

Ryder Scott Canada Reserves Conference



Petroleum Resources Management System Ongoing Considerations and Potential Changes

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Disclaimer

The views expressed in this presentation are solely the personal opinions of the speaker and do not necessarily reflect those of any persons, companies, professional societies or institutions mentioned herein.

Issues presented within are provisional and will change and are provided to encourage thought and industry discussion.

Petroleum Resources Management System

The PRMS system provides a project based resource management framework for government, regulators, financial lending institutions, other stakeholders and oil and gas companies.

The majority of disclosure standards are based on PRMS principals.

- TSX, SEC, HKSE, LSE, ASX, etc.
- **PRMS Principles and Definitions were last updated in 2007**
- Prepared by the Society of Petroleum Engineers OGRC with co-sponsorship from the SPE, SPEE, WPC, AAPG and subsequently by SEG
- Input from the SPE, SPEE, WPC, AAPG
- **Industry recognized a need to modernize and update PRMS**

PRMS Update Sub-Committee

~16 volunteers with considerable reserves experience were selected from the SPE Oil and Gas Reserves Committee, representing the various technical disciplines required for resource evaluation.

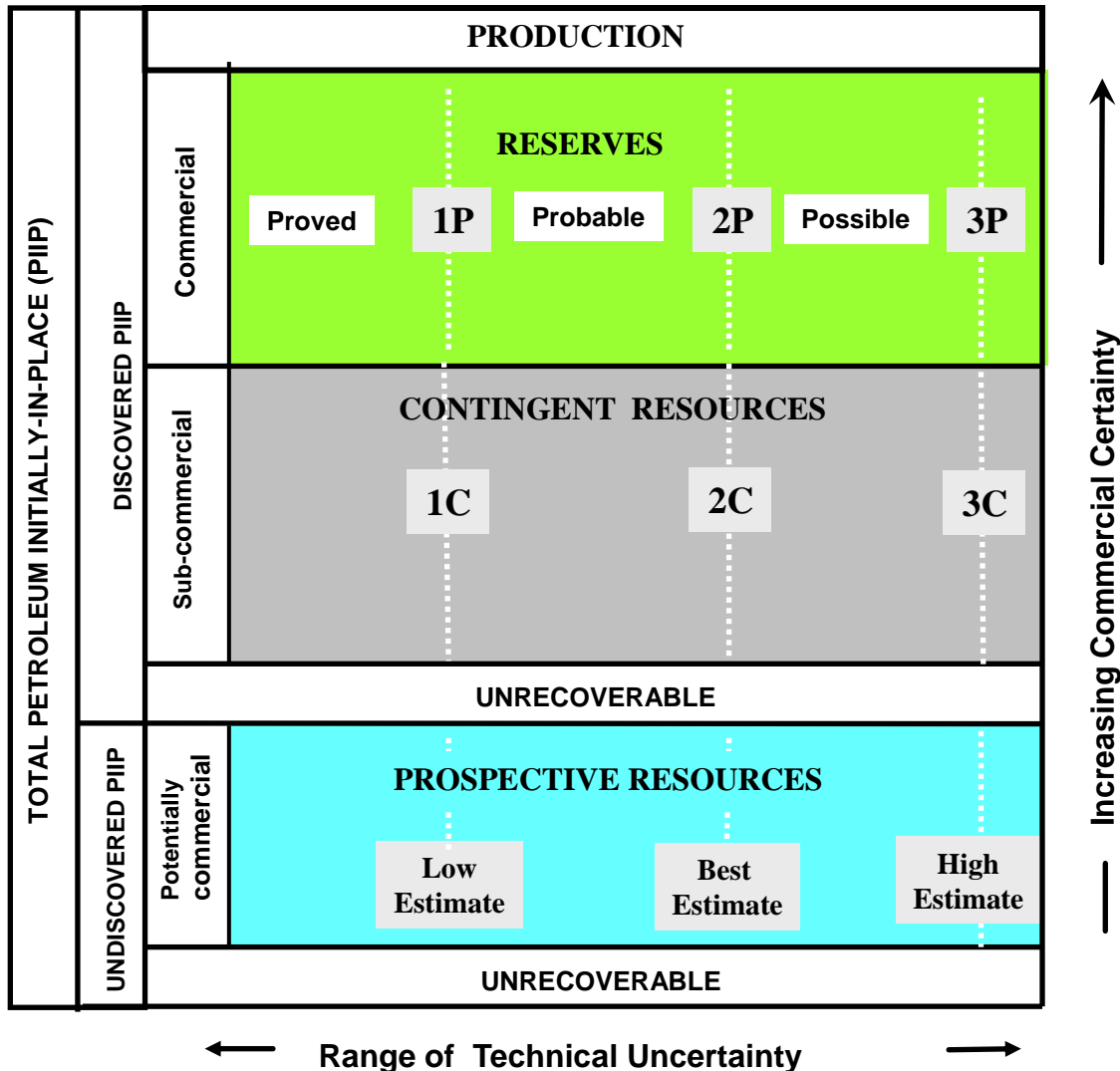
PRMS Definitions are being updated (currently 46 pages) to reflect current principles and best evaluation/reporting practices. COGEH and the PRMS Application Guidelines have been reviewed.

The committee has been at work for more than a year and has constructed a conceptual framework concerning principles and additional concepts. Draft wording is under discussion.

This presentation summarizes some of the key considerations discussed by the PRMS update sub-committee during this process.

I am a committee member and this presentation represents my views.

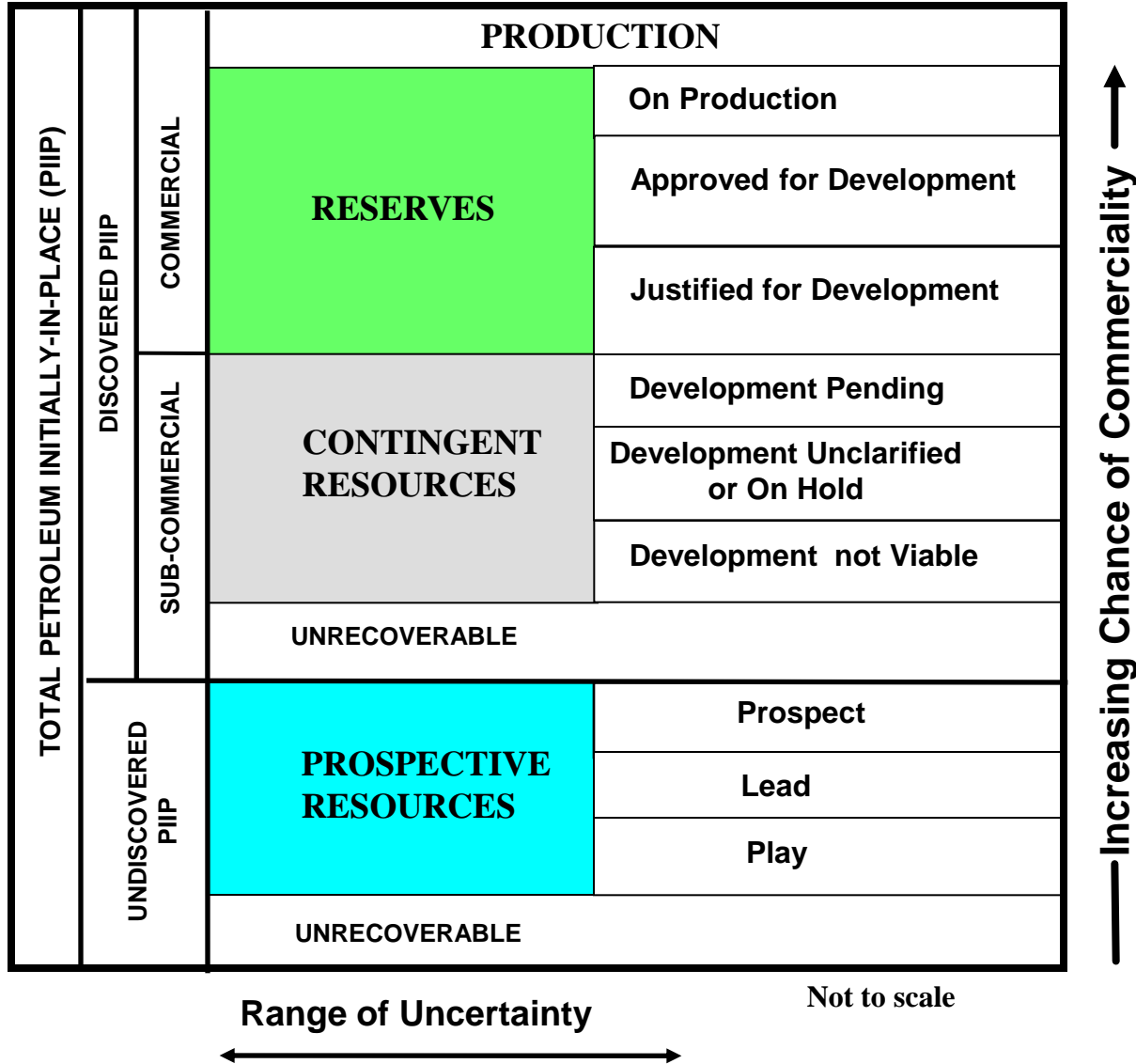
2007 PRMS – Petroleum Resources System



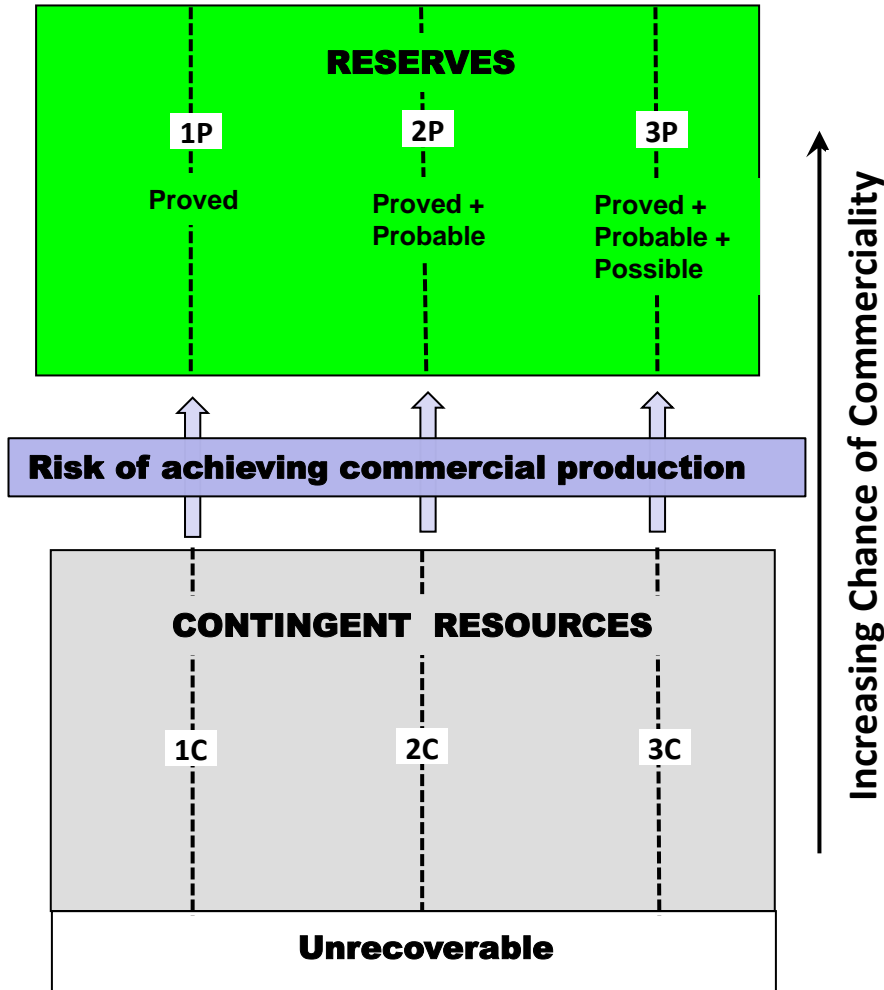
The PRMS is a project based system and provides a methodology to organize oil and gas projects on the basis of commercial maturity and confidence of technical recoveries.

2007 PRMS – Petroleum Resources System

Project maturity subclass



Contingent Resource Categories and Alignment with Reserves



Without new technical information, there should be no change in the distribution of technically recoverable volumes and their categorization boundaries when conditions are satisfied sufficiently to reclassify a project from Contingent Resources to Reserves.

Categories of proved reserves (1P) and contingent resources (1C) have the same levels of confidence.

PRMS Update – Committee Considerations

Some of the ongoing discussions include:

- What is economic, commercial?
- How should fuel gas and process gas be considered for reserves?
- Inclusion of unconventional resource concepts (discovery, flow test requirements, etc.)
- Should “standalone” possible reserves be contingent resources?
- How should scenario and incremental evaluation methods be interpreted? What has changed?
- Should resources be required to be broken-out by project maturity subclass?

Additional Comments

The 2007 definitions were drafted to help clarify the need for evaluation staff to ensure that technical and commercial uncertainty is used to categorize and classify (respectively) resources.

	Incorrect use of PRMS	Correct use of PRMS
PUDS	Drilling 0 - 5 years from evaluation date (commitment not considered)	Drilling within appropriate development spacing distance, project implementation within ~ 5 years, development commitment exists.
Probable Reserves	Drilling 6 - 10 years from evaluation date	Drilling at distances which meet 2P confidence threshold, project implementation within ~5 years, development commitment.
Possible Reserves	Drilling 11 - 15 years from evaluation date	These are likely contingent resources.

Drilling date is a commercial consideration (vertical axis) and is typically unrelated to the confidence of technical recovery (horizontal axis).

PRMS Update – Next Steps

The first draft of the PRMS update has taken considerably more time than anticipated. The committee is comprised of volunteers and spread across many continents; consensus on many principles is time consuming.

The committee plans to have a first draft completed by May/June.

The draft will be provided to members of the sponsoring organizations (SPE, SPEE, WPC, AAPG) for discussion/feedback

The comments/feedback will then need to be considered by the committee and updates will be made.

Consideration to other users of PRMS (LSE, ASX, HKSE, etc.) may be required.

Three month public consultation/comment period.

My belief is that the update may not be complete for 1 year (at least).

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