

Creating a Universal Standard for Evaluating Reserves

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John Ritter is Reserves Manager for Chevron's North American Upstream Operating Co. He joined Texaco, which later combined with Chevron, in 1981, and has held various upstream assignments in the U.S., North Sea, China, and Asia Pacific region. He is Chairperson of SPE's Oil and Gas Reserves Committee and a member of the American Assn. of Petroleum Geologists' (AAPG) Committee on Resource Evaluation and the Colorado School of Mines Potential Gas Committee. He is an AAPG Certified Petroleum Geologist and a member of the Houston Geological Soc. Ritter earned BS and MS degrees in geology from Emory U. in Atlanta.

SPE has been a leader in developing petroleum reserves and resources definitions that have become the industry standard for evaluating petroleum reserves, providing a sound basis for improving the consistency in reserves and resource estimation and reporting worldwide. Now SPE is taking another step forward, envisioning a universal standard that could be adopted by international financial, regulatory, and reporting bodies, as well as the oil and gas industry. Forming the foundation for this standard are the petroleum reserves definitions approved in 1997 by SPE and the World Petroleum Council (WPC) and the resources definitions approved by SPE, WPC, and AAPG in 2000.

This effort is being led within SPE by its Oil and Gas Reserves Committee, of which I am honored to serve as Chairperson. Our goal is to review the existing set of definitions and guidelines in light of those current best practices that provide professionals with a common understanding of reserves and resource classification and terminology. Any potential changes should result in a more accurate global picture of current prospects and future energy supplies for the public. In the absence of a comprehensive and current code, individual countries and companies are using their own reserves evaluation systems, making global comparisons difficult.

This update is part of SPE's ongoing effort to achieve worldwide use of standard reserves definitions. SPE's Oil and Gas Reserves Committee has helped create some of the most significant industry reference documents on reserves that are in use today (see documents at www.spe.org). This standing committee is made up of 11 members who have reserves expertise and represent a wide geographic cross section. Six observers from a diverse group of societies and agencies also provide other industry perspectives and guidance to the committee.

The reserves committee completed the first phase of the definitions review by producing a glossary that provides a common

and consistent understanding of terms. This glossary required several years of work to create, and it was posted on the SPE website in January 2005 (available at www.spe.org/spe/jsp/basic/0,,1104_1730,00.html).

The committee is now focused on comparing or "mapping" the classifications and definitions that are used in other worldwide systems for regulatory government reporting or company internal resource asset management. These are the U.S. Securities and Exchange Commission; U.K. Statement of Recommended Practices; Canadian Security Administrators; Russian Ministry of Natural Resources; China Petroleum Reserves Office; Norwegian Petroleum Directorate; U.S. Geological Survey; and the United Nations Framework Classification. By understanding the relationships between these different sets, it will be possible to identify and leverage best practices that could potentially be incorporated into a new set of definitions. The committee made a report on the mapping process at the SPE Board of Directors meeting in October, and the Board approved posting the mapping document to the SPE website.

SPE Oil and Gas Reserves Committee

Structure

- Eleven members with reserves expertise.
- Appointed for 3-year terms.
- Worldwide representation.

Duties

- Deals with oil and gas reserves matters, including definitions and standards.
- Disseminates information to other agencies, companies, and organizations.
- Works to achieve worldwide use of standard reserves definitions.
- Monitors activities in reserves definitions and recommends revisions to reserves definitions to SPE Board of Directors.

Committee Observers

- American Assn. of Petroleum Geologists.
- Intl. Accounting Standards Board.
- Soc. of Exploration Geophysicists.
- Soc. of Petroleum Evaluation Engineers.
- U.S. Energy Information Agency.
- World Petroleum Council.

The next step is to review and update the definitions themselves to understand the opportunities and the gaps in the existing definition set. A separate review of the guidelines will follow, to assist in the understanding of overall application. The existing definitions are well accepted by the industry, and we will strive to apply the advice of attendees of the recent Shanghai Gas Applied Technology Workshop: Don't fix what isn't broken! A final draft will be posted for member comment before approval. Recommendations resulting from the definitions review should be ready for presentation to the SPE Board of Directors meeting at the 2006 SPE Annual Technical Conference and Exhibition.

The need for the world to have a common set of reserves definitions has never been greater, and we are working with other organizations to promote an overall understanding of the value of SPE's system. Members of the reserves committee have met with representatives of the United Nations Economic Council of Europe and its Ad Hoc Group of Experts on the Harmonization of Energy Reserves and Resources Terminology. We are pursuing the integration of the SPE/WPC/AAPG definitions into the United Nations Framework Classification, which relates to oil and gas classifications as well as uranium and coal. Our offer to assist in writing specifications and guidelines for the classifica-

tion, heavily leveraging the SPE definitions, is being actively considered by the council.

The Intl. Accounting Standards Board (IASB), an independent global accounting standard-setter that is, in essence, a counterpart to the Financial Accounting Standards Board in the United States, is currently reviewing the accounting principles it will apply to extractive industries, including the mining and the oil and gas industries. The reserves committee is pursuing opportunities to clarify to the IASB the application of the SPE/WPC/AAPG classification system within the oil and gas industry.

Although a competent, universally accepted set of definitions forms the basis for transparent and comparable reporting, intense education and training are required to support its consistent use by the industry and the other financial and regulatory bodies. We want to leverage SPE's expertise in reserves evaluation and to share best practices and current technology applications by developing education programs. We also are exploring opportunities for joint education sessions with other industry associations.

The members of SPE's Oil and Gas Reserves Committee are proud of the trust that has been endowed in its expertise and are committed to working on behalf of the SPE membership for reserves standards that benefit the industry and the public. **JPT**