

Commerciality and its Foundational Role in NI 51-101



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1. Introduction
2. Regulatory framework
3. Commerciality and NI 51-101
4. Questions and comments
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1. Introduction

- a. Alberta Securities Commission**
- b. Petroleum**

2. Regulatory framework

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- Administers Alberta's securities laws
 - Entrusted to
 - Foster a fair and efficient capital market
 - Protect investors
- Member of the Canadian Securities Administrators (**CSA**)
 - Includes all provinces and territories
 - Improve, coordinate and harmonize regulation
- CSA's lead oil and gas (**O&G**) regulator

- O&G securities compliance oversight of reporting issuers (**RIs**) actively engaged in O&G activities
 - RIs principally regulated by the ASC
 - Assist other Canadian jurisdictions
- Involves
 - Conducting reviews
 - Disclosure
 - Evaluations of reserves and resources other than reserves (**ROTR**)
 - Developing and maintaining
 - Securities legislation
 - Technical guidance
 - Communicating with our capital market

Introduction

Petroleum – who we are



- **Craig Burns**, P.Geo., Manager
- **Lynddy Garrido**, P.Eng., Petroleum Evaluation Engineer
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- **Richard Bush**, C.E.T., Petroleum Analyst

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- 2. Regulatory framework**
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 - b. Legislation
 - c. Guidance, etc.
3. Commerciality and NI 51-101
4. Questions and comments
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- RIs are responsible for their disclosure
 - Professional service providers play a key role
- Both must be mindful of
 - Securities legislation designed for the provision of information that is
 - Timely
 - Useful
 - Reliable
 - Regulatory framework, incorporating
 - Legislation
 - Guidance, etc.

- General securities legislation, including *Securities Act* (Alberta)
- National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities* (**NI 51-101**)
 - For RIs engaged in O&G activities
 - General disclosure standards
 - Specific annual disclosure requirements
 - Five related forms for filing on SEDAR¹, including
 - 51-101F1 *Statement of Reserves Data and Other Oil and Gas Information*² (**Form 51-101F1**)

¹System for Electronic Document Analysis and Retrieval (SEDAR.com)

²See section 2.1 of NI 51-101; to be filed with the securities regulatory authority not later than the date required by securities legislation to file audited financial statements for the most recent financial year then ended

- 51-101F2 *Report on [Reserves Data][,] [Contingent Resources Data] [and] [Prospective Resources Data] by Independent Qualified Reserves Evaluator or Auditor² (Form 51-101F2)*
 - When signed and filed, representation is made that data has been determined and is in accordance with the COGE Handbook
- 51-101F3 *Report of Management and Directors on Oil and Gas Disclosure² (Form 51-101F3)*
 - When signed and filed, representation is made regarding approval of
 - Content and filing of Form 51-101F1
 - Filing of Form 51-101F2, if it contains reserves or ROTR
 - Content and filing of Form 51-101F3

- Companion Policy 51-101CP *Standards of Disclosure for Oil and Gas Activities* (**51-101CP**)
 - CSA's interpretation and application of NI 51-101 and related forms
- Staff notices (**SN**), including
 - CSA SN 51-324 *Revised Glossary to NI 51-101* (**SN 51-324**)
- Canadian Oil and Gas Evaluation Handbook (**COGE Handbook**)
 - Technical standard for NI 51-101
- Annual oil and gas review reports
- Financial reporting bulletins; Office of the Chief Accountant

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 - c. Chance of development**
 - d. Development timing**
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Commerciality and NI 51-101

Introduction



- 2017 Oil and Gas Review Report separately discusses
 - Commerciality
 - Evaluation and disclosure of reserves and ROTR relating to
 - Classification
 - Chance of development
 - Development timing
- These are collectively discussed here

Commerciality and NI 51-101

Introduction

- The O&G industry faces many challenges

“Regulatory ‘poisons’ are ‘suffocating’ oil industry by driving investors away”

- Financial Post, April 5, 2018

“First Nations court challenges continue to hang over \$7.4-billion Trans Mountain pipeline expansion”

- Vancouver Sun, April 19, 2018

“Pipeline industry blasts project review process, says it ‘doubles down’ on existing problems”

- Calgary Herald, April 5, 2018

“Study says global warming slowing key ocean current, could make for more extreme weather”

- The Associated Press

“Lawyers stumped over new gender and identity provisions for environmental impact assessments”

- National Post, April 3, 2018

“Environmentalists protest against oil and gas exploration in the Gaspé”

- Montreal Star, August 9, 2017

“Oilpatch frets over ‘unintended consequences’ of Alberta’s new power to cut B.C. oil shipments”

- Calgary Herald, April 20, 2018

- Everything that influences commerciality must be accounted for in the evaluation and disclosure of reserves and ROTR
 - Under NI 51-101, commerciality is the foundation of
 - Evaluation of reserves and ROTR
 - Estimation
 - Classification
 - Disclosure of reserves and ROTR
 - This is a shared responsibility
 - RIs
 - Professional service providers

- CSA SN 51-324 defines commercial as

When a *project* is commercial this implies that the essential social, environmental, and economic conditions are met, including political, legal, regulatory, and contractual conditions. Considerations with regard to determining commerciality include

- economic viability of the related development *project*;
- a reasonable expectation that there will be a market for the expected sales quantities of *production* required to justify development;
- evidence that the necessary *production* and transportation facilities are available or can be made available;
- evidence that legal, contractual, environmental, governmental, and other social and economic concerns will allow for the actual implementation of the *recovery project* being *evaluated*;
- a reasonable expectation that all required internal and external approvals will be forthcoming. [...]
- evidence to support a reasonable timetable for development. [...] [*COGE Handbook*]

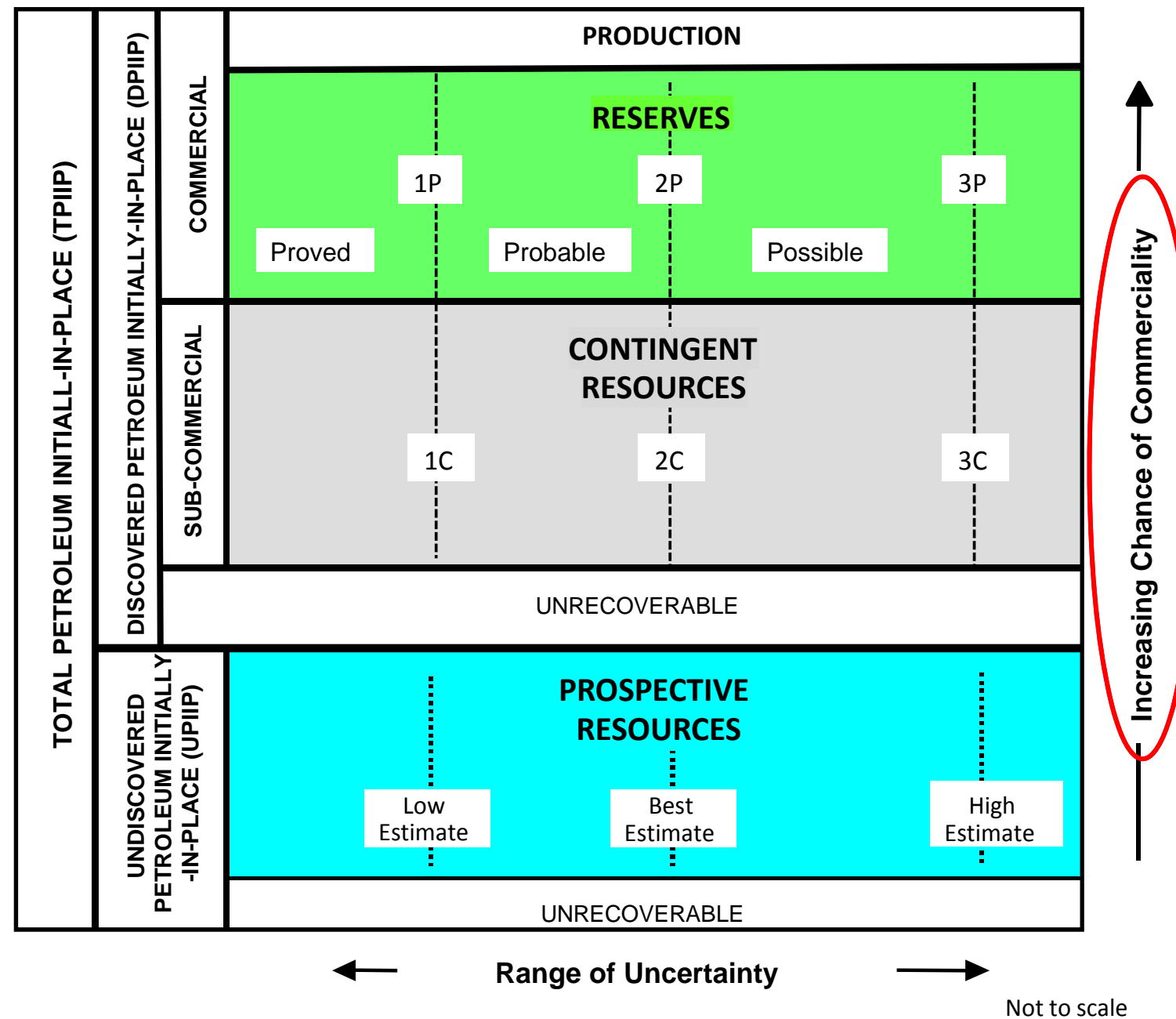
- Section 1.2 of volume 1 of the COGE Handbook states

Reserves and net present values are estimates prepared using input data, professional judgement, and forward-looking assumptions at a particular point in time (the effective date).

- Commerciality considerations are made at the effective date
 - They may materially influence
 - Input data
 - Professional judgement
 - Forward-looking assumptions
 - Things can change post effective date; ongoing assessment needed
 - Consider compliant disclosure requirements, including
 - NI 51-101
 - *Securities Act* (Alberta)

Commerciality and NI 51-101 Classification

- Commerciality informs classification in the COGE Handbook



Commerciality and NI 51-101 Classification

- CSA SN 51-324 defines

- Chance of commerciality (C_{Comm}) as

The product of the *chance of discovery* and the *chance of development*. [COGE Handbook]

- Chance of discovery (C_{Disc}) as

The estimated probability the exploration activities will confirm the existence of a significant *accumulation* of potentially recoverable *petroleum*. [COGE Handbook]

- Chance of development (C_{Dev}) as

The estimated probability that, once discovered, a *known accumulation* will be *commercially developed*. [COGE Handbook]

Commerciality and NI 51-101 Classification

- Section 1.1 of NI 51-101 defines risk as

[A]djusted for the probability of loss or failure in accordance with the *COGE Handbook*;

- If $C_{Dev} = < 100\%$, commerciality is at risk
 - Risk is present

- Section 2.5.1 of volume 2 of the *COGE Handbook* states

A contingency is any factor that prevents current commercial development of a discovered petroleum resource. [...] Every contingency has a risk that it will not be resolved [...]

- Considering commerciality and risk in classification
 - Reserves
 - $C_{Disc} = 100\%$ (they are discovered)
 - $C_{Dev} = 100\%$ (they will be developed)
 - Therefore, $C_{Comm} = \text{effectively } 100\%$
 - No commerciality gap; no risk exists
 - Contingent resources
 - $C_{Disc} = 100\%$ (they are discovered)
 - $C_{Dev} = < 100\%$ (they may be developed)
 - Therefore, $C_{Comm} = < 100\%$
 - Commerciality gap; risk exists due to one or more contingencies

Commerciality and NI 51-101 Classification

- Prospective resources
 - $C_{Disc} = < 100\%$ (they are undiscovered)
 - $C_{Dev} = < 100\%$ (they may be developed, once discovered)
 - Therefore, $C_{Comm} = < 100\%$
 - Commerciality gap; risk exists

- Industry challenges reflect commerciality considerations
 - Economics
 - Market access
 - Transportation
 - Legal system
 - Environment
 - Government
 - Regulatory

Commerciality and NI 51-101 Classification



- Recall commerciality considerations may materially influence
 - Input data
 - Professional judgement
 - Forward-looking assumptions

- So, evaluations must assess commerciality considerations
 - Classification
 - Reserves
 - Reserves are incompatible with contingencies and presence of risk
 - May need to be reclassified to contingent resources
 - Contingent resources
 - Project maturity sub-classes may change with contingency changes
 - Contingency removal may permit reserves assignment
 - Development
 - Plans (including timing)
 - Costs

Commerciality and NI 51-101

Chance of development

- Risk disclosure underpins NI 51-101
 - Risk correlates to C_{Comm}
 - Recall C_{Comm} varies by resources category
 - Therefore, category disclosure is informative
- Section 5.3(1) states

Reserves or resources other than reserves must be disclosed using the applicable terminology and category set out in the *COGE Handbook* and must be classified in the most specific category of *reserves or resources other than reserves* in which the *reserves or resources other than reserves* can be classified.

- Section 5.3 of 51-101CP clarifies that most specific category includes project maturity sub-classes of contingent resources

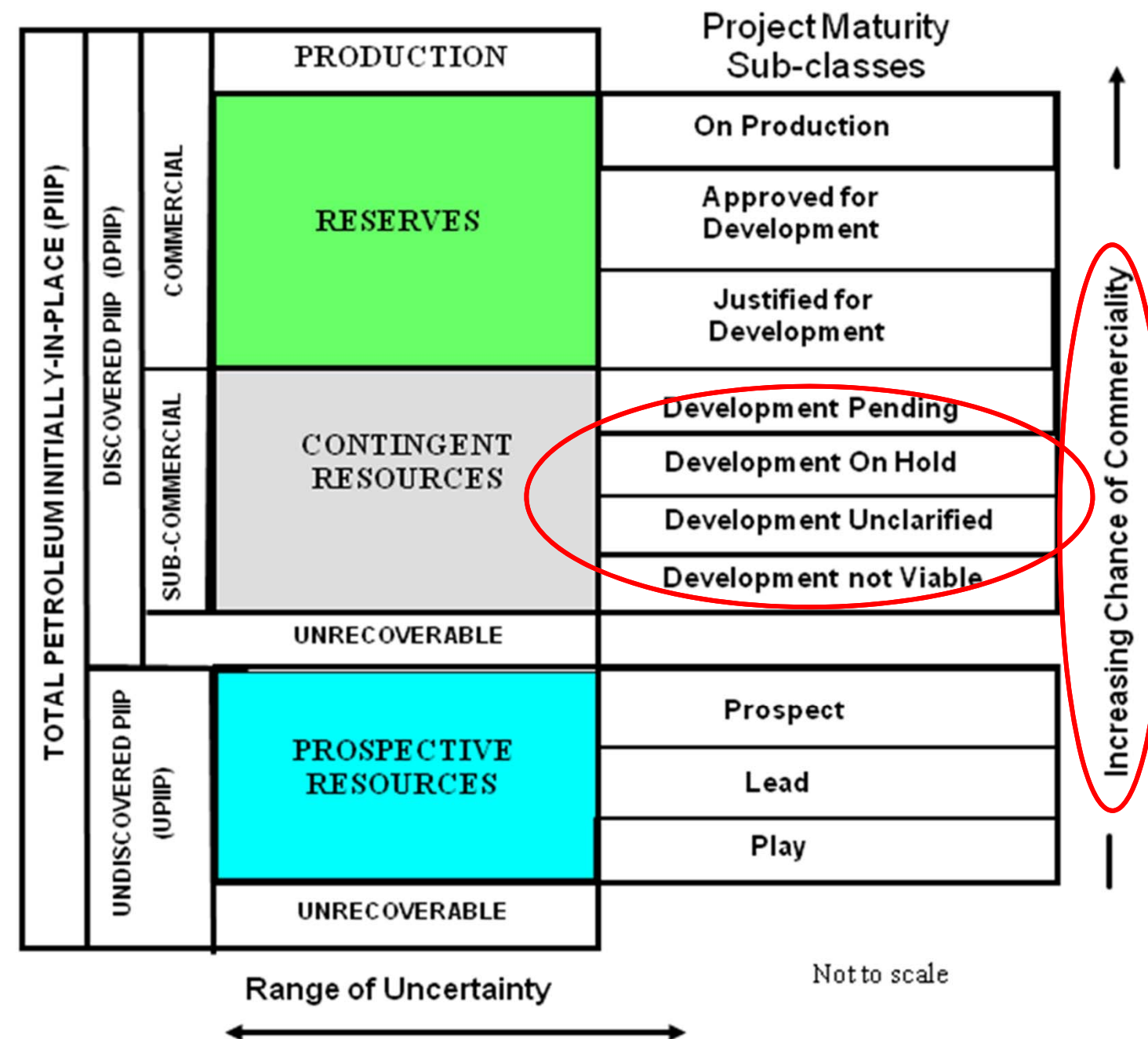
Section 5.3 of *NI 51-101* requires that any disclosure of *reserves* or of *resources* other than *reserves* must apply the applicable categories and terminology set out in the *COGE Handbook*. [...] For instance, there are several *project maturity sub-classes* of *contingent resources* including *development pending*, *development on-hold*, *development unclarified* and *development not viable*.

- Disclosure by sub-classes is further discussed in
 - Section 5.9(2) of NI 51-101
 - *Item 7.1(1)(a)* of Form 51-101
 - Form 51-101F2

Commerciality and NI 51-101

Chance of development

- COGE Handbook recognizes four sub-classes by ascending C_{Comm}



Commerciality and NI 51-101

Chance of development

- CSA SN 51-324 defines
 - Development pending as

Where resolution of the final conditions for development is being actively pursued (high chance of development) [emphasis added]. [COGE Handbook]

- Section 2.5.1 of volume 2 of the COGE Handbook states

The development pending project maturity subclass is described as requiring a “high probability of becoming a commercial development”, which is equivalent to the probability of removal of all contingencies. The term “high probability” is generally considered to be about 80 percent, which may be considered to be a minimum for the removal of all contingencies [emphasis added].

- Numeric $C_{Dev} = \geq 80\%$

Commerciality and NI 51-101

Chance of development

- Development on hold as

Where there is a reasonable chance of development, but there are major non-technical contingencies to be resolved that are usually beyond the control of the operator [emphasis added]. [COGE Handbook]

- Section 2.5.5(d) of volume 2 of the COGE Handbook states

[I]t is more likely than not that the contingencies will be resolved [emphasis added].

- Statistically, the numeric $C_{Dev} = > 50\%$

Commerciality and NI 51-101

Chance of development

- Development unclarified as

When the evaluation is incomplete and there is ongoing activity to resolve any risks or uncertainties. [*COGE Handbook*]

- C_{Dev} is unspecified; may be difficult to assess

- Development not viable as

Where no further data acquisition or evaluation is currently planned and hence there is a low chance of development [emphasis added]. [*COGE Handbook*]

- Staff are of the view that numeric $C_{Dev} = \leq 50\%$

Commerciality and NI 51-101

Chance of development

- Section 2.4.8 of volume 2 of the COGE Handbook states

Project maturity describes the stage of an exploration or development project and broadly corresponds to the chance of commerciality of the project. The boundaries between the maturity subclasses represent “decision gates” that reflect the actions (business decisions) required by the resource owner to move the project up the maturity “ladder” towards commercial production [emphasis added].

Commerciality and NI 51-101

Chance of development

- Part 7 of Form 51-101F1 discusses C_{Dev}
 - *INSTRUCTIONS (1)* states

*A reporting issuer may disclose **contingent resources data** or **prospective resources data** in a statement of the **reserves data** and other information filed under item 1 of section 2.1 of **NI 51-101**, however that data must only be disclosed as an appendix to that statement.*

- If contingent resources are disclosed, *item 7.1(2)* of Form 51-101F1 requires the numeric value of C_{Dev} risk to be disclosed
 - Clarifies associated risk

- COGE Handbook discusses reserves development timing
 - Section 5.5.4(f) of volume 1 states

Non-producing reserves should be planned to be developed within a reasonable time frame. For projects requiring minor capital expenditures, two years is a recommended guideline unless the non-producing reserves are awaiting depletion of another producing zone or production levels are constrained by facility or market limitations. For larger capital expenditures, three years is a recommended guideline for assigning proved reserves and five years for assigning probable reserves. Exceptions to these guidelines are possible but should be clearly documented [emphasis added].

- Exceptions are possible
 - Documentation to occur in the evaluation

Commerciality and NI 51-101

Development timing

- Section 5.7 of volume 2 states

Non-producing reserves that are near existing infrastructure and require minor capital should normally be developed within a two-year period. [...]

The evaluator should review undeveloped reserves estimates if development has not proceeded as previously planned by the operator. [...]

For large projects, where significant capital is required for field development or infrastructure construction (offshore, oil sands, etc.), significant capital expenditures should normally commence within three years for assignment of proved reserves. For the assignment of probable reserves, significant capital spending should normally commence within five years. [...]

Commerciality and NI 51-101

Development timing

- Section 5.3.2 of volume 1 states regarding commercial status

A reasonable time frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While five years is recommended as a maximum time frame for classification of a project as commercial, a longer time frame could be applied where, for example, development of economic projects are deferred at the option of the producer for, among other things, market-related reasons or to meet contractual or strategic objectives.

- Once reserves are developed, things can change
 - Ongoing assessment of commerciality considerations is needed

Commerciality and NI 51-101

Development timing

- *Item 5.1* of Form 51-101F1 covers reserves development timing
 - Per *item 5.1(1)(b)*

[D]iscuss generally the basis on which the *reporting issuer* attributes *proved undeveloped reserves*, its plans (including timing) for developing the *proved undeveloped reserves* and, if applicable, its reasons for deferring the development of particular *proved undeveloped reserves* beyond two years [emphasis added].

- Per *item 5.1(2)(b)*

[D]iscuss generally the basis on which the *reporting issuer* attributes *probable undeveloped reserves*, its plans (including timing) for developing the *probable undeveloped reserves* and, if applicable, its reasons for deferring the development of particular *probable undeveloped reserves* beyond two years [emphasis added].

Commerciality and NI 51-101

Development timing

- *INSTRUCTIONS (2) of item 5.1 states*

*The discussion of a **reporting issuer's** plans for developing **undeveloped reserves**, or the **reporting issuer's** reasons for deferring the development of **undeveloped reserves**, must enable a reasonable investor to assess the efforts made by the **reporting issuer** to convert **undeveloped reserves** to **developed reserves**.*

- COGE Handbook discusses ROTR development timing
 - Section 2.5.5(b) of volume 2 states regarding contingent resources

A project maturity subclass describes a stage along the process towards commerciality. It is not a static condition and the project maturity subclass of a contingent resource, especially if it is economic and constitute(s) a major portion of an organization's assets, should be reviewed regularly. The frequency of review will depend on the project, the area, and the project's significance to an organization. [...] [T]here is wide variation in the timeframes over which projects develop and, in a mature area with access to facilities and markets, the appropriate time between reviews should perhaps be no more than two years [emphasis added].

- The path to commerciality is influenced by commerciality criteria
- Sub-class can change
- Attribution should be reviewed regularly

- Project maturity sub-classes have specific criteria for
 - Activity levels
 - Development timing
- Per section 2.5.5
 - Development pending
 - Ongoing activities to justify near future commercial viability
 - Reasonable timeframe for critical contingency resolution
 - Developers directly influence significant contingencies
 - High probability of commercial development

Commerciality and NI 51-101

Development timing

- Development on hold
 - Commerciality is more likely than not
 - Major non-technical contingencies
 - Developers have little or no direct influence
 - Significant uncertainty in decision outcome and timing
 - Justify a long period in this sub-class in an evaluation

Commerciality and NI 51-101

Development timing

- Development unclarified
 - Under evaluation or requires significant appraisal
 - Contingencies may not be fully defined
 - Commercial assessment potential may take years
 - Should not be maintained indefinitely without
 - Activity to resolve the issues or
 - Providing a reasonable explanation in the evaluation
 - Reclassify if no active evaluation or plan for within a limited time period
- Development not viable
 - Curtailed efforts for the foreseeable future
 - Possible commercial development potential

- Criteria summary
 - Activity levels
 - Development pending
 - Ongoing
 - Development on hold
 - None specific
 - Development unclarified
 - Underway or will resume in a limited time period
 - Development not viable
 - Curtailed for the foreseeable future

- Development timing
 - Development pending
 - Short term
 - Development on hold
 - Uncertain, could be indefinite if a reason is provided in the evaluation
 - Development unclarified
 - Not indefinite without activity to resolve the issues or reason provision
 - Development not viable
 - Uncertain, but not for the foreseeable future

- NI 51-101 discusses ROTR development timing disclosure
 - Section 5.9(2)(d)(iii.1)(B) requires disclosure of the general project timeline, including the estimated date of first commercial production
 - Staff expect timeline disclosure to be informative

- Industry faces challenges that may influence commerciality
- Under NI 51-101, commerciality is foundational regarding
 - Evaluation of reserves and ROTR
 - Estimation
 - Classification
 - Each category has specific criteria regarding
 - Commerciality
 - Activity levels, development timing, etc.
 - Disclosure of reserves and ROTR
- Commerciality assessment is an ongoing process

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