Houston
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To:	Representative Ralph Samuels, LB&A Chair Cheryl Sutton, LB&A Staff
From:	Barry Pulliam
Re:	Analysis of TransCanada Presentation Figures
Date:	April 10, 2008

As requested, we have reviewed the figures presented by TransCanada (TC) on page 10 of its February 6, 2008 presentation (included here for reference as Attachment 1).

For purposes of this analysis, we have used the same destination prices for gas and NGLs that were utilized in the TC analysis.[1] We have also incorporated TC's assumptions as to costs for the GTP and pipeline segments. Using these assumptions, we calculated tariffs and $/mmbtu netback values that are virtually the same as those presented by TC. However, our results of revenue flows to stakeholders differ from the TC presentation in several areas.[2]

Our analysis is set forth in Attachment 2. The top portion of the attachment shows the revenue estimates flowing to different stakeholders that were presented by TC. The bottom portion shows our estimates of these revenues.

In summary, our analysis shows significantly different total revenues flowing to producers, the State of Alaska (SOA) and the Federal Government than does TC's analysis. There are several key assumptions (or inputs) that give rise to these differences. These include (1) assumptions as to production or upstream costs associated with gas production, (2) assumptions as to the calculation of royalties and (3) assumptions as to the level and application of production taxes.

[1] The destination prices for gas are the EIA forecast prices, with TransCanada's estimates of a basis differential between Henry Hub and Alberta. NGL prices at Alberta are TransCanada's estimates.

[2] The TransCanada analysis does not include revenue changes associated with potential "oil effects." These are changes to revenues resulting from potential decreases in oil production at Prudhoe Bay once gas sales begin, or changes in revenues associated with potential increased oil production associated with development of gas production outside Prudhoe Bay. Likewise, our analysis does not include estimated changes for these "oil effects".

Upstream Costs:

The TC analysis includes estimated upstream costs at $1.50/mmbtu (in $2007) for all gas production. The $183 billion figure for producer revenues in TC's analysis is before deduction of those costs. In other words, upstream (production) costs are not netted off of the $183 billion producer revenue figure.[3] Under TC's assumptions production costs total $109 billion. Therefore, net of production costs, the revenue flow to producers under TC's assumptions would total $74 billion. We've shown the TC figures both with and without the upstream production costs netted out in Attachment 2.

We estimate production costs based on the incremental (or additional) costs that would be incurred to produce gas. At Prudhoe Bay, those additional costs are minimal. At fields that are not currently developed, those incremental costs will be higher. For gas-only fields, incremental costs will be equal to the total costs to develop and operate the field. Overall, we estimate a total of $37 billion in additional upstream costs associated with gas, about one-third the total level assumed by TC.

Our analysis shows estimated net revenues to the producers of $132 billion (before costs are netted off) and $95 billion after costs. These compare with TC's estimates of $183 billion and $74 billion, respectively.

Royalties:

The TC analysis estimates royalties to the State of Alaska at 12.5% of netback value. We use a slightly higher royalty rate of 12.6% reflecting higher royalties at Pt. Thomson. In addition, TC's figures reflect an estimated $1.50/mmbtu upstream cost of production as a deduction against royalties. Royalties should be calculated based on netback values, less "field" costs, per settlement agreement with the State. These are different than production costs. Deductible field costs total about $0.24/mmbtu ($2007). We have assumed they would be deductible against royalties on Prudhoe Bay production.[4] Overall, we estimate that royalties to the State of Alaska would be $17 billion higher than the TC estimate.

Production Taxes:

The TC analysis assumes production taxes of 25%. The TC analysis does not deduct royalty payments from production tax obligations. Production taxes under current law are based on "net" proceeds. Net proceeds are after deduction of royalties and upstream costs. In addition, the production tax rate incorporates a "progressivity" feature that serves to increase the 25% rate when prices are higher.

Our analysis estimates incremental production tax revenues that would flow from gas production. In estimating these taxes, we consider the prices forecast for both gas

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[3] The TransCanada presentation notes this point.

[4] In addition, we have assumed that conditioning costs would not be deductible against royalties outside of Prudhoe Bay.

and oil (we use the EIA 2007 mean forecast, as does the TC analysis) and we consider the upstream deductions that would be allowed in arriving at the tax rate and total tax due. We estimate that production taxes at forecast prices and costs would be higher than those included in the TC analysis by approximately $25 billion.

Revenue Flows to Producers:

We estimate higher net revenue flows to the producers than does TC as a result of lower overall upstream costs associated with gas production (see discussion above). However, before deduction of upstream production costs we show significantly lower producer revenues as a result of higher estimated royalties and production taxes.

Revenue Flows to the State of Alaska:

We estimate $37 billion in higher revenue flows to the State of Alaska than does TC. This is largely due to higher estimates of royalties ($17 billion) and production taxes ($25 billion) but offset by lower estimates of income taxes (-$5 billion).[5]

Revenue Flows to Federal Government:

We estimate $15 billion in higher revenues flowing to the Federal Government than does TC. This is largely composed of approximately $3 billion in royalties (TC does not include royalties on federal lands) and $11 billion in additional income tax generation associated with lower production costs.

TransCanada Revenues:

Our analysis results in the same revenues to TC at $16 billion.

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[5] TransCanada did not include royalties or production taxes as a deduction in its determination of state income taxes. We include these items as deductions, which, holding other items constant, reduces state income taxes relative to the TC analysis. Both analyses assume a state income tax rate of 9.4%.

Attachment 1

Project Economics

	Total 25 Years	2018 1st Year	Annual Average
US EIA Gas Price Forecast ($/mmbtu)	-	$6.53	$9.92
Pipeline + Gas Treatment Plant Tolls ($/mmbtu) [1]	-	$2.76	$3.03
Stakeholders' Value [2]			
Producers ($ in Billion) [3]	$183	$4.7	$7.3
State of Alaska ($ in Billion)	$115	$2.5	$4.6
US Gov't ($ in Billion)	$46	$1.2	$1.8
TransCanada ($ in Billion)	$16	$1.3	$0.6

1 Includes fuel
2 Stakeholders' value assumes no expansion, only 4.5 bcf/d for 25 years
3 After royalties and taxes, but before upstream costs

TransCanada

Summary of Stakeholders' Revenue Flows

-- TransCanada Estimate --

	Total 25 Years	2018 1st Year	Annual Average
	(Billion Dollars)		
	(1)	(2)	(3)
Producers	$183	$4.7	$7.3
Less Upstream Costs	(109)	(3.3)	(4.4)
Total after Upstream Costs	$74	$1.3	$3.0
State of Alaska	$115	$2.5	$4.6
U.S. Government	$46	$1.2	$1.9
TransCanada	$16	$1.3	$0.7

Source: TransCanada's AGIA Application Presentation to Alaska Legislature, February 6/7, 2008, pg. 10.

-- EconOne Estimate --

	Total 25 Years	2018 1st Year	Annual Average
	(Billion Dollars)		
	(1)	(2)	(3)
Producers	$132	$2.5	$3.8
Less Upstream Costs	(37)	(0.8)	(1.5)
Total after Upstream Costs	$95	$1.7	$2.3
State of Alaska	$152	$3.3	$6.1
U.S. Government	$61	$1.4	$2.4
TransCanada	$16	$1.2	$0.7

Assumptions: Destination prices, volumes and GTP/pipeline costs consistent with TransCanada.