

Key Distinctions Between SPE-PRMS and SEC Definitions and Disclosure Requirements

An Overview



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Society of Petroleum Engineers Petroleum Resources Management System (SPE-PRMS)

VS.

U.S. Securities and Exchange Commission Definitions and Disclosure Requirements (SEC)

- Economic producibility is determined using the entity's view of **future conditions**
- Entity may consider **revenues from non-hydrocarbon sources** in economic producibility determination
- Entity must have **firm intention to proceed** with a development project to book reserves from the project
- Development of undeveloped reserves must be initiated within a **reasonable time frame**
- **Allows resources to be reported** (contingent and prospective)
- Economic producibility is determined using **existing economic conditions**
- Entity may only consider **revenues from saleable hydrocarbons** in economic producibility determination
- Entity must have committed to a **final investment decision** for a development project to book reserves from the project
- Undeveloped reserves must be converted to developed status within **five years of initial disclosure**
- **Prohibits disclosure of resources** (contingent or prospective)



SPE- PRMS

Under the SPE-PRMS standards, economic producibility is determined using cash-flow estimates that are calculated using the **entity's view of future conditions**.

Future conditions include:

- Estimated costs and schedule associated with project development and the recovery and production of the petroleum, including ADR costs.
- Estimated revenues from production based on the evaluator's view of future prices, taking into account any sales contracts or price hedges specific to a property, including the portion of costs and revenues that accrue to the entity.
- Future projected taxes and royalties expected to be paid by the entity on production and revenues.
- Inflation indexes and market factors.

Alternative economic scenarios may also be considered. For example, evaluators may examine a constant case in which current economic conditions are held constant throughout the life of the project.

Additional References:

[PRMS, Ver. 1.01, par. 3.1.1.1\(B\)-\(D\)](#)

[PRMS, Ver. 1.01, par. 3.1.2.6](#)

Commercial assessments are conducted on a project basis and are based on the **entity's view of future conditions**.

[PRMS, Ver. 1.01, par. 3.1.0.1](#)

Economic viability is tested by applying a **forecast case** that evaluates cash-flow estimates based on an **entity's forecasted economic scenario conditions** (including costs and product price schedules, inflation indexes, and market factors).

[PRMS, Ver. 1.01, par. 3.1.2.2](#)



SEC

The SEC rules require that economic producibility be determined using **existing economic conditions**.

Existing economic conditions include prices and costs associated with the development project, and may not include any escalations based on future conditions.

The price used to represent existing economic conditions must be the average price during the 12-month period prior to the end date of the period covered by the report. This price is determined as an unweighted arithmetic average of the first-day-of-the-month price for each month in the 12-month period. However, if prices are determined by a contractual agreement, such as a long-term sales agreement, the contract price should be used instead of the average price.

The use of a 12-month average price was adopted as part of the amendments to Regulation S-X Rule 4-10 that went into effect on January 1, 2010. The SEC indicated that the change was implemented in order to enhance comparability between disclosures while continuing to provide helpful reserves information to investors.

Additional References:

[Modernization of Oil and Gas Reporting; Final Rule, 74 FR 2161](#)

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...

[Regulation S-X Rule 4-10\(a\)\(22\)](#)

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.

[Regulation S-X Rule 4-10\(a\)\(22\)\(v\)](#)



SPE- PRMS

SPE-PRMS permits entities to consider **revenues from non-hydrocarbon sources** in its economic producibility determination.

Economic producibility is determined by calculating whether the revenue attributable to an entity's entitlement interest in the project's production exceeds the cost of operating the project. Under PRMS, production is defined as the cumulative quantities of petroleum that have been recovered as of a given date. Therefore, because petroleum may also contain non-hydrocarbons, any revenues associated with the sale of the non-hydrocarbon portions of the recovered petroleum may be included in the economic producibility determination.

However, these associated non-hydrocarbon components may not be included as reserves or production unless they are part of the marketable product recognized at the reference point. When the non-hydrocarbon is removed prior to the reference point and subsequently marketed, it may not be included as reserves, but the revenues may still be included in the economic evaluation of the project.

Additional Reference:

[PRMS, Ver. 1.01, par. 3.2.4.1](#)

The revenue generated by the sale of **non-hydrocarbon products may be included** in the project's economic evaluation.

[PRMS, Ver. 1.01, par. 3.2.4.2](#)

Petroleum is defined as a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid, or solid state. **Petroleum may also contain non-hydrocarbons...**

[PRMS, Ver. 1.01, par. 1.1.0.1](#)

Production is the cumulative quantities of **petroleum** that have been recovered at a given date.

[PRMS, Ver. 1.01, par. 1.1.0.5\(C\)](#)

A project's **production** is economically producible when the **net revenue from an ongoing producing project exceeds the net expenses** attributable to a certain entity's interest.

[PRMS, Ver. 1.01, par. 3.1.2.1](#)

Revenues from Non-Hydrocarbon Sources vs. Revenues from Saleable Hydrocarbons



SEC

Under the SEC definitions, only **revenues from saleable hydrocarbons** can be considered in determining economic producibility.

The SPE-PRMS determines economic producibility using revenues from recovered petroleum, including associated non-hydrocarbon components. In contrast, the SEC rules require that economic producibility be determined using revenues generated from resources, which by definition only include crude oil, including condensate and natural gas liquids, natural gas, and saleable hydrocarbons that are extracted from oil sands, shale, coalbeds, or other non-renewable resources and are intended to be upgraded into synthetic oil or gas.

Activities that are related to the production of natural resources other than oil, gas, or natural resources from which synthetic oil and gas can be extracted are explicitly excluded from the definition of oil and gas producing activities, which are the activities that trigger a reporting obligation under the SEC disclosure requirements.

Additional Reference:

[Regulation S-X Rule 4-10\(16\)\(i\)\(A\)&\(D\)](#)

Resources are quantities of **oil and gas** estimated to exist in naturally occurring accumulations.

[Regulation S-X Rule 4-10\(a\)\(28\)](#)

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.

[Regulation S-X Rule 4-10\(a\)\(10\)](#)

Oil and gas producing activities do not include... Activities relating to the production of **natural resources other than oil, gas, or natural resources from which synthetic oil and gas can be extracted**.

[Regulation S-X Rule 4-10\(a\)\(16\)\(ii\)\(C\)](#)



SPE- PRMS

Under SPE-PRMS, in order to report undeveloped reserves, the entity must have evidence showing a **firm intention to proceed with development**.

Within the reserves and resources classes, PRMS allows for further classification based on project maturity levels and the associated business decisions required to move a project towards commercial production.

The firm intention to proceed with development requirement corresponds with the Justified for Development project maturity sub-classification. This sub-class does not require a final investment decision, but simply that the managing entity and its partners agree that the project is commercially viable and have support to move forward with development.

Projects should not remain sub-classified as Justified for Development for extended time periods absent positive indications that all required approvals are expected to be obtained without undue delay. After the final investment decision has been made, the reserves will be reclassified to Approved for Development.

Additional References:

[PRMS, Ver. 1.01, par. 2.1.3.5.1](#)

[PRMS, Ver. 1.01, par. 2.1.3.5.4](#)

[PRMS, Ver. 1.01, par. 2.1.3.5.5](#)

Discovered recoverable quantities (Contingent Resources) may be considered commercially mature, and thus attain Reserves classification, if the entity claiming commerciality has **demonstrated a firm intention to proceed with development**. This means the entity has satisfied the internal decision criteria (typically rate of return at or above the weighted average cost-of-capital or the hurdle rate).

[PRMS Ver. 1.01, par. 2.1.2.1](#)

Firm Intention to Proceed vs. Final Investment Decision



SEC

The SEC definitions indicate that an entity must commit to a **final investment decision** for a development project in order to report undeveloped reserves.

While SPE-PRMS only requires a firm intention to proceed with development in order to classify reserves, the SEC definitions state that a development plan must be adopted, which the SEC has explained requires a final investment decision. The mere intent to proceed with development is insufficient.

Although the SEC definitions do not provide detailed guidance regarding what actually constitutes a final investment decision, the SEC rules are meant to be supplemented with definitions that are commonly accepted within the oil and gas industry, to the extent such definitions are not inconsistent with the stated rules and definitions.

The final investment decision under the SEC requirements is analogous to the PRMS project maturity sub-classification Approved for Development. When a project is Approved for Development, all necessary approvals have been obtained, the required capital funds have been secured, and implementation of the development project is ready to begin.

Additional References:

[Modernization of Oil and Gas Reporting; Final Rule, 74 FR 2169 Regulation S-X Rule 4-10\(a\)\(31\)\(ii\) PRMS, Ver. 1.01, Table 1, "Approved for Development"](#)

Question: The definition of "undeveloped oil and gas reserves" requires that the company have **adopted a development plan** with respect to the reserves. What constitutes adoption of a development plan?

Answer: The mere intent to develop, without more, does not constitute "adoption" of a development plan and therefore would not, in and of itself, justify recognition of reserves. Rather, **adoption requires a final investment decision.**

[Compliance and Disclosure Interpretations Question 131.04](#)



SPE- PRMS

In order for petroleum from undeveloped locations to be classified as SPE-PRMS reserves, an entity must have evidence of a **reasonable time-frame for the initiation of development**.

What constitutes a reasonable time-frame for initiating the development of a project depends on the specific circumstances of that project and varies according to the project scope. While PRMS recommends five years from the initial classification date as a benchmark reasonable time-frame for commencing the project, there are specific circumstances where a longer delay is justified.

The reasonable time-frame requirement applies to all categories of reserves, not just proved reserves. Prior to the 2018 PRMS update, industry standard practice was to only require that development of proved reserves be initiated within a reasonable time-frame, and to report reserves in other categories despite the lack of a plan to timely proceed with development. However, the 2018 update committee has clarified that the requirement applies to the entire reserves class and not solely to the proved reserves category.

Additional Resources:

[PRMS, Ver. 1.01, par. 2.1.3.6.4](#)

[Key Changes from the PRMS 2007 to PRMS 2018](#)

Commerciality is achieved with the entity's commitment to the project and... [e]vidence to support a **reasonable time-frame for development**.

[PRMS Ver. 1.01. par. 2.1.2.1\(C\)](#)

A **reasonable time-frame for the initiation of development** depends on the specific circumstances and varies according to the scope of the project. **While five years is recommended as a benchmark, a longer time-frame could be applied where justifiable**; for example, development of economic projects that take longer than five years to be developed or are deferred to meet contractual or strategic objectives.

[PRMS Ver. 1.01. par. 2.1.2.3](#)

Reasonable Time Frame vs. Five Years of Initial Disclosure



SEC

According to the SEC requirements, undrilled wells must be converted to developed status within **five years of initial disclosure** in order for resources from the planned wells to be reported as undeveloped reserves. This requirement is commonly known as the Five Year Rule.

While the rule only states that the wells must be drilled within five years, [recent comment letters issued by the SEC](#) indicate that current SEC staff interprets this rule to require that new wells be converted to developed status, rather than simply be drilled.

While the SEC allows exceptions to the Five Year Rule, these exceptions are not granted when development is delayed based on internal strategic decisions. The SEC looks to the following factors to determine if an exception is justified:

- The level of ongoing development activities in the area
- The company's historical record of completing comparable projects
- The amount of time without significant development activities
- The extent to which the entity followed a previous development plan
- The extent to which delays in development are caused by external factors related to the physical operating environment

Additional References:

[Compliance and Disclosure Interpretations Question 131.03](#)
[Compliance and Disclosure Interpretations Question 131.05](#)

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.

[Regulation S-X Rule 4-10\(a\)\(31\)\(ii\)](#)



SPE- PRMS

The SPE-PRMS classification system **allows contingent and prospective resources to be reported.**

Contingent resources are quantities of petroleum that are estimated to be potentially recoverable from known accumulations by the application of development project(s) that are not currently considered commercial due to one or more contingencies. For example, petroleum from projects for which there are currently no viable markets or where commercial recovery is dependent on technology that is still under development may be classified as contingent resources.

A contingent resources classification may also be appropriate where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent resources have an associated chance of development.

Prospective resources are quantities of petroleum that are estimated to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated chance of geologic discovery and a chance of development.

Additional Reference:

[PRMS, Ver. 1.01, par. 1.1.0.6\(B\) &\(D\)](#)

The system classifies resources into discovered and undiscovered and defines the recoverable resources classes: Production, Reserves, **Contingent Resources, and Prospective Resources**, as well as Unrecoverable Petroleum.

[PRMS Ver. 1.01. par. 1.1.0.3](#)

Allows Resources to be Reported vs. Prohibits Disclosure of Resources



SEC

The SEC explicitly **prohibits the disclosure of any resources** other than reserves.

Prior to the amendments to Regulation S-X Rule 4-10, which went into effect on January 1, 2010, only disclosure of proved reserves was permitted. The amended rules allow the disclosure of probable and possible reserves at the filers own discretion. However, the disclosure of resources or any estimated values of resources is still not allowed.

The SEC explicitly declined to allow the disclosure of resources in the recent amendments, despite the recommendation of five commenters that such disclosure be permitted. The SEC indicated that this prohibition exists due to concerns that resource volumes are too speculative and may lead investors to form incorrect conclusions.

Additional References:

[Modernization of Oil and Gas Reporting; Final Rule, 74 FR 2173](#)

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...

[Instruction to Regulation S-K, Item 1202](#)

Comments or Questions?

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