Joint Review Panel for the Enbridge Northern Gateway Project

Hearing Order OH-4-2011

Northern Gateway Pipelines Inc.

Enbridge Northern Gateway Project

Written Final Argument of the Alberta Federation of Labour

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I. Introduction

This is the written final argument for the Joint Review Panel hearings, prepared on behalf of the Alberta Federation of Labour (AFL) and filed with respect to the application by Enbridge for the Northern Gateway Pipeline Project.

The AFL is the largest labour organization in Alberta and it represents more than 160,000 unionized workers who work in all sectors of the provincial economy. The AFL has filed evidence in this hearing and our witnesses were cross-examined during the Edmonton portion of the hearings. We rely upon and repeat that evidence here and commend it to the Joint Review Panel for careful consideration.

The AFL asks the Panel to decline to approve either of the pipelines that together are the Northern Gateway Pipeline Project.

The AFL submits that the public interest in Canada is in having a long term sustainable upgrading and refining industry that upgrades and refines the bitumen produced in the oil sands. This industry provides significant long-term employment for Canadians in high paying jobs – jobs that will be created in other countries if bitumen is shipped in simply a diluted state. Further, growth in upgrading and refining will also cause growth in related secondary industry, which again creates more long-term valuable employment for

Canadians. The development of upgrading, refining and related secondary industry also creates real increases to the GDP of Canada. All of the economic benefits caused by these industries, including the employment created, will multiply through the Canadian economy in direct, indirect and induced economic activity. The AFL submits that the evidence must lead the Joint Review Panel to the conclusion that significantly greater economic benefits for Canadians would arise if the volumes of crude oil that are proposed to be shipped down the Northern Gateway export pipeline were instead upgraded and refined in close proximity to the production of that crude oil.

The AFL has also provided considerable evidence of its concerns as to the impact of the Northern Gateway Pipeline Project on the Canadian economy. The project is projected by Enbridge to increase the price of bitumen in the North American and international marketplace, which the AFL believes will have the effect of increasing the strength of the Canadian dollar relative to the American dollar. A higher valued Canadian dollar damages the Canadian manufacturing sector, which relies on export markets due to our relatively smaller Canadian market place. Increasing the price of bitumen to Canadian refineries has the potential to harm the viability of those refineries and further, will likely lead to increases in the price of fuel to Canadian business and individual consumers. All of these impacts combine to damage the Canadian economy and increase inflation. The economic benefits case put forward by Enbridge fails to take any of these impacts into account.

The AFL has provided evidence of the stated policy positions of the current Alberta and Canadian governments. Our leaders have repeatedly promised Canadians that there would be more upgrading and refining of the bitumen from Canada's oil sands, not less. Canadians have been promised policy based on increasing the value added to this non-renewable resource, not the sale of it in its raw form. If the export pipeline is approved, significant investment will be made in it and very long-term transportation contracts will be put in place. It will be virtually impossible for governments to alter those decisions. Each time the decision is made to approve another bitumen export pipeline, there is less and less opportunity to change the wholesale export of our raw resources. The NEB has already approved the Keystone legacy pipelines, Keystone XL, and Alberta Clipper. It is appropriate, at this juncture, for the pipeline approval process to pause to let governments take the steps to enforce the policies they publicly declare rather than removing that option by the approval of yet another bitumen export pipeline.

The AFL submits that the evidence provided to support the condensate import pipeline is so insufficient that it barely exists. The AFL has made every effort to provide evidence regarding the impact of a growing dependency on imported condensate in Canada in its evidence. The AFL submits that the Enbridge position has been that details about condensate markets, supply or price projections and so on are just not relevant or important in these hearings. The AFL submits that the only resulting position that can be distilled from the Enbridge evidence is that since they will be building the export line, they might as well build the condensate line at the same time and it will probably get used. This is simply not good enough. Given the lack of economic evidence supporting the condensate line, The AFL submits that the Panel must decline to approve the application for the condensate import pipeline.

In the detailed submissions that follow, the AFL will address specific points raised in the evidence upon which we submit the Panel can reach important conclusions. We do not intending to minimize the importance of all of the evidence, but neither too do we propose to address every detail of it. We hope that limiting our written submissions to these specific points will be of more assistance to the Panel.

II. Ninety per cent of the promised economic benefits come from the predicted price lift.

The Enbridge Commercial Witness Panel agreed that approximately 90 per cent of the economic benefits accruing from the construction and operations of the the Northern Gateway export pipeline arise from the predicted uplift of the price of the oil sands products sold. This proposition is also at the foundation of the evidence of Robyn Allan. (Exhibit D4-2-49). The AFL will generally refer to the slate of heavy crude oil that this panel was referring to as bitumen unless a specific product is to be referenced. The AFL submits that the evidence supports the conclusion that the other ten per cent of the predicted economic benefits arise simply from the construction and operation of the pipeline project itself.

The following two tables are of assistance:

Table 1 **Estimated Economic Benefits of the Project**

Economic Impact	Northern Gateway Estimate	Due to Oil Price Increase	Share from Oil Price Increase
GDP	$270 billion	$246 billion	91.00%
Additional Labour Income	$48 billion	$43 billion	90.00%
Person Years of Employment	558000	496687	89.00%
Government Revenue	$81 billion	$77 billion	95.00%

Source: Table 1-5 Volume 2 adobe page 24, Enbridge Northern Gateway Application (Exhibit b1-4) and Response to Federal Government IR No. 1, as included in Exhibit D4-2-49

Estimated Economic Benefits from Price Lift Share comparing the Original and the updated Wright Mansell reports

Economic Impact	Northern Gateway Application	Due to Oil Price Increase	Northern Gateway Reply	Due to Oil Price Increase	Share from Oil Price Original	Share from Oil Price Reply
GDP	$270 billion	$246 billion	$280 billion	$251 billion	91%	90%

Source: Exhibit B1-4: Table 1-5 Volume 2, adobe page 24, Enbridge Northern Gateway Application and NGP response to Federal Government IR No.1. Exhibit B83-4: Reply evidence Wright Mansell adobe pages 58 – 62. Do not include the induced benefits as those benefits were only part of the Reply evidence, not part of the original evidence. Including those induced benefits would increase the impact of the price lift to higher than 90%.

Enbridge, relying on the updated Wright Mansell report (Exhibit B83-4), states that the Canadian economy will receive CA$280 billion of benefit over the 30 years after the Northern Gateway Project is operational. The AFL asks the Panel to conclude that 90 per cent of these predicted benefits, or CA$251 billion are tied to the reliability of the evidence of the predicted price uplift.

1. The predicted prices

i. The predicted prices of oil are not accurate or reliable.

Enbridge's evidence relies upon the price predictions of relevant oil products over the period from 2016 to 2025 provided by Muse Stancil in their original report dated January 2010 (Exhibit B1-4, adobe page 47) and from 2018 to 2035 in their updated report dated July 2012. (Exhibit B83-3) Muse Stancil used their proprietary Crude Market Optimization Model to evaluate the market prospects for Western Canadian crude oil based on its detailed and complex understanding of the oil market in North America and the world. Muse indicated that they relied on the CAPP forecast for oil supply through to 2025 and then used a supply extrapolation provided by Enbridge for the years from 2026 to 2035. Muse indicated that their "Crude Market Optimization Model is a distribution model that predicts the flow of crude to various markets and the Western Canadian crude prices that result from such flows." (Exhibit B83-3, adobe page 7) The same Crude Market Optimization Model was used to determine the data for both Muse reports, although the model is continually updated with new assumptions and data, as outlined in the updated Muse report (Exhibit B83-3).

The Muse reports provided predictions as to the year-by-year net benefits to the Canadian oil industry from the date of startup of Northern Gateway (the last quarter of 2018) to 2035 (see Exhibit B83-3, Tables 2 and 3, adobe pages 9-10). Enbridge adopted those predictions as its evidence before the Panel. The Muse Stancil reports were authored by and under the direction of Neil Ernest who testified as part of first Enbridge witness panel (Transcript Vol. 69 and following).

Mr. Ernest was questioned on the price forecasts set out in Tables A-4 to A-7 of both the original and the updated Muse reports (Exhibit B4-1, adobe pages 90-93 and Exhibit B83-3, adobe pages 56-59). In those tables the historical and predicted prices are set out. The price predictions for 2010 and 2011 were projected data in the original Muse report and had become historical data in the updated Muse report due to the time that passed between the preparations of the two reports. Mr. Ernest was questioned as to why there was such a difference between the projections and the actuals in these closest in time years to time of preparation of the predictions in the first Muse report. His answer was that while oil price predictions were required to provide the evidence expected in hearings like this one, no one can accurately predict oil prices and that if he could do so he would be a wealthy man. (Transcripts Volume 71, Line 17722)

> 17722 Mr. Earnest: Price forecasting in the oil industry and most industries is certainly a challenge.
>
> If I could predict with confidence future oil prices, I wouldn't be sitting here today, I'd be floating around in my yacht on the Riviera, I assure you.

Mr. Ernest's testimony on this point is credible and refreshing. It is reasonable to expect that predictions as to the future price of oil products would be most reliable in the time frames closest to the date the prediction is made as the models and assumptions would be based on known realities. When one compares 2010 oil price predictions in the first Muse report to actual prices for the same listed in the 2012 updated Muse analysis, (using the same Crude Market Optimization Model) the following is seen:

Projected and Actual Crude Prices and Spreads - 2010
($US 2010)

	2010 Forecast	2010 Actual	Forecast Error
WTI at Cushing	$73.19	$79.39	$6.20 or 8.5%
Brent	$72.34	$79.47	$7.13 or 9.9%
Arab Heavy	$68.97	$77.71	$8.74 or 12.7%
Asia Premium based on Arab Heavy	$2.29	$1.18	-$1.11 or -49%

Source: Exhibit B1-4, Muse 2009, adobe pages 90-93 and Exhibit B83-3 Muse 2012, adobe pages 56-59, Table A-5 and A-7

The AFL submits that the Muse price predictions for even the closest year to the report date are significantly inaccurate.

Muse Stancil's updated report states that the Northern Gateway net benefit to Canada's oil industry through to 2035 will be CA$38 billion (Exhibit B83-3, adobe page 10). In fact, after an addition error was pointed out, in testimony Mr. Ernest agreed that the predictions he made were of a CA$45 billion net benefit (Exhibit B103-1). That benefit calculation is premised on the predictions of the price of oil over the years to 2035. Those are the same oil price predictions that Mr. Ernest testified were not possible to make with any level of certainty or reliability. Those are also the same oil price predictions that were accepted by the first Enbridge witness panel, including Mr. Ernest, as being the basis for 90 per cent of the benefits predicted to arise from the Northern Gateway Project.

Enbridge also relied upon the conclusions reached in reports prepared by Wright Mansell dated March 2010 (Exhibit B1-4, adobe page 125) and July 2012 (Exhibit B83-4). Dr. Robert Mansell testified as part of the first Enbridge witness panel. Enbridge adopted the conclusions of Wright Mansell as its own evidence of the overall benefit to the Canadian economy from the Northern Gateway project. The price predictions used in Wright Mansell reports are the predictions provided by Muse Stancil, which are the predictions Mr. Ernest testified about in the quote above. Dr. Mansell also accepted the proposition that 90 per cent of the benefits predicted to arise from the Northern Gateway Project were based on the predicted price uplifts. (Transcript Volume 69, Lines 14600 – 14601)

The AFL submits that the Panel ought to conclude that:

a. The predicted price lifts relied upon in all of the Enbridge evidence are based upon the predictions made by Muse Stancil.

b. The Muse Stancil predicted price uplifts are not accurate or reliable.

c. The benefits to the Canadian oil industry predicted by Muse Stancil are based on its predicted price uplifts and are therefore not accurate or reliable.

d. The Wright Mansell predicted overall benefits to Canadians are based on the Muse Stancil unreliable and inaccurate price predictions.

e. Since 90 per cent of the benefits that Enbridge relies upon in support of its Application are based on the unreliable and inaccurate price predictions, the benefits predicted are not accurate or reliable.

f. Therefore, the Applicant has not proven 90 per cent of the benefits that it has put forward in its sworn evidence.

ii. The Asia Premium

In the first Muse Stancil report (Exhibit B1-4, adobe page 47), Muse predicted that part of the price uplift that Western Canadian crude oil would receive was due to the "Asia Premium." That is to say, the evidence indicated the diluted bitumen products shipped on Northern Gateway and sold in Asia would be sold at a premium price above the North American and world market prices. The first Muse Report stated:

> "The higher delivered cost (US$1.60/bbl) is attributable to the "Asia premium" charged by the Mideast national oil companies crude cargos destined for Asia. The premium is relative to the price of a crude destined for delivery to the U.S. The total freight costs from Edmonton to the U.S. Gulf Coast and Northeast Asia are similar using the spot tariffs on the Northern Gateway and Keystone pipelines. The total freight costs are somewhat lower on Northern Gateway using the committed tariffs. Accordingly, since the Canadian crude producer can access a higher priced market (Northeast Asia) at the same, or lower, freight cost, the producer captures a price benefit at Edmonton due to Northern Gateway."
> (Exhibit B1-4, adobe page 54)

The written evidence of Robyn Allan addresses the concept of the "Asia premium" in detail. (Exhibit D4-2-49) The "Asia premium" is not the result of the operation of a free market. In the past, the "Asia premium" arose because the Mideast national oil companies segmented their markets, charging a higher crude oil price to buyers in Asian markets, particularly crude oil consumers in China. The "Asia premium" was a form of price gouging when China had few alternative sources of crude oil.

Ms. Allan's evidence states it is unlikely that the Asia premium will continue to exist as Chinese oil companies became involved in developing sources of oil alternative to the Mideast, including sources in Russia and the Alberta oil sands. Given that China's state-owned oil companies are integrated producers/refiners, a source of cheap feedstock is in their economic interest. As Ms. Allan's evidence states, it is unlikely that Sinopec and CNOOC – both shippers on the Northern Gateway pipeline - would send the oil they extract in Alberta down the Northern Gateway pipeline to their own refineries in China and charge themselves a premium to do so. The "Asia premium" is not generated by the free market that operates in Canada. It is impossible to conclude, in the context of who intends to ship crude oil on the Northern Gateway pipeline, that the "Asia premium" for Canadian crude would persist for long - if at all. (Exhibit B83-3, adobe page 54 Table A-3)

Interestingly, the updated Muse Stancil report significantly minimizes the impact of the Asia premium on the predicted benefits of the Northern Gateway Project. The updated Muse report states:

> "Moreover, the criticality of the size of the Asia Premium on the optimization model output is overstated by the interveners. It is critical that the Northeast Asian crude prices be high enough, relative to the U.S. Gulf Coast alternative, for crude oil to ship on Northern Gateway, but, once that threshold price differential is attained, the benefit of further increases in the Asia-Gulf Coast price differentials mostly flows to the shippers on Northern Gateway and does not get simply expressed as higher crude prices at Edmonton. Once Northern Gateway is full, higher Asian crude prices cannot further increase shipments on Northern Gateway (although the shippers may benefit) and Northern Gateway is no longer acting as the price-setting mechanism for Western Canadian crude. If Northern Gateway is full, some other transportation mode and perhaps market must be acting as the

price-setting mechanism for Western Canadian crudes." (Exhibit B83-3, adobe page 34)

It is troublesome that Muse so significantly changes its view on the importance of the "Asia premium" when the predicted $1.60/bb is about 85 per cent of the total average price lift Muse predicted over the period of time referenced in their original report. It is also interesting to compare the first and the second Muse reports Table A-7 data for the predicted Asia premium, in the 2010 and 2011 because the comparison illustrates the unreliability of the price predictions of this premium as well. (Exhibits B1-4 and B83-3, Table A-7, adobe pages 93 and 59 respectively.)

Furthermore, the evidence from the Shippers witness panel confirms that "Asia premium" is not something that they expect to capture or base their support for the Northern Gateway Project upon. (Transcript Volumes 80 and 81)

The AFL submits that the Panel ought to conclude that:

a. The Muse predictions regarding the amount of the "Asia premium" are no more accurate or reliable than their other oil price predictions.

b. The "Asia premium" is unlikely to continue to exist for the reasons presented in the evidence of Ms. Allan.

c. The "Asia premium," at whatever level it might occur, is only possibly relevant to attract shippers to enter into long term contracts to fill the Northern Gateway pipeline. Once the pipeline is filled, any "Asia premium" that might exist is irrelevant to the overall price of Western Canadian crude oil and thus would provide minimal, if any, benefit to the Canadian economy.

iii. The drop-to-drop price of bitumen

Enbridge's evidence states that the exact ratio of diluent to bitumen in a barrel of Athabasca Dilbit, Cold Lake Blend, Western Canadian Select or other blended bitumen barrels is confidential information and proprietary to the producers. However, the evidence also shows that the ratio is understood to be between 25 and 40 per cent condensate-to-bitumen. (Transcript Volume 75, Lines 22447 – 22448, 22462 and 22476-22478)

The Muse Stancil reports set out their predictions for the price impact of Northern Gateway on these blended barrels of bitumen in Tables A-15 (Northern Gateway operating) and A-16 (Base Case) (Exhibit B1-4 adobe pages 104 and 105, and Exhibit B83-3, adobe pages 70 and 71). In the original report, Muse compared the price of the blended barrels of bitumen to West Texas Intermediate (WTI), while in the updated report the comparison of the Canadian blended bitumen products was to Light Louisiana Sweet (LLS). The AFL points out that the tables in the updated Muse report show that LLS is between $4.35 and $6.42 higher priced that WTI in the comparison period of 2018 to 2035. There was no explanation given for the sudden and unannounced change in the benchmark comparator used by Muse, which also makes it difficult to compare the data presented in the original and updated reports.

In any event, when one compares the Muse Stancil price predictions for Western Canadian blended bitumen products to the selected benchmark in each of the Muse reports, one sees that the price differential is significantly less than 30 per cent for all the years of the comparison period.

The AFL submits that if the barrel of Athabasca Dilbit is comprised of 25 to 40 per cent condensate and only 60 to 75 per cent bitumen, then one would expect that a barrel of Athabasca Dilbit would be priced at least 25 to 40 per cent less than the barrel of LLS or WTI, as those benchmark barrels are full barrels of oil with no condensate included. Put another way, the prices predicted appear to suggest that on a drop-to-drop of oil comparison of only the oil part of the barrels, bitumen is predicted by Enbridge's evidence to be priced higher than WTI or LLS, over the forecast period, in the markets under consideration in Muse Tables A-15 and A-16.

Throughout the hearing, Enbridge and its experts steadfastly maintained that the price and supply of the condensate used to blend Western Canadian bitumen for pipeline shipping purposes was irrelevant to any benefits analysis. Requests for detailed information about the value of condensate and how its prices might fluctuate over the comparison periods were denied on that basis.

The AFL submits that the Panel ought to conclude that:

a. If Enbridge is correct that the price and value of condensate is irrelevant, it cannot be found to have any impact on the way the blended bitumen products are valued in the Muse reports.

b. The price predictions in the Muse Stancil reports show that, on a drop-to-drop of oil basis, bitumen will be priced higher than the conventional oil benchmarks.

c. It makes no economic sense to price bitumen at a price higher than WTI or LLS. Bitumen is a lower-quality heavy crude that must first be upgraded before it can be refined. Further, there is no evidence on the record that provides any rational explanation for why bitumen might be priced higher than conventional crudes.

d. Therefore, the Muse Stancil predictions as to the price of oil products are wholly unreliable and inaccurate.

2. The predicted price lift is only for one year at best.

The benefits of the Northern Gateway Project presented by Enbridge have been calculated on the basis that in each year of the prediction period (2018 to 2035 for Muse Stancil and 2018 to 2048 for Wright Mansell in the July 2012 updated reports, Exhibits B83-3 and B83-4 respectively) there will be further benefits to the Canadian economy. The Enbridge expert evidence states that in each year under consideration there will be an oil price lift attributable to the Northern Gateway Project. That hat price lift will have direct, indirect and induced impacts on the overall Canadian economy each year for 30 years.

However, neither the Enbridge evidence nor the evidence presented in support of the Application by the Government of Alberta through the Reports of Wood Mackenzie and the oral testimony of Dr. Harold York actually supports these conclusions. The AFL also directs the Panel to the evidence of Robyn Allan (Exhibit D4-9-2, adobe page 46, and Exhibit D4-2-49).

i. The Muse Stancil reports and evidence confirms the Northern Gateway export pipeline will act as a price setting mechanism only until it is full.

The updated Muse Stancil report, quoted above, (B83-3, adobe pages 34) states that once the Northern Gateway export pipeline is full, it will no longer be a price setting mechanism in the oil market. This statement in the updated Muse report is consistent with the evidence given orally by Mr. Ernest. (Transcript Volume 70, lines 15882 to 15887) The AFL submits that the example of how the Pegasus pipeline operates in both the updated Muse report and the oral evidence of Mr. Ernest represents exactly how the Northern Gateway export pipeline will impact oil markets. The only conclusion is that the impact of the export pipeline, in terms of creating benefits to the Canadian economy, will cease once the pipeline is full.

The oral evidence of Mr. Fisher given on behalf of Enbridge was that Enbridge would enter into long term shipping contracts to fill the Northern Gateway export pipeline, with the exception of a small amount reserved for spot shipping, before construction of the pipeline even begins. This is confirmed in Enbridge's written evidence.. Furthermore, the Shippers witness panel confirmed they expected the Northern Gateway export pipeline to fill quickly, after a "lumpy" period of one or two years at most. (Transcript Volume 80 Line 29725 and following)

In light of this evidence, it makes no sense for Muse Stancil to have calculated benefits from the Northern Gateway export pipeline each year for 30 years. In the real world, the pipeline will be built and on or about the first day of operations (based on Mr. Fisher's view) or within a year or two (based on the Shippers' view) of the maximum "lumpy period," it will be filled. Northern Gateway will then have a one-time impact on the market price of Western Canadian oil products and then, unless it ceases operations for a sufficiently significant period of time, it will cease to be a price setting mechanism. This analysis was also provided to the Panel in the evidence of Robyn Allan (Exhibit D4-9-2, adobe page 46).

The AFL submits that the Panel ought to conclude that:

a. The Northern Gateway export pipeline will be filled from the beginning of its operation with long-term shipping commitments, except for a small amount of spot shipping capacity, or it will not be constructed.

b. The Muse Stancil reports and the oral evidence of Neil Ernest lead to the conclusion that once the Northern Gateway export pipeline is operating at full capacity, it no longer is a price setting mechanism in the oil market.

c. When the Northern Gateway export pipeline ceases to have an impact on the price of crude oil, it ceases to add any further economic benefit to Canada.

d. At best, the Northern Gateway export pipeline will provide the economic benefits predicted by Enbridge and its experts in the first year or two of its operation, while it fills to capacity and as it begins operations.

ii. The Government of Alberta's evidence, provided by Wood Mackenzie and Dr. Harold York, confirms that the Northern Gateway export pipeline will contribute a one-year benefit to the Canadian economy – at best.

The Government of Alberta commissioned a report from Wood Mackenzie, dated December 2011. The Government of Alberta filed the Wood Mackenzie report as evidence in support of Enbridge's Application. (Exhibit E8-3-2) An update to that report was filed with IR answers provided by the Alberta Government. (Exhibit E8-6-4, beginning at adobe page 7) Dr. Harold York, who authored the Wood Mackenzie reports, gave oral testimony at the hearings (beginning in Transcript Volume 81, line 31338).

Dr. York gave extensive evidence as to the nature of his analysis of oil markets and how those markets impact the price of Western Canada heavy crude oil products. He provided a reconciliation of Table 3 to Table 3A in his original and updated reports and a correction to Figure 2 of the updated report. (Exhibit E8-6-4, adobe page 11 corrected with Exhibit E8-20) Dr. York explained that by 2018 there would be sufficient bitumen supplied for sale from the Western Canadian oil sands that some of it would be purchased by less complex refineries in North America - who pay a lower price for the slate of oil they use as refinery inputs. Once the amount of bitumen purchased at this lower price reaches a sufficient threshold, the price of all bitumen sold in North America would drop to the same level. Dr. York was unable to confirm the exact amount of bitumen that would be required to be sold to change the price in this manner. The economic theory is that one single barrel is sufficient; however, in real life markets are not quite so nimble. Dr. York suggested 56,000 bb/d might not be enough but amounts in the order of 300,000 bb/d were certainly sufficient. (Transcript Volume 81, lines 1909 to 1930, Transcript Volume 80, lines 574 to 578)

Dr. York explained that the benefit of the Northern Gateway export pipeline was that it removed 525,000 b/d of bitumen products from North American oil markets. As a result, oil producers would be able to sell all of the remaining bitumen produced in Western Canada to more complex refineries who were willing to pay higher prices for the bitumen. None of the bitumen would find its way to the less complex refineries who pay less for heavy crudes.

However, in contradiction to the impression left by the Wood Mackenzie written reports and the original rendition of Figure 2 in the updated report, when explaining the revised Table 2 (Exhibit E8-20) Dr. York also confirmed that, at best, the Northern Gateway export pipeline would have this stated impact on the price of bitumen for one year. Given his bitumen supply predictions, Dr. York confirmed that within one year after a pipeline with the capacity of the Northern Gateway commenced operations and was filled, the supply of bitumen produced in Western Canada would again surpass the amount of bitumen that could be used by the more complex refineries. It would again make its way to the simpler refineries that pay less, causing the price of all bitumen sold in North America to drop.

The impact would be that all the bitumen sold thereafter in North America would again be priced at the same approximately $8.00/bbl discount Dr. York predicted would happen if Northern Gateway was not built. (Transcript Volume 83 lines 1872 – 1952)

Interestingly, when asked why the producers would continue to supply bitumen for sale in the market if the price was about to suffer a price discount of $8.00/bbl, Dr. York explained that to the producers the bitumen was still profitable if sold at that discounted price. (Transcript Volume 82 Lines 804 – 886).

The AFL submits that the Panel ought to conclude that:

a. The predicted economic benefits of the Northern Gateway export pipeline will be for no more than one year, and perhaps less.

b. The evidence does not support the conclusion that there will be a price uplift caused by the Northern Gateway Project for more than one year, regardless of the reliability or accuracy of the price projections.

c. The oil producers in Alberta do not require the price benefits predicted from the Northern Gateway export pipeline to maintain their profitability and they will not reduce their supply if the price of bitumen does not rise as predicted.

d. Therefore, there is no free market requirement for the Northern Gateway export pipeline.

iii. The price lift predicted by Muse Stancil works in the identical manner as the Wood Mackenzie price lift – that is, only while it takes 525,000 bb/d of blended bitumen out of the North American oil market.

We have already directed the Panel to the evidence of Muse Stancil and Mr. Ernest regarding the impact of the "Asia premium," how the export pipeline will only operate as a price setting mechanism until it is full, and how the Pegasus pipeline operated in a similar manner. (Exhibit B83-3, adobe page 34) That evidence, we submit, is exactly comparable to the analysis given by Dr. York of how the different refinery configurations in North America have an impact on the price of oil. In essence, the price impacts that each of these experts predicts Northern Gateway will have on the Canadian economy are simply caused by the export pipeline removing 525,000 b/d from the supply of Western Canadian bitumen being sold in North America.

The AFL submits that what the experts are actually saying is that the lasting effect of the Northern Gateway export pipeline on the price of bitumen is simply related to the supply of oil. All of the evidence presented by Muse Stancil, Wood Mackenzie, CAPP, Enbridge, and the Shippers panel confirms the conclusion that the amount of bitumen that will be put on the market for sale continues to grow each year between 2018 to 2046. As long as the supply is growing, the overall economic impact of a mechanism that simply removes part of the supply from the North American market (such as the Northern Gateway export pipeline) will only exist until the Northern American supply of bitumen increases sufficiently to replace the amount removed by that mechanism.

The Muse Stancil updated supply tables forecast Western Canadian crude oil supply will be 4,012 kb/d in 2018, increasing by over 525,000 b/d within three years. By 2020, Muse predicts that supply will be 4,641 kb/d. (Exhibit B83-3, adobe page 51, Table A-1) If the Northern Gateway pipeline opens in late 2018 (as assumed in the Muse Stancil updated report) the price impact from Northern Gateway taking the 525,000 b/d of bitumen out of the North American market will be for just over 2 years at best. The supply prediction from Wood Mackenzie is more robust, reducing the likely time for this benefit to one year. (Exhibit E8-3-2)

The Panel ought to also consider the evidence of the Shipping panel in terms of the expected supply from those producers in the near future. (Transcript Volume 80, Lines 29059 and following)

The AFL submits that the Panel ought to conclude that:

a. The evidence of Muse Stancil and other experts, together with the evidence of the Shippers panel, supports a finding that the supply of bitumen - from 2018 through to 2035 - is increasing and will increase by more than the volumes that will be taken out of the North American market by the Northern Gateway export pipeline. Supply will outstrip Northern Gateway's takeaway capacity within one year of Northern Gateway commencing operation in late 2018, as predicted by Wood Mackenzie, or within no more than two years from late 2018, as predicted by Muse Stancil.

3. The benefits predicted by Wright Mansell have no factual foundation.

As we have now seen, the evidence of Dr. York is clearly that the price lift from the Northern Gateway export pipeline is likely to last no more than one year from the time it begins to operate. The above submissions show that the predicted price lifts from the Muse Stancil evidence suggest an increase of just over two years from when Northern Gateway starts operating in late 2018. Turning to the analysis of Wright Mansell, the AFL points out that 90 per cent of the economic benefits predicted in the Wright Mansell analysis arise from the predicted price lift. The Wright Mansell report relied on the Muse Stancil prediction of a price lift in each year from 2018 moving forward for 30 years. If the price lift is only operating for one or two years, the predicted benefits are almost entirely eradicated.

The one- and two-year economic benefits predicted by Wright Mansell in their updated report are difficult to distill exactly from the report itself. However, in general, the report estimates that over the period to 2048, the Northern Gateway Project will increase Canadian Gross Domestic Product by $280 billion (Exhibit B83-4 adobe page 12. These numbers include the economic benefits from the construction and operation of the pipelines project (the ten per cent of the benefits estimated).

The direct impact from price lifts is estimated to be $113.7 billion from 2019 – 2048. (Exhibit B83-4, adobe page 60 corrected) Wright Mansell explains: "the price uplift would not translate immediately into employment and labour income. The proximate effect would be to improve the cash flow and balance sheets of companies. The main employment impact is estimated as a result of the indirect and induced effects arising from reinvestment, stimulated by company cash flow and the improved value of Canadian resources." (Exhibit B83-4, adobe page 61)

Since the improved value of Canadian resources (price lift) will not exist beyond a year or two, the utilization of an Input-Output model framework for multiple years makes no methodological sense. The value of benefits (assuming Muse Stancil has a perfect forecast) would be only the Net Producer price lift benefits for the first year or two of Northern Gateway's initial operation. An estimate of this value is derived from Muse Stancil's updated report (Exhibit B83-3, Table 3, Net Producer Benefit 2018 and 2019, adobe page 10) with 2018 equal to $1.2 billion and 2019 equal to $3.4 billion for a total benefit of $4.6 billion—or roughly $2.3 billion per year. Annualized over thirty years, the benefit estimated by the Proponent would be relatively trivial at $150 million annually.

The AFL submits that the Panel ought to find that:

a. The benefits predicted by Wright Mansell will not materialize as predicted if the Northern Gateway Pipeline is built.

b. The maximum GDP benefit, assuming the correctness of all the Muse Stancil and Wright Mansell methodology, is roughly between $2.3 billion if the price lift lasts one year and $4.6 billion if the price lift lasts two years, not the $251 billion promised in the updated report.

4. Sending the 525,000 b/d of bitumen to a Canadian upgrader or refinery would yield more economic benefit than building and operating the Northern Gateway export pipeline.

Dr. Harold York testified as follows (Transcript Volume 83):

1761 Ms. Chahley: …

Okay, so would it be fair to say, Dr. York, that, as I understand your report, the – the conclusion that you draw is that it is preferable for the market – for the industry, if you like, to keep the heavy oil out of the cracking refineries because that's where we get the lower price.

Are we together so far?

1764 Dr. Harold York: That's correct.

1765 Ms. Chahley: Could that also – just to make sure I understand what the evidence we've done, is that also accomplished by slowing down the pace of production?

1766 Dr. Harold York: It would be on of the – one of the methods.

1767 Ms. Chahley: And is there another method which would be to use more synthetic crude oil?

Is that another method?

1769 Dr. Harold York: You mean to convert to more synthetic crude oil?

1770 Ms. Chahley Yes, to convert to more synthetic crude oil ---

1771 Dr. Harold York: That would be correct ---

1772 Ms. Chahley: --- and sell that product?

And you agree that would be correct?

And then, one of – the third option, I would say, is the one that is before this Panel would be to put the pipeline in place to go to the West Coast.

Is that correct?

1776 Dr. Harold York: That's correct.

1777 Ms. Chahley: And are there any other solutions – that you can think of?

1778 Dr. Harold York: You could reposition Alberta refineries which, at this point, would largely mean expanding them assuming that they could put the refined products to a market.

There is nothing surprising about the proposition that upgrading or a refinery are solutions once one fully understands the basis for the predicted economic benefits in the Enbridge and Alberta Government evidence. Further, there is no economic downside for oil producers to sell their bitumen to an upgrader or a refinery in Alberta, for example. In fact, the closer to their operation that the refinery is, the less they have to pay to ship the bitumen to its market, the less their exposure is to unknown and uncontrollable condensate import costs and related transportation costs. Increased profits therefore accrue to producers and refiners. (Exhibit D4-2-49, adobe pages 24 – 27)

The AFL submits that the difference between taking 525,000 b/d of bitumen out of the North American supply market via upgrading or refining versus exporting it to Asia via the Northern Gateway pipeline is that once an upgrader or refinery is built to take the 525,000 b/d out of the North American supply market, it would have additional other lasting impacts on the Canadian economy. The construction phase of a refinery would provide a significant number of Canadian jobs to construction companies and their workers, and to operations that supply the raw materials and expertise to construction projects. Thereafter, the operation of a refinery each year provides a significant number of well-paid, value-added jobs in Alberta to those who operate the refinery and those workers who perform the significant annual maintenance. Finally, a refinery would be selling finished products, which generate higher economic multipliers throughout the Canadian economy.

The economic consequences of more permanent, long-term employment and increase in value-added of raw bitumen on the Canadian economy is set out in the evidence of Robyn Allan (Exhibit D4-2-49 and Exhibit D4-2-3), and of the AFL (Exhibit D4-2-2 and D4-2-7). In addition, the sale of refined products and spin-off secondary industries that generally accompany the operation of a refinery that processes 525,000 b/d of oil creates ongoing, long term additional improvements to the Canadian economy.

When asked about the profitability of refineries, Mr. Ernest said “refining is highly economic in Canada. Canadian refiner margins are much as they are in the upper Midwest, probably likely at historic highs.” (Transcript Volume 71, Lines 17288 – 17301) He indicated that the issue was the small size of the Canada: “you don’t have enough humans in Western Canada to sell the products to.” (Transcript Volume 71, Line 17289)

The AFL submits that the response to the concern expressed by Mr. Ernest about access to a sufficient size of market for refined products is simply that those products can be shipped to the markets that would be supplied by the refineries that are anticipated to accept the bitumen from the Northern Gateway export pipeline. The AFL points out that refined products require smaller pipelines and may have fewer environmental concerns..

The AFL also submits that there would be significantly less demand for condensate as diluent if a refinery were built close to the source of bitumen in northern Alberta. If bitumen is processed close to where it is produced, there is simply no need to increase the diluent supply and thus no need for the Northern Gateway condensate pipeline.

The AFL also notes that the CAPP 2011 forecast (Exhibit B31-4, adobe pages 37 and 38) show us that for 2011, the Alberta upgraders have a capacity to output 1,279,000 bb/d and the forecast upgraded light (synthetic) output for 2011 is 723,000 bb/d. Clearly there appears to be more than sufficient capacity in Alberta to upgrade the total volume of bitumen that will be shipped down the Northern Gateway export pipeline without further construction.

The AFL submits that the Panel ought to conclude that:

a. The Northern Gateway export pipeline will provide no economic benefit to the Canadian economy that would not be provided by upgrading and/or refining of the bitumen in Alberta or Canada.

b. The Northern Gateway condensate import pipeline would be unnecessary if bitumen were to be upgraded/refined in Alberta, closer to oil sands extraction operations.

c. Significantly greater benefits to the Canadian economy would be enjoyed, for far longer periods of time, if bitumen were upgraded/refined in Alberta or Canada than if it were sold in its raw form to Asian markets.

d. There may well be sufficient existing capacity in Canada to upgrade the equivalent amount of bitumen as would be shipped on the Northern Gateway export pipeline already.

III. Other problems with the analyses of the Enbridge expert evidence

1. The value of the Canadian dollar

The AFL, particularly through the evidence of Robyn Allan, explained the significant impact on the estimated benefits predicted by both Muse Stancil and Wright Mansell in their original reports. Both reports used a Canadian dollar that was equivalent to 85 cents of the American dollar. Muse Stancil used an on-par Canadian dollar in its updated report of July 2012, and Wright Mansell used a 95 cent Canadian dollar. Dr. Mansell testified that he felt using a 95 cent dollar was an error, but that he had done so to address the concerns of the interveners.

The AFL submits that the Panel ought to prefer the evidence of Robyn Allan (Exhibit D4-2-49, adobe pages 40, 62 – 65, Exhibit D4-9-3 and D4-9-2, adobe pages 16 - 19) over that of the Enbridge experts. There is significant historical support for the conclusion that the value of the Canadian dollar as compared with the American dollar is tied to the value of oil, as oil increases or decreases in value, so does our dollar as compared to the American dollar. The Enbridge experts also used a fixed exchange rate for their entire analysis period, yet their analyses is that over the approximate 30 year forecast period, the price of oil will more than double, regardless of whether or not the Northern Gateway Project is built. The AFL submits that holding the Canadian dollar to a fixed exchange rate in light of that predicted price increase makes no logical sense, and casts serious doubt on the methodology and the results of the entire analysis.

The value of the Canadian dollar as compared to the American dollar is important to the consideration of the predicted benefits of the Northern Gateway export pipeline. The producers sell Western Canadian oil products in American dollars, but the benefits calculated in the Wright Mansell, Muse Stancil and Wood McKenzie evidence are stated in Canadian dollars. So put simply, if the assumption is an 85 or 95 cent dollar when the value of the Canadian dollar, based on the underlying assumption of the price of oil adopted by the Proponent would be greater than par and rising, the size of the benefit expressed in Canadian dollars is increased simply by converting the American revenues to the lesser valued Canadian dollars. When one is speaking of billions of dollars, an 18 per cent plus increase is a significant amount.

The AFL submits that the Panel ought to conclude that:

a. For the time during which an increase in the price of Western Canadian oil is predicted, the Canadian dollar should also be estimated to be increasing in value as compared with the American dollar.

b. All of the expert evidence given on the assumption of a fixed value of the Canadian dollar at less than or on par with the American dollar is flawed and overstates the benefits to the Canadian economy.

2. The analyses of the expert witnesses supporting the Application contains a sufficient number of errors to undermine its credibility

Although the AFL does not suggest that any party should be held to a standard of perfection, the AFL points out that there are several mathematical errors that it located in the filed and later sworn evidence.

A summary of the errors that the AFL was able to locate prior to cross examination at the Edmonton Hearings is set out in the evidence of Robyn Allan (Exhibit D4-2-49). These errors include simple mathematical mistakes, data being left out, at least one chart that misrepresent the concepts, and failure to identify when US dollar denominated values or Canadian denominated values were relied upon. During cross examination, additional errors were identified with respect to differently stated historical pricing data from one report to the next as well as numerous mathematical mistakes in the Reply Evidence.

(Transcript Volume 70, Lines 16398 – 16421, Lines 16604 - 16615, Transcript Volume 71, Lines 17491 – 17507, Lines 17707 – 17716, Exhibit B103-1, Transcript Volume 83, Lines 1854 – 1932 and Exhibit E8-20)

The AFL submits that the Panel ought to conclude that:

a. The expert evidence of Muse Stancil, Wright Mansell and Wood Mackenzie is not reliable.

IV. Many of the costs to Canadians of the Northern Gateway Project are not recognized

The Enbridge evidence does not account for a number of costs that the Canadian public would incur in the event that the Northern Gateway Project is approved. These costs include:

a. The cost to Canadians well into the future of the loss of the value-added industry in Canada. This lost opportunity includes the opportunities to develop and operate upgraders, refineries and the secondary spin off industry that surrounds the operation of these facilities. It also includes the lost opportunity to develop intellectual property and to be a location for research and development in the oil industry. These opportunities are lost for the current generation and several generations of Canadians into the future.

b. The lost opportunity for Canadian governments to set policy to pace the development of the oil sands or to require upgrading or refining of the raw bitumen before export. The producers are signing long term contracts to export bitumen out of Canada. There will be little ability for policy makers to alter that once the pipeline is in place and the contracts have been signed.

c. The economic impact on the refineries in Canada and the integrated refineries abroad is not fully recognized. There is an assumption that the refineries can cope with the increase in the price of bitumen that the evidence predicts without any real analysis of how that can be. That is particularly troubling in that the evidence suggests that there will be no increase in the price of oil products to the Canadian consumer or to Canadian business or public sector operations. The AFL points out that it continues to make no sense to assume that Canadian refineries will absorb the increase in their costs for bitumen and not pass that onto their customers. However, assuming that the refineries will be contented to absorb these costs, there is no analysis of the impact that will have on the health of those refineries. Will those costs make them likely to close or downsize? Will the long-term impact be that Canadians have to import refined oil products?

d. The evidence in the updated Muse Stancil report (Exhibit B83-3) is that railway transport of bitumen will come on stream before the Northern Gateway Project is operational. There is no analysis of whether rail, as an alternative transportation method, would be sufficient to cause the price uplifts or part of those price lifts predicted to be caused by Northern Gateway. There is no analysis of the cost to the rail industry of Northern Gateway taking the transportation of bitumen business away from the railway.

e. The evidence from Dr. Mansell on the reinvestment benefit was that the reinvestment funds would not come from cash flow but rather would come from borrowing. The AFL points out that there is no analysis of the cost to the Canadian economy of the loss of the borrowed funds from other possible uses of such funds. Further, there is no analysis of the real likelihood of continued long-term reinvestment into the oil sands by the producers.

f. The underlying assumption in the evidence is that the supply of oil is the same with or without Northern Gateway. Reinvestment into the energy sector from the price lifts would stimulate supply leading to downward pressure on oil

> prices, thus eroding price lifts. This market dynamic has not been incorporated into the analysis. Enbridge experts have also failed to acknowledge or allow for the likely impact on production that will arise if the predicted price lifts from Northern Gateway were to occur.

The AFL submits that the Panel ought to conclude that:

a. The evidence presented in support of the Application fails to take many significant costs to Canadians into account and is therefore inaccurate and unreliable.

V. The decision to export raw bitumen to Asia ought to be made by government and/or public policy, not by producers of oil.

1. Policies of the Government of Canada and the Government of Alberta explicitly favour the upgrading and /or refining of raw bitumen, not its export.

The AFL has long advocated for the Alberta and Canadian governments to develop policy in regard to the pace of development and the rules for development of the Canadian oil sands. The AFL has and continues to urge the NEB and this Panel as well to decline to approve pipelines that export raw bitumen as once operational, each pipeline makes it harder and harder for government policy to alter the export of raw bitumen. The AFL supports a government policy and requirement that Canadian oil be upgraded and refined in Canada.

The AFL's arguments in this regard have generally been met with the suggestion from the industry that any interference with the free market choices would be undemocratic. The AFL points out that the *1975 Energy Policy and Conservation Act* is the main law in the United States that prevents American crude oil from being exported except with a special government permit. It is extremely difficult to understand why it would not be acceptable for Canada to have the exact same policy and laws as the U.S.A. - a government policy that forbids all export of all raw or unprocessed Canadian oil products.

The AFL provided a significant body of evidence showing that the current Canadian and the Alberta governments has publicly stated policies regarding increasing the percentage of raw bitumen upgraded and/or refined prior to export (Exhibit D4-2-49, Exhibit D4-9-4, Exhibit D4-9-5, Exhibit D4-2-2, adobe pages 17 - 23). The AFL submits that approval of the Northern Gateway Project will significantly interfere with the ability of those policies to be implemented.

The AFL submits that the Panel ought to conclude that:

a. The Northern Gateway Project is not in the public interest as it is not in keeping with Canadian and Alberta Government policies that favour more bitumen being upgraded and /or refined in Canada.

2. The decisions made by the producers are significantly influenced by government policies of the Chinese government.

The evidence from Robyn Allan (Exhibit D4-2-49, Exhibit D4-9-3, D4-9-2) and from the Shippers' panel (Transcript Volume 80) provides the Panel with some insight into the significant level of Chinese government ownership of companies producing bitumen and seeking to ship bitumen on the Northern Gateway export pipeline to Asia. The Panel ought to be concerned because the decisions being made by those companies are made to meet the government policies of a foreign country. The decisions are not strictly free-market decisions.

Further, it is clear that all of the Chinese controlled companies who seek to ship their products down the Northern Gateway have ownership interests in refineries in China, so beyond the influence of foreign government policy in the decisions to export raw bitumen, those producers are not seeking to sell bitumen entirely at arms length to customers. Rather, they are selling to themselves, with their own integrated operations in mind, not the free market economic influences at play in Canada. This is particularly important when the Panel remembers that the shippers are entering into very long-term contracts to ship on Northern Gateway.

The AFL submits that the Panel ought to find that:

a. The support for the Northern Gateway Project is significantly influenced by the policy decisions of a foreign government that operates integrated extraction and refining operations and thus those decisions are made outside of most free market influences. Those decisions, which are not a product of the operation of a free market, are not in the best interest of Canadians.

b. Given the significant involvement of a foreign government and its policies in the decision to support the Northern Gateway Project, and given the fact that export of raw bitumen appears to be contrary to the policies of the Alberta and Canadian governments, the Panel ought to defer a decision on the project until such time as the Alberta and Canadian governments have a chance to address the question of the export of raw bitumen to Asia by way of policy and law.

c. Section 52 (c) of the National Energy Board Act – which deals with certificates for pipelines – states that one of the items for consideration by the Board in issuing a certificate is "the extent to which Canadians will have an opportunity of participating in the financing, engineering and construction of the pipeline." It bears pointing out that 2 of the 6 publicly-identified shippers are Chinese State-Owned Oil Companies.

d. Section 52(e) allows the Panel to consider *"*any public interest that in the Board's opinion may be affected by the granting or the refusing of the application." The stated preference of China's State-Owned Oil Companies -

who are significantly invested in production of Canadian oil sands – to have access to cheaper feedstock for their refineries should give the NEB pause with respect to what kind of market dynamics the Northern Gateway pipeline will cement for Canadians.

VI. The Condensate Import Pipeline

The AFL submits that there is simply no evidence upon which the Panel can conclude that the condensate pipeline is in the interests of Canadians. The Application and evidence surrounding condensate appear to boil down to two propositions:

a. If they are building the export pipeline, it makes sense to build the condensate import pipeline at the same time. So it is not necessary to prove any separate public interest regarding the condensate pipeline.

b. The industry will probably need more condensate to export the Western Canadian bitumen down pipelines, and probably there will be sufficient supply of condensate delivered to Kitimat from somewhere in the world to make use of a condensate import pipeline.

Discussions surrounding the condensate pipeline are extremely limited but the Applicant is requesting a separate certificate of Need and Public Convenience (Exhibit B1-2, Volume 1, Section 1.6, Action Sought by Applicant, p 1-11.)

Evidence on the record regarding Condensate essentially boils down to:

a) Volume 1, p 1-3, and page 3-1. (Exhibit B1-2)
b) Volume 2, p 1-10 to 1-12 (Exhibit B1-4)
c) NGP Response JRP No.2 page 6, Exhibit B31-2 (the Potent and Partners Study was promised and only 1 page of information supplied)

d) NGP Response JPR No.2.3 pages 1-5 Exhibit B49-1 (the information provided in No 2, Page 6 is essentially repeated in this IR and then additional information provided.)

Northern Gateway relied on information concerning global condensate market supply provided to it by Poten & Partners. The document upon which the information was based was not provided although Alberta Federation of Labour requested it become evidence. Since the analysis was not submitted as evidence, it has not been tested, and Northern Gateway did not provide a witness that could speak to it.

Northern Gateway summarized the Poten & Partners supply information in less than 2 pages in Volume 2, Section 1-4 of the Application. (Exhibit B1-4) Table 1-4 provided by Northern Gateway references Poten & Partners and is titled "Available Condensate Streams for Canada." This title is misleading.

This supply is not available for Canada, its available for the entire world, and therefore Canada must compete. We do not know if the claim that these supply volumes are available to Canada is Northern Gateway's conclusion, or the consultants they commissioned. Table 1-4 estimates that in 2015 there will be 220,100 barrels a day of condensate available and for 2020 a supply of 320,200 barrels a day.

The Proponent concluded in Volume 1 of its Application that, based on these figures, "a conservative estimate of net supply exceeds the capacity of the Project's condensate pipeline" and hence there is a market to satisfy the Northern Gateway condensate pipeline capacity. However, supply projections for 2015 in the updated information in IR 2.3 (Exhibit B49-1) fell substantially to 41,000 bb/d and suggests that there is not only a real question about Poten &Partner's ability to forecast, but a questions as to whether there will be supply from offshore when Northern Gateway is ready to operate.

In IR No. 2 to Northern Gateway, the Panel requested an updated annual supply forecast to the year 2035 for condensate available to the import pipeline (Exhibit B43-1, question 2.3). On August 18, 2011 Northern Gateway responded to the JRP. IR No.2.3 and explained that Poten & Partners had been requested to provide a study that would respond to the JRP's questions and that "(T)this study is underway and will be filed with the JRP as soon as it is available."[1] (Exhibit B31-2)

IR No. 2.3 stated, "Changes in these variables can influence the availability of supply globally positively or negatively" and included an identification by Northern Gateway of the factors that can affect condensate supply including:

- Global natural gas production
- Petrochemical demand
- Refinery and condensate splitter demand
- Disruptions in producing countries
- Demand from heavy oil producers

On November 9, 2011 Poten & Partners submitted to Northern Gateway a draft copy of the study titled "International Condensate Supplies & Pricing." This report was not filed as promised. On November 28, 2011 Northern Gateway responded to the outstanding questions from IR No. 2.3 (Exhibit B49-1, item (d) in the summary) and provided selected information from the Poten &Partner's draft report related to revised supply estimates.

On August 22, 2012 AFL filed a Notice of Motion (Exhibit D4-13-1) requesting the Poten &Partners study be submitted as evidence. (Relief Sought, item c). The Motion was denied.

a) **Poten and Partners, has estimated the following volume of condensate to be available to the Northern Gateway condensate pipeline.**

kbpd	2015	2020	2025	2030	2035
Diluent Potential	41	332	334	418	512

The volume noted in the table represents what is left after volumes, which are available to the export market, are used by the refining and petrochemical industry and by merchant and petrochemical splitting.

There was no mention in NGP Response to JRP IR No. 2.3 of the promised study (in IR no. 2), nor why Northern Gateway had elected not to file it.

There was no discussion in the response to IR No. 2.3 to alert the Panel to changes in the new supply forecast as compared to the original figures in the Application. The 2015 estimate fell from 220,100 barrels a day--almost 180,000 barrels a day—to 41,000 barrels a day, which suggests there would be a lack of supply for Northern Gateway's estimated in service date, at that time, of 2016.

There was no explanation as to why the new supply forecast would see condensate supply increase dramatically from 41,000 barrels a day to 332,000 barrels a day within five years.

Northern Gateway witness Paul Fisher could not speak to the reliability of the Poten & Partner's report as he did not prepare it. He did however confirm his understanding that predicting condensate is tenuous and evades a credible methodology.

> 17003 MR. PAUL FISHER: I understood it that it is very difficult to forecast on a long-range basis with any type of precision the amount of condensate that may be available for the North American market. But we weren't looking for precision. We were looking for general indications of the availability.
>
> That decision on the amount of condensate and where that condensate will be sourced from will be made by the Gateway shippers prior to them executing their transportation service agreement on the condensate import pipeline.

The AFL states that there is simply no reliable evidence regarding the condensate import pipeline.

The AFL submits that the Panel ought to conclude that:

a. There is no evidence that the condensate import pipeline will be in the interests of Canadians.
b. It is highly inappropriate to approve the condensate import pipeline just because it is convenient to build it at the same time as the bitumen export pipeline.
c. In the event that the bitumen export pipeline is not approved, there is no basis on the evidence to approve the condensate import pipeline as a stand- alone project.
d. Section 52 of the Act states: "The Board may, subject to the approval of the Governor in Council, issue a certificate in respect of a pipeline if the Board is satisfied that the pipeline is and will be required by the present and future public convenience and necessity." The proponents have not put forward any case that the condensate pipeline is or will be required.

VII. Conclusion

The AFL submits that the public interests of Canadians, including Albertans and British Columbians, is that raw bitumen from Alberta's oil sands be upgraded and/or refined in Canada, not exported in its raw state.

Upon analysis and scrutiny, Enbridge's evidence does not reveal any significant benefits for Canadians if the Northern Gateway Project is approved. At best, the economic benefits suggested will last one to two years. The economic benefits of the Northern Gateway project pale in comparison to the long-term sustained benefits that would occur if the bitumen were to be upgraded and refined in Canada such that finished oil products are sold to export markets.

The AFL submits that when the lack of benefits - taken together with the environmental effects of running a pipeline through mountainous, remote terrain, along with the effects on indigenous communities and traditional territories,, the Panel can come to no other conclusion but to dismiss the application.

The AFL does not have comments to make on the detailed and thoughtful draft conditions suggested by the Panel. The AFL submits that should the Panel decide to approve the Northern Gateway Project, then the AFL encourages the Panel to ensure that there are stringent conditions to ensure the safety of all workers connected to the project and the safety to the environment and the communities who will be directly and indirectly impacted by the project and the operation of the pipelines. The AFL presented the evidence of Robyn Allan regarding insurance issues connected to the project and we specifically endorse the condition that requires that insurance in the magnitude recommended by Robyn Allan be secured for the project.

All of which is respectfully submitted by the Alberta Federation of Labour.
May 30, 2013