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NATIONAL ENERGY BOARD

HEARING ORDER OH-1-2009

TRANSCANADA KEYSTONE PIPELINE GP LTD. (“KEYSTONE”)
KEYSTONE XL PIPELINE APPLICATION

WRITTEN EVIDENCE OF ENBRIDGE PIPELINES INC.
(“ENBRIDGE”)

JULY 30, 2009

INTRODUCTION

Q. What is the purpose of this written evidence of Enbridge?

A. Enbridge understands that, in considering the Keystone XL Pipeline application, the National Energy Board (the "Board") is required to make a determination as to whether the project is in the overall public interest. The Board has described the "public interest" in the following terms:

> *"The public interest is inclusive of all Canadians and refers to a balance of economic, environmental, and social interests that change as society's values and preferences evolve over time. As a regulator, the Board must estimate the overall public good a project may create and its potential negative aspects, weigh its various impacts, and make a decision."*[1]

The purpose of this evidence is to demonstrate that a decision to approve the Keystone XL Pipeline project, as it is currently proposed by Keystone, would not be in the overall Canadian public interest.

Q. Why would an approval of the Keystone XL Pipeline, as applied for, not be in the public interest?

A. Since the summer of 2008, when Keystone was conducting its open season for the Keystone XL Pipeline project, the economic environment has changed dramatically. As a consequence, a much slower rate of growth in Western Canadian crude oil production is now being forecast and, with the major oil pipeline projects that are currently under construction, ample take-away capacity from Western Canada to U.S. markets can now be expected for several years post 2012.

In the current circumstances, there is an opportunity for Keystone to utilize existing pipeline facilities in Canada as part of the Keystone XL Pipeline project. This would avoid unnecessary pipeline construction and would result in a greater benefit to Canadian oil producers. This enhanced project would be in the overall Canadian public interest.

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[1] Reasons for Decision, Emera Brunswick Pipeline Company Ltd., GH-1-2006, page 10.

Q. How is this evidence organized?

A. In this evidence, Enbridge will:

- discuss the need for additional pipeline capacity to export crude oil from Western Canada to U.S. markets;
- address the impact of the Keystone XL Pipeline on the Enbridge system;
- assess the revenue benefit to Canadian oil producers of the Keystone XL Pipeline project; and
- describe the benefits of utilizing existing facilities as part of the Keystone XL Pipeline project, to achieve an outcome that is in the overall Canadian public interest.

NEED FOR ADDITIONAL EXPORT PIPELINE CAPACITY TO U.S. MARKETS

Q. What is the current view of the Canadian producing industry with regard to the need for additional oil pipeline capacity?

A. As stated in the June 2009 crude oil forecast of the Canadian Association of Petroleum Producers ("CAPP"):

> *"For several years, the forecasted growth in Canadian crude oil supply, primarily due to the development of the Alberta oil sands, led industry to conclude there was an urgent need for additional pipeline capacity to connect to new and expanded markets. Growth in crude oil supply is still being forecast; only at a slower rate than previously anticipated. While access to markets remains an important consideration for producers, the need for additional pipeline capacity has been tempered by a lower outlook for supply growth and significant new pipeline capacity now underway."*[2]

[2] Crude Oil Forecast, Markets & Pipeline Expansions, June 2009, page i.

Q. What is the "significant new pipeline capacity now underway"?

A. There are three projects that are currently under construction that will provide additional capacity to U.S. markets:

- the Keystone Pipeline Project (approved by the Board in Decision OH-1-2007), which will provide take-away capacity of 69 200 m^3/d (435,000 b/d);
- the Alberta Clipper Expansion Project (approved by the Board in Decision OH-4-2007), which will provide take-away capacity of 71 500 m^3/d (450,000 b/d); and
- the Cushing Expansion Project (approved by the Board in Decision OH-1-2008), which will expand the take-away capacity of the Keystone Pipeline by 24 800 m^3/d (156,000 b/d) to 94 000 m^3/d (591,000 b/d).

Q. What is the "lower outlook for supply growth" now being forecast by CAPP?

A. Between 2006 and 2008, when new take-away capacity was being approved by the Board, CAPP was forecasting significant growth in Western Canadian crude oil production, due to increasing production from the oil sands. [3] More recently, in its June 2009 crude oil forecast, CAPP makes the following observations:

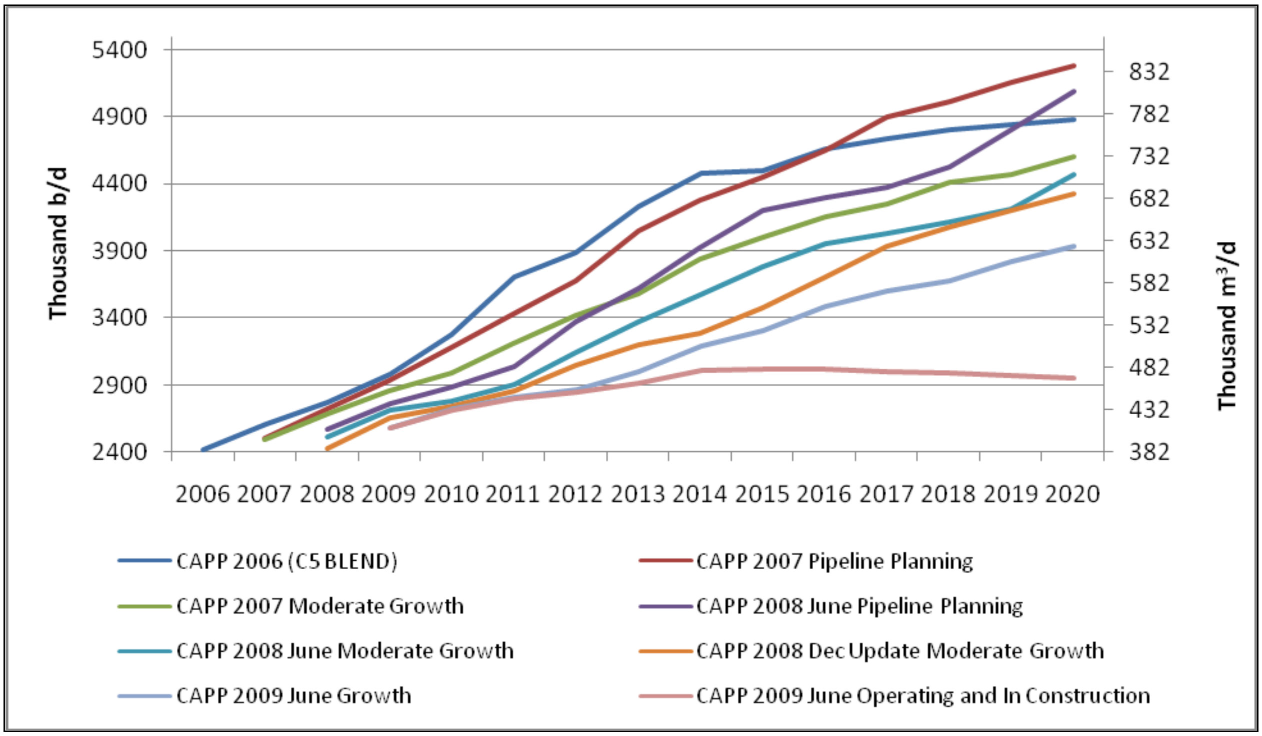
> *"Over the past 12 months, the industry has witnessed a dramatic change in oil prices. The benchmark WTI crude oil price dropped from a peak in July 2008 of over US$140 per barrel to less than US$40 per barrel by year-end. On average, current prices are significantly lower than in recent years. The economic downturn in major market areas has also impacted the industry and the global financial crisis has hindered the ability of companies to attract investment capital.*
>
> *CAPP's estimate of industry capital spending for oil sands development was reduced to $10 billion dollars for 2009 compared to $20 billion in 2008."* [4]

[3] Canadian Crude Oil Production and Supply Forecast, 2006-2020, May 2006; Crude Oil Forecast, Markets and Pipeline Expansions, June 2007; Crude Oil Forecast, Markets and Pipeline Expansions, June 2008.
[4] Crude Oil Forecast, Markets & Pipeline Expansions, June 2009, page 1.

CAPP is accordingly now forecasting a much slower rate of growth in Western Canadian crude oil production than previously anticipated.

The figure below shows the various CAPP forecasts between 2006 and 2009.

Comparison of CAPP's Western Canadian Crude Oil Supply Forecasts



Q. How does the lower supply forecast, combined with the pipeline projects now under construction, affect the need for additional oil pipeline capacity from Western Canada to U.S. markets?

A. The Keystone Pipeline and the Enbridge system expansions, which are under construction, will add more than one million b/d of take-away capacity from Western Canada in 2010. While a certain level of excess pipeline capacity is normally advantageous to oil producers, that advantage reverses when the cost of the capacity outweighs the netback benefits that can be achieved. The Keystone XL Pipeline project would create an unnecessary and unprecedented level of excess pipeline capacity between Western Canada and U.S. markets.

IMPACT OF THE KEYSTONE XL PIPELINE ON THE ENBRIDGE SYSTEM

Q. Please briefly describe the Enbridge system.

A. Enbridge operates the Enbridge pipeline system in Canada and the Lakehead pipeline system in the U.S. (together "the Enbridge system"). The Enbridge system is the primary transporter of crude oil from Western Canada to the U.S. Midwest and is the sole transporter of crude oil from Western Canada to Eastern Canada. The Enbridge system also connects with pipelines that deliver crude oil to Cushing, Oklahoma and to the U.S. Gulf Coast.

Q. What impact would the Keystone XL Pipeline project, as currently proposed by Keystone, have on the Enbridge system?

A. As a consequence of the slower rate of growth in Western Canadian crude oil production now being forecast and the major oil pipeline projects that are currently under construction, additional take-away capacity from Western Canada to U.S. markets will not be needed for several years post 2012. Thus, if the Keystone XL Pipeline is placed in service in late 2012, it will offload volumes from the Enbridge system. The result will be to increase tolls for Enbridge system shippers.

Q. Why will tolls increase if volumes are offloaded from the Enbridge system?

A. The Enbridge system is operated as a common carrier. Shippers nominate volumes for delivery into the system on a monthly basis without a long-term contract for pipeline capacity. Tolls will accordingly increase if the nominated volumes decrease.

Q. Please quantify the toll impact that the Keystone XL Pipeline project would have on Enbridge system shippers.

A. Based on the CAPP 2009 Growth Case and assuming that the Keystone XL Pipeline transports volumes of 60 400 m^3/d (380,000 b/d), the amount of the toll increase to Enbridge system shippers in 2013 is estimated to be Cdn$315 million (Cdn$0.75 per barrel from Edmonton to Chicago). The impact would be greater if either the base

Keystone Pipeline or the Keystone XL Pipeline were to transport more than its contracted volumes.

BENEFIT OF THE KEYSTONE XL PIPELINE PROJECT

Q. Does Enbridge support the development of pipeline capacity to transport Western Canadian crude oil to the U.S. Gulf Coast?

A. Yes. Enbridge recognizes the importance of providing Western Canadian oil producers with sufficient transportation capacity to serve both traditional and new markets. The U.S. Gulf Coast represents a large and attractive market for Western Canadian crude oil.

Q. Has Enbridge made an assessment of the benefit of the Keystone XL Pipeline project to Canadian oil producers?

A. Yes. Enbridge retained Muse, Stancil & Co. ("Muse") to evaluate the implications of the Keystone XL Pipeline for Canadian crude oil producers. Specifically, Muse was requested to:

- evaluate the Western Canadian Crude Supply and Markets report provided by Purvin & Gertz, Inc. ("PGI") on behalf of Keystone (the "PGI Report"); and
- conduct an independent assessment of the benefit of the Keystone XL Pipeline project to Canadian oil producers.

The Muse report is attached to this written evidence. Enbridge has reviewed the Muse report and concurs with its conclusions.

Q. What are the conclusions of Muse respecting its evaluation of the PGI Report?

A. Muse concludes that the assessment provided by PGI significantly overstates the benefit of the Keystone XL Pipeline project to Canadian oil producers. Specifically, Muse finds that:

- the ongoing expansion of the Enbridge system and the construction of the base Keystone Pipeline will capture much of the benefit that PGI is attributing to the Keystone XL Pipeline project;
- the 2006-2008 time period selected by PGI as the basis for its benefit calculations had quite different market conditions than that expected in 2013;
- there are substantive errors in the calculation methodology employed by PGI to determine the Hardisty crude price using the U.S. Gulf Coast netback basis;
- the calculation methodology employed to determine the Hardisty crude price using a U.S. Midwest netback basis overstates the price impact; and
- PGI is using Canadian crude pricing theories that are incorrect.

Q. What are the conclusions of Muse's independent assessment of the benefit of the Keystone XL Pipeline project to Canadian oil producers?

A. Muse estimates that the aggregate net benefit to Canadian oil producers of the Keystone XL Pipeline would be US$102 million in 2013, assuming that only the current committed volumes were to be transported. This net benefit would be reduced if additional volumes were to move on the Keystone XL Pipeline, because of the associated increase in the Enbridge toll.

BENEFIT OF THE ENHANCEMENT TO THE KEYSTONE XL PIPELINE PROJECT

Q. Was Enbridge asked to investigate possible alternatives to the Keystone XL Pipeline project?

A. Yes. In March, 2009, CAPP expressed concern that previous Western Canadian crude oil supply projections were no longer realistic and asked Enbridge to consider whether there were opportunities to utilize existing pipeline capacity as part of the Keystone XL Pipeline project, in order to achieve greater economic efficiency and improved benefits for all crude oil shippers. CAPP presented an option (the "Gretna Option") to Enbridge, which would involve:

- use of the Enbridge pipeline system from Hardisty, Alberta to Gretna, Manitoba to transport crude oil nominated to the Keystone XL Pipeline;

- construction of an interconnection between the Enbridge pipeline system and the Keystone XL Pipeline in the Gretna area; and

- construction by Keystone of the Keystone XL Pipeline south from the Gretna area to Cushing and the U.S. Gulf Coast.

Q. What was the response of Enbridge to this CAPP initiative?

A. Enbridge indicated that it was willing to address potential development options with CAPP. With regard to the Gretna Option, Enbridge advised that significant savings would be achievable in comparison to the proposed configuration of the Keystone XL Pipeline due to the lower capital costs for the Keystone XL Pipeline project and better utilization of the Enbridge system. Specifically, with the Gretna Option:

- there would be a capital cost saving of approximately US$2 billion if the Keystone XL Pipeline were to be built from the Gretna area to the U.S. Gulf Coast rather than from Hardisty to the U.S. Gulf Coast;

- there would be about a Cdn$0.35 per barrel toll saving on the Enbridge system, which would benefit all Canadian oil producers due to the positive impact on netbacks;

- there would be a significant working capital saving for shippers, because the linefill requirement for the Keystone XL Pipeline in Canada would be lower by approximately 2 million barrels;

- new Canadian pipeline construction could be better timed to meet expected Western Canadian supply growth; and

- construction, environmental and permitting challenges would be reduced by making use of existing pipeline facilities in Canada.

Q. Is Enbridge still prepared to participate in the Gretna Option identified by CAPP?

A. Yes. The dialogue with CAPP did not proceed beyond the initial stage and further discussions with CAPP and discussions with Keystone would be required. However, Enbridge would advise that, subject to approval by the Board, it is prepared to provide long-term transportation service to Keystone from Hardisty to the Gretna area, to charge a toll to Keystone for its committed volumes which would be competitive with the toll being proposed by Keystone for its committed shippers in Canada, and to require Keystone to pay a toll only on any uncommitted volumes that are actually shipped. Such an arrangement would enable Keystone to:

- provide its Canadian committed shippers with toll certainty and unapportioned access to pipeline capacity;
- mitigate the risks of underutilization and construction cost escalation associated with the Keystone XL Pipeline project in Canada; and
- achieve significant cost savings in respect of the construction of the Keystone XL Pipeline in the U.S.

Q. Is the availability of the Gretna Option relevant to the Board's consideration of the Keystone XL Pipeline application?

A. Enbridge believes so. The Gretna Option, in comparison to the Keystone XL Pipeline project, would:

- result in greater economic efficiency;
- reduce the costs of the Keystone XL Pipeline project to Keystone and its shippers;
- reduce the tolls payable by shippers on the Enbridge system;
- allow for better correlation between the timing of Canadian pipeline capacity additions and expected Western Canadian supply growth; and

- minimize effects on landowners, right-of-way disturbance and environmental impacts.

The Gretna Option, by utilizing existing facilities in Canada, would achieve an outcome that is in the overall Canadian public interest.

Q. Is there precedent for utilizing existing facilities as part of a new pipeline project?

A. Yes. A good example is the base Keystone Pipeline project that was approved by the Board in 2007. Instead of building a new pipeline directly from Hardisty, Alberta to Wood River, Illinois, Keystone incorporated into the project the conversion to oil transmission of an existing gas pipeline between Burstall, Saskatchewan and Carman, Manitoba. The benefits of utilizing existing facilities were described by Keystone as follows:[5]

- reduced capital costs:

  "The primary benefit is reduced capital expenditures. To the extent that the Facilities can be re-deployed at their depreciated book value, the capital cost of the Keystone Pipeline is lower than it would be if new pipe was required for that particular span. Lower transportation costs will result in higher production netbacks, taxes, and royalties to Canadian interests."

- reduced risk:

  "In addition, despite efforts to control construction costs, projects such as this one are nevertheless subject to potential fluctuations in prices of commodities, including, for example, the price of steel. To the extent existing pipe in the ground is redeployed, risk associated with the escalation of construction cost is mitigated and the demand for steel pipe is reduced."

- minimization of environmental impacts:

  "Another significant benefit is the minimization of environmental impact. The use of existing facilities will minimize disturbance of right of way and will reduce the environmental impact associated with the Project as compared to the installation of new pipe. Using existing facilities is the preferred alternative to installing entirely new pipeline, potentially greenfield pipeline, because it meets the primary

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[5] MH-2-2006 Proceeding, Exhibit B-1d, page 33.

> *goal of environmental protection which is minimizing disturbance to the biophysical environment. The Keystone Project allows for continued development to meet the societal demand for crude oil, while striving to minimize associated impacts on the environment by eliminating the need for completely new facilities and their associated impacts."*

These same benefits would weigh in favour of the Gretna Option being adjudged to be in the Canadian public interest because it provides greater benefits with lower adverse impacts when compared to the Keystone XL Pipeline as proposed.

Q. What about the claim by Keystone that its shippers have already evaluated the alternatives and have made the decision to support the Keystone XL Pipeline?

A. Enbridge does not dispute that:

> *"Keystone shippers are sophisticated parties that evaluated all competing alternatives available to them in 2008, including a number of Enbridge proposals, and made a decision to support the Keystone XL Pipeline and its value proposition."* [6]

The fact is, though, that the circumstances today are not the same as they were in the summer of 2008, when Keystone was conducting its open season for the Keystone XL Pipeline project. The economic environment has changed. There is now a much lower outlook for Western Canadian crude oil supply growth and ample take-away capacity from Western Canada to U.S. markets can now be expected for several years post 2012. It is these changed circumstances that give rise to the opportunity for Keystone to utilize existing facilities as part of the Keystone XL Pipeline project, to achieve an outcome that is in the overall Canadian public interest.

Q. Has Enbridge assessed the "value proposition" of the Gretna Option to Canadian oil producers?

A. Yes. Enbridge requested that Muse conduct an assessment of the revenue benefit of the Gretna Option to Canadian oil producers. Muse estimates that the net benefit of the Gretna Option would be US$386 million in 2013 – approximately US$284 million higher

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[6] Keystone response to Nexen information request 2(b).

than the estimated benefit of the Keystone XL Pipeline project as it is currently proposed by Keystone.

Q. Does this conclude the written evidence of Enbridge?

A. Yes.