RISC

decisions with confidence

Neil Fairnie, Standard Bank
Adam Borushek, RISC Advisory

Status Update on the London-Based Investor Reporting Format

Presentation to SPEE, London

8th March 2018

Agenda

- Background – why is this needed?
- Aims and deliverables
- Basics of Reserves Based Lending
- Proforma CPR template
- What next?
- Q&A

Background

- Following the 2016 SPE/SPEE Reserves event, some of London's bankers/financiers stated they lack confidence in oil and gas reserves and resources reports by some independent assessors
  - Some Independent Resource Reports (aka CPRs) are not fit for purpose for London's Banks/financing.

- This will NOT impact the PRMS categorisations, classifications, guidelines, or methods of estimating reserves, resources or values. It will be independent of reserves system
  - Detailed reporting guidelines are not in the PRMS and the reporting guidelines are too general
  - The PRMS defers to any regulatory reporting, where required by the authorities
  - This leaves a vacuum in the UK banking/finance sector with no SEC/COGEH style reporting standards.

- Small companies are often not familiar with the requirements of London-based financiers
  - Especially those based outside Europe who have not previously sought finance in London.

- They commission auditors to provide reserves reports to meet the needs of London's financial community
  - However, there are currently no standards, so report quality, quantity and content are variable.

Background

- In the absence of clear reporting, Banks may apply their own risking to production and cost profiles to build Bank Cases
  - If the Low Case assumptions are not stated, they may double-dip and be overly conservative
  - This unnecessarily erodes the Borrowing Base
  - The operator remains capital constrained.

A working group was created under supervision of SPE London to work toward the creation of a ‘pro-forma’ template that would improve the consistency of content and format. It is aimed at the London market, not USA and Canada (which have SEC and NI/COGEH). The proposed template is for Reserves Based Lending reporting but could also be used Project Finance and Private Equity.

Aims

- Companies seeking London-based finance can take the proposed pro-forma to their auditors/consultants to provide an independent report that meets the needs of the Banks.

- Consultants would bid for work on common scope, instead of minimal reporting.

- A more streamlined process that better conveys the technical risks and uncertainties to the lenders.

Independent Reports for Finance

- Minimal reporting
- **Ideal reporting for Banks**
- Workflow reporting

The Spectrum of Independent Reserves Reports

- Table of values and cash flows
- Boilerplate text

- **Appropriate level of detail to build a Bank Model**
- **Risks and uncertainties addressed**
- **Quick turn-around**

- AKA 'Reinventing the wheel' or a 'Science report'
- Too much detail for Banks to assess risk
- Not appropriate for speedy business decisions

The answer to satisfy the borrower and the Bank is a BALANCED INDEPENDENT REPORT.

Deliverable

A document to describe the content and format of independent technical reports (CPRs or similar reports) to meet the requirements of Banks in London

- It may be similar to the Canadian COGEH F1 and F2 documents.

The document will be an expanded version of:

- ESMA, Appendix III – Oil and Gas Competent Persons Report – recommended content
- AIM, Note for Mining and Oil & Gas Companies – June 2009, Appendix 2 Content of CPR.

- The document may be distributed through SPE London, SPEE, AIM or ESMA. This is not clear yet.

Contributors from Key Stakeholders

Company Type	Company	Contributor
Consultant/Auditor	Gaffney Cline	Drew Powell
Consultant/Auditor (+ SPE representative)	RISC Advisory	Adam Borushek
Consultant/Auditor	RPS Energy	Ed Jankowski
Consultant/Auditor (+ SPEE representative)	ERC Equipoise	Shane Hattingh
Bank	Standard Bank	Neil Fairnie
Bank	Lloyds	Jim Ayton
Bank	Formerly with Standard Chartered	Sean Nash
Bank	Barclays Capital	Sarah Ferneini
Bank (+ SPE representative)	IFC	Carolina Coll
Operator (+ SPE representative)	JX Nippon	Jonathan Ovens
Private Equity (+ SPE representative)	First Alpha Energy Capital	Miles Cudmore

Assisted by Olga Bradulina of Rock Flow Dynamics.

Pro-Forma Template

- More granularity is needed in the production and cost profiles, so Banks understand the contribution of CAPEX items to the production forecasts:
  - Eg No Further Activity (NFA) profiles for 1P/2P/3P
  - AND short-term infill wells
  - AND an incremental Phase 1 Redevelopment
  - AND incremental Contingent Resource plans.

- The risks and uncertainties need to be stated, but not just sub-surface risks and uncertainties
  - Eg aggressive drilling schedules; market risks; reliance on production hub hosting a field about to be abandoned.

Pro-Forma Template

- The context is important: is the Bank considering an equity or a debt deal?
  - Equity requires growth opportunities, but debt requires security of cashflow
  - 1P and sometimes 2P in Europe. Does the report need to state 3P? Contingent resources?
  - Focus on 5 years? Full field life of 20+ years?

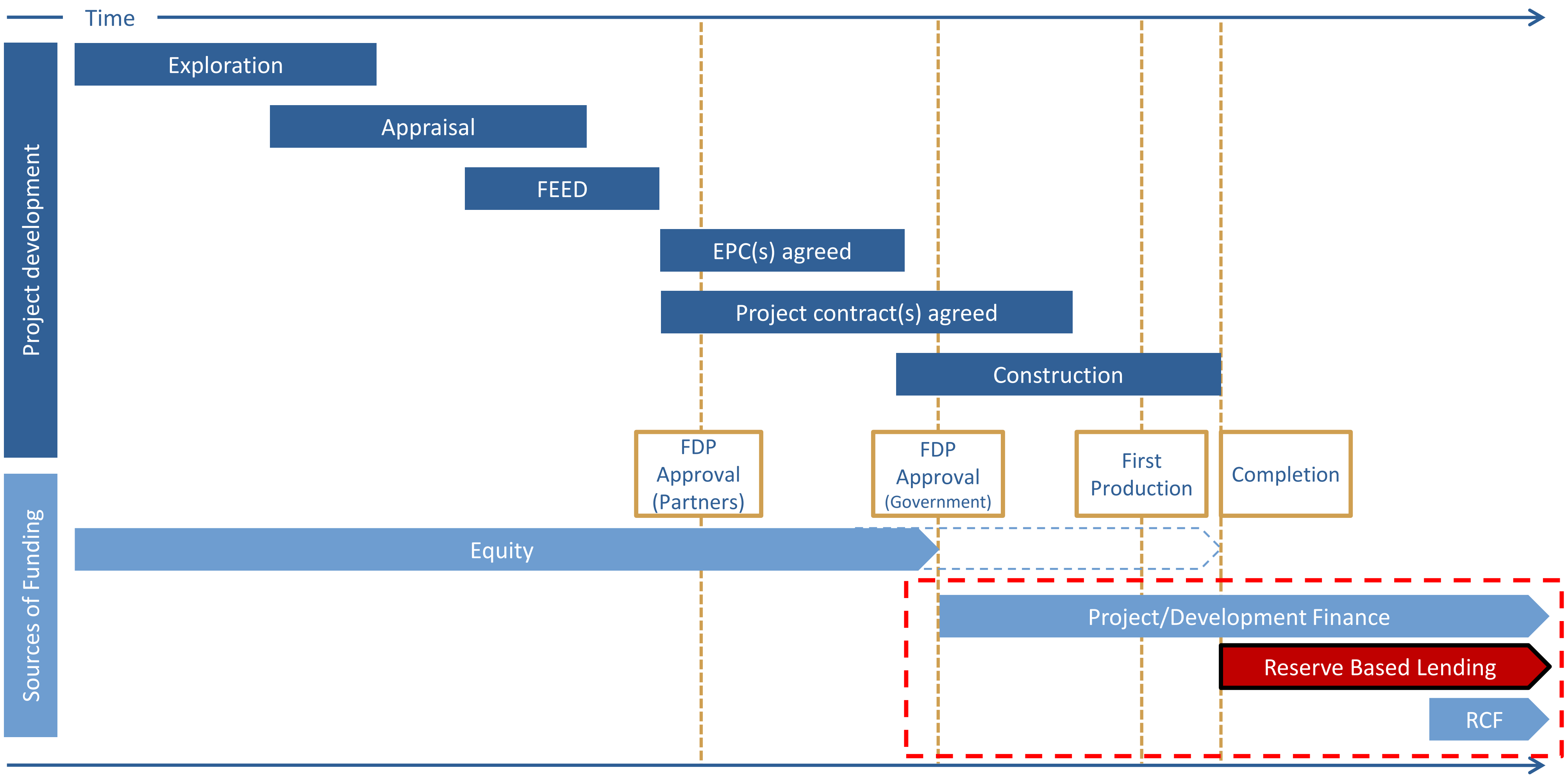
- Cashflow tables are not used by Banks - they use their own financial models. They want production and sales profiles, OPEX and CAPEX, ABEX forecasts.

- Missing the granularity of fixed/variable OPEX incl ABEX, well costs, etc. Financing work needs this in greater detail
  - Less granularity required in a large portfolio of many assets.

- The phasing of the CAPEX is important. Often a single huge number in one year. What drives this? Give an explanation, and a breakdown of the annual CAPEX and OPEX
  - Eg NFA separated out from infill drilling, workovers, and compression projects.

Basics of Reserves Based Lending

Cash flow based Structures Available at Different Stages of Asset Life

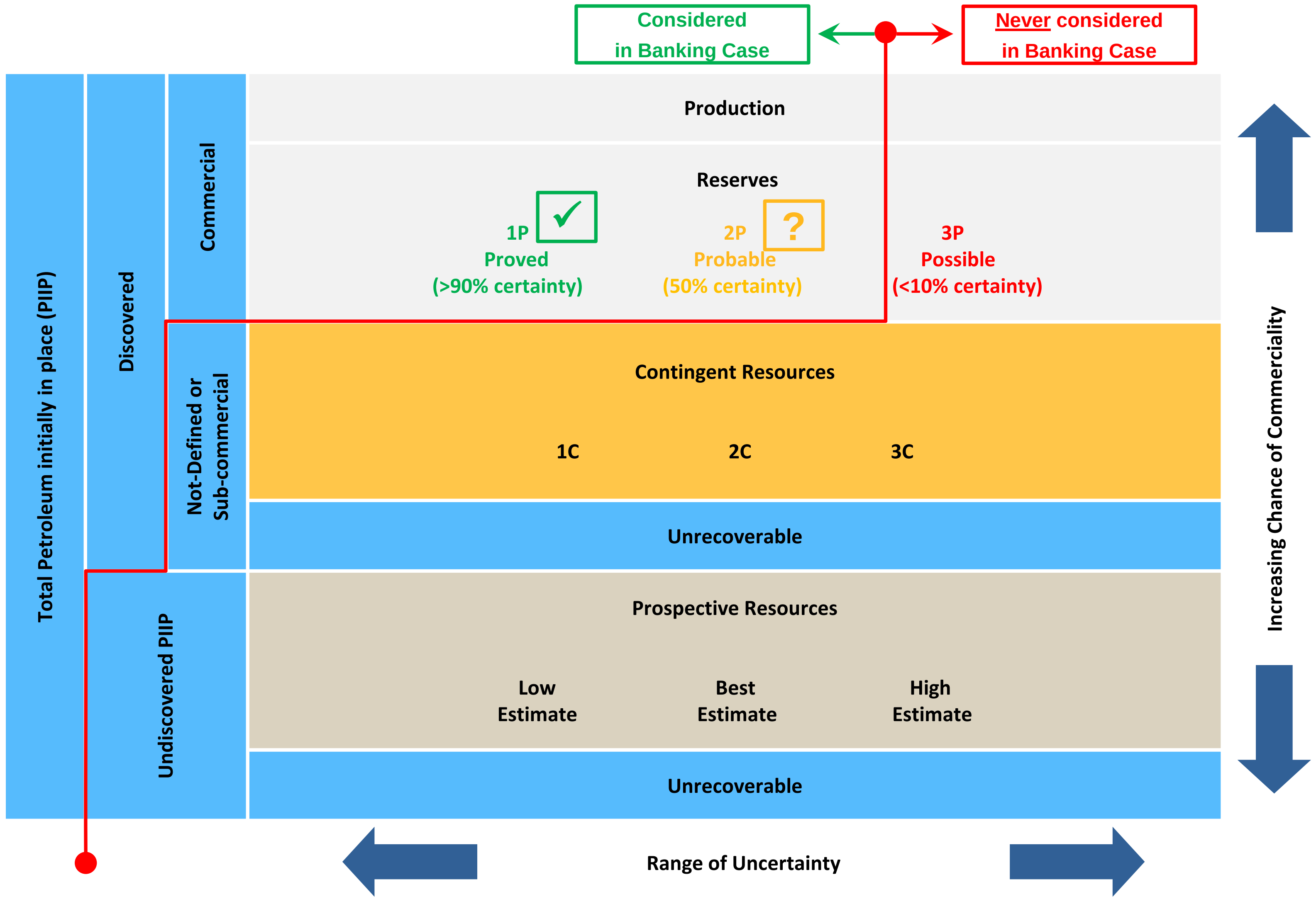


Risk Assessment

Reserve risk	The appraisal status of the borrowing base assets is key in determining the likelihood that the project will be financed - if the borrower has a limited balance sheet, the Bank will be directly exposed to the reservoir / reserve risk for the borrowing base assets from day one
Technical and operational risks	The risk that the assets underperform due to lack of operator expertise - Banks must undertake technical due diligence, and where appropriate, a site inspection
Foreign exchange and interest rate risks	The risk that the Borrower's cash flows are reduced due to movements in FX and interest rates
Commodity price risk	The risk that oil prices fall below the price deck assumed for the facility
Development Risk	The risk that the forecast production levels are not achieved due to the failure of the proposed field development
Security risk	The risk that the assets underperform due to security threats or incidents – requires adequate insurance to be in place
Environmental risk	The risk of non-compliance with environmental laws and regulations – all major international Banks adhere to the **Equator Principles** and need to protect their own corporate reputations in the face of potential adverse publicity
Off-take risk	The risk of non-performance under the off-take agreement
Regulatory risk	The risk of a potential regulatory changes that could affect future cash flows (i.e. taxation changes)
Political risk	The risk of nationalisation, expropriation, licence revocation, and/or an adverse change in law

- As such, RBLs require a significant level of due diligence (typically updated semi-annually)
  - Including legal, financial, insurance, tax, technical and environmental
  - This can be onerous for a small company and difficult to accept by the larger ones!

Reserves Used to Determine a Borrowing Base



The Borrowing Base Amount

- The Borrowing Base Amount ("BBA") is based on the net present value of the cash flows arising from the assets included in the transaction (the Borrowing Base Assets).
- Cash Flow Available for Debt Service ("CFADS") for each period in the loan and field life is assessed as follows:

\+ **Gross Revenues**
– Royalties
– Operating costs
– Taxes
– Ongoing CAPEX
– Government Share of Profit Oil (where relevant)
= **Cash flow Available for Debt Service**

- The cash flows are based on a number of technical and economic assumptions:
  - Technical assumptions include the reserves estimates which need to be assessed by an independent reservoir/petroleum engineer. Lenders require an independent reserves report which will set out the production and cost profiles for each category of reserves (including PDP, PDNP, PUD, 1P, 2P)
  - Technical assumptions are further risked by the Technical Bank
  - Economic assumptions include the commodity price deck, discount rate (reflecting Cost of Debt only) and the appropriate tax regime.
- The Net Present Value of the CFADS for the loan life and field life are then divided by specific cover ratios to determine a Borrowing Base Amount.

Cover Ratios

- The Borrowing Base Amount is initially sized on two time horizons (Loan Life and Field Life) and is the lower of :
  - Loan Life NPV: the net present value of CFADS until the earlier of the loan maturity or reserves tail date, divided by the Loan Life Coverage Ratio ("LLCR")
  - Field Life NPV: the net present value of the CFADS until the earlier of the field end date (abandonment date) or the license expiry date, divided by the Field Life Coverage Ratio ("FLCR").
- A minimum Reserve Tail is required to ensure sufficient capacity to extend or re-finance, and may also define the Borrowing Base Amount if the loan tenor has to be reduced.
- Coverage Ratios applied are at lenders' discretion, based on issues such as quality of borrower, assets and jurisdiction.
- Periodically Coverage Ratios are re-calculated to ensure they do not breach those set-out in the facility agreement

Loan Life Cover Ratio
[typically 1.3x - 1.5x]

$$\text{LLCR} = \frac{\text{NPV of the forecast CFADS during the life of the loan}}{\text{Total debt outstanding under the facility at that point in time}}$$

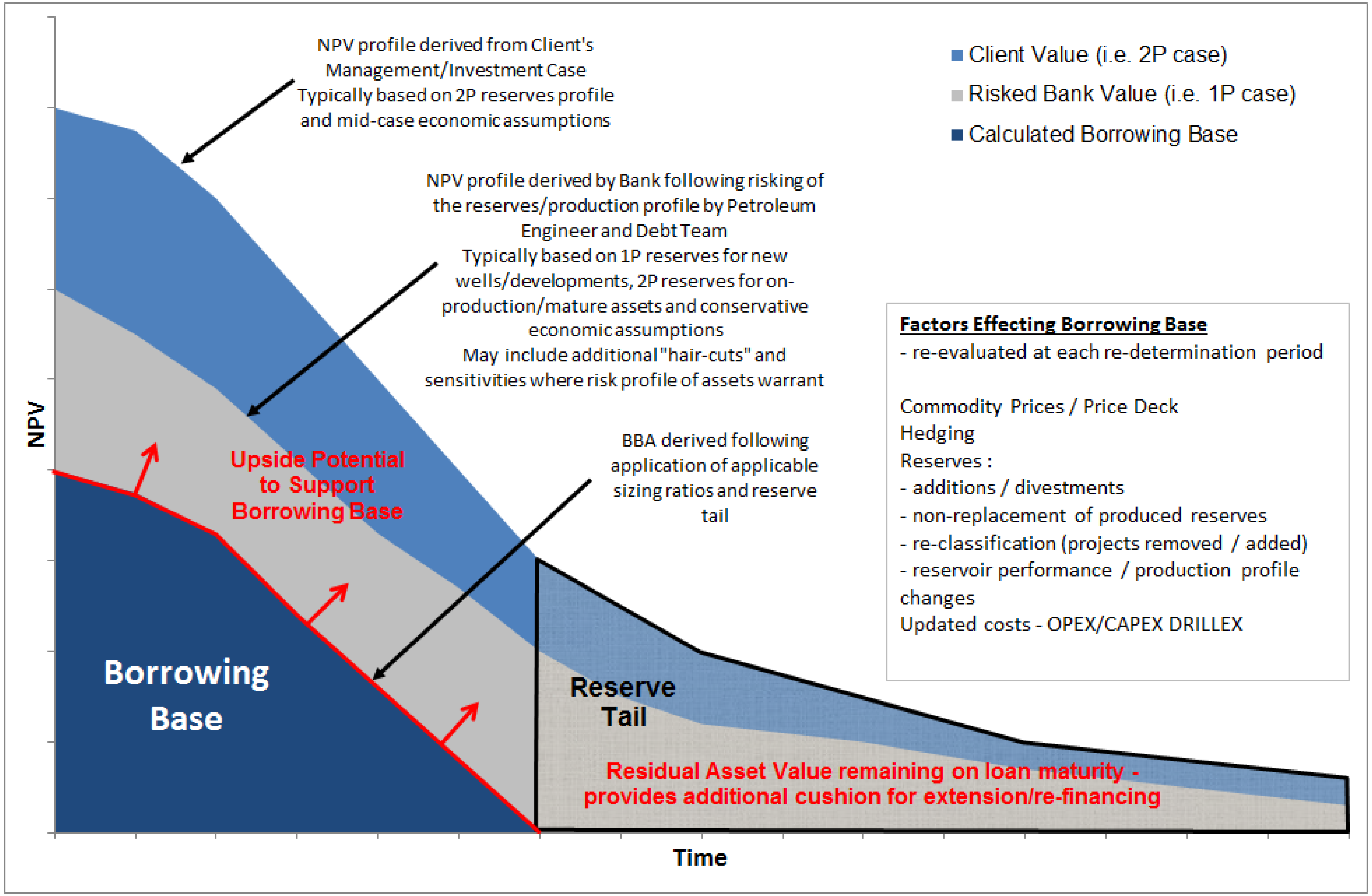
Field Life Cover Ratio
[typically 1.5x - 1.7x]

$$\text{FLCR} = \frac{\text{NPV of the forecast CFADS to field abandonment}}{\text{Total debt outstanding under the facility at that point in time}}$$

Reserve Tail
[typically 25% - 30%]

$$\text{Reserve Tail} = \frac{\text{Remaining reserves at point in time}}{\text{Banking case reserves at beginning of facility}}$$

Putting the BBA into Perspective



Pro-Forma Template

Pro-Forma Template

- This is still a work in progress, with issues still to be discussed and agreed in the Working Group.

- Contributions so far from a range of:
  - Banks and Auditors/Consultants
  - Different technical disciplines
  - Different company sizes
  - Public domain sources (eg ESMA Appendix III, AIM note Appendix 2).

- Need to find a balance between ‘Prescriptive’ and ‘Guidelines’ level of detail.

- Need to differentiate between the Project being financed, and the fieldwide forecast
  - Eg a RBL for a waterflood project in an existing producing field.

Pro-Forma Template

- Chapter 1 – INTRODUCTION
- Chapter 2 – EXECUTIVE SUMMARY
- Chapter 3 – BASIS OF OPINION
- Chapter 4 – SITE VISIT
- Chapter 5 – REVIEW OF PROPERTY OWNER KEY PERSONNEL
- Chapter 6 – SUBSURFACE EVALUATION
- Chapter 7 – WELLS AND FACILITIES EVALUATION
- Chapter 8 – PRODUCTION AND COST PROFILES
- Chapter 9 – ECONOMIC EVALUATION
- Chapter 10 – RESERVES AND RESOURCES
- Chapter 11 – RISK ASSESSMENT
- Chapter 12 – CONSULTANT'S INFORMATION
- Chapter 13 – DATA SOURCES
- Appendices
  - Glossary
  - Reporting Standards

What’s next?

- Do we seek contributions from Private Equity (Riverstone, Pincus etc) and Financial Advisors (EY, PwC etc) or keep it focussed on Banks and auditors/consultants?
  - Should this be generalised from RBL and Private Equity, to include all Due Diligence reports?

- Should we include the ‘*REVIEW OF PROPERTY OWNER KEY PERSONNEL*’ ?
  - We discussed excluding this from the template. This may be best handled off-the-record or as a separate report for the Bank
  - We also note that Auditors’ ‘clients’ are often NOT Banks, but the asset owners seeking finance. There is potential for conflict if the target company is considered negatively.

- Draft report produced and comments received
  - Next iteration being planned: Working Group will meet in late March
  - Will be opened for more public comments in due course.

- Could this be linked to the PRMS, or SPE/SPEE recommended practices?

Q&A

Disclaimer

- The statements and opinions attributable to RISC Advisory Pty Ltd (RISC) are given in good faith and in the belief that such statements are neither false nor misleading. In carrying out its tasks, RISC has considered and relied upon information obtained from discussions as well as information in the public domain.
- Whilst every effort has been made to verify data and resolve apparent inconsistencies, neither RISC nor its servants accept any liability for its accuracy, nor do we warrant that our enquiries have revealed all of the matters, which an extensive examination may disclose.
- We believe our review and conclusions are sound but no warranty of accuracy or reliability is given to our conclusions.
- In some cases the views and opinions of the author may differ from those held by others within RISC.
- RISC has no pecuniary interest or professional fees receivable for the preparation of this presentation, or any other interest that could reasonably be regarded as affecting our ability to give an unbiased view.

Perth

Level 2
1138 Hay Street
WEST PERTH WA 6005
P. +61 8 9420 6660
F. +61 8 9420 6690
E. admin@riscadvisory.com

Brisbane

Level 10
239 George Street
BRISBANE QLD 4000
P. +61 7 3025 3397
F. +61 7 3188 5777
E. admin@riscadvisory.com

London

4th floor Rex House
4-12 Regent Street
LONDON UK SW1Y 4PE
P. +44 203 356 2960
F. +44 203 356 2701
E. admin@riscadvisory.com

Dubai

Suite 503, Shangri La Offices
Sheikh Zayed Road
DUBAI UAE
P. +971 4 401 9875
F. +61 8 9420 6690
E. admin@riscadvisory.com

Jakarta

Alamanda Tower, 25th Floor
Jl. T.B. Simatupang, Kav. 23-24
JAKARTA 12430 INDONESIA
P. +62 21 2965 7987
F. +62 21 2965 7888
E. admin@riscadvisory.com