

NEB No. 441
Cancels NEB No. 436

FERC No. 45.16.0
Cancels FERC No. 45.15.1



ENBRIDGE PIPELINES INC.

IN CONNECTION WITH

ENBRIDGE ENERGY, LIMITED PARTNERSHIP

INTERNATIONAL JOINT RATE TARIFF

APPLYING ON

CRUDE PETROLEUM, CONDENSATES AND NATURAL GAS LIQUIDS
FROM

POINTS IN THE PROVINCES OF ALBERTA, SASKATCHEWAN, MANITOBA,

TO

**POINTS IN THE PROVINCE OF ONTARIO AND POINTS IN THE STATES OF ILLINOIS, INDIANA,
MICHIGAN, MINNESOTA, NEW YORK, AND WISCONSIN**

USING JOINT ROUTING AS DEPICTED ON PAGE 5 OF THIS TARIFF

The transportation rates listed in this tariff are subject to the Rules and Regulations published by:

Enbridge Pipelines Inc., NEB (National Energy Board) Tariffs Nos. [W] ~~438 418~~, 389 and 417 and reissues thereof, on file with the National Energy Board, for transportation within Canada.

Enbridge Energy, Limited Partnership FERC Tariff Nos. [W] 41.15.0 ~~41.14.0~~ and 42.5.0, and reissues thereof, for transportation within the United States.

The provisions published herein will, if effective, not result in an effect on the quality of the human environment.

ISSUED: November 28, 2018

EFFECTIVE: January 1, 2019

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The rates listed in this tariff are payable in United States currency and are applicable on the International movement of Crude Petroleum, Condensates and Natural Gas Liquids tendered to Enbridge Pipelines Inc. at established receiving points in Canada for delivery to established delivery points in the United States and Canada.

TRANSPORTATION RATES

Commodities shall be classified on the basis of the density and viscosity of such commodities at the time of receipt by Enbridge Pipelines Inc. and assessed a transportation rate as listed in the transportation rate tables below. Density shall be based on 15°C. Viscosity shall be based on Enbridge Pipelines Inc.'s reference line temperature at the time of receipt. Where the density of a commodity falls within the density range of one commodity classification and the viscosity of the commodity falls within the viscosity range of another commodity classification, then the commodity shall be deemed to be in the commodity classification with the higher transportation rate.

NATURAL GAS LIQUIDS (NGL) - A commodity having a maximum absolute vapor pressure of 1,250 kilopascals at 37.8°C and a density of up to but not including 600 kilograms per cubic meter (kg/m³) and a viscosity of up to but not including 0.4 square millimeters per second (mm²/s) will be classified as **Natural Gas Liquids**.

CONDENSATES (CND) – A commodity having a density from 600 kg/ m³ up to but not including 800 kg/ m³ and a viscosity of 0.4 mm²/s up to but not including 2 mm²/s will be classified as **Condensates**.

LIGHT CRUDE PETROLEUM (LIGHT) - A commodity having a density from 800 kg/m³ up to but not including 876 kg/m³ and a viscosity from 2 mm²/s up to but not including 20 mm²/s will be classified as **Light Crude Petroleum**.

MEDIUM CRUDE PETROLEUM (MEDIUM) - A commodity having a density from 876 kg/m³ up to but not including 904 kg/m³ and a viscosity from 20 mm²/s up to but not including 100 mm²/s will be classified as **Medium Crude Petroleum**.

HEAVY CRUDE PETROLEUM (HEAVY) - A commodity having a density from 904 kg/m³ to 940 kg/m³ inclusive and a viscosity from 100 up to and including 350 mm²/s will be classified as **Heavy Crude Petroleum**.

[D] All rates on this page have decreased

**INTERNATIONAL JOINT TRANSPORTATION RATES FOR ENBRIDGE PIPELINES
INC. AND ENBRIDGE ENERGY, LIMITED PARTNERSHIP**

INTERNATIONAL JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER						
FROM	TO	RATE				
		NGL	CND	LIGHT	MEDIUM	HEAVY
Edmonton Terminal, Alberta	Clearbrook, Minnesota		15.3928	16.2645	17.2808	19.0611
	Superior, Wisconsin	17.2822	18.0823	18.9545	20.1754	22.3109
	Lockport, Illinois		24.9110	25.7835	27.5050	30.5208
	Mokena, Illinois		24.9110	25.7835	27.5050	30.5208
	Flanagan, Illinois		24.4631	25.3356	27.0571	30.0729
	Griffith, Indiana		24.9110	25.7835	27.5050	30.5208
	Stockbridge, Michigan		27.2138	28.0866	29.9922	33.3313
	Rapid River, Michigan	21.0416				
	Marysville, Michigan		27.2138	28.0866	29.9922	33.3313
	Corunna or Sarnia Terminal, Ontario	25.9801	27.5750	28.4562	30.3719	33.7220
	Nanticoke, Ontario		29.7911	30.8606	32.9644	36.6443
	West Seneca, New York		30.1185	31.2098	33.3616	37.1267
Hardisty Terminal, Alberta	Clearbrook, Minnesota			13.1006	13.9944	15.5604
	Superior, Wisconsin			15.7906	16.8890	18.8103
	Lockport, Illinois			22.6198	24.2187	27.0200
	Mokena, Illinois			22.6198	24.2187	27.0200
	Flanagan, Illinois			22.1719	23.7708	26.5721
	Griffith, Indiana			22.6198	24.2187	27.0200
	Stockbridge, Michigan			24.9228	26.7060	29.8307
	Rapid River, Michigan					
	Marysville, Michigan			24.9228	26.7060	29.8307
	Corunna or Sarnia Terminal, Ontario			25.2926	27.0856	30.2217
	Nanticoke, Ontario			27.6966	29.6780	33.1436
	West Seneca, New York			28.0462	30.0755	33.6261

[D] All rates on this page have decreased

INTERNATIONAL JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER						
FROM	TO	RATE				
		NGL	CND	LIGHT	MEDIUM	HEAVY
Kerrobot Station, Saskatchewan	Clearbrook, Minnesota			11.5276		13.6486
	Superior, Wisconsin	12.8523		14.2176		16.8984
	Lockport, Illinois			21.0467		25.1083
	Mokena, Illinois			21.0467		25.1083
	Flanagan, Illinois			20.5988		24.6604
	Griffith, Indiana			21.0467		25.1083
	Stockbridge, Michigan			23.3497		27.9188
	Rapid River, Michigan	16.6118				
	Marysville, Michigan			23.3497		27.9188
	Corunna or Sarnia Terminal, Ontario	21.5502		23.7193		28.3094
	Nanticoke, Ontario			26.1236		31.2316
	West Seneca, New York			26.4729		31.7141
Regina Terminal, Saskatchewan	Clearbrook, Minnesota			8.3725		9.8139
	Superior, Wisconsin			11.0623		13.0637
	Lockport, Illinois			17.8915		21.2737
	Mokena, Illinois			17.8915		21.2737
	Flanagan, Illinois			17.4436		20.8258
	Griffith, Indiana			17.8915		21.2737
	Stockbridge, Michigan			20.1947		24.0844
	Rapid River, Michigan					
	Marysville, Michigan			20.1947		24.0844
	Corunna or Sarnia Terminal, Ontario			20.5642		24.4751
	Nanticoke, Ontario			22.9688		27.3972
	West Seneca, New York			23.3180		27.8795
Cromer Terminal, Manitoba	Clearbrook, Minnesota			6.0933	6.4385	7.0440
	Superior, Wisconsin	7.9500		8.7835	9.3332	10.2939
	Lockport, Illinois			15.6127	16.6626	18.5036
	Mokena, Illinois			15.6127	16.6626	18.5036
	Flanagan, Illinois			15.1648	16.2147	18.0557
	Griffith, Indiana			15.6127	16.6626	18.5036
	Stockbridge, Michigan			17.9157	19.1499	21.3143
	Rapid River, Michigan	11.7096				
	Marysville, Michigan			17.9157	19.1499	21.3143
	Corunna or Sarnia Terminal, Ontario	16.6481		18.2851	19.5293	21.7049
	Nanticoke, Ontario			20.6896	22.1221	24.6271
	West Seneca, New York			21.0389	22.5192	25.1095

The above tables provide rates including Transmission and Terminalling Charges, as well as the Abandonment Surcharges, the Edmonton Transportation Surcharge, the Phase 1 Southern Access Expansion Surcharge, the Interim Lakehead Operational Tank Surcharge, the Line 78 (Line 62) Twin Surcharge, the CTS Section 20.1 surcharge, the Non-Performance Penalty, and the Line 61 Twin Surcharge. For further information on the applicable tankage charges in Canada and the United States, refer to Enbridge Pipelines Inc.'s NEB Tariff No. [W] ~~440~~ 432, Enbridge Pipelines Inc.'s NEB RT Tariff No. [W] ~~18-2~~ 18-4, and Enbridge Energy, Limited Partnership's FERC Tariff No. [W] ~~43.28.0~~ 43.25.0. For the applicable Oil Allowance charges in Canada and the United States, refer to Enbridge Pipelines Inc.'s NEB Tariff No. [W] ~~440~~ 432, and Enbridge Energy, Limited Partnership's FERC Tariff No. [W] ~~41.15.0~~ 41.14.0.

Notes:

Abandonment Surcharge: The transportation rates include Abandonment Surcharges for transmission and terminalling pursuant to National Energy Board Decision MH-001-2013 and Order MO-030-2014 for movements of all commodities. All movements to the United States incur a receipt terminalling Abandonment Surcharge. Movements to Corunna or Sarnia Terminal, Ontario and Nanticoke, Ontario incur both a receipt and delivery terminalling Abandonment Surcharge.

Edmonton Transportation Surcharge: Pursuant to CTS Section 16.3, the transportation tolls from the Edmonton Terminal, Alberta receiving point include a surcharge for transmission and terminalling, which is adjusted on July 1 for the GDPP Index but not adjusted for distance or commodity type.

Phase 1 Southern Access Expansion Surcharge: Pursuant to CTS Section 16.3, the transportation tolls for all movements downstream of Superior, Wisconsin include a surcharge, which is adjusted on July 1 for the GDPP Index but not adjusted for distance or commodity type.

Interim Lakehead Operational Tank Surcharge: Pursuant to CTS Section 16.3, the transportation tolls for all movements downstream of Superior, Wisconsin include a surcharge, which is adjusted on July 1 for the GDPP Index but not adjusted for distance or commodity type.

Line 78 (Line 62 Twin) Surcharge: Pursuant to CTS Section 16.3, the transportation tolls for all commodity movements into and east of Chicago include a surcharge, which is adjusted on July 1 for the GDPP Index but not adjusted for distance or commodity type.

CTS Section 20.1(i) Surcharge: Pursuant to CTS Section 20.1(i), the transportation tolls include a surcharge for Regulatory Change(s) or Enbridge Specific Regulatory Change(s), which is adjusted for distance and commodity type.

Non-Performance Penalty: The transportation tolls for all commodity movements include a surcredit for refund of collections under the Non-Performance Penalty, which is adjusted for distance only.

Line 61 Twin Surcharge: Pursuant to CTS Section 13.1(e), the transportation tolls include a surcharge, which is adjusted for distance and commodity type.

JOINT ROUTING:**Receipt Points in the provinces of Alberta, Saskatchewan, and Manitoba to delivery points in the province of Ontario and the states of Illinois, Indiana, Michigan, Minnesota, and New York**

Enbridge Pipelines Inc. – Edmonton or Hardisty, Alberta; Kerrobert or Regina, Saskatchewan; or Cromer, Manitoba to the International Border near Gretna, Manitoba, connecting to;

Enbridge Energy, Limited Partnership – International Border near Neche, North Dakota to Clearbrook, Minnesota; Superior, Wisconsin; Lockport or Mokena, Illinois; Griffith, Indiana; Stockbridge or Rapid River, Michigan; or Marysville, Michigan, connecting to;

Enbridge Pipelines Inc. – International Border near Sarnia, Ontario to Corunna or Sarnia Terminal, Ontario or Nanticoke, Ontario, connecting to;

Enbridge Energy, Limited Partnership – International Border near Grand Island, New York to West Seneca, New York.

EXCEPTIONS:

For exceptions to Enbridge Pipelines Inc., Rules and Regulations and Enbridge Energy, Limited Partnership, Rules and Regulations, see the following:

- 1) **Exception to Enbridge Energy, Limited Partnership’s Rules and Regulations FERC No. [W] 41.15.0 41.14.0 Item 9 (h) and FERC No. 42.5.0 Item 10 (i).** For the purposes of this international joint tariff, Enbridge Pipelines Inc. shall collect in kind a percentage, in the amount of 1/10th of 1 percent of all hydrocarbons physically delivered at the designated Regular Delivery Point.
- 2) **Exception to Enbridge Energy, Limited Partnership’s Rules and Regulations FERC No. [W] 41.15.0 41.14.0 Item 7 (a) and FERC No. 42.5.0 Item 8 (c).** For the purposes of this international joint tariff, Enbridge Pipelines Inc. shall charge a shipper the rate for the transportation of Crude Petroleum that is in effect on the date of delivery at the designated Regular Delivery Point for such Crude Petroleum.

SYMBOLS:

[D] – Decrease

[W] – Change in wording only

Enbridge Pipelines Inc. and Enbridge Energy, Limited Partnership
International Joint Transportation Rates¹

Effective: January 01, 2019

JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER											
Natural Gas Liquids (NGL)											
FROM	TO	Transmission & Terminalling From NEB No. 436 FERC No. 45.15.1	CTS Section 20.1 (i) Surcharge	Abandonment Surcharge	Edmonton Transportation Surcharge	Phase 1 Southern Access Expansion Surcharge	Interim Lakehead Operation Tank Surcharge	Line 78 (Line 62 Twin) Surcharge	Line 61 Twin Surcharge	Non-Performance Penalty Credit	Total NEB No. 441 & FERC No. 45.16.0
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)=(A)+(B)+(C)+(D)+(E)+(F)+(G)+(H)+(I)
Edmonton, Alberta	Superior, Wisconsin	15.4215	0.0268	0.2400	1.5996	-	-	-	(0.0023)	(0.0034)	17.2822
	Rapid River, Michigan	18.4730	0.0327	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0042)	(0.0034)	21.0416
	Corunna or Sarnia Terminal, Ontario	23.4007	0.0414	0.2448	1.5996	0.1920	0.0640	0.4479	(0.0069)	(0.0034)	25.9801
Kerrobart, Saskatchewan	Superior, Wisconsin	12.6627	0.0213	0.1730	-	-	-	-	(0.0023)	(0.0024)	12.8523
	Rapid River, Michigan	15.7143	0.0272	0.1730	-	0.1920	0.0640	0.4479	(0.0042)	(0.0024)	16.6118
	Corunna or Sarnia Terminal, Ontario	20.6420	0.0359	0.1778	-	0.1920	0.0640	0.4479	(0.0069)	(0.0025)	21.5502
Cromer, Manitoba	Superior, Wisconsin	7.8843	0.0117	0.0571	-	-	-	-	(0.0023)	(0.0008)	7.9500
	Rapid River, Michigan	10.9360	0.0176	0.0571	-	0.1920	0.0640	0.4479	(0.0042)	(0.0008)	11.7096
	Corunna or Sarnia Terminal, Ontario	15.8638	0.0263	0.0618	-	0.1920	0.0640	0.4479	(0.0069)	(0.0008)	16.6481

¹International Joint Toll in U.S. Dollar per Cubic Meter

JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER											
Condensate (CND)											
FROM	TO	Transmission & Terminalling From NEB No. 436 FERC No. 45.15.1	CTS Section 20.1 (i) Surcharge	Abandonment Surcharge	Edmonton Transportation Surcharge	Phase 1 Southern Access Expansion Surcharge	Interim Lakehead Operation Tank Surcharge	Line 78 (Line 62 Twin) Surcharge	Line 61 Twin Surcharge	Non- Performance Penalty Credit	Total NEB No. 441 & FERC No. 45.16.0
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)=(A)+(B)+(C)+(D)+ (E)+(F)+(G)+(H)+ (I)
Edmonton, Alberta	Clearbrook, Minnesota	13.5346	0.0230	0.2400	1.5996	-	-	-	(0.0010)	(0.0034)	15.3928
	Superior, Wisconsin	16.2211	0.0274	0.2400	1.5996	-	-	-	(0.0024)	(0.0034)	18.0823
	Lockport, Illinois	22.3385	0.0382	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0058)	(0.0034)	24.9110
	Mokena, Illinois	22.3385	0.0382	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0058)	(0.0034)	24.9110
	Flanagan, Illinois	22.3385	0.0382	0.2400	1.5996	0.1920	0.0640	-	(0.0058)	(0.0034)	24.4631
	Griffith, Indiana	22.3385	0.0382	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0058)	(0.0034)	24.9110
	Stockbridge, Michigan	24.6385	0.0422	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0070)	(0.0034)	27.2138
	Marysville, Michigan	24.6385	0.0422	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0070)	(0.0034)	27.2138
	Corunna or Samia Terminal, Ontario	24.9947	0.0424	0.2448	1.5996	0.1920	0.0640	0.4479	(0.0070)	(0.0034)	27.5750
	Nanticoke, Ontario	27.1558	0.0468	0.2961	1.5996	0.1920	0.0640	0.4479	(0.0070)	(0.0041)	29.7911
West Seneca, New York	27.4792	0.0477	0.2995	1.5996	0.1920	0.0640	0.4479	(0.0072)	(0.0042)	30.1185	

JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER											
Light Crude Petroleum (LGT)											
FROM	TO	Transmission & Terminalling From NEB No. 436 FERC No. 45.15.1	CTS Section 20.1 (i) Surcharge	Abandonment Surcharge	Edmonton Transportation Surcharge	Phase 1 Southern Access Expansion Surcharge	Interim Lakehead Operation Tank Surcharge	Line 78 (Line 62 Twin) Surcharge	Line 61 Twin Surcharge	Non- Performance Penalty Credit	Total NEB No. 441 & FERC No. 45.16.0
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)=(A)+(B)+(C)+(D)+ (E)+(F)+(G)+(H)+ (I)
Edmonton, Alberta	Clearbrook, Minnesota	14.4043	0.0251	0.2400	1.5996	-	-	-	(0.0011)	(0.0034)	16.2645
	Superior, Wisconsin	17.0910	0.0299	0.2400	1.5996	-	-	-	(0.0026)	(0.0034)	18.9545
	Lockport, Illinois	23.2081	0.0416	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0063)	(0.0034)	25.7835
	Mokena, Illinois	23.2081	0.0416	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0063)	(0.0034)	25.7835
	Flanagan, Illinois	23.2081	0.0416	0.2400	1.5996	0.1920	0.0640	-	(0.0063)	(0.0034)	25.3356
	Griffith, Indiana	23.2081	0.0416	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0063)	(0.0034)	25.7835
	Stockbridge, Michigan	25.5082	0.0459	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0076)	(0.0034)	28.0866
	Marysville, Michigan	25.5082	0.0459	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0076)	(0.0034)	28.0866
	Corunna or Samia Terminal, Ontario	25.8728	0.0461	0.2448	1.5996	0.1920	0.0640	0.4479	(0.0076)	(0.0034)	28.4562
	Nanticoke, Ontario	28.2220	0.0507	0.2961	1.5996	0.1920	0.0640	0.4479	(0.0076)	(0.0041)	30.8606
West Seneca, New York	28.5669	0.0519	0.2995	1.5996	0.1920	0.0640	0.4479	(0.0078)	(0.0042)	31.2098	
Hardisty, Alberta	Clearbrook, Minnesota	12.8760	0.0220	0.2066	-	-	-	-	(0.0011)	(0.0029)	13.1006
	Superior, Wisconsin	15.5627	0.0268	0.2066	-	-	-	-	(0.0026)	(0.0029)	15.7906
	Lockport, Illinois	21.6800	0.0385	0.2066	-	0.1920	0.0640	0.4479	(0.0063)	(0.0029)	22.6198
	Mokena, Illinois	21.6800	0.0385	0.2066	-	0.1920	0.0640	0.4479	(0.0063)	(0.0029)	22.6198
	Flanagan, Illinois	21.6800	0.0385	0.2066	-	0.1920	0.0640	-	(0.0063)	(0.0029)	22.1719
	Griffith, Indiana	21.6800	0.0385	0.2066	-	0.1920	0.0640	0.4479	(0.0063)	(0.0029)	22.6198
	Stockbridge, Michigan	23.9800	0.0428	0.2066	-	0.1920	0.0640	0.4479	(0.0076)	(0.0029)	24.9228
	Marysville, Michigan	23.9800	0.0428	0.2066	-	0.1920	0.0640	0.4479	(0.0076)	(0.0029)	24.9228
	Corunna or Samia Terminal, Ontario	24.3448	0.0430	0.2114	-	0.1920	0.0640	0.4479	(0.0076)	(0.0029)	25.2926
	Nanticoke, Ontario	26.6936	0.0477	0.2627	-	0.1920	0.0640	0.4479	(0.0076)	(0.0037)	27.6966
West Seneca, New York	27.0388	0.0489	0.2661	-	0.1920	0.0640	0.4479	(0.0078)	(0.0037)	28.0462	

JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER											
Light Crude Petroleum (LGT)											
FROM	TO	Transmission & Terminalling From NEB No. 436 FERC No. 45.15.1	CTS Section 20.1 (i) Surcharge	Abandonment Surcharge	Edmonton Transportation Surcharge	Phase 1 Southern Access Expansion Surcharge	Interim Lakehead Operation Tank Surcharge	Line 78 (Line 62 Twin) Surcharge	Line 61 Twin Surcharge	Non- Performance Penalty Credit	Total NEB No. 441 & FERC No. 45.16.0
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)=(A)+(B)+(C)+(D)+ (E)+(F)+(G)+(H)+ (I)
Kerrobart, Saskatchewan	Clearbrook, Minnesota	11.3392	0.0189	0.1730	-	-	-	-	(0.0011)	(0.0024)	11.5276
	Superior, Wisconsin	14.0259	0.0237	0.1730	-	-	-	-	(0.0026)	(0.0024)	14.2176
	Lockport, Illinois	20.1431	0.0354	0.1730	-	0.1920	0.0640	0.4479	(0.0063)	(0.0024)	21.0467
	Mokena, Illinois	20.1431	0.0354	0.1730	-	0.1920	0.0640	0.4479	(0.0063)	(0.0024)	21.0467
	Flanagan, Illinois	20.1431	0.0354	0.1730	-	0.1920	0.0640	-	(0.0063)	(0.0024)	20.5988
	Griffith, Indiana	20.1431	0.0354	0.1730	-	0.1920	0.0640	0.4479	(0.0063)	(0.0024)	21.0467
	Stockbridge, Michigan	22.4431	0.0397	0.1730	-	0.1920	0.0640	0.4479	(0.0076)	(0.0024)	23.3497
	Marysville, Michigan	22.4431	0.0397	0.1730	-	0.1920	0.0640	0.4479	(0.0076)	(0.0024)	23.3497
	Corunna or Sarnia Terminal, Ontario	22.8077	0.0400	0.1778	-	0.1920	0.0640	0.4479	(0.0076)	(0.0025)	23.7193
	Nanticoke, Ontario	25.1568	0.0446	0.2291	-	0.1920	0.0640	0.4479	(0.0076)	(0.0032)	26.1236
West Seneca, New York	25.5018	0.0458	0.2325	-	0.1920	0.0640	0.4479	(0.0078)	(0.0033)	26.4729	
Regina, Saskatchewan	Clearbrook, Minnesota	8.2566	0.0128	0.1057	-	-	-	-	(0.0011)	(0.0015)	8.3725
	Superior, Wisconsin	10.9431	0.0176	0.1057	-	-	-	-	(0.0026)	(0.0015)	11.0623
	Lockport, Illinois	17.0604	0.0293	0.1057	-	0.1920	0.0640	0.4479	(0.0063)	(0.0015)	17.8915
	Mokena, Illinois	17.0604	0.0293	0.1057	-	0.1920	0.0640	0.4479	(0.0063)	(0.0015)	17.8915
	Flanagan, Illinois	17.0604	0.0293	0.1057	-	0.1920	0.0640	-	(0.0063)	(0.0015)	17.4436
	Griffith, Indiana	17.0604	0.0293	0.1057	-	0.1920	0.0640	0.4479	(0.0063)	(0.0015)	17.8915
	Stockbridge, Michigan	19.3606	0.0336	0.1057	-	0.1920	0.0640	0.4479	(0.0076)	(0.0015)	20.1947
	Marysville, Michigan	19.3606	0.0336	0.1057	-	0.1920	0.0640	0.4479	(0.0076)	(0.0015)	20.1947
	Corunna or Sarnia Terminal, Ontario	19.7251	0.0338	0.1105	-	0.1920	0.0640	0.4479	(0.0076)	(0.0015)	20.5642
	Nanticoke, Ontario	22.0744	0.0385	0.1618	-	0.1920	0.0640	0.4479	(0.0076)	(0.0022)	22.9688
West Seneca, New York	22.4193	0.0397	0.1652	-	0.1920	0.0640	0.4479	(0.0078)	(0.0023)	23.3180	
Cromer, Manitoba	Clearbrook, Minnesota	6.0297	0.0084	0.0571	-	-	-	-	(0.0011)	(0.0008)	6.0933
	Superior, Wisconsin	8.7166	0.0132	0.0571	-	-	-	-	(0.0026)	(0.0008)	8.7835
	Lockport, Illinois	14.8339	0.0249	0.0571	-	0.1920	0.0640	0.4479	(0.0063)	(0.0008)	15.6127
	Mokena, Illinois	14.8339	0.0249	0.0571	-	0.1920	0.0640	0.4479	(0.0063)	(0.0008)	15.6127
	Flanagan, Illinois	14.8339	0.0249	0.0571	-	0.1920	0.0640	-	(0.0063)	(0.0008)	15.1648
	Griffith, Indiana	14.8339	0.0249	0.0571	-	0.1920	0.0640	0.4479	(0.0063)	(0.0008)	15.6127
	Stockbridge, Michigan	17.1339	0.0292	0.0571	-	0.1920	0.0640	0.4479	(0.0076)	(0.0008)	17.9157
	Marysville, Michigan	17.1339	0.0292	0.0571	-	0.1920	0.0640	0.4479	(0.0076)	(0.0008)	17.9157
	Corunna or Sarnia Terminal, Ontario	17.4984	0.0294	0.0618	-	0.1920	0.0640	0.4479	(0.0076)	(0.0008)	18.2851
	Nanticoke, Ontario	19.8475	0.0341	0.1132	-	0.1920	0.0640	0.4479	(0.0076)	(0.0015)	20.6896
West Seneca, New York	20.1926	0.0352	0.1166	-	0.1920	0.0640	0.4479	(0.0078)	(0.0016)	21.0389	

JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER											
Medium Crude Petroleum (MED)											
FROM	TO	Transmission & Terminalling From NEB No. 436 FERC No. 45.15.1	CTS Section 20.1 (i) Surcharge	Abandonment Surcharge	Edmonton Transportation Surcharge	Phase 1 Southern Access Expansion Surcharge	Interim Lakehead Operation Tank Surcharge	Line 78 (Line 62 Twin) Surcharge	Line 61 Twin Surcharge	Non-Performance Penalty Credit	Total NEB No. 441 & FERC No. 45.16.0
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)=(A)+(B)+(C)+(D)+(E)+(F)+(G)+(H)+(I)
Edmonton, Alberta	Clearbrook, Minnesota	15.4187	0.0271	0.2400	1.5996	-	-	-	(0.0012)	(0.0034)	17.2808
	Superior, Wisconsin	18.3098	0.0322	0.2400	1.5996	-	-	-	(0.0028)	(0.0034)	20.1754
	Lockport, Illinois	24.9268	0.0449	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0068)	(0.0034)	27.5050
	Mokena, Illinois	24.9268	0.0449	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0068)	(0.0034)	27.5050
	Flanagan, Illinois	24.9268	0.0449	0.2400	1.5996	0.1920	0.0640	-	(0.0068)	(0.0034)	27.0571
	Griffith, Indiana	24.9268	0.0449	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0068)	(0.0034)	27.5050
	Stockbridge, Michigan	27.4108	0.0495	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0082)	(0.0034)	29.9922
	Marysville, Michigan	27.4108	0.0495	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0082)	(0.0034)	29.9922
	Corunna or Sarnia Terminal, Ontario	27.7855	0.0497	0.2448	1.5996	0.1920	0.0640	0.4479	(0.0082)	(0.0034)	30.3719
	Nanticoke, Ontario	30.3223	0.0548	0.2961	1.5996	0.1920	0.0640	0.4479	(0.0082)	(0.0041)	32.9644
West Seneca, New York	30.7152	0.0561	0.2995	1.5996	0.1920	0.0640	0.4479	(0.0085)	(0.0042)	33.3616	
Hardisty, Alberta	Clearbrook, Minnesota	13.7681	0.0238	0.2066	-	-	-	-	(0.0012)	(0.0029)	13.9944
	Superior, Wisconsin	16.6592	0.0289	0.2066	-	-	-	-	(0.0028)	(0.0029)	16.8890
	Lockport, Illinois	23.2763	0.0416	0.2066	-	0.1920	0.0640	0.4479	(0.0068)	(0.0029)	24.2187
	Mokena, Illinois	23.2763	0.0416	0.2066	-	0.1920	0.0640	0.4479	(0.0068)	(0.0029)	24.2187
	Flanagan, Illinois	23.2763	0.0416	0.2066	-	0.1920	0.0640	-	(0.0068)	(0.0029)	23.7708
	Griffith, Indiana	23.2763	0.0416	0.2066	-	0.1920	0.0640	0.4479	(0.0068)	(0.0029)	24.2187
	Stockbridge, Michigan	25.7604	0.0462	0.2066	-	0.1920	0.0640	0.4479	(0.0082)	(0.0029)	26.7060
	Marysville, Michigan	25.7604	0.0462	0.2066	-	0.1920	0.0640	0.4479	(0.0082)	(0.0029)	26.7060
	Corunna or Sarnia Terminal, Ontario	26.1350	0.0464	0.2114	-	0.1920	0.0640	0.4479	(0.0082)	(0.0029)	27.0856
	Nanticoke, Ontario	28.6718	0.0515	0.2627	-	0.1920	0.0640	0.4479	(0.0082)	(0.0037)	29.6780
West Seneca, New York	29.0649	0.0528	0.2661	-	0.1920	0.0640	0.4479	(0.0085)	(0.0037)	30.0755	
Cromer, Manitoba	Clearbrook, Minnesota	6.3743	0.0091	0.0571	-	-	-	-	(0.0012)	(0.0008)	6.4385
	Superior, Wisconsin	9.2655	0.0142	0.0571	-	-	-	-	(0.0028)	(0.0008)	9.3332
	Lockport, Illinois	15.8823	0.0269	0.0571	-	0.1920	0.0640	0.4479	(0.0068)	(0.0008)	16.6626
	Mokena, Illinois	15.8823	0.0269	0.0571	-	0.1920	0.0640	0.4479	(0.0068)	(0.0008)	16.6626
	Flanagan, Illinois	15.8823	0.0269	0.0571	-	0.1920	0.0640	-	(0.0068)	(0.0008)	16.2147
	Griffith, Indiana	15.8823	0.0269	0.0571	-	0.1920	0.0640	0.4479	(0.0068)	(0.0008)	16.6626
	Stockbridge, Michigan	18.3664	0.0315	0.0571	-	0.1920	0.0640	0.4479	(0.0082)	(0.0008)	19.1499
	Marysville, Michigan	18.3664	0.0315	0.0571	-	0.1920	0.0640	0.4479	(0.0082)	(0.0008)	19.1499
	Corunna or Sarnia Terminal, Ontario	18.7409	0.0317	0.0618	-	0.1920	0.0640	0.4479	(0.0082)	(0.0008)	19.5293
	Nanticoke, Ontario	21.2779	0.0368	0.1132	-	0.1920	0.0640	0.4479	(0.0082)	(0.0015)	22.1221
West Seneca, New York	21.6708	0.0380	0.1166	-	0.1920	0.0640	0.4479	(0.0085)	(0.0016)	22.5192	

JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER											
Heavy Crude Petroleum (HVV)											
FROM	TO	Transmission & Terminalling From NEB No. 436 FERC No. 45.15.1	CTS Section 20.1 (I) Surcharge	Abandonment Surcharge	Edmonton Transportation Surcharge	Phase 1 Southern Access Expansion Surcharge	Interim Lakehead Operation Tank Surcharge	Line 78 (Line 62 Twin) Surcharge	Line 61 Twin Surcharge	Non-Performance Penalty Credit	Total NEB No. 441 & FERC No. 45.16.0
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)=(A)+(B)+(C)+(D)+(E)+(F)+(G)+(H)+(I)
Edmonton, Alberta	Clearbrook, Minnesota	17.1957	0.0305	0.2400	1.5996	-	-	-	(0.0013)	(0.0034)	19.0611
	Superior, Wisconsin	20.4414	0.0364	0.2400	1.5996	-	-	-	(0.0031)	(0.0034)	22.3109
	Lockport, Illinois	27.9378	0.0506	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0077)	(0.0034)	30.5208
	Mokena, Illinois	27.9378	0.0506	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0077)	(0.0034)	30.5208
	Flanagan, Illinois	27.9378	0.0506	0.2400	1.5996	0.1920	0.0640	-	(0.0077)	(0.0034)	30.0729
	Griffith, Indiana	27.9378	0.0506	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0077)	(0.0034)	30.5208
	Stockbridge, Michigan	30.7446	0.0559	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0093)	(0.0034)	33.3313
	Marysville, Michigan	30.7446	0.0559	0.2400	1.5996	0.1920	0.0640	0.4479	(0.0093)	(0.0034)	33.3313
	Corunna or Sarnia Terminal, Ontario	31.1302	0.0562	0.2448	1.5996	0.1920	0.0640	0.4479	(0.0093)	(0.0034)	33.7220
	Nanticoke, Ontario	33.9962	0.0619	0.2961	1.5996	0.1920	0.0640	0.4479	(0.0093)	(0.0041)	36.6443
West Seneca, New York	34.4743	0.0632	0.2995	1.5996	0.1920	0.0640	0.4479	(0.0096)	(0.0042)	37.1267	
Hardisty, Alberta	Clearbrook, Minnesota	15.3312	0.0268	0.2066	-	-	-	-	(0.0013)	(0.0029)	15.5604
	Superior, Wisconsin	18.5770	0.0327	0.2066	-	-	-	-	(0.0031)	(0.0029)	18.8103
	Lockport, Illinois	26.0732	0.0469	0.2066	-	0.1920	0.0640	0.4479	(0.0077)	(0.0029)	27.0200
	Mokena, Illinois	26.0732	0.0469	0.2066	-	0.1920	0.0640	0.4479	(0.0077)	(0.0029)	27.0200
	Flanagan, Illinois	26.0732	0.0469	0.2066	-	0.1920	0.0640	-	(0.0077)	(0.0029)	26.5721
	Griffith, Indiana	26.0732	0.0469	0.2066	-	0.1920	0.0640	0.4479	(0.0077)	(0.0029)	27.0200
	Stockbridge, Michigan	28.8802	0.0522	0.2066	-	0.1920	0.0640	0.4479	(0.0093)	(0.0029)	29.8307
	Marysville, Michigan	28.8802	0.0522	0.2066	-	0.1920	0.0640	0.4479	(0.0093)	(0.0029)	29.8307
	Corunna or Sarnia Terminal, Ontario	29.2661	0.0525	0.2114	-	0.1920	0.0640	0.4479	(0.0093)	(0.0029)	30.2217
	Nanticoke, Ontario	32.1318	0.0582	0.2627	-	0.1920	0.0640	0.4479	(0.0093)	(0.0037)	33.1436
West Seneca, New York	32.6099	0.0595	0.2661	-	0.1920	0.0640	0.4479	(0.0096)	(0.0037)	33.6261	

JOINT TRANSPORTATION RATES IN US DOLLARS PER CUBIC METER											
Heavy Crude Petroleum (HVY)											
FROM	TO	Transmission & Terminalling From NEB No. 436 FERC No. 45.15.1	CTS Section 20.1 (i) Surcharge	Abandonment Surcharge	Edmonton Transportation Surcharge	Phase 1 Southern Access Expansion Surcharge	Interim Lakehead Operation Tank Surcharge	Line 78 (Line 62 Twin) Surcharge	Line 61 Twin Surcharge	Non- Performance Penalty Credit	Total NEB No. 441 & FERC No. 45.16.0
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)=(A)+(B)+(C)+(D)+ (E)+(F)+(G)+(H)+ (I)
Kerobert, Saskatchewan	Clearbrook, Minnesota	13.4562	0.0231	0.1730	-	-	-	-	(0.0013)	(0.0024)	13.6486
	Superior, Wisconsin	16.7019	0.0290	0.1730	-	-	-	-	(0.0031)	(0.0024)	16.8984
	Lockport, Illinois	24.1983	0.0432	0.1730	-	0.1920	0.0640	0.4479	(0.0077)	(0.0024)	25.1083
	Mokena, Illinois	24.1983	0.0432	0.1730	-	0.1920	0.0640	0.4479	(0.0077)	(0.0024)	25.1083
	Flanagan, Illinois	24.1983	0.0432	0.1730	-	0.1920	0.0640	-	(0.0077)	(0.0024)	24.6604
	Griffith, Indiana	24.1983	0.0432	0.1730	-	0.1920	0.0640	0.4479	(0.0077)	(0.0024)	25.1083
	Stockbridge, Michigan	27.0051	0.0485	0.1730	-	0.1920	0.0640	0.4479	(0.0093)	(0.0024)	27.9188
	Marysville, Michigan	27.0051	0.0485	0.1730	-	0.1920	0.0640	0.4479	(0.0093)	(0.0024)	27.9188
	Corunna or Sarnia Terminal, Ontario	27.3908	0.0487	0.1778	-	0.1920	0.0640	0.4479	(0.0093)	(0.0025)	28.3094
	Nanticoke, Ontario	30.2567	0.0544	0.2291	-	0.1920	0.0640	0.4479	(0.0093)	(0.0032)	31.2316
West Seneca, New York	30.7348	0.0558	0.2325	-	0.1920	0.0640	0.4479	(0.0096)	(0.0033)	31.7141	
Regina, Saskatchewan	Clearbrook, Minnesota	9.6954	0.0156	0.1057	-	-	-	-	(0.0013)	(0.0015)	9.8139
	Superior, Wisconsin	12.9411	0.0215	0.1057	-	-	-	-	(0.0031)	(0.0015)	13.0637
	Lockport, Illinois	20.4376	0.0357	0.1057	-	0.1920	0.0640	0.4479	(0.0077)	(0.0015)	21.2737
	Mokena, Illinois	20.4376	0.0357	0.1057	-	0.1920	0.0640	0.4479	(0.0077)	(0.0015)	21.2737
	Flanagan, Illinois	20.4376	0.0357	0.1057	-	0.1920	0.0640	-	(0.0077)	(0.0015)	20.8258
	Griffith, Indiana	20.4376	0.0357	0.1057	-	0.1920	0.0640	0.4479	(0.0077)	(0.0015)	21.2737
	Stockbridge, Michigan	23.2446	0.0410	0.1057	-	0.1920	0.0640	0.4479	(0.0093)	(0.0015)	24.0844
	Marysville, Michigan	23.2446	0.0410	0.1057	-	0.1920	0.0640	0.4479	(0.0093)	(0.0015)	24.0844
	Corunna or Sarnia Terminal, Ontario	23.6302	0.0413	0.1105	-	0.1920	0.0640	0.4479	(0.0093)	(0.0015)	24.4751
	Nanticoke, Ontario	26.4960	0.0470	0.1618	-	0.1920	0.0640	0.4479	(0.0093)	(0.0022)	27.3972
West Seneca, New York	26.9740	0.0483	0.1652	-	0.1920	0.0640	0.4479	(0.0096)	(0.0023)	27.8795	
Cromer, Manitoba	Clearbrook, Minnesota	6.9788	0.0102	0.0571	-	-	-	-	(0.0013)	(0.0008)	7.0440
	Superior, Wisconsin	10.2246	0.0161	0.0571	-	-	-	-	(0.0031)	(0.0008)	10.2939
	Lockport, Illinois	17.7208	0.0303	0.0571	-	0.1920	0.0640	0.4479	(0.0077)	(0.0008)	18.5036
	Mokena, Illinois	17.7208	0.0303	0.0571	-	0.1920	0.0640	0.4479	(0.0077)	(0.0008)	18.5036
	Flanagan, Illinois	17.7208	0.0303	0.0571	-	0.1920	0.0640	-	(0.0077)	(0.0008)	18.0557
	Griffith, Indiana	17.7208	0.0303	0.0571	-	0.1920	0.0640	0.4479	(0.0077)	(0.0008)	18.5036
	Stockbridge, Michigan	20.5278	0.0356	0.0571	-	0.1920	0.0640	0.4479	(0.0093)	(0.0008)	21.3143
	Marysville, Michigan	20.5278	0.0356	0.0571	-	0.1920	0.0640	0.4479	(0.0093)	(0.0008)	21.3143
	Corunna or Sarnia Terminal, Ontario	20.9135	0.0358	0.0618	-	0.1920	0.0640	0.4479	(0.0093)	(0.0008)	21.7049
	Nanticoke, Ontario	23.7793	0.0415	0.1132	-	0.1920	0.0640	0.4479	(0.0093)	(0.0015)	24.6271
West Seneca, New York	24.2573	0.0429	0.1166	-	0.1920	0.0640	0.4479	(0.0096)	(0.0016)	25.1095	