidance should assist companies in preparing their disclosure, improving the quality and consistency of this disclosure. 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.

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

The new rules and amendments also update 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 and assess those operations. This includes resources extracted from nontraditional sources that companies consider oil and gas activities, which previously were excluded 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 harmonization of foreign private issuer disclosure will 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 harmonization of foreign private issuer disclosure is intended to promote comparability among all oil companies.

#### **D. Costs**

We expect that the new rules and amendments will result in initial and ongoing costs to oil and gas companies. These burdens will vary significantly among companies. Based on disclosures in company filings, the largest oil and gas companies can have as much as 10,000 times the reserves of the median reporting oil and gas company. As would be expected, companies that have more reserves and larger operations will have a correspondingly larger amount of information that they must disclose and, therefore, the burden of complying with our disclosure requirements would be greater for larger companies.

Although we are adding a new subpart to Regulation S-K to set forth the disclosure requirements that are unique to oil and gas companies, the subpart, for the most part, codifies the substantive disclosure called for by Industry Guide 2. The disclosure requirements have been updated and clarified, and require the disclosure to be presented in a tabular format, where appropriate. Although many companies already present this information in tabular form, for companies that do not, this 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 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 geographic location and nature of its exploration and discoveries. 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 have reduced the level of geographical detail to reduce the burden on companies, while still providing sufficient information to investors regarding concentrations of risk, including political risk.

We expect companies will incur costs in preparing the additional disclosures such as calculating and aggregating the reserve projections in a prescribed format. However, if probable and possible categories of reserves have different extraction cost structures and they are not disclosed separately from proved reserves, this could result in increased uncertainty in an investor's assessment of a company's prospects.

Companies also expressed concern that mandatory disclosure of probable and possible reserves could expose them to increased litigation risk. 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 will incur costs to hire these outside consultants. The new rules and amendments do 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 ability to accurately estimate such reserves than larger companies. However, we understand that the vast majority of smaller oil and gas companies already hire third parties to estimate their reserves or certify their estimates.



### **3. 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 definitions 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 new rules 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.

### **4. Change in pricing mechanism**

We do not anticipate significant costs with the change in pricing mechanisms for establish reserves. Companies simply will apply a different price scenario to determine the economic producibility of reserves. It is possible that the use of a 12-month average price may reduce the cost of disclosure because it should reduce the volatility of reserves estimates and therefore reduce the need to make significant adjustments to those estimates on a yearly basis due to daily price swings.

### **5. Disclosure of PUD development**

The required disclosure of a company's progress in developing PUDs will increase the cost of reporting. However, we believe that companies regularly track their progress in this arena. Until a company develops a property, it cannot begin to realize the cash flows from production and the actual sale of products. Thus, the development of reserves is of utmost importance to an oil and gas company's business.

## **6. Increased geographic disclosure**

The requirements to provide increased geographic disclosure of reserves and production, in certain circumstances, may increase the amount of disclosure that a company must present. However, because the threshold that we are adopting in the release is 15% of the company's total reserves, a company would be required to disclose, at most, reserves and production in six countries. Considering the relatively large proportion of reserves that must exist in a country before a company is required to provide country-level disclosure, we believe that such information is readily available to companies. As noted in the body of this release, we have attempted to draft this provision to minimize any competitive harm that such disclosure may cause a company.

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

The harmonization of foreign private issuer disclosure regarding oil and gas activities may 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 disclosure relates 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 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.

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

Securities Act Section 2(b)<sup>338</sup> and Section 3(f) of the Exchange Act<sup>339</sup> require 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>340</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) 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.

We expect the new rules and amendments 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 should 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

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<sup>338</sup> 15 U.S.C. 77b(b).

<sup>339</sup> 15 U.S.C. 78c(f).

<sup>340</sup> 15 U.S.C. 78w(a)(2).

resources and prospects. The new rules and amendments 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 new rules and amendments permit smaller companies, who often participate in a significant amount of exploratory activity, to better disclose their business prospects. Consequently, we anticipate that the new rules and amendments could lead to efficiencies in capital formation, as more information will be available regarding the prospects of smaller issuers.

The effects of the new rules and 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 will 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 new rules 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 because of the relative uncertainty associated with such reserves, 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.

### **XIII. Final Regulatory Flexibility Analysis**

We have prepared this Final Regulatory Flexibility Analysis in accordance with Section 603 of the Regulatory Flexibility Act.<sup>341</sup> This analysis relates to the modernization of the oil and gas disclosure requirements. An Initial Regulatory Flexibility Analysis (IRFA) was prepared in accordance with the Regulatory Flexibility Act in conjunction with the Proposing Release. The Proposing Release included, and solicited comment on, the IRFA.

#### **A. Reasons for, and Objectives of, the New Rules and Amendments**

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>342</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 new rules and 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

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<sup>341</sup> 5 U.S.C. 603.

<sup>342</sup> See Release No. 33-8870 (Dec. 12, 2007) [72 FR 71610].

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 amendments also harmonize our full cost accounting rules with the changes that we are adopting with respect to disclosure of oil and gas reserves. The new rules and amendments also are intended to codify, modernize and centralize the disclosure items for oil and gas companies into Regulation S-K. Finally, the new rules and amendments are intended to harmonize oil and gas disclosures by foreign private issuers with disclosures by domestic companies. Overall, the new rules and 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. Significant Issues Raised by Commenters**

We did not receive comments specifically addressing the impact of the proposed rules and amendments on small entities. However, several of the comments related to burdens that would be placed on all companies affected by the proposals. In particular, commenters believed that the proposal to require the use of different prices for disclosure and accounting purposes would impose a significant burden on all oil and gas companies. We have considered those comments and are adopting amendments to our disclosure

rules and the full cost accounting method that will require the use of a single price for both purposes. Similarly, commenters were concerned that certain aspects of the proposal, such as the new definition of geographic area and disclosure by accumulation type would increase the detail in the disclosures significantly. We agree with those commenters and have significantly reduced the level of detail required in the disclosure requirements.

### **C. Small Entities Subject to the New Rules and Amendments**

The new rules and amendments 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 new rules and amendments 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>343</sup> and Exchange Act Rule 0-10(a)<sup>344</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. The new rules and amendments affect small entities that are operating companies and engage in oil and gas producing activities. Based on filings in 2007, we estimate that there are approximately 28 oil and gas companies that may be considered small entities.

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<sup>343</sup> 17 CFR 230.157.

<sup>344</sup> 17 CFR 240.0-10(a).

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

The new rules and amendments to Regulation S-K expand some existing disclosures, and eliminate others. In particular, the 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 reserves in a company's initial filing with the Commission and in filings which include material additions to reserves estimates;
- Disclosure of the company's internal controls over reserves estimates and the qualifications the technical person primarily responsible for overseeing the preparation or audit of the reserves estimates;
- If a company represents that disclosure is based on the authority of a third party that prepared the reserves estimates or conducted a reserves audit or process review, 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. Agency Action to Minimize Effect on Small Entities**

We considered different compliance standards for the small entities that will be affected by the new rules and amendments. In the Proposing Release, we solicited comment regarding the possibility of different standards for small entities. We did not receive comment on this particular issue. However, we believe that such differences would be inconsistent with the purposes of the rules.

The new rules and amendments are designed to modernize the disclosure requirements for oil and gas companies. As such, we believe all oil and gas companies will benefit from the modernization of the rules. Under the new rules and amendments, all companies will be allowed to use modern technologies to establish reserves and include operations in unconventional resources in their oil and gas reserves estimates. Adopting differing standards for disclosure for small entities would significantly reduce the comparability between companies. However, the new rules and amendments do permit companies to disclose probable and possible reserves. We believe the removal of the prohibition against such reserves will enable companies to disclose a broader view of their prospects. We believe this will particularly benefit smaller oil and gas companies that may have significant unproved reserves in their portfolio. Such disclosure may assist smaller companies in raising capital for development projects in those properties.

#### **XIV. Update to Codification of Financial Reporting Policies**

The Commission amends the "Codification of Financial Reporting Policies" announced in Financial Reporting Release No. 1 (April 15, 1982) [47 FR 21028] as follows:

1. By removing the seven introductory paragraphs before Section 406.01, the last sentence of Section 406.01.c.vi., the first paragraph of Section 406.01.d, the introductory paragraph of Section 406.02.d, and removing and reserving Sections 406.01.a., 406.02.a, 406.02.b., 406.02.d.iii., and 406.02.e.

2. By revising Section 406.01B to read as follows:

The rules in Rule 4-10(b) specify that the application of successful efforts shall comply with SFAS 19. In 2008, the Commission published amendments to the definitions in Rule 4-10(a) that may not align completely with SFAS 19's existing terminology and application. Further, paragraph 7 of SFAS 25 states: "For purposes of applying this Statement and Statement 19, the definition of proved reserves, proved developed reserves, and proved undeveloped reserves shall be the definitions adopted by the SEC for its reporting purposes that are in effect on the date(s) as of which the reserve disclosures are to be made. Previous reported quantities shall not be revised retroactively if the SEC definitions are changed." In any case, the Commission expects the practical application of SFAS 19 will remain unchanged other than incorporating the effects of the new definitions.

3. By removing the first three sentences of Section 406.02.c. and in the fourth sentence replacing the phrase "this sort of information" with "information to assess the impact of oil and gas producing activities on near term cash flows and liquidity".

4. By adding a new Section 406.03 entitled "Transition" and including the text of the 3<sup>rd</sup> paragraph of Section VII.B and the last sentence of the 2<sup>nd</sup> paragraph of Section VII.C of this release.

5. By adding a new Section 406.04 entitled “MD&A Guidance” and including the text beginning with the last sentence of the 2nd paragraph of Section V of this release through the end of that Section.

The Codification is a separate publication of the Commission. It will not be published in the Federal Register or Code of Federal Regulations. For more information on the Codification of Financial Reporting Policies, contact the Commission’s Public Reference Room at 202-551-5850.

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

We are adopting 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 AMENDMENTS**

#### **List of Subjects**

17 CFR Part 210

Accountants, Accounting, Reporting and recordkeeping requirements, Securities.

17 CFR Parts 211, 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 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)(22)
(a)(5)	(a)(23)
(a)(6)	(a)(32)
(a)(7)	(a)(21)
(a)(8)	(a)(15)
(a)(9)	(a)(27)
(a)(10)	(a)(13)
(a)(11)	(a)(9)
(a)(12)	(a)(29)
(a)(13)	(a)(30)
(a)(14)	(a)(1)
(a)(15)	(a)(12)
(a)(16)	(a)(7)
(a)(17)	(a)(20)

b. Removing paragraphs (a)(3) and (a)(4);

c. 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)(24), (a)(25), (a)(26), (a)(28), (a)(31), and (c)(8);

d. Revising newly redesignated paragraphs (a)(13), (a)(16), (a)(22), and (a)(30); and

e. Removing the authority citations following the section.

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 reservoir. Analogous reservoirs, as used in resources assessments, have similar rock and fluid properties, reservoir conditions (depth, temperature, and pressure) and drive mechanisms, but are typically at a more advanced stage of development than the reservoir of interest and thus may provide concepts to assist in the interpretation of more limited data and estimation of recovery. When used to support proved reserves, an “analogous reservoir” refers to a reservoir that shares the following characteristics with the reservoir of interest:

- (i) Same geological formation (but not necessarily in pressure communication with the reservoir of interest);
- (ii) Same environment of deposition;
- (iii) Similar geological structure; and
- (iv) Same drive mechanism.

Instruction to paragraph (a)(2): Reservoir properties must, in the aggregate, be no more favorable in the analog than in the reservoir of interest.

(3) Bitumen. Bitumen, sometimes referred to as natural bitumen, is petroleum in a solid or semi-solid state in natural deposits with a viscosity greater than 10,000 centipoise measured at original temperature in the deposit and atmospheric pressure, on a

gas free basis. In its natural state it usually contains sulfur, metals, and other non-hydrocarbons.

(4) 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.

(5) 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.

(6) Developed oil and gas reserves. Developed oil and gas reserves are reserves of any category that can be expected to be recovered:

(i) Through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and

(ii) Through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.

\* \* \* \* \*

(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. An exploratory well is a well drilled to find a new field 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. An extension well is a well drilled to extend the limits of a known 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 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 saleable hydrocarbons, in the solid, liquid, or gaseous state, from oil sands, shale, coalbeds, or other nonrenewable natural resources which are intended to be upgraded into 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 ending at a “terminal point”, which is the outlet valve on the lease or field storage tank. If unusual physical or operational circumstances exist, it may be appropriate to regard the terminal point for the production function as:

a. The first point at which oil, gas, or gas liquids, natural or synthetic, are delivered to a main pipeline, a common carrier, a refinery, or a marine terminal; and

b. In the case of natural resources that are intended to be upgraded into synthetic oil or gas, if those natural resources are delivered to a purchaser prior to upgrading, the first point at which the natural resources 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.



Instruction 2 to paragraph (a)(16)(i): For purposes of this paragraph (a)(16), the term saleable hydrocarbons means hydrocarbons that are saleable in the state in which the hydrocarbons are delivered.

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

(A) Transporting, refining, or marketing oil and gas;

(B) Processing of produced oil, gas or natural resources that can be upgraded into synthetic oil or gas by a registrant that does not have the legal right to produce or a revenue interest in such production;

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

(D) 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, and the registrant believes that such adjacent portions are in communication with the known (proved) reservoir. 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)(22)(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 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. Probable reserves may be assigned to areas that are structurally higher than the proved area if these areas are in communication with the proved reservoir.

(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) and (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 and engineering data) is used to generate a full range of possible outcomes and their associated probabilities of occurrence.

\* \* \* \* \*

(22) 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 establish 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 reservoir, 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 first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions.

\* \* \* \* \*

(24) Reasonable certainty. If deterministic methods are used, reasonable certainty means a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate. A high degree of

confidence exists if the quantity is much more likely to be achieved than not, and, as changes due to increased availability of geoscience (geological, geophysical, and geochemical), engineering, and economic data are made to estimated ultimate recovery (EUR) with time, reasonably certain EUR is much more likely to increase or remain constant than to decrease.

(25) Reliable technology. Reliable technology is a grouping of one or more technologies (including computational methods) that has been field tested and has been demonstrated to provide reasonably certain results with consistency and repeatability in the formation being evaluated or in an analogous formation.

(26) Reserves. Reserves are estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations. In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce or a revenue interest in the production, installed means of delivering oil and gas or related substances to market, and all permits and financing required to implement the project.

Note to paragraph (a)(26): 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).

\* \* \* \* \*

(28) 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.

\* \* \* \* \*

(30) Stratigraphic test well. A stratigraphic test well is a drilling effort, geologically directed, to obtain information pertaining to a specific geologic condition. Such wells customarily are drilled without the intent of being completed for hydrocarbon production. The classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration. Stratigraphic tests are classified as “exploratory type” if not drilled in a known area or “development type” if drilled in a known area.

(31) Undeveloped oil and gas reserves. Undeveloped oil and gas reserves are reserves of any category 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 directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.

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

(iii) Under no circumstances shall estimates for 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 same reservoir or an analogous reservoir, as defined in paragraph (a)(2) of this section, or by other evidence using reliable technology establishing reasonable certainty.

\* \* \* \* \*

(c) \* \* \*

(8) For purposes of this paragraph (c), the term “current price” shall mean 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 first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions.

\* \* \* \* \*

**PART 211—INTERPRETATIONS RELATING TO FINANCIAL REPORTING MATTERS**

3. Amend Part 211, subpart A, by adding “Modernization of Oil and Gas Reporting,” Release No. FR-78 and the release date of December 31, 2008, to the list of interpretive releases.

**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**



4. 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.

\* \* \* \* \*

5. 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 Securities Act Industry Guide 4 (referred to in §229.801(d)).

\* \* \* \* \*

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

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

8. 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, production prices and production costs.

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.

**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 229.1200 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 210.4-10(a)) shall apply for purposes of this Subpart 229.1200.

(d) For purposes of this Subpart 229.1200, the term by geographic area means, as appropriate for meaningful disclosure in the circumstances:

- (1) By individual country;
- (2) By groups of countries within a continent; or
- (3) By continent.

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

(a) Summary of 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 as of Fiscal-Year End  
Based on Average Fiscal-Year Prices**

	Reserves				
	Oil	Natural Gas	Synthetic Oil	Synthetic Gas	Product A
Reserves category	(mmbbls)	(mmcf)	(mmbbls)	(mmcf)	(measure)
<b>PROVED</b>					
<b>Developed</b>					
Continent A					
Continent B					
Country A					
Country B					
Other Countries in Continent B					
<b>Undeveloped</b>					
Continent A					
Continent B					
Country A					
Country B					
Other Countries in Continent B					
<b>TOTAL PROVED</b>					
<b>PROBABLE</b>					
Developed					
Undeveloped					
<b>POSSIBLE</b>					
Developed					
Undeveloped					

(2) Disclose, in the aggregate and by geographic area and for each country containing 15% or more of the registrant's proved reserves, expressed on an oil-equivalent-barrels basis, reserves estimated using prices and costs under existing economic conditions, for the product types listed in paragraph (a)(4) of this Item, in the following categories:

- (i) Proved developed reserves;

- (ii) Proved undeveloped reserves;
- (iii) Total proved reserves;
- (iv) Probable developed reserves (optional);
- (v) Probable undeveloped reserves (optional);
- (vi) Possible developed reserves (optional); and
- (vii) Possible undeveloped 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) through (a)(2)(vii) 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.

Instruction 4 to paragraph (a)(2): A registrant need not provide disclosure of the reserves in a country containing 15% or more of the registrant's proved reserves if that country's government prohibits disclosure of reserves in that country. In addition, a registrant need not provide disclosure of the reserves in a country containing 15% or more of the registrant's proved reserves if that country's government prohibits disclosure in a particular field and disclosure of reserves in that country would have the effect of disclosing reserves in particular fields.

(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 be aggregated by simple arithmetic summation.

(4) Disclose separately material reserves of the following product types:

(i) Oil;

(ii) Natural gas;

(iii) Synthetic oil;

(iv) Synthetic gas; and

(v) Sales products of other non-renewable natural resources that are intended to be upgraded into synthetic oil and gas.

(5) If the registrant discloses probable or possible reserves, discuss the uncertainty related to such reserves estimates.

(6) If the registrant has not previously disclosed reserves estimates in a filing with the Commission or is disclosing material additions to its reserves estimates, the registrant shall provide a general discussion of 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.

(7) Preparation of reserves estimates or reserves audit. Disclose and describe the internal controls the registrant uses in its reserves estimation effort. In addition, disclose the qualifications of the technical person primarily responsible for overseeing the preparation of the reserves estimates and, if the registrant represents that a third party conducted a reserves audit, disclose the qualifications of the technical person primarily responsible for overseeing such reserves audit.

(8) Third party reports. If the registrant represents that a third party prepared, or conducted a reserves audit of, the registrant's reserves estimates, or any estimated valuation thereof, or conducted a process review, the registrant shall file a report of the third party as an exhibit to the relevant registration statement or other Commission filing. If the report relates to the preparation of, or a reserves audit of, the registrant's reserves estimates, it must include the following disclosure, if applicable to the type of filing:

- (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 registrant'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, 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 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 underlying a reserves estimate prepared by another party 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.

(b) Reserves sensitivity analysis (optional). (1) The registrant may, but is not required to, provide the information specified in paragraph (b)(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	Syn. Oil	Syn. Gas	Product A	Oil	Gas	Syn. Oil	Syn. Gas	Product A	Oil	Gas	Syn. Oil	Syn. Gas	Product A
	mbbls	mmcf	mbbls	mmcf	measure	mbbls	mmcf	mbbls	mmcf	measure	mbbls	mmcf	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 (b), disclose the price and cost schedules and assumptions on which the disclosed values 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) Disclose the total quantity of proved undeveloped reserves at year end.
- (b) Disclose material changes in proved undeveloped reserves that occurred during the year, including proved undeveloped reserves converted into proved developed reserves.
- (c) Discuss investments and progress made during the year to convert proved undeveloped reserves to proved developed reserves, including, but not limited to, capital expenditures.
- (d) Explain the reasons why material amounts of proved undeveloped reserves in individual fields or countries remain undeveloped for five years or more after disclosure as proved undeveloped reserves.

**§ 229.1204 (Item 1204) Oil and gas production, production prices and production costs.**

- (a) For each of the last three fiscal years disclose production, by final product sold, of oil, gas, and other products. Disclosure shall be made by geographical area and for each country and field that contains 15% or more of the registrant's total proved

reserves expressed on an oil-equivalent-barrels basis unless prohibited by the country in which the reserves are located.

(b) For each of the last three fiscal years disclose, by geographical area:

(1) The average sales price (including transfers) per unit of oil, gas and other products produced; and

(2) The average production cost, not including ad valorem and severance taxes, per unit of production.

Instruction 1 to Item 1204: Generally, net production should include only production that is owned by the registrant and produced to its interest, less royalties and production due others. However, in special situations (e.g., foreign production) net production before any royalties may be provided, if more appropriate. If “net before royalty” production figures are furnished, the change from the usage of “net production” should be noted.

Instruction 2 to Item 1204: Production of natural gas should include only marketable production of natural gas on an “as sold” basis. Production will include dry, residue, and wet gas, depending on whether liquids have been extracted before the registrant transfers title. Flared gas, injected gas, and gas consumed in operations should be omitted. Recovered gas-lift gas and reproduced gas should not be included until sold. Synthetic gas, when marketed as such, should be included in natural gas sales.

Instruction 3 to Item 1204: If any product, such as bitumen, is sold or custody is transferred prior to conversion to synthetic oil or gas, the product’s production, transfer prices, and production costs should be disclosed separately from all other products.

Instruction 4 to Item 1204: The transfer price of oil and gas (natural and synthetic) produced should be determined in accordance with SFAS 69.

Instruction 5 to Item 1204: The average production cost, not including ad valorem and severance taxes, per unit of production should be computed using production costs disclosed pursuant to SFAS 69. Units of production should be expressed in common units of production with oil, gas, and other products converted to a common unit of measure on the basis used in computing amortization.

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

(a) For each of the last three fiscal years, by geographical area, disclose:

- (1) The number of net productive and dry exploratory wells drilled; and
- (2) The number of net productive and dry development wells drilled.

(b) Definitions. For purposes of this Item 1205, the following terms shall be defined as follows:

(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) 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.

(4) 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.

(c) 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) Disclose, as of a reasonably current date or as of the end of the fiscal year, the total gross and net productive wells, expressed separately for oil and gas (including synthetic oil and gas produced through wells) and the total gross and net developed acreage (i.e., acreage assignable to productive wells) by geographic area.

(b) Disclose, as of a reasonably current date or as of the end of the fiscal year, the amount of undeveloped acreage, both leases and concessions, if any, expressed in both gross and net acres by geographic area, together with an indication of acreage concentrations, and, if material, the minimum remaining terms of leases and concessions.

(c) Definitions. For purposes of this Item 1208, 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.

**PART 249—FORMS, SECURITIES EXCHANGE ACT OF 1934**

9. The authority citation for part 249 continues to read in part as follows:

Authority: 15 U.S.C. 78a et seq. and 7201; and 18 U.S.C. 1350, unless otherwise noted.

\* \* \* \* \*

10. 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 revisions read as follows:

[Note: The text of Form 20-F does not, and this amendment 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 Subpart 229.800 of Regulation S-K (§229.801 et seq. of this chapter) that applies to you.
- 2. If oil and gas operations are material to you 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).

\* \* \* \* \*

**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 proven 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

December 31, 2008