

Stranded Gas Hearings (0508311127 Minutes)

Return on Capital and Cost of Capital: Petroleum and Natural Gas Pipeline Companies

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MR. PULLIAM continued the presentation with packet four, which discusses the return on capital and cost of capital as those relate in the petroleum and natural gas pipeline industries. He began by explaining that measures of profitability that are used, particularly in the petroleum industry are return on capital employed (ROCE) and return on shareholder equity (ROE). Although both look at measures of profit over an investment base, they do so in different ways. The ROCE is one of the most widely used measures of profitability. He explained that capital employed is the sum of capital a firm has either through the issuance of equity or debt. In this context capital companies are measuring the book value of that capital. However, the book value of that capital may not reflect today's market value. He then explained that ROCE is measured by after-tax profits without the cost of debt financing and then that profit is looked at over the total amount of debt and equity. The aforementioned is referred to as the operating profit before financing costs over capital employed.

MR. PULLIAM said that ROE is how the firm's profits look relative to what shareholders have invested and thus it's merely income over the value of the stock from a book value basis. This takes into account any potential benefit the company receives by issuing debt. Therefore, after all the debt and costs are paid there will be a profit, net income, which is reviewed relative to the amount of equity in the company.

MR. PULLIAM then turned attention to how these measures have looked over the years [as illustrated on page 4-5] in relation to the three major producers. On average [the producers] have enjoyed ROCE just under 15 percent. Page 4-6 is the same chart with an average ROCE for the three major producers. Page 4-7 includes TransCanada's ROCE, which he said would be similar to what one would see for many gas pipeline companies. Obviously, the [ROCE] for TransCanada is quite a bit lower, about 7 percent, than that of the petroleum companies, which is attributed to the fact that the gas industry is a very different business. TransCanada operates a gas pipeline that's in a regulated environment with regulated returns. The ROCE is consistent with the risk involved in the business. Page 4-9 is a chart that illustrates that crude oil prices have been generally rising, particularly since 2000. He highlighted that the rises and falls are in rough approximation with commodity prices because the majority of the assets in the petroleum industry are in the upstream. Page 4-10 provides averages over the last 5-10 years for the various petroleum companies as well as TransCanada.

MR. PULLIAM moved on to page 4-11, which reviews return on shareholder equity. These numbers are a little higher than ROCE numbers because they reflect the advantage of employing debt in the business. He noted that typically the petroleum industry doesn't employ a lot of debt, while the pipeline industry does. The chart on page 4-12 shows the average ROE over 10 years, which is about 17 percent. The chart on page 4-13 illustrates what a gas pipeline company would look like in that picture. The chart shows that the returns are higher relative to ROCE because gas pipelines employ more debt and thus the ROE is going to be proportionally higher for those companies. However, the ROE is going to be lower than it is for the petroleum industry because of the different, regulated, operating environment. The chart on page 4-14 shows the average of the producers and TransCanada. The chart on page 4-15 illustrates the returns relative to commodity, energy, and prices. Again, the petroleum price moves with the change in commodity prices over time. However, that's not the case with the gas pipeline industry. Page 4-16 shows the average ROE over the past 5 years and 10 years.

MR. PULLIAM then directed attention to page 4-17 and the weighted average cost of capital (WACC), which is the cost of attracting capital to a project. The WACC is equal to the average cost of the firm's debt and equity, and it depends upon the proportion of debt and equity in the firm's capital structure. Furthermore, the WACC is based on the market value of the firm's debt and equity. As specified on page

4-18, the WACC is measured after-tax costs. He related that the after-tax debt is generally lower than for equity because debt is tax deductible. Furthermore, the after-tax cost of debt is equal to the borrowing cost. Mr. Pulliam moved on to page 4-19, which specifies that the cost of equity is commonly measured using the capital asset-pricing model (CAPM). The CAPM is based on the returns of a company's stock relative to a risk-free return and the overall market returns. Page 4-20 illustrates how CAPM calculates the cost of equity. The first example is the risk-free rate in which the firm is viewed as having an equal risk as the market. He then reviewed the two examples of cost of equity, which take into account the risk-free rate, the market risk premium, and the company specific beta. The beta is the relationship between a company's risk and the market overall. Therefore, a company with a risk level equal to the market would have a beta of 1.0 and thus its cost of equity would be the risk-free rate plus the market risk premium times a factor of one. The second example on page 4-20 is one with risk equal to half the market-wide average, which is about where the petroleum industry has been over the last few years.

REPRESENTATIVE SAMUELS inquired as to what the financial markets review when determining a company's beta.

MR. PULLIAM specified that a beta is the variability of a given company's return versus that in the market overall.

MR. PULLIAM, continuing with page 4-21, highlighted that petroleum and natural gas pipeline industries typically have a beta less than 1.0. In fact, the 2004 betas for the companies being discussed ranged from 0.25 to 0.83. Page 4-22 shows a WACC calculation for the four companies being discussed. He reminded the committee that petroleum companies typically don't employ much debt but rather are highly weighted toward equity. However, gas pipeline companies issue a lot of debt. For example, TransCanada's debt equity ratio is about 50:50. The chart on page 4-23 illustrates the WACC for the specified petroleum companies during 1995-2004. The WACC for the specified petroleum companies has decreased a bit since the mid-1990s and went fairly flat in the late 1990s because of lower interest rates and lower betas. The chart on page 4-24 illustrates the average of the three specified petroleum companies, which reflects the aforementioned pattern. On page 4-25, the aforementioned chart includes TransCanada's WACC, which has a lower cost of capital. The chart on page 4-26 illustrates the average of the two industries. Mr. Pulliam then turned to the chart on page 4-27, which contrasts the capital costs with the commodity prices. The chart illustrates that capital costs have decreased as energy prices have increased. The final chart on page 4-28 of packet four shows the average WACC over 5-10 years. He emphasized that the WACC numbers will become important [as the process continues] because they impact the view of project financing and the viability of a project. Mr. Pulliam noted that the WACC is company-wide and doesn't reflect any specific project but rather are starting points.

SENATOR HOLLIS FRENCH, Alaska State Legislature, asked if one could assume that TransCanada enjoys a significant advantage over petroleum companies when it comes to financing this project because its cost of capital is so much lower than that of the oil companies.

MR. PULLIAM replied no. However, he pointed out that a gas pipeline project would be consistent with TransCanada's business. He reiterated his last point regarding the fact that the WACC is for a firm and doesn't reflect a project specific capital cost.

[DR. FINIZZA] indicated that the kinds of capital costs that accompany a pipeline project are lower than the types of capital costs that accompany upstream investments and such projects.

CHAIR THERRIault inquired as to what is included in upstream investments.

[DR. FINIZZA] answered investment in development, exploration, and marketing of the commodity itself as opposed to the transportation.

REPRESENTATIVE SAMUELS asked if one can assume that the numbers presented don't include any implications regarding the possibility of federal loan guarantees, although [the federal loan guarantee] will

be a factor in the capital market.

MR. PULLIAM said that [taking into account the federal loan guarantee] typically would provide a lower cost of debt than what's reflected in the numbers presented.

SENATOR HOFFMAN asked if the federal loan guarantee would give one company more of an advantage than another.

MR. PULLIAM replied yes, to the extent the company is a higher [risk] rated company to begin with. The difference between a federal loan guarantee rate and the rate at which it can borrow may be less than a company that's not as highly rated.

SENATOR STEDMAN referred to page 4-22, and surmised that a company with a lower cost of capital, everything else being equal, would probably be more profitable for shareholders and thus that company would be more interested in the project.

MR. PULLIAM said that he didn't know whether he would agree with that because [the interest a company has in a project] would be driven by the risk of the project itself. In fact, a company with a higher cost of capital might still do the project. He suggested that companies should view the project not just based on the cost of capital, but should be making adjustments to reflect the specific project.

SENATOR STEDMAN posed an example in which a project returns 10 percent, and opined that a project with a 7.6 percent cost of capital would be more beneficial than a 9.3 percent cost of capital.

MR. PULLIAM said in the end it should be equally beneficial to them "because it's going to reflect, again, it's going to be what the market is going to require like the economics of the project itself."

DR. LEITZINGER opined that two things are going on with the numbers. He indicated that the numbers reflect the differences in companies' operating abilities as well as different historical choices regarding the types of risks taken. However, when reviewing the possibility of all the companies potentially participating in the same project, one doesn't know whether there would be cost advantages or capital cost savings across companies.

SENATOR STEDMAN suggested reviewing this from a shareholder's perspective because the goal of a company is to increase shareholder wealth. He suggested that if a project had a return of 8.6 percent, the company with return on capital [WACC] of 7.6 percent would increase shareholder wealth while the company with a 9.3 percent [WACC] would decrease shareholder wealth. Therefore, it would seem that the company with increased shareholder wealth would be interested in doing the project, he surmised. He asked if the aforementioned is a use of the numbers [on page 4-22] on a macro level, a sort of "30,000 foot" overview.

MR. PULLIAM indicated that Senator Stedman's points were fair to draw at the "30,000 foot" overview level.

CHAIR THERRIALT pointed out that [Senator Stedman's case assumes] that all things are equal [between the companies and possible contracts], which isn't the case.

DR. FINIZZA interjected that if the four companies [mentioned on 4-22] were doing the same project and assessed its risk the same, then they shouldn't be using different discount rates. In such a situation, the companies should also compare the expected cash flow to the cost of capital adjusted for the risk, which he predicted wouldn't be 6 percent but probably more in the range of 10-12 percent.

REPRESENTATIVE GARA returned the committee's attention to page 4-7. He asked if he would be correct in his assumption that if a company builds a pipeline, then it should only assume a rate of return of other pipeline companies and not the rate of return of production since it is just building a pipeline.

UNIDENTIFIED SPEAKERS replied yes.

REPRESENTATIVE GARA surmised then that a production company could take its money and make 20 percent elsewhere, and therefore decide not to build a pipeline for a 10 percent rate of return.

CHAIR THERRIault announced that the committee would break for lunch and members should return at 1:30 p.m.