Annex B

Amendments to National Instrument 51-101 Standards of Disclosure for Oil & Gas Activities

Summary of Comments and CSA Responses

Item	Subject	Summarized Comment	CSA Response
Comments in response to questions in CSA Notice dated October 17, 2013			

1. Disclosure of estimates prepared under an alternative resource evaluation system (Question 1)

The proposed amendments would permit an issuer to disclose reserves prepared in accordance with, for example, the SEC regime supplementary to reserves disclosed under NI 51-101. Do you support the proposal to permit the supplementary disclosure of reserves prepared under a regime comparable to the COGE Handbook, as is set out in proposed section 5.18 of NI 51-101? Please explain your views.

Proposed	General	Five commenters	We thank the commenters for
section 5.18 of	Comments For	support the proposal to	their input.
NI 51-101		allow supplementary	
		disclosure of an	
		evaluation under an	
		alternative resources	
		evaluation standard.	
		Their reasons include	
		the following:	
		• The number of	
		issuers subject	
		to reporting in	
		multiple	
		jurisdictions	
		and the close	
		economic ties	
		between	
		Canada and, for	
		example, the	
		United States	
		make it	
		important for	
		disclosure	
		under other	
		similar	
		standards to be	
		permitted.	
		• Providing a	
		mechanism to	

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Item	Subject General Comments Against	disclose reserves in accordance with other standards provides greater comparability between Canadian and foreign issuers' oil and gas disclosure. • This will allow reporting issuers the ability to meet the needs of multiple stakeholders more effectively. One commenter does not support the requirement to disclose additional information for an estimate prepared under an alternative resources evaluation standard. Their reason is that it is excessive to have companies duplicate effort when they have already prepared a reserve estimate in a format that is	CSA Response We thank the commenter for their input, however, NI 51-101 adopts the COGE Handbook as the standard for the classification and evaluation of resources. The COGE Handbook enables greater comparability and predictability between resource estimates. To the extent an estimate of resources has not been classified and evaluated in accordance with the COGE Handbook, investors must be made aware of the differences.
		comparable to COGE Handbook.	
	Questions Regarding Application	One commenter asked what obligation does a 40-F filer have relative to the proposed disclosure	Under section 5.18 of NI 51-101 a reporting issuer may disclose a resource estimate using a standard other than that set out by COGE Handbook. If a
		requirements for the	reporting issuer is required by the

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		public disclosure of a	local regulator to provide		
		reserves estimate under	disclosure under another		
		an alternative resources	standard, for example, in order to		
		evaluation standard.	access the capital markets of that		
			standard, then disclosure of the		
			estimate would be "required" for		
			the purpose of the amendments.		
			If a reporting issuer is not		
			required by the local regulator to		
			provide, for example, disclosure		
			of reserves prepared under an alternate standard in its		
			disclosure documents, the		
			disclosure of the estimate would		
			"not be required" for the purpose		
			of the amendments.		
			A reporting issuer should obtain		
			legal advice to whether in its		
			circumstances it is required to		
			provide the required disclosure.		
	Questions	One commenter asked	An arithmetic reconciliation of		
	Regarding	if an arithmetic	the alternate disclosure and NI		
	Reconciliations	reconciliation of an	51-101 disclosure is not required.		
		estimate prepared			
		under the alternative			
		resources evaluation			
		standard to the			
		estimate prepared			
		under the COGE Handbook would be			
		required.			
2. Do you support the removal of the requirement to disclose information by					
	2. Do you support the removal of the requirement to disclose information by production group (Question 2)				
production Group (Question 2)					
The proposed amendments eliminate the requirement to disclose a reporting issuer's reserves					
lata by production group. Do you support the removal of the requirement to disclose reserves					

The proposed amendments eliminate the requirement to disclose a reporting issuer's reserves data by production group. Do you support the removal of the requirement to disclose reserves data by production group? Please explain your views.

Repealed	Support	6 commenters support	We thank the commenters for
paragraph	production group	the proposal to remove	their input.
1.1(u) of NI	removal	the requirement to	
51-101,		disclose the net present	
removal of		value of future net	
requirement		revenue by production	

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from		group. Their reasons	
paragraph 3(c)		include the following:	
of item 2.1 of		• Removing the	
Form 51-		concept of	
101F1		production	
		group and using	
		qualifying	
		definitions will	
		better define	
		the actual	
		resource	
		potential.	
		• The proposal	
		brings	
		consistency	
		with other	
		elements of	
		reporting which	
		are based on	
		product type.	
	Reduction of	Three commenters	We thank the commenter for the
	number of	suggested that we	input, however, product types are
	product types	reduce the total	included to describe both the
	1 51	number of product	physical product and the source
		types and specifically	in an attempt to capture the
		allow reporting issuers	following comparability factors:
		to combine similar	
		product types if	• The same physical
		reasonable. For	product attracts the
		example, when a	same price (adjusted
		reporting issuer	for quality and
		produces gaseous	transport costs)
		hydrocarbons, since	whatever the source,
		costs do not vary	but
		materially due to	
		differing origins of	Different sources hove significantly
		natural gas, or	have significantly different cost and
		multiple liquid product	risk profiles, and
		types from the same	production
		field.	characteristics.
			characteristics.
			Having multiple "product types"
			provides an investor with a more

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			comprehensive picture rather than having the general product types "oil" or "gas". Reducing the number of product types is outside of the scope of these proposed amendments. The separation of conventional natural gas, coal bed methane, synthetic gas and shale gas, into different product types provides an investor with information on some of the differences in cost and risk profiles and production
	Question about	One commonter asked	characteristics.
	Question about condensate	One commenter asked if the definition of light crude oil includes condensates.	We thank the commenter for the question. In paragraph 1.1(q.2) the definition of natural gas liquids includes condensates. Light crude oil, for the purpose of product types in NI 51-101, does not include condensates.
	Removal of unit values	One commenter suggested that unit values should be removed.	We thank the commenter for the input, however, the removal of unit values is outside of the scope of the changes contemplated by the proposed amendments.
	Comment on NGLs	One commenter suggested that NGLs are a by-product and should be combined with oil or gas.	We thank the commenter for the input. In addition to the required product type disclosure, paragraph 1.1(3)(c) of the Form 51-101F1 requires the disclosure of product types with their associated by-products, which for oil or gas, may include NGLs.
	Clarification of bitumen definition	Several commenters identified a potential overlap between the definitions of heavy crude oil and bitumen.	We thank the commenters for their input. We have amended the definition of "bitumen" to include the concept of bitumen being "solid or semi-solid" and that "it is not primarily recoverable at economic rates through a well without the implementation of enhanced

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			recovery methods."
	Re-inclusion of	One commenter stated	We thank the commenter for the
	shale oil as a	that shale oil should be	input. We have revised the
	product type	included as a product	proposed amendments to include
		type.	tight oil as a product type, which
			includes shale oil.

3. The requirement to provide low, best and high estimates of volume and net present value of future net revenue in respect of any contingent resources or prospective resources included in the annual statement of reserves data (Question 4)

A reporting issuer that includes contingent resources and/or prospective resources is not currently required to have those estimates prepared by an independent qualified reserves evaluator. Do you support the requirement in proposed item 2 of section 2.1 of NI 51-101 for an independent qualified reserves evaluator to evaluate or audit any contingent resources or prospective resources included in the annual statement of reserves data? Please explain your views.

Do you support the requirement in proposed paragraph 4 of item 2.1 of Form 51-101F1 to provide low, best and high estimates of volume and net present value of future net revenue in respect of any contingent resources or prospective resources included in the annual statement of reserves data? Please explain your views.

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Part 7 of Form	General	3 commenters support	We thank the commenters for
51-101F1	comments for	the proposed	their input, however, we have
	requirement to	requirement to provide	removed the proposed
	provide low, best,	low, best, high	requirement to disclose low and
	high estimates	estimates.	high estimates in addition to the
	-		best estimate. Nevertheless, if a
			reporting issuer discloses a high
			estimate, the low estimate must
			also be disclosed as required by
			section 5.17 of NI 51-101.
	General	6 commenters do not	We thank the commenters for
	comments	support the	their input.
	against	requirement to disclose	
	requirement to	the low and high	We have amended the
	provide low, best,	estimates in addition to	requirement relative to the
	high estimate	the best estimate.	optional contingent and
		Their reasons include	prospective resources disclosure
		the following:	in the statement prepared in
		• Disclosure of	accordance with Form 51-101F1
		the medium or	to only require disclosure of the
		'best' estimate	2C estimate for contingent
		of volume is	resources or the best estimate for
		sufficient.	prospective resources. However,
		Certain	if a 3C or high estimate is

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		reporting issuers may consider this requirement as onerous. • Estimates may vary widely due to limited information.	disclosed, section 5.17 of NI 51- 101 requires that the 1C or low estimate also be disclosed.
	IQRE requirement	Two commenters inquired whether an exemption will be available from the requirement to have an independent evaluation or audit of any contingent resources or prospective resources included in the annual statement of reserves data.	We thank the commenters for the question. The CSA has granted relief from the requirement for the annual preparation of an evaluation or audit by an independent qualified reserves evaluator to reporting issuers that have been able to establish that they have: (a) qualified reserves evaluators and auditors within the meaning of NI 51-101; (b) a well-established reserves evaluation process that is at least as rigorous as would be the case were it to rely upon independent reserves evaluators or auditors; and (c) implemented a technical quality assurance program in connection with the preparation of its internally generated reserves data. CSA staff are willing to consider relief for reporting issuers that are able to make the same representations in respect of their resources other than reserves data.
		Two commenters suggested that the	We thank the commenter for their input. The IQRE

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		independent qualified	requirement ensures that if a
		reserves evaluator	reporting issuer elects to disclose
		(IQRE) requirement	contingent resources and
		should only be	prospective resources in an
		required for	appendix to its statement
		"development	prepared in accordance with
		pending" contingent	Form 51-101F1, those estimates
		resources and that	are subject to the same rigour and
		making this a	technical quality assurance as the
		requirement for	reserves estimates included in the
		contingent resources	Form 51-101F1 disclosure. A
		and prospective	reporting issuer is not required to
		resources disclosed in	engage an IQRE for disclosure
		Form 51-101F1 seems	made outside of the required
		onerous and may not	annual statement.
		be necessary if	
		competent staff are	In addition, the internal qualified
		completing the	evaluator of the reporting issuer
		assessments.	can evaluate the resources and
			volumes and values audited by
			an IQRE.
		One commenter stated	We thank the commenter for the
		that an IQRE may not	input. If a reporting issuer
		have enough information at early	discloses contingent or prospective resources in an
		stages if license terms	appendix to its statement
		are not fully defined.	prepared in accordance with
		are not runy defined.	Form 51-101F1, section 3.2 and
			3.3 of NI 51-101 impose an
			obligation on the reporting issuer
			to provide "all information
			reasonably necessary to enable
			the qualified reserves evaluators
			or auditors to provide a report
			that will satisfy the applicable
			requirements of this Instrument",
			which includes the requirement
			to be prepared in accordance
			with the COGE Handbook.
		One commenter	We thank the commenter for the
		suggested that an	input, however, disclosure of
		IQRE should only be	contingent and prospective
		required to evaluate or	resources in the statement
		audit 75% of resources	prepared in accordance with
		other than reserves and	Form 51-101F1 is voluntary. If a

no need for review on the remaining 25%.reporting issuer includes disclosure of contingent resources at its own discretion, it may provide those estimates in respect of one or several of its properties. This flexibility requires that all contingent resources optionally included in an appendix to the Form 51- 101F1 be prepared by an IQRE or IQRA.Estimates of prospective and contingent resourcesSeveral commenters suggested that prospective resource estimates need to be risked, and that specific guidance should be included as to how risk should be incorporated into estimates.We thank the commenters for the in input. Where an estimate of volume or value of prospective resources is disclosed, paragraph 5.9(1)(d) of N151-101 requires a to clarify that for the purpose of optional annual disclosure, when contingent resources or prospective resources."We have included specific directions in the Form 51-101F1 to clarify that for the purpose of optional annual disclosure, when contingent resources are disclosed, a numeric quantification of the risks is required and the risks is requirement in Form 51-101F1 to clarify that if contingent resources are optionally disclosed in an appendix to the statement prepared in accordance with Form 51-101F1, a quantification	Item	Subject	Summarized Comment	CSA Response
prospective and contingent resourcessuggested that prospective resource estimates need to be risked, and that specific guidance should be included as to how risk should be incorporated into estimates.their input. Where an estimate of volume or value of prospective resources is disclosed, paragraph 5.9(1)(d) of NI 51-101 requires a reporting issuer to disclose, in writing, the "risks and the level of uncertainty associated with recovery of the resources."We have included specific directions in the Form 51-101F1 to clarify that for the purpose of optional annual disclosure, when contingent resources are disclosed, a numeric quantification of the risks is required and the risked estimates must be provided.We have updated the requirement in Form 51-101F1 to clarify that if contingent resources and prospective resources are optionally disclosed in an appendix to the statement prepared in accordance with			the remaining 25%.	disclosure of contingent resources or prospective resources at its own discretion, it may provide those estimates in respect of one or several of its properties. This flexibility requires that all contingent resources and prospective resources optionally included in an appendix to the Form 51- 101F1 be prepared by an IQRE or IQRA.
of, and explanation of the method		prospective and contingent	suggested that prospective resource estimates need to be risked, and that specific guidance should be included as to how risk should be incorporated into	 their input. Where an estimate of volume or value of prospective resources is disclosed, paragraph 5.9(1)(d) of NI 51-101 requires a reporting issuer to disclose, in writing, the "risks and the level of uncertainty associated with recovery of the resources." We have included specific directions in the Form 51-101F1 to clarify that for the purpose of optional annual disclosure, when contingent resources or prospective resources are disclosed, a numeric quantification of the risks is required and the risked estimates must be provided. We have updated the requirement in Form 51-101F1 to clarify that for the purpose of optional annual disclosure, when contingent resources are disclosed, a numeric quantification of the risks is required and the risked estimates must be provided. We have updated the requirement in Form 51-101F1 to clarify that if contingent resources are optionally disclosed in an appendix to the statement prepared in accordance with Form 51-101F1, a quantification

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			development are required. NI 51-101 is primarily focused on disclosure of reserves data. The techniques and evaluation and audit practices required to carry out a reserves or resources other than reserves evaluation are collectively governed by the COGE Handbook, the obligations imposed by professional organizations, as defined by NI 51-101, and best industry practices on the subject.
	Disclosure of NPV for contingent and prospective resources	Several commenters recommended that for contingent resources, they may disclose NPV for development pending and on-hold in some cases. For development not viable, sub-economic or unrecoverable, commenters suggested disclosing volumes only. For prospective resources, commenters suggested disclosing NPV or analog minimum economic field size. Additionally commenters suggested that economic and sub- economic resources should be disclosed separately and prospective resources should be risked for chance of discovery or perhaps show both unrisked and risked in Form 51-101F2.	We thank the commenters for their input. We have revised the presentation and clarified the requirements related to the optional disclosure of contingent resources and prospective resources in response to the valid concerns raised in respect of the disclosure of the net present value of future net revenue of contingent resources and prospective resources in the statement prepared in accordance with Form 51-101F1. Optional presentation of contingent resources as a part of the required annual filing may now only be made as an appendix to the Form 51-101F1. The disclosure must be classified according to the most specific sub-classes set out in the COGE Handbook, which have been refined in chapter 2 of volume 2. To highlight the difference between reserves and resources other than reserves, additional cautionary language for the estimates of value is now required. In addition, rather than

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			net present value, the disclosure
			of risked net present value of
			future net revenue will instead be
			required for contingent resources
			in the development pending
			project maturity sub-class (see
			section 10.2 of volume 1 and
			section 5.8.1 of volume 2 of the
			COGE Handbook).
			The ability to disclose contingent
			resources and prospective
			resources is increasingly
			important for reporting issuers at
			early stages with a need to
			express the potential of the
			interests they hold in their oil and
			gas assets. We have seen an
			increase in the disclosure of
			contingent resource volumes and
			values in the required annual
			disclosure of reporting issuers.
			We continue to be of the view
			that the disclosure of contingent
			resources and prospective
			resources without providing
			information as to its economic
			viability can be misleading. We
			are of the view that providing the
			risked net present value of future
			net revenue for contingent
			resources in the development
			pending project maturity sub-
			class and prospective resources
			volumes optionally disclosed in
			the annual statement will assist
			an investor "in reaching an
			opinion on the merit and
			likelihood of the company
			proceeding with the required
			investment." (see section 5.8.1 of
			the COGE Handbook volume 2).
			Balancing the benefit to certain
			reporting issuers in having the
		<u> </u>	reporting issuers in naving the

Item	Subject	Summarized Comment	CSA Response
			ability to provide disclosure of
			volumes of contingent and
			prospective resources and values
			of contingent resources in the
			development pending project
			maturity sub-class against an
			investor's need to appreciate the
			value of a particular property or
			group of properties to the
			reporting issuer, requires
			something more than the
			prohibition of the disclosure of
			contingent resources and
			prospective resources and
			something less than the ability to
			allocate value to those properties
			without a framework to properly
			account for how the reporting
			issuer arrived at that value. By
			replacing the requirement for net
			present value of future net
			revenue with a risked net present
			value of future net revenue in the
			development pending project
			maturity sub-class of contingent
			resources, investors should have
			enough information to determine
			whether the volumes allocated to
			a particular project are realizable
			while allowing the reporting
			issuer to speak to potential.
			Other than for contingent
			resources in the development
			pending project maturity sub-
			class, we are no longer requiring
			the disclosure of the value of
			contingent and prospective
			resource values when a volume is
			optionally disclosed as a part of
			the Form 51-101F1 disclosure.
			This is in response to a concern
			over the uncertainty associated
			with these estimates and the
			potential for misunderstanding
		<u> </u>	potential for misunderstanding

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			by a reader of the document.
			A reporting issuer may disclose estimates of volume and value of contingent resources other than those in the development pending project maturity sub-class and of prospective resources as a part of its annual disclosure, however, the reporting issuer should consider whether the level of uncertainty associated with the particular estimate is of such a degree to make that estimate misleading if used in the context of the Form 51-101F1.
		Several commenters suggested that poorly defined development and marketing plans may lead to misleading disclosures. The commenters noted that values for contingent and prospective resources are dependent on significant factors such as recovery technology, market access and development plans, costs and schedule,	We thank the commenters for their input. We have revised item 5.9(2)(d)(iii.1)(A) of NI 51- 101 to clarify that the estimated total capital requirements to achieve production and a general timeline of the project, including the estimated date of first production must be disclosed along with the contingent or prospective resources estimate. An investor will be able to assess the particular estimate against the information disclosed by the reporting issuer about the project. In addition to the disclosures
		which have the potential for significant variations in the assumptions around those factors among various parties assigning a value to a resource. Additionally, commenters noted that the requirement to	required by section 5.9 of NI 51- 101, refinement to the classification framework in the COGE Handbook will allow for more specific contingent resource and prospective resource sub-classes which reflect the stage of development. Information regarding recovery technology, market access, development plans, costs and

Item	Subject	Summarized Comment	CSA Response
		provide detailed	schedule would be required to be
		descriptions of	disclosed if a reporting issuer
		development projects	optionally discloses contingent or
		associated with	prospective resources.
		disclosed contingent	
		and prospective	An estimate of contingent
		resources will be	resources or prospective
		unduly onerous for	resources is made as of an
		reporting issuers with	effective date. Disclosure about
		contingent resources and prospective	the project at the effective date, allows an investor to assess the
		resources located in	validity of the estimates and the
		multiple	likelihood that the reporting
		accumulations, each	issuer would actually develop the
		requiring its own	contingent or prospective
		development plan,	resources. The omission of this
		even though the	information could mislead an
		descriptions may	investor about the potential
		provide limited useful	represented in contingent or
		information.	prospective resources estimates.
		Several commenters	Other than for contingent
		stated that significant	resources in the development
		uncertainties are	pending project maturity sub-
		involved with long	class, we are no longer requiring
		term contingent	the disclosure of the value of
		resource and	contingent and prospective
		prospective resource	resource values when a volume is
		estimates and the	optionally disclosed as a part of the Form 51-101F1 disclosure.
		requirement for NPV of prospective and	This is in response to a concern
		contingent resources	over the uncertainty associated
		should be removed.	with these estimates and the
		should be removed.	potential for misunderstanding
			by a reader of the document.
			A reporting issuer may disclose
			estimates of volume and value of
			contingent resources other than
			those in the development pending
			project maturity sub-class and of
			prospective resources as a part of
			its annual disclosure, however,
			the reporting issuer should
			consider whether the level of

Item	Subject	Summarized Comment	CSA Response
			uncertainty associated with the particular estimate is of a sufficient degree to make that estimate misleading if used in the context of the Form 51-101F1.
			If a reporting issuer is unable to comply with section 5.9 of NI 51-101 or the disclosure requirements of the Form 51- 101F1 because there is not enough detail or certainty around the project, then the reporting issuer should consider whether it would be misleading to include the contingent or prospective resource estimates in annual disclosure.
		One commenter suggested that contingent resources should be disclosed separately in Appendix 1.	We thank the commenter for the input. We have revised the presentation of the Form 51- 101F1 to require the presentation of the optional disclosure of contingent resources and prospective resources in an appendix to the Form 51-101F1 or the annual information form.
		Some commenters stated that the new provisions require issuers to ascribe economic value to resources (that are not themselves required to be economic), which could result in misleading or confusing disclosures caused by issuers	We thank the commenters for their input. We have changed the requirement for net present value of future net revenue to a requirement to disclose the risked net present value of future net revenue of contingent resources in the development pending project maturity sub-class. If a reporting issuer optionally discloses a volume of contingent resources in the development
		ascribing vastly different economic values to contingencies depending on their circumstances.	pending project maturity sub- class that has a negative risked net present value of future net revenue in its statement prepared in accordance with Form 51- 101F1, it would be important for

Item	Subject	Summarized Comment	CSA Response
Item	Subject	One commenter suggested that the requirement to disclose NPV of FNR may cause certain reporting issuers to consider it enough reason to re- consider the merits of listing as a public	an investor to understand the extent to which the contingent resources are negative as it suggests the likelihood of the development of contingent resources. A reporting issuer may disclose estimates of volume and value of contingent resources other than those in the development pending project maturity sub-class and of prospective resources as a part of its annual disclosure, however, that disclosure will be subject to the prohibition against misleading statements. An estimate may be misleading for the purpose of the required annual disclosure if the estimate is highly uncertain. We thank the commenter for the input. The disclosure of contingent and prospective resources is optional. If a reporting issuer seeks to establish its potential to its investors on the basis of its contingent resources and prospective resources and elects to disclose that potential in
		consider the merits of	and prospective resources and
	Guidelines for	One commenter	issuer's contingent and prospective resources. We thank the commenter for the
	disclosing contingent and prospective	suggested that COGE Handbook volume 2, chapter 2 may not	input. Chapter 2 of volume 2 of the COGE Handbook requires that "evaluators must rely on

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Item	Subject resources	Summarized Comment provide sufficient guidelines to ensure consistent disclosure of all resources.	their professional expertise and experience, be accountable for their interpretations and provide clear and complete documentation for their work." Under the current version of NI 51-101 reporting issuers can disclose both or either of contingent and prospective resources volumes and values with minimal guidance. The new guidelines enhance the classification framework and provide additional guidance to evaluators in classifying and categorizing contingent and prospective resources. We thank the commenter for the input. The refinements to the classification framework in the COGE Handbook provide an indication as to the stage of development of the particular estimate. In addition, under item 5.9(2)(d)(iii.1)(D) of NI 51-101, reporting issuers will be required to disclose whether the project is based on a conceptual or pre- development study. Prior to including an estimate of contingent or prospective resources in the statement prepared in accordance with Form 51-101F1, a reporting issuer is required to provide all information reasonably necessary to enable the qualified reserves
-	uirements to disclos d metric (Question 5		• •

Item	Subject	Summarized Comment	CSA Response	
the reporting issuant if there was metric and a cau NI 51-101 to imp as BOEs, finding	uer to disclose the st no identifiable stand tionary statement. I pose the above descr g and development c	andard, methodology and lard, the parameters used i Do you support the propos		
Section 5.14 of NI 51-101	General comments for disclosure-based approach to oil and gas metrics	6 commenters support the proposed requirements to disclose the standard, methodology and meaning of the disclosed metric.	We thank the commenters for their input.	
	Equivalency	One commenter agreed with the proposal, however recommended retaining 6 Mcf = 1 BOE for reporting equivalency.	We thank the commenter for the input. We have provided guidance in the Companion Policy to 51-101 which describes a method of providing disclosure on BOEs. The COGE Handbook states:	
			Reserves quoted in BOE calculated using a conversion of 6:1 <i>Mcf/BOE</i> generally overstate the reserves of a company, but it is currently the most commonly used method in the industry.	
			The best approach to considering investment alternatives is not to use BOE conversions at all.	
5. Marketability of Production & Reserves				
Section 5.4 and 5.5 of NI 51-101	Point of sale	One commenter stated that the new provisions should not be interpreted to prevent	We thank the commentor for the input. The proposed amendment to section 5.4 of NI 51-101 maintains the concept that the	

Item	Subject	Summarized Comment	CSA Response
		the booking of NGLs subject to Aux Sable agreements as reserves. Another commenter stated that there are	value assigned to reserves should be determined at the point at which the particular product type is to be or was sold. The alternate reference point allows reporting issuers to have a point,
		challenges with determining the proper future net revenue that would be attributed to the wet gas stream at the delivery point into	prior to the first point of sale, at which it would be appropriate to allocate value. This does not, however, permit the allocation of value after the first point of sale.
		a system, and that the future net revenue determined at the delivery point into the system may be misleading and not be	To clarify that product types must be recovered before the first point of sale or alternate reference point, we have re- inserted section 5.5 of NI 51-101.
		aligned with the issuer's financial disclosure.	The responsibility for ensuring public disclosure of future net revenue is not misleading falls on the reporting issuer and its independent qualified reserves evaluator (for more detail, see
6 Abanda	nment and Reclama	tion Costs	section 2 of CSA Notice 51-327).
Sections 1.1(n.3) and (z.01) of NI 51-101, and item 5.2 of Form 51- 101F1	Distinction between abandonment and reclamation costs	One commenter suggested we not separate abandonment and reclamation costs, but allow issuers to continue to disclose on a combined basis and footnote as such, particularly where a reporting issuer's estimate of either abandonment costs or reclamation costs is less than a certain percentage (eg. 20%) of the whole.	We thank the commenter for the input. We have revised the definition of abandonment and reclamation costs and have revised the sample table included in the Companion Policy to clarify that the abandonment and reclamation costs may be disclosed together.
	Abandonment and reclamation costs - offshore	One commenter stated that the reclamation costs definition does	We thank the commenters for the input. We have revised the definition of abandonment and

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	and scope	not contemplate offshore costs. Additionally, a commenter suggested that a definition for "in the vicinity of the well" and "land" is required.	reclamation costs to clarify that the reporting obligation applies to a "property that has been disturbed by oil and gas activities", which by definition are activities prior to the first point of sale.
		A commenter suggested that the definition of reclamation costs should be amended to better define its scope, and in particular, whether it is meant to extend to costs beyond well-related reclamation costs.	
	Evaluation by IQRE	One commenter suggested we not repeal item 6.4 of Form 51-101F1 because reserves evaluations only include well abandonment costs. Other abandonment and reclamation costs should be disclosed separately. The commenter suggested that the repeal of 6.4 means that abandonment and reclamation costs associated with properties and wells with no assigned resources, all pipelines,	We thank the commenter for the input. We will repeal item 6.4 of Form 51-101F1. Since its implementation in 2003, reporting issuers have been required for the purpose of annual disclosure under NI 51- 101 to calculate the net present value of future net revenue using both abandonment and reclamation costs. Disclosure of a reporting issuer's obligations relative to the abandonment of pipelines and facilities not included at the field level would be available in the financial statements of the reporting issuer. Section 4.5 of the COGE Handbook volume 1 requires an
		and facilities not located on the well site will not be included in	evaluator to take certain measures to reduce the likelihood that data not prepared by the

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Item	Subject	Summarized Comment the reporting issuer's disclosure. The commenter noted that IQREs are not qualified to address total field abandonment and reclamation costs. The commenter asked if IQREs would be allowed to rely on estimates provided by the reporting issuer.	CSA Response independent qualified reserves evaluator is erroneous or unrepresentative. The COGE Handbook states that "one or more cross checks or other tests can confirm the reasonableness and completeness of client provided information". A cross check that may be of assistance in respect of reclamation costs could be to request the "cooperation and assistance from the company's independent financial auditor." The reporting issuer is obliged on a regular basis to revise its estimates regarding asset retirement obligations, making the financial auditor a potential resource to the evaluator. Another cross check may be for the evaluator to compare information provided by the reporting issuer with guides provided by regulators in the jurisdiction in which the reclamation costs will accrue. For example, in Alberta and Saskatchewan, regulators have estimated abandonment and reclamation costs for different
	Disclosure in	One commenter	regions in the province. We thank the commenter for the
	audited financial statements	suggested that the current disclosure of abandonment and reclamation costs in audited financial statements is adequate and that further evaluation of these costs would be redundant.	we thank the commenter for the input. The asset retirement obligations included in financial statements only include existing wells and facilities; they do not include retirement obligations for "planned wells", see 7.6.4 of the COGE Handbook volume 1. Abandonment costs are also used to test the economics of the undeveloped properties.
	Abandonment and reclamation costs at the asset	Two commenters wanted clarification on whether abandonment	Our view is that abandonment and reclamation costs are only included at the company level,

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	level	and reclamation costs need to be applied at the asset level (including contingent and prospective resource projects).	which is compatible with accounting requirements.
	Location of abandonment and reclamation costs disclosure	One commenter requested clarification on where abandonment and reclamation costs with depleted and / or non-productive assets would be included.	If reserves are not assigned to the depleted or non-productive assets, generally speaking, the abandonment and reclamation costs would no longer be included in the required annual oil and gas disclosure, but would presumably continue as an asset retirement obligation in the reporting issuer's financial statements.
	Clarification of abandonment and reclamation costs	One commenter requested clarification on whether abandonment and reclamation costs should include future leases, wells and facilities or should they be restricted to existing abandonment and reclamation liabilities.	Abandonment and reclamation costs should include both existing and future leases, wells and facilities. Abandonment and reclamation costs for the purpose of NI 51-101 are based on the regulations of the jurisdictions within which a reporting issuer carries out oil and gas activities.
7. Other A	mendments		
Other Amendments	Removal of consent	One commenter agreed with removal of section 5.7 consent.	We thank the commenter for the input.
	Effective date of evaluation by evaluator	One commenter agreed with the change to Form 51-101F2 for evaluators to take responsibility only in respect of events up to the effective date of the evaluation.	We thank the commenter for the input.
	Canadian Professional Organization	One commenter noted that the Association of Professional Geoscientists of Nova Scotia is not listed as a	We thank the commenter for the input. The Association of Professional Geoscientists of Nova Scotia has now been included in the Companion

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		Canadian Professional Organization.	Policy.
	Definition of conventional natural gas in section 1.1(f.2) of NI 51-101	One commenter suggested revising the definition of conventional natural gas since it does not fit tight gas such as Montney.	We thank the commenter for the input, we have revised the definition of conventional natural gas to align with the definition of conventional resources in chapter 2 of COGE Handbook volume 2 as follows:
			Conventional natural gas means natural gas that has been generated elsewhere and has migrated as a result of hydrodynamic forces and is trapped in discrete accumulations by seals that may be formed by localized structural, depositional or erosional geological features.
	Relative density in section 1.1(n.5) of NI 51- 101	One commenter suggested the addition of the word "relative" before "density" since API gravity is not a measure of density.	We thank the commenter for the input. We have revised the definitions to refer to "relative density".
	Clarification of conceptual study in section 5.9(2)(d)(iii.1)(C) of NI 51-101	One commenter suggested the wording of 5.9(a)(iii.1)(C) is awkward. The commenter suggested adding "based on" before "a conceptual". The commenter stated that the difference between a conceptual and pre-development study is not clear.	We thank the commenter for the input. Describing the project level of detail provides an indication of the reliability of an evaluation at various stages of maturity. A conceptual study is the initial stage in the development of a project scenario, with limited detail and typically based on limited information. A pre-development study is an intermediate step in the development of a project evaluation scenario, where the level of economic analysis is sufficient to assess development options and overall project

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			viability, but is insufficient for making a final investment decision. These concepts are described in greater detail in chapter 2 of the COGE Handbook volume 2.
	Preparation date in item 1.1.3 of Form 51-101F1	One commenter questioned whether references to preparation date are still necessary.	We thank the commenter for the input. The preparation date is necessary because, as is described in Instruction (3) to item 1.1 of Form 51-101F1, it takes time after the end of the financial year to assemble the information for that completed year that is needed to prepare the required disclosure as at the end of that financial year.
	Reserves volume disclosure in section 5.1 of Form 51-101F1	One commenter noted the disclosure of first attributed reserves volume is not meaningful to investors.	We thank the commenter for the input. The removal of first attributed is outside of the scope of the changes currently being contemplated by the proposed amendments.
	Proved undeveloped reserves in section 5.1.1 of Form 51-101F1	One commenter suggested replacing "not planning to develop" with "deferring the development" creates a sentence that does not make sense.	We thank the commenter for the input. We have revised item 5.1.1 of Form 51-101F1 as follows: discuss generally the basis on which the <i>reporting issuer</i> attributes <i>proved undeveloped</i> <i>reserves</i> , its plans (including timing) for developing the <i>proved</i> <i>undeveloped reserves</i> and, if applicable, its reasons for deferring the development of particular <i>proved undeveloped</i>
	Commerciality under Part 7 of	One commenter suggested that the	<i>reserves</i> beyond two years. We thank the commenter for the input. We agree that sub-classes

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	Form 51-101F1	summation of an economic project with a sub-economic project would be misleading.	should not be summed but should be reported separately due to variations in chance of commerciality. We have revised the proposed disclosure with Part 7 of Form 51-101F1 and the appendix to the Companion Policy.
	Definition of field	One commenter noted the term "field" is not defined.	We thank the commenter for the input. Clarification on our interpretation of the term "field" is provided in section 5.8 of the companion policy to NI 51-101.
	First attributed PUD and PbUD in the aggregate	One commenter supported the requirement to remove the aggregate first attributed PUD and PbUD.	We thank the commenter for the input and this revision is incorporated into the amendments to <i>NI 51-101</i>
	Risked net present value of future net revenue	One commenter stated it is not clear whether other elements of future net revenue for contingent and prospective resources must be reported.	We thank the commenter for the input. Disclosure of the risked net present value of future net revenue of contingent resources and prospective resources does not require a similar breakdown as required for reserves under item 3(b) of 2.1 of Form 51-101F1.