

# **LINE 3 REPLACEMENT PROJECT**

## **Application for Certificate of Need**

**Minnesota Public Utilities Commission  
Appendix D**

Issue Resolution Sheet (US)



***Representative Shipper Group (RSG)  
Issue Resolution Sheet (IRS)  
CONFIDENTIAL & WITHOUT PREJUDICE***

Final IRS # 2013-02-B (U.S.) Line 3 Replacement
Enbridge Pipelines Inc. Enbridge Energy Limited Partnership

**ISSUE: Line 3 Replacement (U.S.)**

**PROJECT SCOPE (See Appendix A for additional information)**

- Initial annual capacity of 760 kbpd assuming 65% heavy / 35% light
- New 36-inch pipeline between the U.S. border and Superior, except for approximately 16 miles downstream of the U.S. border which will be new 34-inch pipe
- 8 new pump stations
- Clearbrook terminal connectivity
- Superior terminal connectivity
- Target in-service date: Q3 2017
- All scope will be updated to reflect the Class IV Cost Estimate to be completed in April 2014
- Total unclassified cost (including AFUDC; including Decommissioning) ("Unclassified Total Capital Costs"): US\$2.6B

**Operational**

- New Line 3 will be placed in mixed service from Hardisty to Superior,
- Existing Line 3 decommissioned from Hardisty to Superior

Should the scope of the project, including any of the individual components, deviate materially from what is identified above, Enbridge commits to update the RSG in a timely manner and where reasonable may seek amendment of this IRS 2013-02-B (U.S.).

**RSG MEMBER CONDITIONS PRECEDENT**

Enbridge Pipelines Inc. ("Enbridge") will update the RSG Members early Q2, 2014 regarding the completed results of the Line 3 Class IV Cost Estimates. Should the Line 3 Class IV Cost Estimates result in total capital costs (including AFUDC and decommissioning) (U.S. and Canada) in excess of 15% above the Unclassified Total Capital Costs, then within 30 days of receipt of the Line 3 Class IV Cost Estimates from Enbridge the RSG will have the option to vote on not proceeding with IRS 2013-02-A (Canada) and IRS 2013-02-B (U.S.), and should the RSG through a two thirds majority vote elect not to proceed, the applicable clauses in IRS 2013-01-A and 2013-01-B regarding the Class IV cost estimate recovery will be applicable. A RSG termination notice will follow a RSG two thirds majority vote to not proceed, which



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must be provided to Enbridge through written notice within 30 days of the Enbridge delivery of the Class IV Cost Estimate. Failure to provide written notice within such 30 day period will be deemed to be an election to waive the related termination right.

**ENBRIDGE and RSG MEMBER CONDITIONS PRECEDENT**

In the event that;

- 1) Enbridge does not receive regulatory approvals by July 2016; or,
- 2) Enbridge has received regulatory approvals but the approval is not satisfactory to Enbridge, acting reasonably; or
- 3) Enbridge has applied for regulatory approvals and at any time Enbridge believes, acting reasonably, such regulatory approvals are not likely to be received, then

Enbridge will provide the RSG with notice of such event the RSG (subject to a two thirds majority vote), will have the option to elect to terminate the Line 3 Replacement upon notice. Such notice must be given within 30 days of Enbridge's notice, failing which either party will be deemed to have waived its right to elect to terminate the Line 3 Replacement.

In addition, the following key milestones are provided to inform the RSG of the important checkpoints for updates. The dates listed are based on the unclassified cost estimate and will be revised with the Class IV Cost Estimate.



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Milestone	Date	*% of Unclassified Total Capital Cost
Class IV Completion	31-Mar-14	1.7%
Submission of Regulatory Applications	1-Oct-14	5.4%
Ordering Long Lead Items (Pumps, Pipe)	31-Mar-15	13.3%
Regulatory Approvals / Construction Start	1-Jun-16	40.2%
Target In-service	Q3 2017	~100%

\*Unclassified Total Capital Cost used for percentage calculation excludes AFUDC

Enbridge will provide quarterly updates to the RSG related to the key milestones above and impacts, if any, on the target in-service date.

**ENBRIDGE CONDITIONS PRECEDENT**

Enbridge will not be obligated to proceed with the Line 3 Replacement described in this IRS 2013-02-B (U.S.) unless IRS 2013-02-A (Canada) is also approved by the RSG.

Enbridge will not be obligated to proceed with the Line 3 Replacement described in this IRS 2013-02-B (U.S.) unless it has received all necessary Enbridge Board approvals including any of its affiliates by the end of March 2014.

**TERMINATION**

Should the RSG vote to terminate the Line 3 Replacement, the RSG will support recovery of all costs incurred as a result of terminating the Line 3 Replacement through cost recovery to be negotiated and agreed to by Enbridge and the RSG.



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**RECOVERY OF LINE 3 REPLACEMENT**

- Term
  - 15-years from the in-service date of the Line 3 Replacement. Upon expiry of this 15-year term, Enbridge will be entitled to recovery of any undepreciated Line 3 Replacement rate base, the terms of which will be negotiated with the appropriate counterparty at that time.
- The forecasted Line 3 transmission toll surcharge for Canada and the U.S., the total surcharge herein referred to as the “Line 3 Surcharge”, which will be adjusted to reflect the capital cost risk sharing agreed to herein, is as follows:
  - For all barrels transported on the Enbridge Mainline a Line 3 Surcharge of
    - US\$0.80/bbl (based on a Hardisty to Flanagan movement) will be applied to the Mainline base rate for the first 10 years of the 15-year term; and
    - US\$0.75/bbl (based on a Hardisty to Flanagan movement) will be applied to the Mainline base rate for the remaining 5 years of the 15-year term.
  - Should the RSG and CAPP support proceeding with the Line 61 Twin project, the Line 3 Surcharge will be reduced by US\$0.10/bbl once both the Line 3 Replacement and Line 61 Twin are in-service such that during the first 10 years, the Line 3 Surcharge will be reduced to US\$0.70/bbl and during the last 5 years, the Line 3 Surcharge will be reduced to US\$0.65/bbl.
  - Each year, the Line 3 Surcharge will be further adjusted to reflect the volume transported on Enbridge’s pipeline system ex-Gretna as follows:
    - For every 50 kbpd below a lower threshold of 2,350 kbpd the Line 3 Surcharge will increase by US\$0.04/bbl; and
    - For every 50 kbpd above an upper threshold of 2,835 kbpd, the Line 3 Surcharge will be reduced by US\$0.035/bbl.
    - The measurement of the volume at Gretna will be based on a monthly average and any adjustment to the Line 3 Surcharge will be based on a 9 month moving average to align with the current Competitive Toll Settlement (“CTS”).
  - In the event that the nine month moving average falls below the lower threshold, Enbridge and the RSG will determine if the cause of the shortfall was due to capacity loss on the Mainline system below the stated lower threshold of 2,350 kbpd. If it is determined that the shortfall was due to capacity loss on the Enbridge Mainline for reasons other than force majeure, the lower threshold will be reduced by the corresponding shortfall amount. For purposes of determining the applicable capacity



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loss, Enbridge will use the historical nine month moving average of volumes from Canadian receipt points through Gretna. Appendix D sets forth capacity amounts anticipated by the in-service date of Line 3 Replacement.

- The transmission toll surcharge will be applied to the International Joint Toll ("IJT") and the Canadian Local Toll ("CLT"), will be distance adjusted with no commodity adjustment and will not be subject to annual escalation.
- During the remaining term of the (the "CTS") the CLT will be adjusted as required to ensure that the IJT is equal to or less than the sum of the CLT and the Lakehead tolls on file and in effect, including recovery of the surcharges. During the term following the completion of the current CTS term, the RSG agrees that the CLT will be adjusted to ensure recovery of the Line 3 Surcharge.
- Receipt toll Surcharge
  - A receipt toll surcharge of US\$0.04/bbl will be charged on all volumes received at the Edmonton and Hardisty terminals with no commodity adjustment and will not be subject to annual escalation.
- Capital Cost Risk Sharing
  - The actual Line 3 Surcharge will be adjusted based on the Class IV Cost Estimate including AFUDC. This adjustment is based on an agreed capital cost risk sharing of 75% to the shipper and 25% to Enbridge for any costs in the Class IV Cost Estimate including AFUDC, which are in excess of the Unclassified Total Capital Costs. Following completion of the Class IV Cost Estimate, 100% of any capital costs that exceed the Class IV Cost Estimate including AFUDC will be borne by Enbridge.
  - The maximum adjustment will be capped at 15% above the Unclassified Total Capital Costs.
    - For reference the surcharge impact based on a Hardisty to Flanagan movement is shown below for 5%, 10% and 15% increases in the Class IV Cost Estimate over the Unclassified Total Capital Costs:
      - 5% = +US\$0.04/bbl
      - 10% = +US\$0.09/bbl
      - 15% = +US\$0.14/bbl
      - Should the Class IV Cost Estimate be below the Unclassified Total Capital Costs, a similar adjustment would occur as follows:
        - 5% = -US\$0.04/bbl
        - 10% = -US\$0.09/bbl
        - 15% = -US\$0.14/bbl



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- The Class IV Cost Estimate adjustment will be applied linearly between these intervals.
- Key Economic Parameters
  - 30-year depreciation
  - ROE consistent with FERC methodology
- Volume includes all forecast volume on the Enbridge Mainline which is expected to be between 2,350 kbpd and 2,685 kbpd as measured at Gretna.
- Post CTS Treatment of Enbridge Mainline Rate Base
  - The RSG agrees that the US\$0.80/bbl Line 3 Surcharge includes the integrity capital of approximately \$1.8 billion used to calculate the credit during the CTS term. Subsequent to the expiry of the CTS, the depreciated integrity capital in the amount of C\$1.3 billion will continue to be included (based on 30-year depreciation) as part of the Enbridge Mainline rate base.
  - Enbridge will maintain a separate rate base for the proposed Line 3 Replacement for the 15-year term of this IRS 2013-02-B.
  - For the purpose of calculating the Enbridge Mainline base toll, power costs will be calculated based on the infrastructure in place without the Line 3 Replacement (See Appendix D).
  - It is also agreed that the estimated remaining rate base at 2013 of US\$ 103 million for the existing Line 3, regardless of whether it is being decommissioned, will also be included as part of the Enbridge Mainline rate base for the Enbridge Mainline toll calculation and will be recovered as part of the Enbridge Mainline toll.
  - Enbridge Mainline Tankage principles, once finalized, will apply to any new tanks that are approved as a part of this project. Any future requirements imposed by a regulator, including those under the Land Matters Consultation Initiative, are outside the scope of this IRS.

**BACKGROUND**

At the January 31, 2013 RSG Meeting, Enbridge presented the Enbridge Mainline Expansions (2016-2017) project to the RSG and proposed that the RSG adopt this proposal as IRS 2013-01 and that pending further discussions, Enbridge would seek a RSG vote to recover the associated costs of the expansions at a subsequent RSG meeting.



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At the same RSG meeting, Enbridge suggested that a new RSG Sub-Committee be formed to address IRS 2013-01. The new RSG Sub-Committee was to be called the "RSG Expansions Sub-Committee 2013". Enbridge requested volunteers for the RSG Expansions Sub-Committee 2013, and it was formed to address IRS 2013-01 in early February, 2013.

At the May 2, 2013 and June 6, 2013 RSG meetings, Enbridge provided an update on the commercial proposal that Enbridge made to the RSG Expansions Sub-Committee 2013 related to IRS 2013-01.

On August 13, 2013, CAPP, on behalf of its Executive Policy Group ("EPG"), provided written support for Enbridge to proceed with an expenditure of up to \$37,000,000 to prepare a total Class IV estimate for the U.S. portion of the Line 3 Replacement Project and the Line 61 Twin Project.

On September 13, 2013, the RSG conducted an email vote for approval of expenditure and recovery of the Line 3 Replacement Class IV Cost Estimate for the Canadian portion (Final IRS 2013-01-A) for a maximum of \$63,000,000, and the U.S. portion (Final IRS 2013-01-B) for a maximum of \$20,000,000. When combined with the Line 61 Twin Class IV Cost Estimate of \$17,000,000 (Final IRS 2013-01-C), the aggregate total of the three cost estimates is \$100,000,000.

Subsequent to the Class IV funding approvals by the RSG which was originally designated as IRS 2013-01, the Line 3 Replacement project has been assigned IRS 2013-02-A (Canada) and IRS 2013-02-B (U.S.). Upon approval of the Line 3 Replacement Project (Final IRS 2013-02-A and Final IRS 2013-02-B), the \$63,000,000 approved for the Canadian portion and \$20,000,000 approved for the U.S. portion of the Line 3 Replacement Class IV Cost Estimate will be included in the overall capitalized project costs.

On October 8, 2013 Enbridge provided the RSG Expansions Sub-Committee 2013 with an update on the proposed commercial terms setting out the two scope options for originating barrels: Edmonton or Hardisty. On October 10, 2013 Enbridge provided a commercial and project update on Line 3 Replacement project to the full RSG for the above mentioned scope options (Edmonton or Hardisty).

Enbridge's proposed Line 3 Pipeline Replacement Project assumes a 36-inch pipe diameter in Canada, 34-inch pipe diameter in 17-mile section around the border, and 36-inch diameter in the U.S. The existing 34-inch Line 3 pipe between Edmonton and Hardisty will remain in-service whereas the existing 34-inch pipe between Hardisty and Superior will be decommissioned.





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On October 21, 2013, Enbridge emailed a commercial offer to the RSG Expansions Sub-Committee 2013 for the Line 3 Replacement project that (1) originates at Hardisty by keeping the existing 34-inch Line 3a in-service between Edmonton and Hardisty; (2) decommissions the existing Line 3 between Hardisty and Superior; and (3) replaces the existing Line 3 between Hardisty and approximately 1 mile upstream of the border with 36-inch pipe, from approximately 1 mile upstream of the border in Canada to a valve approximately 16 miles downstream with 34-inch pipe and from the first valve to Superior with 36-inch pipe.

Subsequent to October 21, 2013, Enbridge and the commercial negotiating team of the RSG met weekly to negotiate the final commercial terms presented herein.

On February 24, 2014 the Final IRS 2013-02-A and IRS 2013-02-B was sent out for an RSG vote to take place on February 26, 2014 at Calgary, Alberta.

**REFERENCE TO CTS**

The IRS 2013-02-B (U.S.) represents an expenditure of greater than \$250MM on the Enbridge Mainline. As a result, pursuant to Section 16.3 of the CTS, Enbridge has concluded negotiations with the RSG. Enbridge and the RSG have agreed that a surcharge is required to support the recovery of the costs of the Line 3 Replacement project.

**RSG RESOLUTION:**

As agreed to with the RSG, on February 26, 2014, the RSG voted on IRS 2013-02-B (U.S.). The results of the vote are below.

The RSG authorizes Enbridge to implement a Line 3 Surcharge in accordance with the commercial terms herein, which will be charged in addition on the CLT and the IJT.

**Voting Results – to be completed by Secretary of the RSG:**

☒ Approved      ☐ Not Approved



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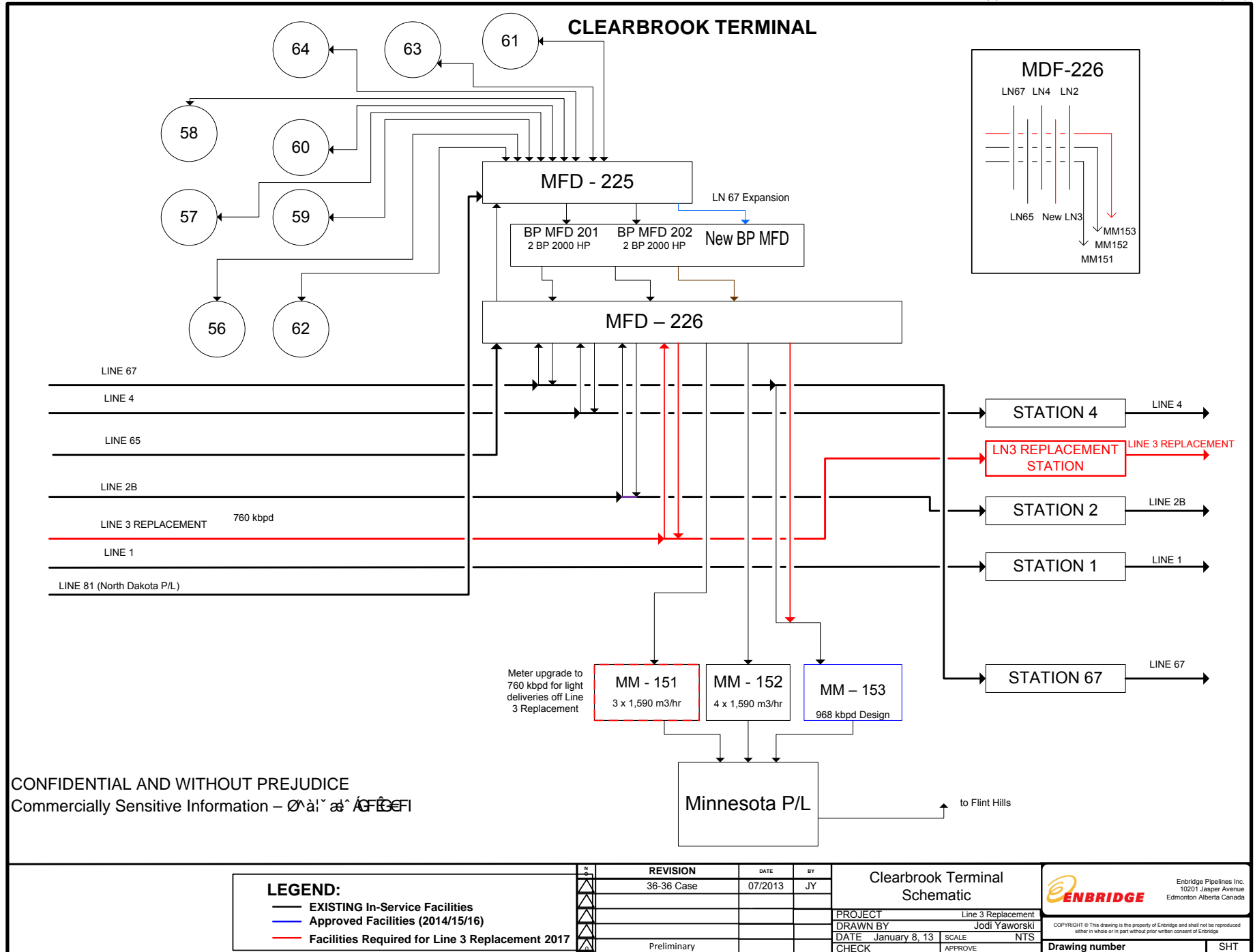
Final IRS # 2013-02-B (U.S.) Line 3 Replacement
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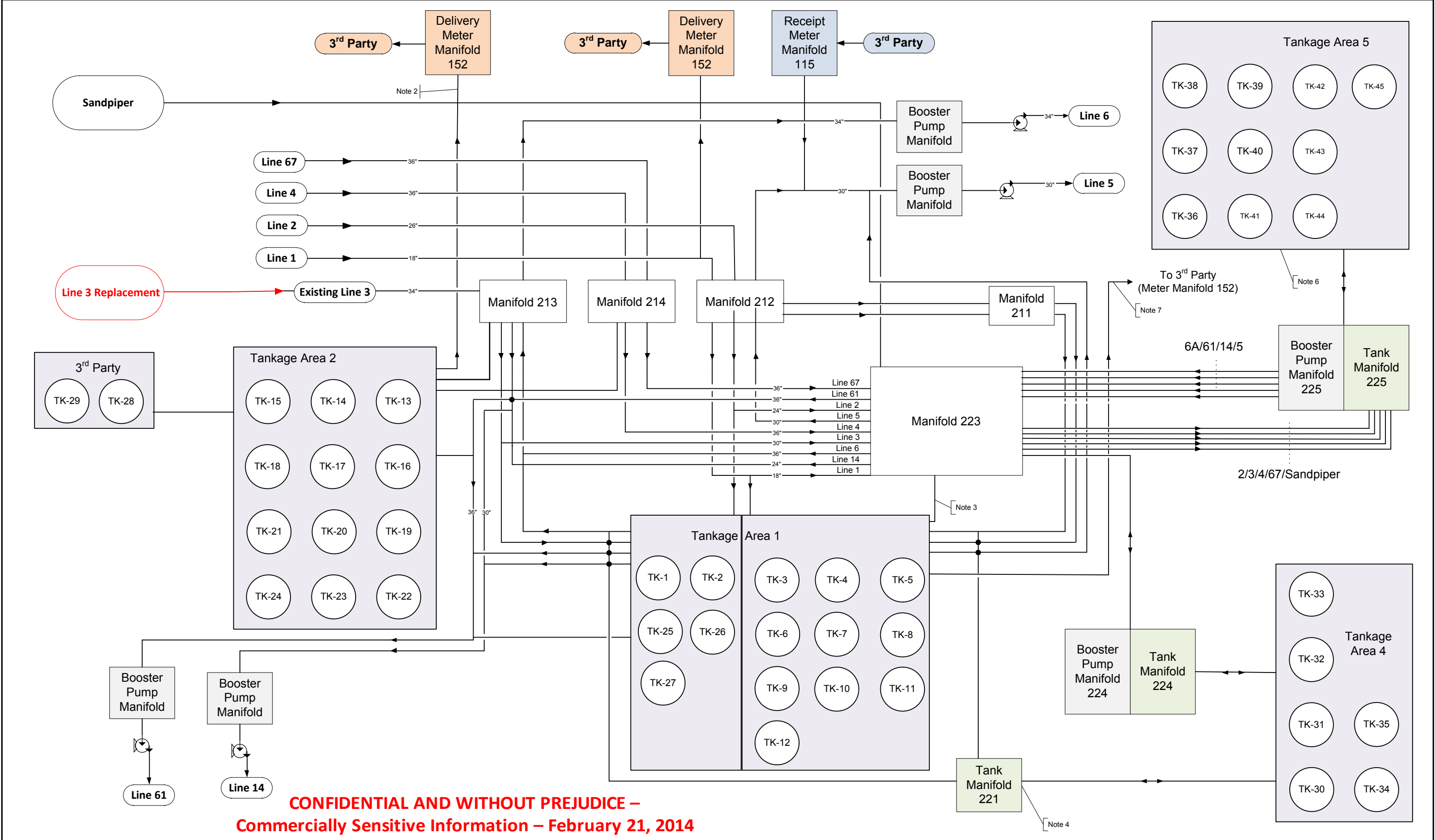
**APPENDIX A**

**Line 3 Scope (US):**

Project	US Capital
Line 3 Replacement (36")	\$ 1,879
Line 3 Decommissioning	\$ 25
Clearbrook Connectivity	\$ 57
Superior - L3 / L61T Connectivity	\$ 25
Re-Route	\$ 300
<b>*TOTAL</b>	<b>\$ 2,286</b>

**\*Excludes AFUDC**





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Commercially Sensitive Information – February 21, 2014**



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Appendix B

Distance Based Line 3 Surcharge Adjustment Prior to any Class IV Cost Estimate Adjustment for the First 10-years of the 15-year Term (Based on a Hardisty to Flanagan Movement)

9-month Rolling Average Volume (kbpd)	Line 3 Only Surcharge <sup>1</sup> US\$ /bbl	Line 3 Surcharge <sup>1,2</sup> Line 3 and Line 61 Twin in Mainline service US\$ /bbl
3,036 to 3,085	0.625	0.525
2,986 to 3,035	0.660	0.560
2,936 to 2,985	0.695	0.595
2,886 to 2,935	0.730	0.630
2,836 to 2,885	0.765	0.665
2,350 to 2,835	0.800	0.700
2,300 to 2,349	0.840	0.740
2,250 to 2,299	0.880	0.780
2,200 to 2,249	0.920	0.820
2,150 to 2,199	0.960	0.860
2,100 to 2,149	1.000	0.900
2,050 to 2,099	1.040	0.940

<sup>1</sup> The Line 3 Surcharge is reduced by US\$ 0.05/bbl for the last 5-years of the 15-year term

<sup>2</sup> A separate Line 61 Twin surcharge will apply



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**Illustrative Example of Line 3 Surcharge Adjustment**

Month	9	10	11	12
Volume (kbpd)				
9-month Moving Average	2,400	2,325	2,290	2,350
Surcharge US\$ / bbl	\$0.80	\$0.84	\$0.88	\$0.80



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Appendix C

Line 3 Class IV Capital Cost Over-run Table for the Line 3 Surcharge Adjustment

<b>Class IV Capital Cost Over-run</b>	<b>Line 3 Only Surcharge US\$ /bbl</b>	<b>Line 3 Surcharge with Line 61 Twin US\$ /bbl</b>
+15%	\$0.940	\$0.840
+10%	\$0.890	\$0.790
+5%	\$0.840	\$0.740
0	\$0.800	\$0.700
-5%	\$0.760	\$0.660
-10%	\$0.710	\$0.610
-15%	\$0.660	\$0.560



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Appendix D

Anticipated Enbridge Mainline Reference Capacities at Gretna with a Line 3 Replacement

Line 1 = 240 kbpd

Line 2 = 440 kbpd

Line 3 = 760 kbpd

Line 4 = 800 kbpd

Line 67 = 800 kbpd

Line 65 = 185 kbpd

Anticipated Enbridge Mainline Reference Capacities at Gretna without a Line 3 Replacement

Line 1 = 240 kbpd

Line 2 = 440 kbpd

Line 3 = 390 kbpd

Line 4 = 800 kbpd

Line 67 = 800 kbpd

Line 65 = 185 kbpd





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Appendix E

Estimated Distance Adjusted Line 3 Surcharge prior to any Class IV Cost Estimate Adjustment

- 1) Edmonton to Hardisty US\$ 0.06/bbl
- 2) Hardisty to Clearbrook US\$ 0.44/bbl
- 3) Hardisty to Flanagan US\$ 0.80/bbl
- 4) Hardisty to Sarnia US\$ 0.90/bbl