APPLICATION

BY TRANS MOUNTAIN PIPELINE ULC

AS GENERAL PARTNER OF TRANS MOUNTAIN PIPELINE L.P.

FOR APPROVAL OF 2020 FINAL TOLLS PURSUANT TO 2019 TO 2021 INCENTIVE TOLL SETTLEMENT

AND
REVIEW AND VARIANCE OF THE LETTER DECISION (20 JULY 2006 DECISION) RELATED TO THE DISPOSITION OF THE WESTRIDGE DOCK BID PREMIUMS

2020

ATTACHMENT 1

2020 FINAL TOLL CALCULATION SCHEDULES

TRANS MOUNTAIN

2020 Final Toll calculation

Pursuant to the 2019 - 2021 Incentive Toll Settlement

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2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 1

Calculation of Revenue Requirement

($000)

Line	Description	Schedule & Line ref.	2019 Approved	2019 Actual [1]	2019 Variance	2020 Proposal [1]
1	**A. Revenues for Annual Toll Change**					
2	Capital Cost Recovery	[Schedule 2, Sheet 1, line 26]	112,849	113,376	527	102,091
3	Income Tax Provision	[Schedule 7, line 12]	12,112	12,517	405	7,317
4	Fixed Costs	[Schedule 3, line 11]	67,217	67,217	-	68,887
5	Flow Through Costs	[Schedule 4, line 10]	131,771	125,586	(6,185)	134,906
6	Trans Mountain Personnel Adjustment [2]	[Schedule 3, line 12]	-	-	-	-
7	Transportation Revenue Adjustment	[Schedules 6, line 15]	-	(7,555)	(7,555)	-
8	Operational Capacity Incentive Adjustment	[Schedules 5, Sheet 1, line 17]	-	854	854	-
9	Summary of NRAs and Adjustments	[Schedule 8, line 9]	(712)	(7,371)	(6,659)	(924)
10	**Total Revenues**		**323,237**	**304,625**	**(18,612)**	**312,277**
11	Carrying Charges	[Schedule 9, Note 2]	(129)			(448)
12	Prior year adjustment [3]		**3,814**			**(18,612)**
13	**Total Annual Revenue Requirement**		**326,922**			**293,217**
14	**B. Adjustment required for partial year Net Tolls**					
15	Revenues collected from 2019 Interim Net Tolls [4]		(89,384)			
16	Revenues collected from 2020 Interim Net Tolls [4]					(117,665)
17	**Revenues for Partial Year Net Tolls**		**237,538**			**175,552**
18	**C. Average change in Revenue Requirement**	[(line 13: 2019 Approved ÷ 2018 of $283,463K) - 1]	15.3%			
		[(line 13: 2020 Proposed ÷ 2019 Approved) - 1]				-10.3%
19	**Refund Westridge Dock Bid Premiums**					
20	Separate Tariff Sur-credit	[Schedule 8.2, line 8]	(161,120)	(167,407)		(148,837)
21	Additional refund to offset Pipeline Reclamation Surcharge	[Schedule 8.2, line 9]	(13,216)	(14,011)		(12,435)
22	Additional refund to offset System Optimization Surcharge [5]	[Schedule 8.2, line 10]	(2,800)	(2,990)		(5,906)
23	**Total Separate Tariff Sur-credit**		**(177,136)**	**(184,408)**		**(167,178)**
24	**Average change in Tolls**					
25	Without Westridge Dock Bid Premiums		**37.2%**			**-30.5%**
26	With Westridge Dock Bid Premiums		**-10.0%**			**-15.0%**

Note(s):

[1] The 2019 Actual and the 2020 Proposal conform with the principles defined in the 2019-2021 ITS.

[2] Trans Mountain Personnel Adjustment is calculated pursuant to Section 11.5 of the 2019-2021 ITS.

[3] The 2019 Approved Prior year adjustment can be found in the 2019 Final Toll filing, Toll Calculation Schedules, Schedule 1, Line 13. CER filing ID: A98625.

[4] Interim Toll amounts are the sum of Interim Net Tolls multiplied by deliveries identified for January through April.

[5] The System Optimization Surcharge and offsetting Westridge Dock Premium Surcredit were approved by CER Order TO-004-2019.

[6] ALL AMOUNTS SHOWN ON THE SCHEDULES ARE CALCULATED TO THE DOLLAR AND HAVE NOT BEEN ROUNDED WHEN PRESENTED IN THOUSANDS. AS A RESULT TOTALS MAY NOT ADD.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 2

Calculation of Rate Base, Capital Cost Recovery, and Adjustment

Sheet 1 of 2

($millions)

Line	Description	Capital	Returns / Rates		2019	2019	2019	2020
		Structure	2019	2020	Approved	Actual	Variance	Proposal
1	Open Plant In Service Assets				1,632.4	1,632.4	-	1,675.4
2	Open Accumulated Depreciation				(684.4)	(684.4)	-	(727.6)
3	**Total Open Net Plant** [1]				**948.0**	**948.0**	**-**	**947.8**
4	**Capital Additions to Rate Base as of**							
5	1-Jan [Schedule 2.1, line 22]				0.2	0.5	0.3	1.8
6	31-Dec [Schedule 2.1, line 23]				49.2	44.8	(4.4)	77.7
7	*Additions without Westridge Marine Terminal*				49.4	45.3	(4.1)	79.6
8	*Westridge Marine Terminal*				-	0.0	0.0	-
9	Reportable Additions				49.4	45.3	(4.1)	79.6
10	**Depreciation Expense** [5]							
11	31-Dec	[2]	3.06%	2.41%	(44.9)	(45.6)	(0.7)	(35.4)
12	Reportable Depreciation Expense				(44.9)	(45.6)	(0.7)	(35.4)
13	Retirements				-	(2.4)	(2.4)	-
14	Net Proceeds / (Costs)				(0.3)	(0.0)	0.2	(0.5)
15	Close Plant In Service				1,681.9	1,675.4	(6.5)	1,754.9
16	Close Accumulated Depreciation				(729.0)	(727.6)	1.4	(762.5)
17	**Total Close Net Plant**				**952.8**	**947.8**	**(5.1)**	**992.5**
18	**Average Plant In Service**				**950.5**	**948.1**	**(2.4)**	**971.0**
19	Average Working Capital [4]				17.3	17.0	(0.3)	17.6
20	**Net Rate Base**				**967.8**	**965.1**	**(2.6)**	**988.6**
21	**Return on Capital**							
22	Equity	45%	9.50%	9.50%	41.4	41.3	(0.1)	42.3
23	Debt [3]	55%	5.00%	4.50%	26.6	26.5	(0.1)	24.5
24	**Total Return on Capital**		7.03%	6.75%	68.0	67.8	(0.2)	66.7
25	**Depreciation Expense**				44.9	45.6	0.7	35.4
26	**Total Capital Cost Recovery**				**112.8**	**113.4**		**102.1**
27	**Capital Cost Recovery Variance**						**0.5**	
28	Carrying Charges	[If line 27<0, line 27 * rate on Sch 9]					-	

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 2

Calculation of Rate Base, Capital Cost Recovery, and Adjustment

Sheet 2 of 2

Note(s):

[1] Excluded assets: Capital Cost Incentive or CCI pursuant to CER Order TO-06-2006.

[2] Section 10.2 of the 2019-2021 ITS required Trans Mountain to initiate a depreciation study and seek approval for the resultant depreciation rates to be effective January 1, 2020. Trans Mountain filed an application for approval of the Revised Depreciation Rates on October 1, 2019 based on the recommendations of the 2019 Depreciation Study filed with the Commission (C02007) and is awaiting Commission decision. The 2020 proposed annual depreciation expense is based on the Revised Depreciation Rates for rate-regulated assets.

[3] The 2019 debt rate is set at 5%. The 2020 debt rate is determined pursuant to the calculation on Schedule 2.2 and Section 10.1 (b) of the 2019-2021 ITS. The debt rate includes fees, if any, for the line of credit required pursuant to CER Order AO-001-FRO-002-2017.

[4] Forecast Working Capital Provision:

	2019	**2019**	**2019**	**2020**
	Approved	**Actual**	**Variance**	**Proposal**
Fixed & Flow Through Operating Expenses	199.8	193.3	(6.5)	204.4
Less Insurance	(3.8)	(4.1)	(0.3)	(4.4)
Plus Income Taxes Payable	8.8	9.2	0.3	5.4
Cash Cost of Service	204.9	198.4	(6.5)	205.4
Provision for Cash Requirement [ii]	8.4	8.2	(0.3)	8.4
Average Prepaid Expenses [iii]	3.2	2.9	(0.3)	3.2
Average Inventory	5.6	5.9	0.3	6.0
Average Working Capital Provision	**17.3**	**17.0**	**(0.3)**	**17.6**
[i] Days in year	365	365		366
[ii] Provision for Cash uses Days in year [i] times # of days set at:	15	15		15

[iii] For 2020, Average Prepaid Expenses calculated as 72% of the forecast insurance expense.

[5] Calculation of annual depreciation adjustment to actual booked depreciation expense for disallowed plant ($000)

Disallowed Plant	**Asset**	**2019**	**2020**	**Expense**	**Expense**		**Expense**
Expansion CCI - 2010	(6,673)						
Accumulated Depreciation - 2019	1,521	2.76%	2.13%	184	184		142
Total Depreciation Expense Adjustment				**184**	**184**		**142**

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 2.1

Calculation of Rate Base, Capital Cost Recovery, and Adjustment
Summary of Capital Additions by Major Categories
($000)

Line	Description	Schedule & Line ref.	2019 Approved	2019 Actual	2019 Variance	2020 Proposal
1	**A. Mainline Repair Projects** [1]					
2	1-Jan		(271)	126	397	1,291
3	31-Dec		29,004	35,548	6,544	25,946
4	Total	[line 2 + line 3]	28,734	35,675	6,941	27,237
5	**B. Facility Pipeline Projects** [2]					
6	1-Jan		502	378	(124)	484
7	31-Dec		14,839	7,819	(7,021)	45,511
8	Total	[line 6 + line 7]	15,342	8,197	(7,144)	45,996
9	**C. Tanks** [3]					
10	1-Jan		(15)	(3)	12	51
11	31-Dec		4,931	1,173	(3,759)	6,236
12	Total	[line 10 + line 11]	4,916	1,170	(3,746)	6,287
13	**D. Westridge Marine Terminal Upgrades** [4]					
14	1-Jan		-	7	7	-
15	31-Dec		-	-	-	-
16	Total	[line 14 + line 15]	-	7	7	-
17	**E. Others** [5]					
18	1-Jan		1	1	-	15
19	31-Dec		440	258	(182)	24
20	Total	[line 18 + line 19]	440	259	(182)	40
21	**F. Total Capital Additions**					
22	1-Jan	[sum of (lines 2, 6, 10, 14 & 18)]	217	510	293	1,842
23	31-Dec	[sum of (lines 3, 7, 11, 15 & 19)]	49,215	44,798	(4,417)	77,717
24	**Grand Total**	[line 22 + line 23]	**49,431**	**45,307**	**(4,124)**	**79,559**

Note(s):

[1] Mainline repairs, natural hazard assessment/remediation, cathodic protection, Mainline valve replacement, and other Mainline related projects are included.

[2] Safety improvements, pumping equipment, piping modification, arc flash mitigation, seismic upgrades, leak detection flow meters, voltage sag correction, and other facility related projects are included.

[3] Secondary tank containment upgrades, heel reduction, tankage upgrades and other tank related projects are included.

[4] Westridge Marine Terminal upgrade projects are included.

[5] Other minor capital projects are included such as equipment replacements and minor facilities repairs that are not specifically budgeted.

[6] Capital projects that are of material value (i.e. > $1M) are reviewed and discussed with Shippers as part of the annual toll filing.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 2.2

Calculation of Rate Base, Capital Cost Recovery, and Adjustment
Calculation of 2020 Debt Rate
(units as shown)

Line	Month	Schedule & Line ref.	2019 Fixed	2020 Fixed 2018 Benchmark Rate	2020 Fixed 2019 Benchmark Rate
1	**A. Debt Rate Adjustment [1]**				
2	January			2.08%	1.83%
3	February			2.04%	1.80%
4	March			2.00%	1.43%
5	April			2.18%	1.49%
6	May			2.11%	1.46%
7	June			1.93%	1.40%
8	July			2.19%	1.46%
9	August			2.25%	1.17%
10	September			2.32%	1.42%
11	October			2.42%	1.46%
12	November			2.27%	1.51%
13	December			1.93%	1.64%
14	**Monthly average rate**			**2.14%**	**1.51%**
15	**Debt Rate Adjustment**	[2019 AVG rate - 2018 AVG rate]			**-0.64%**
16	**B. Debt Rate**		**5.00%**		
17	**Debt Rate [2]**	[(Prior year rate + line 15) but within the range of 4.5% and 5.5%]			**4.50%**

Note(s):

[1] Debt Rate Adjustment is calculated based on the monthly average rate of the Government of Canada Benchmark Bond Yields - 5 Year. The monthly yield data could be retrieved on the Bank of Canada website under series number V122540.

[2] The 2020 debt rate is calculated pursuant to Section 10.1 (b) of the 2019-2021 ITS. The rate shall not be lower than 4.5% and shall not exceed 5.5%.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 3

Summary of Fixed Costs and Trans Mountain Personnel Adjustment

($000 or units as shown)

Line	Description	Schedule & Line ref.	2019 Approved	2019 Actual	Escalator [5]	2020 Fixed
1	**A. Direct G&A** [1]					
2	Total Fixed Direct G&A Costs		**1,943**		2%	**1,981**
3	**B. Trans Mountain Personnel** [2]					
4	Fixed Trans Mountain Personnel [3]		**65,274**		2.5%	**66,906**
5	**Trans Mountain Personnel Adjustment** [4]					
6	Actual Trans Mountain Personnel			69,460		
7	Difference between Actual and Fixed amounts	[line 6 - line 4]		4,186		
8	**Total saving to share**	[Negative shown on line 7]		**-**		
9	Shippers' share of the saving	[50% * line 8]		-		
10	Trans Mountain's share of the saving	[line 8 - line 9]		-		
11	**Total Fixed Operating Expenses**	[line 2 + line 4]	**67,217**			**68,887**
12	**Trans Mountain Personnel Adjustment**	[line 9]		**-**		
13	Carrying Charges	[line 9 * rate on Sch 9]		-		

Note(s):

[1] Amounts shown exclude Flow Through Costs. Forecast Flow Through Costs are provided on Schedule 4.

[2] Trans Mountain Personnel means personnel costs as transferred to Trans Mountain. Trans Mountain Personnel include pension costs pursuant to Section 3.1 (oo) of the 2019-2021 ITS.

[3] 2019 Trans Mountain Personnel is a fixed amount as agreed to by the Shippers and Trans Mountain pursuant to Section 9.3 of the 2019-2021 ITS. 2020 Trans Mountain Personnel is escalated at a fixed escalator pursuant to Section 9.4 of the 2019-2021 ITS.

[4] Trans Mountain and Shippers have reviewed the 2019 Trans Mountain Personnel amount and determined no further adjustments are required in 2020 pursuant to Section 11.5 of the 2019-2021 ITS.

[5] Annual escalator for Direct G&A is fixed at 2% for the Term pursuant to Section 9.1 of the 2019-2021 ITS .
Annual escalator for Trans Mountain Personnel is fixed at 2.5% for the Term pursuant to Section 9.4 of the 2019-2021 ITS.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 4

Summary of Flow Through Costs and Adjustments
($000)

Line	Description	Schedule & Line ref.	2019 Approved	2019 Actual	2019 Variance	2020 Proposal
1	**Flow Through Costs**					
2	Power		35,134	35,786	652	38,404
3	Property Taxes		27,616	28,127	511	28,515
4	Integrity Management		36,358	35,043	(1,314)	34,684
5	Land and Right of Way Management		5,641	5,405	(236)	5,726
6	Environmental Compliance and Remediation		10,693	4,732	(5,961)	10,376
7	Fire, Safety and Security		9,241	9,071	(170)	10,378
8	Insurance		3,753	4,087	333	4,420
9	CER Cost Recovery		3,335	3,335	-	2,403
10	**Total Flow Through Costs**		**131,771**	**125,586**	**(6,185)**	**134,906**
11	Carrying Charges	[if line 10<0, line 10 * rate on Sch 9]			**(121)**	

Note(s):

[1] This schedule is used to summarize the Flow Through Costs and adjustments to be included in the subsequent year's Revenue Requirement.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 4.1

Summary of Power Transmission Volume and BC Energy Cost Savings
(units in $000 or as otherwise shown)

Line	**Description**	**Schedule & Line ref.**	**2019 Baseline**	**2019 Actual**
1	**A. Transmission Volume Cost Management Report** [1]			
2	Average billing demand (MW) [3] [4]		133.44 [2]	113.60 [2]
3	Demand rate ($000/MW) [5]		128.31	128.31
4	**Total transmission costs** [3]		17,121	14,576
5	**Transmission savings**			**2,545**
6	Demand reduction fees [6]			11
7	**Total transmission volume savings** [7]	[line 5 - line 6]		**2,534**
8	**B. BC Energy Price Management Report** [8]			
9	BC Energy rate ($/MWh) [9]		50.17	49.72
10	BC energy consumption (MWh) [10]		200,853	200,853
11	**Total BC energy costs** [10]	[line 9 * line 10/1000]	10,076	9,986
12	**BC energy price savings**			**91**
13	Negotiation costs [11]			-
14	**Total BC energy price savings**	[line 12 - line 13]		**91**
15	**C. Total Savings**	[line 7 + line 14]		**2,625**

Note(s):

[1] Trans Mountain manages system transmission volume on behalf of the Shippers and expects to reduce the annual average monthly billing demand by managing power supply contracts and physical consumption, without impacting throughput. Minimum contract levels can be optimized to match physical needs of the Trans Mountain System. In addition, while there is always a pair of stations that are at maximum flow rates (reflecting current System design and bottlenecks), all other stations can be managed to ensure additional costs are not being incurred.

[2] **Variable inputs used above**

	2019 Baseline	2019 Actual
Ex-Edm Throughput (m^3/day)	49,904	49,904

[3] The actual average billing demand and transmission costs are determined from the actual vendor invoices. Both components are determined as the sum of the monthly invoiced amounts for all mainline pump stations.

[4] The baseline average billing demand =0.00209459*(annual Ex-Edm throughput in m^3)+28.90935272 (MW).

[5] Demand rate is determined as the actual total transmission costs, before demand reduction fees, divided by the actual average billing demand.

[6] Demand reduction fees may be incurred to obtain reductions in average monthly billing demand and may include fees charged by transmission supplier and consulting fees. Carryover from prior years may occur when demand reduction fees are greater than transmission savings.

[7] Total savings is the savings after deducting the demand reduction fees and carryovers from prior years.

[8] The majority of the mainline pump stations in BC obtain electric service under BC Hydro's Electric Tariff, Rate Schedule 1823. The default Energy Rate under Rate Schedule 1823 is determined under subsection (a). Trans Mountain may elect to obtain energy under an alternate rate, subsection (b), and negotiate with BC Hydro to obtain credits under the Power Smart program to purchase energy at lower prices. The driver for this saving arises from the additional administrative management costs incurred to use Rate Schedule 1823 subsection (b) as eligibility for this rate requires annual reviews and negotiations with BC Hydro.

Where energy consumption has increased to the extent that there are no savings under Rate Schedule 1823 subsection (b), the savings will be zero. This may occur if Trans Mountain's throughput increases substantially due to achieving incentive volumes. Should a significant throughput increase be expected, Trans Mountain may elect to purchase energy under Rate Schedule 1823 subsection (a) until a new Power Smart baseline can be negotiated for the increased throughput level.

[9] The actual energy rate is determined as the actual total BC energy costs, before negotiation costs, divided by the actual energy consumption.

[10] The Total BC energy costs and the energy consumption are determined from the actual vendor invoices. Both components are determined as the sum of the monthly invoiced amounts for all mainline pump stations under BC Hydro's Electric Tariff, Rate Schedule 1823.

[11] Negotiation costs are the third party costs incurred to manage the BC Power Smart Program and to negotiate power credits and rate reduction.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

Schedule 4.2

Calculation of the Petroleum Loss Allowance Percentages [1]

(units in $000 or as otherwise shown)

Line	Description	Comments / Units	2019 Approved	2020 Proposal
1	**A. 2019 PLAP**			
2	Mainline System Crude Petroleum PLAP		**0.03%**	
3	Mainline System Refined Petroleum PLAP		**0.02%**	
4	Non Mainline System Petroleum PLAP		**0.01%**	
5	**B. Percentage Adjustment to subsequent year PLAP**			
6	Balance Sheet amount at Dec 31, due from shippers (positive), due to shippers (negative)			$ 9,848
7	Average annual price of crude	per m³		$ 416.20
8	Calculated volume equivalent (m³)	m³		23,660
9	Total Deliveries	m³		20,395,485
10	**F. Percentage Adjustment to subsequent year PLAP**	[line 8 ÷ line 9]		0.12%
11	Percentage adjustment applied to each PLAP			**386.69%**
12	Adjustment to subsequent year PLAP [2]			
13	Mainline System Crude Petroleum PLAP	[line 2 times (1 + line 11)]		**0.15%**
14	Mainline System Refined Petroleum PLAP	[line 3 times (1 + line 11)]		**0.10%**
15	Non Mainline System Petroleum PLAP	[line 4 times (1 + line 11)]		**0.05%**

Note(s):

[1] The Petroleum Loss Allowance Percentages work in conjunction with the Inventory Settlement Procedure and Refined Petroleum Reconciliation Procedure filed with the 2019-2021 ITS. Any revisions to the Procedures are posted on the Trans Mountain tolls and tariffs website.

[2] 2020 Proposed PLAPs are calculated pursuant to Section 11.7 (d) of the 2019-2021 ITS.

[3] Trans Mountain and Shippers have agreed to review the PLAP periodically to determine whether further adjustments are required. The intent after the Reset is to keep PLAP relatively stable from year to year.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 5
Calculation of Operational Capacity Incentive Adjustment
(units as shown)

Sheet 1 of 2

Line	Description	Schedule	Sharing	2019 Update (Jan - Dec)
1	A. System capacity percentages			
2	Target capacity (fixed for Term)			96.0%
3	Achieved capacity			94.2%
4	B. System volumes			
5	Delivered volume (m³/d) [1]			49,904
6	Deemed Heavy Percentage [4] [5] [6]			12.3%
7	100% hydraulic volume (m³/d) [2]			52,950
8	Target hydraulic volumes w/o maintenance adjustment (m³/d)	[line 2 x line 7]		50,832
9	Adjustment hours [3]			262
10	Maintenance capacity adjustment (m³/d)	[line 9 ÷ 24 ÷ days in a year x line 8]		1,522
11	Target System Capacity (m³/d)	[line 8 - line 10]		49,310
12	C. Annualized volumes for sharing (m³/d)	[line 5 - line 11]		594
13	D. Revenue sharing calculation			
14	Toll for sharing $/m^3 (fixed for Term)			15.7500
15	Days available for sharing			365
16	Revenues to be shared ($000)	[line 12 x line 14 x line 15]		3,417
17	Operational Capacity Incentive Adjustment	Trans Mountain's share [7]	Lower of 25% of line 16 or $4 million	854
18		Shippers' share	[line 16 - line 17]	2,562
19	Carrying Charges ($000)	[- (line 18 * rate on Sch 9)]		(50)

Note(s):

[1] For capacity incentive sharing purposes, only those volumes injected at Edmonton / Edson and delivered out of the System are used along with the Deemed Heavy Percentage as determined in Note [6].

[2] Hydraulic Formula:

For $x \le 20.01\%$, $y = (809386115x^5 - 618225002x^4 + 163964466x^3 - 15952931x^2 - 193925x + 395343)/95\%/6.2898108$

For $x > 20.01\%$, $y = (-24844444x^6 + 62290768x^5 - 62888803x^4 + 31439150x^3 - 7464327x^2 + 480997x + 333140)/95\%/6.2898108$

Where y = 100% hydraulic capacity, x = Deemed Heavy Percentage as determined in Note [6].

[3] Adjustment hours include system shutdowns, maintenance activities, Shipper actions including but not limited to Delivery Point delays, Kamloops Excess Nominations, and/or Force Majeure, and they are reflected in the Target System Capacity.

[4] A heavy percentage indicator will be measured for the volumes injected at Edmonton and delivered out of the system for determination of the monthly Adjusted Heavy Percentage:

Blended Heavy Percentage: measure based on petroleum grade category indicated on delivery tickets for a batch.

Pre-blend Heavy Percentage: measure based on the deemed petroleum type indicated at Edmonton injection of the component material within a batch.

[5] Two heavy percentage indicators will be measured and recorded on a monthly basis. Monthly Adjusted Heavy Percentage will be determined as follows:

(a). If Blended Heavy Percentage and Pre-blend Heavy Percentage are both greater than 14%, the Adjusted Heavy Percentage is set as the Blended Heavy Percentage.

(b). If Blended Heavy Percentage and Pre-blend Heavy Percentage are both less than 14%, the Adjusted Heavy Percentage is set as the Blended Heavy Percentage.

(c). If Blended Heavy Percentage is less than 14% and Pre-blend Heavy Percentage is greater than 14%, the Adjusted Heavy Percentage is set as 14%.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 5
Calculation of Operational Capacity Incentive Adjustment
(units as shown)
Sheet 2 of 2

[6] The Deemed Heavy Percentage will be the annual average of monthly Adjusted Heavy Percentages.

2019 Deemed Heavy Percentage:

Month	Blended Heavy Percentage	Pre-blend Heavy Percentage	Adjusted Heavy Percentage	Days in a Month
January	3%	15%	14%	31
February	2%	13%	2%	28
March	1%	15%	14%	31
April	13%	19%	14%	30
May	6%	13%	6%	31
June	9%	22%	14%	30
July	2%	15%	14%	31
August	6%	18%	14%	31
September	7%	20%	14%	30
October	0%	16%	14%	31
November	5%	16%	14%	30
December	12%	18%	14%	31
Annual simple average/Deemed Heavy Percentage	5.4%	16.5%	12.3%	365

[7] The Operational Capacity Incentive Adjustment for the account of Trans Mountain for the year shall not exceed $4 million.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 6
Calculation of Transportation Revenue Adjustment
(units as shown)

			2019 Calculation [1]	
Line	Description	Schedule & Line ref.	System Deliveries *(m³/day)*	Annual Revenues *($000)*
1	**Transportation Revenue Adjustment ("TRA")**			
2	**A. Interim Toll Period**	January to April	*120 days*	*120 days*
3	Forecast Amounts for Toll Purposes [2]		48,682	89,384
4	Actual Amounts		49,730	90,889
5	**Interim TRA**	[line 4 - line 3]	**1,048**	**1,505**
6	**B. Final Toll Period**	May to December	*245 days*	*245 days*
7	Forecast Amounts for Toll Purposes [2]		46,168	237,538
8	Actual Amounts		50,000	243,740
9	**Toll Period TRA**	[line 8 - line 7]	**3,832**	**6,203**
10	**Other Adjustments**			**(153)**
11	**Total TRA - (Shortfall) / Surplus**	[line 5 + line 9 + line 10]		**7,555**
12	**Annual TRA ($000)**			
13	TRA Surplus refundable to Shippers	[positive shown on line 11]		(7,555)
14	TRA Shortfall chargeable to Shippers	[negative shown on line 11]		-
15	**TRA to be included in the subsequent year ($000)**			**(7,555)**
16	Carrying Charges	[line 13 * rate on Sch 9]		(147)

Note(s):

[1] Proof without carrying charges.

		Reconciliation of amounts	
		Shippers	**TM**
Interim Revenues collected	[line 4]	90,889	
Final Toll Revenues collected	[line 8]	243,740	
Other Adjustment	[line 10]	(153)	
Total Revenues collected		**334,476**	
TRA	[line 15]	(7,555)	
Total Tolled Revenues	[Schedule 1, line 13]		326,922
Net revenues paid / collected		**326,922**	**326,922**

[2] The 2019 forecast system deliveries for interim and final toll periods can be found in the 2019 Final Toll filing, Toll Calculation Schedules, TL Schedule 2, Sheet 1, Line 12. The 2019 forecast annual revenues for interim and final toll periods can be found in the 2019 Final Toll filing, Toll Calculation Schedules, TL Schedule 3, Sheet 2, Line 7. CER filing ID: A98625.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 7
Calculation of Income Tax Provision and Adjustment
($000)

Line	Description	Schedule & Line ref.	2019 Approved	2019 Actual	2019 Variance	2020 Proposal
1	**Forecast Provision for Income Taxes Payable**					
2	**Return on Equity**					
3	2019 Base System / 2020 Rate Base	[Schedule 2, line 22]	41,373	41,260	(113)	42,263
4	**Total Return on Equity**		41,373	41,260	(113)	42,263
5	**Permanent & Timing Differences**					
6	Capital Cost Allowance [1]		(52,760)	(52,117)	643	(55,603)
7	Depreciation	[Schedule 2, line 25]	44,862	45,575	713	35,361
8	Cost of Retirements & other differences	prior year's adjustment	(265)	(68)	197	(500)
9	Capitalized Interest AFUDC		(465)	(304)	161	(522)
10	**Tax Base**		**32,746**	**34,346**	**1,600**	**20,999**
11	Income Tax Provision [2]	[line 10 * tax rate / (1 - tax rate)]	12,112	12,517	405	7,317
12	**Income Tax Provision**		**12,112**	**12,517**	**405**	**7,317**
13	**Carrying Charges**	[if line 12<0, line 12 * rate on Sch 9]			-	

Note(s):

[1] CCA forecast is provided on Schedule 7.1. 2019 Actual do not reflect July 1 tax filing review. New income tax rules came into effect on January 1, 2017 and November 21, 2018 are reflected in the CCA calculation.

[2]	Income tax rates (combined Federal and Provincial).	27.0%	26.7%	25.8%
[3]	Taxes Payable used in Working Capital Calculation in Sch 2 Note [4]	8,841	9,174	5,426

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 7.1

CCA for the Rate Base: (i) 2019; and (ii) Forecast for 2020
($ as shown)

Year	Description	CEC	Class 14.1 [2]	Class 1	Class 2	Class 3	Class 6	Class 7	Class 8	Class 10	Class 17	Class 49	Class 50	TOTAL
	Regular Rate	7%	5%	4%	6%	5%	10%	15%	20%	30%	8%	8%	55%	
	All Rate [3]	11%	8%	6%	9%	8%	15%	23%	30%	45%	12%	12%	83%	
2018	UCC at Dec 31	2,070,550	39,265	127,379,947	4,925,595	1,913,614	70,375,553	10,319,491	21,796,935	836,615	3,926,887	337,037,936	28,766	580,651,154
2019	Additions [1]	-	-	2,484,188	-	-	1,402,802	2,815,313	1,660,382	462,765	-	35,795,683	-	44,621,132.14
2019	Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
		2,070,550	39,265	129,864,135	4,925,595	1,913,614	71,778,355	13,134,805	23,457,317	1,299,379	3,926,887	372,833,619	28,766	625,272,286
	CCA	144,939	1,963	5,095,198	295,536	95,681	7,037,555	1,547,924	4,359,387	250,984	314,151	26,963,035	15,821	46,122,173
	CCA: Additions [3]	-	-	149,051	-	-	210,420	633,446	498,114	208,244	-	4,295,482	-	5,994,758
2019	**Total CCA**	**144,939**	**1,963**	**5,244,249**	**295,536**	**95,681**	**7,247,976**	**2,181,369**	**4,857,502**	**459,229**	**314,151**	**31,258,517**	**15,821**	**52,116,931**
2019	UCC at Dec. 31	1,925,612	37,302	124,619,886	4,630,059	1,817,933	64,530,379	10,953,436	18,599,815	840,151	3,612,736	341,575,102	12,945	573,155,355
2020	Additions [1]	-	-	4,318,934	-	-	2,438,870	4,894,620	2,886,690	804,549	-	62,233,308	-	77,576,971.28
2020	Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-
		1,925,612	37,302	128,938,820	4,630,059	1,817,933	66,969,249	15,848,056	21,486,505	1,644,700	3,612,736	403,808,410	12,945	650,732,326
	CCA	134,793	1,865	4,984,795	277,804	90,897	6,453,038	1,643,015	3,719,963	252,045	289,019	27,326,008	7,120	45,180,362
	CCA: Additions	-	-	259,136	-	-	365,830	1,101,290	866,007	362,047	-	7,467,997	-	10,422,307
2020	**Total CCA**	**134,793**	**1,865**	**5,243,931**	**277,804**	**90,897**	**6,818,868**	**2,744,305**	**4,585,970**	**614,092**	**289,019**	**34,794,005**	**7,120**	**55,602,669**
2020	UCC at Dec. 31	1,790,819	35,437	123,694,889	4,352,256	1,727,036	60,150,381	13,103,751	16,900,535	1,030,608	3,323,717	369,014,405	5,825	595,129,658

Note(s):

[1] Additions exclude AFUDC amounts.

[2] As of January 1, 2017, property that formerly would have been eligible capital property in the cumulative eligible capital (CEC) account is now considered depreciation property under capital cost allowance Class 14.1 with a rate of 5%. CCA calculation is adjusted to reflect the income tax rule change.

[3] On November 21, 2018, Government of Canada introduces the Accelerated Investment Incentive (AII). AII provides an increased first-year CCA deduction for eligible property acquired after November 20, 2018 and available for use before 2028. The 2019 and 2020 CCA forecasts have reflected this new tax rule change.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 8

Summary of Non-Routine Adjustments

($000)

Line	Description	Schedule & Line ref.	2019 Approved	2019 Actual	2019 Variance	2020 Proposal
1	**Non-Routine Adjustments**					
2	Costs for CER mandated regulatory changes (e.g. Pipeline Abandonment)		20	-	(20)	40
3	Costs for CER OPR change (ISLMS)		653	357	(296)	516
4	Costs for 2019 Depreciation study		85	129	44	20
5	Costs for Focus Group		30	-	(30)	-
6	NRA for Edmonton Terminalling Revenues	[Schedule 8.1]	(1,500)	(2,067)	(567)	(1,500)
7	Non-Performance Damage Assessment, Demurrage and/or Other Refund		-	-	-	-
8	Alternate Delivery Point Fees		-	(5,790)	(5,790)	-
9	**Total NRAs and NRA Variances to be included in subsequent year's tolls**		**(712)**	**(7,371)**	**(6,659)**	**(924)**
10	**Carrying Charges**	[if line 9<0, line 9* rate on Sch 9]			(130)	
11	**Westridge Dock Bid Premium Refund**	[Schedule 8.2]				
12	Refund to reduce Tolls		(161,120)	(167,407)	(6,287)	(148,837)
13	Refund to offset Pipeline Reclamation Surcharge		(13,216)	(14,011)	(795)	(12,435)
14	Refund to offset System Optimization Surcharge		(2,800)	(2,990)	(190)	(5,906)
15	**Total Refund**		**(177,136)**	**(184,408)**	**(7,272)**	**(167,178)**

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 8.1

Summary of Non-Routine Adjustments
Calculation of the NRA for the Edmonton Terminalling Revenues
($000)

Line	Description	2019 Approved	2019 Actual	2019 Share	2019 Variance	2020 Proposal	2020 Share
1	**A. Revenue Sharing**						
2	Revenues collected and available for sharing	3,000	3,946		946	3,000	
3	**B. Revenue Returned to Shippers** [1]						
4	$0 - $3M (including $3M)	1,500	1,500	50%	-	1,500	50%
5	Between $3M and $5M (including $5M)	-	567	60%	567	-	60%
6	Between $5M and $7.5M (including $7.5M)	-	-	70%	-	-	70%
7	Greater than $7.5M	-	-	75%	-	-	75%
8	**Total Shippers' share**	1,500	2,067		567	1,500	
9	**C. Refund amount**	**(1,500)**	**(2,067)**		**(567)**	**(1,500)**	
10	**Impact on Revenue Requirement**				**(567)**	**(1,500)**	

Note(s):

[1] The sharing percentage is determined when the collected revenues are:

	Share %
(i) less than or equal to $3M, Shippers will be refunded with 50% of the revenue.	50%
(ii) between $3M and $5M (including $5M), Shippers will be refunded with 60% of the revenue.	60%
(iii) between $5M and $7.5M (including $7.5M), Shippers will be refunded with 70% of the revenue.	70%
(iv) greater than $7.5M, Shippers will be refunded with 75% of the revenue.	75%

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 8.2

Summary of Non-Routine Adjustments
Westridge Dock Bid Premium Refunds

($000)

Sheet 1 of 2

Line	Description	Amount Collected	2019 Approved	2019 Actual	2020 Proposal
1	**A. 2018 Collection:**				
2	2018 Amount Collected	246,425			
3	**Total Collection as of Dec 31 2018**	246,425			
4	Carrying Charges as of Dec 31 2018	5,222			
5	**Total to be refunded as of Jan 1 2019**	**251,647**			
6	**Total to be refunded as of Jan 1 2020**				237,004
7	**B. Disposition:** [1]				
8	Refund Amount - Part A - Toll Reduction (Jan - Dec)		(161,120)	(167,407)	(148,837)
9	Refund Amount - Part B - Offset to Pipeline Reclamation Surcharge (Jan - Dec)		(13,216)	(14,011)	(12,435)
10	Refund Amount - Part C - Offset to System Optimization Surcharge (Jan - Dec) [2]		(2,800)	(2,990)	(5,906)
11	**Total Refund**		**(177,136)**	**(184,408)**	**(167,178)**
12	**C. Total net balance**				
13	2018 year end net balance			67,238	
14	Carrying Charges for 2018 collected and accumulated interest			3,559	
15	2019 collection			164,795	
16	Carrying Charges for 2019 collected			1,411	
17	Total net balance as of Dec 31, 2019			237,004	
18	**Total net balance for future year refund**			237,004	

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 8.2

Summary of Non-Routine Adjustments
Westridge Dock Bid Premium Refunds

Sheet 2 of 2

Note(s):

[1] For 2019, the estimated applicable carrying charges on the outstanding balance of the 2018 Westridge Dock Bid Premiums and the accumulated interest are:

	Month	**Monthly Rate**	**Balance Outstanding (Beginning of month)**	**2019 Refunds**	**Carrying Charges**	**Balance Outstanding (End of month)**
	January	1.95%	251,647	(9,058)	409	242,998
	February	1.95%	242,998	(8,429)	395	234,964
	March	1.95%	234,964	(7,926)	382	227,419
	April	1.95%	227,419	(8,808)	370	218,981
	May	1.95%	218,981	(20,538)	356	198,799
	June	1.95%	198,799	(16,545)	323	182,577
	July	1.95%	182,577	(19,550)	297	163,324
	August	1.95%	163,324	(18,207)	265	145,382
	Sept	1.95%	145,382	(19,040)	236	126,579
	Oct	1.95%	126,579	(19,053)	206	107,731
	November	1.95%	107,731	(18,268)	175	89,638
	December	1.95%	89,638	(18,986)	146	**70,797**
	As of Dec 31			(184,408)	3,559	
2019 Collected Amount						164,795
Carrying Charges on 2019 Collected						1,411
2019 Ending Balance						237,004
Opening Balance as of Jan 1, 2020						**237,004**

[2] The refund of Westridge Dock Bid Premiums to offset the System Optimization Surcharge was approved by the CER Order TO-004-2019 dated June 27, 2019.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
Schedule 9

Calculation of 2019 Carrying Charge Rate [1]
(units as shown)

Line	Month	TD Prime Rate	Days/ Month	2019 Actual Monthly Rate
1	January	3.95%	31	1.95%
2	February	3.95%	28	1.95%
3	March	3.95%	31	1.95%
4	April	3.95%	30	1.95%
5	May	3.95%	31	1.95%
6	June	3.95%	30	1.95%
7	July	3.95%	31	1.95%
8	August	3.95%	31	1.95%
9	September	3.95%	30	1.95%
10	October	3.95%	31	1.95%
11	November	3.95%	30	1.95%
12	December	3.95%	31	1.95%
13	**Average rate**		**365**	**1.95%**

Note(s):

[1] The Carrying Charge rate is the average of the monthly Trans Mountain overnight bank rate (TD prime minus 2%, or as may be changed from time to time).

[2] Summary of 2019 Carrying Charges *($000)*

Description	Schedule & Line ref.	2019 Actual
Capital Cost Recovery Adjustment	[Schedule 2, Sheet 1, line 28]	-
Trans Mountain Personnel Adjustments (Shippers' share)	[Schedule 3, line 13]	-
Flow Through Cost Adjustment	[Schedule 4, line 11]	(121)
Capacity Incentive (Shippers' share)	[Schedule 5, line 19]	(50)
Transportation Revenue Adjustment	[Schedule 6, line 16]	(147)
Income Tax Adjustment	[Schedule 7, line 13]	-
NRA Adjustments	[Schedule 8, line 10]	(130)
Total		**(448)**

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
CER 1

CER Compliance Reporting
Income Statement
($000) unless otherwise indicated

(For 12 Months Ended December 31, 2019)

Line	Particulars	CER Accounts	Annual Actuals [2]	Filed Forecast	Variance Col.
1	(a)	(b)	(c)	(d)	(c) - (d)
2	**Revenues**				
3	Transportation Revenue	501	334,476	326,922	7,555
4	Terminalling Revenues	556	3,946	3,000	946
5	Prior Year Adjustments	501	(3,685)	(3,685)	-
6	Current Year Adjustments	501	(19,060)	-	(19,060)
7	Other Revenue	554	5,790	-	5,790
8	Total Revenue [3]		321,467	326,237	(4,770)
9	**Operating Expenses**				
10	Allocations from TMCI [1]	710-01, 720-01, 730-01	65,274	65,274	-
11	Fuel & Power	720-02	35,786	35,134	652
12	Other Operating & Maintenance	710, 720, 730	60,767	68,417	(7,650)
13	Depreciation & Amortization	414, 423	45,575	44,862	713
14	Income Taxes	413	17,656	9,836	7,820
15	Taxes Other than Income	730-16	28,127	27,616	511
16	CER Cost Recovery	730	3,335	3,335	-
17	Total Operating Expenses		256,520	254,475	2,045
18	**Operating Income**		64,947	71,762	(6,816)
19	*Less:*				
20	Financial Charges deemed at 55% of Rate Base [4]	417	26,541	26,614	(73)
21	Preferred Share Dividends		*n/a*	*n/a*	*n/a*
22	**Equity Return**		38,405	45,148	(6,743)
23	**Rate of Return on Rate Base**		6.73%	7.42%	
24	**Rate of Return on Common Equity**		8.84%	10.37%	

Note(s):

[1] Staff costs are allocated to Trans Mountain from Trans Mountain Canada Inc (TMCI).

[2] Annual Actuals include all amounts as booked Dec. 31, of each year plus required adjustments to reflect amounts as calculated in this filing.

[3] Includes all revenues earned on regulated assets.

[4] Financing Fees averaged 5% for 2019.

[5] Historical data of related company transaction details can be found in Trans Mountain Annual Code of Conduct Compliance Reports. For 2019, Trans Mountain reports the costs recovered from Merchant services at the Edmonton Terminal in the Schedule CER 7. Other details of related company transactions will continue to be reported in the Annual Code of Conduct Compliance Report.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
CER 2

CER Compliance Reporting
Average Rate Base
($000) unless otherwise indicated

(For 12 Months Ended December 31, 2019)

Line	**Particulars**	**Annual Actual**
1	(a)	(b)
2	**Plant in Service**	
3	Net Plant	948,147
4	Total Plant	948,147
5	**Working Capital**	
6	Cash	8,152
7	Materials and Supplies	5,909
8	Transmission Line Pack	*n/a*
9	Prepayments and Deposits	2,932
10	Other (please specify)	-
11	Total Working Capital	16,993
12	**Deferrals**	
13	Deferred Income Taxes	-
14	Total Deferrals	-
15	**Total Average Rate Base** [1]	**965,140**

Note(s):

[1] The Total Average Rate Base includes all capital spending invested in the rate-regulated assets as per the calculation of the CCI.
The averaging is based on simple half-year average.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
CER 3

CER Compliance Reporting
Throughput Details
Deliveries (m^3 / d)

(For 12 Months Ended December 31, 2019)

Line		Particulars	Annual Actuals	Toll Forecast	Variance Forecast
1		(a)	(b)	(c)	(d)
2	Edmonton	Kamloops	932	1,397	(465)
3		Total Kamloops Deliveries	932	1,397	(465)
4	Edmonton	Sumas	32,264	25,523	6,741
5	Kamloops	Sumas	7	-	7
6		Total Sumas Deliveries	32,271	25,523	6,748
7	Edmonton	Burnaby	13,441	12,890	551
8	Kamloops	Burnaby	-	-	0
9		Total Burnaby Deliveries	13,441	12,890	551
10	Edmonton	Westridge	3,267	7,184	(3,918)
12		Total Westridge Deliveries	3,267	7,184	(3,918)
13	**Total System (Volumes recorded as delivered)**		**49,911**	**46,994**	**2,917**

Note(s):

[1] In addition to the annual throughput details provided in this schedule, pursuant to Order MO-036-2017 and CER Filing Manual Guide BB. 1 bullet 8, Trans Mountain submits its traffic data on a quarterly basis in the format required in Guide BB. 2.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

CER 4

CER Compliance Reporting
Annual Integrity Spending
($000)

(For 12 Months Ended December 31, 2019)

Actual Annual Expenditures [1] (a)	**Actual** (b)
Operating	
Program Management	4,266
Surveillance, Condition Monitoring and Integrity Hazard Assessment	9,921
Mitigation and Remediation	20,857
Other Expenditures	-
Total Operating	35,043
Capital	
Program Management	-
Surveillance, Condition Monitoring and Integrity Hazard Assessment	-
Mitigation and Remediation	44,303
Other Expenditures	-
Total Capital	44,303

Note(s):

[1] Separation into expenditures categories are provided to the extent available.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
CER 5
CER Compliance Reporting
Firm Service Report
Pursuant to Board Order RH-2-2011
($000) unless otherwise indicated

(For 12 Months Ended December 31, 2019)

				LTD														**LTD**
Line	**Description**			**YE 2018**	**Jan-19**	**Feb-19**	**Mar-19**	**Apr-19**	**May-19**	**Jun-19**	**Jul-19**	**Aug-19**	**Sep-19**	**Oct-19**	**Nov-19**	**Dec-19**	**2019 Total**	**YE 2019**
1	**A. Project Spending Details**																	
2	**Edmonton Term Expansion**	In-service month	**Jun-14**															
3	Build 1 Regulated Tank	Capital Spending		34,084	-	-	-	-	-	-	-	-	-	-	-	-	-	34,084
4		FS Funds applied		(34,084)	-	-	-	-	-	-	-	-	-	-	-	-	-	(34,084)
5	**TM Expansion Project**																	
6	Development costs	Capital Spending		1,514,370	33,210	45,470	52,325	60,947	113,616	109,513	113,189	161,500	112,398	123,294	123,962	95,440	1,144,862	2,659,232
7		Net FS Funds applied		(161,223)	(2,430)	(2,195)	(2,431)	(2,362)	(2,433)	(2,354)	(2,430)	(2,431)	(2,352)	(2,430)	(2,354)	(2,430)	(28,633)	(189,855)
8	Prior month AFUDC / Interest				9,218	9,457	8,826	10,122	10,192	11,256	11,576	12,692	13,717	13,989	15,260	15,558		
9	Net Monthly Balances before Carrying Charges		AFUDC/Interest	1,353,148	39,997	52,731	58,719	68,706	121,375	118,414	122,335	171,761	123,763	134,853	136,868	108,568	1,116,229	2,469,377
10	Net Balance before current month AFUDC / Interest				1,584,957	1,637,688	1,696,407	1,765,113	1,886,488	2,004,902	2,127,237	2,298,998	2,422,761	2,557,614	2,694,481	2,803,050		
11	Monthly Carrying Charge Calculation		AFUDC/Interest	201,030	9,457	8,826	10,122	10,192	11,256	11,576	12,692	13,717	13,989	15,260	15,558	16,724	149,367	350,396
12	**Closing Net Monthly Balances**			**1,554,177**	**1,594,413**	**1,646,514**	**1,706,529**	**1,775,305**	**1,897,743**	**2,016,478**	**2,139,929**	**2,312,715**	**2,436,750**	**2,572,874**	**2,710,039**	**2,819,774**		**2,819,774**
13	**B. Firm Service - Special Deposit Account Details**																	
14	**Step 1: Assign Firm Service Fees to ETE Regulated Tank**																	
15	Monthly Firm Service Fees received			(195,307)	(2,430)	(2,195)	(2,431)	(2,362)	(2,433)	(2,354)	(2,430)	(2,431)	(2,352)	(2,430)	(2,354)	(2,430)	(28,633)	(223,939)
16	Less Spending on	ETE - Build 1 Tank		34,084	-	-	-	-	-	-	-	-	-	-	-	-	-	34,084
17	**Remaining after ETE assignment of FS Funds**			(161,223)	(2,430)	(2,195)	(2,431)	(2,362)	(2,433)	(2,354)	(2,430)	(2,431)	(2,352)	(2,430)	(2,354)	(2,430)	(28,633)	(189,855)
18	**Step2: Reconciliation of Special Deposit Account for Firm Service Fees**																	
19	Cumulative Firm Service Fees available			(195,307)	(197,737)	(199,932)	(202,363)	(204,725)	(207,158)	(209,512)	(211,942)	(214,373)	(216,725)	(219,155)	(221,509)	(223,939)		(223,939)
20	Cumulative Capital Spending (all Eligible Projects)			1,548,454	1,581,664	1,627,134	1,679,458	1,740,405	1,854,021	1,963,533	2,076,722	2,238,222	2,350,620	2,473,914	2,597,876	2,693,316		2,693,316
21	Net Balance w/o AFUDC / Interest			1,353,148	1,383,927	1,427,202	1,477,095	1,535,680	1,646,863	1,754,022	1,864,780	2,023,849	2,133,895	2,254,759	2,376,367	2,469,377		2,469,377
22	Cumulative prior months AFUDC / Interest				201,030	210,486	219,312	229,433	239,625	250,880	262,457	275,149	288,866	302,855	318,114	333,672		
23	Net Balance before current month AFUDC / Interest				1,584,957	1,637,688	1,696,407	1,765,113	1,886,488	2,004,902	2,127,237	2,298,998	2,422,761	2,557,614	2,694,481	2,803,050		
24	Monthly Carrying Charge Calculation		AFUDC/Interest	201,030	9,457	8,826	10,122	10,192	11,256	11,576	12,692	13,717	13,989	15,260	15,558	16,724		350,396
25	**Closing Net Monthly Balances**			**1,554,177**	**1,594,413**	**1,646,514**	**1,706,529**	**1,775,305**	**1,897,743**	**2,016,478**	**2,139,929**	**2,312,715**	**2,436,750**	**2,572,874**	**2,710,039**	**2,819,774**		**2,819,774**
26	**C. Carrying Costs Details**																	
27	Bank Interest (-ve balances on Line 24)			(10)	-	-	-	-	-	-	-	-	-	-	-	-	-	(10)
28	AFUDC (+ve balances on Line 24)			201,039	9,457	8,826	10,122	10,192	11,256	11,576	12,692	13,717	13,989	15,260	15,558	16,724	149,367	350,406
29	**Monthly AFUDC / Bank Interest**			**201,030**	**9,457**	**8,826**	**10,122**	**10,192**	**11,256**	**11,576**	**12,692**	**13,717**	**13,989**	**15,260**	**15,558**	**16,724**	**149,367**	**350,396**

Note(s):

[1] "**Carrying Charges**" means AFUDC or Bank Interest for a given month, when applicable.

[2] **AFUDC and AFUDC Rates:**

To the extent that cumulative Eligible Project spending does not exceed available funds, no AFUDC is charged.

To the extent that cumulative Eligible Project spending exceeds available funds, AFUDC is charged. Such AFUDC is assigned to Eligible Projects based on priority of funds used (i.e. ETE Regulated tank uses funds first (therefore no AFUDC is assigned) and then TMEP development costs).

2019 AFUDC rate	Equity	ROE	9.5%	times	structure	45%	equals	4.28%
	Debt	Rate	5.0%	times	structure	55%	equals	2.75%
	Combined AFUDC rate							**7.03%**

[3] **Bank Interest** means the net percentage interest paid by the bank for this account (interest earned net of bank fees) when there are available funds to earn interest.

2019 Monthly rate	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	1.95%	
Days in Month	31	28	31	30	31	30	31	31	30	31	30	31	365

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

CER 6

CER Compliance Reporting
Trans Mountain Expansion Project Bulk Oil Cargo Fee Due from Westridge Shippers
Pursuant to Board Order TO-001-2016
($000) unless otherwise indicated

(For 12 Months Ended December 31, 2019)

Line	Description		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
1	**A. TMEP BOCF Due from Westridge Shippers**														
2	Opening Balance		22,173	24,564	24,666	24,769	27,170	27,283	27,397	29,809	29,933	30,058	32,481	32,616	**22,173**
3	Addition		2,288			2,288			2,288			2,288			**9,153**
4	Monthly Financing Cost	[line 9]	102	102	103	113	113	114	124	124	125	135	135	136	**1,425**
5	Closing Balance	[line 2 + line 3 + line 4]	24,564	24,666	24,769	27,170	27,283	27,397	29,809	29,933	30,058	32,481	32,616	32,752	**32,752**
6	**B. Financing cost details**														
7	Balance	[line 2 + line 3]	24,462	24,564	24,666	27,057	27,170	27,283	29,685	29,809	29,933	32,346	32,481	32,616	
8	Financing Rate		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	**5%**
9	Monthly Financing Cost	[line 7 x (line 8 /12)]	102	102	103	113	113	114	124	124	125	135	135	136	**1,425**

Note(s):

[1] As published in Canada Gazette Part I dated December 1, 2018, the TMEP BOCF rate applicable is $4.597 per tonne of bulk oil, plus all applicable taxes, from January 1, 2019.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
CER 7
CER Compliance Reporting

Costs Recovered from Merchant Services at the Edmonton Terminal
Pursuant to Board Order XO-T246-04-2008
($000) unless otherwise indicated
(For 12 Months Ended December 31, 2019)

Line	**Description**	**Schedule & Line ref.**	**2019**
1	**A. Rate Base** [1]		
2	Net Rate Base		462,678
3	Equity [2]		19,779
4	Debt [2]		12,724
5	Depreciation [3]		13,460
6	Capital Cost Recovery	[Sum (Lines 3, 4 & 5)]	45,963
7	**B. Income Tax Provision**		-
8	**C. Operating Expenses**		
9	Power		1,025
10	Property Tax		2,074
11	Insurance		1,158
12	O&M		1,330
13	Employee Services		3,447
14	Total Operating Expenses	[Sum (Lines 9, 10, 11,12 & 13)]	9,034
15	**Total Annual Revenue Requirement for Merchant Services**	[Sum (Lines 6, 7 & 14)]	**54,997**

Note(s):

[1] The assets included in the Rate Base are Tanks 24, 25, 27, 28, 29, 30,31, 32, 33, 34, 35, 36, 37, 38 and 39, and ancillary facilities at the Edmonton Terminal

[2] The financial parameters for calculating the Return on Capital are consistent with the parameters used in the ITS at the time.
For greater clarity, the financial parameters used are:

	2019
Capital Structure (Debt/Equity)	55%/45%
Return on equity	9.5%
Return on debt	5.0%

[3] The depreciation rates applied are consistent with the rates used in the ITS and as approved by the Board in Order TO-02-2011.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

TL Schedule 1

Explanatory Notes for the Toll Design and Calculations

The basic design of Trans Mountain's tolls evolved over many years and resulted in four primary categories of service: Terminalling, Tankage, Mainline Transportation, and Other. The current tolls embody the toll design principles established in 1995 and 2009 where all volumes are subject to the same fee for the same service and represent a user-pay and cost-based allocation methodology.

As Trans Mountain's Revenue Requirement is expected to be recovered from the approved tolls each year, the division of the Revenue Requirement into a specific set of service fees that comprise the individual tolls ensures that the principles of the toll design are met. Within the Trans Mountain toll design, Receipt and Delivery Tankage and Terminalling are unbundled into individual direct and indirect use service fees at each location (Edmonton, Kamloops, Sumas, and Burnaby). The Mainline Transportation are unbundled into Mainline Transmission and different material types through the commodity surcharge/surcredit to recognize their impacts during transportation.

a. Direct Use

The fee for this service includes 100% of the cost of the asset (e.g. meters, manifolds, blending/boosters, and tanks) and any structures or improvements that support or house these assets plus an allocation of common assets (land, roads, support services, etc.) less any forecast indirect usage fees.

b. Indirect Use

To the extent that the indirect use of an asset pushes costs onto direct users, an indirect fee is applied. For example, the Indirect Use tank fee is a percentage of the applicable Direct Use fee based on the impact that an average outage for an average batch or batch train would impose on other pipeline shippers if the batch or batch train was delayed or cancelled. This estimate is 1 days' notice for a change or delay in the 6 day batch cycle or 5 days in an average month (30.5 days) which is approximately 15% of the Direct Use fee. The Indirect Use fee is applied whenever the Direct Use fee is not applied.

By subdividing the services, allocating costs and applying direct/indirect fees at each location, the tankage and terminalling credits used prior to 2009 were no longer required.

The primary categories of service are subdivided as follows:

a. Receipt Terminalling:
  i. Inlet piping and metering (direct/indirect);
  ii. Manifold transfer into receipt tanks (direct/indirect);
  iii. Manifold transfer and blending out of the receipt tanks (direct/indirect); and
  iv. Transfer to mainline through outbound boosters and metering (direct/indirect)

b. Receipt Tankage:
  i. Direct use; and
  ii. Indirect use.

c. Delivery Tankage
  i. Direct use; and
  ii. Indirect use.

d. Delivery Terminalling
  i. Pumps and manifold in/out
  ii. Meters (direct/indirect)

e. Mainline Transportation
  i. Mainline Transmission from Receipt to Delivery locations
  ii. Commodity surcharges/surcredit for different material types

f. Other
  i. Administrative or Special Service Fees
  ii. Westridge Marine Terminal Loading Charge

The pipeline tolls ("Net Tolls") are composed of all the fees for Receipt and Delivery Terminalling, Receipt and Delivery Tankage, Mainline Transportation and other special service fees or charges as appropriate for the different levels of service provided from/to the various receipt and Delivery locations. Edmonton and Kamloops are receipt locations and Kamloops, Sumas and Burnaby are Delivery locations. The Carrier also provides Terminalling service at Edmonton for volumes not entering the mainline. The toll design and the application of other fees recognize the nature of the volumes transported through the mainline and for volumes not entering mainline.

TL Schedule 1

Explanatory Notes for the Toll Design and Calculations

The following table summarizes the types of assets installed and used within the Toll Design service fees.

Location	Meters	Manifold	Blending and/or Booster	Tank
Edmonton Terminal (Receipt)	✓	✓	✓	✓
Kamloops (Receipt)	✓		✓	✓
Kamloops (Delivery)	✓	✓	✓	
Sumas (Delivery)		✓	✓	✓
Burnaby Terminal and Westridge Marine Terminal (Delivery)	✓	✓	✓	✓

Tankage, Terminalling, and Westridge Marine Terminal Fees

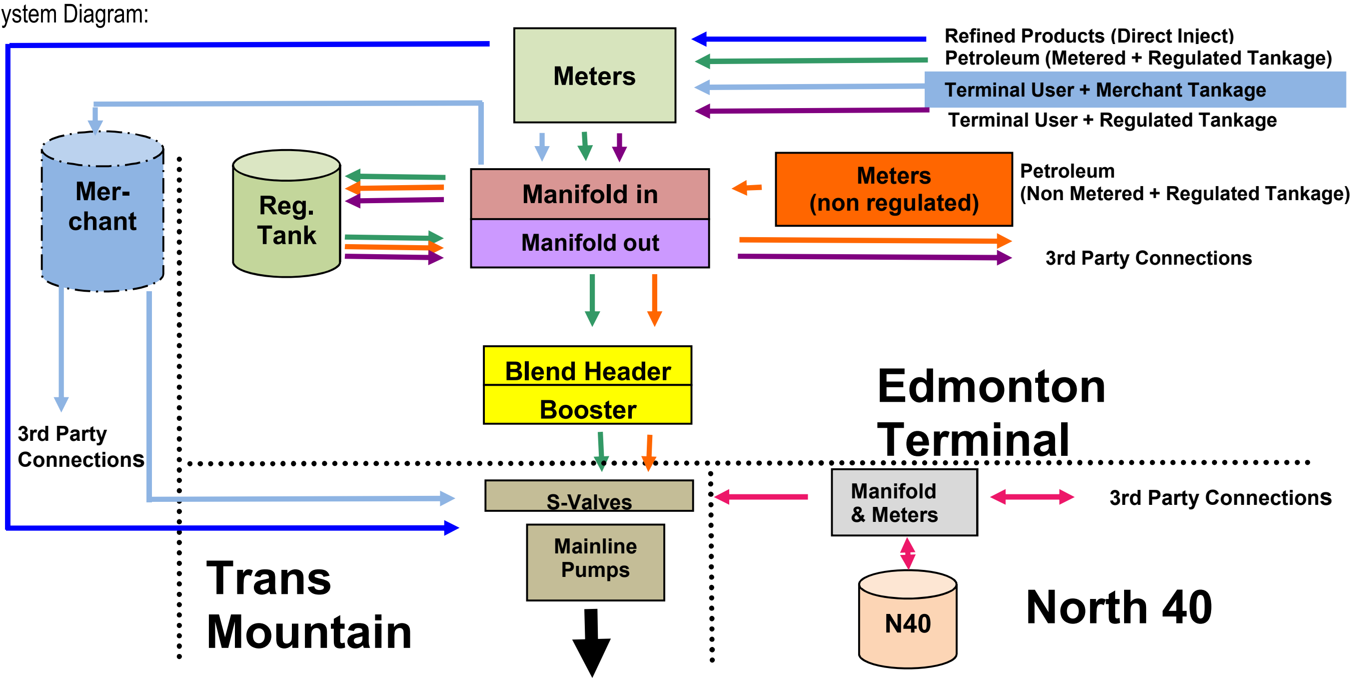
Edmonton fees (receipt location):

Edmonton Terminalling fee is first separated into two types of receipt fees: Direct and Indirect. Direct terminalling fees are comprised of four receipt service fees: i) One for inlet metering services; ii) Two for manifold transfer service into and out of tankage; and iii) One for outlet blending and booster service into the mainline. The Indirect fee recognizes that Trans Mountain has invested in facilities, incurs annual operating and maintenance capital expenses, and requires scheduling flexibility to accommodate both direct and indirect use of the Terminal assets. The Indirect fee is estimated at 15% of the Direct fee (estimated as the proportion of required scheduling flexibility in Trans Mountain's "normal" pumping schedule, i.e. 1 day in 6 days). The Indirect fee is applied to the four receipt fees individually.

Edmonton Tankage fee is separated into two types of receipt fees: Direct and Indirect. Shipper volumes that directly use the tanks will be assessed a Direct tankage fee and those that do not will be assessed an Indirect Tankage fee. The Indirect Tankage fee is set based on the same principle as outlined under the Terminalling fees, again estimated at 15%.

The receipt fees can then be combined based on use by each Shipper, current and new, requesting receipt services at Edmonton terminal.

System Diagram:



TL Schedule 1

Explanatory Notes for the Toll Design and Calculations

Kamloops fees (receipt location):

Kamloops Terminalling fees were reviewed using the principles established for Edmonton terminal. As this location is significantly less complex than the Edmonton terminal, the cost has been entirely allocated to the inlet metering service fee. Additionally, Kamloops terminalling is also used for mainline breakout and relief purposes. As a result, the terminalling costs are shared between the mainline fees, 15%, and the receipt terminalling fees, 85%.

Kamloops Tankage fees were reviewed in light of the principles used for Edmonton terminal, that being the direct and indirect use of tanks for receipt functions. Additionally, Kamloops tankage is also used for mainline breakout and relief purposes. As a result, the tankage costs are shared between the mainline fees, 5%, and the receipt tankage fees, 95%. Use of the Direct and Indirect fees are also applied to Kamloops volumes.

Kamloops fees (delivery location):

Kamloops Terminalling fee uses the costs for providing a delivery location at the Suncor (previously Petro Canada) owned site upstream of the Trans Mountain Kamloops station, rather than an allocation of the asset costs at Kamloops station.

Kamloops Tankage fee is an Indirect Use fee as no delivery tankage is provided at the Suncor site and no delivery pipeline assets were provided in lieu of tankage at this site.

Sumas fees (delivery location):

Sumas Terminalling fee is based on the functional design of Sumas station, that being to provide coincidental pumping to both the connected Trans Mountain (Puget Sound) LLC pipeline and to the Trans Mountain mainline into Burnaby, BC. When Sumas station was rebuilt, approximately 50% of the costs at this location was incurred to allow pumping to each location. As a result, 50% of the Sumas station costs are rolled into the delivery terminalling fees and the remainder are rolled into the mainline fees.

The Indirect metering fee is assessed for all volumes being transferred / delivered into Trans Mountain (Puget Sound) LLC pipeline as no meters were installed for delivery to Trans Mountain (Puget Sound) LLC.

Sumas Tankage fee is based on the costs at Sumas tank farm (a location distinct from Sumas station) and the assessment of use by volumes destined for delivery to Washington State refineries. It was determined that 90% of Sumas tank farm costs are to be rolled into the delivery tankage fee and the remainder rolled into the mainline fees.

Westridge Marine Terminal Loading Charge (delivery location):

The Westridge Marine Terminal Loading Charge recovers costs for incremental operation and maintenance incurred at Westridge Marine Terminal (both operating and capital costs).

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
TL Schedule 2

Summary of Forecast System Throughput Volumes

Sheet 1 of 2

Deliveries (m³/day)

Line	**Source**	**Destination**	**km**	**Schedule & Line ref.**	**Used in Proposed Net Toll Calculations [1]** **2020 Interim** *JAN to APR* *121 days*	 **2020 Proposed** *MAY to DEC* *245 days*	 **2020 Total** *Annual* *366 days*
1	Edmonton	Kamloops	819		682	1,175	1,012
2	*Total Kamloops Deliveries*				*682*	*1,175*	*1,012*
3	Edmonton	Sumas	1,096		29,909	29,491	29,630
4	Kamloops	Sumas	271		-	-	-
5	*Total Sumas Deliveries*				**29,909**	**29,491**	**29,630**
6	Edmonton	Burnaby	1,149		9,054	13,120	11,776
7	Kamloops	Burnaby	324		-	-	-
8	*Total Burnaby Deliveries*				**9,054**	**13,120**	**11,776**
9	Edmonton	Westridge	1,153		7,865	6,590	7,012
10	*Total Westridge Marine Terminal Deliveries*				**7,865**	**6,590**	**7,012**
11	**Total Ex Edmonton/Edson Throughput**				**47,511**	**50,376**	**49,429**
12	**Total System Throughput**				**47,511**	**50,376**	**49,429**
13	Total Heavy Crude (Ex Edmonton/Edson)				5,610	6,177	5,990
14	**Percentage Heavy (Ex Edmonton/Edson)**				**11.81%**	**12.26%**	**12.12%**
15	**Hydraulic Capacity (Ex Edmonton/Edson) at Percentage Heavy** [2]				**53,278**	**52,996**	**53,083**
16	**Deliveries as Percentage of Hydraulic Capacity**			**[line 11/line 15]**	**89%**	**95%**	**93%**
17	Total Land Deliveries				39,646	43,786	42,417
18	Total Offshore Deliveries				7,865	6,590	7,012
19	Deliveries Ex Kamloops				-	-	-
20	Total System Deliveries (m³)						18,091,062

Note(s):

[1] Proposed throughput is based on actual deliveries and updated nominations for January 1 to March 31, and forecast volumes for the remainder of the year as agreed to with Shippers.

[2] Hydraulic Formula:

For $x \leq 20.01\%$, $y = (809386115x^5 - 618225002x^4 + 163964466x^3 - 15952931x^2 - 193925x + 395343)/95\%/6.2898108$

For $x > 20.01\%$, $y = (-24844444x^6 + 62290768x^5 - 62888803x^4 + 31439150x^3 - 7464327x^2 + 480997x + 333140)/95\%/6.2898108$

Where y = 100% hydraulic capacity, x = annual average % heavy injected at Edmonton and Edson and delivered out of the System.

[3] Under normal operating conditions, the System throughput will be set at a minimum 93% of hydraulic capacity at the forecast heavy composition as contemplated in Section 6 of the 2019-2021 ITS.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
TL Schedule 2

Calculation of Annual Cubic Meter Kilometers [2]
Sheet 2 of 2
(000,000 m^3km)

				Used in Proposed Net Toll Calculations [1]		
Line	**Source**	**Destination**	**km**	**2020 Interim** *JAN to APR* *121*	**2020 Proposed** *MAY to DEC* *245*	**2020 Total** *Annual* *366*
1	Edmonton	Kamloops	819	68	236	303
2	*Total Kamloops Deliveries*			**68**	**236**	**303**
3	Edmonton	Sumas	1,096	3,965	7,916	11,881
4	Kamloops	Sumas	271	-	-	-
5	*Total Sumas Deliveries*			**3,965**	**7,916**	**11,881**
6	Edmonton	Burnaby	1,149	1,259	3,693	4,951
7	Kamloops	Burnaby	324	-	-	-
8	*Total Burnaby Deliveries*			**1,259**	**3,693**	**4,951**
9	Edmonton	Westridge	1,153	1,097	1,861	2,959
10	*Total Westridge Marine Terminal Deliveries*			**1,097**	**1,861**	**2,959**
11	**Total**			**6,388**	**13,706**	**20,094**

Note(s):

[1] Proposed throughput is based on actual deliveries and updated nominations for January 1 to March 31, and forecast volumes for the remainder of the year as agreed to with Shippers.

[2] Annual cubic meter kilometers means distance (km) * volume * days in the year ÷ one million.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
TL Schedule 3

Revenue Comparison using Interim and Proposed Tolls

Sheet 1 of 2

(units as shown)

						2020 Tolls		Annual Revenue ($'000)		
Line	**Receipt**	**Destination**	**Receipt Service**	**Petroleum Type**	**Volumes**	*Interim*	*Proposed*	*Interim* [1]	*Proposed* [2]	*Change*
					(m³/day)			*($000)*	*($000)*	*(%)*
1	Edmonton	Kamloops	All	All	1,012	All	All	5,152	3,538	-31.3%
2	Edmonton	Sumas	All	All	29,630	All	All	212,593	146,976	-30.9%
3	Edmonton	Burnaby	All	All	11,776	All	All	87,536	60,579	-30.8%
4	Edmonton	Westridge	All	All	7,012	All	All	65,328	46,153	-29.4%
5	Kamloops	Sumas	All	All	-	All	All	-	-	-
6	Kamloops	Burnaby	All	All	-	All	All	-	-	-
7	**Total Mainline**				**49,429**			370,609	257,246	-30.6%
8	Partial year correction [4]							(43,687)	35,972	20.3%
9	**Total Revenues**							**326,922**	**293,217**	**-10.3%**

Note(s):

[1] 2020 Interim Tolls, Tariff No. 108, was approved by CER Order TO-005-2019.
2020 Interim Tolls, based on 2019 partial year Revenue Requirement, will generate approximately $117,665K between January 1 and April 30 of 2020.

[2] Proposed Edmonton to Westridge Tolls include the Westridge Marine Terminal Loading Charge of $2.168 per m³.

[3] Number of days used in revenue calculation = 366

[4] Partial year correction depends on timing of change (i.e. month) and any substantive changes in volume mix or revenues.

[5] Calculation of percentage change in partial year tolls for 2020:

Description	**Calculation**	**Interim**	**Final**	**Change**
Mainline Tolls	TL Sch 3.2 Line 7: Revenue*1000 ÷ Volumes	20.4676	14.2237	-30.5%
Westridge Dock Bid Premium Refund Sur-credit	(i) TL Sch 9, Line 4 * -1 * 1000 divided by (TL Sch 3.2, Line 7: Throughput for 120 days)	(11.5771)		
	(ii) TL Sch 9, (Line 5 - Line 3) * 1000 divided by (TL Sch 3.2, Line 7: Throughput for 245 days)		(6.6668)	
Net Tolls		**8.8905**	**7.5569**	**-15.0%**

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

TL Schedule 3

Revenue Comparison Using Interim and Proposed Tolls for 2020 - Details

Sheet 2 of 2

(units as shown)

				JAN to APR Revenues			**MAY to DEC Revenues**				
Line	**From:**	**Receipt Service**	**Petroleum Type**	**Interim Tolls** [1]	**Throughput for 121 days**	**Revenues Interim Tolls**	**Proposed Tolls**	**Throughput for 245 days**	**Revenues Proposed Tolls**	**Total Revenues**	*Change*
				($\$/m^3$)	*m^3*	*(\$ 000)*	*($\$/m^3$)*	*m^3*	*(\$ 000)*	*(\$ 000)*	*(%)*
	Edmonton To:										
1	Kamloops	All	All	All	82,549	1,148	All	287,753	2,749	3,898	-31.3%
2	Sumas	All	All	All	3,619,039	70,866	All	7,225,371	98,034	168,900	-30.7%
3	Burnaby	All	All	All	1,095,570	22,220	All	3,214,424	45,200	67,420	-30.7%
4	Westridge	All	All	All	951,703	23,431	All	1,614,652	29,568	52,999	-25.6%
	Kamloops To:										
5	Sumas	All	All	All	-	-	All	-	-	-	
6	Burnaby	All	All	All	-	-	All	-	-	-	
7	**Total**				**5,748,862**	**117,665**		**12,342,200**	**175,552**	**293,217**	-30.5%
8	**Other Charges:**										
9	Edm Term	Tank Metered	All	$\$ 1.3422/m^3$			$\$ 1.3091/m^3$		-	-	-2.5%
10	Edm Term	Tank Non Metered	All	$\$ 1.0939/m^3$			$\$ 1.0603/m^3$		-	-	-3.1%
11	Edm Term	Metered In, 3rd Party	All	$\$ 0.3257/m^3$			$\$ 0.3256/m^3$		-	-	*na*
12	**Total**								**175,552**	**293,217**	

Note(s):

[1] 2020 Interim Tolls, Tariff No. 108, was approved by CER Order TO-005-2019.

[2] Total volume in m^3 as shown above converted to m^3/day to match volumes shown on TL Schedule 2:

Above volumes stated in m^3 / day 47,511 and 50,376 = 49,429

[3] Volumes used for partial year Westridge Marine Terminal Loading Charge (shown on TL Schedule 6): 951,703

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
TL Schedule 4

Summary of Proposed Tolls by Crude Type

Sheet 1 of 2

($/ m³)

Line	Receipt	Destination	Type of Service	Petroleum Type	Mainline Tolls	Surcharge (Surcredit)	Tankage		Terminalling		Westridge Loading	Net Toll
							Receipt	Delivery	Receipt	Delivery		
1	Edmonton	Edmonton	Tank Metered, Non Pipe	All	*na*	-	0.9350	-	0.3741	-	-	**1.3091**
2	Edmonton	Edmonton	Tank Non Metered	All	*na*	-	0.9350	-	0.1253	-	-	**1.0603**
3	Edmonton	Edmonton	Metered In, 3rd Party	All	*na*	-	*na*	-	0.3256			**0.3256**
4	Edmonton	Kamloops	Tank Metered	Super Light	7.5479	(0.1510)	0.9350	0.2418	0.4954	0.4849	-	**9.5540**
5	Edmonton	Kamloops	Tank Non Metered	Super Light	7.5479	(0.1510)	0.9350	0.2418	0.2466	0.4849	-	**9.3051**
6	Edmonton	Kamloops	Direct Injected	Super Light	7.5479	(0.1510)	0.1403	0.2418	0.3231	0.4849	-	**8.5869**
7	Edmonton	Kamloops	3rd Party Injected	Super Light	7.5479	(0.1510)	0.1403	0.2418	0.0743	0.4849	-	**8.3381**
8	Edmonton	Sumas	Tank Metered	Light	10.0969	-	0.9350	1.6121	0.4954	0.3728	-	**13.5122**
9	Edmonton	Sumas	Tank Non Metered	Light	10.0969	-	0.9350	1.6121	0.2466	0.3728	-	**13.2634**
10	Edmonton	Sumas	Direct Injected	Light	10.0969	-	0.1403	1.6121	0.3231	0.3728	-	**12.5452**
11	Edmonton	Sumas	3rd Party Injected	Light	10.0969	-	0.1403	1.6121	0.0743	0.3728	-	**12.2964**
12	Edmonton	Sumas	Metered In, Direct Mainline	Light	10.0969	-	0.1403	1.6121	0.3511	0.3728	-	**12.5731**
13	Edmonton	Sumas	Tank Metered	Medium	10.0969	0.5048	0.9350	1.6121	0.4954	0.3728	-	**14.0170**
14	Edmonton	Sumas	Tank Non Metered	Medium	10.0969	0.5048	0.9350	1.6121	0.2466	0.3728	-	**13.7682**
15	Edmonton	Sumas	Direct Injected	Medium	10.0969	0.5048	0.1403	1.6121	0.3231	0.3728	-	**13.0500**
16	Edmonton	Sumas	3rd Party Injected	Medium	10.0969	0.5048	0.1403	1.6121	0.0743	0.3728	-	**12.8012**
17	Edmonton	Sumas	Metered In, Direct Mainline	Medium	10.0969	0.5048	0.1403	1.6121	0.3511	0.3728	-	**13.0779**
18	Edmonton	Sumas	Tank Metered	Heavy	10.0969	1.5145	0.9350	1.6121	0.4954	0.3728	-	**15.0267**
19	Edmonton	Sumas	Tank Non Metered	Heavy	10.0969	1.5145	0.9350	1.6121	0.2466	0.3728	-	**14.7779**
20	Edmonton	Sumas	Direct Injected	Heavy	10.0969	1.5145	0.1403	1.6121	0.3231	0.3728	-	**14.0597**
21	Edmonton	Sumas	3rd Party Injected	Heavy	10.0969	1.5145	0.1403	1.6121	0.0743	0.3728	-	**13.8109**
22	Edmonton	Sumas	Metered In, Direct Mainline	Heavy	10.0969	1.5145	0.1403	1.6121	0.3511	0.3728	-	**14.0876**
23	Edmonton	Sumas	Tank Metered	Super Heavy	10.0969	2.0194	0.9350	1.6121	0.4954	0.3728	-	**15.5316**
24	Edmonton	Sumas	Tank Non Metered	Super Heavy	10.0969	2.0194	0.9350	1.6121	0.2466	0.3728	-	**15.2828**
25	Edmonton	Sumas	Direct Injected	Super Heavy	10.0969	2.0194	0.1403	1.6121	0.3231	0.3728	-	**14.5646**
26	Edmonton	Sumas	3rd Party Injected	Super Heavy	10.0969	2.0194	0.1403	1.6121	0.0743	0.3728	-	**14.3158**
27	Edmonton	Sumas	Metered In, Direct Mainline	Super Heavy	10.0969	2.0194	0.1403	1.6121	0.3511	0.3728	-	**14.5925**
28	Edmonton	Burnaby	Tank Metered	Super Light	10.5876	(0.2118)	0.9350	1.6121	0.4954	0.4849	-	**13.9032**
29	Edmonton	Burnaby	Tank Non Metered	Super Light	10.5876	(0.2118)	0.9350	1.6121	0.2466	0.4849	-	**13.6544**
30	Edmonton	Burnaby	Direct Injected	Super Light	10.5876	(0.2118)	0.1403	1.6121	0.3231	0.4849	-	**12.9362**
31	Edmonton	Burnaby	3rd Party Injected	Super Light	10.5876	(0.2118)	0.1403	1.6121	0.0743	0.4849	-	**12.6874**
32	Edmonton	Burnaby	Tank Metered	Light	10.5876	-	0.9350	1.6121	0.4954	0.4849	-	**14.1150**
33	Edmonton	Burnaby	Tank Non Metered	Light	10.5876	-	0.9350	1.6121	0.2466	0.4849	-	**13.8662**
34	Edmonton	Burnaby	Direct Injected	Light	10.5876	-	0.1403	1.6121	0.3231	0.4849	-	**13.1480**
35	Edmonton	Burnaby	3rd Party Injected	Light	10.5876	-	0.1403	1.6121	0.0743	0.4849	-	**12.8992**
36	Edmonton	Burnaby	Metered In, Direct Mainline	Light	10.5876	-	0.1403	1.6121	0.3511	0.4849	-	**13.1759**
37	Edmonton	Westridge	Tank Metered	Light	10.6251	-	0.9350	1.6121	0.4954	0.4849	2.1680	**16.3205**
38	Edmonton	Westridge	Tank Non Metered	Light	10.6251	-	0.9350	1.6121	0.2466	0.4849	2.1680	**16.0717**
39	Edmonton	Westridge	Direct Injected	Light	10.6251	-	0.1403	1.6121	0.3231	0.4849	2.1680	**15.3535**
40	Edmonton	Westridge	3rd Party Injected	Light	10.6251	-	0.1403	1.6121	0.0743	0.4849	2.1680	**15.1047**
41	Edmonton	Westridge	Metered In, Direct Mainline	Light	10.6251	-	0.1403	1.6121	0.3511	0.4849	2.1680	**15.3814**
42	Edmonton	Westridge	Tank Metered	Medium	10.6251	0.5313	0.9350	1.6121	0.4954	0.4849	2.1680	**16.8518**
43	Edmonton	Westridge	Tank Non Metered	Medium	10.6251	0.5313	0.9350	1.6121	0.2466	0.4849	2.1680	**16.6030**
44	Edmonton	Westridge	Direct Injected	Medium	10.6251	0.5313	0.1403	1.6121	0.3231	0.4849	2.1680	**15.8848**
45	Edmonton	Westridge	3rd Party Injected	Medium	10.6251	0.5313	0.1403	1.6121	0.0743	0.4849	2.1680	**15.6360**
46	Edmonton	Westridge	Metered In, Direct Mainline	Medium	10.6251	0.5313	0.1403	1.6121	0.3511	0.4849	2.1680	**15.9127**

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

TL Schedule 4

Summary of Proposed Tolls by Crude Type

Sheet 2 of 2
($/ m³)

Line	Receipt	Destination	Type of Service	Petroleum Type	Mainline tolls	Surcharge (Surcredit)	Tankage		Terminalling		Westridge Loading	Net Toll
							Receipt	Delivery	Receipt	Delivery		
47	Edmonton	Westridge	Tank Metered	Heavy	10.6251	1.5938	0.9350	1.6121	0.4954	0.4849	2.1680	**17.9143**
48	Edmonton	Westridge	Tank Non Metered	Heavy	10.6251	1.5938	0.9350	1.6121	0.2466	0.4849	2.1680	**17.6655**
49	Edmonton	Westridge	Direct Injected	Heavy	10.6251	1.5938	0.1403	1.6121	0.3231	0.4849	2.1680	**16.9473**
50	Edmonton	Westridge	3rd Party Injected	Heavy	10.6251	1.5938	0.1403	1.6121	0.0743	0.4849	2.1680	**16.6985**
51	Edmonton	Westridge	Metered In, Direct Mainline	Heavy	10.6251	1.5938	0.1403	1.6121	0.3511	0.4849	2.1680	**16.9752**
52	Edmonton	Westridge	Tank Metered	Super Heavy	10.6251	2.1250	0.9350	1.6121	0.4954	0.4849	2.1680	**18.4455**
53	Edmonton	Westridge	Tank Non Metered	Super Heavy	10.6251	2.1250	0.9350	1.6121	0.2466	0.4849	2.1680	**18.1967**
54	Edmonton	Westridge	Direct Injected	Super Heavy	10.6251	2.1250	0.1403	1.6121	0.3231	0.4849	2.1680	**17.4785**
55	Edmonton	Westridge	3rd Party Injected	Super Heavy	10.6251	2.1250	0.1403	1.6121	0.0743	0.4849	2.1680	**17.2297**
56	Edmonton	Westridge	Metered In, Direct Mainline	Super Heavy	10.6251	2.1250	0.1403	1.6121	0.3511	0.4849	2.1680	**17.5064**
57	Kamloops	Sumas	Tank Metered	Light	2.4977	-	0.9350	1.6121	0.3231	0.3728	-	**5.7407**
58	Kamloops	Sumas	Direct Injected	Light	2.4977	-	0.1403	1.6121	0.3231	0.3728	-	**4.9460**
59	Kamloops	Sumas	Tank Metered	Medium	2.4977	0.1249	0.9350	1.6121	0.3231	0.3728	-	**5.8656**
60	Kamloops	Sumas	Direct Injected	Medium	2.4977	0.1249	0.1403	1.6121	0.3231	0.3728	-	**5.0709**
61	Kamloops	Sumas	Tank Metered	Heavy	2.4977	0.3747	0.9350	1.6121	0.3231	0.3728	-	**6.1154**
62	Kamloops	Sumas	Direct Injected	Heavy	2.4977	0.3747	0.1403	1.6121	0.3231	0.3728	-	**5.3207**
63	Kamloops	Burnaby	Tank Metered	Light	2.9884	-	0.9350	1.6121	0.3231	0.4849	-	**6.3435**
64	Kamloops	Burnaby	Direct Injected	Light	2.9884	-	0.1403	1.6121	0.3231	0.4849	-	**5.5488**

Note(s):

[1] Commodity surcharges/surcredits applied to Mainline charges only. Level of Toll Credits applied:

Classification:	Typical Representative Petroleum:	Commodity Surcharge (Surcredit)
SUPER LIGHT PETROLEUM	Gasoline, Alkylate	-2%
LIGHT PETROLEUM	Rainbow, Pembina, Diesel, Butane, or as blended	0%
MEDIUM PETROLEUM	SSX, or as blended	5%
HEAVY PETROLEUM	Peace Heavy, or as blended	15%
SUPER HEAVY PETROLEUM	Cold Lake, AHS, or as blended	20%

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

TL Schedule 5

Calculation of Proposed Mainline Tolls
(units as shown)

Line	Description	Schedule & Line ref.	Toll Design Amount	Net Transmission
1	**A. Calculation of Mainline Revenues ($000)**			
2	Total Revenue Requirement	[Schedule 1, line 13]		293,217
3	Partial Year Revenues	[TL Schedule 3, Sheet 2, line 7]		(117,665)
4	**Partial Year Revenue Requirement**	[TL Schedule 3, Sheet 2, line 7]		**175,552**
5	*LESS:*			
6	Petroleum Loading Revenues	[TL Schedule 6, sum of [i] & [ii]]	(3,501)	
7	Toll Commodity Revenues (net)		(3,405)	
8	Tankage Revenue Requirement	[TL Schedule 7, line 12]	(31,043)	
9	Terminalling Revenue Requirement [1]		(11,289)	
10	Total non-Mainline Transmission Revenues		(49,237)	(49,237)
11	**Partial-year Mainline Transmission Revenue Requirement (*$000*)**			**126,315**
12	**B. Calculation of Partial Year Mainline Transmission Charge**			
13	Partial Year Cubic Meter Kilometers (*000*)	[TL Schedule 2, Sheet 2, line 11*1000]		13,705,713
14	Transmission Charge ($ / m^3 km)	[line 11 ÷ line 13]		0.0092162
15	**C. Summary of Mainline Transmissions Tolls ($ / m³):**			

Line	Receipt	Destination	Kilometers	Transmission Toll [2]
16	**Receipt**	**Destination**	**Kilometers**	**Transmission Toll [2]**
17	Edmonton	Kamloops	819.0	7.5479
18	Edmonton	Sumas	1,095.6	10.0969
19	Edmonton	Burnaby	1,148.8	10.5876
20	Edmonton	Westridge Marine Terminal	1,152.9	10.6251
21	Kamloops	Sumas	271.0	2.4977
22	Kamloops	Burnaby	324.3	2.9884

Note(s):

[1] Terminalling Revenue Requirement is comprised of total Adjusted Receipt Revenues (TL Schedule 8, Sheet 1, line 10) and total Adjusted Delivery Revenues (TL Schedule 8, Sheet 2, line 11).

[2] Transmission Tolls equal Kilometers by destination times Transmission Charge on line 14.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement
TL Schedule 6

Calculation of Proposed Westridge Marine Terminal Loading Charge

($000 unless otherwise shown)

Line	Description			Amount
1	**A. Calculation of partial year Revenue Requirement for Operating & Maintenance costs ($000):**			
2	Revenue Requirement [1]			4,310
3	Revenues collected during interim toll period [2a]			(1,590)
4	Net partial year revenues		**[i]**	**2,720**
5	Partial Year Volumes (m³) [TL Schedule 3, Sheet 2, line 4]			1,614,652
6	**Operating & Maintenance Fee ($ / m³)**			**1.6848**
7	**B. Calculation of partial year Revenue Requirement for Capital Expenditures:**			
8	Revenue requirement associated with Westridge Marine Terminal Upgrades [3]			1,406
9	Revenues collected during interim toll period [2b]			(626)
10	Net partial year revenues		**[ii]**	**780**
11	Partial Year Volumes (m³) [TL Schedule 3, Sheet 2, line 4]			1,614,652
12	**Capital Fee ($ / m³)**			**0.4832**
13	**C. Summary of Loading Charges ($ / m³)**			
14	Operating & Maintenance Fee	from Section A above		1.6848
15	Capital Improvements Fee	from Section B above		0.4832
16	**Proposed Loading Charge ($ / m³)**			**2.1680**

Note(s):

[1] The Revenue Requirement is comprised of two components (i) Operating and Maintenance costs and (ii) Capital expenditures. The Capital expenditures reflect improvements completed since 2007 to date.

[2]	**Interim Revenue Calculation:**	**Schedule**	**Volumes (m³)**	**Interim Toll ($/m³)**	**Revenues ($)**
2a	Operating & Maintenance Fee	[Volumes from TL Schedule 3]	951,703	1.6704	1,589,714
2b	Capital Improvement Fee	[Volumes from TL Schedule 3]	951,703	0.6575	625,722

[3] Calculation of Revenue Requirement for Capital Fee ($000)

			2019 Filed	**2019 Final**	**2020 Proposed**
Plant	Open		17,340	17,340	17,347
	Additions		-	7	-
Retirements			-	-	-
	Close		17,340	17,347	17,347
Accumulated Depreciation	Open		3,954	3,954	4,448
	Additions		494	494	389
	Close		4,448	4,448	4,837
Average Working Capital	[(O&M + Taxes Payable) x 15 days /365 or 366]		6	6	5
Average Rate Base			**13,145**	**13,149**	**12,710**
Equity Rate			9.50%	9.50%	9.50%
Debt Rate			5.00%	5.00%	4.50%
Equity Return		45%	562	562	543
Interest Expense		55%	361	362	315
Depreciation Expense			494	494	389
Income Tax Provision			213	208	164
Revenue Requirement			1,630	**1,626**	1,410
Plus prior year variance			(0)		(4)
Total Revenue Requirement			**1,630**		**1,406**

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

TL Schedule 7

Calculation of Proposed Tankage Tolls

(units as shown)

Line	Description	Allocation Factors	Total System	Share	Total Receipt	Total Delivery	TOTAL
1	**Revenues ($000)** [1]						
2	Annual Revenues		293,217				
3	Edmonton				16,762	-	16,762
4	Kamloops				1,964	-	1,964
5	Sumas				-	4,026	4,026
6	Burnaby				-	25,109	25,109
7	**Total Annual Revenues**		293,217		18,725	29,135	47,860
8	Edmonton Terminal Revenues [2]	71.9%		(2,067)	(1,486)	-	(1,486)
9	Total Shared Amounts			(2,067)	(1,486)	-	(1,486)
10	**Net Revenues**				17,239	29,135	46,374
11	Adjustment for partial year		(117,665)		(5,699)	(9,632)	(15,331)
12	**Adjusted Revenues ($000)**		**175,552**		**11,540**	**19,503**	**31,043**
13	**Regulated Tankage Throughput ('000 m³):**						
14	Edmonton				12,342	-	
15	Kamloops				-	-	
16	Sumas				-	7,225	
17	Burnaby				-	3,214	
18	Westridge				-	1,615	
19	**Total Regulated Tankage Throughput:**				12,342	12,054	
20	**Tankage Charges ($/m³):**				**0.9350**	**1.6121**	
21	**Indirect Tankage Throughput ('000 m³):**						
22	Edmonton				-	-	
23	Kamloops				-	288	
24	Sumas				-	-	
25	Burnaby				-	-	
26	**Total Indirect Tankage Throughput:**				-	288	
27	**Indirect Tankage Charges ($/m³):**	15.0%			**0.1403**	**0.2418**	

Note(s):

[1] The Tankage Revenues have been rebased to reflect the forecast cost of operation for these locations.

[2] Edmonton Terminal Revenues are prorated between Tankage and Terminalling based on 2019 final tolls:

Receipt Tankage	0.9648	71.88%
Receipt Terminalling	0.3774	28.12%

Edmonton Terminal Revenues include 2019 variance and 2020 proposed Shippers' share of the Edmonton Terminal Revenues.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

TL Schedule 8

Calculation of Proposed Terminalling Tolls

Sheet 1 of 2. Receipt Terminalling

(units as shown)

Line	Description		Allocation Factors	Total System	Share	Meters	Manifold		Boost & Blend	Total Receipt
							In	Out		
1	**Revenues ($000)** [1]									
2	Annual Revenues before sharing			293,217						
3	Edmonton					3,162	658	542	2,664	7,026
4	Kamloops					2,690	-	-	-	2,690
5	**Total Annual Revenues before sharing**			293,217		5,852	658	542	2,664	9,716
6	Edmonton Terminal Revenues [2]		28.1%		(2,067)	(455)	(51)	(42)	(33)	(581)
7	Total Shared Amounts				(2,067)	(455)	(51)	(42)	(33)	(581)
8	**Net Revenues**					5,397	607	500	2,631	9,134
9	Adjustment for partial year			(117,665)		(1,784)	(201)	(165)	(870)	(3,020)
10	**Adjusted Revenues ($000)**			**175,552**		**3,613**	**406**	**334**	**1,761**	**6,115**
11	**Total Throughput ('000 m^3):**									
12	Edmonton Receipts	Tank Metered		12,342		12,342	12,342	12,342	12,342	
13		Tank Non Metered		-		-	-	-	-	
14	Kamloops Receipts	Tank Metered		-		-	-	-	-	
15	**Total Throughput:**					12,342	12,342	12,342	12,342	
16	**Direct Terminalling Charges (\$/m^3):**					**0.2927**	**0.0329**	**0.0271**	**0.1427**	
17	**Indirect Throughput ('000 m^3):**									
18	Edmonton Receipts	Tank Metered		12,342						
19	Kamloops Receipts	Tank Metered		-		-	-	-	-	
20	**Total Throughput:**					-	-	-	-	
21	**Indirect Terminalling Charges (\$/m^3):**		15.0%			**0.0439**	**0.0049**	**0.0041**	**0.0214**	
22	**Summary of Receipt Terminalling Charges (\$/m^3):**									
23	**Edmonton**	Tank Metered, Pipeline				0.2927	0.0329	0.0271	0.1427	**0.4954**
24		Tank Metered, Non Pipeline				0.2927	0.0329	0.0271	0.0214	**0.3741**
25		Tank Non Metered				0.0439	0.0329	0.0271	0.1427	**0.2466**
26		Tank Non Metered, Non Pipeline				0.0439	0.0329	0.0271	0.0214	**0.1253**
27		Metered In, Direct Mainline [3]				0.2927	0.0329	0.0041	0.0214	**0.3511**
28		Metered In, 3rd Party [3]				0.2927	0.0329	*na*	*na*	**0.3256**
29		Direct Injections				0.2927	0.0049	0.0041	0.0214	**0.3231**
30		3rd Party Injected				0.0439	0.0049	0.0041	0.0214	**0.0743**
31	**Kamloops**	Tank Metered				0.2927	0.0049	0.0041	0.0214	**0.3231**
32		Direct Injections				0.2927	0.0049	0.0041	0.0214	**0.3231**

Note(s):

[1] The Terminalling Revenues have been rebased to reflect the forecast cost of operation for these locations.

[2] Edmonton Terminal Revenues are prorated between Tankage and Terminalling based on 2019 final tolls.

Receipt Tankage	0.9648	71.88%
Receipt Terminalling	0.3774	28.12%

Edmonton Terminal Revenues include 2019 variance and 2020 proposed Shippers' share of the Edmonton Terminal Revenues.

[3] These terminalling charges were introduced to accommodate merchant tanks within Trans Mountain's Edmonton Terminal. Corresponding movements commenced in December 2013.

[i] Metered In, Direct Mainline represents the movements that go through regulated meters and manifold in, enter merchant tanks and then directly inject into the mainline.

[ii] Metered In, 3rd Party represents the movements that go through regulated meters and manifold in, enter merchant tanks, and then go to a 3rd Party facility. As this type of movement does not impose opportunity costs to the regulated system, no indirect fees are charged.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

TL Schedule 8

Calculation of Proposed Terminalling Tolls

Sheet 2 of 2. Delivery Terminalling

(units as shown)

Line	Description	Total	Allocation	Meters	Terminal	Total
1	**Revenues ($000)** [1]					
2	Annual Revenues before sharing	293,217				
3	Kamloops [2]			153	1,197	1,350
4	Sumas				2,356	2,356
5	Burnaby			1,069	2,955	4,024
6	**Total Annual Revenues before sharing**	293,217		1,221	6,509	7,730
7	Edmonton Terminal Revenues		n/a	-	-	-
8	Total Shared Amounts			-	-	-
9	**Net Revenues**			1,221	6,509	7,730
10	Adjustment for partial year	(117,665)		(404)	(2,152)	(2,556)
11	**Adjusted Revenues ($000)**	**175,552**		**818**	**4,357**	**5,174**
12	**Direct Throughput ('000 m^3):**					
13	Edmonton Receipts					
14	Tank Metered	12,342		12,342	12,342	
15	Tank Non Metered	-		-	-	
16	Direct Injections	-		-	-	
17	3rd Party Injected	-		-	-	
18	Kamloops Receipts					
19	Tank Metered	-		-	-	
20	Direct Injections	-		-	-	
21	Sumas Deliveries	(7,225)		(7,225)	-	
22	**Total Throughput:**			5,117	12,342	
23	**Direct Terminalling Charges ($/$m^3$):**			**0.1319**	**0.3530**	
24	**Indirect Throughput ('000 m^3):**					
25	Sumas Deliveries	7,225		7,225	-	
26	**Total Throughput:**			7,225	-	
27	**Indirect Terminalling Charges ($/$m^3$):**		15%	**0.0198**	**0.0530**	
28	**Summary of Delivery Terminalling Charges ($/$m^3$):**					
29	Kamloops			0.1319	0.3530	**0.4849**
30	Sumas			0.0198	0.3530	**0.3728**
31	Burnaby			0.1319	0.3530	**0.4849**
32	Westridge			0.1319	0.3530	**0.4849**

Note(s):

[1] The Terminalling Revenues have been rebased to reflect the forecast cost of operation for these locations.

[2] Kamloops Metering Revenues, column titled "Meters", are calculated as the Burnaby Metering Revenue times the ratio of the number of meters at Kamloops (2) divided by the number of meters at Burnaby (14). The Kamloops Total Revenue, column titled "Total", is determined using the rate base / cost of service methodology. The Kamloops Terminal Revenue is the difference between the two.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

TL Schedule 9

Calculation of Proposed Separate Toll for the Westridge Dock Bid Premium Refund
(units as shown)

Line	Description	Schedule & Line ref.	Additional Refunds Westridge/Kamloops	Total Amount
1	**A. Calculation of Partial Year Premium Refund($000)**			
2	Total Premiums to be refunded for toll reduction ($000)	[Schedule 8.2, line 9]		(148,837)
3	Additional Refunds to Shippers ($000) [1]		(3,368)	3,368
4	Interim Westridge Dock Bid Premiums refunded for toll reduction ($000)			66,555
5	**Partial Year Premiums to be Refunded ($000)**		**(3,368)**	**(78,915)**
6	**B. Calculation of Partial Year Refund Charge**			
7	Partial Year Cubic Meter Kilometers	[TL Schedule 2, Sheet 2, line 11 *1000]		13,705,713
8	Partial Year Westridge Marine Terminal Volumes (m^3)		1,614,652	
9	**Partial Year Transmission Surcredit (\$ / m^3km)**			**(0.00575781)**

10 **C. Summary of Refund Surcredit Tolls (\$ / m^3):**

11	**Receipt**	**Destination**	**Kilometers**	**Surcredit**	**Add. Refund Credit**	**Total**
12	Edmonton	Kamloops	819.0	(4.7155)		(4.7155)
13	Edmonton	Sumas	1,095.6	(6.3080)		(6.3080)
14	Edmonton	Burnaby	1,148.8	(6.6146)		(6.6146)
15	Edmonton	Westridge	1,152.9	(6.6380)	(2.0856)	(8.7236)
16	Kamloops	Sumas	271.0	(1.5604)	(1.6140)	(3.1744)
17	Kamloops	Burnaby	324.3	(1.8670)	(1.5745)	(3.4415)

Note(s):

[1] To achieve a reasonably uniform average net toll (pipeline Net Toll + Westridge Dock Bid Premium surcredit), an additional credit has been assigned to the Westridge delivered volumes and the Kamloops receipt volumes.

2020 Final Toll calculation Pursuant to the 2019 - 2021 Incentive Toll Settlement

Method for Calculation of Tolls

TL Schedule 10

Calculation of System Optimization Surcharge and Offset Westridge Dock Premium Surcredit

(units as shown)

Line	Description	Schedule & Line ref.	Proposal
1	**A. System Optimization Costs ($000)**		
2	**System Optimization Costs - Total Allowed Recoverable Cost**	**[Cap on Recoverable Amount]**	35,000
3	**B. Cost Recovery Mechanism ($000)**		
4	**(a) Recovery through System Optimization Surcharge [1]**	**[Line 2 x 40%, Cap on Surcharge]**	14,000
5	Term for Collection (years)		2.5
6	Annualized System Optimization Surcharge Collection Amount	[Line 4 / Line 5]	**5,600**
7	**System Optimization Cost added to the toll Rate Base as additions [2]**	**[Line 2 - Line 4, Cap on Rate Base]**	21,000
8	**(b) Assessment of Final Cost of System Optimization: 2021 Reset if Final Cost as at Dec 31, 2020 ≤ $30M, otherwise No Reset**		
9	**1) If Reset (i.e. Final Cost as at Dec 31, 2020 ≤ $30 M)**		
10	Final Cost as at Dec 31, 2020	[Example]	25,000
11	Reset of Cap on the Surcharge	[Line 9 x 40%]	10,000
12	2019, 2020 Actual Surcharge Collected	[Example]	8,400
13	Reset of the 2021 Surcharge Collection Amount	[Line 11 - Line 12]	1,600
14	System Optimization Cost added to the toll Rate Base as additions [2]	[Line 10 x 60%]	15,000
15	**2) If No Reset (i.e. $30 M < Final Cost as at Dec 31, 2020 ≤ $35 M)**		
16	Final Cost as at Dec 31, 2020	[Example]	32,000
17	System Optimization Cost added to the toll Rate Base as additions [2]	[Line 14 - $14M]	18,000
18	**3) If No Reset (i.e. Final Cost as at Dec 31, 2020 > $35 M)**		
19	Final Cost as at Dec 31, 2020	[Example]	37,000
20	System Optimization Cost added to the toll Rate Base as additions [2]	[Line 7, Cap on Rate Base]	21,000
21	System Optimization Cost in excess of Cap on Rate Base	[Line 19 - Line 2, Disallowed Rate Base]	2,000
22	**C. Unit Delivery Surcharge**		
23	Forecast annual volumes *(m^3 / day)*	[2019 Final Toll, TL Schedule 2 Sheet 1, Line 11]	46,994
24	Annual Cubic Meter Kilometers *(000,000 m^3km)*	[2019 Final Toll, TL Schedule 2 Sheet 2, Line 11]	19,052
25	Unit Delivery Surcharge *($ / m^3km)*	[Line 6 / Line 24 / 1000]	0.00029394

26	**D. System Optimization Surcharge** *($ / m^3)*	**Effective July 1, 2019**			
27	**Receipt Point**	**Delivery Point**	**Kilometers**		**Surcharge**
28	Edmonton	Kamloops	819.0	$	0.2407
29	Edmonton	Sumas	1095.6	$	0.3220
30	Edmonton	Burnaby	1148.8	$	0.3377
31	Edmonton	Westridge	1152.9	$	0.3389
32	Kamloops	Sumas	271.0	$	0.0797
33	Kamloops	Burnaby	324.3	$	0.0953
34	**E. Westridge Dock Bid Premium Surcredit** *($ / m^3)*	**Effective July 1, 2019**			
35	**Receipt Point**	**Delivery Point**	**Kilometers**		**Surcredit**
36	Edmonton	Kamloops	819.0	$	(0.2407)
37	Edmonton	Sumas	1095.6	$	(0.3220)
38	Edmonton	Burnaby	1148.8	$	(0.3377)
39	Edmonton	Westridge	1152.9	$	(0.3389)
40	Kamloops	Sumas	271.0	$	(0.0797)
41	Kamloops	Burnaby	324.3	$	(0.0953)

Note(s):

[1] A portion of the System Optimization cost will be recovered through the System Optimization Surcharge. The Surcharge is capped at $14 million.

[2] A portion of the System Optimization cost will be recovered through the toll Rate Base. The Rate Base additions for the System Optimization are capped at $21 million.

[3] The System Optimization Surcharge and offsetting Westridge Dock Premium Surcredit were approved by CER Order TO-004-2019.