

SPEE Reserves Definition Committee (RDC) Who we are, what we are doing, what's next?

Rod Sidle, RDC Chair

At the January 2016 Joint SPE-GCS
Reservoir Study Group and Houston
SPEE Luncheon

SPEE Mission Statement

Recognizing that **Petroleum Evaluation Engineering** is a specialized field, the Society is dedicated to the promotion of **professional growth** of the **membership** and to the **advancement** of the **profession of Petroleum Evaluation Engineering** by demonstrating by example the highest standard of **ethics**, by promoting continuing **education** of our **membership** and by education of the **public** in the area of **oil and gas reserve definitions, reserve evaluations and fair market value.**

SPEE RDC – Purpose (per by-laws)

- advise the Board, and
- liaise with
 - Society committees
 - other professional societies
 - governmental entities
 - intergovernmental entities

on issues relating to petroleum reserves and resources definitions

Other SPEE Committees/Appointments

Bylaws Committees

Chair of Past Presidents' Council	Marshall Watson
Qualifications	Tim Gilblom
Committee: Steve Blair, Neal Howard, and Richard Rowe	
Nominating	Samantha Holroyd
Grievance	David Gold
Committee: Frank Molyneaux and Dan Olds	
Reserves Definitions	Rod Sidle
Committee: Russ Long, S. Tim Smith, Stuart Filler, John Etherington, John Ritter, Dave Elliott and Martin Hubbig	

Individual Appointments

Ethics	Tom Collier
Evaluation Parameters Survey	Brent Hale
Fair Market Value	D. Russell Long
Internet	Mike White
Membership	Donald C. Jacks
Newsletter Coordinator	Richard J. Miller
Communications	George Schaefer
Production Tax Summary and University Interface	Marshall Watson
Recommended Evaluation Practices	Daniel R. Olds
Annual Meeting Advance Planning	Barry Ashton
Professional Registration	Marcus Snyder
Monograph 3 - Evaluation of Resource Plays	Russell K. Hall
Monograph 4 - Unconventional Developed Reserves	John P. Seidle
Technical Training	Jennifer Fitzgerald
SPE OGRC Oil and Gas Reserves Committee Observer	Ron Harrell
COGEH (Canadian Oil and Gas Evaluation Handbook)	Robin Bertram
UNECE Expert Group on Resource Classification	John Ritter

← RDC.....key liaison groups:

- FMV (Monograph 2)
- REPs - Recommended Evaluation Practices
- Monograph 3
- Monograph 4
- Technical Training
- COGEH
- UNECE

Other Professional Societies

- SPE – Oil and Gas Reserves Committee
- SEG – Oil and Gas Reserves Committee
- AAPG – Resource Evaluation Committee
- What we do: Inter-society engagement to support PRMS and participation in educational forums (conferences, symposiums, etc.)
- How are we different?

Governmental Entities

- US Securities and Exchange Commission (SEC)
- Alberta Securities Commission (ASC)
 - Through Calgary Chapter of SPEE and COGEH

Intergovernmental Entities

- United Nations
 - Via UNECE and **UN Framework Classification**

SPEE RDC Members (SPEE Chapter)

- Dave Elliott (Calgary)
- John Etherington (Calgary)
- Stuart Filler (Houston)
- Martin Hubbig (Europe)
- Russ Long (Houston)
- John Ritter (Houston)
- Rod Sidle (Houston)
- Tim Smith (Central Texas)

Support for Education/Understanding

Among others.....

- Provide reserves definition guidance for SPEE publications
- Support reserve process/definition guidance with SEC and ASC
- Support reserves process/definition guidance of industry standards (PRMS and related documents)

Done/Doing: SPEE examples

- Monograph 3 – published Dec. 2010
- Monograph 4 – coming 2016
- Monograph 2 – planning update of 2002 FMV guide
- Monograph “Next” – Your input here (later slide)
- UNECE

SPEE Monograph 4 – Estimating Developed Reserves in Unconventional Reservoirs

Purpose - Assess current methods to forecast performance of wells in unconventional reservoirs given different reservoir types, different completions, and different well maturities.

SPEE Monograph 4 -- Committee Members

- Jim Erdle (CMG)
- Brent Hale (SPEE, Cobb & Associates)
- Olivier Houze (KAPPA Engineering)
- Dilhan Ilk (DeGolyer & MacNaughton)
- Creties Jenkins (SPEE, Rose & Associates)
- John Lee (SPEE, Texas A&M)
- John Ritter (SPEE, Occidental Petroleum)
- John Seidle (SPEE, MHA Petroleum Consultants) – Committee Chair
- Darla-Jean Weatherford (TextRight, technical editor)
- Scott Wilson (SPEE, Ryder Scott)

SPEE Monograph 4 -- Outline

1. Introduction
2. Definition of Unconventional Reservoirs (UCR)
3. Reservoir Characterization Aspects of Estimating Developed Reserves in UCR's
4. Drilling, Completions, and Operational Aspects of Estimating Developed Reserves in UCR's
5. Classical Arps' Decline Curve Analysis (DCA)
6. Fluid Flow Theory & Alternative Decline Curve Methods
7. Model-Based Well Performance Analysis & Forecasting
8. Discretized (Numerical) Models
9. Quantifying Uncertainty in the Estimation of Developed Reserves
10. Example Problems

SPEE Monograph 2

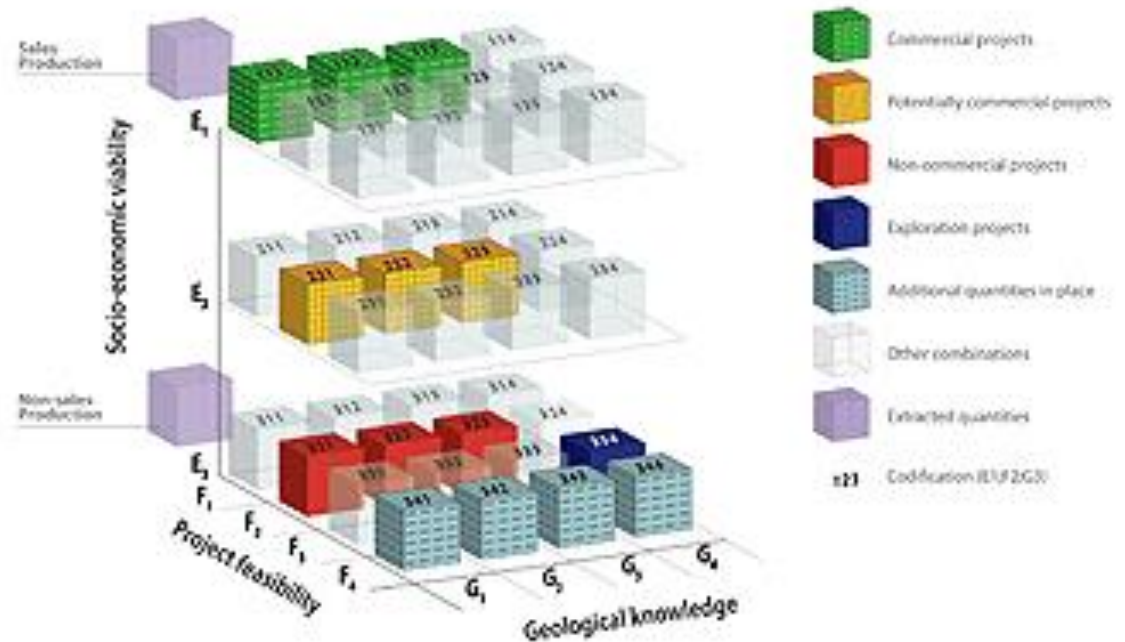
- Title: “Perspectives on The Fair Market Value of Oil and Gas Interests”
- Editor: D. R. (Russ) Long
- Coverage includes:
 - Evaluation Procedures
 - Dealing with Uncertainty and Adjustment for Risk
 - Market Perspectives and Evaluation Parameters
 - Example cases of FMV

UNECE

United Nations Economic Commission for Europe

Sponsors: United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources (UNFC)

“a universally acceptable and internationally applicable scheme for the classification and reporting of fossil energy and mineral reserves and resources.”

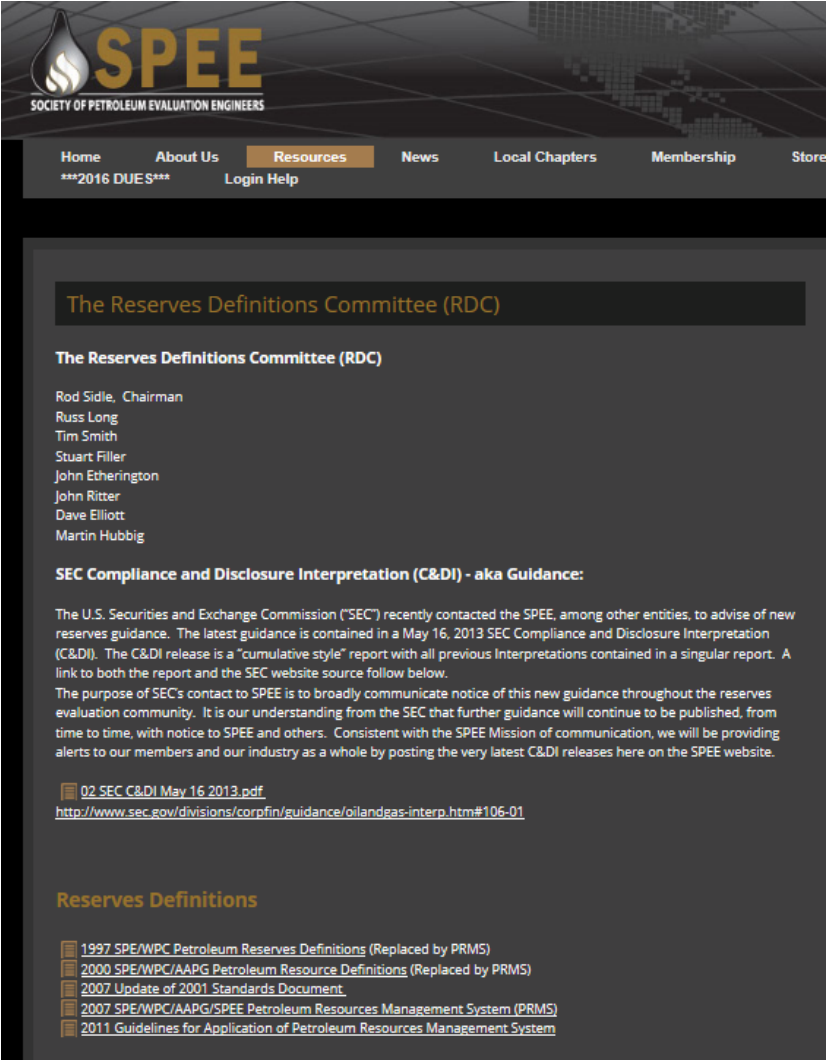


Done/Doing: SEC examples

- SEC docs on SPEE web
- SEC invitation for Annual Meeting

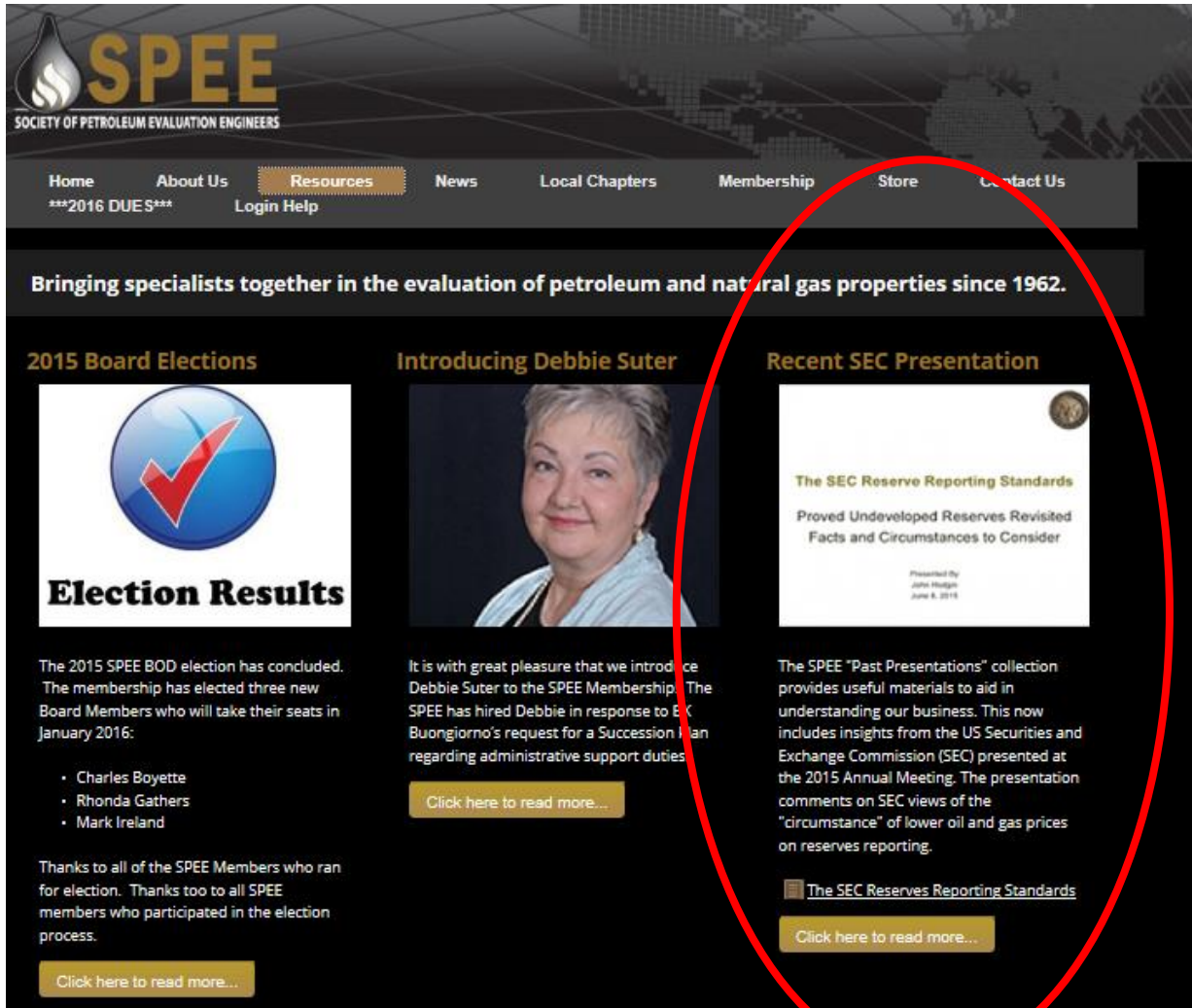
SEC Reference Documents

- SPEE/Resources website
- RDC content
- Contains links to:
 - SEC Compliance and Disclosure Interpretation (C&DI) – immediate updates as soon as contacted by SEC
 - Also SPE PRMS docs



The screenshot shows the SPEE (Society of Petroleum Evaluation Engineers) website. The header includes the SPEE logo and navigation links: Home, About Us, Resources (highlighted), News, Local Chapters, Membership, and Store. Below the navigation is a section titled "The Reserves Definitions Committee (RDC)". Under this heading, the members of the RDC are listed: Rod Sidle, Chairman; Russ Long; Tim Smith; Stuart Filler; John Etherington; John Ritter; Dave Elliott; and Martin Hubbig. Below the list is a section titled "SEC Compliance and Disclosure Interpretation (C&DI) - aka Guidance:". The text explains that the SEC recently contacted SPEE and other entities to advise on new reserves guidance. It mentions that the latest guidance is in a May 16, 2013 SEC Compliance and Disclosure Interpretation (C&DI) release, which is a "cumulative style" report. A link to the report is provided: <http://www.sec.gov/divisions/corpfin/guidance/oilandgas-interp.htm#106-01>. Below this is a section titled "Reserves Definitions" with a list of documents: 1997 SPE/WPC Petroleum Reserves Definitions (Replaced by PRMS), 2000 SPE/WPC/AAPG Petroleum Resource Definitions (Replaced by PRMS), 2007 Update of 2001 Standards Document, 2007 SPE/WPC/AAPG/SPEE Petroleum Resources Management System (PRMS), and 2011 Guidelines for Application of Petroleum Resources Management System.

SEC Presentations at SPEE AM



The image shows a screenshot of the SPEE website. A red circle highlights the 'Recent SEC Presentation' section. The website header includes the SPEE logo (SOCIETY OF PETROLEUM EVALUATION ENGINEERS) and a navigation menu with links for Home, About Us, Resources, News, Local Chapters, Membership, Store, and Contact Us. Below the navigation is a tagline: 'Bringing specialists together in the evaluation of petroleum and natural gas properties since 1962.' The main content area features three columns: '2015 Board Elections' with a checkmark icon and 'Election Results' text; 'Introducing Debbie Suter' with a photo of Debbie Suter and a 'Click here to read more...' button; and 'Recent SEC Presentation' with a presentation slide titled 'The SEC Reserve Reporting Standards' and a 'Click here to read more...' button. The presentation slide text reads: 'The SEC Reserve Reporting Standards', 'Proved Undeveloped Reserves Revisited', 'Facts and Circumstances to Consider', 'Presented By John Hodgin', 'June 8, 2015'.

Link to John
Hodgin's AM
presentation

Also from
Resources/Past
Presentations

Done/Doing: Sister Society examples

- 2016 SPE/IAEE* HEES program committee
- 2016 URTEC program committee
- PRMS update

* International Association for Energy Economics

What should be next?

- SPEE initiatives
 - Short topical guidance: e.g., new “REPs*”
 - Major documents: e.g., Monograph “Next” ideas
- Joint “Sisters” initiatives
- SEC communication opportunities
- ...and....??

*SPEE Recommended Evaluation Practices at URL:

<https://secure.spee.org/recommended-evaluation-practices-reps>

BACK UP SLIDES

ARTICLE XVIII. Reserve Definitions Committee

- Section 1. The Executive Committee shall appoint a Reserve Definitions Committee, **the purpose of which shall be to advise the Board, and to liaise with Society committees, other professional societies, governmental entities, and intergovernmental entities, on issues relating to petroleum reserves and resources definitions.** The Executive Committee shall select the Reserve Definitions Committee Chairman and will decide on the size, constituency, and term of the Reserve Definitions Committee members, if any, depending on the needs of the Society from time to time.
- Section 2. The Executive Committee may alternatively appoint a Reserve Definitions Committee Chairman, who will appoint committee members. The Executive Committee will advise the Reserve Definitions Committee Chairman so appointed on the size and constituency of the Reserve Definitions Committee.

Board & Other SPEE Committees

2015 Officers and Directors

Executive Committee

President..... Gary Gonzenbach (Central Texas)
 Vice President..... Dee Patterson (Dallas)
 Secretary-Treasurer..... Floyd Siegle (Calgary)
 Past-President..... Samantha Holroyd (Houston)

Directors

Brad DeWitt (California) Don Jacks (Oklahoma City)
 Jennifer Fitzgerald (Houston) Letha Lencioni (Denver)
 Robert Green (Midland) Simon McDonald (Europe)
 Brent Hale (Dallas) Rawdon Seager (Houston)
 Mike White (Director-at-Large)(Denver)

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Current REPs

- SPEE REP #1.1 – Elements of a Reserve Report
- SPEE REP #2 – Presentation of Hydrocarbon Production, Sales, and Lease Use Quantities in Reserve Reports
- SPEE REP #3 – Inclusion of Revenue from Non-Hydrocarbon Sources in Reserve Reports
- SPEE REP #4 – Inclusion of Hedging Positions in Reserve Reports
- SPEE REP #5 – Discounting Cash Flows
- SPEE REP #6 – Definition of Decline Curve Parameters
- SPEE REP #7 – Escalation of Prices and Costs
- SPEE REP #8 – Calculation of Reversionary Interests
- SPEE REP #9 – Reporting Multiple Rates of Return
- SPEE REP #10 – Calculating Internal Rate of Return