



**Department of Energy**  
Washington, DC 20585

FEB 15 2008

Nancy M. Morris  
Secretary  
Securities and Exchange Commission  
100 F Street NE  
Washington, DC 20549-1090

Dear Ms. Morris:

The Energy Information Administration (EIA) of the Department of Energy (DOE) is pleased to provide the enclosed comments with respect to the Securities and Exchange Commission's Concept Release on Possible Revisions to the Disclosure Requirements Relating to Oil and Gas Reserves, Release Nos. 33-8870 and 34-56945, File No. S7-29-07. EIA supports the Commission's reconsideration of its disclosure requirements relating to oil and gas reserves.

EIA is the independent statistical and analytical agency within the DOE. While we do not promote, formulate, or take positions on policy issues, we do produce objective, timely, and relevant data, projections, and analyses that are meant to assist policymakers, help markets function efficiently, and inform the public. Our comments are strictly those of EIA and should not be construed as representing those of the DOE or the Administration.

Any questions regarding the comments should be addressed to EIA's Deputy Administrator, Howard Gruenspecht, at [howard.gruenspecht@eia.doe.gov](mailto:howard.gruenspecht@eia.doe.gov) or 202.586.6351.

Respectfully,

A handwritten signature in black ink, appearing to read "Guy F. Caruso".

Guy F. Caruso  
Administrator  
Energy Information Administration

Enclosure



## **U.S. Energy Information Administration**

### **Comments on:**

### ***Concept Release on Possible Revisions to the Disclosure Requirements Relating to Oil and Gas Reserves***

**SEC File No. S7-29-07**

**February 15, 2008**

The Energy Information Administration (EIA) is pleased to provide comments on the Securities and Exchange Commission's (SEC) Concept Release on Possible Revisions to the Disclosure Requirements Relating to Oil and Gas Reserves, Release Nos. 33-8870 and 34-56945, File No. S7-29-07.

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EIA supports the Commission's reconsideration of its disclosure requirements relating to oil and gas reserves. We see potential benefits in several areas.

First, given the accelerating pace of relevant technological change, the rate at which existing conventional oil and gas proved reserves are being produced, and the large price swings in contemporary oil and gas markets, many elements of the existing rule-based system used by the Commission merit reconsideration. Movement to a well-conceived and executed principles-based system informed by the best available reserves estimation practices could help to keep investors better informed.

Second, some of the present rules governing reserves disclosures can distort the reporting of proved reserves. Notably, using a product price as of the last day of the year as the basis for determinations regarding the economic producibility of resources can produce unrealistic and misleading results regarding the amounts of proved reserves that are actually available, and cause a spurious fluctuation in reserve estimates. This problem is particularly acute with respect to the prices of individual production streams, which can be dramatically impacted by temporary disruptions in downstream transportation or refining/processing infrastructures to which they may be tightly linked.

Third, at a time when the public interest requires the most efficient possible investment programs in order to allow supply to offset depletion of existing proved developed reserves and keep up with demand growth, the present disclosure rules for oil and gas reserves can inadvertently distort investment decisions. Specifically, because the

“reportability” of reserves is an important consideration for public companies subject to the Commission’s jurisdiction, such companies may prefer investments that generate such reserves relative to possible alternative projects that, in their judgment, would yield greater and/or higher-valued volumes of oil and gas production and profit per dollar invested, but do not yield reportable reserves under the present Commission rules.

Fourth, updated disclosure requirements relating to oil and gas reserves would allow for greater consistency of reserves reporting to EIA and the Commission. EIA collects reserves information each year on the Form EIA-23, *Annual Survey of Domestic Oil and Gas Reserves*, from entities that operate such reserves in the United States, including, but not limited to, entities subject to the Commission’s reporting requirements. EIA’s reserves data program has always supported efforts by relevant experts to improve the definition and estimation of reserves, provided that such changes do not constitute a sharp departure from current practice and serve to improve the clarity of reserves estimates for the public, industry, and government. Consequently, EIA has adopted an approach to defining proved reserves incorporating very similar concepts to those mentioned for possible Commission adoption in the Concept Release that is the subject of these comments. However, to avoid burdening respondents, we currently allow entities subject to both Commission and EIA reporting requirements to report reserves information to EIA on the same basis that they now use to report to the Commission. Modification of the Commission’s current disclosure requirements along the lines suggested in the Concept Release would be likely to result in more consistent reporting by all entities that hold reserves.

In sum, EIA believes that improvements in reserves disclosure requirements could simultaneously achieve several critical objectives: enhancing disclosure quality, eliminating spurious fluctuations in the current reporting of proved reserves, avoiding distortions in the selection of investment projects, and improving consistency among reserves data reported to EIA, reported to the Commission, and independently estimated for Federal Outer Continental Shelf fields by the Minerals Management Service.

EIA maintains significant expertise in the estimation of petroleum reserves. We would be glad to provide any assistance we can in the development of an improved reserves reporting regime by the Commission.

Our responses to the specific questions posed in the concept release are provided below.

**1. Should we replace our rules-based current oil and gas reserves disclosure requirements, which identify in specific terms which disclosures are required and which are prohibited, with a principles-based rule? If yes, what primary disclosure principles should the Commission consider? If the Commission were to adopt a principles-based reserves disclosure framework, how could it affect disclosure quality, consistency and comparability?**

EIA believes that a principles-based reserves disclosure framework that is informed by the Society of Petroleum Engineers (SPE) Petroleum Resources Management System

(PRMS) could better serve the interests of both investors and companies that file oil and gas reserves estimates with the Commission than the present rules-based requirements. The SPE PRMS is globally recognized as a key guideline for reserves and resources classification. Adoption of a framework that requires respondents to demonstrate that their reserves estimate(s) comply with the definitions and related guidelines set forth in the SPE PRMS should improve the quality, consistency, and comparability of reserves data. EIA already uses such a framework for reporting of oil and gas reserves on the Form EIA-23.

Moving to such a principles-based framework has the advantage of setting an accounting objective that must be met in each instance irrespective of what type or quantity of reserves-related data are available or what reserves estimation method happens to be applied at the time the estimate is made. Other advantages of a principles-based system include its adaptability to most technological change, a reduced maintenance burden for both government and industry, and the responsibility placed on companies to provide technically sound reserves estimates.

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

In accord with EIA practice for reporting on Form EIA-23, companies should continue to be required to report their proved reserves (1P; reasonable certainty; 90 percent probability of that much or more being recovered in the future). Companies should also have the option to additionally and separately report their probable reserves. The sum of proved reserves and probable reserves is the larger volume of 2P reserves (50 percent probability of that much or more being recovered in the future; equal chance of there being either more or less recovered). Companies should be able to technically substantiate their reported reserves estimates.

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

EIA finds considerable merit in the overall resources framework described in the SPE PRMS, which plays a key role in our own reserves reporting program. Should the Commission adopt the SPE PRMS, it should only require that companies implement those portions of the system that are necessary and sufficient for the required reporting of proved reserves and the optional reporting of probable reserves.

**4. Should we consider revising the current definition of proved reserves, proved developed reserves and proved undeveloped reserves? If so, how? Is there a way to**

**revise the definition or the elements of the definition, to accommodate future technological innovations?**

Consistent with its own practice, EIA suggests adoption of the proved reserves definitions and related guidelines detailed in the SPE PRMS. We believe that this approach can readily accommodate all but perhaps the most radical future technological innovations.

**5. Should we specify the tests companies must undertake to estimate reserves? If so, what tests should we require? Should we specify the data companies must produce to support reserves conclusions? If so, what data should we require? Should we specify the process a company must follow to assess that data in estimating its reserves?**

The constant evolution of technology and an increasing focus on the exploitation of resources that present novel technical challenges mitigate against having the Commission specify check lists of the tests that companies must undertake to estimate reserves. There are numerous types of testing equipment and procedures that can be used to gather the data necessary to estimate proved reserves prior to commencement of production. The determination of equipment and procedures (such as 3-D seismic, drill stem testing, open hole logs, side-wall cores and other oil industry best practices) that are suitable for initial reserves evaluation of a given field should be based on the physical location of the field, prior knowledge of analogous fields, and analysis of the information obtained while drilling the initial well(s). Relevant portions of the SPE PMRS definitions and guidelines, as determined by the Commission, could be of assistance in defining the process to be followed by companies in collecting and interpreting data to support reserves conclusions.

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

In EIA's view, the concept of reasonable certainty can coexist with reporting of probabilistic estimates of reasonably certain reserves as provided for by the definitions and guidelines of the SPE PRMS. The term "reasonable certainty" is the historical industry standard and is used by EIA when defining proved reserves. The definition of proved reserves was formally broadened by the SPE, et al., in 1997 to include a probabilistic interpretation of the concept of proved reserves. EIA supported this enhancement. Nevertheless, many companies that estimate proved reserves still prefer to rely on the deterministic definition of reasonable certainty. In practice these two types of estimates should be considered equally acceptable when applied to proved reserves. The quantity of proved reserves is an estimate. As such, it will always depend to some extent on the qualitative judgments of the estimator. Consequently there will almost always be a range of reasonable proved reserve estimates for any field or group of fields. Expert petroleum engineers often develop different proved reserve estimates for the same field

even when starting with essentially the same data. This has been confirmed over and over again by the EIA when it makes independent proved reserves estimates for fields reported on its Form EIA-23.

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

In EIA's view, proved reserves reported to the Commission should conform to the SPE definition of proved reserves irrespective of whether they are developed or undeveloped. For reserves to be considered proved, a formal development plan should be in place that specifies a time period during which development is expected to take place, for example 5 years. Some frontier, offshore, and unconventional projects can legitimately have longer development periods. If it is necessary to delay development, or an appropriate development plan requires more than 5 years, then a justification should be provided.

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

In EIA's view, the concept of "economic producibility" is appropriate as a requisite characteristic of reported reserves.

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

In EIA's view, the concept of "existing operating conditions" is appropriate as a requisite characteristic of reported reserves.

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

Use of the December 31 price for reserves estimation purposes has been a source of controversy and confusion in reserves reporting for some time. Recent market conditions, characterized by significant price swings over short time intervals, have exacerbated the situation. The problem is particularly acute with respect to the prices of individual production streams, which can be dramatically impacted by temporary

disruptions in downstream transportation or refining/processing infrastructures to which they may be tightly linked. For this reason, EIA believes that modification of the Commission's current price rule would benefit all concerned parties. Specifically, companies could be required to use the actual sales prices for a field's production averaged over a longer recent representative period (for example, something in the range of 6 to 18 months as determined by the Commission) in estimating its reserves. This will substantially improve the quality of the resulting estimates and provide a better foundation for investors' decisions. For a new field the sales prices averaged over the representative period for comparable oil or gas production in the area where the field is located could be used. Alternatively, an expected future price specified in a long-term contract (of a duration matching the representative period chosen by the Commission) could be used. EIA has no views regarding the desirability of a requirement for price sensitivity analyses but we would expect that the volumes of proved undeveloped reserves would be much more sensitive to price changes than the volumes of proved developed reserves.

**11. Should we consider eliminating any of the current exclusions from proved reserves? How could removing these exclusions affect disclosure quality?**

EIA suggests that undrilled deepwater offshore prospects located near an existing platform or subsea drilling manifold be considered for removal from the current list of exclusions from proved reserves at 17 CFR 210.4-10 (a)(2)(iii)(C) when geophysical and engineering data support a conclusion that the prospect is analogous to a producing reservoir at that platform or manifold. Similarly, we suggest elimination of the current exclusion made at 17 CFR 210.4-10 (a)(2)(iii)(D) for oil shales, coal, gilsonite, and other such sources. In EIA's view, removal of these exclusions would serve to enhance disclosure quality and eliminate possible distortions in investment resulting from their application.

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

EIA suggests elimination of the exclusion from oil and gas activities currently applied at 17 CFR 210.4-10 (a)(1)(ii)(D) to the extraction of hydrocarbons from shale, tar sands, or coal. Hydrocarbon extraction projects utilizing these unconventional resources are expected to become increasingly important and can readily be accommodated within the scope of the SPE PRMS. In EIA's view, removal of this exclusion would serve to enhance disclosure quality and eliminate possible distortions in investment resulting from its application.

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

EIA suggests that the Commission eliminate its current restriction on inclusion of oil and gas reserves from sources that require further processing. Moving to a principles-based disclosure framework based on the SPE PRMS provides everything that is needed to appropriately govern the inclusion of tar sands, oil shales, and other currently unconventional sources of petroleum. It also provides a capability to readily accommodate most “unforeseen resource discoveries and processing methods” including both sources not yet considered to be producible and future extraction techniques.

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

EIA suggests that the disclosure framework be based on “best currently available technologies” at the time a reserves estimate is made. Proved reserves estimates have always been based on existing technology at the time the estimates are made and should remain that way. The SPE PRMS framework and its proved and probable reserves definitions are written so as to readily accommodate all but the most radical future technological change.

**15. Should we consider requiring companies to engage an independent third party to evaluate their reserves estimates in the filings they make with us? If yes, what should that party’s role be? Should we specify who would qualify to perform this function? If so, who should be permitted to perform this function and what professional standards should they follow? Are there professional organizations that the Commission can look to set and enforce adherence to those standards?**

In EIA’s view, a requirement to engage an independent third party to evaluate reported reserves estimates does not appear to be necessary. Even without such a requirement, the vast majority of large publicly-held operators already utilize an independent third party to either prepare or review their proved reserve estimates.

There are no universally applicable or absolute standards for reserves estimation. Professional certification as a qualified reserves estimator is not statutorily required. The SPE PRMS guidelines, and a companion SPE document “Standards Pertaining to the Estimating and Auditing of Petroleum Reserves Information” (really another guideline) which deals with matters like estimator qualifications, the estimation process, and estimate documentation, constitute the best available and most appropriate guidance. The SPE and the Society of Petroleum Evaluation Engineers (a smaller group specializing in reserves estimation), while they promote and sponsor the education and training of engineers in reserves estimation, do not have the power to enforce adherence to specific standards.