

APPLICATION OF THE UNFC IN FINANCIAL REPORTING



Dr. David C. Elliott
Chief Petroleum Advisor
Alberta Securities Commission

A | S | C

Alberta Securities Commission

UNECE AHGE on Harmonization of Fossil Energy and Mineral Resources Terminology
Sixth Session, Geneva, 25-27 March 2009



- Background: UNFC Needs
- Securities Regulation
- Canadian NI 51-101 as an example
- The Changing Regulatory Environment



- Business Processes
- Resource Management
- International Energy Studies
- Financial Reporting

Securities
Accounting

*From UNECE Ad Hoc Group of Experts on
Harmonization of Fossil Energy and Mineral
Resources Terminology*

A|S|C

Alberta Securities Commission



- To identify the information needs of the various users and to determine how best these can be provided:
 1. In a standard form
 2. In a manner that variations from a standard can be recognised and understood.



- Time – the general timeframe of the information for a particular need.
- Aggregation level – the general level of aggregation for a particular need.

A | S | C

Alberta Securities Commission



- The information needed by an operating entity and its partners in order to make operational decisions.
- Time: generally short term (quarterly to a few years).
- Aggregation: Low to medium



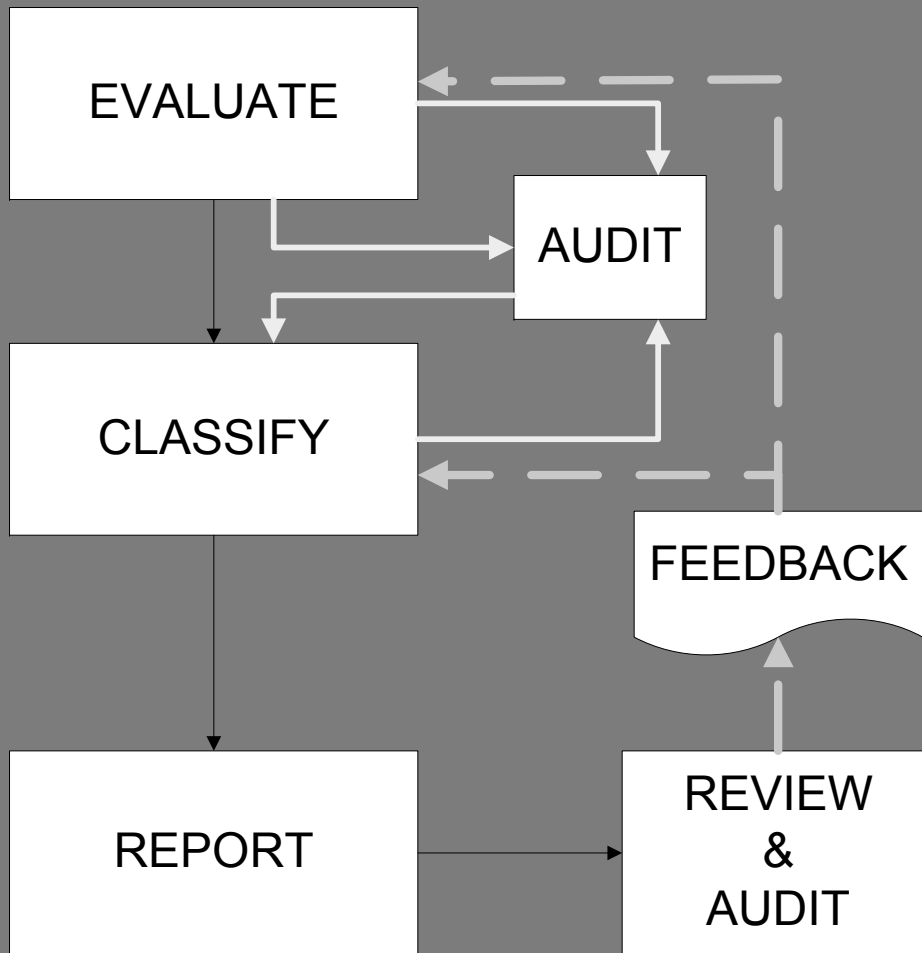
- The information needed for the administration of resource development:
 - E.g., Issuing licenses, development approvals, etc.
- Time: Short to medium
- Aggregation: Low to medium



- Information needed for the study of energy supply.
 - Should this be **Resource**, not Energy, study needs?
- Time: One to many years
- Aggregation: Generally high



- The information on resources that is reported to outside parties:
 - To regulatory agencies
 - For accounting purposes
 - To others, e.g, investment analysts, general public
- Time: Short to medium
- Aggregation: Generally medium





- Measurement is based on Limited Data:
 - Inherent Uncertainty
 - Requires Statistical Concepts
- Classification Provides a Common Language:
 - Key Information: Best Estimate and Associated Uncertainty
 - Various Systems (UNFC, CIM, PRMS, Etc.)
- Reporting
 - May not be public

A|S|C

Alberta Securities Commission



- “Disclosure” refers to public reporting, not to evaluation or classification.
- Regulator:
 - Sets Disclosure Standards
 - Reviews and Audits for Compliance With:
 - Regulatory Disclosure Legislation
 - Industry Standards of Measurement and Classification
- Can use as an example for non-public reporting



The Flotation of Oil Companies

To Stop Extravagant Flotations Is in Best Interests of Calgary and of Legitimate Development—Analysis of Paraffin Oil Company Prospectus—Large Profits for Promoters and Small Ones at Best for Investors — —

WARNING TO THE PUBLIC

Many Oil Companies Now Being Formed with Extravagant Capital — Do Not Buy Oil Stock Without the Fullest Investigation —



- Not yet used for this purpose
- Could be used if appropriate disclosure guidelines were developed
- Will describe:
 - General principles of disclosure
 - Using Canadian practice as a template



- Protect the integrity of the capital market:
 - Ability to raise funds
 - Ability to trade securities
- Balance conflicting goals:
 - Investor protection: relevant, timely, and reliable information
 - Access to capital: compliance costs not too burdensome



- Securities regulator governs stock exchanges in Canada.
- Cannot list on an exchange without regulatory approval.
- Exchanges may have additional listing requirements.



- **Full**
- **True**
- **Plain**

- Materiality
- Continuous Disclosure

- Selective Disclosure
- Misleading information and secondary market liability

A|S|C

Alberta Securities Commission



- Information that Significantly Affects, or Could Reasonably be Expected to Affect the Market Price or Value of the Issuer's Securities:
 - Quantitative
 - Qualitative
- Must be Disclosed
- Trading on Undisclosed Material Information is **INSIDER TRADING.**



- Annual Financial Statements
- Interim Financial Statements (Quarterly)
- Management Discussion and Analysis
- Certifications
- Annual Information Forms
- Annual Oil and Gas Disclosure (NI 51-101)
- Information Circulars (e.g. Annual Meeting)
- Material Changes



- Disclosure to a limited set of individuals without release to the public:
 - E.g., well results
- Severe penalties in Canada and many other countries.



- Information should not be misleading, even by omission.
- Severe penalties in Canada and many other countries.
- Liability may extend to Experts.



- Large Body of General Securities Legislation
- General provisions are applicable to all reporting issuers
- More petroleum and mining companies on Canadian Exchanges than any other country
- Because of the Importance to the Canadian Economy, Special Legislation For:
 - Oil and Gas: National Instrument 51-101
 - All Reporting Issuers
 - Mining: National Instrument 43-101
 - All Issuers

A | S | C

Alberta Securities Commission



- Replace the resource terminology of NI 51-101 with the equivalent UNFC designation:
 - E.g., 111 instead of Proved reserves, etc.
- Describe the product type:
 - E.g., 111 Light and medium oil
- Details will depend on:
 - Specific regulatory requirements
 - Product type (differences for minerals!)



- “Oil and Gas Activities”:
 - Exploration (Inc. Land Purchases, Seismic, etc.)
 - Acquisition
 - Drilling, Completion, Production, Construction
- Conventional and Unconventional Hydrocarbons:
 - Includes Bitumen (In-situ, Mined)
 - Synthetic Crude
 - Shale Gas and Oil
- All Disclosure:
 - Regulatory (Annual) Filings
 - Other Disclosure: News Releases, Webcasts, etc.



- Requires Annual Independent Evaluation
- Refers to Canadian Oil and Gas Evaluation Handbook (COGEH) for Standards:
 - Resource Definitions of Canadian Petroleum Society
 - Guidance Prepared by Industry (SPEE)

A|S|C

Alberta Securities Commission



- Product type reported at point of sale
- Annual Filings:
 - At a point in time
 - Three forms
- Continuous Disclosure (NI 51-102):
 - News releases
 - Webcasts
 - Investor presentations
 - Interviews
 - Etc.



- All reporting issuers engaged in oil and gas activities
- Evaluation by Qualified Reserves Evaluator or Auditor is mandatory:
 - Independent for Proved and Probable reserves
 - Optional for other resource types, but usually independent
- For defined product types:
 - Conventional: Light & medium, Heavy, Natural Gas
 - Unconventional: CBM, bitumen, synthetic crude, etc.
- Three forms:
 - F1 Statement of Reserves & Resources
 - F2 Evaluators or Auditors Report
 - F3 Management & Directors Report

A | S | C

Alberta Securities Commission



- Disclosure:
 - Mandatory: Proved, Probable
 - Voluntary: Possible, Other Resource Categories
 - E.g., Contingent, Prospective Resources
- Pricing information:
 - Mandatory Forecast Prices
 - Optional Constant (but little used)
- NPV at 0, 5, 10, 15, 20% discount rates
- Before and after tax



FORECAST PRICES AND COSTS

RESERVES Millions of dollars	LIGHT AND MEDIUM OIL		NATURAL GAS	
	Gross (Mbbls)	Net (Mbbls)	Gross (MMcft)	Net (MMcft)
RESERVES CATEGORY				
PROVED:				
Developed Producing	677	586	106,026	82,768
Developed Non-Producing	58	53	13367	10628
Undeveloped	-		7683	6283
TOTAL PROVED	735	639	127076	99679
PROBABLE	308	269	53862	42940
TOTAL PROVED PLUS PROBABLE	1043	908	180938	142619

Could replace Reserves Categories with the equivalent UNFC designation



NET PRESENT VALUE OF FUTURE NET REVENUE BEFORE INCOME TAXES
FORECAST PRICES AND COSTS

DISCOUNT RATE	0%	5%	10%	15%	20%
Millions of dollars					
RESERVES CATEGORY					
PROVED:					
Developed Producing	625	500	425	373	334
Developed Non-Producing	72	58	49	42	37
Undeveloped	44	33	26	21	18
TOTAL PROVED	741	591	500	436	389
PROBABLE	346	221	161	126	102
TOTAL PROVED PLUS PROBABLE	1087	812	661	562	491

Could replace Reserves Categories with the equivalent UNFC designation



- Additional information on reserves:
 - Undeveloped Reserves
 - Significant Factors or Uncertainties
 - Future Development Costs



- Other Information:
 - Numbers of wells
 - Properties with no reserves
 - Forward Contracts
 - Abandonment and Reclamation costs
 - Tax horizons
 - Exploration and development activities
 - Production estimates and history



ASSOCIATED AND NON-ASSOCIATED GAS

	Proved	Probable	Proved + Probable
	MMcf	MMcf	MMcf
December 31, 2006	114,967	43,773	158,740
Discoveries	2,932	940	3,872
Extensions	13,010	8,155	21,165
Infill Drilling	8,516	4,656	13,172
Improved Recovery	578	704	1,282
Technical Revisions	(1,297)	(9,277)	(10,574)
Acquisitions	13,292	4,936	18,228
Dispositions	0	0	0
Economic Factors	(253)	(25)	(278)
Production	(24,671)	0	(24,671)
December 31, 2007	127,074	53,862	180,936

A | S | C

Alberta Securities Commission



- Signed by the Independent Qualified Reserves Evaluator or Auditor to confirm that:
 - At least 75% of 10% NPV of Proved + Probable reserves were evaluated or audited, the balance reviewed.
 - Provide an opinion on their reasonableness.



- Signed by:
 - Two Senior Officers
 - Two Directors
- To confirm that they have reviewed the evaluation process and have approved the filings.



- Example of different disclosure philosophies
- USA:
 - Comparability (SMOG)
 - Limited to reserves
- Canada:
 - Information for decision-making
 - All resource types



		US (SEC)	Canada (CSA)
RESOURCES			
RESERVES	Proved	Mandatory	Mandatory
	Probable Possible	Optional	
OTHER RESOURCES		Not allowed	Optional
PRICING			
CONSTANT		Mandatory	Optional
FORECAST		Optional Sensitivity Case	Mandatory
SCOPE			
FILINGS		Yes	Yes
OTHER		Not addressed	Yes
DISCOUNT RATE		*10%	0, 5, 10, 15, 20%
INDEPENDENT EVALUATION		No	Yes

***FASB 69**

A | S | C

Alberta Securities Commission



- A reporting system that does not provide the information required for auditing the reported information is of limited use.
- Technical revisions are a key auditing tool.



- Statutory Filing Review
- Compliance Review:
 - Annual Filings
 - News Releases, Webcasts, etc.
- Technical Audits of Reserves and Resources:
 - Prospectuses
 - Continuous Disclosure
 - Monitoring
 - Miscellaneous
- Communication:
 - Annual Report, Papers, Talks



- Unconventional Resource Disclosure has increased substantially:
 - Coal Bed Methane
 - Bitumen
 - Shale Gas
- Full Spectrum Disclosure (all resource classes) has increased substantially:
 - Allows raising of funds for other than the development of reserves.
- Changes to regulation and guidance



	CONVENTIONAL	UNCONVENTIONAL
KEY FACTOR	EXPLORATION	RECOVERY
ASSET BALANCE		
RESERVES	HIGH	LOW
RESOURCES	LOW	HIGH

Difference can be very significant in:

- Assessing risk and disclosure
- Raising money on the market



- Many similarities to NI 51-101, but differences reflective of different industries.
- Evaluation report is triggered by events and is not an annual requirement.
- Applies to all issuers not just reporting issuers.
- Limited disclosure allowed on exploration activities.
- Generally more detailed on fewer properties.
- Personal site inspection required.

A | S | C

Alberta Securities Commission



- ASC website <http://www.albertasecurities.com/>
 - Legislation, Forms, Companion Policy
 - Annual Oil and Gas Review Reports
 - Papers
- NI 51-101 and NI 43-101 regulatory disclosure is filed on SEDAR (http://www.sedar.com/issuers/issuers_en.htm):
 - E. g. see Enerplus Resources Fund SEDAR postings for 13 March 2009, Annual Information Form which contains the information required by NI 51-101Other companies file the three forms separately from their Annual Information Form.

A | S | C

Alberta Securities Commission



David Elliott, Ph.D., P. Geol.
Chief Petroleum Advisor

Alberta Securities Commission
4th Floor, 300 – 5th Avenue S.W.
Calgary, Alberta Canada
T2P 3C4

Tel: 403.297.4008

Fax: 403.297.2082

david.elliott@seccom.ab.ca

www.albertasecurities.com

A | S | C

Alberta Securities Commission