

Industry bracing for mid-year impairments, reserves writedowns

U.S. shale companies expect a spate of asset impairments in balance sheets this year. Accounting firm Deloitte in June reported that companies could write off as much as \$300 billion, which will trigger insolvencies and restructuring.

Analysts, however, may not completely trust those numbers, because oil and gas companies do not report under a single “standardized measure” for impairment testing, which makes use of forward-price assumptions and discounted net present values from oil and gas production forecasts. Lower forecasts result in reserves writedowns.

Accounting and Reserves Evaluations

Companies have the flexibility to handle balance-sheet asset impairments differently. Therefore, company-to-company results are not comparable.

That is the status quo. Oil and gas accountants say the most reliable numbers in financial statements are cash and short-term payables.

Dan Olds, managing senior vice president at Ryder Scott, believes impairment in the oil and gas industry is

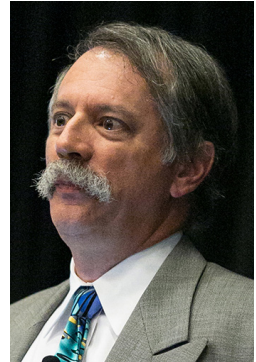
subject to allowable variances used by reporting companies.

“Some companies use only proved reserves while others use the 2P reserves case, which adds another level of complexity,” he said. “When the process allows companies so much discretion in picking a forecast case from which to base estimated future values, inconsistencies are the result.”

Olds is author of SPE technical paper, “Basic Petroleum Accounting for Petroleum Engineers,” Society of Petroleum Engineers, No. 162907-MS, 2012.

If the reserves report’s values—typically, discounted future cash flows—are less than the net book value of the assets, which is an accounting metric, then the property is impaired, said Olds.

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Dan Olds

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Q1 and Q2: Pay me now or pay me later

Keith Myers, president of research at Westwood Global Energy Group (WGEG), wrote an insightful analysis of big differences in recording impairments within the oil and gas industry.

“A significant fall in oil prices would typically trigger an impairment test, but there is considerable management discretion allowed as to the timing, forward oil prices, and discount rates used,” he wrote in an article published by *Offshore Engineer* magazine June 16.

At that time, oil prices used in Q1 impairment tests were all over the board.

Some companies recognized the fall in prices while others used year-end 2019 oil price assumptions, as shown in a table accompanying the *OE* article at www.oedigital.com/news/479383-e-p-players-widely-differing-views-on-oil-price-future.

Some companies did not impair their assets in Q1, and are likely to write down asset values in mid-year financial statements, wrote Myers.

Q1 short-term price forecasts for the Brent crude benchmark varied widely, stated the WGEG survey. Gran Tierra Energy Inc. and Talos Energy Inc. used the SEC ceiling-test methodology based on an average price over the previous 12 months, which was \$67.50 a barrel, stated Myers, while Repsol SA was using \$65 for 2020.

Bearish companies in 2020 include Equinor ASA, Aker BP ASA, Africa Oil Corp. and Hess Corp. with short-term forecasts ranging from \$31 to \$33 a barrel based on the forward curve at end-March.

Many long-term oil price forecasts remain unchanged, the *OE* article stated.

Royal Dutch Shell assumes \$60 a barrel unescalated while Total SA was at \$70 a barrel. Repsol was at \$74 a barrel by 2025 while Equinor was at \$77 a barrel that year.

Hess Corp. had the lowest long-term Brent oil price assumption at \$55 a barrel. BP Plc reduced its long-term oil price assumption for 2021-2050 from \$70 a barrel to \$55, the lowest in its peer group.

Book value, accounting methods and impairment

To understand how impairments are calculated, understanding book value and full cost (FC) vs. successful efforts (SE) accounting methods is essential.

Olds explained that book values are adjusted to account for capital spending for field development and production of associated reserves through an annual DD&A (depreciation, depletion and amortization) process. Typically, an accountant uses the net book value and a

reserves report to calculate a depletion rate and then applies it to annual production to determine book value that was lost because of production.

Olds cited the formula for adjusting book values through a depletion rate calculated as follows:

Depletion rate = book value/reserves; Annual DD&A = depletion rate x annual production.

He also examined how DD&A is treated under both FC and SE accounting methods. Under FC, all exploration and drilling costs are capitalized into a single, full-cost pool for each country. That approach dilutes the financial impact of a discovery or dry hole during the reporting period and results in more stable financial results.

SE companies capitalize drilling costs for discoveries or development wells, but expense exploration dry holes. The pool concept is limited to a single well, reservoir or field. Under SE, a significant discovery or dry hole is more immediately reflected in the financial reporting period.

FC companies factor in all categories of proved reserves in the depletion-rate calculation. SE companies adjust the book value of producing properties using proved developed reserves only, but consider the total proved reserves for amortizing acquisition costs, such as bonus payments or lease acquisitions.

Impairment

Impairment and reserves de-booking processes are different between FC and SE accounting as follows:

- **FC impairment**—Discounted net present values in the reserves report are compared to the net book value (full-cost pool). If the ceiling test finds that the net book value is higher, then it is written down to the discounted NPV. Impairment is more likely for FC companies, because the FC pool may include unsuccessful wells that would be expensed under SE accounting.
- **SE impairment**—Net book value is compared to the reserve report as in full cost, but adjustments can be made. A public issuer can consider changes to expected future prices and costs. An appropriate discount rate can be used. Companies also make adjustments for income taxes.

Early Signs, Future Warnings

Out of the gate first in Q4 was Royal Dutch Shell, which wrote down more than \$2 billion on a weaker economic outlook months before the price plunge April 20. Chevron Corp. took a non-cash, after-tax impairment charge of \$10 billion in its Q4, which surprised some analysts.

The list of companies taking their lumps for Q1 included Chesapeake Energy Corp., which recognized an \$8.3-billion

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non-cash impairment because the carrying value exceeded the market value as of March 31.

Oasis Petroleum Inc., reported non-cash impairment losses of \$4.8 billion for Q1 associated with the plunge in commodity prices. Harvest Oil & Gas Corp. reported \$1.6 million of impairment primarily related to the writedown of properties in Michigan to their fair value for Q1.

Zargon Oil & Gas Ltd. announced an \$8.54 million impairment loss on its Williston Basin properties.

On June 15, BP Plc warned that it will write off "exploration

intangibles in the range of \$8 billion to \$10 billion" at end of Q2. Others will follow.

For a detailed analysis of petroleum accounting, reserves and impairments, please reference Olds' SPE paper for purchase at www.onepetro.org.

For more information on book values and reserves, please see presentation by Olds at https://www.ryderscott.com/wp-content/uploads/2014/03/RSC-2012-Reserves-Conference_4BookValue_Olds.pdf.