

## Appendix E

### DVA Rate Rider Calculation

Proposed Calculation of Group 1 Deferral and Variance Rate Riders

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 <sup>1</sup>	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 <sup>1</sup>	1595 Recovery Share Proportion (2009) <sup>1</sup>	1595 Recovery Share Proportion (2010) <sup>1</sup>	1595 Recovery Share Proportion (2011) <sup>1</sup>	1595 Recovery Share Proportion (2012) <sup>1</sup>	1598 LRAM Variance Account Class Allocation (\$ amounts)	Number of Customers for Residential and GS-50 classes <sup>3</sup>
RESIDENTIAL	\$/kWh	399,321,062	785,348	32,525,749	0	0.00%	25.04%	26.04%	18.73%	23.86%		
GENERAL SERVICE LESS THAN 50 KW	\$/kWh	73,414,784	146,829	18,692,749	0	0.00%	14.36%	12.31%	7.36%	13.29%		14,281
GENERAL SERVICE 50 TO 999 KW	\$/kW	298,238,363	785,348	242,097,167	657,787	0.00%	34.18%	29.04%	40.20%	31.52%		7,432
* GENERAL SERVICE 1,000 TO 4,999 KW - Class A	\$/kW	124,077,463	124,077	29,575,489	72,356							
* GENERAL SERVICE 1,000 TO 4,999 KW EXCLUDES	\$/kW	188,655,896	496,667	162,068,651	490,763							
UNMETERED SCATTERED LOAD	\$/kWh	2,024,987	404,997	185,378	0	0.00%	0.23%	0.19%	0.10%	0.20%		
SENTINEL LIGHTING	\$/kW	122,483	310	0	0	0.00%	0.01%	0.02%	0.00%	0.01%		
STREET LIGHTING	\$/kW	11,781,635	31,502	11,835,635	31,502	0.00%	1.15%	1.50%	1.50%	1.38%		
microFIT												
<b>Last Board Approved Totals</b>	<b>Total</b>	<b>956,387,714</b>	<b>1,384,348</b>	<b>486,821,889</b>	<b>1,252,408</b>						<b>0</b>	<b>49,373</b>
	<b>Total Excluding Class A</b>	<b>926,710,226</b>	<b>1,311,992</b>	<b>457,144,401</b>	<b>1,180,052</b>							
	<b>Total Excluding Class A</b>	<b>926,710,226</b>	<b>1,311,992</b>	<b>457,144,401</b>	<b>1,180,052</b>							
* 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	123,832,688	586,017	191,756,942		0.00%	25.97%	30.11%	11.08%	13.83%		
						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 1599 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	(\$2,369)	(\$296,167)	(\$63,003)	(\$194,944)	\$10,190	(\$22,889)	\$0	\$0	\$533	(\$800)	(\$1,953)	\$4,368	\$0
GENERAL SERVICE LESS THAN 50 KW	13.7%	3.9%	9.1%	\$0	(\$236)	(\$14,558)	(\$24,370)	(\$7,784)	\$8,945	(\$2,388)	\$0	\$0	\$294	(\$142)	(\$2,948)	\$1,738	\$0
GENERAL SERVICE 50 TO 999 KW	30.2%	49.7%		\$0	\$0	(\$251,424)	(\$33,483)	(\$189,398)	\$8,550	(\$542,141)	\$0	\$0	\$680	(\$344)	(\$14,895)	\$4,091	\$0
GENERAL SERVICE 1,000 TO 4,999 KW	19.2%	37.3%		\$0	\$0	(\$160,003)	(\$34,033)	(\$137,803)	\$5,505	(\$495,972)	\$0	\$0	\$532	(\$347)	(\$11,518)	\$2,673	\$0
UNMETERED SCATTERED LOAD	0.2%	0.1%		\$0	\$0	(\$1,265)	(\$375)	(\$1,489)	\$61	(\$553)	\$0	\$0	\$5	(\$2)	(\$56)	\$26	\$0
SENTINEL LIGHTING	0.0%	0.0%		\$0	\$0	(\$407)	(\$23)	(\$72)	\$4	\$0	\$0	\$0	\$0	(\$0)	(\$1)	\$1	\$0
STREET LIGHTING	1.2%	2.3%		\$0	\$0	(\$9,750)	(\$2,974)	(\$8,589)	\$935	(\$25,044)	\$0	\$0	\$24	(\$77)	(\$704)	\$179	\$0
microFIT	0.0%	0.0%		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.0%</b>	<b>0</b>	<b>(\$2,599)</b>	<b>(\$833,775)</b>	<b>(\$177,368)</b>	<b>(\$561,760)</b>	<b>\$28,687</b>	<b>(\$1,090,167)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,049</b>	<b>(\$1,151)</b>	<b>(\$37,056)</b>	<b>\$12,974</b>	<b>\$0</b>

\*\* 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)	(\$169,396)	\$0	\$680	(\$344)	(\$14,898)	\$4,091	(\$233,354)	(\$476,128)
* GENERAL SERVICE 1,000 TO 4,999 KW - Class A	3.1%	(\$25,573)	\$890	(\$24,683)	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	(\$126,531)	(\$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	(\$85)	(\$198)
STREET LIGHTING	1.2%	(\$9,750)	\$335	(\$9,414)	1.2%	\$0		(\$2,074)	(\$8,569)	\$0	\$24	(\$17)	(\$704)	\$179	(\$9,161)	(\$18,575)
microFIT														\$0	\$0	
<b>Totals</b>	<b>100.00%</b>	<b>(\$833,775)</b>	<b>\$28,687</b>	<b>(\$805,088)</b>	<b>100.00%</b>	<b>\$0</b>	<b>(\$2,599)</b>	<b>(\$177,368)</b>	<b>(\$561,760)</b>	<b>\$0</b>	<b>\$2,049</b>	<b>(\$1,151)</b>	<b>(\$37,056)</b>	<b>\$12,974</b>	<b>(\$764,912)</b>	<b>(\$1,570,000)</b>

Allocation of 1589 Global Adjustment Account Balance <sup>1</sup>			
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			
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>(\$1,090,167)</b>

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):

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	(\$0.5157)
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				
<b>Total</b>	<b>(\$1,570,000)</b>	<b>474,534,711</b>		

*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
(\$306,099)	568,917	\$/kW	(\$0.5363)

**Calculation of 1589 Global Adjustment Rate Riders**

Rate Rider Recovery Period (in Years):

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)	499,763	\$/kW	(\$0.7389)
UNMETERED SCATTERED LOAD	(\$919)	385,276	\$/kWh	(\$0.0024)
SENTINEL LIGHTING	\$0	0	\$/DIV/OI	
STREET LIGHTING	(\$26,670)	31,502	\$/kW	(\$0.8466)
microFIT				
<b>Total</b>	<b>(\$1,090,167)</b>	<b>52,984,817</b>		

**Proposed Rate Rider Calculation - Effective May 1, 2015**

	Deferral Variance Rate Riders	1589 Global Adjustment Rate Riders	Combined Rate Riders
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	(\$0.0000)		(\$0.5363)
* GENERAL SERVICE 1,000 TO 4,999 KW EXCLUDES CLASS A	(\$0.5157)	(\$0.7389)	(\$1.2546)
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 Class A Riders 2015

Rate Rider for Disposition of Deferral Variance Account (2015) effective 2015	(\$1,7363)
Rate Rider for Disposition of Global Adjustment Account (2015) effective 2015	(\$1,7363)
Application only to Non-RPP customers excluding Class A customers	