

1500 Bishop Street, P.O. Box 1060, Cambridge, ON N1R 5X6

July 29, 2008

Ms. Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 2300 Yonge Street 26th Floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Cambridge and North Dumfries Hydro Inc.

OEB License: ED-2002-0574

Low Voltage Charges EB-2007-0900

Enclosed please find an Agreed Statement of Facts and copies of the proposed methodology for low voltage charge (one for Waterloo North Hydro and one for Hydro One).

All three parties support the joint proposal and the documents being submitted.

If you require any additional information or clarification with respect to the information, please contact myself at (519) 621-8405, ext. 2355).

Sincerely,

CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.

John W. Grotheer President and CEO

AGREED STATEMENT OF FACTS

Cambridge and North Dumfries Hydro Inc. – Low Voltage Charges EB-2007-0900

This document constitutes the Agreed Statement of Facts ("ASF") of Cambridge and North Dumfries Hydro Inc. ("C&NDHI") and of Hydro One Networks ("Hydro One") and Waterloo North Hydro ("Waterloo") in the consideration of just and reasonable Low Voltage charges for 2008, and the methodology underlying the proposed rates. This issue arose in C&NDHI's application for 2008 electricity distribution rates considered under Board file number EB-2007-0900. The ASF, the proposed methodology and the proposed rates represent the outcomes of a technical conference held on July 9, 2008 between the parties above and Board staff, as directed in Procedural Order No. 1.

The Technical conference was transcribed. The following summarizes the discussion of the issue, and the parties joint proposal on a resolution of this matter.

History

2006 EDR

Cambridge and North Dumfries Hydro Inc. ("C&NDHI") used Schedule 10-7 of the 2006 Electricity Distribution Rate Handbook in its 2006 EDR application to propose LV rates for each of Hydro One Networks ("Hydro One") and Waterloo North Hydro ("Waterloo"). The rates were \$0.0716/kW for Hydro One and \$0.20/kW for Waterloo.

2008 EDR (IRM)

As part of its 2008 EDR application under the 2nd Generation IRM plan, C&NDHI filed a proposal for corrected LV rates, as it had discovered errors in the inputs used in the 2006 application. C&NDHI made the following corrections:

- Corrected the error in 2006 by not dividing the costs to be recovered by twelve. This meant that rates were calculated by correctly dividing annual costs by annual demand.
- Corrected the 2006 proposals by reversing the Waterloo and Hydro One demand numbers (which were erroneously switched in the 2006 application)

There was some discussion of some further errors or deficiencies in the revised approach:

- Due to an error in the formula, the return on assets uses the ROE. This
 error was worked around in the 2006 EDR application by substituting the
 weighted average cost of capital in place of the ROE.
- The load on the lines, which was also swapped in 2006 was corrected.
- The approach does not take into account the share of energy on the line delivered to the embedded distributor.
- There is no reflection of grossed-up taxes or PILs.

The proposal in the 2008 IRM application was \$0.90/kW for Waterloo and \$2.60/kW for Hydro One.

Issues

The Schedule 10-7 methodology, as reflected in the spreadsheet, used only distance as an allocator of costs to the LV lines. Demand was only used as the charge determinant. The methodology assigned all costs to the embedded distributor, even though C&NDHI has other direct (retail) customers served from each line. (In technical parlance, each of C&NDHI's LV lines is a shared line.)

The parties proposed a revision to Schedule 10-7 that would address the errors in the earlier schedule. The revised schedule:

- Calculates the cost of capital based on the deemed capital structure and approved or deemed ROE and debt rates.
- Reflects both the percentage of km of line and the percentage of load on the LV line for delivering energy to the embedded distributor. This better reflects the costs that should be borne by the embedded distributor.

The proposal is a closer approximation to a cost of service to determine the revenue requirement that should be recoverable from the LV customers. The approach is not an exact cost of service model, but should give a reasonable and practical approach for determining costs. All parties agreed that the methodology is to try to determine the costs that should be recoverable from the embedded distributor(s) and to avoid any subsidization with the host distributor's other (retail) customers. Addition of an approach to incorporate taxes/PILs (grossed-up) would be a refinement that would give a better proxy of the revenue requirement to be recovered from the embedded distributor(s) through LV rates. A simplified tax/PILs calculation approach, with the 2008 IRM model as one starting point was suggested. The applicants agreed to look into the refinements.

The proposal also allows for primary feeders and distribution stations to also be factored into the determination of the revenue requirement. The allocation for the capital-related and operating and ancillary costs for these would be allocated based on the percentage of load; there is no line-length consideration. These are not applicable in this case, but the parties felt that this approach, if accepted

by the Board, could also be applicable for determining LV rates for other hostembedded distributor situations.

In addition to the accounts currently used for direct costs, the parties propose that certain other accounts be included:

- Account 1980 Supervisory System (SCADA) (capital)
- Account 5160 Maintenance of Line Transformers (expense)
- Account 5035 Overhead Distribution Transformers Operations (expense)
- Account 5055 Underground Distribution Transformers (expense)
- Account 1850 Line Transformers (capital)

The proposed revised Schedule 10-7 includes an allowance for working capital. The proposal only included operating expenses for determining the working capital allowance, but did not include a cost of power component. This matter was discussed. C&NDHI noted that, where the embedded distributor is a market participant (and billed directly by the IESO), there is no working capital requirement of that for the host distributor for the energy and wholesale market service charges, however, transmission network and connection charges are borne by the host distributor, and thus should be included in the working capital calculation. However, where the embedded distributor is not a market participant, there may be a lag between when the host distributor is billed for power delivered by the LV system and when it recovers amounts from the embedded distributor. There was also some discussion that, in the overall cost allocation model, the revenue requirement, including the working capital allowance based on controllable expenses plus cost of power, is allocated to and recovered from all customers, including any embedded distributors.

C&NDHI proposed that there should be an allowance for administrative overhead. In its original 2006 EDR application, C&NDHI had used a factor of 12% to represent administrative overhead. The Board approved the LV rates using that factor in 2006 EDR. No party in the technical conference opposed this.

Hydro One discussed its approach to determining LV rates, as it has many embedded distributors and other "direct" customers. Its approach calculates rates on a more "postage stamp" approach, but considers that the methodology is consistent with the revised approach proposed in the technical conference.

C&NDHI's proposal was to propose new "corrected" 2006 rates, which are based on 2004 historical data. However, C&NDHI's application is for 2008 rates. There was discussion of two options for updating the rates to be more current with 2008:

 Calculate the corrected 2006 LV rates per the new schedule, and then apply subsequent IRM adjustments to may adjustments to the LV rates has been done for distribution rates for other distributors; or Use forecast or most recent historical (e.g. 2007) data to calculate more current LV rates.

There was some discussion of these approaches. C&NDHI has indicated its preference for the former approach. This approach has also been used recently in rate applications for Welland Hydro, EnWin and PUC to make adjustments to 2006 rates and then apply the 2007 adjustment. The latter approach may be more practical in some circumstances and is one step. However, both approaches are reasonable and could be used based on circumstances.

The proposed approach gives LV rates in the range of \$0.50/kW. These rates are before adjustments discussed above, and refinements may alter slightly the proposed rates. This is within the range of LV rates that have been approved by the Board in other applications.

Proposed Embedded Distribution Low Voltage Charges - Waterloo North Hydro

(AN*Col 11)

14,118

(Note all cells are referenced, no direct input in this sheet)

12,518 RR*Col 11

13,730 ѕим

Waterloo Border		Waterloo North Hydro		EB-2007-0900									
1		2		3		4		5			6		
Asset Class		Total annual OM&A costs of asset class providing LV services (\$)		Original cost of asset class providing LV services		Accumulative amortization or asset class providing LV services		Annual amortization on asset class providing LV services			NBV of asset class providing LV services		
Distribution Stations	PP	-	В	-	С	-	D	-		E	-		
Transformer Stations	QQ	-	G	=	Н	-	I	-		J	-		
Low Voltage lines	RR	\$1,893,724	L	\$43,132,918	M	\$17,508,524	N	\$1,726,547		0	\$25,624,394		
												-	
		7		8		9		10			11		
		2	Share of facilities	1		Sh	are of faciliti	ies					
		kW or kVA		kW or kVA		kW or kVA		kW or kVA			percent		
		Total line length or station		Line length providing LV		Annual billed total demand or station/line providing LV		Annual billed Embedded Distributor demand on station/line providing LV					
Asset Class		capacity in asset class (KM)		services (KM)		services (kW or kVA)		services (kW or kVA)			Utilization facto		
Distribution Stations					AA	-	BB	-		(Col 10/Col 9)	0.00%		
Transformer Stations					cc	-	DD	-		(Col 10/Col 9)	0.00%		
Low Voltage lines	GG	727	нн	8.4	EE	121,536	FF	76,261		(Col 8/Col 7) * (Col 10/Col 9)	0.73%		
	1	1											
		12		12 (a)		13		14		15		15 (a)	16
		\$		\$		\$		\$		\$		\$	\$/kW or \$/kVA
Asset Class		Return on assets used to provide LV Services		PILs		Annual Amortization or assets used to provide LV Services		OM & A costs (with burden) associated with assets used to provide LV Services		Total annual cos associated with assets used to provide LV Services		Total annual cost associated with assets used to provide LV Services + 2007 & 2008 IRM Adjustments	Monthly kW Rate associated with the delivery of LV Services
Distribution Stations	(Y*S*Col 11)	-	(AB*Col 11)	-	D*Col 11	-	PP*Col 11	-	SUM	-	(((Col 15*(1+AO))* (1+AP))	-	
Transformer Stations	(AE*S*Col 11)	-	(AH*Col 11)	-	I*Col 11	-	QQ*Col 11	-	SUM	-	(((Col 15*(1+AO))* (1+AP))	-	
i e e e e e e e e e e e e e e e e e e e	1	1		1	1	1		1		1	1		

N*Col 11

4,264

45,211 \$ 0.59 [Sum Col 15 (a)] [Sum Col 15 (a)

45,211

(((Col 15*(1+AO))*

(1+AP))

44,629

Col 10 FF]

Low Voltage lines

(AK*S*Col 11)

EB-2007-0900 Cambridge & North Dumfries Hydro Inc. Proposed Embedded Distribution Low Voltage Charges Inputs - Waterloo North Hydro Inc.

			Input cells Calculated Cells
Distributor debt rate (deemed) Distributor return on equity before tax (utilized in formula) Distributor tax rate (current tax rate) Weighted Average Cost of Capital (WACC) Equity Portion of WACC		P Q R S	percent 6.01% 9.00% 33.50% 7.51% 4.50%
Deemed debt share Deemed equity share		T U	50.00% 50.00%
Working Capital Allowance Percentage Administrative Burden Percentage (applicable to all asset classes and OM&A only)		V 00	15% 12%
Rates charged for calcuation of Energy Sales for Working Capital Allowance Commodity (per kWh) Wholesale Market Service Charge (WMS) (per kWh) Transmission Network (per kW) Transmission Connection (per kW) 2007 IRM Adjustment - Sheet 8, Cell D12	[Most recent (April 08) Board Approved RPP Rate] (Current LDC Retail Rate of Applicable Rate Class) (Current LDC Retail Rate of Applicable Rate Class) (Current LDC Retail Rate of Applicable Rate Class)	TT UU VV WW	\$ 0.0545 \$ 0.0062 \$ 1.6160 \$ 1.6452
2008 IRM Adjustment (before Tax Adjustment) - Sheet 7, Cells D12 + E12	IPI - X - K	AP	0.4%
	USoA Accts 5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A*(1+OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705*** (B - C = E) With losses	A PP B C D E	- - - - -
Rate Base - Distribution Stations NBV of assets Working Capital Allowance: OM&A Costs with Administration Burden Power Supply Expenses: Energy Sales (if applicable) WMS (if applicable) Transmission Network Transmission Connection Working Capital Working Capital Allowance Rate Base	(=E) (=PP) (SS x TT) (SS x UU) (BB X VV) (BB X WW) (X x V = X1) (W + X1 = Y)	W X X1 Y	-
PILs Calculation Target Net Income before consideration of PILS Target Net Income before consideration of PILS times tax rate = PILs Provision PILs Provision Grossed Up - before application of Utilization Factor	(Y x XX) (YY x R) (ZZ / (1 - R)	YY ZZ AB	-

10f3

Transformer Stations (TS)	USoA Accts		\$
	5005****, 5010*****, 5012 **, 5014, 5015, 5105****,		
Total annual OM&A costs of asset class providing LV services	5110**, 5112	F	
OM&A with Administration Burden	((F * (1 + OO) = QQ))	QQ	-
Original cost of asset class providing LV services	1805**, 1806**, 1808**, 1815, 1825	G	
Accumulative amortization on asset class providing LV services	2105***	Н	
Annual amortization on asset class providing LV services	5705***	1	
NBV of asset class providing LV services	(G - H = J)	J	-
Annual Billed Demand (kW or kVA) Total on Transformer Stations		СС	-
Annual Billed Demand (kW or kVA) of Embedded Distributor on Transformer Stations		DD	-
	With losses	AC	-
Rate Base - Transformer Stations			
NBV of assets	(= J)	z	_
Working Capital Allowance:		_	
OM&A Costs with Administration Burden	(= QQ)		_
Power Supply Expenses:	()		
Energy Sales (if applicable)	(AC x TT)		-
WMS (if applicable)	(AC x UU)		-
Transmission Network	(DD X VV)		-
Transmission Connection	(DD X WW)		-
Working Capital	,	AD	-
Working Capital Allowance	$(AD \times V = AD1)$	AD1	-
Rate Base	(AD1 + Z = AE)	ΑE	-
PILs Calculation			
Target Net Income before consideration of PILS	(AE x XX)	AF	-
Target Net Income before consideration of PILS times tax rate = PILs Provision	(AF x R)	AG	-
PILs Provision Grossed Up - <u>before</u> application of Utilization Factor	(AG / (1 - R)	AH	-

Low Voltage Lines		USoA Accts		\$
Total annual OM&A costs of asset class providing LV services	Ovhd	5020, 5025, 5030, 5095, 5005****, 5010****,	ĸ	1,690,825
James and the second se		5120, 5125, 5135, 5035****, 5160****, 5105****		, , , , , , , ,
	UG	5040, 5045, 5050, 5090		
		5145, 5150, 5055****		
OM&A with Administration Burden		((K * (1 + OO) = RR))	RR	1,893,724
Original cost of asset class providing LV services	Ovhd	1830, 1835, 1850, 1980	L	43,132,918
		1840, 1845		10,102,010
Accumulative amortization on asset class providing LV services		2105***	м	17,508,524
Annual amortization on asset class providing LV services		5705***	N	1,726,547
NBV of asset class providing LV services		(L - M = O)	0	25,624,394
1.2.7 S. 4355. 51455 p. 5144. lig 2.7 551.11555		(2 3)		20,02 1,00 1
Annual Billed Demand (kW or kVA) Total on Low Voltage Lines			EE	121,536
Annual Billed Demand (kW or kVA) of Embedded Distributor on Low Voltage Lines			FF	76,261
Annual Energy (kWh) of Embedded Distributor on Low Voltage Lines (if applicable)	****	With losses	AI	
Timidal Energy (KVVII) of Emboaded Biothbater on Eest Voltage Embo (ii applicable)		Will 100000	/ "	
Total Line Length (KM) of System (overhead and/or underground as applicable)			GG	727
Total Line Length (KM) to provide LV Services			НН	8.4
Total Line Longin (1417) to provide LV corvided			1	0.1
Rate Base - Low Voltage Lines				
NBV of assets		(= O)	LL	25,624,394
Working Capital Allowance:				20,02 1,00 1
OM&A Costs with Administration Burden		(= RR)		1,893,724
Power Supply Expenses:		(-100)		1,000,724
Energy Sales (if applicable)		(AI x TT)		_
WMS (if applicable)		(AI x UU)		_
Transmission Network		(FF X VV)		123,238
Transmission Connection		(FF X WW)		125,465
Working Capital		(11 × ****)	AJ	2,142,426
Working Capital Allowance		$(AJ \times V = AJ1)$	AJ1	321,364
Rate Base		(AJ1 + LL = AK)	AK	25,945,758
Truic Dage		(1011 LL - 1111)	Δι,	20,343,730
PILs Calculation				
Target Net Income before consideration of PILS		(AK x XX)	AL	1,167,559
Target Net Income before consideration of PILS times tax rate = PILs Provision		(AL x R)	AM	391,132
PILs Provision Grossed Up - before application of Utilization Factor		(ALXIX) (AM / (1 - R))	AN	588,169
application of object op - before application of offitzation ractor		[(······/ (1 14))		300,109

2of3

⁻ reallocate TS building and other building costs where necessary - amounts re-allocated from Station Buildings & Fixtures expense (if applicable)

EB-2007-0900 Cambridge & North Dumfries Hydro Inc. Proposed Embedded Distribution Low Voltage Charges Inputs - Waterloo North Hydro Inc.

- will need to record portion attributable to the assets providing the LV services
- if any portion of the account is applicable
- applicable only if i) Host Distributor pays IESO for Commodity and WMS Charges for energy consumed by the Embedded Distributor and
 - ii) recommended methodology is applied by a Host LDC for each Embedded customer, if deriving individual customer rates;
 - or, for all Embedded customers as a group, if developing a pooled rate

30f3

\$17,508,524

Proposed Embedded Distribution Low Voltage Charges - Hydro One Networks Inc.

\$1,893,724

Hydro One

RR

(Note all cells are referenced, no direct input in this sheet)

\$1,726,547

	1			1	1			1	ı	1	1
1		2		3		4		5			6
Asset Class		Total annual OM&A costs of asset class providing LV services (\$)		Original cost of asset class providing LV services		Accumulative amortization on asset class providing LV services		Annual amortization on asset class providing LV services			NBV of asset class providing LV services
Distribution Stations	PP	-	В	-	С	•	D	-		E	-
Transformer Stations	QQ	=	G	=	Н	=	I	=		J	=

М

EB-2007-0900

\$43,132,918

		7		8		9		10		11
		1	Share of facilities			She	are of facilitie	?S		
		kW or kVA		kW or kVA		kW or kVA		kW or kVA		percent
Asset Class		Total line length or station capacity in asset class (KM)		Line length providing LV services (KM)		Annual billed total demand on station/line providing LV services (kW or kVA)		Annual billed Embedded Distributor demand on station/line providing LV services (kW or kVA)		Utilization factor
Distribution Stations					AA	-	BB	-	(Col 10/Col 9)	0.00%
Transformer Stations					CC	-	DD	-	(Col 10/Col 9)	0.00%
Low Voltage lines	GG	727	нн	8.6	EE	132,868	FF	27,005	(Col 8/Col 7) * (Col 10/Col 9)	0.24%

		12		12 (a)		13		14		15		15 (a)	16
		\$		\$		\$		\$		\$		\$	\$/kW or \$/kVA
Asset Class		Return on assets used to provide LV Services		PILs		Annual Amortization on assets used to provide LV Services		OM & A costs (with burden) associated with assets used to provide LV Services		Total annual cost associated with assets used to provide LV Services		Total annual cost associated with assets used to provide LV Services + 2007 & 2008 IRM Adjustments (IRM excluded from PILs)	Monthly kW Rate associated with the delivery of LV Services
Distribution Stations	(Y*S*Col 11)	-	(AB*Col 11)	-	D*Col 11	-	PP*Col 11	-	SUM	-	(((Col 15*(1+AO))* (1+AP))	-	
Transformer Stations	(AE*S*Col 11)	-	(AH*Col 11)	-	I*Col 11	-	QQ*Col 11	-	SUM	-	(((Col 15*(1+AO))* (1+AP))	-	
Low Voltage lines	(AK*S*Col 11)	4,677	(AN*Col 11)	1,413	N*Col 11	4,151	RR*Col 11	4,553	SUM	14,794	(((Col 15*(1+AO))* (1+AP))	14,987	

14,987 \$ 0.55 [Sum Col 15 (a)

[Sum Col 15 (a)]

\$25,624,394

Col 10 FF]

Sheffield

Low Voltage lines

	Distribution Low Voltage Onlinges inputs Tryare		
			Innut calls
			Input cells
			Calculated Cells
			poroont
Distributor debt rate (deemed)		Р	percent 6.01%
Distributor return on equity before tax (utilized in formula)		Q	9.00%
		-	
Distributor tax rate (current tax rate)		R	33.50%
Weighted Average Cost of Capital (WACC)		S	7.51%
Equity Portion of WACC		XX	4.50%
Deemed debt share		Т	50.00%
Deemed equity share		U	50.00%
Working Capital Allowance Percentage		V	15%
Administrative Burden Percentage (applicable to all asset classes and OM&A only)		00	12%
Rates charged for calcuation of Energy Sales for Working Capital Allowance			
Commodity (per kWh)	[Most recent (April 08) Board Approved RPP Rate]	TT	\$ 0.0545
Wholesale Market Service Charge (WMS) (per kWh)	(Current LDC Retail Rate of Applicable Rate Class)	UU	\$ 0.0062
Transmission Network (per kW)	(Current LDC Retail Rate of Applicable Rate Class)	VV	\$ 1.7054
Transmission Connection (per kW)	(Current LDC Retail Rate of Applicable Rate Class)	ww	\$ 1.6162
Transmission Connection (per kw)	(Current LDC Retail Rate of Applicable Rate Class)	VVVV	\$ 1.0102
2007 IRM Adjustment - Sheet 8, Cell D12	IPI - X	AO	0.9%
2008 IRM Adjustment (before Tax Adjustment) - Sheet 7, Cells D12 + E12	IPI - X - K	AP	0.4%
District of the Boothers	110.44.4	1	
Distribution Stations	USOA Accts		\$
	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*,		\$
Total annual OM&A costs of asset class providing LV services	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114	A	·
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP))	PP	\$
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820	PP B	·
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105***	PP B C	·
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services Annual amortization on asset class providing LV services	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705***	PP B C D	·
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105***	PP B C	·
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services Annual amortization on asset class providing LV services NBV of asset class providing LV services	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705***	PP B C D	
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services Annual amortization on asset class providing LV services NBV of asset class providing LV services Annual Billed Demand (kW or kVA) Total on Distribution Stations	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705***	PP B C D E	-
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services Annual amortization on asset class providing LV services NBV of asset class providing LV services Annual Billed Demand (kW or kVA) Total on Distribution Stations Annual Billed Demand (kW or kVA) of Embedded Distributor on Distribution Stations	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705***	PP B C D	-
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services Annual amortization on asset class providing LV services NBV of asset class providing LV services Annual Billed Demand (kW or kVA) Total on Distribution Stations Annual Billed Demand (kW or kVA) of Embedded Distributor on Distribution Stations Annual Energy (kWh) of Embedded Distributor on Distribution Stations (if applicable)	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705*** (B - C = E)	PP B C D E	-
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services Annual amortization on asset class providing LV services NBV of asset class providing LV services Annual Billed Demand (kW or kVA) Total on Distribution Stations Annual Billed Demand (kW or kVA) of Embedded Distributor on Distribution Stations Annual Energy (kWh) of Embedded Distributor on Distribution Stations (if applicable) **** **Rate Base - Distribution Stations	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705*** (B - C = E)	PP B C D E AA BB SS	-
Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services Annual amortization on asset class providing LV services NBV of asset class providing LV services Annual Billed Demand (kW or kVA) Total on Distribution Stations Annual Billed Demand (kW or kVA) of Embedded Distributor on Distribution Stations Annual Energy (kWh) of Embedded Distributor on Distribution Stations (if applicable) **** **** **** **** *** *** *** *	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705*** (B - C = E)	PP B C D E	-
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Total annual OM&A costs of asset class providing LV services OM&A with Administration Burden Original cost of asset class providing LV services Accumulative amortization on asset class providing LV services Annual amortization on asset class providing LV services NBV of asset class providing LV services Annual Billed Demand (kW or kVA) Total on Distribution Stations Annual Billed Demand (kW or kVA) of Embedded Distributor on Distribution Stations Annual Energy (kWh) of Embedded Distributor on Distribution Stations (if applicable) **** **** **** **** **** **** ****	5005****, 5010*****5012*, 5016, 5017, 5105****, 5110*, 5114 ((A * (1 + OO) = PP)) 1805*, 1806*, 1808*, 1820 2105*** 5705*** (B - C = E) * With losses (= E) (= PP) (SS x TT) (SS x UU)	PP B C D E AA BB SS	
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(Y x XX)

(YY x R) (ZZ / (1 - R)

 $\mathbf{Y}\mathbf{Y}$

ΖZ ΑB

1of3

PILs Calculation

Target Net Income before consideration of PILS

Target Net Income before consideration of PILS times tax rate = PILs Provision PILs Provision Grossed Up - before application of Utilization Factor

Transformer Stations (TS)	USoA Accts		\$
()	5005****, 5010*****, 5012 **, 5014, 5015, 5105****,		Y
Total annual OM&A costs of asset class providing LV services	5110**, 5112	F	
OM&A with Administration Burden	((F * (1 + OO) = QQ))	QQ	-
Original cost of asset class providing LV services	1805**, 1806**, 1808**, 1815, 1825	G	
Accumulative amortization on asset class providing LV services	2105***	н	
Annual amortization on asset class providing LV services	5705***		
NBV of asset class providing LV services	(G - H = J)	J	-
Annual Dillad Dansard (IAM as IA/A) Tatal on Transferres a Chatiana		СС	
Annual Billed Demand (kW or kVA) Total on Transformer Stations		DD	-
Annual Billed Demand (kW or kVA) of Embedded Distributor on Transformer Stations	** With losses	AC	-
Annual Energy (kWh) of Embedded Distributor on Transformer Stations (if applicable) ***	vvitn iosses	AC	-
Rate Base - Transformer Stations			
NBV of assets	(= J)	Z	-
Working Capital Allowance:			
OM&A Costs with Administration Burden	(= QQ)		-
Power Supply Expenses:			
Energy Sales (if applicable)	(AC x TT)		-
WMS (if applicable)	(AC x UU)		-
Transmission Network	(DD X VV)		-
Transmission Connection	(DD X WW)		-
Working Capital		AD	-
Working Capital Allowance	$(AD \times V = AD1)$	AD1	-
Rate Base	(AD1 + Z = AE)	AE	-
PILs Calculation			
Target Net Income before consideration of PILS	(AE x XX)	AF	-
Target Net Income before consideration of PILS times tax rate = PILs Provision	(AF x R)	AG	_
PILs Provision Grossed Up - before application of Utilization Factor	(AG / (1 - R)	AH	-
· 			

Low Voltage Lines		USoA Accts		\$
Total annual OM&A costs of asset class providing LV services		5020, 5025, 5030, 5095, 5005****, 5010****,	K	1,690,825
		5120, 5125, 5135, 5035****, 5160****, 5105****		
		5040, 5045, 5050, 5090		
		5145, 5150, 5055****		
OM&A with Administration Burden		((K * (1 + OO) = RR))	RR	1,893,724
Original cost of asset class providing LV services		1830, 1835, 1850, 1980	L	43,132,918
	UG	1840, 1845		
Accumulative amortization on asset class providing LV services		2105***	M	17,508,524
Annual amortization on asset class providing LV services		5705***	N	1,726,547
NBV of asset class providing LV services		(L - M = O)	0	25,624,394
Annual Billed Demand (kW or kVA) Total on Low Voltage Lines			EE	132,868
Annual Billed Demand (kW or kVA) of Embedded Distributor on Low Voltage Lines			FF	27,005
Annual Energy (kWh) of Embedded Distributor on Low Voltage Lines (if applicable)	****	With losses	AI	21,005
Armual Energy (kwm) of Embedded Distributor on Low Voltage Lines (if applicable)		Williosses	AI	-
Total Line Length (KM) of System (overhead and/or underground as applicable)			GG	727
Total Line Length (KM) to provide LV Services			НН	8.6
Rate Base - Low Voltage Lines				
NBV of assets		(= O)	LL	25,624,394
Working Capital Allowance:				
OM&A Costs with Administration Burden		(= RR)		1,893,724
Power Supply Expenses:				
Energy Sales (if applicable)		(AI x TT)		-
WMS (if applicable)		(AI x UU)		-
Transmission Network		(FF X VV)		46,054
Transmission Connection		(FF X WW)		43,645
Working Capital			AJ	1,983,424
Working Capital Allowance		$(AJ \times V = AJ1)$	AJ1	297,514
Rate Base		(AJ1 + LL = AK)	AK	25,921,907
Bill a Calaulatian				
PILs Calculation		(AV VV)		4.400.400
Target Net Income before consideration of PILS		(AK x XX)	AL	1,166,486
Target Net Income before consideration of PILS times tax rate = PILs Provision		(AL x R)	AM	390,773
PILs Provision Grossed Up - before application of Utilization Factor		(AM / (1 - R))	AN	587,628

2of3

⁻ reallocate TS building and other building costs where necessary - amounts re-allocated from Station Buildings & Fixtures expense (if applicable)

EB-2007-0900 Cambridge & North Dumfries Hydro Inc. Proposed Embedded Distribution Low Voltage Charges Inputs - Hydro One Networks Inc

- will need to record portion attributable to the assets providing the LV services
- ** if any portion of the account is applicable
- ***** applicable only if i) Host Distributor pays IESO for Commodity and WMS Charges for energy consumed by the Embedded Distributor and
 - ii) recommended methodology is applied by a Host LDC for each Embedded customer, if deriving individual customer rates;
 - or, for all Embedded customers as a group, if developing a pooled rate

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