

**2011 IRM3 REVENUE COST
RATIO ADJUSTMENT WORKFORM**



Name of LDC: Thunder Bay Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

LDC Information

Applicant Name	Thunder Bay Hydro Electricity Distribution Inc.
OEB Application Number	IRM3
LDC Licence Number	ED-2002-0529
Applied for Effective Date	May 1, 2011
Last COS Re-based Year	2009
Last COS OEB Application Number	EB-2008-0245



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Thunder Bay Hydro Electricity Distribution Inc.

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Rate Class Selection, Re-Based Billing Determinants & Current Tariff Rates

The purpose of this sheet is to set up the rate classes, enter the re-based billing determinants from your last cost of service application and enter the current service charge and volumetric distribution rates as found on your May 1, 2010 (or subsequent) Tariff of rates and charges.

Last COS Re-based Year				2009					
Last COS OEB Application Number				EB-2008-0245					
Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Current Tariff Service Charge D	Current Tariff Distribution Volumetric Rate kWh E	Current Tariff Distribution Volumetric Rate kW F
RES	Residential	Customer	kWh	44,635	350,217,935		10.17	0.0128	
GSLT50	General Service Less Than 50 kW	Customer	kWh	4,466	144,258,193		17.86	0.0131	
GSGT50	General Service 50 to 999 kW	Customer	kW	511	305,337,414	718,710	239.24		1.3460
GSGT50	General Service 1,000 to 4,999 kW	Customer	kW	19	194,477,088	561,149	2,320.15		1.8526
USL	Unmetered Scattered Load	Connection	kWh	437	1,786,004		8.91	0.0130	
Sen	Sentinel Lighting	Connection	kW	176	146,789	402	6.41		5.1418
SL	Street Lighting	Connection	kW	13,091	10,616,947	31,276	1.69		10.2313
NA	Rate Class 8	NA	NA						
NA	Rate Class 9	NA	NA						
NA	Rate Class 10	NA	NA						
NA	Rate Class 11	NA	NA						
NA	Rate Class 12	NA	NA						
NA	Rate Class 13	NA	NA						
NA	Rate Class 14	NA	NA						
NA	Rate Class 15	NA	NA						
NA	Rate Class 16	NA	NA						
NA	Rate Class 17	NA	NA						
NA	Rate Class 18	NA	NA						
NA	Rate Class 19	NA	NA						
NA	Rate Class 20	NA	NA						
NA	Rate Class 21	NA	NA						
NA	Rate Class 22	NA	NA						
NA	Rate Class 23	NA	NA						
NA	Rate Class 24	NA	NA						
NA	Rate Class 25	NA	NA						



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Removal of Rate Adders

The purpose of this sheet is to remove from current tariff rates any rate adders included in rates. Most applicants will not require input on this sheet

Last COS Re-based Year 2009
Last COS OEB Application Number EB-2008-0245

Rate Class	Current Tariff	Current Tariff	Current Tariff	Service	Distribution	Distribution
	Service	Distribution	Distribution	Charge Rate	Volumetric kWh	Volumetric kW
	Charge	Volumetric Rate kWh	Volumetric Rate kW	Adders	Rate Adders	Rate Adders
	A	B	C	D	E	F
Residential	10.17	0.0128	0.0000	0.00	0.0000	0.0000
General Service Less Than 50 kW	17.86	0.0131	0.0000	0.00	0.0000	0.0000
General Service 50 to 999 kW	239.24	0.0000	1.3460	0.00	0.0000	0.0000
General Service 1,000 to 4,999 kW	2,320.15	0.0000	1.8526	0.00	0.0000	0.0000
Unmetered Scattered Load	8.91	0.0130	0.0000	0.00	0.0000	0.0000
Sentinel Lighting	6.41	0.0000	5.1418	0.00	0.0000	0.0000
Street Lighting	1.69	0.0000	10.2313	0.00	0.0000	0.0000



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Calculated Current Revenue From Rates

The purpose of this sheet is to calculate current revenue from rate classes

Last COS Re-based Year 2009
Last COS OEB Application Number EB-2008-0245

Rate Class	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Current Base Service Charge D	Current Base Distribution Volumetric Rate kWh E	Current Base Distribution Volumetric Rate kW F	Service Charge Revenue G = A * D *12	Distribution Volumetric Rate Revenue kWh H = B * E	Distribution Volumetric Rate Revenue kW I = C * F	Revenue Requireme nt from Rates I
Residential	44,635	350,217,935	0	10.17	0.0128	0.0000	5,447,255	4,482,790	0	9,930,045
General Service Less Than 50 kW	4,466	144,258,193	0	17.86	0.0131	0.0000	957,153	1,889,782	0	2,846,935
General Service 50 to 999 kW	511	305,337,414	718,710	239.24	0.0000	1.3460	1,467,020	0	967,384	2,434,403
General Service 1,000 to 4,999 kW	19	194,477,088	561,149	2,320.15	0.0000	1.8526	528,994	0	1,039,585	1,568,579
Unmetered Scattered Load	437	1,786,004	0	8.91	0.0130	0.0000	46,724	23,218	0	69,942
Sentinel Lighting	176	146,789	402	6.41	0.0000	5.1418	13,538	0	2,067	15,605
Street Lighting	13,091	10,616,947	31,276	1.69	0.0000	10.2313	265,485	0	319,994	585,480
							8,726,170	6,395,790	2,329,029	17,450,989



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Decision - Cost Revenue Adjustments by Rate Class

The purpose of this sheet is to input the Revenue Cost Ratios as determined from column G on Sheet "C1.5 Proposed R C Ratio Adj" of the applicants 2010 IRM3 Supplemental Filing Module or 2010 COS Decision and Order.

Under Direction the applicant can choose "No Change" - no change in that rate class ratio, "Change" - Board ordered change from COS decision, or Rebalance to apply offset adjustments to Decision prescribed rate classes.

Rate Class	Direction	Current	Transition	Transition	Transition	Transition	Transition
		Year 2010	Year 1 2011	Year 2 2012	Year 3 2013	Year 4 2014	Year 5 2015
Residential	Rebalance	115.36%	tbd	tbd	tbd	tbd	tbd
General Service Less Than 50 kW	No Change	115.55%	115.55%	115.55%	115.55%	115.55%	115.55%
General Service 50 to 999 kW	No Change	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%
General Service 1,000 to 4,999 kW	Change	59.42%	66.28%	73.14%	80.00%	80.00%	80.00%
Unmetered Scattered Load	No Change	114.91%	114.91%	114.91%	114.91%	114.91%	114.91%
Sentinel Lighting	No Change	109.17%	109.17%	109.17%	109.17%	109.17%	109.17%
Street Lighting	Change	56.01%	70.00%	70.00%	70.00%	70.00%	70.00%



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Revenue Offsets Allocation

The purpose of this sheet is to allocate the Revenue Offsets (miscellaneous revenue) found in the last COS to the various rate classes in proportion to the allocation from the Cost Allocation informational filing.

Rate Class	Informational Filing		Allocated Revenue Offsets
	Revenue Offsets	Percentage Split	
	A	C= A / B	E = D * C
Residential	821,918	60.12%	900,522
General Service Less Than 50 kW	284,946	20.84%	312,197
General Service 50 to 999 kW	167,866	12.28%	183,920
General Service 1,000 to 4,999 kW	61,102	4.47%	66,945
Unmetered Scattered Load	2,105	0.15%	2,306
Sentinel Lighting	657	0.05%	720
Street Lighting	28,459	2.08%	31,180
	1,367,052	100.00%	1,497,790
	B		D

Enter revenue offsets as found in Cell F47 on sheet "C1.2 Revenue Offsets Allocation" of the 2010 IRM3 Supplemental Filing Module or from 2010 COS RRWF



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Transformer Allowance

The purpose of this sheet is to remove the transformer allowance from volumetric rates.
Under Transformer Allowance in Rates select "Yes" if included in that rate class or "No" if not included.
Once selected apply the update button to reveal input cells in which you can input the number of kW's and the transformer rate for each rate class.

Rate Class	Transformer Allowance In Rate	Transformer Allowance	Transformer Allowance kW's	Transformer Allowance Rate	Volumetric Distribution Rate	Billed kW's	Adjusted Volumetric Distribution Rate
		A	C	E	F	G	I=(F *(G - C) +(F - E) * C) / G
Residential	No						
General Service Less Than 50 kW	No						
General Service 50 to 999 kW	Yes	77,679	129,466	0.6000	1.3460	718,710	1.2379
General Service 1,000 to 4,999 kW	Yes	332,726	554,544	0.6000	1.8526	561,149	1.2597
Unmetered Scattered Load	No						
Sentinel Lighting	No						
Street Lighting	No						
		410,406	684,009			1,279,859	
		B	D			H	
		Enter Transformer Allowance as found in Cell E47 on sheet "C1.3 Transformer Allowance" of the 2010 IRM3 Supplemental Filing Module or from 2010 COS RRWF					



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Revenue / Cost Ratio Revenue

The purpose of this sheet is to calculate revenue by rate class that includes Revenue Offsets and excludes Transformer Allowance prior to Revenue Cost Ratio Adjustment re-allocation.

Rate Class	Billed Customers or Connections A	Billed kWh B	Billed kW C	Base Service Charge D	Base Distribution Volumetric Rate kWh E	Base Distribution Volumetric Rate kW F	Service Charge G = A * D * 12	Distribution Volumetric Rate kWh H = B * E	Distribution Volumetric Rate kW I = C * F	Revenue Requirement from Rates J = G + H + I
Residential	44,635	350,217,935	0	0	10.17	0.0128	5,447,255	4,482,790	0	9,930,045
General Service Less Than 50 kW	4,466	144,258,193	0	0	17.86	0.0131	957,153	1,889,782	0	2,846,935
General Service 50 to 999 kW	511	305,337,414	718,710	0	239.24	0.0000	1,467,020	0	889,704	2,356,724
General Service 1,000 to 4,999 kW	19	194,477,088	561,149	0	2,320.15	0.0000	528,994	0	706,859	1,235,853
Unmetered Scattered Load	437	1,786,004	0	0	8.91	0.0130	46,724	23,218	0	69,942
Sentinel Lighting	176	146,789	402	0	6.41	0.0000	13,538	0	2,067	15,605
Street Lighting	13,091	10,616,947	31,276	0	1.69	0.0000	265,485	0	319,994	585,480
							8,726,170	6,395,790	1,918,624	17,040,584



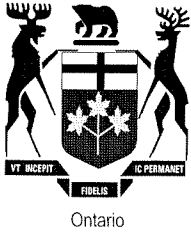
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Proposed Revenue / Cost Ratio Adjustment

Rate Class	Adjusted Revenue	Current Revenue	Re-Allocated Cost	Proposed	Final Adjusted	Dollar Change	Percentage Change
	A	Cost Ratio B		Revenue Cost Ratio D	Revenue E = C * D		
Residential	\$ 10,830,567	1.15	\$ 9,388,858	1.12	\$ 10,526,078	-\$ 304,489	-2.8%
General Service Less Than 50 kW	\$ 3,159,132	1.16	\$ 2,733,996	1.16	\$ 3,159,132	\$ -	0.0%
General Service 50 to 999 kW	\$ 2,540,644	0.80	\$ 3,175,805	0.80	\$ 2,540,644	\$ 0	0.0%
General Service 1,000 to 4,999 kW	\$ 1,302,798	0.59	\$ 2,192,546	0.66	\$ 1,453,211	\$ 150,413	11.5%
Unmetered Scattered Load	\$ 72,248	1.15	\$ 62,874	1.15	\$ 72,248	\$ -	0.0%
Sentinel Lighting	\$ 16,325	1.09	\$ 14,954	1.09	\$ 16,325	\$ -	0.0%
Street Lighting	\$ 616,660	0.56	\$ 1,101,051	0.70	\$ 770,736	\$ 154,076	25.0%
	<u>\$ 18,538,374</u>		<u>\$ 18,670,083</u>		<u>\$ 18,538,374</u>	<u>\$ 0</u>	<u>0.0%</u>

Out of Balance ☐ Yes

Final ? ☐ Yes



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Proposed Revenue from Revenue / Cost Ratio Adjustment

Rate Class	Adjusted Revenue By Revenue Cost Ratio A	Allocated Re- Based Revenue Offsets B	Revenue Requirement from Rates Before Transformer Allowance C = A - B	Re-based Transformer Allowance D	Revenue Requirement from Rates E = C + D
Residential	\$ 10,526,078	\$ 900,522	\$ 9,625,556	\$ -	\$ 9,625,556
General Service Less Than 50 kW	\$ 3,159,132	\$ 312,197	\$ 2,846,935	\$ -	\$ 2,846,935
General Service 50 to 999 kW	\$ 2,540,644	\$ 183,920	\$ 2,356,724	\$ 77,679	\$ 2,434,403
General Service 1,000 to 4,999 kW	\$ 1,453,211	\$ 66,945	\$ 1,386,266	\$ 332,726	\$ 1,718,992
Unmetered Scattered Load	\$ 72,248	\$ 2,306	\$ 69,942	\$ -	\$ 69,942
Sentinel Lighting	\$ 16,325	\$ 720	\$ 15,605	\$ -	\$ 15,605
Street Lighting	\$ 770,736	\$ 31,180	\$ 739,556	\$ -	\$ 739,556
	<u>\$ 18,538,374</u>	<u>\$ 1,497,790</u>	<u>\$ 17,040,584</u>	<u>\$ 410,406</u>	<u>\$ 17,450,989</u>



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Proposed Fixed Variable Revenue Allocation

Rate Class	Revenue Requirement from Rates A	Service Charge % Revenue B	Distribution Volumetric		Service Charge Revenue E = A * B	Distribution Volumetric		Revenue Requirement from Rates by Rate Class H = E + F + G
			Rate % Revenue kWh C	Rate % Revenue kW D		Rate Revenue kWh F = A * C	Rate Revenue kW G = A * D	
Residential	\$ 9,625,556	54.9%	45.1%	0.0%	\$ 5,280,224	\$ 4,345,332	\$ -	\$ 9,625,556
General Service Less Than 50 kW	\$ 2,846,935	33.6%	66.4%	0.0%	\$ 957,153	\$ 1,889,782	\$ -	\$ 2,846,935
General Service 50 to 999 kW	\$ 2,434,403	60.3%	0.0%	39.7%	\$ 1,467,020	\$ -	\$ 967,384	\$ 2,434,403
General Service 1,000 to 4,999 kW	\$ 1,718,992	33.7%	0.0%	66.3%	\$ 579,720	\$ -	\$ 1,139,272	\$ 1,718,992
Unmetered Scattered Load	\$ 69,942	66.8%	33.2%	0.0%	\$ 46,724	\$ 23,218	\$ -	\$ 69,942
Sentinel Lighting	\$ 15,605	86.8%	0.0%	13.2%	\$ 13,538	\$ -	\$ 2,067	\$ 15,605
Street Lighting	\$ 739,556	45.3%	0.0%	54.7%	\$ 335,351	\$ -	\$ 404,204	\$ 739,556
	<u>\$ 17,450,989</u>				<u>\$ 8,679,730</u>	<u>\$ 6,258,332</u>	<u>\$ 2,512,927</u>	<u>\$ 17,450,989</u>



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Proposed Fixed and Variable Rates

Rate Class	Distribution Volumetric			Distribution Volumetric			Re-based Billed			Proposed Base		Proposed Base	
	Service Charge Revenue	Rate Revenue kWh	Rate Revenue kW	Customers or Connections	Re-based Billed kWh	Re-based Billed kW	Proposed Base Service Charge	Proposed Base Distribution		Proposed Base Distribution			
								Volumetric Rate	kWh	Volumetric Rate	kWh		
	A	B	C	D	E	F	G = A / D / 12	H = B / E		I = C / F			
Residential	\$ 5,280,224	\$ 4,345,332	\$ -	44,635	350,217,935	0	9.86	0.0124		-			
General Service Less Than 50 kW	\$ 957,153	\$ 1,889,782	\$ -	4,466	144,258,193	0	17.86	0.0131		-			
General Service 50 to 999 kW	\$ 1,467,020	\$ -	\$ 967,384	511	305,337,414	718,710	239.24	-		1.3460			
General Service 1,000 to 4,999 kW	\$ 579,720	\$ -	\$ 1,139,272	19	194,477,088	561,149	2,542.63	-		2.0302			
Unmetered Scattered Load	\$ 46,724	\$ 23,218	\$ -	437	1,786,004	0	8.91	0.0130		-			
Sentinel Lighting	\$ 13,538	\$ -	\$ 2,067	176	146,789	402	6.41	-		5.1418			
Street Lighting	\$ 335,351	\$ -	\$ 404,204	13,091	10,616,947	31,276	2.13	-		12.9238			



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Adjustment required to Proposed Rates

Rate Class	Proposed Base			Current Base			Adjustment		
	Proposed Base Service Charge	Proposed Base Distribution Volumetric Rate kWh	Proposed Base Distribution Volumetric Rate kW	Current Base Service Charge	Current Base Distribution Volumetric Rate kWh	Current Base Distribution Volumetric Rate kW	Adjustment Required Base Service Charge	Adjustment Required Base Distribution Volumetric Rate kWh	Adjustment Required Base Distribution Volumetric Rate kW
		A	B						
Residential	\$ 9.86	\$ 0.0124	\$ -	\$ 10.17	\$ 0.0128	\$ -	-\$ 0.31	-\$ 0.0004	\$ -
General Service Less Than 50 kW	\$ 17.86	\$ 0.0131	\$ -	\$ 17.86	\$ 0.0131	\$ -	\$ -	\$ -	\$ -
General Service 50 to 999 kW	\$ 239.24	\$ -	\$ 1.3460	\$ 239.24	\$ -	\$ 1.3460	\$ -	\$ -	\$ -
General Service 1,000 to 4,999 kW	\$ 2,542.63	\$ -	\$ 2.0302	\$ 2,320.15	\$ -	\$ 1.8526	\$ 222.48	\$ -	\$ 0.1776
Unmetered Scattered Load	\$ 8.91	\$ 0.0130	\$ -	\$ 8.91	\$ 0.0130	\$ -	\$ -	\$ -	\$ -
Sentinel Lighting	\$ 6.41	\$ -	\$ 5.1418	\$ 6.41	\$ -	\$ 5.1418	\$ -	\$ -	\$ -
Street Lighting	\$ 2.13	\$ -	\$ 12.9238	\$ 1.69	\$ -	\$ 10.2313	\$ 0.44	\$ -	\$ 2.6925

Enter the above values onto Sheet
"D1.X Revenue Cost Ratio Adj"
of the 2011 OEB IRM3 Rate Generator.