Department of Energy
Washington, DC 20585

August 26, 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 proposed rule titled "Modernization of the Oil and Gas Reporting Requirements," Release Nos. 33-8935 and 34-58030, File No. S7-15-08.

EIA is pleased that the Commission's proposed changes to the oil and gas reserves disclosure requirements comport very substantially with the comments and suggestions we provided in response to the Commission's earlier concept release. As noted in those comments, the modernization of reporting requirements has significant potential benefits for both investors and companies. The additional suggestions and comments provided in the enclosed comments focus on four areas that fall within EIA's expertise where we believe that the Commission's proposed rule language and associated discussion could be improved to enhance its clarity and/or technical accuracy.

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

Any questions regarding the comments should be addressed to EIA's Director of Oil and Gas, Steve Harvey, at stephen.harvey@eia.doe.gov or 202.586.6012.

Respectfully,

Guy F. Caruso
Administrator
Energy Information Administration

Enclosure

U.S. Energy Information Administration

Comments on:

Modernization of the Oil and Gas Reporting Requirements

SEC File No. S7-15-08

August 28, 2008

The Energy Information Administration (EIA) is pleased to provide comments on the Securities and Exchange Commission's proposed rule titled "Modernization of the Oil and Gas Reporting Requirements," Release Nos. 33-8935 and 34-58030, File No. S7-15-08 (Proposed Rule).

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

We were pleased to note that the Commission's proposed changes to the oil and gas reserves disclosure requirements are largely consistent with EIA's prior comments,[1] which we incorporate by reference. Our further comments on the proposed rule are limited to areas that fall within our expertise and where we believe that the Commission's proposed rule language and associated discussion might be improved to enhance its clarity and/or technical accuracy.

As stated in our prior comments, EIA believes that a reserves disclosure framework informed by current usage, as represented by the Society of Petroleum Engineers (SPE) Petroleum Resources Management System (PRMS), would better serve the interests of both investors and companies that file oil and gas reserves estimates with the Commission than the presently applicable 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 estimates comply with the definitions and related guidelines set forth in the SPE PRMS would improve the quality, consistency and comparability of reserves data.

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[1] EIA, "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.

EIA has found considerable merit in the overall resources framework described in the SPE PRMS, which plays a key role in our own reserves reporting program. Moving to such a framework has the advantage of setting an objective that must be met 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 such a system include its adaptability to most technological change, a reduced maintenance burden for both government and industry and the responsibility being placed on companies to provide technically sound reserves.

As noted above, the Proposed Rule embodies much of this approach. Nevertheless, EIA believes that further attention by the Commission to four substantive matters directly bearing on how reserves are estimated could serve to increase clarity and technical accuracy and consistency with current and likely future practice. These matters include the definition of "reasonable certainty," the determination of prices for use in reserves estimation, the definition of "reliable technology" and the treatment of coal extraction for the purpose of hydrocarbon state conversion.

Definition of "Reasonable Certainty"

EIA recognizes the enormous difficulty of taking terms related to deterministic and probabilistic analysis and making workable legal definitions designed to provide investors with a more meaningful and comprehensive understanding of oil and gas reserves.[2] Nevertheless, we remain concerned that these definitions be consistent with good industry practice, particularly as reflected in SPE documents.

Consistent with current practice, the Commission's Proposed Rule uses the term "reasonable certainty" in direct relation to proved reserves estimates. The term "reasonable certainty" is the historical industry standard and is used by EIA when defining proved reserves. In the Proposed Rule, the Commission explicitly defines this term qualitatively as meaning "much more likely to be achieved than not" [p.145 lines 12-13].[3] EIA notes that the proposed definition is inconsistent with the guidelines offered in the SPE PRMS, and does not appear to represent an improvement over those guidelines. EIA suggests that the Commission address this discrepancy.

The definition of proved reserves was formally broadened by the SPE in 1997 to include a probabilistic interpretation of the concept of proved reserves. EIA supported this enhancement. Among its other advantages, it provided an explicit quantitative interpretation of reasonable certainty when probabilistic methods are used. Nevertheless,

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[2] An attempt to assess how people interpret these kinds of qualitative terms was developed in F. Mosteller and C. Youtz, "Quantifying Probabilistic Expressions", *Statistical Science*, 1990, v.6, no. 1, p.2-12 (http://projecteuclid.org/DPubS/Repository/1.0/Disseminate?view=body&id=pdf_1&handle=euclid.ss/1177012242). Interestingly, the closest term to a 90 percent probability of success – roughly that we propose as consistent with SPE practice – appeared to be "almost always."

[3] Page and line numbers refer to the document posted on the Commission's web site (http://www.sec.gov/rules/proposed/2008/33-8935.pdf) not the Federal Register notice.

many companies that estimate proved reserves still 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.

As an estimate, the quantity of proved reserves 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 EIA when it makes independent proved reserves estimates for fields reported on its Form EIA-23.

As regards definition of the traditional term "reasonable certainty," SPE PMRS section 2.2.2 states that:

> If deterministic methods are used, the term reasonable certainty is intended to express 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 recovered will equal or exceed the estimate.

The Proposed Rule offers the following definition [p. 145, lines 12-19]:

> Reasonable certainty means "much more likely to be achieved than not." When deterministic methods are used, as changes due to increased availability of geoscience (geological, geophysical, and geochemical), engineering, and economic data are made to estimated ultimate recovery (EUR) with time, reasonably certain EUR is much more likely to increase than to either decrease or remain constant. When probabilistic methods are used, reasonable certainty means that there is at least a 90% probability that the quantities actually recovered will equal or exceed the stated volume.

In both cases, the definition of reasonable certainty in the deterministic case is defined qualitatively, which is appropriate given that analytic approach. The Commission's reasonable certainty definition could be made more consistent with the PRMS treatment by changing it as follows:

> If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be recovered. When probabilistic methods are used, reasonable certainty means that there is at least a 90% probability that the quantities actually recovered will equal or exceed the stated volume.

A Proposed Rule that is closer to SPE PRMS guidance will be easier to understand and will help coordinate future changes. The language in the Proposed Rule should also include a reminder that both deterministic and probabilistic proved reserve estimations have an inherent degree of uncertainty associated with them. Reasonable certainty does not constitute a guarantee that the volume will be recovered in the future.

<u>Determination of Prices for Use in Reserves Estimation</u>

EIA welcomes the Commission's proposal to cease use of a single-day spot price in the estimation of reserves. Use of the December 31 price for reserves estimation purposes

has been a source of controversy and confusion in reserves estimation and reporting for some time. Volatile recent market conditions have exacerbated the situation, particularly with respect to the prices of individual production streams. These can be dramatically altered by temporary disruptions in downstream transportation or refining/processing infrastructures to which they may be tightly linked.

EIA would, however, like to see the Commission clarify how the price used in the Proposed Rule should related to a particular field's production, reserves, and gross income for a fiscal year [p.144 lines 7-10]. Companies usually estimate their reserves at the property, reservoir, or field level using the firm contract or netback price actually received at the point of custody transfer for the associated production streams. Because the price for oil and gas production varies geographically and by quality, estimates of the value of reserves need to reflect those differences. True comparability across companies of the value of their reserves requires that these kinds of value distinctions be reflected in reserves estimations. Companies should be required to specify what kind of prices were used in estimating their reserves volumes and be able to produce individual price data by field, if audited.

Definition of "Reliable Technology"

The definition in the Proposed Rule of "reliable technology" [p.145 lines 20-25 and p.146 lines 1-2] raises several concerns. That definition includes the sentence "Expressed in probabilistic terms, reliable technology has been proved empirically to lead to correct conclusions in 90% or more of its applications." Reserves estimation is a more complex and multi-faceted thought process that draws generalized conclusions from a combination of measurements obtained from multiple technological sources such as seismic interpretations, well log interpretations, flow tests, reservoir modeling results, production performance analysis and the like. In this context, it is not clear how a rigorous probabilistic test for emerging new technology could be established. The following would better reflect the complexity of the process: "Reliable technology has been demonstrated empirically to enable consistently correct geo-scientific and engineering interpretations in developing reserve estimates in the formation being evaluated or in an analogous formation."

Treatment of Coal Extraction for the Purpose of Hydrocarbon State Conversion

EIA welcomes the proposal that the extraction of bitumen from oil sands, extraction of synthetic oil from oil shales and production of natural gas and oil (if present) from coal reservoirs be considered as oil and gas producing activities.

EIA recommends that the Commission continue to treat coal extracted by mining as a mining activity, even if when the coal is subjected to hydrocarbon state conversion (from solid to gaseous and/or liquid form) [p.25 lines 20-22 and p.26 lines 1-13]. This coal should be considered feedstock for a separate process that produces the synthetic hydrocarbon liquids or gases.

How the hydrocarbon is first produced and sold should determine the way its resource is assessed. For example, the extraction by mining of coal for sale or custody transfer at the mine mouth as coal should be treated as a mining activity even if a plant later gasifies or liquefies that coal. However, EIA recommends that the Commission consider oil and gas production using an in-situ coal liquefaction or gasification process that brings produced oil or gas to the surface via wells to be an oil and gas producing activity. The proved oil and or gas reserves volumes attributed to in-situ liquefaction or gasification of coal deposits should be identified separately so that the resulting proved reserves volumes associated with different types of coal reservoirs are clearly distinct.

For gas, EIA would view gas produced in situ from coal as conceptually similar to production (extraction) of natural gas from a coal reservoir, although in that situation coal is merely the reservoir (formation) from which a type of natural gas is produced (extracted). Natural gas produced from coal reservoirs is already a substantial part of U.S. production with over 9 percent of current U.S. proved reserves of natural gas residing in coal reservoirs. The coal resource base is large enough so that in situ production of gas from coal reservoirs could become significant in the future.