TRANSCANADA PIPELINES LIMITED

BUSINESS AND SERVICES RESTRUCTURING AND MAINLINE 2012 – 2013 TOLLS APPLICATION

WRITTEN EVIDENCE OF MR. GEOFFREY B. INGE KTM INC.

(On behalf of the Industrial Gas Users Association)

NATIONAL ENERGY BOARD

IN THE MATTER OF the National Energy Board Act, R.S.C. 1985, c. N-7, as amended, and the Regulations made thereunder;

AND IN THE MATTER OF an Application for:

1. Approvals required to implement a Restructuring Proposal that affects the businesses and services of TransCanada PipeLines Limited, NOVA Gas Transmission Ltd. and Foothills Pipe Lines Ltd.; and

2. approval of final tolls for the TransCanada Mainline for 2012 and 2013.

March 9, 2012

TABLE OF CONTENTS

1. INTRODUCTION

Q1. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND JOB TITLE.

A1. My name is Geoffrey B. Inge. I am the President of KTM Inc., located at 777 29th Street, Suite 200, Boulder, Colorado 80303.

Q2. PLEASE DESCRIBE THE SERVICES THAT KTM INC. PROVIDES.

A2. KTM, Inc. is an energy consulting firm specializing in providing information, strategic advice and economic analysis on energy market and regulatory issues related to the natural gas consumption of its electric generation, industrial and large commercial clients. KTM is based in Boulder, Colorado and provides its services to clients throughout the United States.

Q3. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A3. I hold a Bachelor of Business Administration from the University of Virginia (1976) and a Master of Business Administration from the University of Virginia's Colgate Darden School of Business Administration (1979). My primary concentration was in finance. My analytical skills in the energy field were developed through participation in Conoco's Management Development Program, into which I was recruited upon obtaining my M.B.A in 1979. Conoco also provided me with field experience in gas processing and gathering. From 1983 to 1987, I was the senior gas buyer for Delhi Gas Pipeline's Gas Acquisition Group for the mid-continent region. I joined KTM, Inc. in February, 1987 as Vice President. I have analyzed numerous pipeline cost of service rate filings before the Federal Energy Regulatory Commission (hereinafter "FERC" or "Commission") and, utilizing the principles of cost allocation and rate design, have developed computer models to test the impact on clients of proposed rate case settlement terms. I was promoted to Senior Vice President of KTM in January, 1992, and became President in January, 2000.

At KTM I have been actively involved as a consultant on electricity and natural gas regulatory issues, representing electric generation and industrial energy users in various federal and state regulatory proceedings.

Q4. HAVE YOU PREVIOUSLY PRESENTED EVIDENCE BEFORE THE NATIONAL ENERGY BOARD?

A4. No.

Q5. HAVE YOU PREVIOUSLY PRESENTED TESTIMONY BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION OR STATE PUBLIC UTILITIES COMMISSIONS?

A5. Yes. I have testified before the FERC in Docket Nos. GP91-8-008, & al. (*Jack J. Grynberg v. Rocky Mountain Natural Gas Company*) on gas valuation issues, and as a cost allocation and rate design witness in Docket No. RP96-306-000 (*Paiute Pipeline Company*). I have also submitted testimony before the FERC in Docket Nos. RP08-426-000 (*El Paso Natural Gas Company)* and RP10-21-000 *(Florida Gas Transmission Company, LLC.)* as a cost allocation and rate design witness; however, both of those cases settled prior to hearing on my specific issues. I also testified before the FERC in Docket No. RP10-139 *(El Paso Natural Gas Company)* as a cost allocation and rate design witness. I have also presented cost allocation and rate design testimony before the Public Utilities Commission of Nevada in Docket Nos. 92-4021, 01-11030, 03-12002, 06-12001, and 07-09016, and before the California Public Utilities Commission in Applications A.01-06-041, A.05-06-018, and A.08-08-004.

Q6. WHO IS SPONSORING YOUR EVIDENCE IN THIS PROCEEDING?

A6. I am providing evidence on behalf of the Industrial Gas Users Association ("IGUA").

Q7. WHAT IS THE PURPOSE OF YOUR EVIDENCE IN THIS PROCEEDING?

A7. KTM was asked to evaluate the applicability and impacts of various U.S. regulatory solutions identified by IGUA's witness Ms. Dena Wiggins (Ballard Spahr) which establish rates in situations where a regulated utility/pipeline's assets are no longer used and useful. In addition, KTM was asked to work with Mr. Bernard Otis (another consultant engaged by IGUA) for the purpose of providing conclusions that may be drawn from TransCanada's Application and its responses to various written Information Requests with respect to:

i) The nature and extent of the current underutilization of TransCanada's Mainline system;

ii) Whether TransCanada's Application provides adequate solutions to the Mainline's underutilization; and

iii) The identification of potential corrective measures that could be applied in this case to address TransCanada's underutilization problem, taking into account the regulatory and legal precedents identified by Ms. Wiggins, while being mindful of the specific fact circumstances presented by the current tolling crisis on the TransCanada Mainline.

2. EXECUTIVE SUMMARY

Q8. PLEASE SUMMARIZE YOUR CONCLUSIONS.

A8. Based on my evaluation of the evidence and Information Request responses submitted by TransCanada in this case and evidence presented by IGUA witnesses Dena Wiggins and Bernard Otis, I conclude the following:

1. There is a significant amount of net plant included in the calculation of TransCanada's proposed tolls that is related to capacity not required to meet TransCanada's current and forecast Mainline gas flow.
2. The presence of Prairies and NOL underutilized net plant in the rate calculation causes TransCanada's proposed tolls to be greater than they would be if this net plant was excluded from the rate calculation.
3. TransCanada's restructuring proposal does not effectively address the cost of underutilized net plant.
4. Including underutilized net plant in the toll (rate) calculation is not consistent with U.S. precedent.
5. When faced with similar situations, U.S. regulators have required that underutilized capacity cost be excluded from the traditional toll (rate) calculation and shared by customers and shareholders.
6. A restructuring that directly addresses underutilized capacity cost by eliminating underutilized net plant from the toll calculation and requiring a corresponding capital reduction will reduce future toll uncertainty.
7. Requiring TransCanada to share the cost of underutilized capacity will reduce tolls.
8. By failing to directly address and take responsibility for a significant portion of the cost of underutilized capacity in its proposed restructuring, TransCanada avoids an obvious toll design option that will provide future toll stability and more competitive long haul tolls.

9. Tolls can be reduced further by financing the shipper portion of underutilized capacity cost with government-sponsored debt.

10. The NEB should require TransCanada to remove underutilized net plant from the toll calculation. Furthermore, the associated rate base reduction should be accompanied by a capital reduction funded in equal measure by TransCanada shareholders and shippers. Finally, the shipper portion of funding should be accomplished through the issue of government-sponsored long term debt amortized annually with the proceeds of a throughput toll rider.

3. EVALUATION OF TRANSCANADA'S PROPOSED RESTRUCTURED TOLL DESIGN

Q9. WHAT IS YOUR UNDERSTANDING OF THE NEED FOR A RESTRUCTURED TOLL DESIGN?

A9. I have relied primarily on the evidence submitted by TransCanada witness John Reed. After evaluating the circumstances of TransCanada's present condition Mr. Reed concludes:

> *"Current and projected market conditions require a comprehensive near-term response to address the long-term economic viability of the Mainline. The significant loss of billing determinants that the Mainline has already sustained coupled with the increasing competitiveness of the natural gas pipeline industry threatens the long-term economic viability of all of the Mainline's services without changes to address the situation."*[1]

Mr. Reed continues his evidence with a list of natural gas supply and demand changes which together have generally reduced the demand for traditional long-haul capacity.

Q10. HOW DOES THE LONG-HAUL CAPACITY DEMAND REDUCTION AFFECT TOLLS?

A10. In general, a reduction in billing determinants results in a lower denominator in the toll equation. Absent a corresponding reduction in the numerator (revenue requirement), tolls will increase.

[1]Page 4, lines 24-29, Business and Services Restructuring and Mainline 2012-2013 Tolls Application, Part C: Business and Services Restructuring Proposal, Appendix C4: Direct Evidence of John J. Reed (Concentric Energy Advisors, Inc), September 1, 2011.

Specifically, TransCanada has experienced three types of long haul, long term billing determinant reduction. Some shippers have reduced or eliminated their use of the TransCanada system. Other shippers have vacated their long-haul capacity in favor of short-haul capacity capable of delivering gas supply from sources closer to the market. This reduces long haul billing determinants thereby increasing the energy-distance component of the toll. In addition, the increased availability of long-haul capacity has induced some formerly long term contract holders to rely more on discretionary, short term services. As TransCanada explains:

> *There has been a shift in contract holders on the Mainline in recent years.*
>
> *Historically, producers, marketers and LDCs have primarily held long-haul contracts. In recent years, the profile has changed such that a large proportion of contracts have been turned back by producers and marketers, while LDCs and end-users have done so to a lesser extent.*
>
> *These events have resulted in a migration from long-haul to short-haul contracting on the Mainline. Shippers have also opted to use shorter-term services such as IT and STFT in preference to long-term firm service. Over the past five years, long-haul transportation contracts out of the WCSB have declined by about 70% while short haul contracts from points in Ontario have increased by about 25%. This loss in billing determinants has put upward pressure on Mainline tolls*.[2]

Q11. WHY ARE SHIPPERS VACATING THEIR TRADITIONAL LONG-HAUL CAPACITY?

A11. Simply put, shippers have a cheaper alternative. Pipeline infrastructure and new natural gas production in the northeast United States have driven down the price of local natural gas supply relative to traditional Western Canadian Sedimentary Basin (WCSB) supply delivered via long haul TransCanada capacity. As Mr. Reed notes:

> *Second, increased North American natural gas production and new transportation infrastructure has resulted in a reduction in the basis differentials between major trading points. A basis differential is a proxy for the market value of pipeline capacity between two locations, and because of the increase in market area supply, which has caused an increase in available capacity on various pipelines to those markets from traditional supply basins, basis differentials between many locations have*

[2] Page 3 of 30, TransCanada Pipelines Limited, Business and Services Restructuring and Mainline 2012-2013 Tolls Application, Part B: Background, Section 3.0: Business Environment, September 1, 2011.

fallen. This has been the case with the basis differential between NIT and Dawn.[3]

Q12. IS THERE AN IMMEDIATE NEED FOR TRANSCANADA TO ADDRESS THIS PROBLEM?

A12. Yes. I agree with witness Reed who, in response to this question, states:

Yes, I believe that TransCanada is at a point where immediate action needs to be taken to address the long-term economic viability of its System in relation to the changes occurring in the marketplace. TransCanada is facing a number of issues that need to be addressed, including:

- *reduced volumes that have caused increasing tolls, resulting in long-haul transportation on the Mainline from the WCSB being less competitive, which in turn has decreased demand for such capacity;*
- *changed flows on the eastern Mainline resulting from the rapid expansion of Marcellus supplies – greater short-haul contracting and reduced utilization of the Northern Ontario Line in the near-term, reducing the overall base of billing determinants;*
- *increasing supply options that could contribute to further decontracting; and*
- *a greater demand for interruptible and short-term firm transportation services due to the availability of capacity on the Mainline and the pricing and flexibility provided for these services, which is cannibalizing demand for long-term firm transportation, leading to increased toll uncertainty.*[4]

Furthermore, my analysis of TransCanada's contract data submitted in response to IGUA's IR 2.8(a) (wherein TransCanada identifies its contract data as of 1/1/2012) reveals that 53% of TransCanada's FT contract quantity has primary terms which end during 2012. Furthermore, 37% of the FT contract quantity with 2012 primary term expirations are long haul contracts held by three large eastern Canadian utilities. Absent a meaningful effort to restructure TransCanada's long haul tolls, it is reasonable to expect a significant reduction in long haul, long term contract demand during 2012.

[3] Page 17, lines 7-13, Business and Services Restructuring and Mainline 2012-2013 Tolls Application, Part C: Business and Services Restructuring Proposal, Appendix C4: Direct Evidence of John J. Reed (Concentric Energy Advisors, Inc), September 1, 2011.

[4] Ibid, page 26, lines 9 - 24

Q13. HAS TRANSCANADA OFFERED SOLUTIONS TO THIS PROBLEM?

A13. Yes. TransCanada has offered an integrated package of cost allocation and rate design changes intended to address the problem. However, these proposed solutions are designed to shift the cost of service burden among current and future shippers and do little to reduce the actual cost of underutilized capacity.

Q14. HOW MUCH UNDERUTILIZED CAPACITY EXISTS?

A14. The calculation of underutilized capacity is discussed in detail by IGUA's witness Mr. Otis who concludes that almost half the Prairies System Capacity and 57% of the NOL capacity are not required to meet the needs of TransCanada's long term firm and projected discretionary transportation contracts.

Q15. HOW MUCH OF TRANSCANADA'S PROPOSED RATE BASE IS RELATED TO PRAIRIES AND NOL UNDERUTILIZED CAPACITY?

A15. Of the $5.8 billion rate base underlying TransCanada's proposed tolls, $1.6 billion or 28% is related to Prairies and NOL system underutilized capacity.

Q16. WHY IS THE COST OF UNDERUTILIZED CAPACITY IMPORTANT IN THIS CASE?

A16. The fixed cost of capacity as measured by depreciation, return and income taxes represents 58% of the gross revenue requirement in this case. Excluding the gross plant and accumulated depreciation related to underutilized Prairies and NOL capacity would reduce TransCanada's proposed gross revenue requirement from $1.59 billion to $1.28 billion. This is a reduction of almost 20%.

Q17. IS THERE ALSO UNDERUTILIZED CAPACITY ON THE EASTERN TRIANGLE SYSTEM?

A17. Yes, but I have excluded it from my evidence because, as Mr. Otis explains in his evidence, there is insufficient information to eliminate it from toll calculation.

Q18. IS THE UTILIZATION OF THE PRAIRIES AND NOL SYSTEMS LIKELY TO IMPROVE SIGNIFICANTLY DURING THE TWO YEAR PROPOSED TOLL PERIOD?

A18. No. Utilizing TransCanada's forecast, Mr. Otis estimates that the percentage of underutilized capacity will be 44% and 56% for the Prairies and NOL systems respectively.

Q19. HASN'T TRANSCANADA ADEQUATELY ADDRESSED THE PROBLEM OF UNDERUTILIZED CAPACITY WITH ITS PROPOSAL TO ACCELERATE THE DEPRECIATION OF THE PRAIRIES AND NOL SYSTEMS?

A19. No. Unfortunately, TransCanada's proposal to transfer accumulated reserve for depreciation from the Eastern Triangle and Prairies systems to the NOL system shifts the cost to future shippers but does not eliminate the cost.

Q20. WHY DO YOU BELIEVE IT IS IMPORTANT THAT THE NEB REQUIRE TRANSCANADA TO ADDRESS THE UNDERUTILIZED CAPACITY ISSUE IN THIS CASE?

A20. First, as Ms. Wiggins' evidence indicates, regulators have found that including the cost of capacity which is not used and useful in the calculation of rates results in rates which are not just and reasonable.

Second, failure to address the issue in this case undermines two of TransCanada's stated restructuring goals: future rate stability and more competitive long haul economics.

Q21. PLEASE EXPLAIN HOW A FAILURE TO ADDRESS THE UNDERUTILIZED CAPACITY ISSUE IN THIS CASE UNDERMINES FUTURE RATE STABILITY?

A21. Absent a miraculous increase in long haul contracting, a cost burden related to underutilized capacity will remain at the end of TransCanada's proposed two year rate term. Shippers facing contracting decisions during 2012 and 2013 will have to do so without knowing if their future rates will include an underutilized capacity cost burden. As I stated earlier, there is a significant amount of primary term contract expiration in 2012. By requiring TransCanada to address this issue in this case, the NEB can reduce long term uncertainty in the calculation of future rates.

Q22. PLEASE EXPLAIN HOW A FAILURE TO ADDRESS THE UNDERUTILIZED CAPACITY ISSUE IN THIS CASE UNDERMINES A MORE COMPETITIVE LONG HAUL RATE?

A22. As I identify and discuss in the next section of my evidence, there are several options which could address the underutilized capacity issue in this case. As my evidence demonstrates, all these options result in lower long haul tolls.

4. IDENTIFICATION AND DISCUSSION OF COST ALLOCATION AND TOLL DESIGN OPTIONS

Q23. DID YOU EVALUATE ADDITIONAL TOLL CALCULATION METHODOLOGIES WHICH WOULD IMPROVE THE RESULTS OF TRANSCANADA'S RESTRUCTURING PROPOSAL?

A23. Yes. Part of my mandate from IGUA was to consider the applicability and impact of various regulatory solutions to the problem of underutilized capacity in the United States identified by IGUA's witness Ms. Wiggins. In her evidence, Ms. Wiggins first discusses the concept of "used and useful" considered by U.S. regulators as a requirement for rate recovery. Second, she discusses several U.S. regulatory solutions to various cases wherein assets deemed not used and useful were excluded from the rate calculation.

Q24. WHAT IS YOUR UNDERSTANDING OF THE U.S. PRECEDENT EVIDENCE OFFERED BY MS. WIGGINS AND HOW DID YOU APPLY IT?

A24. From a rate analysts' perspective I took the following from Ms. Wiggin's evidence:

1. State and Federal regulatory authorities have generally excluded the cost related to assets which are not used and useful from the normal rate calculation and have separately addressed the apportionment of such costs.
2. In determining the apportionment of costs related to assets no longer used and useful, U.S. regulators recognize the need to balance utility/pipeline shareholder and customer interests and in that regard have considered several factors including:
    a. The reason why the assets are no longer used and useful.
    b. The impact on the utility/pipeline.
    c. The impact on the captive customer.

3. In cases where assets are rendered not used and useful as a result of changes in regulation, U.S. regulators have generally allowed the cost of those assets to be recovered from customers.
4. In cases where the assets are rendered not used and useful as a result of changes in the market, U.S. regulators have generally required that the cost of those assets be shared between the utility/pipeline and its customers.
5. U.S. regulators have implemented the shared cost concept for assets deemed not used and useful in a variety of different ways.

In this case, there is a significant amount of assets included in TransCanada's filed toll calculation that are not required to meet current contract demand and therefore not useful. My evidence isolates the portion of TransCanada rate base related to capacity that is no longer useful in the regulatory context and considers how U.S. regulatory solutions would apportion the related cost.

Q25. PLEASE IDENTIFY AND DESCRIBE THE TOLL DESIGN OPTIONS YOU EVALUATED WHICH ARE BASED ON THE U.S. PRECEDENT DISCUSSED BY MS. WIGGINS?

A25. My evidence discusses four toll design options based on U.S. precedent. All of the options begin with the premise that assets not used and/or useful should be excluded from the toll calculation methodology. Specifically, I considered the following options:

1. The NEB would simply disallow the underutilized portion of TransCanada's Prairies and NOL system rate base for the purpose of calculating tolls.
2. The NEB would disallow 50% of the underutilized portion of TransCanada's Prairies and NOL system rate base for the purpose of calculating tolls.
3. The NEB would require TransCanada to transfer the underutilized portion of plant to account 102 Plant Held for Future Use. Plant held in this account would not be depreciated.
4. The NEB would calculate the return on underutilized rate base by applying only TransCanada's cost of debt rather than a full weighted average cost of capital.

Q26. HOW DID YOU EVALUATE THE IMPACT OF THESE FOUR OPTIONS APPLIED TO COST DATA IN TRANSCANADA'S CASE?

A26. First, I developed a revenue requirement model capable of producing the results of TransCanada's as-filed case. I then adjusted that model to incorporate the toll calculation concepts identified in the four options above. The model produces an illustrative revenue requirement assuming all other conditions in TransCanada's revenue requirement calculation remain in place.

Q27. PLEASE DESCRIBE THE MODEL ADJUSTMENTS YOU APPLIED FOR EACH OF THE FOUR OPTIONS.

A27. For Option 1, I reduced the gross plant and accumulated depreciation of the Prairies and NOL systems by 49% and 57% respectively.

For Option 2, I reduced the gross plant and accumulated depreciation of the Prairies and NOL systems by 24.5% and 28.5% respectively.

For Option 3, I reduced the depreciation expense of the Prairies and NOL systems by 49% and 57% respectively.

For Option 4, I reduced the return on $1.6 billion of rate base from 8.17% to 3.36%.

Q28. WHAT IS THE RATE BASE AND REVENUE REQUIREMENT IMPACT OF THE OPTIONS IDENTIFIED ABOVE?

A28. The chart below summarizes the rate base and revenue requirement impacts of the four options identified above. The adjustments to various related schedules filed by TransCanada are shown in **Attachments A-D**.

		($000)			
Line No.	Particulars	Rate Base	Reduction From As Filed	Gross Revenue Requirement	Reduction From As Filed
	(a)	(b)	(c)	(d)	(e)
1	As Filed	5,823,692		1,589,649	
2	Option 1	4,228,668	1,595,024	1,279,209	310,440
3	Option 2	5,032,706	790,985	1,435,147	154,502
4	Option 3	5,873,636	(49,945)	1,460,497	129,152
5	Option 4	5,823,691	0	1,484,610	105,039

Q29. DO YOU INCLUDE A REDUCTION OF O&M EXPENSE IN YOUR REVENUE REQUIREMENT CALCULATION?

A29. No. Since all the options I considered retain current assets in service I do not reduce TransCanada's proposed O&M expense.

Q30. DID YOU CALCULATE THE TOLL IMPACT RELATED TO THE REVENUE REQUIREMENT REDUCTIONS IDENTIFIED ABOVE FOR OPTIONS 1 - 4? IF SO, PLEASE EXPLAIN HOW YOU DID SO.

A30. Yes. For illustrative purposes I calculated 2012 tolls. First, I developed a toll calculation model capable of producing the results of TransCanada's as-filed case. I then adjusted that model to incorporate the reduced revenue requirement discussed above.

Q31. WHAT WERE THE RESULTS OF YOUR ILLUSTRATIVE 2012 TOLL CALCULATIONS?

A31. The chart below shows a comparison of indicative long haul and short haul tolls. An expanded toll comparison can be seen in **Attachments A-D** along with the adjustments to various related schedules filed by TransCanada.

		Illustrative 2012 Tolls ($/GJ)			
Line No.	Particulars	Long Haul SMB to Union CDA	Reduction From As filed	Short Haul Dawn to Union CDA	Reduction From As filed
	(a)	(b)	(c)	(d)	(e)
1	As Filed	$1.09		$0.17	
2	Option 1	$0.82	$0.27	$0.14	$0.03
3	Option 2	$0.95	$0.14	$0.16	$0.01
4	Option 3	$0.98	$0.11	$0.16	$0.01
5	Option 4	$1.00	$0.09	$0.16	$0.01

Q32. PLEASE DISCUSS THE BENEFITS AND DETRIMENTS OF EACH FOUR OPTIONS IDENTIFIED ABOVE.

A32. Option 1 produces significantly lower tolls by placing the entire burden of underutilized capacity cost on TransCanada. However, this is simply not practical. It would be unreasonable to expect TransCanada to suffer a $ 1.6 billion accounting write down representing approximately 70% of its

current equity. Furthermore, it would be no more equitable to place the entire underutilized capacity cost burden on TransCanada than it would be to place the entire burden on toll payers.

Option 2 shares the burden of underutilized capacity cost, thereby conforming to the sharing concept prevalent in U.S. regulatory precedent. It is also simple to implement. The resulting toll reduction is meaningful but modest.

Options 3 and 4 have the virtue of being relatively easy to implement and like Option 2 rest on solid U.S. regulatory precedent. However, they provide less toll reduction and do nothing to reduce the cost of underutilized capacity in the long run. Furthermore, Option 3 does not represent a true sharing of the cost of underutilized capacity because depreciation expense is not eliminated; only postponed.

Q33. ARE THE FOUR OPTIONS IDENTIFIED ABOVE THE ONLY OPTIONS YOU CONSIDERED?

A33. No. While the four options identified above are certainly an improvement to the restructuring plan proposed by TransCanada, they suffer from a common shortcoming. Each of the four options will impair TransCanada's ability to generate revenue from a portion of its assets without adjusting the investment related to those assets. I considered two alternatives which resolve this shortcoming.

Q34. WHAT ARE THE CONSEQUENCES OF FAILING TO PROVIDE A REGULATORY SOLUTION THAT MATCHES A CAPITAL REDUCTION WITH A RATE BASE REDUCTION OR IMPAIRMENT?

A34. Presumably, the capital reduction will occur outside the regulatory process. The most likely scenario would be an auditor mandated asset impairment requiring an asset write down and an associated reduction in equity.

Q35. PLEASE EXPLAIN THE CONCEPT OF A REGULATORY SOLUTION REDUCING BOTH RATE BASE AND A CORRESPONDING AMOUNT OF CAPITAL.

A35. To preserve harmony in TransCanada's regulated balance sheet, a net plant reduction is accompanied by an equal capitalization reduction. The regulated company capital structure (60% debt / 40% equity) is preserved by reducing each component in proportion to its original amount. In essence, the regulated company is downsized. The chart below illustrates the concept.

			($billion)		
	Rate Base	=	Capitalization		
			Debt	Equity	Total
As Filed	$5.8	=	$3.5	$2.3	$5.8
Reduction	1.6	=	1.0	0.6	1.6
Remaining	$4.2	=	$2.5	$1.7	$4.2

Q36. PLEASE EXPLAIN HOW THE DEBT AND EQUITY COMPONENTS OF CAPITALIZATION WOULD BE REDUCED?

A36. Debt is retired or purchased. Equity capital is reduced by a cash dividend to the shareholders.

Q37. HOW WOULD AN NEB IMPOSED CAPITAL REDUCTION BE FUNDED?

A37. There may be many alternatives. However, in order to minimize the toll impact I considered two options based on the securitization concept, explained by TransCanada in its response to IR NEB 3.1 (attached hereto as **Attachment E**).

The first of these two options, Option 5 utilizes the 50/50 cost sharing concept identified in the U.S. precedent evidence provided by Ms. Wiggins. Applying this concept, I have assumed that TransCanada will provide 50% of the capital reduction cost while the shipper 50% contribution will be funded with government-sponsored debt to be repaid through a volumetric toll rider.

The second option, Option 6 assumes the entire capital reduction cost is funded with government-sponsored debt to be repaid through a volumetric toll rider.

Q38. WHY IS IT APPROPRIATE TO RECOVER THE COST OF THE CAPITAL REDUCTION FUNDED BY GOVERNMENT SPONSORED DEBT FROM ALL SHIPPERS VIA A TOLL RIDER?

A38. The significant amount of underutilized capacity has allowed some shippers to replace long haul, long term transportation service withshort term, short haul and/or discretionary transportation services. These shippers should not be allowed to escape a portion of the cost related to the underutilized capacity.

Q39. IS THERE PRECEDENT FOR THIS SORT OF SOLUTION?

A39. As demonstrated by the evidence of Ms. Wiggins, there is certainly precedent for the concept of ratepayers and shareholders sharing the burden of non-used and useful assets. Also, as TransCanada describes in it response to IR NEB 3.1, there is precedent for the use of securitized debt to fund the cost of stranded assets.

Furthermore, according to Mr. Reed, both he and the NEB recognize the need for innovative solutions in this case. Mr. Reed offers in his evidence the comments of Board member Lyne Mercier:

> *Market conditions for supply, demand and pipeline utilization will likely continue to evolve and innovative solutions will be required to adapt to changing circumstances. (NEB, Unconventional Gas: Challenges for Pipelines and Markets, Presented by Lyne Mercier, November 18, 2009).*(emphasis added)[5]

And the comments of former Board member Jean-Paul Théorêt:

> *If one accepts my view that the market structure for gas pipelines is messy, then the first by-word for regulation will be flexibility. In a messy market structure, characterized by imperfect competition amongst a few companies, the regulator must be prepared to adopt flexible approaches that meet the needs of each situation. Since each pipeline's situation will be unique, it is unlikely that a 'one size fits all' approach will be viable over the long term.* (*See*, NEB, The Regulation of the National Energy Board – Its Evolution, Its Future Role, Presented by Jean-Paul Théorêt, January 25, 2001) (emphasis added).[6]

And his own conclusion that:

> *Just as the Board concluded in RH-1-2002, the competitive pressures being faced by TransCanada today in the current marketplace also require new and innovative ways to compete.* (emphasis added)[7]

Q40. WOULD TRANSCANADA BE ABLE TO RETURN NET PLANT REMOVED FROM RATE BASE TO THE RATE BASE AMOUNT USED TO DETERMINE TOLLS IF THE DEMAND FOR PRAIRIES AND NOL CAPACITY INCREASED?

A40. Yes. A mechanism can be developed to reverse the process if necessary.

---

[5] Page 24, lines 26-29, Business and Services Restructuring and Mainline 2012-2013 Tolls Application, Part C: Business and Services Restructuring Proposal, Appendix C4: Direct Evidence of John J. Reed (Concentric Energy Advisors, Inc), September 1, 2011.
[6] Ibid, page 34, lines 4 - 12
[7] Ibid, lines 28 - 30

Q41. DID YOU CALCULATE THE TOLL IMPACT OF OPTIONS 5 AND 6 IDENTIFIED ABOVE? IF SO, PLEASE EXPLAIN HOW YOU DID SO.

A41. Yes. For illustrative purposes, I calculated 2012 tolls. Once again I used the toll calculation model I developed to calculate tolls at the reduced revenue requirement. I developed the toll rider that would generate the revenue necessary to amortize the securitized debt. This involved several steps.

First, I determined the amount of securitized debt. The amount is greater than the amount of disallowed rate base because there is premium associated with the retirement of the debt portion of the capital reduction. I determined the premium to be 11% based on an analysis of the individual debt instruments. To calculate the annual amortization amount I assumed a 20 year bond at a 5% interest rate. Finally, I divided the annual amortization amount by TransCanada's 2010 mainline annual throughput to determine a conservative illustrative toll rider. I note that TransCanada expects its throughput to improve.

Q42. WHAT WERE THE RESULTS OF YOUR ILLUSTRATIVE 2012 TOLL CALCULATIONS?

A42. The chart below shows a comparison of indicative long haul and short haul tolls for Options 5 and 6. **Attachment F** and **G** provide the tolls calculation schedules for each.

		Illustrative 2012 Tolls ($/GJ)	
Line No.	Particulars	Long Haul SMB to Union CDA	Short Haul Dawn to Union CDA
	(a)	(b)	(c)
1	As Filed	$ 1.09	$ 0.17
2	Option 5		
3	Base Toll	$ 0.82	$ 0.14
4	Toll Rider	0.05	0.05
5	Total Toll	$ 0.87	$ 0.20
6	Toll Reduction	$ 0.22	$ (0.03)
7	Option 6		
8	Base Toll	$ 0.82	$ 0.14
9	Toll Rider	0.10	0.10
10	Total Toll	$ 0.92	$ 0.24
11	Toll Reduction	$ 0.17	$ (0.07)

Q43. PLEASE DISCUSS THE BENEFITS AND DETRIMENTS OF OPTIONS 5 AND 6.

A43. Both Options 5 and 6 provide a long run solution by shrinking the regulated company to a size more in keeping with the current demand for capacity. Complexity is an obvious shortcoming of both Options 5 and 6.

Option 5 provides a greater long haul toll reduction and a relatively small short haul toll increase. Option 5 is consistent with the cost sharing precedent identified by Ms. Wiggins.

Option 6 has several detriments relative to Option 5. First, it yields a lower long haul rate benefit. At the same time it generates a significant short haul toll increase above that proposed by TransCanada. Finally, it places the entire burden of underutilized capacity cost on the shippers.

5. CONCLUSION

Q44. PLEASE PROVIDE YOUR CONCLUSIONS.

A44. First, TransCanada's restructuring proposal can and should be enhanced by excluding underutilized Prairies and NOL plant from the toll calculation.

Second, the rate base reduction related to underutilized Prairies and NOL capacity should be accompanied by a corresponding capital reduction.

Third, the capital reduction should be funded by a 50% contribution from TransCanada and 50% from the proceeds of government-sponsored debt which will be repaid via a volumetric toll rider charged to all shippers.

These concepts are embodied in what I have identified as Option 5 and if adopted by the Board, will result in a more effective and balanced toll restructuring.

Q45. DOES THIS END YOUR EVIDENCE?

A45. Yes.