



Ontario Energy Board

v 1.0

# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

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Last COS Re-based Year	2020

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*While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results.*



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

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# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

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 most current Tariff of Rates and Charges.

Rate Class	Fixed Metric	Vol Metric	Re-based Billed	Re-based Billed kWh	Re-based Billed kW	Current Tariff	Current Tariff	Current Tariff
			Customers or Connections			Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW
			A	B	C	D	E	F
RESIDENTIAL SERVICE CLASSIFICATION	Customers	kWh	43,121	367,560,506	0	29.3100	0.0000	0.0000
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	Customers	kWh	4,194	136,403,467	0	22.4200	0.0216	0.0000
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	Customers	kW	500	344,496,360	857,773	171.0200	0.0000	4.9072
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Connections	kWh	289	1,109,725	0	7.9400	0.0120	0.0000
SENTINEL LIGHTING SERVICE CLASSIFICATION	Connections	kW	360	366,104	1,010	4.6100	0.0000	14.8222
STREET LIGHTING SERVICE CLASSIFICATION	Connections	kW	9,958	7,448,452	20,807	5.5400	0.0000	2.6929



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

The purpose of this sheet is to remove any rate adders included in current rates. Most applicants will not need to make an entry on this sheet.

Rate Class	Current Tariff Service Charge A	Current Tariff Distribution Volumetric Rate kWh B	Current Tariff Distribution Volumetric Rate kW C	Service Charge Rate Adders D	Distribution Volumetric kWh Rate Adders E	Distribution Volumetric kW Rate Adders F
RESIDENTIAL SERVICE CLASSIFICATION	29.31	0.0000	0.0000			
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	22.42	0.0216	0.0000			
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	171.02	0.0000	4.9072			
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	7.94	0.0120	0.0000			
SENTINEL LIGHTING SERVICE CLASSIFICATION	4.61	0.0000	14.8222			
STREET LIGHTING SERVICE CLASSIFICATION	5.54	0.0000	2.6929			



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

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

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 Requiremen t from Rates J = G + H + I
RESIDENTIAL SERVICE CLASSIFICATION	43,121	367,560,506	0	29.31	0.0000	0.0000	15,166,518	0	0	15,166,518
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	4,194	136,403,467	0	22.42	0.0216	0.0000	1,128,354	2,946,315	0	4,074,669
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	500	344,496,360	857,773	171.02	0.0000	4.9072	1,026,120	0	4,209,264	5,235,384
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	289	1,109,725	0	7.94	0.0120	0.0000	27,536	13,317	0	40,853
SENTINEL LIGHTING SERVICE CLASSIFICATION	360	366,104	1,010	4.61	0.0000	14.8222	19,915	0	14,970	34,886
STREET LIGHTING SERVICE CLASSIFICATION	9,958	7,448,452	20,807	5.54	0.0000	2.6929	662,008	0	56,031	718,039
							18,030,451	2,959,632	4,280,265	25,270,348



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

The purpose of this sheet is to enter the Revenue Cost Ratios as determined from column G on Sheet "10. Proposed R C Ratio Adj" of the applicant's 2020 Revenue to Cost Ratio Adjustment Workform (V1.3) or latest COS Decision and Order.

Under the column labeled "Direction", the applicant can choose "No Change" (i.e. no change in that rate class ratio), "Change" (i.e. the OEB ordered change from COS decision) or "Rebalance" (i.e. to apply any offset adjustments required).

Rate Class	Direction	Current	Transition	Transition	Transition	Transition	Transition
		Year 2020	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025
RESIDENTIAL SERVICE CLASSIFICATION	Change	91.59%	91.95%	92.32%	92.69%	93.06%	0.00%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	No Change	118.66%	118.66%	118.66%	118.66%	118.66%	118.66%
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	No Change	109.46%	109.46%	109.46%	109.46%	109.46%	109.46%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	No Change	100.10%	100.10%	100.10%	100.10%	100.10%	100.10%
SENTINEL LIGHTING SERVICE CLASSIFICATION	Change	78.69%	82.28%	85.87%	89.47%	93.06%	0.00%
STREET LIGHTING SERVICE CLASSIFICATION	Change	184.47%	168.35%	152.24%	136.12%	120.00%	0.00%



## Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

The purpose of this sheet is to allocate the Revenue Offsets (miscellaneous revenue, cell F47) 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 Revenue Offsets	Percentage Split	Allocated Revenue Offsets
	A	C = A / B	E = D * C
RESIDENTIAL SERVICE CLASSIFICATION	973,337	62.68%	-
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	215,301	13.87%	-
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	311,444	20.06%	-
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	3,342	0.22%	-
SENTINEL LIGHTING SERVICE CLASSIFICATION	4,062	0.26%	-
STREET LIGHTING SERVICE CLASSIFICATION	45,300	2.92%	-
	1,552,786	100.00%	
	<b>B</b>		<b>D</b>



# Revenue to Cost Ratio Adjustment Model

## for 2021 IRM Filers

The purpose of this sheet is to remove the transformer allowance from volumetric rates. In Cell E47, enter your Transformer Allowance as per your 2019 Revenue to Cost Ratio Adjustment Workform (V1.0) or your last CoS Decision. Under the column labeled "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 enter 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 SERVICE CLASSIFICATION	No						
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	No						
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	Yes	(117,853 )	196,422	(0.6000 )	4.9072	857,773	5.0446
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	No						
SENTINEL LIGHTING SERVICE CLASSIFICATION	No						
STREET LIGHTING SERVICE CLASSIFICATION	No						
			196,422			857,773	
		B	D			H	



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

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 SERVICE CLASSIFICATION	43,121	367,560,506	0	29.31	0.0000	0.0000	15,166,518	0	0	15,166,518
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	4,194	136,403,467	0	22.42	0.0216	0.0000	1,128,354	2,946,315	0	4,074,669
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	500	344,496,360	857,773	171.02	0.0000	5.0446	1,026,120	0	4,327,117	5,353,237
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	289	1,109,725	0	7.94	0.0120	0.0000	27,536	13,317	0	40,853
SENTINEL LIGHTING SERVICE CLASSIFICATION	360	366,104	1,010	4.61	0.0000	14.8222	19,915	0	14,970	34,886
STREET LIGHTING SERVICE CLASSIFICATION	9,958	7,448,452	20,807	5.54	0.0000	2.6929	662,008	0	56,031	718,039
							18,030,451	2,959,632	4,398,118	25,388,201



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

## Proposed Revenue Cost Ratio Adjustment

This worksheet adjusts revenue-to-cost ratios in order to address any shortfall or over recovery (Out of Balance) that would result from implementing the revenue-to-cost ratios entered on sheet "6. Decision Cost Revenue Adj". To do this, one or more rate classes must indicate "Rebalance" on sheet 6.

There are three options for attributing any Out of Balance to rate classes.

1. To adjust a single rate class so that the entire Out of Balance is absorbed by that rate class, select the green cell for the rate class under "Proposed Revenue to Cost Ratio" labelled Column D. To use this option, click the button "Iterate".
2. To apportion the Out of Balance across all green cells such that all green cells are increased by the same amount relative to Column B. To use this option, click the button "Iterate All Equal Percentage Change."
3. To apportion the Out of Balance such that each class is allocated the Out of Balance in proportion to its share of the allocated costs in Column C. To use this option, click the button "Iterate All Proportionate Change."

Rate Class	Adjusted Revenue A	Current Revenue Cost Ratio B	Re-Allocated Cost C = A / B	Proposed Revenue Cost Ratio D	Final Adjusted Revenue E = C * D	Dollar Change F = E - C	Percentage Change G = (E / C) - 1
RESIDENTIAL SERVICE CLASSIFICATION	\$ 15,166,518	0.92	\$ 16,559,847	0.92	\$ 15,227,532	\$ 61,014	0.4%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	\$ 4,074,669	1.19	\$ 3,433,951	1.19	\$ 4,074,669	-\$ 0	0.0%
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	\$ 5,353,237	1.09	\$ 4,890,641	1.09	\$ 5,353,237	\$ 0	0.0%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	\$ 40,853	1.00	\$ 40,810	1.00	\$ 40,853	\$ 0	0.0%
SENTINEL LIGHTING SERVICE CLASSIFICATION	\$ 34,886	0.79	\$ 44,333	0.82	\$ 36,478	\$ 1,593	4.6%
STREET LIGHTING SERVICE CLASSIFICATION	\$ 718,039	1.84	\$ 389,244	1.68	\$ 655,307	-\$ 62,732	-8.7%
	<u>\$ 25,388,201</u>		<u>\$ 25,358,825</u>		<u>\$ 25,388,075</u>	<u>-\$ 126</u>	<u>0.0%</u>

Out of Balance 126

Final ? No

# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

## 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 SERVICE CLASSIFICATION	\$ 15,227,532	\$ -	\$ 15,227,532	\$ -	\$ 15,227,532
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	\$ 4,074,669	\$ -	\$ 4,074,669	\$ -	\$ 4,074,669
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	\$ 5,353,237	\$ -	\$ 5,353,237	-\$ 117,853	\$ 5,235,384
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	\$ 40,853	\$ -	\$ 40,853	\$ -	\$ 40,853
SENTINEL LIGHTING SERVICE CLASSIFICATION	\$ 36,478	\$ -	\$ 36,478	\$ -	\$ 36,478
STREET LIGHTING SERVICE CLASSIFICATION	\$ 655,307	\$ -	\$ 655,307	\$ -	\$ 655,307
	<u>\$ 25,388,075</u>	<u>\$ -</u>	<u>\$ 25,388,075</u>	<u>-\$ 117,853</u>	<u>\$ 25,270,222</u>



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

## Proposed fixed and variable revenue allocation

Rate Class	Revenue Requirement from Rates	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Revenue Requirement from Rates by Rate Class
	A	B	C	D	E = A * B	F = A * C	G = A * D	H = E + F + G
RESIDENTIAL SERVICE CLASSIFICATION	\$ 15,227,532	100.0%	0.0%	0.0%	\$ 15,227,532	\$ -	\$ -	\$ 15,227,532
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	\$ 4,074,669	27.7%	72.3%	0.0%	\$ 1,128,354	\$ 2,946,315	\$ -	\$ 4,074,669
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	\$ 5,235,384	19.6%	0.0%	80.4%	\$ 1,026,120	\$ -	\$ 4,209,264	\$ 5,235,384
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	\$ 40,853	67.4%	32.6%	0.0%	\$ 27,536	\$ 13,317	\$ -	\$ 40,853
SENTINEL LIGHTING SERVICE CLASSIFICATION	\$ 36,478	57.1%	0.0%	42.9%	\$ 20,824	\$ -	\$ 15,654	\$ 36,478
STREET LIGHTING SERVICE CLASSIFICATION	\$ 655,307	92.2%	0.0%	7.8%	\$ 604,171	\$ -	\$ 51,136	\$ 655,307
	<u>\$ 25,270,222</u>				<u>\$ 18,034,537</u>	<u>\$ 2,959,632</u>	<u>\$ 4,276,054</u>	<u>\$ 25,270,222</u>



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

## Proposed fixed and variable rates

Rate Class	Service Charge Revenue A	Distribution Volumetric Rate Revenue kWh B	Distribution Volumetric Rate Revenue kW C	Re-based Billed Customers or Connections D	Re-based Billed kWh E	Re-based Billed kW F	Proposed Base Service Charge G = A / D / 12	Proposed Base Distribution Volumetric Rate kWh H = B / E	Proposed Base Distribution Volumetric Rate kW I = C / F
RESIDENTIAL SERVICE CLASSIFICATION	#####	\$ -	\$ -	43,121	367,560,506	0	29.43	-	-
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	\$ 1,128,354	\$ 2,946,315	\$ -	4,194	136,403,467	0	22.42	0.0216	-
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	\$ 1,026,120	\$ -	\$ 4,209,264	500	344,496,360	857,773	171.02	-	4.9072
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	\$ 27,536	\$ 13,317	\$ -	289	1,109,725	0	7.94	0.0120	-
SENTINEL LIGHTING SERVICE CLASSIFICATION	\$ 20,824	\$ -	\$ 15,654	360	366,104	1,010	4.82	-	15.4989
STREET LIGHTING SERVICE CLASSIFICATION	\$ 604,171	\$ -	\$ 51,136	9,958	7,448,452	20,807	5.06	-	2.4576



# Revenue to Cost Ratio Adjustment Model for 2021 IRM Filers

Proposed adjustments to Base Service Charge and Distribution Volumetric Rate. Enter the adjustments found in column M and N below into Tab 16 of the 2020 IRM Rate Generator Model.

Rate Class	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	C	D	E	F	G = A - D	H = B - E	I = C - F
RESIDENTIAL SERVICE CLASSIFICATION	\$ 29.43	\$ -	\$ -	\$ 29.31	\$ -	\$ -	\$ 0.12	\$ -	\$ -
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	\$ 22.42	\$ 0.0216	\$ -	\$ 22.42	\$ 0.0216	\$ -	\$ -	\$ -	\$ -
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	\$ 171.02	\$ -	\$ 4.9072	\$ 171.02	\$ -	\$ 4.9072	\$ -	\$ -	\$ -
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	\$ 7.94	\$ 0.0120	\$ -	\$ 7.94	\$ 0.0120	\$ -	\$ -	\$ -	\$ -
SENTINEL LIGHTING SERVICE CLASSIFICATION	\$ 4.82	\$ -	\$ 15.4989	\$ 4.61	\$ -	\$ 14.8222	\$ 0.21	\$ -	\$ 0.6767
STREET LIGHTING SERVICE CLASSIFICATION	\$ 5.06	\$ -	\$ 2.4576	\$ 5.54	\$ -	\$ 2.6929	-\$ 0.48	\$ -	\$ 0.2353