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
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)
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
SEC Presentations at SPEE AM

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)

Bylaws Committees
Chair of Past Presidents’ Council: Marshall Watson
Qualifications: Tim Gilliom
Committee: Steve Blair, Neal Howard, and Richard Rowe
Nominating: Samantha Holroyd
Grievance: David Gold
Committee: Frank Molyneux and Dan Oak
Reserves Definitions: Rod Sidle
Committee: Ross Long, S. Tim Smith, Stuart Filler, John Eshleman, John Ritter, Dave Elliott, and Martin Hubbig

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