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May 8, 2019

VIA RESS, EMAIL and COURIER

Ms. KirstenWalli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario, M4P 1E4

Dear Ms. Walli:

Re: EB-2018-0305 Enbridge Gas Inc. ("Enbridge Gas") – 2019 Rate Application
Undertaking Responses and Correction

As per the Ontario Energy Board's (the "Board") Decision and Procedural Order No. 2, please find enclosed undertaking responses from the technical conference held on May 1 and 2, 2019. Also included in the undertakings is JT1.27, which is in response to the request by FRPO at the technical conference[1], and the subsequent request by SEC related to the historical costs of the Sudbury line.

Further, Enbridge Gas has reviewed the technical conference transcripts and notes a correction for volume one. For Vol. 1, page 60, line 19, the word "year" should be replaced with "month".

As Stated	Correction
MS. FERGUSON: Technically in both ERP systems that both legacy utilities use it would be allocated at the end of the year.	MS. FERGUSON: Technically in both ERP systems that both legacy utilities use it would be allocated at the end of the month.

Please contact the undersigned if you have any questions.

Yours truly,

(Original Signed)

Rakesh Torul
Technical Manager, Regulatory Applications

cc: EB-2018-0305 Intervenors
Crawford Smith, Lax O'Sullivan Lisus Gottlieb

[1] Tr. 1, pages 183 – 184.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Aiken

REF: Tr.1 p4

To provide a schedule similar to the one in exhibit b1, tab 1, schedule 1, appendix e, that shows the shift for rates 10 and m2 for the cost adjustment.

Response:

Please see Attachment 1.

Union Rate Zones
Current and Proposed Monthly Customer Charge Cost Adjustments
General Service Rate 10 and Rate M2 Base Delivery Rates

Line No.	Particulars	Billing Units	Current Approved Revenue (1) ($000's)	Proposed Base Rate Forecast Usage (1) (m^3)	Prior to Cost Adjustment		Current Cost Adjustment				Proposed Cost Adjustment			
					Proposed Revenue ($000's)	Proposed Base Rates (cents / m^3)	Cost (2) Adjustment ($000's)	Cost (2) Adjustment (%)	Proposed Revenue ($000's)	Proposed Base Rates (cents / m^3)	Cost (3) Adjustment ($000's)	Cost (3) Adjustment (%)	Proposed Revenue ($000's)	Proposed (4) Base Rates (cents / m^3)
			(a)	(b)	(c)	(d) = (c / b)	(e)	(f)	(g)	(h) = (g / b x 100)	(i)	(j)	(k)	(l) = (k / b x 100)
	Union North													
	Rate 10 General Service (5)													
1	Monthly Charge	bills	1,724	24,629	1,854	$75.29	(130)	-100%	1,724	$70.00	(130)	-100%	1,724	$70.00
	Monthly Delivery Charge													
2	First 1,000 m^3	10^3m^3	1,889	24,721	1,623	6.5659	24	19%	1,647	6.6638	23	17%	1,646	6.6578
3	Next 9,000 m^3	10^3m^3	8,281	133,464	7,115	5.3311	106	81%	7,221	5.4106	52	40%	7,167	5.3701
4	Next 20,000 m^3	10^3m^3	4,716	84,894	4,055	4.7767	-	0%	4,055	4.7767	30	23%	4,085	4.8117
5	Next 70,000 m^3	10^3m^3	3,228	64,369	2,775	4.3116	-	0%	2,775	4.3116	20	16%	2,796	4.3432
6	Over 100,000 m^3	10^3m^3	878	29,607	755	2.5496	-	0%	755	2.5496	6	4%	760	2.5683
7	Delivery Commodity charge		18,992	337,055	16,324	4.8430	130	100%	16,454	4.8817	130	100%	16,454	4.8817
8	Total		20,716	337,055	18,178	5.3932	-		18,178	5.3932	-		18,178	5.3932
	Union South													
	Rate M2 General Service (5)													
9	Monthly Charge	bills	5,702	81,451	6,031	$74.05	(330)	-100%	5,702	$70.00	(330)	-100%	5,702	$70.00
	Monthly Delivery Charge													
10	First 1,000 m^3	10^3m^3	2,965	61,556	2,154	3.4995	57	17%	2,211	3.5922	51	15%	2,205	3.5816
11	Next 6,000 m^3	10^3m^3	14,158	299,565	10,284	3.4330	273	83%	10,556	3.5239	83	25%	10,367	3.4605
12	Next 13,000 m^3	10^3m^3	15,413	338,494	11,220	3.3148	-	0%	11,220	3.3148	90	27%	11,310	3.3414
13	All over 20,000 m^3	10^3m^3	18,245	432,442	13,280	3.0710	-	0%	13,280	3.0710	106	32%	13,387	3.0957
14	Delivery Commodity charge		50,781	1,132,057	36,939	3.2630	330	100%	37,269	3.2921	330	100%	37,269	3.2921
15	Total		56,483	1,132,057	42,970	3.7958	-		42,970	3.7958	-		42,970	3.7958

Notes:
(1) Exhibit F1, Tab 2, Rate Order, Working Papers, Schedule 5, column (b) and column (q).
(2) Customer-related cost adjustment from the monthly charge to the monthly delivery charges in proportion to the first two monthly delivery charge blocks in column (a).
(3) Customer-related cost adjustment from the monthly charge to the monthly delivery charges in proportion to column (a) including the monthly charge revenue allocated to the first delivery block.
(4) Exhibit F1, Tab 2, Rate Order, Working Papers, Schedule 5, column (r).
(5) Rate 10 and Rate M2 base delivery rates, excluding PDO, DSM and ICM unit rates.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Shepherd

REF: Tr.1 p14

To redo the calculation to show how much you propose to collect on the proposal you have made and how much you would collect in rates if it remains a y factor.

Response:

Please see Attachment 1 for an update to Exhibit I.SEC.6, Attachment 1, assuming the proposed 2019 PCI factor of 1.07% is applied to the 2019 capital pass-through project revenue requirement in each year from 2020 to 2023. The PCI adjustment excludes the revenue requirement associated with income taxes related to utility timing differences, which are proposed to be disposed of on an actual basis as part of Enbridge Gas's annual deferral proceedings.

UNION RATE ZONES
Summary of 2019-2023 Capital Pass-Through Revenue Requirement Recovered from Customers
As Proposed Including PCI vs. Pass-through of Annual Revenue Requirement

Line No.	Particulars ($000's)	As Proposed Including PCI (6) 2019 Forecast (a)	2020 Forecast (b)	2021 Forecast (c)	2022 Forecast (d)	2023 Forecast (e)	Total (f) = sum (a:e)	Pass-through of Annual Revenue Requirement 2019 Forecast (g)	2020 Forecast (h)	2021 Forecast (i)	2022 Forecast (j)	2023 Forecast (k)	Total (l) = sum (g:k)	Difference Total (m) = (f-l)
	Rate Base Investment													
1	Capital Expenditures	8,964	-	-	-	-		8,964	-	-	-	-		
2	Average Investment	1,596,906	1,596,906	1,596,906	1,596,906	1,596,906		1,596,906	1,558,331	1,515,453	1,472,576	1,429,698		
	Revenue Requirement Calculation:													
	Operating Expenses:													
3	Operating and Maintenance Expenses	4,604	4,654	4,703	4,754	4,805	23,519	4,604	4,769	4,863	4,960	5,060	24,256	(737)
4	Depreciation Expense (1)	42,741	43,198	43,660	44,128	44,600	218,327	42,741	42,883	42,883	42,883	42,883	214,271	4,056
5	Property Taxes	5,675	5,736	5,798	5,860	5,922	28,991	5,675	5,746	5,819	5,894	5,970	29,104	(113)
6	Total Operating Expenses (line 3 + line 4 + line 5)	53,021	53,588	54,161	54,741	55,327	270,837	53,021	53,397	53,565	53,736	53,913	267,631	3,206
	Required Return:													
7	Interest Expense	35,120	35,495	35,875	36,259	36,647	179,396	35,120	34,270	33,327	32,384	31,441	166,541	12,856
8	Equity Return	51,337	51,887	52,442	53,003	53,570	262,239	51,337	50,097	48,719	47,340	45,962	243,456	18,783
9	Total Required Return (line 7 + line 8) (2)	86,457	87,382	88,317	89,262	90,217	441,635	86,457	84,367	82,046	79,724	77,403	409,996	31,639
	Income Taxes:													
10	Income Taxes - Equity Return (3)	18,516	18,714	18,914	19,116	19,321	94,581	18,516	18,068	17,571	17,074	16,577	87,807	6,774
11	Income Taxes - Utility Timing Differences (4)	(36,415)	(30,255)	(24,835)	(20,236)	(16,336)	(128,076)	(36,415)	(29,865)	(24,051)	(19,054)	(14,752)	(124,138)	(3,938)
12	Total Income Taxes (line 10 + line 11)	(17,899)	(11,541)	(5,921)	(1,119)	2,985	(33,495)	(17,899)	(11,797)	(6,480)	(1,980)	1,825	(36,331)	2,836
13	Total Revenue Requirement (line 6 + line 9 + line 12)	121,578	129,429	136,557	142,883	148,529	678,977	121,578	125,967	129,130	131,480	133,140	641,296	37,681
14	Incremental Project Revenue (5)	4,340	4,387	4,434	4,481	4,529	22,172	4,340	5,415	6,243	7,069	7,895	30,962	(8,790)
15	Net Revenue Requirement (line 13 - line 14)	117,238	125,042	132,124	138,402	144,000	656,805	117,238	120,552	122,887	124,411	125,245	610,334	46,471

Notes:
(1) Depreciation expense at 2013 Board-approved depreciation rates.
(2) The required return assumes a capital structure of 36% common equity at the 2013 Board-approved return of 8.93% and 64% long-term debt. The assumed long-term debt for rates for 2019 are 3.82% for Parkway West and Parkway Growth projects, 3.36% for 2016 Dawn-Parkway Expansion and Burlington to Oakville projects, and 3.29% for 2017 Dawn-Parkway Expansion and Panhandle Reinforcement projects.
(3) Taxes related to the equity component of the return at a tax rate of 26.5%.
(4) Taxes related to the utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year. As Proposed Including PCI net revenue requirement reflects the forecast deferral account balance for utility timing differences.
(5) Incremental project revenue reflected as an increase to Rate M12 and Rate C1 billing units used to set rates during the 2014-2018 IRM term except for the incremental revenue of the Panhandle Reinforecement Project. Incremental
(6) 2019 PCI factor of 1.07% applied annually for each year of the deferred rebasing period.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Shepherd

REF: Tr.1 p32

To advise the changes made to the monthly service charge for rate classes m1, 01, m2 and 10 since 2001

Response:

Please see Table 1.

Table 1
Union Rate Zones
History of General Service Monthly Customer Charges

Line No.	Particulars	Monthly Customer Charge ($) Rate 01	Rate 10	Rate M1 (1)	Rate M2 (1)
		(a)	(b)	(c)	(d)
1	2001	10.00	50.00	n/a	7.50
2	2002	10.00	50.00	n/a	8.75
3	2003	10.00	50.00	n/a	10.00
4	2004	12.00	70.00	n/a	12.00
5	2005	14.00	70.00	n/a	14.00
6	2006	14.00	70.00	n/a	14.00
7	2007	16.00	70.00	16.00	70.00
8	2008	17.00	70.00	17.00	70.00
9	2009	18.00	70.00	18.00	70.00
10	2010	19.00	70.00	19.00	70.00
11	2011	20.00	70.00	20.00	70.00
12	2012	21.00	70.00	21.00	70.00
13	2013	21.00	70.00	21.00	70.00
14	2014	21.00	70.00	21.00	70.00
15	2015	21.00	70.00	21.00	70.00
16	2016	21.00	70.00	21.00	70.00
17	2017	21.00	70.00	21.00	70.00
18	2018	21.00	70.00	21.00	70.00
19	2019 - Proposed	21.00	70.00	21.00	70.00

Note:
(1) Rate M2 was split into Rate M1 and Rate M2 in 2007.

ENBRIDGE GAS INC.

Undertaking of Mr. Small
To Mr. Shepherd

REF: Tr.1 p46

To provide a more complete answer to LPMA 1 that explains why three accounts is not preferable to two accounts or alternatively explains how you will make sure that any true-up of north and south goes to the right ratepayers.

Response:

As indicated in the response to Exhibit I.LPMA.1, Enbridge Gas's request for two ICM deferral accounts, one for the EGD rate zone and one for the Union rate zones, relates to the continuation of those rate zones for rate setting purposes, inclusive of the associated derivation of the ICM threshold and incremental capital amount for each respective legacy zone. Over the deferred rebasing term, there is the potential that ICM projects may be recoverable from either or both the Union North and Union South rate zone customers, or from specific customer classes, and as such Enbridge Gas proposes one deferral account for the Union rate zones.

The ICM projects and associated recovery through the ICM rate rider will be tracked in sufficient detail to track variances at a rate class level, regardless of the number of deferral accounts. Over the deferred rebasing period the actual revenue requirement by rate class will be compared to the actual revenue recovered by rate class. The treatment of any variances will be addressed at rebasing.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Vellone

REF: Tr.1 p51

With reference to APPrO 3, to rerun the allocation of the $2.8 million assuming the Sudbury reinforcement projected went into service in 2019, to show how the amount gets allocated between union north and Union South.

Response:

The Sudbury project went into service in 2018. Making the assumption that the project went into service in 2019 would have an impact on the amount to be allocated as it would impact the maximum eligible incremental capital in 2019.

Assuming the Sudbury Replacement project went into service in 2019, the Maximum Eligible Incremental Capital would increase from $143.3 million to $235.2 million.

Please see Table 1 below.

Table 1

Maximum Eligible Incremental Capital by Rate Zone
(Assuming Sudbury Replacement went into service in 2019)

Line No.	Particulars ($ millions)	EGD (a)	Union (b)
1	2019 In-Service Capital Forecast	481.7	610.4
2	Less: Materiality Threshold Value	468.5	375.2
3	Maximum Eligible Incremental Capital	13.1	235.2

With the Sudbury Replacement project assumed to be in service in 2019, the total in-service capital amount related to the project would be $95.3 million. This amount includes the $3.4 million related to 2019 in-service capital. The total ICM projects amount would increase to $241.4 million in the Union rate zones, increasing the gap between the total in-service capital and the maximum eligible incremental capital from $2.8 million to $6.2 million. To recognize this difference, the funding request for each of the ICM projects were reduced proportionately (based on the amount of in-service capital) between the three ICM projects in the Union rate zones.

Table 2 below shows the allocation of the $6.2 million between the Union North and Union South rate zones for illustration purposes.

Table 2

2019 Incremental Capital Funding Request by Rate Zone
(Assuming Sudbury Replacement went into service in 2019)

Line No.	Particulars ($ millions)	Total Project In-service Amount	Total Project ICM Funding Request	Difference
		(a)	(b)	(c) = (b-a)
	2019 In-service Capital Forecast			
	EGD Rate Zone			
1	Don River Replacement	34.2	13.1	(21.1)
	Union South Rate Zone			
2	Kingsville Reinforcement	118.2	115.2	(3.0)
3	Stratford Reinforcement	27.9	27.2	(0.7)
4	Total Union South Rate Zone	146.1	142.3	(3.8)
	Assuming Sudbury Replacement went into service in 2019			
	Union North Rate Zone			
5	Sudbury Replacement	95.3	92.9	(2.4)
6	Total Incremental Capital Funding Request	275.6	248.3	(27.3)

ENBRIDGE GAS INC.

Undertaking of Ms. Ferguson
To Mr. Shepherd

REF: Tr.1 p53

To advise why there are no overhead costs in Stratford.

Response:

As indicated in the Leave-to-Construct evidence for the Stratford project, overheads are included in the project costs of $28.5M (EB-2018-0306 at p.11). Please refer to the table below for a breakdown of the costs.

Total Project Costs - Stratford

	Total before Overhead (a)	Indirect Overhead (b)	Total (c) = (a) + (b)
Materials	$ 2,606,000	$ 391,000	$ 2,997,000
Construction and Labour	$ 18,800,000	$ 2,820,000	$ 21,620,000
Contingencies	$ 3,150,000	$ 473,000	$ 3,623,000
Interest During Construction	$ 300,000	$ -	$ 300,000
	$ 24,856,000	**$ 3,684,000**	**$ 28,540,000**

ENBRIDGE GAS INC.

Undertaking of Ms. Ferguson
To Mr. Shepherd

REF: Tr.1 p61

To provide the calculation that got you to the overhead number in three of the projects listed in Energy Probe 16; to advise what made up the overhead of 759,000 in the Don River project.

Response:

Enbridge and Union allocate indirect overheads on a percentage basis to all capital projects.

Union allocation rate is 14.8%:

Union ICM's	**Project Cost ($)**	**Overhead Allocations @ 14.8% ($)**	**Total ($)**
Kingsville	105,716,000	15,700,000	121,416,000
Sudbury*	82,957,000	12,300,000	95,257,000
Stratford	24,856,000	3,684,000	28,540,000

EGD allocation rate is 36.4%:

EGD ICM	**Project Cost ($)**	**Overhead Allocation @ 36.4% ($)**	**Total ($)**
Don River*	25,909,623	9,445,258	35,354,881

*Adjusted for Non-Overhead cost estimate variances

Please refer to EB-2018-0305, Exhibit I.Staff.32(c) for a description of what is included in overheads for Enbridge and Union. Please refer to EB-2018-0305, Exhibit I.BOMA.63(c) for a description on the differences in overheads.

The Don River Leave-to-Construct includes direct overheads of $759,000, which is comprised of direct labour costs and expenses. Please see the table below for a description of the change:

Don River ICM Overheads	**Costs as Filed in EB-2018-0108 ($)**	**Updated Cost Estimate ($)**
Direct Overheads	759,000	544,100
Departmental Labour Charge		6,789,303
Administrative & General		2,655,955
Total	**759,000**	**9,989,358**

ENBRIDGE GAS INC.

Undertaking of Mr. Kacicnik
To Mr. Brett

REF: Tr.1 p73

To list for each rate change in each component of the rate being proposed in dollar and percentage terms, and where possible the impact on high, medium and low consumption customers.

Response:

Please see Attachment 1 and Attachment 2 for the proposed year-over-year changes (in unit rate and percentage terms) in delivery rates by customer class and by component for the EGD and Union rate zones, respectively.

As shown in the Attachments, the proposed changes in delivery rates vary by rate component for most of the customer classes (i.e., all components of delivery rates do not increase / decrease by the same percentage and the percentage increase does not equal 2019 PCI = 1.07% for volumetric components of delivery rates).

For the EGD rate zone, the factors that contribute to the proposed year-over-year change in volumetric components of delivery rates for the EGD rate zone are as follows:

- Base rate adjustments to 2018 delivery rates for CIS and Customer Care costs, Pension and OPEB costs, and Tax Deduction Related to SRC Refund (EB-2017-0306 / EB-2017-0307, Decision and Order, Section 5.8 and Exhibits C.LMPA 39, 40, and 41). Note that base rate adjustments only result in a one-time year-over-year unit rate change and percentage impact between 2018 and 2019 delivery rates.
- No change / increase in the monthly customer charges by the PCI. The revenue increase that would result from escalating customer charges by the PCI is instead prorated to each delivery block based on volume in each block.
- Proposed 2019 DSM (Y-Factor) unit rates are uniform / same for all volumes consumed within a rate class. All customers within a rate class are charged the same unit rate for DSM.

For the Union rate zones, costs are first allocated to the appropriate rate component (i.e., customer, demand or commodity) and then further allocated to the delivery charge tiers when applicable. The practice for the Union rate zone is to allocate the costs to

tiers in proportion to current approved revenue to maintain the existing block relationships during the IRM term. The exceptions to this practice for 2019 are:

- the proposed monthly customer charge adjustments for general service rate classes[1],
- interruptible rates which are adjusted by a common average interruptible unit rate change, and
- the ICM unit rates, which are common for all tiers.

For all rate zones, volumetric delivery rates are also impacted by adjustments for year-over-year change in average use for general service customers and in LRAM volumes for contract customers. For all customer classes each block of consumption is adjusted by the same year-over-year percentage change in average use or LRAM volumes.

The impacts to customers based on different levels of consumption is best illustrated through customer bill impacts, which can be found at Exhibit F1, Tab 1, Working Papers, Schedule 3, Pages 1 to 8 for the EGD rate zone and Exhibit F1, Tab 2, Working Papers, Schedule 4 for the Union rate zones.

[1] Exhibit B, Tab 1, Schedule 1, p.29-31 and Exhibit I.LPMA.4.

ENBRIDGE GAS INC.
EGD Rate Zone
SUMMARY OF PROPOSED UNIT RATES BY RATE CLASS

Line No.	Rate No.	Particulars	Rate Block (m^3)	EB-2018-0249 Approved October 1, 2018 Rates(1) (cents/m^3*)	EB-2018-0305 Proposed January 1, 2019 Rates (2) (cents/m^3*)	Rate Change	Rate Change %
				(a)	(b)	(c) = (b)-(a)	(d) = (c/a)
	RATE 1						
1.01		Customer Charge		$20.00	$20.00	$0.00	0.0%
1.02		Delivery Charge	First 30	7.5800	7.7418	0.1618	2.1%
1.03			Next 55	6.9619	7.1311	0.1692	2.4%
1.04			Next 85	6.4779	6.6529	0.1750	2.7%
1.05			Over 170	6.1171	6.2964	0.1793	2.9%
	RATE 6						
2.01		Customer Charge		$70.00	$70.00	$0.00	0.0%
2.02		Delivery Charge	First 500	7.2823	7.3356	0.0533	0.7%
2.03			Next 1,050	5.1670	5.2333	0.0663	1.3%
2.04			Next 4,500	3.6857	3.7612	0.0755	2.0%
2.05			Next 7,000	2.7340	2.8154	0.0814	3.0%
2.06			Next 15,250	2.3111	2.3951	0.0840	3.6%
2.07			Over 28,300	2.2049	2.2895	0.0846	3.8%
	RATE 9						
3.01		Customer Charge		235.95	$238.47	$2.52	1.07%
3.02		Delivery Charge	First 20,000	11.2489	11.3693	0.1204	1.1%
3.03			Over 20,000	10.5292	10.6419	0.1127	1.1%
	RATE 100						
4.01		Customer Charge		122.01	$123.32	$1.31	1.07%
4.02		Demand Charge (Cents/Month/m^3)		36.0000	36.3852	0.3852	1.07%
4.03		Delivery Charge	First 14,000	0.0000	0.0000	0.0000	0.0%
4.04			Next 28,000	0.0000	0.0000	0.0000	0.0%
4.05			Over 42,000	0.0000	0.0000	0.0000	0.0%
	RATE 110						
5.01		Customer Charge		$587.37	$587.37	$0.00	0.0%
5.02		Demand Charge (Cents/Month/m^3)		22.9100	23.1551	0.2451	1.07%
5.03		Delivery Charge	First 1,000,000	0.5393	0.5458	0.0065	1.2%
5.04			Over 1,000,000	0.3893	0.3933	0.0040	1.0%

Notes:
* Cents/m^3 unless otherwise noted.
(1) Exhibit F1, Tab 1, Rate Order, Working Papers, Schedule 4, Col.(c) - Col.(e).
(2) Exhibit F1, Tab 1, Rate Order, Working Papers, Schedule 6, Col. (d).

ENBRIDGE GAS INC.
EGD Rate Zone
SUMMARY OF PROPOSED UNIT RATES BY RATE CLASS

Line No.	Rate No.	Particulars	Rate Block (m^3)	EB-2018-0249 Approved October 1, 2018 Rates(1) (cents/m^3*)	EB-2018-0305 Proposed January 1, 2019 Rates (2) (cents/m^3*)	Rate Change	Rate Change %
				(a)	(b)	(c) = (b)-(a)	(d) = (c/a)
	RATE 115						
1.01		Customer Charge		$622.62	$622.62	$0.00	0.0%
1.02		Demand Charge (Cents/Month/m^3)		24.3600	24.6200	0.2600	1.07%
1.03		Delivery Charge	First 1,000,000	0.2079	0.2453	0.0374	18.0%
1.04			Over 1,000,000	0.1079	0.1448	0.0369	34.2%
	RATE 125						
2.01		Customer Charge		$500.00	$500.00	$0.00	0.0%
2.02		Delivery Charge (Cents/Month/m^3 of Contract Dmnd)		9.8840	10.1507	0.2667	2.7%
	RATE 135	DEC - MAR					
3.01		Customer Charge		115.08	$115.08	$0.00	0.0%
3.02		Delivery Charge	First 14,000	6.9940	7.1902	0.1962	2.8%
3.03			Next 28,000	5.7938	5.9591	0.1653	2.9%
3.04			Over 42,000	5.3939	5.5487	0.1548	2.9%
	RATE 135	APR - NOV					
4.01		Customer Charge		115.08	$115.08	$0.00	0.0%
4.02		Delivery Charge	First 14,000	2.2940	2.3028	0.0088	0.4%
4.03			Next 28,000	1.5940	1.5937	(0.0003)	0.0%
4.04			Over 42,000	1.3940	1.3911	(0.0029)	-0.2%
	RATE 145						
5.01		Customer Charge		123.34	$123.34	$0.00	0.0%
5.02		Demand Charge (Cents/Month/m^3)		8.2300	8.3181	0.0881	1.07%
5.03		Delivery Charge	First 14,000	2.5737	2.6926	0.1189	4.6%
5.04			Next 28,000	1.2147	1.3217	0.1070	8.8%
5.05			Over 42,000	0.6557	0.7579	0.1022	15.6%
	RATE 170						
6.01		Customer Charge		279.31	$279.31	$0.00	0.0%
6.02		Demand Charge (Cents/Month/m^3)		4.0900	4.1338	0.0438	1.07%
6.03		Delivery Charge	First 1,000,000	0.2706	0.1502	(0.1204)	-44.5%
6.04			Over 1,000,000	0.0706	(0.0515)	(0.1221)	-173.0%

Notes:
* Cents/m^3 unless otherwise noted.
(1) Exhibit F1, Tab 1, Rate Order, Working Papers, Schedule 4, Col.(c) - Col.(e).
(2) Exhibit F1, Tab 1, Rate Order, Working Papers, Schedule 6, Col. (d).

ENBRIDGE GAS INC.
EGD Rate Zone
SUMMARY OF PROPOSED UNIT RATES BY RATE CLASS

Line No.	Rate No.	Particulars	Rate Block (m^3)	EB-2018-0249 Approved October 1, 2018 Rates(1) (cents/m^3*)	EB-2018-0305 Proposed January 1, 2019 Rates (2) (cents/m^3*)	Rate Change	Rate Change %
				(a)	(b)	(c) = (b)-(a)	(d) = (c/a)
	RATE 200						
1.01		Customer Charge		-	$0.00	$0.00	0.0%
1.02		Demand Charge (Cents/Month/m^3)		14.7000	14.8573	0.1573	1.07%
1.03		Delivery Charge		(0.0478)	(0.0212)	0.0266	-55.7%
	RATE 300	FIRM SERVICE					
2.01		Monthly Customer Charge		500.00	$500.00	$0.00	0.0%
2.02		Demand Charge (Cents/Month/m^3)		26.6881	27.7771	1.0890	4.1%
	RATE 332	Transportation Service					
3.01		Monthly Contract Demand Charge ($/GJ)		1.2075	1.2204	0.0129	1.07%

Notes:
* Cents/m^3 unless otherwise noted.
(1) Exhibit F1, Tab 1, Rate Order, Working Papers, Schedule 4, Col.(c) - Col.(e).
(2) Exhibit F1, Tab 1, Rate Order, Working Papers, Schedule 6, Col. (d).

ENBRIDGE GAS INC.
Union Rate Zones
SUMMARY OF PROPOSED UNIT RATES BY RATE CLASS

Line No.	Particulars (cents/m³)	EB-2018-0253 Approved October 1, 2018 Rate (a)	EB-2018-0305 Proposed January 1, 2019 Rate (b)	Rate Change (c) = (b - a)	Rate Change (%) (d) = (c / a)
	Union North - General Service				
	Rate 01				
1	Monthly Charge	$21.00	$21.00	-	0.00%
	Monthly Delivery Charge				
2	First 100 m³	9.3755	10.0484	0.6729	7.18%
3	Next 200 m³	9.1356	9.2549	0.1193	1.31%
4	Next 200 m³	8.7563	8.8872	0.1309	1.49%
5	Next 500 m³	8.4081	8.5496	0.1415	1.68%
6	Over 1,000 m³	8.1204	8.2708	0.1504	1.85%
	Rate 10				
7	Monthly Charge	$70.00	$70.00	-	0.00%
	Monthly Delivery Charge				
8	First 1,000 m³	7.9011	8.2572	0.3561	4.51%
9	Next 9,000 m³	6.4155	6.7388	0.3233	5.04%
10	Next 20,000 m³	5.7447	6.0762	0.3315	5.77%
11	Next 70,000 m³	5.1855	5.5209	0.3354	6.47%
12	Over 100,000 m³	3.0670	3.4170	0.3500	11.41%
	Union South - General Service				
	Rate M1				
13	Monthly Charge	$21.00	$21.00	-	0.00%
	Delivery Charge				
14	First 100 m³	5.0777	5.9775	0.8998	17.72%
15	Next 150 m³	4.8140	4.8283	0.0143	0.30%
16	All over 250 m³	4.1326	4.1436	0.0110	0.27%
	Rate M2				
17	Monthly Charge	$70.00	$70.00	-	0.00%
	Delivery Charge				
18	First 1,000 m³	5.0510	4.9042	(0.1468)	-2.91%
19	Next 6,000 m³	4.9552	4.7581	(0.1971)	-3.98%
20	Next 13,000 m³	4.7739	4.5915	(0.1824)	-3.82%
21	All over 20,000 m³	4.4236	4.2540	(0.1696)	-3.83%

ENBRIDGE GAS INC.
Union Rate Zones
SUMMARY OF PROPOSED UNIT RATES BY RATE CLASS

Line No.	Particulars (cents/m³)	EB-2018-0253 Approved October 1, 2018 Rate (a)	EB-2018-0305 Proposed January 1, 2019 Rate (b)	Rate Change (c) = (b - a)	Rate Change (%) (d) = (c / a)
	Union North - Contract Rate Classes				
	Rate 20				
1	Monthly Charge	$860.69	$918.21	$57.52	6.68%
	Delivery Demand Charge				
2	First 70,000 m³	28.6515	31.1085	2.4570	8.58%
3	All over 70,000 m³	16.8485	19.5720	2.7235	16.16%
	Delivery Commodity Charge				
4	First 852,000 m³	0.5384	0.5484	0.0100	1.86%
5	All over 852,000 m³	0.3843	0.3914	0.0071	1.85%
	Rate 100				
6	Monthly Charge	$1,341.41	$1,409.84	$68.43	5.10%
7	Delivery Demand Charge	15.0877	19.7444	4.6567	30.86%
8	Delivery Commodity Charge	0.2200	0.2262	0.0062	2.82%
	Rate 25 - Large Volume Interruptible Service				
9	Monthly Charge	$289.76	$317.47	$27.71	9.56%
10	Delivery Charge - (Average)	2.5505	2.9527	0.4022	15.77%

ENBRIDGE GAS INC.
Union Rate Zones
SUMMARY OF PROPOSED UNIT RATES BY RATE CLASS

Line No.	Particulars (cents/m³)	EB-2018-0253 Approved October 1, 2018 Rate (a)	EB-2018-0305 Proposed January 1, 2019 Rate (b)	Rate Change (c) = (b - a)	Rate Change (%) (d) = (c / a)
	Union South - Contract Rate Classes				
	Rate M4				
	Monthly demand charge:				
1	First 8,450 m³	61.6487	61.0324	(0.6163)	-1.00%
2	Next 19,700 m³	27.6418	27.3655	(0.2763)	-1.00%
3	All over 28,150 m³	23.2229	22.9908	(0.2321)	-1.00%
	Monthly delivery commodity charge:				
4	First block	1.5493	1.4521	(0.0972)	-6.27%
5	All remaining use	0.5919	0.5482	(0.0437)	-7.38%
	Interruptible contracts				
6	Monthly Charge	$644.34	$681.74	$37.40	5.80%
	Daily delivery commodity charge:				
7	2,400 m³ to 17,000 m³	3.0257	2.8987	(0.1270)	-4.20%
8	17,000 m³ to 30,000 m³	2.8958	2.7688	(0.1270)	-4.39%
9	30,000 m³ to 50,000 m³	2.8275	2.7005	(0.1270)	-4.49%
10	50,000 m³ to 60,000 m³	2.7796	2.6526	(0.1270)	-4.57%
	Rate M5A				
	Firm contracts				
11	Monthly demand charge	34.4858	35.3897	0.9039	2.62%
12	Monthly delivery commodity charge	2.3415	2.3399	(0.0016)	-0.07%
	Interruptible contracts				
13	Monthly Charge	$644.34	$681.74	$37.40	5.80%
	Daily delivery commodity charge:				
14	2,400 m³ to 17,000 m³	3.0257	2.8987	(0.1270)	-4.20%
15	17,000 m³ to 30,000 m³	2.8958	2.7688	(0.1270)	-4.39%
16	30,000 m³ to 50,000 m³	2.8275	2.7005	(0.1270)	-4.49%
17	50,000 m³ to 60,000 m³	2.7796	2.6526	(0.1270)	-4.57%
	Rate M7				
18	Monthly demand charge	34.6517	34.1968	(0.4549)	-1.31%
19	Monthly delivery commodity charge	0.3372	0.2927	(0.0445)	-13.20%
	Interruptible/ Seasonal				
	Monthly delivery commodity charge (Average)	1.2618	0.8530	(0.4088)	-32.40%
	Rate M9				
20	Monthly demand charge	23.5428	23.8992	0.3564	1.51%
21	Monthly delivery commodity charge	0.1569	0.1526	(0.0043)	-2.74%
	Rate M10				
22	Monthly delivery commodity charge	7.1560	7.4211	0.2651	3.70%

ENBRIDGE GAS INC.
Union Rate Zones
SUMMARY OF PROPOSED UNIT RATES BY RATE CLASS

Line No.	Particulars (cents/m³)	EB-2018-0253 Approved October 1, 2018 Rate (a)	EB-2018-0305 Proposed January 1, 2019 Rate (b)	Rate Change (c) = (b - a)	Rate Change (%) (d) = (c / a)
	Rate T1				
	Transportation (cents / m³)				
1	Monthly demand charge first 28,150 m³	40.5921	40.4434	(0.1487)	-0.37%
2	Monthly demand charge next 112,720 m³	28.0445	27.9418	(0.1027)	-0.37%
	Commodity charges - Customer provided fuel:				
3	Firm	0.1051	0.1018	(0.0033)	-3.14%
4	Average Interruptible	1.3216	1.4803	0.1587	12.01%
5	Monthly Charge	$1,896.28	$1,964.91	$68.63	3.62%
	Rate T2				
	Transportation (cents / m³)				
6	Monthly demand charge first 140,870 m³	32.0198	31.0965	(0.9233)	-2.88%
7	Monthly demand charge all over 140,870 m³	16.9369	16.4485	(0.4884)	-2.88%
	Commodity charges - Customer provided fuel:				
8	Firm	0.0234	0.0192	(0.0042)	-17.95%
9	Average Interruptible	1.0040	1.0820	0.0780	7.77%
10	Monthly Charge	$5,440.88	$5,987.98	$547.10	10.06%
	Rate T3				
	Transportation (cents / m³)				
11	Monthly demand charge	17.9898	17.0001	(0.9897)	-5.50%
12	Commodity Charges - Customer provided fuel	0.0569	0.0503	(0.0066)	-11.60%
	Monthly Charge				
13	City of Kitchener	$19,843.96	$20,640.21	$796.25	4.01%
14	Natural Resource Gas	$3,046.25	$3,168.48	$122.23	4.01%
15	Six Nations	$1,015.42	$1,056.16	$40.74	4.01%

ENBRIDGE GAS INC.

Undertaking of Mr. Kacicnik
To Mr. Garner

REF: Tr.1 p82

Total 2018 contributions collected as well as the contributions collected in the three years prior to and after the change. In addition the total connection complaints in the three years prior to the change, subject to any limitations.

Response:

The table below shows the number of customer additions, amount of contributions collected for service connections, number of contributions collected, and an average contribution amount collected for the 2012 to 2018 period.

	2012	2013	2014	2015	2016	2017	2018
Total Customer Additions	35,971	34,644	34,504	31,533	29,991	34,005	29,037
Service Contributions Collected	$617,665	$1,106,482	$3,736,459	$3,522,272	$13,699,469	$10,615,358	$9,486,473
Number of Contributions Collected	372	422	572	975	5,312	4,641	4,097
Average Contribution Amount Collected	$1,660	$2,622	$6,532	$3,613	$2,579	$2,287	$2,315

The following information provides the number of customer additions / connections, number of complaints, and the general themes of complaints for the 2012 to 2018 period.

		Connection Complaints	
	Total New Connections	# of Complaints	Themes
2012	35,971	126	Cost, Installation dates, Communication
2013	34,644	144	Cost, Installation dates, Communication
2014	34,504	269	Cost, Installation dates, Communication
2015	31,533	367	Cost, Installation dates, Communication
2016	29,991	634	Cost, Installation dates, Communication
2017	34,005	444	Cost, Installation dates, Communication
2018	29,037	298	Cost, Installation dates, Communication
YTD 2019	4,730	91	Cost, Installation dates, Communication

ENBRIDGE GAS INC.

Undertaking of Mr. Kacicnik
To Mr. Brett

REF: Tr.1 p83

To file Enbridge Gas distribution's undertakings to the lieutenant-governor-in-council in this proceeding.

Response:

Please see Attachment 1. In addition to the undertakings to the Lieutenant Governor in Council for Ontario are two subsequent Ministerial Directives that have the effect of amending and expanding those undertakings.

Filed: 2019-05-08
EB-2018-0305
Exhibit JT1.10
Attachment 1
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UNDERTAKINGS OF THE CONSUMERS' GAS COMPANY LTD., ENBRIDGE CONSUMERS ENERGY INC., 311594 ALBERTA LTD., ENBRIDGE PIPELINES (NW) INC. AND ENBRIDGE INC.

TO: Her Honour The Lieutenant Governor in Council for the Province of Ontario

WHEREAS Enbridge Consumers Energy Inc. holds all of the issued and outstanding common shares of The Consumers' Gas Company Ltd. ("Consumers");

AND WHEREAS 311594 Alberta Ltd. holds all of the issued and outstanding common shares of Enbridge Consumers Energy Inc.;

AND WHEREAS Enbridge Pipelines (NW) Inc. holds all of the issued and outstanding common shares of 311594 Alberta Ltd.;

AND WHEREAS Enbridge Inc. ("Enbridge") holds all of the issued and outstanding common shares of Enbridge Pipelines (NW) Inc.;

the above named corporations do hereby agree to the following undertakings:

1.0 Definitions

In these undertakings,

1.1 "Act" means the *Ontario Energy Board Act, 1998*;

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Attachment 1
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1.2 "affiliate" has the same meaning as it does in the *Business Corporations Act*;

1.3 "Board" means the Ontario Energy Board;

1.4 "business activity" has the same meaning as it does under the Act or a regulation made under the Act; and

1.5 "electronic hearing", "oral hearing" and "written hearing" have the same meaning as they do under the *Statutory Powers Procedure Act*.

2.0 Restriction on Business Activities

2.1 Consumers shall not, except through an affiliate or affiliates, carry on any business activity other than the transmission, distribution or storage of gas, without the prior approval of the Board.

3.0 Maintenance of common equity

3.1 Where the level of equity in Consumers falls below the level which the Board has determined to be appropriate in a proceeding under the Act or a predecessor Act, Consumers shall raise or Enbridge and its affiliates shall provide within 90 days, or such longer period as the Board may specify, sufficient additional equity capital to restore the level of equity in Consumers to the appropriate level.

3.2 Any additional equity capital provided to Consumers by Enbridge or its affiliates shall be provided on terms no less favourable to Consumers than Consumers could obtain directly in the capital markets.

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4.0 Head Office

4.1 The head office of Consumers shall remain within the franchise area of Consumers.

5.0 Prior Undertakings

5.1 Subject to Article 5.2, these undertakings supersede, replace and are in substitution for all prior undertakings of Consumers, Enbridge and their affiliates.

5.2 The undertakings of British Gas PLC and Consumers dated June 16th, 1994 and approved by the Lieutenant Governor in Council on June 23rd, 1994, remain in full force and effect.

6.0 Dispensation

6.1 The Board may dispense, in whole or in part, with future compliance by any of the signatories hereto with any obligation contained in an undertaking.

7.0 Hearing

7.1 In determining whether to grant an approval under these undertakings or a dispensation under Article 6.1, the Board may proceed without a hearing or by way of an oral, written or electronic hearing.

8.0 Monitoring

8.1 At the request of the Board, Consumers, Enbridge and their affiliates will provide to the Board any information the Board may require related to compliance with these undertakings.

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9.0 Enforcement

9.1 The parties hereto acknowledge that there has been consideration exchanged for the receipt and giving of the undertakings and agree to be bound by these undertakings.

9.2 Any proceeding or proceedings to enforce these undertakings may be brought and enforced in the courts of the Province of Ontario and Enbridge, Consumers and their affiliates hereby submit to the jurisdiction of the courts of the Province of Ontario in respect of any such proceeding.

9.3 For the purpose of service of any document commencing a proceeding in accordance with Article 9.2, it is agreed that Consumers is the agent of Enbridge and its affiliates and that personal service of documents on Consumers will be sufficient to constitute personal service on Enbridge and its affiliates.

10.0 Release from undertakings

10.1 Enbridge, Consumers and their affiliates are released from these undertakings on the day that Enbridge no longer holds, either directly or through its affiliates, more than 50 per cent of the voting securities of Consumers or on the day that Consumers sells its gas transmission and gas distribution systems.

11.0 Effective Date

11.1 These undertakings become effective on March 31, 1999.

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EB-2018-0305
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Attachment 1
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DATED this 7th day of December, 1998.

THE CONSUMERS' GAS COMPANY LIMITED

by _____

_____

ENBRIDGE CONSUMERS ENERGY INC.

by _____

_____

311594 ALBERTA LTD.

by _____

_____

ENBRIDGE PIPELINES (NW) INC.

by _____

_____

ENBRIDGE INC.

by _____

_____

Ontario
Executive Council
Conseil des ministres

Order in Council
Décret

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that:

Sur la recommandation du soussigné, le lieutenant-gouverneur, sur l'avis et avec le con- sentement du Conseil des ministres, décrète ce qui suit:

WHEREAS Enbridge Distribution Inc. and related parties gave undertakings to the Lieutenant Governor in Council that were approved by Order in Council on December 9, 1998 and that took effect on March 31, 1999; and Union Gas Limited and related parties gave undertakings to the Lieutenant Governor in Council that were approved by Order in Council on December 9, 1998, and that took effect on March 31, 1999;

AND WHEREAS opportunities exist for Enbridge Distribution Inc. and Union Gas Limited to carry on business activities that could assist the Government of Ontario in achieving its goals in energy conservation;

AND WHEREAS the Minister of Energy may issue, and the Ontario Energy Board shall implement, directives that have been approved by the Lieutenant Governor in Council that require the Board to take steps specified in the directives to promote energy conservation, energy efficiency, load management or the use of cleaner energy sources, including alternative and renewable energy sources;

NOW THEREFORE the attached Directive is approved.

Recommended: _____
Minister of Energy

Concurred: _____
Chair of Cabinet

Approved and Ordered: AUG 10 2006
Date

_____
Administrator of the Government

O.C./Décret 1537/2006

Minister of Energy

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900 Bay Street
Toronto ON M7A 2E1
Tel: 416-327-6715
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Ministre de l'Énergie

Édifice Hearst, 4e étage
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Ontario

MINISTER'S DIRECTIVE

Re: Gas Utility Undertakings

Enbridge Gas Distribution Inc. and related parties gave undertakings to the Lieutenant Governor in Council that were approved by Order in Council on December 9, 1998 and that took effect on March 31, 1999 ("the Enbridge Undertakings"); and Union Gas Limited and related parties gave undertakings to the Lieutenant Governor in Council that were approved by Order in Council on December 9, 1998 and that took effect on March 31, 1999 ("the Union Undertakings").

Pursuant to section 27.1 of the *Ontario Energy Board Act, 1998*, I hereby direct the Ontario Energy Board to dispense,

- under section 6.1 of the Enbridge Undertakings, with future compliance by Enbridge Gas Distribution Inc. with section 2.1 ("Restriction on Business Activities") of the Enbridge Undertakings, and

- under section 6.1 of the Union Undertakings, with future compliance by Union Gas Limited with section 2.1 ("Restriction on Business Activities") of the Union Undertakings,

in respect of the provision of services by Enbridge Gas Distribution Inc. and Union Gas Limited that would assist the Government of Ontario in achieving its goals in energy conservation, including services related to:

(a) the promotion of electricity conservation, natural gas conservation and the efficient use of electricity;

(b) electricity load management; and

(c) the promotion of cleaner energy sources, including alternative energy sources and renewable energy sources.

.../cont'd

In addition, pursuant to section 27.1 of the *Ontario Energy Board Act, 1998*, I hereby direct the Board to dispense, under section 6.1 of the Enbridge Undertakings, with future compliance with section 2.1 of the Enbridge Undertakings in respect of research, review, preliminary investigation, project development and the provision of services related to the following business activities:

(a) the local distribution of steam, hot and cold water in a Markham District Energy initiative; and

(b) the generation of electricity by means of large stationary fuel cells integrated with energy recovery from natural gas transmission and distribution pipelines.

Further, pursuant to section 27.1 of the *Ontario Energy Board Act, 1998*, I hereby direct the Board to dispense, under section 6.1 of the Union Undertakings, with future compliance with section 2.1 of the Union Undertakings in respect of research, review, preliminary investigation, project development and the provision of services related to the following business activities:

(a) the generation of electricity by means of large stationary fuel cells integrated with energy recovery from natural gas transmission and distribution pipelines.

To the extent that any activities undertaken by Enbridge Gas Distribution Limited or Union Gas Limited in reliance on this Directive are forecast to impact upon their regulated rates, such activities are subject to the review of the Ontario Energy Board under the *Ontario Energy Board Act, 1998.*

In this directive, "alternative energy source" and "renewable energy source" have the same meanings as in the *Electricity Act, 1998.*

Dwight Duncan
Minister

Ontario
Executive Council
Conseil des ministres

Order in Council
Décret

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that:

Sur la recommandation du soussigné, le lieutenant-gouverneur, sur l'avis et avec le consentement du Conseil des ministres, décrète ce qui suit:

WHEREAS Enbridge Gas Distribution Inc. and related parties ("Enbridge") gave undertakings to the Lieutenant Governor in Council that were approved by Order in Council on December 9, 1998 and that took effect on March 31, 1999 ("the Enbridge Undertakings"), and Union Gas Limited and related parties ("Union") gave undertakings to the Lieutenant Governor in Council that were approved by Order in Council on December 9, 1998 and that took effect on March 31, 1999 ("the Union Undertakings");

AND WHEREAS the Minister of Energy and Infrastructure has the authority under section 27.1 of the *Ontario Energy Board Act, 1998* to issue directives, approved by the Lieutenant Governor in Council, that require the Ontario Energy Board to take steps specified in the directives to promote energy conservation, energy efficiency, load management and the use of cleaner energy sources including alternative and renewable energy sources;

AND WHEREAS The Government of Ontario has, with the passage of the *Green Energy and Green Economy Act, 2009,* embarked upon a historic series of initiatives related to promoting the use of renewable energy sources and enhancing conservation throughout Ontario;

AND WHEREAS certain amendments to the *Ontario Energy Board Act, 1998* provided for by the above-noted statute authorize electricity distribution companies to directly own and operate renewable energy electricity generation facilities with a capacity of ten (10) megawatts or less, facilities that generate heat and electricity from a single source, or facilities that store energy, subject to criteria to be prescribed by regulation;

AND WHEREAS it is desirable that both Enbridge and Union are accorded authority similar to those of electricity distributors to own and operate the kinds of generation and storage facilities referenced above, while clarifying that the latter two activities, namely the ownership and operation of facilities that generate heat and electricity from a single source, or facilities that store energy, are to be interpreted to include stationary fuel-cell facilities each of which does not exceed 10 Megawatts in capacity, as well as to allow Enbridge and Union the authority to own and operate assets required in respect of the provision of services by Enbridge and Union that would assist the Government of Ontario in achieving its goals in energy conservation including where such assets relate to solar-thermal water and ground-source heat pumps;

AND WHEREAS the Minister of Energy has previously issued a directive pursuant to section 27.1 in respect of the Enbridge Undertakings and the Union Undertakings, under Order-in-Council No. 1537/2006, dated August 10, 2006.

NOW THEREFORE the directive attached hereto is approved and is effective as of the date hereof.

Recommended: _____
Minister of Energy and Infrastructure

Concurred: _____
Chair of Cabinet

Approved and Ordered: SEP 0 8 2009
Date

_____
Lieutenant Governor

O.C./Décret 1540/2009

MINISTER'S DIRECTIVE

Re: Gas Utility Undertakings Relating to the Ownership and Operation of Renewable Energy Electricity Generation Facilities, Facilities Which Generate Both Heat and Electricity From a Single Source and Energy Storage Facilities and the Ownership and Operation of Assets Required to Provide Conservation Services.

Enbridge Gas Distribution Inc. and related parties gave undertakings to the Lieutenant Governor in Council that were approved by Order in Council on December 9, 1998 and that took effect on March 31, 1999 ("the Enbridge Undertakings"); and Union Gas Limited and related parties gave undertakings to the Lieutenant Governor in Council that were approved by Order in Council on December 9, 1998 and that took effect on March 31, 1999 ("the Union Undertakings").

The Government of Ontario has, with the passage of the *Green Energy and Green Economy Act, 2009,* embarked upon a historic series of initiatives related to promoting the use of renewable energy sources and enhancing conservation throughout Ontario.

One of those initiatives is to allow electric distribution companies to directly own and operate renewable energy electricity generation facilities of a capacity of not more than 10 megawatts or such other capacity as is prescribed by regulation, facilities which generate both heat and electricity from a single source and facilities for the storage of energy, subject to such further criteria as may be prescribed by regulation.

The Government also wants to encourage initiatives that will reduce the use of natural gas and electricity.

Pursuant to section 27.1 of the *Ontario Energy Board Act, 1998*, and in addition to a previous directive issued thereunder on August 10, 2006 by Order in Council No. 1537/2006, in respect of the Enbridge Undertakings and the Union Undertakings, I hereby direct the Ontario Energy Board to dispense,

- under section 6.1 of the Enbridge Undertakings, with future compliance by Enbridge Gas Distribution Inc. with section 2.1 ("Restriction on Business Activities") of the Enbridge Undertakings, and

- under section 6.1 of the Union Undertakings, with future compliance by Union Gas Limited with section 2.1 ("Restriction on Business Activities") of the Union Undertakings,

in respect of the ownership and operation by Enbridge Gas Distribution, Inc. and Union Gas Limited, of:

(a) renewable energy electricity generation facilities each of which does not exceed 10 megawatts or such other capacity as may be prescribed, from time to time, by

regulation made under clause 71(3)(a) of the *Ontario Energy Board Act, 1998* and which meet the criteria prescribed by such regulation;

(b) generation facilities that use technology that produces power and thermal energy from a single source which meet the criteria prescribed, from time to time, by regulation made under clause 71(3)(b) of the *Ontario Energy Board Act, 1998*;

(c) energy storage facilities which meet the criteria prescribed, from time to time, by regulation made under clause 71(3)(c) of the *Ontario Energy Board Act, 1998*; or

(d) assets required in respect of the provision of services by Enbridge Gas Distribution Inc. and Union Gas Limited that would assist the Government of Ontario in achieving its goals in energy conservation and includes assets related to solar-thermal water and ground-source heat pumps;

(e) for greater certainty, the use of the word "facilities" in paragraphs (b) and (c) above shall be interpreted to include stationary fuel-cell facilities each of which does not exceed 10 Megawatts in capacity.

This directive is not in any way intended to direct the manner in which the Ontario Energy Board determines, under the *Ontario Energy Board Act, 1998,* rates for the sale, transmission, distribution and storage of natural gas by Enbridge Gas Distribution Inc. and Union Gas Limited.

George Smitherman
Deputy Premier, Minister of Energy and Infrastructure

ENBRIDGE GAS INC.

Undertaking of Mr. Kacicnik
To Mr. Brett

REF: Tr.1 p85

To enhance response to Exhibit 1, Staff 2 part h.

Response:

As noted in the response to Exhibit I.STAFF.2, Enbridge Gas is not able to distinguish between services contribution from residential infills and subdivision projects. Using historical costs provided at JT1.9, a high-level estimate of $8 million per year as a result of the changes to Conditions of Service can be made (i.e., Enbridge Gas collected approximately $3 million on average per year for the 2013 to 2015 period and approximately $11 million on average per year for the 2016 to 2018 period. The difference between the two periods is approximately $8 million per year). Accordingly, Enbridge Gas expects to collect on average approximately $8 million in additional contributions each year through 2023.

ENBRIDGE GAS INC.

Undertaking of Ms. Ferguson
To Mr. Brett

REF: Tr.1 p88

To file a copy of Enbridge's policy document on harmonized enterprise-wide capitalization policy.

Response:

Please see Attachment 1.

Enterprise Wide Capitalization Policy

Policy management:	
	Title
Policy Preparer	Director Capital Assets
Policy Owner	Director Capital Assets
Policy Approver	Chief Accounting Officer

Policy version control:		
Version	**Approval Date**	**Effective Date**
2.0	August 14, 2018	August 1, 2018

Contents

1. Executive summary

Enbridge Inc. is subject to U.S. Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") which sets out generally accepted accounting principles for entities that utilize United States Generally Accepted Accounting Principles ("US GAAP").

The principles outlined within this Enterprise Wide Capitalization Policy ("Policy") establish guidelines and procedures for the Capitalization of Property, Plant and Equipment ("PP&E"), internally developed and externally acquired information technology hardware, software, and eligible project Costs.

Non-compliance with this Policy constitutes a violation of the Enbridge Statement on Business Conduct and may result in disciplinary action up to and including termination.

2. Purpose

The purpose of this Policy is to provide management with the framework and principles within which to account for the Capitalization of PP&E, internally developed and externally acquired information technology hardware, software, and eligible project Costs.

3. Definitions

Asset – An expenditure incurred that results in "…probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events."

Base Pressure Gas – The volume of gas in underground storage which is required as a base pressure for the operation of underground storage areas

Board – Enbridge Inc. Board of Directors.

Capitalization – The costs to acquire an asset are expensed over the life of that Asset rather than in the period the expense was incurred.

Carrying Amount – The amount of an item as displayed in the financial statements. In the case of PP&E, it is the net book value (i.e., gross Cost less accumulated Depreciation).

Company – Enbridge Inc. and its Subsidiaries.

Cost – The amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an Asset at the time of its acquisition or construction.

Depreciation – The systematic and rational allocation of the Depreciable Amount of an Asset over its estimated Useful Life.

Depreciable Amount – The gross Cost of the Asset reduced by its estimated salvage value.

Directly Attributable Costs – Incremental Costs incurred by the Company that are linked to its capital program such that if the capital program ceased, those Costs would not be incurred.

Fair Value – The price that would be received to sell an Asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Group Method of Depreciation – A method of Depreciation where similar Assets with comparable useful lives are grouped and depreciated as a pool. When those Assets are retired or otherwise disposed of, gains and losses are not reflected in earnings, but are booked as an adjustment to accumulated Depreciation.

In-Service Date – The date on which a project is considered to be complete and ready to begin operating as intended.

Linefill – The amount of gas, oil or product required to fill a new line before deliveries can be made at take-off points or the end of the line.

Linepack – The volume of gas or oil maintained in a pipeline at all times in order to maintain pressure and provide uninterrupted flow of gas or oil.

Material – The omission or misstatement of an item in a financial report is Material if, in the light of surrounding circumstances, the magnitude of the item is such that it is Probable that the judgment of a reasonable person relying upon the report would have been changed or influenced by the inclusion or correction of the item.

Probable – Likely to occur, which is generally interpreted to have a greater than 75% likelihood of occurring.

Residual Value – The estimated fair value of an Asset at the end of its Useful Life to the entity, less any disposal Costs.

Subsidiary – With respect to Enbridge Inc., any corporation, partnership (general or limited, including master limited), limited liability company, trust, joint venture, joint stock company, unincorporated association, unincorporated syndicate, unincorporated organization, or other entity or association that is directly or indirectly controlled by Enbridge Inc.

Unit of Property – A complete structure, apparatus or item of equipment that constitutes a part of any installation or property and includes a part of any structure or apparatus where such part is a physically distinct part of the structure and the value of such part is Material. Units of property are documented by the business units**.** A minor Unit of Property is defined as an associated part or item included within a larger Unit of Property.

Useful Life – The period over which an Asset is expected to contribute directly or indirectly to generating future cash flows.

Utilities – Rate Regulated natural gas Utilities.

4. General

This Policy sets out the general principles to be followed in determining the types of expenditures which may be capitalized for the Company, excluding those situations as described in *Section 4.1 – Scope exclusions*.

This Policy is to be read in conjunction with the following policies:

- **Enterprise Wide Revenue Recognition Policy** – provides guidance for the determination of the accounting treatment of revenue.
- **Enterprise Authorities & Spending Limits Policy** – provides guidance on the management of capital commitments, expenditure budgets and related operating plans by delegating approval to the appropriate level within the company

This Policy supersedes all existing Policies and procedures related to Capitalization in effect at all locations except when specifically referred.

This Policy is not meant to replace the applicable US GAAP, but instead outlines the situations that are most applicable to the Company.

4.1 Scope exclusions

The following are excluded from the scope of this Policy:

- Agreements or filings that are in effect with regulatory bodies;
- Some projects attract Capitalized Costs in accordance with ASC 980 Regulated Operations. For operations that are subject to rate regulation, all or part of an incurred Cost that would otherwise be charged to expense under this Policy may be Capitalized if the scope and criteria for Capitalization pursuant to ASC 980 are met for that entity, including these costs in the project are not subject to additional approval
- Depreciation and amortization of capital Assets;
- Identified Assets within the scope of ASC 840 or ASC 842;
- Impairment or disposal of long-lived Assets; and
- Property acquired as part of a business combination.

4.2 Governance

The Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") are responsible for ensuring that the Company's financial condition and results of operations are fairly presented in the financial statements and for establishing and maintaining the Company's disclosure controls and procedures and internal controls over financial reporting. The CEO and CFO have delegated to the Chief Accounting Officer ("CAO") responsibility for accounting and internal controls, which includes the sub-delegation of activities to support the fair presentation of the financial statements and assessment of effectiveness of internal controls. Capitalization of expenditures is a critical component of the accounting activities.

4.3 Project Classifications

The Capital Asset group is responsible for maintaining the definitions and providing governance over the capital project classification process. For example, maintenance and growth categories.

5. PP&E recognition - When does Capitalization commence?

5.1 Projects requiring individual Board approval

For those projects that require individual Board approval and which are funded separately from the approved capital budget, all internal and external Costs incurred are to be expensed until the project has progressed to the stage at which the criteria for Capitalization set out below have been met. For purposes of this Policy, project expenditures may be Capitalized when all the following criteria, supported by internal and external documentary evidence, which may include approved minutes of Board meetings and Authorizations for Expenditures, have been satisfied and the project is Probable of being constructed:

- Evidence which demonstrates the existence of a market for the output(s) of the project;
- Senior management and the Board have approved the project;
- Significant legal, regulatory, and operational requirements related to the project have been met or are reasonably expected to be met; and
- Adequate technical, financial and other resources necessary in order to complete the project are available or have been obtained.

Prior to meeting the criteria set out above, no Costs may be Capitalized. For projects that are approved by the Board during a quarterly meeting, judgment would be applied to determine at what point during the preceding quarter it was Probable that the project would proceed. Project expenditures may be Capitalized from this point forward. It is important to note that project Costs

previously written off as period expenses in prior externally reported periods would not be subsequently reinstated because the status of the project at the time the Costs were incurred was too uncertain to establish a relationship with future benefits, and accordingly, the Costs were properly charged to expense in those periods. Any subsequent recovery of external third-party Costs previously expensed would be included in earnings as a reduction of period Costs (e.g. the recovery of project Costs from a shipper as part of the terms of a Memorandum of Understanding ("MOU") or other form of written agreement).

The following diagram depicts the life cycle of a typical capital project and when Costs are Capitalized vs. expensed in relation to the project stage:

<table>
<tr><td colspan="2">Pre-operating period</td><td>Operating period</td></tr>
<tr><td>Pre-approval stage</td><td>After approval "activities"</td><td>Asset in service</td></tr>
<tr><td></td><td>Example of activities:

Pre-construction - technical drawings and specifications, process of obtaining required permits from governmental authorities, etc.

Construction activities - physical construction of the Asset and all steps required in order to prepare the Asset for its intended use.

Unforeseen obstacles during this stage such as technical problems, labor disputes or litigation, etc. that is directly attributable to the completion of the capital project.</td><td></td></tr>
<tr><td>Expense</td><td>Capitalize</td><td>Expense (or Capitalize if Costs fall under Trailing Costs (<u>Section 11.1 – Trailing Costs</u>) definition)</td></tr>
</table>

Approval date achieved if all met:

Evidence of a market for outputs, such as a MOU or other agreement with a customer, is in place or is being developed.

Senior management and the Board have approved the project.

Significant legal, regulatory and operational requirements related to the project have been met or are reasonably expected to be met. Adequate technical, financial and other resources necessary in order to complete the project are available or have been obtained.

In service date:

Asset is in the location and condition necessary for it to operate in the manner intended.

5.2 Projects funded through the annual capital budget

Pipeline integrity, core maintenance and major overhauls are recurring items. Projects for these activities are included in the annual capital budget process and receive funding approval when the Board approves the capital budget. These budgets are often referred to as Program Funding Portfolios.

The funding within the portfolios can be substituted between various projects without the requirement to receive additional Board approval as the overall funding was approved during the budget process. These projects are evaluated and approved according to guidance outlined in the Authority & Spending Limits Policy (ASL)

Expenditures on these projects may be Capitalized immediately and are subject to the criteria in this Policy. Projects, those submitted into the annual capital budget, as well as any subsequent substitutions must be evaluated for Capitalization as they are raised as a capital project through the Capital Assets group.

6. PP&E recognition - capital vs. expense overview

It is important to determine which Costs may or may not be Capitalized to produce accurate financial statements. Capital Assets are shown on the balance sheet. Costs which may not be Capitalized are expensed in the period in which they are incurred. Accordingly, an expenditure that is incurred in one period, but which is anticipated to result in economic benefits over a number of years in the future and which meets the definition of an Asset is Capitalized. The Cost of Asset used in the earnings process is recognized through an annual Depreciation charge.

ASC 360-10-05-3 states that PP&E typically consist of tangible long-lived Assets used to create and distribute an entity's products and services and typically includes land and land improvements, buildings, machinery and equipment, and furniture and fixtures.

ASC 360-10-30-1 states that the historic Cost of acquiring or constructing an Asset includes all Costs necessary to bring the Asset to the location and condition necessary for its intended use. There is no formal accounting guidance on how to determine if the Asset is ready for its intended use. It is a point in time at which management decides that all significant testing and commissioning for the Asset has been completed and the project is deemed available for operation. If an Asset requires a period of time in which to carry out the activities necessary to bring it to that location and condition, the interest Cost ("AIDC") incurred during that period as a result of expenditures made to construct the Asset is included in the Cost of the Asset (as per ASC 835-20-05-1).

US GAAP does not provide specific guidance regarding the nature of expenditures which can be Capitalized as part of PP&E. As a result, the decision as to whether a particular expenditure may be Capitalized is determined to a considerable extent by the definition of an Asset set out in FASB Statement of Financial Accounting Concepts 6, wherein Assets are defined as "…probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events." Accordingly, if an expenditure is expected to result in a Probable future economic benefit to the Company, it is eligible for Capitalization. For a sample listing of activities and expenditures that are allowed or disallowed for Capitalization, please refer to *Appendix 2 – Directly Attributable capital Cost inclusions* and *Appendix 3 – Directly Attributable capital Cost exclusions* for additional guidance.

Decision trees for Capitalization and expense related to the 2 areas below can be found in *Appendix 4 – Decision tree for Capitalization* and *Appendix 5 – Decision tree for improvements and replacements*.

6.1 Capitalization Thresholds

Expenditures for individual items of PP&E with a Cost greater than or equal to $10,000 are eligible for Capitalization, except for the Regulated Utilities where the threshold is minimum $1,000. The Capitalization threshold applies to an Asset at a single physical location. Splitting or aggregating Asset expenditures for multiple purchases at a single location or an Asset at multiple locations to circumvent the Capitalization threshold is not allowed.

In certain cases, a number of Assets which individually Cost less than the threshold are purchased together at one location, or pooled, for Capitalization.
Examples Include:

- Computer equipment/peripherals and software
- Office furniture and equipment
- Telephones, Communication Equipment
- Meters and Regulators (specifically those used in the Gas Distribution business units)

In such cases, the entire Cost of the purchase is Capitalized as a single or grouped Asset.

The Company's rate regulatory operations may require special considerations for limits, agreements or guidelines set with regulatory bodies. Therefore, any thresholds established with the regulatory body will supersede the limit noted above.

7. Project construction including new builds, additions and extensions

If a project is eligible for Capitalization based on the assessment carried out in *Section 5 – PP&E recognition – When does Capitalization commence?* all expenditures coded to a capital project or group of capital projects must meet the criteria for Capitalization. Any expenditure incurred which is Directly Attributable and necessary to bring the Asset to the location and condition for its intended use may be Capitalized under ASC 835-20-05-1.

7.1 Directly Attributable Cost inclusions

For the Company, Directly Attributable Costs are defined as expenditures incurred by the Company that are directly related to a particular capital program or project such that if that project had not been undertaken, those Costs would not have been incurred. For clarity and to ensure consistency in the Capitalization of Costs, please refer to *Appendix 2 – Directly Attributable capital Cost inclusions* for a sample listing of examples.

Regulated Company entities are to also refer to applicable guidelines established by the regulator when determining if items should be treated as capital or expense.

7.2 Directly Attributable Cost exclusions

Directly Attributable Cost exclusions are Costs incurred that are to be considered expense items. For clarity and to ensure consistency in the Capitalization of Costs, please refer to *Appendix 3 – Directly Attributable capital Cost exclusions* for a sample listing of examples.

Regulated Company entities are to also refer to applicable guidelines established by the regulator when determining if item should be treated as capital or expense.

7.3 Transaction Costs for Asset acquisitions

Costs incurred to facilitate transactions accounted for as Asset acquisitions are Capitalized in accordance with ASC 805-50-30-1. However, transaction Costs incurred to acquire Assets through a business combination are expensed as incurred.

7.4 Major Projects group

The Major Projects group is a centralized group which oversees construction of large capital projects and includes functions such as project management, development engineering, construction engineering and transition to operations.

The Costs incurred by the Major Projects group are Capitalized as they are incremental and are necessary to support construction of the projects undertaken by the Company. Those Costs form part of the expenditures that are necessary to bring the projects to the stage where they are ready for their intended use, thereby generating future economic benefits. The Company would be billed for charges of a similar nature if it outsourced the management of its projects to third-party Engineering, Procurement and Construction contractors, and those charges would similarly be Capitalized as part of the Costs of the projects.

Costs incurred within the Major Projects group are Capitalized, with certain exceptions such as training, memberships, Depreciation, and business process re-engineering Costs.

A portion of the Costs incurred by the Major Projects group is Capitalized directly to projects through allocations. Examples of Costs to be allocated include monitoring of project activity, developing engineering and safety standards, engineering design, procurement, establishing process controls, identifying resource requirements, and providing finance and administrative support.

The Major Projects group is allocated Costs from other Company business units when Major Projects utilizes their resources to complete large capital projects. Costs include burdened labor charges, IT, human resources (excluding recruiting Costs) and legal support. These Cost allocations are Capitalized except for Costs specifically excluded in *Appendix 3 – Directly Attributable capital Cost exclusions*.

7.5 Overhead-related Costs

Certain overhead Costs are allowable for Capitalization. Please refer to the *Overhead Capitalization Memorandum* for additional guidance.

7.6 Spare parts and surplus parts and equipment

Spare parts are individual parts of a larger Asset such as a pipeline system or a wind farm which require periodic replacement over the life of the Asset. They can be broken down into four separate categories - commissioning, operational, capital and salvaged spares.

Type of Spare	Treatment	Reason
Commissioning Spares	Capital	Commissioning spares are used for replacement of damaged or faulty equipment to ensure there is no delay in the starting schedule of the new facility.
Operational Spares	Expense	Operational spares are units of equipment that are deemed essential to the operation of the Asset. Determination of which equipment meets these criteria is made through Operations' periodic review.
Capital Spares	Capital	Capital spares are items of equipment which are not being utilized in current operations but are purchased and kept on hand for emergency use as the equipment is specialized and critical to the operations of a particular item of PP&E. These capital spares would normally qualify for Capitalization if purchased new or replaced. Capital spares may be Capitalized if they are specifically related and integral to a particular item of PP&E.
Salvaged Spares	Expense	Salvaged spares are previously used spares that were part of operating (or operable) plant. When equipment of this type is removed from service, it is to be expensed, or if Group Method of Depreciation is applied, recorded to accumulated Depreciation. Should the salvaged spare be subsequently reused, the spare will be put into service at zero net book value.

Surplus parts and equipment are those that remain uninstalled after the completion of a project but have potential for future use on other projects. The accounting treatment of surplus parts and equipment is dependent on whether the item is operating or capital in nature. Surplus parts and equipment categorized as commissioning or capital spares are Capitalized if they are of future utility, while operational spares are charged to expense as discussed above. Any transfers of parts and equipment are accounted for at the carrying value.

7.7 Allowance for Funds Used During Construction (AFUDC) and Capitalized Interest

Allowance for Funds Used during Construction ("AFUDC") represents the estimated Costs of financing construction projects. AFUDC consists of two components, an equity component and an interest component (AIDC). The equity component is a non-cash item that may be Capitalized under rate regulated accounting when permitted by the regulator.

i. AIDC

ASC 835-20 permits the Capitalization of actual interest expense incurred for borrowed funds. The Capitalization period begins when all three of the following conditions are present:

- Expenditures for the Asset have been made;
- Activities that are necessary to get the Asset ready for its intended use are in progress; and
- Interest Cost is being incurred.

Interest Capitalization continues for as long as these conditions are present. Interest Capitalization ceases if the Company suspends substantially all activities related to the acquisition or construction of the Asset until such activities are resumed. However, brief interruptions in construction activities, interruptions that are externally imposed, and delays that are inherent in the Asset acquisition or construction process do not require cessation of interest Capitalization.

Regulated Company entities are also to refer to applicable guidelines established by the regulator when determining if item should be treated as capital or expense.

7.8 Asset Retirement Obligations ("ARO")

An ARO is only provided for those Assets for which a legal obligation related to Asset retirement exists and for which a settlement date or range of settlement dates for the liability can be determined with sufficient accuracy to permit a reasonable estimate of the fair value of the liability to be made.

All legal obligations associated with the retirement of a tangible long-lived Asset must be identified. Legal obligations can result from:

- a government action, such as common law or statute;
- an agreement between entities, such as a written or oral contract; or
- A promise conveyed to a third party that imposes a reasonable expectation of performance.

7.9 Accounting for the receipt of damages

Damages are made to compensate the impacted party to a contract for the failure of the other party to the contract to perform as promised. If cash is received as penalties/compensation due to missed milestones or projects not completed, they do not represent revenue and are to be accounted for as a reduction of the capital Cost of the project as no activities were performed to earn revenue. If the damages are reimbursements for direct/incremental Costs not previously Capitalized, the cash received is recorded as a reduction of expenses on the income statement.

However, if damages are received subsequent to the project In-Service Date from a triggering event that is not related to the construction or installation of a project, such as the operational performance of equipment falling below the level guaranteed by the supplier, the damages are to be recorded as other revenue.

7.10 Accounting for pre-completion revenue

In some cases, incidental revenue may be generated prior to the project In-Service Date of a project. For example, electricity revenue may be generated during the testing phase of a wind or solar power project. In such cases, the incidental revenue is to be credited against the capital Cost of the project as supported by ASC 970-340-25-12.

8. PP&E recognition – Improvements or replacements of existing Assets

Expenditures which are expected to result in an extension of the Useful Life or an increase in the efficiency or functionality of an Asset are Capitalized. These kinds of expenditures are broadly categorized as improvements and replacements. Improvements are Capitalized since it results in future benefit. However, all repairs and some replacement projects that do not extend the Useful Life or increase the expected output of property, plant and equipment are expensed as incurred.

Replacements are substitutions of a major part or Unit of Property with a new major part or Unit of Property. Generally, the Carrying Amount of items replaced is retired and charged to gain/loss on disposition and the Cost of the replacement is Capitalized in the proper capital Asset account.

8.1 Major overhauls and inspections

A major overhaul is an improvement of an item of PP&E when it is expected to extend the Useful Life. These programs include scheduled major overhauls for tanks, compressors and pumps. Historically, the Company has maintained the interpretation of US GAAP that the overhaul and inspection Costs tied to these major overhaul programs are considered capital Costs.

US GAAP provides guidance in regard to major overhaul and maintenance in Section ASC 908. PwC accounting and financial reporting guides point to guidance provided by AICPA Audit and Accounting Guide for Airlines (the Airline Guide) that provides a detailed interpretation of ASC 908 that can be used as a principal source of guidance on accounting for major maintenance activities in all industries.

The term “overhaul” is frequently used to describe the process of inspecting and maintaining an Asset. Overhaul Costs typically include replacement of parts and major repairs and maintenance. The accounting for the replacement of parts or components is discussed in Section 1.2.1.4 of the PwC accounting and financial reporting guides on property, plant, and equipment. The treatment of major repairs and maintenance Costs will depend on whether such Costs meet the specified criteria for recognition as an Asset. The Costs of “day-to-day servicing” of an Asset do not meet the FASB Concepts Statement No. 6, Elements of Financial Statements, Asset recognition criteria and do not qualify as major maintenance. However, major repair and maintenance programs carried out as part of a periodic inspection and overhaul and that result in future economic benefits beyond those initially expected may qualify for recognition as an Asset. The dry-docking of a ship would be an example of such an event.

There are three acceptable methods of accounting for major maintenance, as highlighted in the following table. The interpretation of ASC 908 provided by the airline guidance has consulted with the SEC on the interpretation of ASC 908 and the SEC has indicated that the guidance is to be applied by analogy to all major maintenance activities

Method	Guidance
Direct expense (ASC 908-360-25-2(a))	Overhauls associated with large fleets are relatively constant from period to period, thus most carriers recognize the Cost of overhauls as expense as they are incurred.
Deferral (ASC 908-360-30-3 and 35-6)	The actual Cost of each overhaul is Capitalized and amortized to the next overhaul.

Built-in overhaul (ASC 908-360-30-2 and 35-5)	When overhaul Costs are included or combined with other Costs, an entity would segregate Costs into components that (1) are depreciated over the Useful Life of the Asset and (2) require overhaul at periodic intervals. The Cost of the initial overhaul is Capitalized and amortized to the next overhaul, at which time the process is repeated.

Grant Thornton provides additional interpretation indicating that Major inspections and overhauls are Capitalized and amortized to the next major inspection or overhaul (built-in overhaul and deferral methods) (ASC 908-720-25-3; ASC 908-360-35-4 through 35-6).

Historically the Company's Capitalized major overhaul and API 653 Tank Program Costs. Based on US GAAP Section ASC 908-360-35-6 and the PWC accounting guidance interpretation, overhaul and inspection Costs can be Capitalized. As we have identified above, "major repair and maintenance programs carried out as part of a periodic inspection and overhaul and that result in future economic benefits beyond those initially expected may qualify for recognition as an Asset.", Therefore, inspection Costs in related to the major overhaul programs within the Company are eligible for Capitalization. However, the Costs for major overhauls must be tracked separately from the Asset on which the major overhaul is performed. All Costs from a major overhaul must be fully amortized or written off prior to the Capitalization of the next major inspection and overhaul.

8.2 Major pipeline rehabilitation projects

A major pipeline rehabilitation project involves the refurbishment of pipeline Assets, which may include sleeving, grinding, and recoating or replacement of worn, damaged or corroded pipe. These activities, as part of the major pipeline rehabilitation project, mitigate or prevent environmental contamination that has yet to occur and that otherwise may result from future operations or activities. In addition, these activities extend the Useful Life of the pipeline. Activities which may be Capitalized as part of the Cost of a major pipeline rehabilitation program include the Cost to open the ditch, clean, treat, inhibit, and recoat; rewrapping; sleeving; pipe replacements that constitute units of property (i.e. greater than 10 meters or 33 feet for US affiliates; or greater than 1 meter in the Regulated Utilities); right of way access rights; backfill and restoration.

Pipe relocation and replacements that constitute units of property are treated as capital replacements as mentioned above in *Section 8 – PP&E Recognition – Improvements or replacements of existing Assets*.

Rate regulated operations may qualify for special considerations set with regulatory bodies. Therefore, any thresholds (i.e. pipe length restrictions) established with regulator will supersede the limit noted above.

Integrity digs are required under a pipeline rehabilitation program. The digs are necessary to gain access to areas on the pipeline which have been known to contain potential anomalies and facilitate the work that is required to extend the Useful Life of the pipeline. Accordingly, the Cost of the integrity dig is capitalized as part of the overall rehabilitation program.

However, any validation digs that are performed after the pipeline is in service and is not included in the commissioning of the pipeline does not qualify for Capitalization and must be expensed.

See *Appendix 6 – Pipeline maintenance and repair guideline* for a summary on Capitalization and expensing of Major Rehabilitation Projects.

9. PP&E recognition – Other

9.1 Contributions in Aid of Construction ("CIAC")

CIAC are reimbursements received from a third party that are generally intended to defray all or a portion of the construction Cost of new Assets or Cost to relocate, abandon or extend the life of existing Assets. For accounting purposes, the treatment of these reimbursements will depend on:

1) The relationship between the Company and the third-party payer: Is the third party an existing customer on the Company's system for which they are providing reimbursement?
2) Ownership of the CIAC related Assets following construction: Will ownership remain with the Company, will ownership be transferred to the third party or will there be joint ownership?

Scenarios that will result in deferring accounting treatment:

a) If a CIAC is received from the government where no customer relationship exists, and Asset ownership is retained by the Company, the CIAC reimbursement will be recorded as a reduction to project Costs.

   For CIAC's which are the result of regulatory actions, the payments merely serve as a Cost recovery mechanism. As the terms of the payment are stipulated by the regulator, and only allow for reimbursement of Costs incurred, these transactions are nonnegotiable in nature. Accordingly, CIAC's in regulated entity transactions are not within the scope of ASC 606, because these transactions are not negotiable, indicating that the construction activities do not constitute an entity's ongoing major and central operations and represent Cost reimbursements only. Therefore, payments received for construction reimbursement are not revenue-generating transactions and are to be treated as reductions to Cost of the constructed Assets.

b) If a CIAC is received from a non-customer, and ownership is retained by the Company, the CIAC is recorded as a liability and periodically offset against the Cost of construction. Any unsettled Residual balances may result in gains or losses but cannot be setup as Assets as the third-party payer is not a customer and therefore the physical Assets are not expected to provide future economic benefit to the Company.

c) If the CIAC is received from an existing customer on the Company's system for which reimbursement is being made and the Assets remain the property of the Company, the CIAC is considered part of the revenues similar to transportation tolls and therefore the reimbursement will be recorded as deferred revenue and treated separately from the Assets created. In such instances the reimbursement is not credited to the project. The resulting Assets are depreciated over the Useful Life of the Assets alongside similar Assets within that Company system and the deferred revenue is amortized over the term of the revenue contract.

d) If the CIAC is received from an existing customer on the Company's system for which reimbursement is being made, however the Asset ownership is transferred to the customer upon construction completion, similar to (c) above the reimbursement will be recorded as deferred revenue. The Cost of construction will be viewed as the Cost of obtaining the contract and recorded as other Assets instead of as Capital Assets on the balance sheet. This is because Asset ownership is transferred to the customer. Both the deferred revenue and the other Asset balance will be amortized over the same period in accordance with the remaining term of the revenue contract.

In situations where the Company makes up-front payments to electric utilities to fund the construction of transmission lines required in order to connect electricity to new pipelines or other projects, the refundable portion of those payments is accounted for as a current or non-current receivable.

The non-refundable portion of such payments is considered part of the Cost of bringing the Company's Assets to its intended use and is therefore Capitalized as part of the capital project.

10. Information technology hardware, software and internal use software

The Information technology category includes both hardware and software purchases, as well as internal use software, which is defined as software developed, acquired, or modified by the Company to meet its own internal requirements, as opposed to software purchased from a third-party vendor.

10.1 Hardware and software purchases

Hardware purchases and their associated implementation Costs are considered capital Costs. Software purchases from third parties are also considered capital as long as this software is installed on at on premise servers.

For guidance in regard to Costs incurred under Software as a Service arrangements including cloud computing where the Company does not obtain title to the software provided, please refer to *Appendix 3 – Directly Attributable capital Cost exclusions*.

10.2 Internal use software

Internal use software is acquired, internally developed, or modified solely to meet the entity's internal needs and regulatory requirements, and to streamline operations. In addition, no substantive plan exists to market the software externally.

Internal use software projects are subject to the most evaluation, as individual tasks undertaken within these projects must be classified as either capital or expense in nature. (Refer to *Appendix 2 – Directly Attributable capital Cost inclusions* and *Appendix 3 – Directly Attributable capital Cost exclusions* for additional guidance).

Internal Use projects can be typically divided into different stages and US GAAP provides detailed guidance on the accounting treatment of Costs at each stage

i. Preliminary project stage

Project activities undertaken at this stage include current stage assessments, preliminary design activities, vendor demonstrations, technology requirements and selection of vendors. All expenditures incurred at this stage are expensed per ASC 350-40-25-1. Additionally, Costs of consultants and the Company's internal staff (i.e., payroll and labor burden) are charged to expense during this stage.

ii. Application development stage

Once the project receives appropriate approval and funding and the project meets Capitalization criteria, the internal and external Costs incurred at this stage are accounted for according to the guidance set out in ASC 350-40-25-2 to 25-5.

The guidance allows for the Capitalization of certain Costs incurred which include Costs to purchase the software, external direct Costs of materials and services in developing/acquiring the internal use software, payroll and labor burden Costs for the time that individuals are working directly on the project and interest Costs incurred, etc.

However, there are certain Costs that are not eligible for Capitalization and must be expensed at the time the Cost is incurred. These include all Costs incurred relating to data conversion, training, software maintenance, unspecified upgrade agreements and General and administrative and overhead Costs (i.e. office services, finance and accounting, legal, and other similar Costs) as required by ASC 350-40-30-3.

Regulated Company entities are also to refer to applicable guidelines established by the regulator when determining if item should be treated as capital or expense.

iii. Post implementation/operation stage

Internal and external training and maintenance Costs are expensed as incurred per ASC 350-40-25-6.

10.3 Upgrades and enhancements

The Cost of upgrades and enhancements (modification) to existing internal use software may be Capitalized if the modification result in additional functionality which to enable the software to perform tasks that it previously was not capable of performing. A modification that only extends the Useful Life without adding additional functionality is a maintenance activity and is to be expensed as incurred. Any maintenance combined with the upgrade in a contract must be separated and expensed.

Business process reengineering Costs are not capital in nature and are expensed as per *Appendix 3 – Directly Attributable capital Cost exclusions*.

11. Cessation of Capitalization

Recognition of capital Costs on a project ceases when the project is in the location and condition necessary for it to operate in the manner intended. This is generally attained at the In-Service Date of the capital project. For multiple phase projects, each identifiable phase capable of functioning independently will cease Capitalization when it is ready for its intended use.

11.1 Trailing Costs

The Company undertakes large capital projects which may incur Costs for several years after the Asset has gone into service. Some of these expenditures may be necessary for the successful completion of the project and are to be Capitalized as part of the Cost of the Asset. For example, as a condition of regulatory approval, the Company may agree to do post construction environmental work on disturbed lands after the pipeline is in operation. Additionally, the timing of certain tasks necessary to complete a project may be dependent on factors such as weather or the availability of contractors or equipment.

12. Policy administration

The Director of Capital Assets of Enbridge Inc. is responsible for the overall administration of this Policy. The Director of Accounting Policies and Internal Controls is responsible for ensuring periodic reviews are conducted of this Policy. The Director of Capital Assets is responsible for regularly reporting to the CAO on exceptions arising from the Company's activities governed by the Policy.

All employees involved in the Capitalization of expenses are responsible for being familiar with and complying with this Policy. All aspects of non-compliance must be reported to the employee's immediate supervisor, Internal Controls and, as appropriate, to an employee in a higher Salary Grade in the business unit or to the Chief Accounting Office.

Inquiries regarding interpretation of the Policy or revisions to the Policy should be directed to the Capital Asset team. Any requests for revisions of this Policy are to be submitted to the Chief Accounting Office for consideration and will be reviewed by the Director of Capital Assets.

Any amendments to this Policy must be approved by CAO with the exception of the following which may be approved by the Director of Capital Assets:

- Amendments to correct errors, clarify meaning or intent or with respect to the administration of the Policy; and
- Any updates to the Appendices.

Appendix 1: Authoritative Guidance

Applicable US GAAP	ASC 340 Other Assets and Deferred Costs ASC 350 Intangibles – Goodwill and Other ASC 360 Property Plant & Equipment ASC 410 Asset Retirement and Environmental Obligations ASC 805 Business Combinations ASC 835 Interest ASC 845 Nonmonetary Transactions ASC 908 Airlines ASC 970 Real Estate - General

Appendix 2: Directly Attributable Capital Cost Inclusions

The following table identifies Costs which are typically included in capital but are not limited to. For additional guidance, please contact the Capital Assets team.

Access roads	Major repairs or resurfacing which increases Useful Life or a change in the surface (gravel to asphalt) or widening of a road can be Capitalized. All other minor repairs are to be expensed.
Allowance for interest and equity during construction	AIDC and AEDC on qualifying Assets (*Refer to Section 7.7 – Allowance for Funds Used During Construction (AFUDC) and Capitalized Interest*).
Base Pressure Gas - Company owned	Capitalize as PP&E as it is integral to the operation of the related Asset.
Cathodic protection (anodes, test boxes, ground beds, rectifiers)	Initial ground bed installations and the installation of additional rectifiers, anodes and ground beds are allowable to be Capitalized.
Contract work	Amounts paid for work performed under contract by other companies and individuals related to the approved scope of the project.
Costs of testing, including hydro testing during commissioning of new pipelines	Costs incurred while testing whether the Asset is functioning properly, after deducting any proceeds generated while bringing the Asset to its intended use.
Development of manuals	The initial development Costs of new manuals and operating procedures, including IT and operational manuals during the process of creating a new capital Asset, can be Capitalized. These manuals are created for internal use only and used on a continual basis. Any revisions or updates to manuals are expensed.
Drawings/mapping	The Cost of preparing initial drawings or of updating drawings to current standards is a necessary expenditure to construct the Asset, and is accordingly Capitalized through a direct charge to the project. The Costs of subsequent maintenance of drawings are to be expensed.
Engineering services and professional fees	Any amount paid to third parties including other companies, firms or individuals engaged by the Company to plan, design, prepare estimates, supervise, inspect or give general advice and assistance in connection with a construction project.
Geohazard remediation program	Certain Geohazard expenditures performed on the Company's existing right of way can be Capitalized. For detailed guidance, please refer to the Geohazard Remediation Program Memorandum.
Handling and delivery	Initial Handling and Delivery Costs (freight, etc.).
Insurance, injuries and damages	Premiums paid for insurance during construction. Costs incurred in respect of injuries to persons, damage to property of others and damage to plant incidental to construction. Insurance recovered or recoverable for compensation for the aforementioned items is to be credited to construction Costs.
IT hardware purchase	Hardware purchases and the associated implementation Costs are considered capital.

Labor and employee benefits	Labor Costs and benefits for those employees working directly on the construction or acquisition of the item of PP&E including management of front-line construction.
Land	Costs related to the acquisition of land are to be Capitalized if the Costs are directly identifiable with the purchase. Land will not be amortized.
Land rights, land permits, right of way	Costs related to the application and purchases of right of way are to be Capitalized.
Line lowering if units of plant are added	Cost may only be Capitalized if units of plant are added (e.g. Sections or joints of pipe equal to or greater than 10 meters (CAD), 33 Ft. (US) or 1 meter (regulated entities) in length or complete replacement of services. Costs of raising, lowering, or relocating existing line are expensed.
Linefill/Linepack- Company owned	Costs are Capitalized as non-depreciable PP&E as it is required to operate the pipeline. Volumes will remain in use in the pipeline until the pipeline is decommissioned. Subsequently, volumes would be sold at current market value.
Linefill/Linepack- Marketing company (i.e. Tidal Marketing)	These Costs are not capital. However, treatment of these Costs takes into account the terms of shipping agreement. • LT = Treated as a Non-Capital Long Term Asset • ST = Treated as Inventory
Linefill/Linepack- Shipper owned	Costs are not Capitalized
Materials and supplies	The purchase price of materials and supplies which includes import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.
Other related Costs	Ad valorem taxes (i.e. taxes based on the value of imported goods), inspection Costs, insurance and transportation Costs (i.e. Costs of transporting workers, equipment and material and supplies used for construction purposes).
Privileges/temporary land use or rights	Compensation paid for the temporary use of public and private property in connection with a construction project.
Project management	Project management Costs directly related to the construction or acquisition activity.
Pump modifications - Impeller replacements	An impeller is a unit of plant and qualifies as a capital expenditure when a worn impeller is removed from service and replaced.
Pump modifications - Motor rewinds	If the re-wind is performed to increase efficiency to a point that is beyond the original design, then the re- wind and associated Costs are to be Capitalized. In all other situations, such Costs are to be expensed.
Pump modifications - Trimming of impellers	Capitalization is allowable if the change either increases pump efficiency, or improves the overall pump capacity. Otherwise these Costs must be expensed.
Pump modifications - Volute modifications	Similar in nature to a trim. It is usually done as a Cost-effective modification to pumps to accommodate the pumping of a product that differs from the original pump design specifications.

Rents	Amounts paid for the use of temporary housing and office space occupied by project management personnel and construction crews and other incremental rental Costs such as equipment rentals incurred specifically in relation to a project that is not for the Company's own use are Capitalized. Rental Costs incurred to accommodate staff temporarily relocated while their offices or facilities undergo renovations (i.e. swing space) must be charged to expense as the property is for internal use.
Representation Costs	Representation Costs are defined as expenditures incurred in making a representation for the purpose of obtaining a license or permit relating to the capital project. For the Costs to be eligible for Capitalization, they must relate to representations to, or be required by, a government or government agency that has the authority to make rules, regulations or bylaws related to company operations. These Costs would include the Costs of preparing and processing applications, hearing Costs and related legal Costs.
Safety and environmental Costs	Capital expenditures required in order to meet the Company's safety and environmental standards maybe Capitalized when they contribute to Assets with lives spanning more than one year. For example: • Environmental restoration Costs required to bring the project into service may be Capitalized. • Costs associated with the development of post construction environmental monitoring and remediation plans that are necessary in order to satisfy regulatory and stakeholder requirements are Capitalized. Environmental remediation work that is performed 2 years after the project has gone into service is considered maintenance work and therefore is expensed.
Site preparation	Costs of site preparation including Costs incurred in disposing of excavated material (other than contaminated soil; see *Appendix 2 – Directly Attributable capital cost inclusions*) during the course of a capital project.
Software purchase	Software purchases from a third party are considered capital.
Special machine and heavy work equipment service	The Costs related to power shovels, scrapers, pile drivers, dredgers, ditchers, material loaders and similar equipment that paid to others for rent, operation and maintenance of such equipment can be Capitalized.
Tank painting and fibreglassing	Tank fibreglassing most frequently refers to floors but is also performed on roofs. The first application of fiberglass to any tank surface, whether done at time of initial construction or subsequent thereto, is to be included in PP&E as a capital Cost. The initial tank painting is considered a capital Cost of the construction project.
Transient analysis	Expenditures for transient pressure analysis during the construction stage of a project are Capitalized.
Vehicles	Purchase price plus any non-recoverable taxes.

Appendix 3: Directly Attributable Capital Cost exclusions

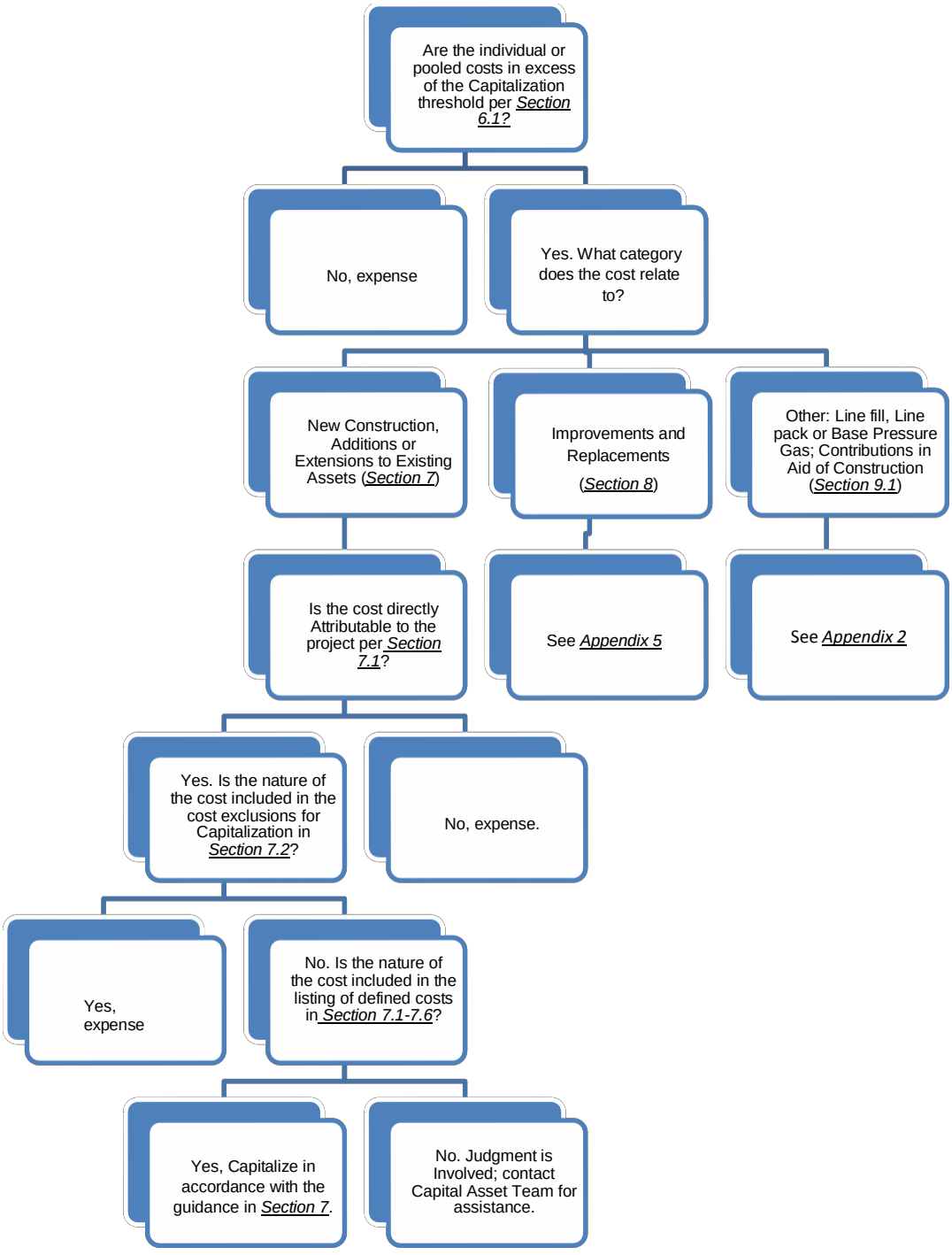
The following table identifies Costs which are excluded from capital but are not limited to. For additional guidance, please contact the capital Assets team.

Business process re-engineering	US GAAP specifies that the Costs of business process reengineering activities are to be expensed as incurred. Business process reengineering Costs that are expensed include: • Preparation of a request for proposal. • Current state assessment - the process of documenting the entity's current business processes. This activity is sometimes called mapping, developing an as-is baseline, flow charting, and determining current business process structure. • Process reengineering - the effort to reengineer business processes to increase efficiency and effectiveness. • Restructuring the work force - the effort to determine what employee composition is necessary to operate the reengineered business processes.
Charitable donations; sponsorships, social license or community investment paid to support a project	Charitable donations are payments made on an unconditional basis, and for which we do not receive any consideration in return; they are expensed as incurred. Some Sponsorships that derive direct benefit to a specific project can be Capitalized. Please refer to the Memorandum "Sponsorship and Donations Procedural Guidelines".
Cloud computing	Certain expenditures incurred in regard to cloud computing can be Capitalized. For detailed guidance, please refer to the Cloud Computing Memorandum.
Contaminated soils cleanup	In general, contaminated soil cleanup is to be charged to expense. US GAAP guidance allows Capitalization subject to a recoverability test, only if at least one of the following criteria is met: • The condition of the property is improved as compared with the condition of the property when originally constructed (or acquired, if later); or • The Costs are incurred in preparing the property for sale and the property is classified as "held for sale" on the balance sheet, subject to a recoverability test. Cleanup Costs may also be eligible for Capitalization in situations where the soil has been contaminated by a third party prior to the Company obtaining its right of way, and construction cannot occur unless the contaminated soil is remediated.
Equipment tagging and data	Equipment tagging uses a Company-specific label that is attached to each identifiable piece of equipment. This serves the function of a serial number, whereby information on that piece of equipment can be pulled up and reviewed by Operations for maintenance purposes. Equipment data is the actual vendor-specific information entered into the maintenance management system. As these Costs are viewed as ongoing record management for maintenance of the capital Assets, the Costs are expensed.

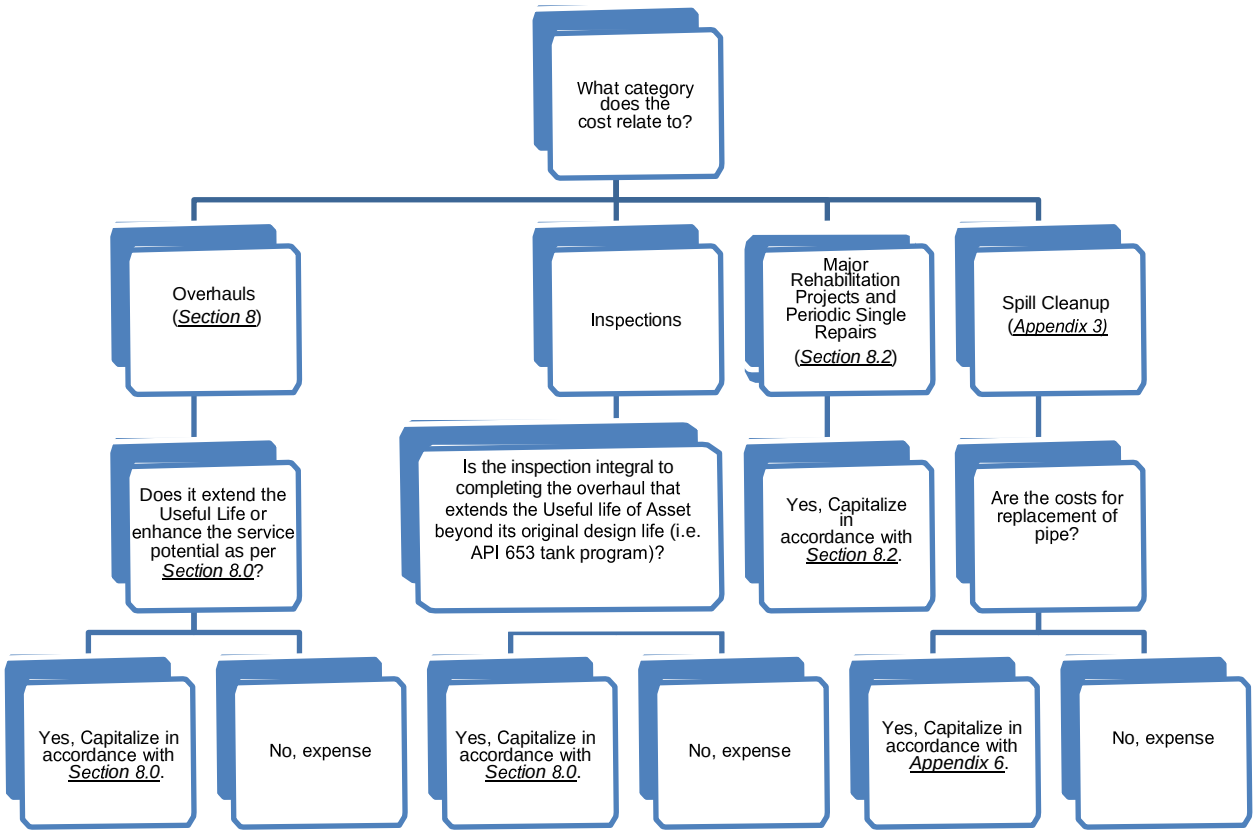
General and administrative Costs not Directly Attributable to capital projects	General and administrative Costs which are not Directly Attributable to capital projects are expensed as incurred. This would include items such as office support services, human resources, IT, accounting, legal, and executive Costs which are not chargeable to a capital project. For clarity, general and administrative Costs may only be Capitalized in accordance with *Section 7.5 – Overhead-related Costs* (Some G&A Costs may be Capitalized according to rate regulated rules or guidelines).
Initial operating losses	Losses incurred during the period after the Asset is available and, in the condition, necessary for its intended use but before it reaches its commercial operation date, are recognized in income.
Internal use software – Application development stage	Data conversion (other than software Costs as discussed above). The process of data conversion from old to new systems may include purging or cleansing of existing data, reconciliation or balancing of the old data with data in the new system, creation of new/additional data, and conversion of old data to the new system. Software maintenance and unspecified upgrade agreements are frequently entered into at the time of initial purchase but are not to be considered part of the capital Cost of the project. These Costs are expensed in the period in which they are incurred. Agreements which provide support in future fiscal years should be treated as a prepaid expense which is amortized to expense over the term of the agreement. Costs incurred after the point at which a computer software project is complete and ready for its intended use (i.e., after all substantial testing is complete) are expensed. General and administrative and overhead Costs are addressed separately within *Appendix 3 – Directly Attributable capital Cost exclusions*.
Membership and professional dues	These Costs are expensed as they are incurred.
Spill cleanup and environmental remediation Costs	Expenditures incurred because of a line break and subsequent oil spill are charged to expense as incurred as such expenditures do not generate any future economic benefits to the Company. Costs incurred in relation to environmental remediation related to a spill are also expensed. However, an exception to this general rule may be made where any portion of the pipeline or associated equipment is replaced because of a line break or spill. In that case, the Cost of the replacement is Capitalized, and the undepreciated Cost of the replaced Asset is expensed in accordance with the relevant provisions of this Policy. If Group Method of Depreciation is applied to the replaced Asset, the Cost is instead recorded to accumulated Depreciation.
Start-up Costs and expenditures for commencing new operations	Start-up Costs such as advertising, organization Costs, including governmental charges and legal and professional fees relating to the commencement of a new operation (e.g. new facility, Asset, or plant) are expensed.

Training Costs of employees or consultants	The Costs of ongoing training of employees or consultants are expensed as incurred. This would include travel Costs for the trainer and end-user to attend training courses, the value of their time spent while training, the Cost of developing training courses and the Cost of the facilities and equipment used for training. See *Appendix 2 – Directly Attributable capital Cost inclusions* which discusses the development of (training) manuals, which may be Capitalized in some situations.

Appendix 4: Decision Tree for Capitalization



Appendix 5: Decision Tree for Improvements and Replacements



Appendix 6: Pipeline Maintenance and Repair Guideline

Assessment Activities	Major Rehabilitation Project[1]
Pipeline Integrity Runs (Corrosion, Crack Detection and deformation tools)	Expense
Hydro tests	Expense
Construction Activities	
Replacement: One Unit of Property[2] or Greater	Capital
Replacement: Less than One Unit of Property[2]	Expense
Sleeving[3]	Capital
Recoating[3]	Capital
Rewrapping	Capital

1. Integrity Programs classified as Major Rehabilitation Projects extend the overall pipeline system's Useful Life and serviceability.
2. EG: Unit of Property for pipeline is 10 meters for CAD affiliates; 33 feet for US affiliates, 1 meter for Utilities
3. Currently, pipe recoating or sleeving is the preferred method of repair in Major Rehabilitation Projects. Recoating is capitalized when it extends the Useful Life of the pipeline. Hydro testing of pipe during the commissioning phase of a project is capitalized

ENBRIDGE GAS INC.

Undertaking of Ms. Ferguson
To Mr. Brett

REF: Tr.1 p93

To advise when these studies were done and when they were approved by the Board.

Response:

Both legacy EGD and Union operated under separate capitalization policies prior to amalgamation. These policies were filed as part of each company's respective 2013 rebasing application. The EGD and Union rate zones continue to operate under these capitalization policies.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Dr. Higgin

REF: Tr.1 p100

To provide the statistics supporting the M1 and M2 graphs for 2019, and for the Union North rate zones.

Response:

When adjusting rates each year for changes to NAC, the Union rate zones apply the most recent actual NAC for each rate class, calculated using the Board-approved 50:50 weather normal for the forecast year. For 2019 rates, 2017 actual NAC calculated using the 2019 weather normal is used as the target NAC for each rate class. This is a continuation of the Board-approved methodology used during the 2014 to 2018 IRM.

Unlike the EGD rate zone's Board-approved forecasted Average Use used for adjusting rates, the Union rate zones' methodology of using the most recent actual NAC does not involve regression analysis, and so there are no associated statistics such as the T-Stat, R^2, standard deviation, etc. Enbridge Gas can examine the historical accuracy of Union's methodology by examining the average percentage variance of the actual relative to target (forecast) NAC, as shown in the tables below. The average percent variance for Rate M1 and Rate M2 are -1.8% and 1.7%, respectively, over the past five years. For the same period, the average percent variance for Rate 01 and Rate 10 are -1.1% and -0.8%, respectively.

Note the NAC figures shown below are calculated using the corresponding weather normal in each year.

			Actual vs Target			Actual vs Target
	Rate M1		% variance	Rate M2		% variance
	Actual	Target		Actual	Target	
2013	2,768	2,778	-0.4%	169,422	143,867	17.8%
2014	2,748	2,751	-0.1%	167,537	165,085	1.5%
2015	2,676	2,761	-3.1%	163,129	169,121	-3.5%
2016	2,667	2,852	-6.5%	159,933	172,693	-7.4%
2017	2,764	2,738	0.9%	166,969	166,297	0.4%
Average			-1.8%			1.7%

			Actual vs Target			Actual vs Target
	Rate 01		% variance	Rate 10		% variance
	Actual	Target		Actual	Target	
2013	2,900	2,765	4.9%	168,975	157,381	7.4%
2014	2,923	2,898	0.9%	172,516	167,443	3.0%
2015	2,799	2,901	-3.5%	162,078	169,025	-4.1%
2016	2,788	3,015	-7.5%	159,855	177,214	-9.8%
2017	2,835	2,844	-0.3%	163,483	164,329	-0.5%
Average			-1.1%			-0.8%

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Dr. Higgin

REF: Tr.1 p104

To advise what the amount would have been on the trend line.

Response:

After performing the hypothetical exercise of calculating the simple NAC trend, the results are as follows:

The 10 year trend for Rate M1 NAC yields 2,662 m^3 per customer for 2019. This is approximately 4% lower than the 2019 target NAC. If this trend line NAC is used to adjust rates, then Rate M1 rates would correspondingly increase by approximately 4%.

The 10 year trend for Rate M2 NAC yields 160,611 m^3 per customer for 2019. This is approximately 4% lower than the 2019 target NAC. If this trend line NAC is used to adjust rates, then Rate M2 rates would correspondingly increase by approximately 4%.

Note, this exercise is based on historical data calculated using the 2019 weather normal.

The NAC adjustment to rates and the NAC Deferral mechanism work together to keep both the company and the customer whole. That is, if the actual NAC is lower than the target NAC, there will be an amount collected from customers. If the actual NAC is higher than the target NAC, there will be an amount refunded to customers.

ENBRIDGE GAS INC.

Undertaking of Mr. Small
To Ms. Girvan

REF: Tr.1 p113

To file the current balances for the 2018 DVAS.

Response:

Attached to this response are the current preliminary balances for the accounts that Enbridge Gas expects to seek clearance of, with respect to the EGD rate zone (Attachment #1) and Union rate zones (Attachment #2), as part of the forthcoming 2018 Earnings Sharing and Deferral Clearance application.

EGD RATE ZONE
DEFERRAL & VARIANCE ACCOUNT BALANCES
AT MARCH 31, 2019

Line No.	Account Description	Account Acronym	Principal ($000's)	Interest ($000's)	Total ($000's)
	Non Commodity Related Accounts				
1.	Deferred Rebate Account	2018 DRA	981.6	(6.9)	974.7
2.	Gas Distribution Access Rule Impact D/A	2018 GDARIDA	117.1	0.7	117.8
3.	Manufactured Gas Plant D/A	2018 MGPDA	888.0	64.4	952.4
4.	Electric Program Earnings Sharing D/A	2018 EPESDA	(1,210.1)	(11.0)	(1,221.1)
5.	Average Use True-Up V/A	2018 AUTUVA	(18,787.8)	(115.1)	(18,902.9)
6.	Earnings Sharing Mechanism Deferral Account	2018 ESMDA	(27,350.0)	(167.5)	(27,517.5)
7.	Customer Care CIS Rate Smoothing D/A	2018 CCCISRSDA	(4,901.6)	(51.2)	(4,952.8)
8.	Customer Care CIS Rate Smoothing D/A	2017 CCCISRSDA	(2,785.3)	(10.2)	(2,795.5)
9.	Customer Care CIS Rate Smoothing D/A	2016 CCCISRSDA	(779.9)	(2.9)	(782.8)
10.	Customer Care CIS Rate Smoothing D/A	2015 CCCISRSDA	1,124.2	4.1	1,128.3
11.	Customer Care CIS Rate Smoothing D/A	2014 CCCISRSDA	2,927.0	10.8	2,937.8
12.	Customer Care CIS Rate Smoothing D/A	2013 CCCISRSDA	4,634.9	17.0	4,651.9
13.	Transition Impact of Accounting Changes D/A	2019 TIACDA	4,435.8	-	4,435.8 [1]
14.	Post-Retirement True-Up V/A	2018 PTUVA	256.6	1.6	258.2
15.	Dawn Access Costs D/A	2018 DACDA	1,173.7	7.2	1,180.9
16.	OEB Cost Assessment V/A	2018 OEBCAVA	2,702.3	45.6	2,747.9
17.	Pension and OPEB Forecast Accrual Vs. Actual Cash Payment Differential V/A	2018 P&OPEBFAVACPDVA	-	(2.2)	(2.2)
18.	Total non commodity Related Accounts		(36,573.5)	(215.6)	(36,789.1)
	Commodity Related Accounts				
19.	Transactional Services D/A	2018 TSDA	(1,304.7)	(7.9)	(1,312.6)
20.	Storage and Transportation D/A	2018 S&TDA	1,787.7	80.2	1,867.9
21.	Unaccounted for Gas V/A	2018 UAFVA	5,616.0	24.4	5,640.4
22.	Total commodity related accounts		6,099.0	96.7	6,195.7
23.	Total Deferral and Variance Accounts		(30,474.5)	(118.9)	(30,593.4)

Notes:
1. The TIACDA balance is being cleared over a 20 year period. The current outstanding balance is $62,101.2 thousand. As part of the 2018 ESM and Deferral Clearance proceeding, the Company will be requesting clearance of the 2019 instalment of $4,435.8 thousand.

UNION RATE ZONES
DEFERRAL & VARIANCE ACCOUNT BALANCES
AT MARCH 31, 2019

Line No.	Account Number	Account Name	Principal ($000's)	Interest ($000's)	Total ($000's)
	Gas Supply Accounts:				
1	179-107	Spot Gas Variance Account	-	-	-
2	179-108	Unabsorbed Demand Costs (UDC) Variance Account	(9,712)	(161)	(9,873)
3	179-131	Upstream Transportation Optimization	10,273	109	10,381
4	179-132	Deferral Clearing Variance Account - Supply	(403)	(7)	(410)
5	179-132	Deferral Clearing Variance Account - Transport	(264)	(5)	(269)
6	Total Gas Supply Accounts (Lines 1 through 5)		(107)	(64)	(171)
	Storage Accounts:				
7	179-70	Short-Term Storage and Other Balancing Services	1,413	16	1,428
	Other:				
8	179-103	Unbundled Services Unauthorized Storage Overrun	-	-	-
9	179-112	Gas Distribution Access Rule (GDAR) Costs	-	-	-
10	179-120	IFRS Conversion Cost	-	-	-
11	179-123	Conservation Demand Management (CDM)	(1,054)	(14)	(1,068)
12	179-132	Deferral Clearing Variance Account	(1,069)	(19)	(1,088)
13	179-133	Normalized Average Consumption	(20,322)	(327)	(20,649)
14	179-134	Tax Variance	(413)	(5)	(418)
15	179-135	Unaccounted for Gas (UFG) Volume Variance Account	1,733	22	1,755
16	179-136	Parkway West Project Costs	7	8	15
17	179-137	Brantford-Kirkwall/Parkway D Project Costs	(824)	(15)	(839)
18	179-138	Parkway Obligation Rate Variance	288	-	288
19	179-141	Unaccounted for Gas (UFG) Price Variance Account	2,101	30	2,131
20	179-142	Lobo C Compressor/Hamilton-Milton Pipeline Project Costs	(5,829)	(80)	(5,909)
21	179-143	Unauthorized Overrun Non-Compliance Account	(5)	-	(5)
22	179-144	Lobo D/Bright C/Dawn H Compressor Project Costs	(6,988)	(95)	(7,083)
23	179-149	Burlington-Oakville Project Costs	(3,358)	(45)	(3,403)
24	179-151	OEB Cost Assessment Variance Account	1,203	20	1,223
25	179-153	Base Service North T-Service TransCanada Capacity	-	-	-
26	179-156	Panhandle Reinforcement Project Costs	(2,312)	(21)	(2,333)
27	179-157	Pension & OPEB Forecast Accrual vs Actual Cash Payment Differential Variance Account	-	(108)	(108)
28	Total Other Accounts (Lines 8 through 27)		(36,842)	(650)	(37,492)
29	**Total Deferral Account Balances (Lines 6 + 7 + 28)**		**(35,536)**	**(699)**	**(36,235)**

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Vellone

REF: Tr.1 p126

To review paragraph 171 and advise whether it addresses the same issue in IR STAFF 8.

Response:

No, paragraph 171 of the MAADs reply argument addressed an argument by certain parties that changes should be made to Union's ICM threshold calculation. The Applicants did not argue that a base rate adjustment should be made. In contrary, the Applicants were arguing against inclusion of the capital pass-through amounts in the ICM materiality threshold calculation.

Although the Applicants did point out that a disconnect would arise between the level of base capital investment calculated by the ICM materiality threshold and the level of base capital investment that is supported by base rates, if the rate base and depreciation expense of the capital pass-through projects were included in the ICM materiality threshold, they did not propose, nor did the Board consider a base rate change. At the time, Enbridge Gas was proposing continued pass through of the capital pass-through projects to capture the changes in the revenue requirement, including utility tax timing differences.

Ultimately, the MAADs Decision directed Enbridge Gas to include the rate base and depreciation associated with the capital pass-through projects in determining the ICM materiality threshold. The Board recognized significant capital additions were funded through the capital pass-through mechanism during Union's 2014-2018 IRM term.

In this application, Enbridge Gas has included the rate base and depreciation associated with the capital pass-through projects in the ICM materiality threshold calculation as directed by the Board. In direct response to the Board's Decision, Enbridge Gas has proposed a one-time adjustment to base rates to include the capital pass-through projects, as well as amendments to the scope of the capital pass-through deferral accounts to capture only the utility tax timing differences (as detailed in Board Staff Interrogatory #8, Exhibit I.STAFF.8). These adjustments are required to support the capital pass-through projects in rates and align the level of capital investment base rates can support with that assumed by the ICM materiality threshold. The one-time

adjustment to base rates is consistent with the threshold value definitions for rate base and depreciation[1] used in calculating the ICM materiality threshold.

This proceeding is the first opportunity for Enbridge Gas to propose this base rate adjustment to address the Board's findings in the MAADs Decision.

[1] EB-2007-0673 Supplemental Report of the Board, p. 33. "RB" is defined as rate base included in base rates and "d" is defined as depreciation expense included in base rates.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Quinn

REF: Tr.1 p131

To confirm the allocation of the revenue in the deferral account.

Response:

Please see Attachment 1 for the allocation of the $0.216 million short-term transportation revenue associated with the 30,393 GJ/d of excess capacity included in the disposition of the 2017 Dawn-Parkway Expansion Project deferral account[1] in Union's 2017 Deferral Account Disposition proceeding (EB-2018-0105). The allocation of the revenue was based on the 2013 Board-approved distance weighted Dawn-Parkway design day demands, updated for the Project demands.

The disposition of this deferral amount was approved by the Board on an interim basis with an order for Enbridge Gas to file evidence supporting the proportional allocation of this revenue in the 2018 deferral account disposition proceeding.[2]

[1] Account No. 179-144 - Lobo D/Bright C/Dawn H Compressor Project Costs
[2] EB-2018-0105 Decision and Rate Order, December 6, 2018, page 3.

UNION RATE ZONES
Allocation of Deferral Account 179-144
2017 Short-term Transportation Revenue Associated with 30,393 GJ/d Excess Capacity

Line No.	Particulars	Allocation Factor (1) ($10^6 m^3$/d x km)	Allocation Factor (1) (%)	Revenue Allocation (2) ($000's)
		(a)	(b)	(c)
	Union North In-franchise			
1	Rate 01	1,191	3.5%	8
2	Rate 10	312	0.9%	2
3	Rate 20	83	0.2%	1
4	Rate 25	-	-	-
5	Rate 100	6	0.0%	0
6	Total Union North In-Franchise	1,592	4.7%	10
	Union South In-franchise			
7	Rate M1	1,820	5.3%	12
8	Rate M2	612	1.8%	4
9	Rate M4	178	0.5%	1
10	Rate M5A	2	0.0%	0
11	Rate M7	82	0.2%	1
12	Rate M9	29	0.1%	0
13	Rate M10	1	0.0%	0
14	Rate T1	88	0.3%	1
15	Rate T2	570	1.7%	4
16	Rate T3	207	0.6%	1
17	Total Union South In-franchise	3,588	10.5%	23
	Ex-franchise			
18	Excess Utility Space	-	-	-
19	Rate M12	28,879	84.8%	183
20	Rate M13	-	-	-
21	Rate M16	-	-	-
22	Rate C1	-	-	-
23	Total Ex-franchise	28,879	84.8%	183
24	Total In-franchise and Ex-franchise	34,060	100.0%	216

Notes:
(1) 2013 Board-approved distance weighted Dawn-Parkway design day demands, updated for the Project demands as per EB-2015-0200, Exhibit A, Tab 10, Page 6, Table 10-1, line 6, UPDATED.
(2) Allocated in proportion to column (b).

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Quinn

REF: Tr.1 p136

To provide the design day demand of the Kirkwall line.

Response:

The Winter 18/19 design day demand Enbridge Gas delivers to the Kirkwall Custody Transfer Station from the Dawn Parkway system is 233 TJ/d.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Quinn

REF: Tr.1 p145

To provide the allocated cost of the project by rate class, similar to shown here on Schedule 16, with the 30,000 included in the allocation, which is what this Schedule shows, and the allocation without it, and the results.

Response:

Please see Attachment 1 for the impact of including 30,393 GJ/d of incremental Dawn-Parkway demands in the allocation of the 2019 revenue requirement related to the 2017 Dawn-Parkway Expansion Project.

Enbridge Gas has compared this impact to the cost allocation that would otherwise occur if the revenue was recorded and disposed of in the 2017 Dawn-Parkway Expansion Project deferral account[1]. This comparison illustrates that the difference between including the demands in proposed 2019 rates and including the revenue associated with the demands in the Project deferral account is nominal.

[1] Account No. 179-144 - Lobo D/Bright C/Dawn H Compressor Project Costs.

UNION RATE ZONES
2019 Capital Pass-Through Adjustment for the 2017 Dawn-Parkway Expansion Project
Impact of Including Incremental Project Demands of 30,393 GJ/d

Line No.	Particulars ($000s)	Impact to 2019 Rates: Including 30,393 GJ/d Demands (1) (a)	Excluding 30,393 GJ/d Demands (b)	Variance (c) = (a - b)	Incremental Rate M12 Revenue Adjustment (2) (d)	Total Impact (e) = (c + d)	Estimated 2019 Deferral Account Allocation (3) (f)	Difference (g) = (f - e)
	Union North In-franchise							
1	Rate 01	(1,471)	(1,430)	(41)	-	(41)	(45)	(4)
2	Rate 10	(15)	(4)	(11)	-	(11)	(12)	(1)
3	Rate 20	(200)	(198)	(3)	-	(3)	(3)	(0)
4	Rate 25	(90)	(90)	0	-	0	-	(0)
5	Rate 100	(236)	(236)	(0)	-	(0)	(0)	(0)
6	Total Union North In-Franchise	(2,013)	(1,958)	(55)	-	(55)	(61)	(6)
	Union South In-franchise							
7	Rate M1	(3,746)	(3,676)	(70)	-	(70)	(70)	1
8	Rate M2	109	132	(24)	-	(24)	(23)	0
9	Rate M4	56	63	(7)	-	(7)	(7)	0
10	Rate M5A	(218)	(217)	(0)	-	(0)	(0)	0
11	Rate M7	57	60	(3)	-	(3)	(3)	0
12	Rate M9	33	34	(1)	-	(1)	(1)	0
13	Rate M10	1	1	(0)	-	(0)	(0)	0
14	Rate T1	(16)	(13)	(3)	-	(3)	(3)	0
15	Rate T2	204	226	(22)	-	(22)	(22)	0
16	Rate T3	264	272	(8)	-	(8)	(8)	0
17	Total Union South In-franchise	(3,256)	(3,118)	(138)	-	(138)	(137)	1
	Ex-franchise							
18	Excess Utility Space	(32)	(32)	(0)	-	(0)	-	0
19	Rate M12	46,306	46,113	193	(1,308)	(1,115)	(1,110)	5
20	Rate M13	(2)	(2)	(0)	-	(0)	-	0
21	Rate M16	(7)	(7)	(0)	-	(0)	-	0
22	Rate C1	(55)	(55)	(0)	-	(0)	-	0
23	Total Ex-franchise	46,209	46,016	193	(1,308)	(1,115)	(1,110)	5
24	Total (line 6 + line 17 + line 23)	40,941	40,941	-	(1,308)	(1,308)	(1,308)	-
25	Gas Supply Admin	(25)	(25)	-	-	-	-	-
26	Total In-franchise and Ex-franchise	40,916	40,916	-	(1,308)	(1,308)	(1,308)	-

Notes:
(1) Exhibit F1, Tab 2, Rate Order, Working Papers, Schedule 16, p. 3.
(2) Exhibit I.STAFF.11, Attachment 1.
(3) Revenue of $1.308 million allocated in proportion to 2013 distance weighted Dawn-Parkway design day demands updated to include the 2017 Dawn-Parkway Project demands including the 30,393 GJ/d.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Quinn

REF: Tr.1 p150

To advise the company's position on the expected value from the C1 contracts that would go to the otherwise unsold 30,000 TJS of capacity if it remained unsold in the board's determination.

Response:

No amount of C1 long-term revenue would be included in revenue allocated to the 30,393 GJ/d of excess capacity.

ENBRIDGE GAS INC.

Undertaking of Mr. Small
To Mr. Quinn

REF: Tr.1 p151

To file the company's policy document in whatever form it exists that describes the practice to distinguish between the PGVA and the TDSA.

Response:

Enbridge Gas confirms there is not a policy document describing the practice to distinguish between the PGVA and TDSA. The Gas Accounting group ensures that the amounts are booked correctly as either gas costs or transactional services revenue items and that amounts are booked accurately to either the PGVA or TSDA.

ENBRIDGE GAS INC.

Undertaking of Mr. Small
To Mr. Quinn

REF: Tr.1 p152

To advise whether there are departmental incentives tied to the level of margin for transactional service revenue.

Response:

There are no departmental incentives tied to the level of margin for transactional service revenue.

ENBRIDGE GAS INC.

Undertaking of Mr. Kacicnik
To Mr. Quinn

REF: Tr.1 p161

To confirm whether UAF is part of company inventory.

Response:

This is to confirm for the EGD rate zone that:

- the gas used to fill newly built mains and service connections is part of UAF; and
- UAF is not part of inventory.

ENBRIDGE GAS INC.

Undertaking of Ms. Mikhaila
To Mr. Quinn

REF: Tr.1 p163

To provide a response to FRPO 8 using data for January 5, 2018

Response:

a) 7954 TJ/d

b) The following are the results from January 5, 2018.

i. 6390 TJ/d
ii. 4694 TJ/d
iii. 300 TJ/d
iv. 1527 TJ/d
v. There was a system surplus in Winter 17/18 and therefore no shortfall to manage.

ENBRIDGE GAS INC.

Undertaking of Mr. Hildebrand
To Mr. Vellone

REF: Tr.1 p176

To confirm the number is under the materiality threshold.

Response:

Confirmed, the cost of in-line inspections for the Sudbury line is under the materiality threshold.

ENBRIDGE GAS INC.

Undertaking of Mr. Hildebrand
To Mr. Quinn

REF: Tr.1 p184

What were the previous three years' expenditures on that pipeline, and were they capital or O&M?

Response:

In response to the question by FRPO at the technical conference[1], and the subsequent request by SEC, please see Table 1 below for the costs of the Sudbury Transmission line since 2015 (capital and O&M). Also, attached are Board Staff.2 and 3 which were filed in the Sudbury Replacement project leave-to-construct proceeding (EB-2017-0180).

As shown in response to Board Staff.3, part a) Union incurred capital costs of approximately $10 million, as reflected in the LTC applications filed in the preceding three years. These capital costs are reflected in Table 1. As reflected in the answer to Board Staff.3, part f), Union anticipated that with construction of the Sudbury Replacement project, it would no longer incur capital costs of $8 – 10 million over the subsequent several years. The $8 to 10 million is not an offset to the cost of the Sudbury Replacement project. In EB-2017-0180, Union explained its preferred approach was to replace a larger part of the line. This was the preferred alternative because it served the forecast growth in the City of Sudbury, solved pigging issues, and was more efficient then replacing individual sections of the pipeline.[2]

Further, Enbridge Gas confirms, as discussed at the technical conference, that there will not be material O&M savings as a result of the Sudbury Replacement project over the deferred rebasing period.[3] This is due to the regular O&M maintenance work that is still required, such as leak surveys, in-line inspections, and corrosion surveys. Please also see the response to Exhibit I.APPrO.4, part a).

[1] Tr. 1, pages 183-184.
[2] EB-2017-0180 Application, May 5, 2017, Project Summary, pages 6 – 7, para. 28.
[3] Tr. 1, pages 175-176.

Table 1:
Historical Sudbury Costs
($000's)

Year	O&M	Capital	Total
2015	382	5,627	6,009
2016	83	2,112	2,195
2017	-	9,335	9,335
2018	-	75,280	75,280
Total	465	92,354	92,819

UNION GAS LIMITED

Answers to Interrogatories from Board Staff

Interrogatory # 2

Ref: Evidence page 1, paragraphs 1 and 4, pages 5-6

Preamble:

Union Gas noted that the Project is a continuation of 3 previous Sudbury system replacement projects approved by the OEB (EB-2015-0042; EB-2016-0122, and EB-2016-0222).

Questions:

a) Please discuss and explain Union Gas' approach to regional planning of its Sudbury System expansion and replacement.

b) Did Union Gas consider filing a single application requesting approval of the 4 replacement/expansion projects (i.e. EB-2015-0042; EB-2016-0122: EB-2016-0222; EB-2017-0180)? If not, why not? Please discuss if such a comprehensive approach could be more effective in terms of planning incremental system capacity.

c) Please indicate how much incremental capacity was provided to the Sudbury system by each of the three approved and completed Sudbury replacement projects (EB-2015-0042; EB-2016-0122, and EB-2016-0222).

Response:

a) Union Gas determines system expansion projects based on future growth forecasts and/or signed contracts from Commercial/Industrial customers requesting natural gas service.

Replacement projects are assessed on an individual basis as part of the pipeline integrity and municipal replacement programs.

b) Union was not able to file the four referenced projects completed in the past with the current project due to the specific requirements of the individual cases.

The EB-2015-0042 project was an integrity project that needed to be completed in 2015 to ensure the safe operation of the Sudbury system. The EB 2016-0122 project was a growth project where the Proposed Facilities were primarily required to serve the proposed loads requested by Victoria Mine. The EB-2016-0222 project was a class location project where it was necessary to replace the pipeline to ensure compliance

with the CSA code. The EB-2017-0180 project was required to comply with a move order given to Union by the City of Greater Sudbury.

c) The incremental capacity provided by projects EB-2015-0042, EB-2016-0122 and EB-2016-0222 were 414m^3/hr, 690m^3/hr and 1242 m^3/hr respectively.

UNION GAS LIMITED

Answers to Interrogatories from Board Staff

Interrogatory # 3

Ref: Evidence page 7, paragraph 32, pages 7-8, paragraphs 31-32: "Project Cost and Economics"

Preamble:

Union Gas estimated the total capital costs for the Project at $74M. Union Gas stated that the incremental estimated cost of upsizing the pipeline from 10 inch to 12 inch diameter is $1.5 M. Union Gas did not complete a Discounted Cash Flow (DCF) analysis for the Project, explaining that this Project is needed to address primarily the integrity issues and that the cost of the upsizing is not significant. Union Gas also explained that the upsize will provide incremental capacity for new, anticipated contracts (not acquired at this time). Union Gas also indicated that the increase in pipeline size will decrease the pipeline maintenance costs.

Questions:

a) Please provide a breakdown of capital costs for comparable projects currently in-service and recently approved by the OEB.

b) Please indicate the timing and the method for recovery of the construction costs for the Project.

c) Is the estimate of $ 1.5 M incremental cost based on the assumption that all costs (except materials) will be the same regardless of the difference in diameter of the replacement pipeline?

d) Please discuss if the increased size of the replacement pipeline affects the requirements for new easements?

e) Please explain the approach to recovering the of $1.5 M estimated costs associated with upsizing the pipeline.

f) Given that the considerable length of the existing pipeline in the rest of the Sudbury System will still be 10 inch diameter; does Union expect a significant decrease in maintenance costs from the Project? What is the estimated reduction in maintenance cost resulting from the Project?

Response:

a)

Case #	Project name	Length	Diameter	Cost	Cost /meter
EB-2015-0042	Sudbury NPS 10 Replacement Project	.7 Km	NPS 12	$ 2.0 M	$2857.00
EB-2016-0122	2016 Sudbury Replacement Project	.85 Km	NPS 12	$ 2.2 M	$ 2588.00
EB-2016-0222	Sudbury Maley Replacement Project	2.8 Km	NPS 12	$ 6.3 M	$ 2250.00
Eb-2017-0180	2018 Sudbury Replacement Project	20 Km	NPS 12	$ 74 M	$ 3700.00*

*Variations in cost per metre are significantly influenced by specific project scope parameters. The 2018 Sudbury Replacement Project has large proportions of rock excavation, wetland management, a specialized Cathodic Protection design and bypass installations, which are all costly activities that are not present to the same extent or not present at all in the previously approved OEB projects as indicated in the table. It is the influence of this construction scope that has increased the cost per metre for the 2018 Sudbury Replacement Project.

b) Union will be seeking cost recovery of the Sudbury Replacement Project as part of its 2019 rates application.

c) No, the estimate of $1.5 M incremental cost to install a NPS 12 over a NPS 10 considers both the material and contractor costs for these specific diameter pipelines.

d) Union is able to construct the Proposed Facilities in the existing easement. The increased size of the new pipeline does not require the existing easement to be enlarged.

e) Union will be seeking cost recovery of the Sudbury Replacement Project as part of its 2019 rates application.

f) The length of the NPS 10 pipeline portion of the Sudbury Transmission system is longer than the proposed replacement but it is this portion of the NPS 10 Sudbury Transmission system that is experiencing a concentration of integrity issues driven by the unique localized terrain features and localized influences from the mining activities in the Sudbury Basin. The replaced pipeline section will remove known integrity issues eliminating the need to repair the existing pipeline. The current forecast for managing known integrity concerns in this section of the Sudbury transmission system is $8-$10 million over the next several years. Replacing the current pipeline will also address future integrity concerns that over time will require additional repairs and future maintenance expenditures as the current pipeline continues to experience external corrosion. Having a single diameter NPS 12 pipeline will improve the effectiveness of future inline inspections.

ENBRIDGE GAS INC.

Undertaking of Mr. Hildebrand
To Mr. Ladanyi

REF: Tr.2 p12

To address the contingency increase for Sudbury replacement.

Response:

The updated cost estimate presented in column b of the Sudbury Replacement Table in Exhibit I.EP.16 is $95.3 million, which does not show an increase for contingencies in line 3.0. The purpose of this table is to show the variance between the costs as filed and the updated cost estimate for the project. The contingencies filed and approved in the leave-to-construct application for the Sudbury Replacement project were used primarily for construction and labour expenses. An additional $8.9 million was required, and was attributed to construction and labour. Please see Exhibit JT2.3 for an explanation of the additional construction and labour costs required.

ENBRIDGE GAS INC.

Undertaking of Mr. Naczynski
To Mr. Ladanyi

REF: Tr.2 p13

To address the $573,000 for the Don River project

Response:

External and Regulatory Costs are comprised of environmental services, consulting services, geophysical services, legal fees and insurance. The increase in costs of $0.573 million is due primarily to higher permitting and design costs.

ENBRIDGE GAS INC.

Undertaking of Mr. Hildebrand
To Mr. Ladanyi

REF: Tr.2 p13

To advise why the construction labour has increased by 8.9 million for Sudbury project.

Response:

The $8.9 million change is due to increased prime contractor costs for services including:

- Design changes such as revisions to construction
- Cathodic protection
- 3rd party observation
- Environmental oversight
- Fire protection
- Construction execution delays including inclement weather

ENBRIDGE GAS INC.

Undertaking of Ms. Thompson
To Mr. Ladanyi

REF: Tr.2 p15

To provide the most current estimate for Kingsville.

Response:

There are no changes to the estimate for the Kingsville Reinforcement project.

ENBRIDGE GAS INC.

Undertaking of Mr. Hildebrand
To Mr. Ladanyi

REF: Tr.2 p15

To provide the current estimates for Stratford.

Response:

There are no changes to the estimate for the Stratford Reinforcement project.