

Appendix E

DVA Rate Rider Calculation

Thunder Bay Hydro - Group 1 Deferral and Variance Calculations Model

2015 IRM Application

To segregate rate riders for Class A

Utility Name	Thunder Bay Hydro
Service Territory	
Assigned EB Number	EB-2014-0114
Name of Contact and Title	Sandra Leonetti, Regulatory Affairs
Phone Number	807 343 1016
Email Address	sleonetti@tbhydro.on.ca
We are applying for rates effective	May-01-15
Rate-Setting Method	Price Cap IR
Rate Year the Group 1 accounts were last cleared ¹	2014
Last Cost of Service Re-Basing Year	2013

Billing Determinants for Allocation of Deferral and Variance Accounts												
Rate Class	Unit	Metered kWh	Metered kW	Billed kWh for Non-RPP Customers	Estimated kW for Non-RPP Customers	1590 Recovery Share Proportion ¹	1595 Recovery Share Proportion (2009) ¹	1595 Recovery Share Proportion (2010) ¹	1595 Recovery Share Proportion (2011) ¹	1595 Recovery Share Proportion (2012) ¹	1568 LRAM Variance Account Class Allocation (\$ amounts)	Number of Customers for Residential and GS<50 classes ²
RESIDENTIAL	\$/kWh	339,721,062		32,526,740	0	0.00%	25.04%	26.04%	18.76%	33.66%		
GENERAL SERVICE LESS THAN 50 KW	\$/kWh	131,404,394		18,892,749	0	0.00%	14.36%	12.31%	7.96%	13.39%		44,881
GENERAL SERVICE 50 TO 999 KW	\$/kW	288,398,369	783,589	242,097,167	657,787	0.00%	33.19%	29.84%	40.20%	31.53%		4,492
* GENERAL SERVICE 1,000 TO 4,999 KW - Class A	\$/kW	29,677,488	72,356	29,677,488	72,356							
* GENERAL SERVICE 1,000 TO 4,999 KW EXCLUDES	\$/kW	153,655,396	496,561	152,058,854	490,763							
UNMETERED SCATTERED LOAD	\$/kWh	2,024,907		385,276		0.00%	0.23%	0.19%	0.10%	0.20%		
SENTINEL LIGHTING	\$/kW	122,483	340		0	0.00%	0.01%	0.02%	0.00%	0.01%		
STREET LIGHTING	\$/kW	11,183,615	31,502	11,183,615	31,502	0.00%	1.19%	1.50%	1.90%	1.38%		
microFIT												
Last Board Approved Totals	Total	956,387,714	1,384,348	486,821,889	1,252,408						0	49,373
	Total Excluding Class A	926,710,226	1,311,992	457,144,401	1,180,052							
	Total Excluding Class A	926,710,226	1,311,992	457,144,401	1,180,052							
* These customers kWh and kW when added together total the last Board approved for the GS 1,000 to 4,999 rate class shown below.												
GENERAL SERVICE 1,000 TO 4,999 KW	\$/kW	183,532,884	568,917	181,736,342		0.00%	25.97%	30.11%	31.08%	19.83%		
						0.00%	100.00%	100.00%	100.00%	100.00%		

Notes

Class A customer (In GS 1,000-4,999 class) - not allocated the RSVA account balance for 1589 global adjustment because of the settlement process with the IESO.

COPY OF _Tab 7. Allocating Def-Var Bal _from 2015 IRM Rate Generator Model

The table below is provided for the purposes of comparison. It is a direct copy of tab 7 of the Rate Generator, which shows the allocation of the account balances among the rate classes using the allocators assumed in the Rate Generator. While the total claim per account will be the same in Thunder Bay Hydro's proposed treatment, the allocation of the claim among the classes will be different.

Allocation of Group 1 Accounts (including Account 1568)

Rate Class	% of Total kWh	% of Total non-RPP kWh	% of Customer Numbers **	1550	1551	1580	1584	1586	1588	1589	1590	1595 (2008)	1595 (2009)	1595 (2010)	1595 (2011)	1595 (2012)	***1568
RESIDENTIAL	35.5%	6.7%	90.9%	\$0	(\$2,363)	(\$296,167)	(\$63,003)	(\$199,544)	\$10,190	(\$72,839)	\$0	\$0	\$513	(\$300)	(\$6,951)	\$4,368	\$0
GENERAL SERVICE LESS THAN 50 KW	13.7%	3.9%	9.1%	\$0	(\$236)	(\$114,558)	(\$24,370)	(\$77,184)	\$3,941	(\$42,308)	\$0	\$0	\$294	(\$142)	(\$2,948)	\$1,738	\$0
GENERAL SERVICE 50 TO 999 KW	30.2%	49.7%		\$0	\$0	(\$251,424)	(\$53,485)	(\$169,398)	\$8,650	(\$542,141)	\$0	\$0	\$680	(\$344)	(\$14,898)	\$4,091	\$0
GENERAL SERVICE 1,000 TO 4,999 KW	19.2%	37.3%		\$0	\$0	(\$160,003)	(\$34,037)	(\$107,803)	\$5,505	(\$406,972)	\$0	\$0	\$532	(\$347)	(\$11,518)	\$2,573	\$0
UNMETERED SCATTERED LOAD	0.2%	0.1%		\$0	\$0	(\$1,765)	(\$376)	(\$1,189)	\$61	(\$863)	\$0	\$0	\$5	(\$2)	(\$36)	\$26	\$0
SENTINEL LIGHTING	0.0%	0.0%		\$0	\$0	(\$107)	(\$23)	(\$72)	\$4	\$0	\$0	\$0	\$0	(\$0)	(\$1)	\$1	\$0
STREET LIGHTING	1.2%	2.3%		\$0	\$0	(\$9,750)	(\$2,074)	(\$6,569)	\$335	(\$25,044)	\$0	\$0	\$24	(\$17)	(\$704)	\$179	\$0
microFIT	0.0%	0.0%		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	100.00%	100.00%	100.0%	0	(\$2,599)	(\$833,775)	(\$177,368)	(\$561,760)	\$28,687	(\$1,090,167)	\$0	\$0	\$2,049	(\$1,151)	(\$37,056)	\$12,974	\$0

** Used to allocate Account 1551 as this account records the variances arising from the Smart Metering Entity Charges to Residential and GS<50 customers.

*** Not disposing of 1568 LRAM VA

Allocation of Deferral and Variance Balances

Allocation of 1580, 1588 Accounts					Allocation of 1550, 1551, 1584, 1586, 1590, 1595(2009), 1595(2010), 1595(2011), 1595(2012) Accounts											
Account Balances from Thunder Bay Hydro's 2015 IRM Rate Generator Model Tab 7.					Account Balances from Thunder Bay Hydro's 2015 IRM Rate Generator Model Tab 7.											
					\$0	(\$2,599)	(\$177,368)	(\$561,760)	\$0	\$2,049	(\$1,151)	(\$37,056)	\$12,974	(\$764,912)	\$1,570,000	
Rate Class	% of Total kWh	Allocation of Account 1580	Allocation of Account 1588	Allocation Sub-Total 1580 + 1588	% of Total kWh	1550	1551	1584	1586	1590	1595 (2009)	1595 (2010)	1595 (2011)	1595 (2012)	Allocation Sub-Total 1550, 1551, 1584, 1586, 1590, 1595 (2009), 1595 (2010), 1595 (2011), 1595 (2012)	Allocation Totals Excluding 1589
RESIDENTIAL	35.5%	(\$296,167)	\$10,190	(\$285,977)	35.5%	\$0	(\$2,363)	(\$63,003)	(\$199,544)	\$0	\$513	(\$300)	(\$6,951)	\$4,368	(\$267,280)	(\$553,258)
GENERAL SERVICE LESS THAN 50 KW	13.7%	(\$114,558)	\$3,941	(\$110,616)	13.7%	\$0	(\$236)	(\$24,370)	(\$77,184)	\$0	\$294	(\$142)	(\$2,948)	\$1,738	(\$102,848)	(\$213,465)
GENERAL SERVICE 50 TO 999 KW	30.2%	(\$251,424)	\$8,650	(\$242,774)	30.2%	\$0		(\$53,485)	(\$169,398)	\$0	\$680	(\$344)	(\$14,898)	\$4,091	(\$233,354)	(\$476,128)
* GENERAL SERVICE 1,000 TO 4,999 KW - Class A	3.1%	(\$25,873)	\$890	(\$24,983)	3.1%	\$0		(\$5,504)	(\$17,432)	\$0	\$68	(\$44)	(\$1,465)	\$327	(\$24,050)	(\$49,032)
* GENERAL SERVICE 1,000 TO 4,999 KW EXCLU	16.1%	(\$134,130)	\$4,615	(\$129,516)	16.1%	\$0		(\$28,533)	(\$90,371)	\$0	\$464	(\$303)	(\$10,054)	\$2,245	(\$126,551)	(\$256,066)
UNMETERED SCATTERED LOAD	0.2%	(\$1,765)	\$61	(\$1,705)	0.2%	\$0		(\$376)	(\$1,189)	\$0	\$5	(\$2)	(\$36)	\$26	(\$1,573)	(\$3,278)
SENTINEL LIGHTING	0.0%	(\$107)	\$4	(\$103)	0.0%	\$0		(\$23)	(\$72)	\$0	\$0	(\$0)	(\$1)	\$1	(\$95)	(\$198)
STREET LIGHTING	1.2%	(\$9,750)	\$335	(\$9,414)	1.2%	\$0		(\$2,074)	(\$6,569)	\$0	\$24	(\$17)	(\$704)	\$179	(\$9,161)	(\$18,575)
microFIT														\$0	\$0	
Totals	100.00%	(\$833,775)	\$28,687	(\$805,088)	100.00%	\$0	(\$2,599)	(\$177,368)	(\$561,760)	\$0	\$2,049	(\$1,151)	(\$37,056)	\$12,974	(\$764,912)	(\$1,570,000)

Allocation of 1589 Global Adjustment Account Balance ¹			
1,000-4,999 - Class A customers excluded from the Allocation			
Balance from Rate Maker Model Tab 7. Cell L28			(\$1,090,167)
Rate Class	% of Total kWh	% of Total non-RPP	Allocation of Balance in
RESIDENTIAL	36.7%	7.1%	(\$77,568)
GENERAL SERVICE LESS THAN 50 KW	14.2%	4.1%	(\$45,054)
GENERAL SERVICE 50 TO 999 KW	31.1%	53.0%	(\$577,337)
* GENERAL SERVICE 1,000 TO 4,999 KW - Class A	0.0%	0.0%	\$0
* GENERAL SERVICE 1,000 TO 4,999 KW EXCLU	16.6%	33.3%	(\$362,620)
UNMETERED SCATTERED LOAD	0.2%	0.1%	(\$919)
SENTINEL LIGHTING	0.0%	0.0%	\$0
STREET LIGHTING	1.2%	2.4%	(\$26,670)
microFIT			
Total	100.00%	100.0%	(\$1,090,167)

Note: ¹ Class A (GS 1,000-4,999) excluded from this allocation.

Calculation of Deferral and Variance Rate Riders excluding 1589 RSVA Global Adjustment				
		Rate Rider Recovery Period (in Years):		1
Rate Class	Allocation Totals	Estimated kWh or kW	Unit	Deferral and Variance
RESIDENTIAL	(\$553,258)	339,721,062	\$/kWh	(\$0.0016)
GENERAL SERVICE LESS THAN 50 KW	(\$213,465)	131,404,394	\$/kWh	(\$0.0016)
GENERAL SERVICE 50 TO 999 KW	(\$476,128)	783,589	\$/kW	(\$0.6076)
* GENERAL SERVICE 1,000 TO 4,999 KW - Class A	(\$49,032)	72,356	\$/kW	(\$0.6777)
* GENERAL SERVICE 1,000 TO 4,999 KW EXCLUDES Class A	(\$256,066)	496,561	\$/kW	(\$0.6167)
UNMETERED SCATTERED LOAD	(\$3,278)	2,024,907	\$/kWh	(\$0.0016)
SENTINEL LIGHTING	(\$198)	340	\$/kW	(\$0.5815)
STREET LIGHTING	(\$18,575)	31,502	\$/kW	(\$0.5897)
microFIT				
Total	(\$1,570,000)	474,534,711		

Note: There are no negligible rate riders.

Combined Class A and Non Class A for One Rate Rider - Deferral & Variance GS 1,000-4,999			
Allocation Total	Total Estimated KWh or kW	Unit	Rate Rider for GS
(\$305,099)	568,917	\$/kW	(\$0.5363)

Calculation of 1589 Global Adjustment Rate Riders				
		Rate Rider Recovery Period (in Years):		1
Rate Class	Allocation of Balance in Account 1589	Estimated kWh or kW for Non-RPP Customers	Unit	Global Adjustment
RESIDENTIAL	(\$77,568)	32,526,740	\$/kWh	(\$0.0024)
GENERAL SERVICE LESS THAN 50 KW	(\$45,054)	18,892,749	\$/kWh	(\$0.0024)
GENERAL SERVICE 50 TO 999 KW	(\$577,337)	657,787	\$/kW	(\$0.8777)
* GENERAL SERVICE 1,000 TO 4,999 KW - Class A	\$0	0	\$/kW	\$0.0000
* GENERAL SERVICE 1,000 TO 4,999 KW EXCLUDES Class A	(\$362,620)	490,763	\$/kW	(\$0.7389)
UNMETERED SCATTERED LOAD	(\$919)	385,276	\$/kWh	(\$0.0024)
SENTINEL LIGHTING	\$0	0	\$/kW	#DIV/0!
STREET LIGHTING	(\$26,670)	31,502	\$/kW	(\$0.8466)
microFIT				
Total	(\$1,090,167)	52,984,817		

Proposed Rate Rider Calculation - Effective May 1, 2015			
	Deferral/Variance Rate Riders	1589 Global Adjustment Rate Riders	Combined Rate Rider \$\$
RESIDENTIAL	(\$0.0016)	(\$0.0024)	(\$0.0040)
GENERAL SERVICE LESS THAN 50 KW	(\$0.0016)	(\$0.0024)	(\$0.0040)
GENERAL SERVICE 50 TO 999 KW	(\$0.6076)	(\$0.8777)	(\$1.4853)
* GENERAL SERVICE 1,000 TO 4,999 KW - Class A	(\$0.5363)		(\$0.5363)
* GENERAL SERVICE 1,000 TO 4,999 KW EXCLUDES Class A	(\$0.5363)	(\$0.7389)	(\$1.2752)
UNMETERED SCATTERED LOAD	(\$0.0016)	(\$0.0024)	(\$0.0040)
SENTINEL LIGHTING	(\$0.5815)		(\$0.5815)
STREET LIGHTING	(\$0.5897)	(\$0.8466)	(\$1.4363)
microFIT			

Note: TBHydro IRM 2015 was modified and Tab 8, column G 20 is picking up the incorrect quantity for calculation of GA Rate Rider

GS > 1,000 - 4,999 Classification - 2015	
- Rate Rider for Disposition of Deferral/Variance Accounts (2015) effective until...	(\$0.5363)
- Rate Rider for Disposition of Global Adjustment Account (2015) effective until...	(\$0.7389)
Applicable only to Non-RPP customers, excluding Class A customers	