CONCENTRIC ENERGY ADVISORS

# Panel 4 Presentation

# Intragaz Limited Partnership

Presented by:

J. S. Gaske

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# I. Comparable Proxy Group for Storage Operations

## A. The appropriate proxy group for Intragaz' storage operations includes other mid-stream pipeline and storage operations.

1. Pipelines and storage companies often are regulated like monopolies, but they do not have franchised service territories and are not protected from entry by competitors;

2. Pipelines and storage companies sell wholesale services to other large energy companies;

3. Standard & Poor's considers storage to be in the "mid-stream" category which has significantly greater risks than gas distribution companies.

# I. Comparable Proxy Group for Storage Operations

## B. The difference between Gaz Métro and Intragaz risks is demonstrated by the history of Intragaz:

1. The Régie would not allow Gaz Métro to develop the storage field because the Régie believed that storage was too risky for a gas distribution company to undertake;

2. The offer of a regulated gas distribution company rate of return, plus a premium, was too low to attract capital to the project.

# I. Comparable Proxy Group for Storage Operations

C. Generic Canadian utilities, and U.S. LDC's both have lower risks than a storage company and are not appropriate proxy companies for Intragaz.

D. The two proxy groups in my analysis – (i) Diversified Canadian Utility Companies and (ii) U.S. Natural Gas Transmission and Storage Companies – have risks that are reasonably comparable to those of Intragaz.

# II. Risks of Intragaz

## A. Intragaz is entirely dependent on a single customer and does not have a diversified revenue source

1. Standard & Poor's also considers single-asset storage companies, like Intragaz, to have much higher risk than the integrated mid-stream companies that comprise the U.S. Gas Transmission and Storage proxy group:

   "Whether a storage asset (depleted reservoir, salt dome cavern, or aquifer) developer is a diversified midstream energy company, a regulated utility, or a single-asset project sponsor, we view the general risks of storage development similarly. Although the individual risks are similar, projects financed on a single-asset basis ***entail a much higher degree of financial risk than an integrated midstream company that relies on a more diverse revenue stream."***[1]

1. From page 2 of S&P Report "U.S. Natural Gas Storage Owners Face Uncertainty As the Sector Copes With Volatile Prices and Demand," December 23, 2008, provided in response to IGUA IR to Gaske 6.

# II. Risks of Intragaz

## B. Intragaz has contracts that are significantly shorter than the depreciable life of its assets;

1. The fact that the contract is less than the depreciable life of the assets indicates that the buyer, or its regulator, sees a risk associated with signing a longer term contract;

2. Investors see the same risks. In referring to storage companies, Standard & Poor's states:

> *"We would expect any candidate for investment grade to have long-term contracts and an appropriate leverage profile that ensures contract revenue will comfortably cover all operating costs and debt service for a substantial portion of the debt's tenor."* [2]

2. From page 3 of S&P Report "U.S. Natural Gas Storage Owners Face Uncertainty As the Sector Copes With Volatile Prices and Demand," December 23, 2008, provided in response to IGUA IR to Gaske 6.

# II. Risks of Intragaz

## C. Effect of a 10-Year Contract for Intragaz

1. During the 10-year period Intragaz retains several types of risks.

2. During the 10-year period, Intragaz is responsible for gas in storage and retains the risk that gas migration will cause a loss of gas.

3. Failure of storage facilities is not limited to salt dome storage.

4. The Gaz Métro contract with Intragaz is not a TBO.

# II. Risks of Intragaz

## D. Intragaz is a small company with the greater risks associated with smaller companies;

1. Many studies have found that smaller firms require higher returns;

2. Smaller Canadian companies have experienced higher returns.

3. The Régie has recognized the greater risk of small companies in a recent Gazifère decision:

> "[89] The Board assesses the overall risk of Gazifère above average, mainly because of its size and the amount of competition from electricity in Quebec. ."[3]

3. Decision D-2010-147 (26 November 2010).

# III. Capital Structure and Financial Risk

A. Intragaz' discussions with lenders indicate that its business is too risky to allow it to borrow for a term longer than its customer contract;

B. A 50% equity ratio is normal and appropriate for a mid-stream company, especially one with the risks of Intragaz;

C. One purpose of a 10-year contract is to provide enough security so that Intragaz can take on the additional financial risks associated with debt;

D. A 10-year contract will allow Intragaz to use debt to reduce the weighted average cost of capital, thereby providing a lower cost of service for the benefit of its customer;

# III. Capital Structure and Financial Risk

## E. It would be incorrect to argue that Intragaz should not be treated as a stand-alone entity because Gaz Métro originally wanted these assets in its rate base.

1. These assets have never been in rate base and Gaz Métro did not develop the Intragaz storage facilities;

2. Since 1988, the Régie has *required* that Intragaz be a stand-alone company with stand-alone risks;

3. It was only later, in 2005, that Gaz Métro invested by buying a *partial* interest in the storage company – GdF Québec also owns a significant interest and is not a customer;

4. Gaz Métro's later partial investment in Intragaz did not change the fact that Intragaz is a stand-alone storage company.

# III. Capital Structure and Financial Risk

**F. The suggestion that the owners of Intragaz should guarantee Intragaz' debt would be a violation of the stand-alone principle. The fair return standard requires a return that is sufficient to attract capital, without parent guarantees.**

1. After requiring that a separate, stand-alone company take the risk of developing storage it would be ironic to base the capital structure and cost of debt on the assumption that the shareholders should guarantee the debt.

2. A debt guarantee would ask shareholders to cross-subsidize Intragaz' ratepayers without just compensation for the cost of this subsidy.

# III. Capital Structure and Financial Risk

G. Like Gazifère, Intragaz has greater risks than its owners and the need for a capital structure and rate of return that reflects its risks as a stand-alone company.

# IV. Advantages of DCF Approach

**A. The DCF approach involves two variables, one of which (the dividend yield) is known and easy to calculate, and one of which (investors' expected growth rates) must be estimated.**

1. In the past, one reason the Régie has not adopted DCF is the lack of a published source of consensus analysts' growth rate estimates for Canadian companies.

2. Beginning in early 2012, SNL began collecting and publishing analysts' estimates for Canadian utility companies, thus, the lack of such data should no longer be a concern.

3. Another concern in the past has been a claim that analysts' growth rates might be biased.

# IV. Advantages of DCF Approach

*(Cont.)*

4. Laws governing investment advisory firms in the U.S. were revised 10 years ago and recent research indicates that there is no bias in analysts' growth rate estimates.

# IV. Advantages of DCF Approach

**B. The CAPM approach involves three variables, one of which (the risk-free rate) should be known, two of which (beta and the market risk premium) must be estimated.**

1. Beta has been shown to be an unreliable measure of expected returns and is essentially unmeasureable.

2. The market risk premium is difficult to measure due to problems with defining the "market" and because it requires an indication of investors' market expectations.

3. There is a growing realization that the problems with CAPM are exacerbated when the risk-free rate is exceptionally low.

# IV. Advantages of DCF Approach

**C. The greater uncertainty of the inputs for the CAPM (two or more unknown variables to estimate) compared with the DCF (one unknown variable to estimate), suggest that the DCF is the more straightforward and reliable approach.**

**D. DCF is widely used as the standard method in the U.S.**

1. The BCUC adopted DCF as its primary approach in a 2009 decision; [4]

2. Alberta based its generic rate of return in 2011 on both DCF and CAPM. [5]

4. British Columbia Utilities Commission, In the Matter of Terasen Gas Inc., Terasen Gas (Vancouver Island) Inc., Terasen Gas (Whistler) Inc. and Return on Equity and Capital Structure, December 16, 2009, p. 45.; discussed at Gaske, p. 37.
5. Alberta Utilities Commission, Decision 2011-474 (December 8, 2011), para. 144.

# IV. Advantages of DCF Approach

E. Because the basic CAPM calculation has been producing implausible and unreasonable results in recent years, those people using the CAPM in regulatory proceedings have had to abandon a pure CAPM by making significant adjustments to the results.

# IV. Advantages of DCF Approach

## F. Drs. Gaske and Booth both agree that the DCF is likely to produce more reliable results in the current market environment.

1. Gaske: "For all of the reasons discussed above, the CAPM should not be considered to be a valid or reliable method for estimating the cost of common equity capital for a regulated company." (p. 52)

2. Booth: "… this analysis confirms the implications of the current problems in the bond market on the CAPM estimates … As a result, it supports my adjustments to the CAPM estimates and the value of currently looking at DCF estimates." (p. 69)

# IV. Advantages of DCF Approach

*(cont.)*

3. After demonstrating that DCF is more reliable than CAPM, and that his DCF results were substantially higher than his CAPM results, Dr. Booth did not make any changes to his recommendation to reflect DCF results.

4. Dr. Booth's DCF analyses used proxy groups that do not have risks comparable to Intragaz.

## G. The DCF approach produces reasonable and plausible results without the need for large subjective adjustments that depart from the well-supported methods for calculating a cost of common equity.

# V. Rate of Return Recommendation

## Table 1

## Calculation of Median Results

| | Discounted Cash Flow (DCF) | |
|---|---|---|
| | Canadian Utility Proxy Group | U.S. Pipeline & Storage Proxy Group |
| Dividend Yield | 4.08% | 6.70% |
| Dividend Growth Adj. Factor | 0.14% | 0.13% |
| Expected Growth Rate | **7.10%** | **4.00%** |
| Flotation Cost Adj. | 0.45% | 0.43% |
| **Return on Equity – DCF** | **11.78%** | **11.26%** |
| **Recommendation** | **11.75%** | |