EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 22 Filed: June 7, 2018

# ATTACHMENT 22 CURRENT TARIFF OF RATES AND CHARGES JANUARY 1, 2018 POWERSTREAM RZ

## Alectra Utilities Corporation PowerStream Rate Zone TARIFF OF RATES AND CHARGES Effective Date January 1, 2018 Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### **RESIDENTIAL SERVICE CLASSIFICATION**

This classification refers to an account taking electricity at 750 volts or less where the electricity is used exclusively in a separately metered living accommodation. Customers shall be residing in single-dwelling units that consist of a detached house or one unit of a semi-detached, duplex, triplex or quadruplex house, with a residential zoning. Separately metered dwellings within a town house complex or apartment building also qualify as residential customers. Multi-unit residential establishments such as apartment buildings supplied through one service (bulk metered) shall be classified as general service. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	21.63
Smart Metering Entity Charge - effective until December 31, 2022	\$	0.57
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$	0.12
Rate Rider for Recovery of Stranded Meter Assets (2016) – effective until September 30, 2018	\$	0.06
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.11
Rate Rider for Recovery of 2018 Foregone Revenue - effective May 1, 2018 until December 31, 2018	\$	0.14
Distribution Volumetric Rate	\$/kWh	0.0088
Low Voltage Service Rate	\$/kWh	0.0005
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018		
Applicable only for Non-RPP Customers	\$/kWh	0.0062
Rate Rider for Disposition of Global Adjustment Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0003
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kWh	(0.0003)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective May 1, 2018 until April 30, 2019	\$/kWh	(0.0030)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable Only for Class B Customers	\$/kWh	0.0002
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0075
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0040
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### **GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION**

This classification refers to a non-residential account taking electricity at 750 volts or less wheose monthly average peak demand is less than, or is forecast to be less than, 50 kW. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	29.00
Smart Metering Entity Charge - effective until December 31, 2022	\$	0.57
Rate Rider for Recovery of Stranded Meter Assets (2016) – effective until September 30, 2018	\$	0.21
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.12
Rate Rider for Recovery of 2018 Foregone Revenue - effective May 1, 2018 until December 31, 2018	\$	0.40
Distribution Volumetric Rate	\$/kWh	0.0185
Low Voltage Service Rate	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018	ψ/ΚννΠ	0.0004
Applicable only for Non-RPP Customers	\$/kWh	0.0062
Rate Rider for Disposition of Global Adjustment Account (2018) - effective May 1, 2018 until April 30, 2019	ψ/ΚννΠ	0.0002
Applicable only for Non-RPP Customers	¢/1/1/h	0.0004
	\$/kWh	
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0003
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kWh	(0.0003)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective May 1, 2018 until April 30, 2019	\$/kWh	(0.0030)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0002
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kWh	0.0001
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable Only for Class B Customers	\$/kWh	0.0002
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018)		
- effective May 1, 2018 until April 30, 2019	\$/kWh	0.0009
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0067
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0035
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25
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Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### **GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION**

This classification refers to a non-residential account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 50 kW but less than 5,000 kW, both regular and interval metered. Class A and Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

The rate rider for the disposition of WMS – Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

The rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate order is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	142.24
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.57
Rate Rider for Recovery of 2018 Foregone Revenue - effective May 1, 2018 until December 31, 2018	\$	4.21
Distribution Volumetric Rate	\$/kW	4.2415
Low Voltage Service Rate	\$/kW	0.1589
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable only to non-RPP non-Interval Metered Customers	\$/kW	2.3303
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable only for Class B Interval Metered Customers at December 31, 2016	\$/kW	(1.6412)
Rate Rider for Disposition of Global Adjustment Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.1169
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kW	(0.1224)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective May 1, 2018 until April 30, 2019	\$/kW	0.0184
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective May 1, 2018 until April 30, 2019		
Applicable only for Non-Wholesale Market Participants	\$/kW	(1.1367)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.0620
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kW	0.0168
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018)		
- effective May 1, 2018 until April 30, 2019	\$/kW	0.0796
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0905
Retail Transmission Rate - Network Service Rate	\$/kW	2.6739
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	1.3420
Retail Transmission Rate - Network Service Rate – Interval Metered	\$/kW	2.8030
Retail Transmission Rate - Line and Transformation Connection Service Rate – Interval Metered	\$/kW	1.4520

# Alectra Utilities Corporation PowerStream Rate Zone TARIFF OF RATES AND CHARGES Effective Date January 1, 2018 Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### **MONTHLY RATES AND CHARGES – Regulatory Component**

Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

## Alectra Utilities Corporation PowerStream Rate Zone TARIFF OF RATES AND CHARGES Effective Date January 1, 2018 Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### LARGE USE SERVICE CLASSIFICATION

This classification refers to an account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 5,000 kW. Class A and Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	6,128.34
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	24.34
Rate Rider for Recovery of 2018 Foregone Revenue - effective May 1, 2018 until December 31, 2018	\$	97.02
Distribution Volumetric Rate	\$/kW	2.2623
Low Voltage Service Rate	\$/kW	0.1630
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.1584
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kW	(0.1659)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective May 1, 2018 until April 30, 2019	\$/kW	(1.3235)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.0840
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kW	0.0090
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018)		
- effective May 1, 2018 until April 30, 2019	\$/kW	(0.0723)
Retail Transmission Rate - Network Service Rate	\$/kW	3.2305
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	1.4016
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### STANDBY POWER SERVICE CLASSIFICATION

This classification refers to an account that has Load Displacement Generation and requires the distributor to provide back-up service. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

### MONTHLY RATES AND CHARGES – Delivery Component - APPROVED ON AN INTERIM BASIS

Standby Charge – for a month where standby power is not provided. The charge is applied to the contracted amount (e.g. nameplate rating of generation facility).

\$/kW 2.8334

Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION

This classification refers to an account taking electricity at 750 volts or less whose average monthly peak demand is less than, or is forecast to be less than, 50 kW and the consumption is unmetered. Such connections include cable TV power packs, bus shelters, telephone booths, traffic lights, railway crossings, etc. The customer will provide detailed manufacturer information/documentation with regard to electrical demand/consumption of the proposed unmetered load. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

The rate rider for the disposition of WMS – Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

The rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate order is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	8.68
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.03
Rate Rider for Recovery of 2018 Foregone Revenue - effective May 1, 2018 until December 31, 2018	\$	0.08
Distribution Volumetric Rate	\$/kWh	0.0197
Low Voltage Service Rate	\$/kWh	0.0005
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable only for non-RPP Customers	\$/kWh	0.0062
Rate Rider for Disposition of Global Adjustment Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0003
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kWh	(0.0003)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective May 1, 2018 until April 30, 2019	\$/kWh	(0.0029)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0002
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable Only for Class B Customers	\$/kWh	0.0002
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kWh	0.0001
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018)		
- effective May 1, 2018 until April 30, 2019	\$/kWh	(0.0005)
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0063
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0037
MONTHLY RATES AND CHARGES – Regulatory Component		
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Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### SENTINEL LIGHTING SERVICE CLASSIFICATION

This classification refers to an unmetered lighting load supplied to a sentinel light. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

The rate rider for the disposition of WMS – Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

The rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate order is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge (per Connection)	\$	4.23
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.02
Rate Rider for Recovery of 2018 Foregone Revenue - effective May 1, 2018 until December 31, 2018	\$	0.04
Distribution Volumetric Rate	\$/kW	9.9582
Low Voltage Service Rate	\$/kW	0.1170
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable only for non-RPP Customers	\$/kW	2.3977
Rate Rider for Disposition of Global Adjustment Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.1210
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kW	(0.1267)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective May 1, 2018 until April 30, 2019	\$/kW	(1.0740)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.0641
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0895
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kW	0.0396
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018)		
- effective May 1, 2018 until April 30, 2019	\$/kW	(0.3850)
Retail Transmission Rate - Network Service Rate	\$/kW	2.0778
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	0.9929
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

## Alectra Utilities Corporation PowerStream Rate Zone TARIFF OF RATES AND CHARGES Effective Date January 1, 2018 Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### STREET LIGHTING SERVICE CLASSIFICATION

This classification applies to an account for roadway lighting with a Municipality, Regional Municipality, Ministry of Transportation and private roadway lighting operation, controlled by photo cells. The consumption for these customers will be based on the calculated connected load times the required lighting times established in the approved Ontario Energy Board street lighting load shape template. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

The rate rider for the disposition of WMS – Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

The rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate order is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge (per Connection)	\$	1.20
Rate Rider for Recovery of 2018 Foregone Revenue - effective May 1, 2018 until December 31, 2018	\$	0.01
Distribution Volumetric Rate	\$/kW	6.3791
Low Voltage Service Rate	\$/kW	0.1288
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable Only for Non-RPP Customers	\$/kW	2.2128
Rate Rider for Disposition of Global Adjustment Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.1116
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kW	(0.1169)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective May 1, 2018 until April 30, 2019	\$/kW	(1.0519)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.0592
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective May 1, 2018 until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0870
Rate Rider for Recovery of Incremental Capital (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kW	0.0253
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018)		
- effective May 1, 2018 until April 30, 2019	\$/kW	0.5854
Retail Transmission Rate - Network Service Rate	\$/kW	2.6888
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	1.4379
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### MicroFIT SERVICE CLASSIFICATION

This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's microFIT program and connected to the distributor's distribution system. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

### **MONTHLY RATES AND CHARGES – Delivery Component**

Service Charge	\$ 5.40

### ALLOWANCES

Transformer Allowance for Ownership - per kW of billing demand/month	\$/kW	(0.60)
Primary Metering Allowance for Transformer Losses - applied to measured demand & energy	%	(1.00)

Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### SPECIFIC SERVICE CHARGES

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Customer Administration		
Arrears certificate	\$	15.00
Statement of account	\$	15.00
Duplicate invoices for previous billing	\$	15.00
Request for other billing information	\$	15.00
Easement Letter	\$	15.00
Income tax letter	\$	15.00
Account history	\$	15.00
Returned cheque (plus bank charges)	\$	15.00
Legal letter charge	\$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Special meter reads	\$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	\$	30.00
Non-Payment of Account		
Late payment - per month	%	1.50
Late payment - per annum	%	19.56
Collection of account charge - no disconnection	\$	30.00
Disconnect/reconnect at meter - during regular hours	\$	65.00
Disconnect/reconnect at meter - after regular hours	\$	185.00
Other		
Install/remove load Control device - during regular hours	\$	65.00
Install/remove load control device - after regular hours	\$	185.00
Disconnect/reconnect at meter - during regular hours	\$	65.00
Disconnect/reconnect at meter - after regular hours	\$	185.00
Disconnect/reconnect at pole - during regular hours	\$	185.00
Disconnect/reconnect at pole - after regular hours	\$	415.00
Specific Charge for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect until August 31, 2018	\$	22.35
Specific Charge for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect from September 1, 2018 until December 31, 2018	\$	28.09
Specific Charge for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect from January 1, 2019	\$	43.63
Temporary Service install and remove - overhead - no transformer	\$	500.00

Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

### **RETAIL SERVICE CHARGES (if applicable)**

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity.

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	\$	100.00
Monthly fixed charge, per retailer	\$	20.00
Monthly variable charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing monthly charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing monthly credit, per customer, per retailer	\$/cust.	(0.30)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail		
Settlement Code directly to retailers and customers, if not delivered electronically through the		
Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year	\$	no charge
More than twice a year, per request (plus incremental delivery costs)	\$	2.00

### LOSS FACTORS

If the distributor is not capable of prorating changed loss factors jointly with distribution rates, the revised loss factors will be implemented upon the first subsequent billing for each billing cycle.

Total Loss Factor - Secondary Metered Customer < 5,000 kW	1.0369
Total Loss Factor - Secondary Metered Customer > 5,000 kW	1.0145
Total Loss Factor - Primary Metered Customer < 5,000 kW	1.0266
Total Loss Factor - Primary Metered Customer > 5,000 kW	1.0045

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 23 Filed: June 7, 2018

# ATTACHMENT 23 PROPOSED TARIFF OF RATES AND CHARGES JANUARY 1, 2019 POWERSTREAM RZ

# **INCENTIVE REGULATION MODEL FOR 2019 FILERS**

### Alectra - PowerStream TARIFF OF RATES AND CHARGES Effective Date January 1, 2019 Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

### **RESIDENTIAL SERVICE CLASSIFICATION**

This classification refers to an account taking electricity at 750 volts or less where the electricity is used exclusively in a separately metered living accommodation. Customers shall be residing in single-dwelling units that consist of a detached house or one unit of a semi-detached, duplex, triplex or quadruplex house, with a residential zoning. Separately metered dwellings within a town house complex or apartment building also qualify as residential customers. Multi-unit residential establishments such as apartment buildings supplied through one service (bulk metered) shall be classified as general service. Class B consumers are defined in accordance with 0. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge Smart Metering Entity Charge - effective until December 31, 2022 Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers	\$ \$ \$ \$/kWh \$/kWh \$/kWh	24.83 0.57 0.11 0.16 0.0044 0.0005 0.0004
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019         Applicable Only for Non-RPP Customers         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019         Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019         Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019         Retail Transmission Rate - Network Service Rate         Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh \$/kWh \$/kWh \$/kWh \$/kWh	0.0018 (0.0030) (0.0010) 0.0002 0.0073 0.0040
MONTHLY RATES AND CHARGES – Regulatory Component Wholesale Market Service Rate (WMS) - not including CBR Capacity Based Recovery (CBR) - Applicable for Class B Customers Rural or Remote Electricity Rate Protection Charge (RRP) Standard Supply Service – Administrative Charge (if applicable)	\$/kWh \$/kWh \$/kWh \$	0.0032 0.0004 0.0003 0.25

### **GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION**

This classification refers to a non-residential account taking electricity at 750 volts or less wheose monthly average peak demand is less than, or is forecast to be less than, 50 kW. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	29.26
Smart Metering Entity Charge - effective until December 31, 2022	\$	0.57
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$	0.12
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	0.17
Distribution Volumetric Rate	\$/kWh	0.0187
Low Voltage Service Rate	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019		
Applicable Only for Non-RPP Customers	\$/kWh	0.0018
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kWh	(0.0030)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019	\$/kWh	(0.0009)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kWh	0.0002
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kWh	0.0009
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019	\$/kWh	0.0006
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$/kWh	0.0001
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$/kWh	0.0001
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0065
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0035
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0032
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0004
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25
Statuard Suppry Service – Autrinistrative Stratye (il applicable)	φ	0.25

### **GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION**

This classification refers to a non-residential account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 50 kW but less than 5,000 kW, both regular and interval metered. Class A and Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

The rate rider for the disposition of WMS – Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

The rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate order is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge       \$       143.52         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$       0.57         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$       0.84         Distribution Volumetric Rate       \$       0.84         Low Voltage Service Rate       \$kW       0.1589         Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019       \$kwh       0.0004         Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       \$kWh       0.0004         Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       \$kWh       0.0018         Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019       \$kWh       0.0018         Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       \$kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$kW       0.0184         Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019       \$kW       0.2953
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$       0.84         Distribution Volumetric Rate       \$/kW       4.2797         Low Voltage Service Rate       \$/kW       0.1589         Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019       *       *         Applicable only for Non-RPP Customers non-Interval Metered       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kWh       0.0018
Distribution Volumetric Rate     \$/kW     4.2797       Low Voltage Service Rate     \$/kW     0.1589       Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers     \$/kwh     0.0004       Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers non-Interval Metered     \$/kWh     0.0018       Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019     \$/kW     0.0184
Low Voltage Service Rate     \$/kW     0.1589       Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019     \$/kwh     0.0004       Applicable only for Non-RPP Customers     \$/kwh     0.0004       Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019     \$/kWh     0.0018       Applicable Only for Non-RPP Customers non-Interval Metered     \$/kWh     0.0018       Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019     \$/kW     0.0184
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019       \$/kwh       0.0004         Applicable only for Non-RPP Customers       \$/kwh       0.0004         Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       \$/kWh       0.0018         Applicable Only for Non-RPP Customers non-Interval Metered       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kW       0.0184
Applicable only for Non-RPP Customers       \$/kwh       0.0004         Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       */kWh       0.0018         Applicable Only for Non-RPP Customers non-Interval Metered       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kW       0.0184
Applicable Only for Non-RPP Customers non-Interval Metered       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kW       0.0184
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 \$/kW 0.0184
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019 \$/kW (0.2953)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Applicable only for Non-Wholesale Market Partic \$/kW (1.1367)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019
Applicable only for Non-Wholesale Market Participants \$/kW (0.0453)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019
Applicable Only for Class B Customers \$/kW 0.0905
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019
Applicable Only for Class B Customers \$/kW (0.0046)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019 \$/kW 0.0796
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019 \$/kW 0.0886
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order \$/kW 0.0168
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order \$/kW 0.0249
Retail Transmission Rate – Network Service Rate \$/kW 2.6130
Retail Transmission Rate – Line and Transformation Connection Service Rate \$\kW 1.3338
Retail Transmission Rate – Network Service Rate – Interval Metered \$\kW 2.7391
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered \$\kW 1.4431
MONTHLY RATES AND CHARGES – Regulatory Component
Wholesale Market Service Rate (WMS) - not including CBR \$/kWh 0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers \$/kWh 0.0004
Rural or Remote Electricity Rate Protection Charge (RRP) \$/kWh 0.0003
Standard Supply Service - Administrative Charge (if applicable) \$ 0.25

### LARGE USE SERVICE CLASSIFICATION

This classification refers to an account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 5,000 kW. Class A and Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

The rate rider for the disposition of WMS – Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

The rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate order is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

### **MONTHLY RATES AND CHARGES – Delivery Component**

Service Charge	\$	6,183.50
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$	24.34
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	35.99
Distribution Volumetric Rate	\$/kW	2.2827
Low Voltage Service Rate	\$/kW	0.1630
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	(1.3235)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019	\$/kW	(0.5809)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	(0.0723)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019	\$/kW	(0.0705)
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0090
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0133
Retail Transmission Rate – Network Service Rate	\$/kW	3.1569
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.3931
MONITULY PATES AND CHARGES - Regulatory Component		

#### **MONTHLY RATES AND CHARGES – Regulatory Component**

Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

### STANDBY POWER SERVICE CLASSIFICATION

This classification refers to an account that has Load Displacement Generation and requires the distributor to provide back-up service. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

### MONTHLY RATES AND CHARGES - Delivery Component - APPROVED ON AN INTERIM BASIS

Standby Charge – for a month where standby power is not provided. The charge is applied to the contracted amount (e.g. nameplate rating of generation facility).

2.8589

\$/kW

### UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION

This classification refers to an account taking electricity at 750 volts or less whose average monthly peak demand is less than, or is forecast to be less than, 50 kW and the consumption is unmetered. Such connections include cable TV power packs, bus shelters, telephone booths, traffic lights, railway crossings, etc. The customer will provide detailed manufacturer information/documentation with regard to electrical demand/consumption of the proposed unmetered load. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	8.76
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$	0.03
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	0.05
Distribution Volumetric Rate	\$/kWh	0.0199
Low Voltage Service Rate	\$/kWh	0.0005
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019		
Applicable Only for Non-RPP Customers	\$/kWh	0.0018
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kWh	(0.0029)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019	\$/kWh	(0.0009)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kWh	(0.0005)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019	\$/kWh	(0.0003)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers	\$/kWh	0.0002
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$/kWh	0.0001
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$/kWh	0.0001
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0062
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0082
	φ/Κννπ	0.0037
MONTHLY RATES AND CHARGES – Regulatory Component		
······································		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

### SENTINEL LIGHTING SERVICE CLASSIFICATION

This classification refers to an unmetered lighting load supplied to a sentinel light. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$       0.02         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$       0.02         Distribution Volumetric Rate       \$/kW       10.0478         Low Voltage Service Rate       \$/kW       0.017         Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       \$/kWh       0.0004         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kWh       0.00377         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2019       \$/kW       (0.3377)         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2019       \$/kW       (0.0050)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (RAMVA) (2018) - effective until December 31, 2019       \$/kW       (0.3850)         Applicable Only for Class B Customers       \$/kW       (0.050)       \$/kW       (0.3850)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April	Service Charge (per Connection)	\$	4.27
Distribution Volumetric Rate       \$/kW       10.0478         Low Voltage Service Rate       \$/kW       0.1170         Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019       Applicable only for Non-RPP Customers       \$/kWh       0.0004         Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       \$/kWh       0.0018         Applicable Only for Non-RPP Customers       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until April 30, 2019       \$/kW       (0.3377)         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019       Applicable Only for Class B Customers       \$/kW       0.0895         Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019       Applicable Only for Class B Customers       \$/kW       0.0895         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.3850)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0386         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0386         Retai	Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$	0.02
Low Voltage Service Rate\$/kW0.1170Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019Applicable only for Non-RPP Customers\$/kWh0.0004Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019\$/kWh0.0018Applicable Only for Non-RPP Customers\$/kW(1.0740)Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2019\$/kW(0.3377)Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019Applicable Only for Class B Customers\$/kW(0.0050)Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019\$/kW(0.0250)Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until April 30, 2019\$/kW(0.2176)Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until April 30, 2019\$/kW(0.2176)Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until April 30, 2019\$/kW(0.2176)Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order\$/kW0.0396Retail Transmission Rate – Network Service Rate\$/kW0.03860\$/kW0.03860Retail Transmission Rate – Line and Transformation Connection Service Rate\$/kW0.98690.9869	Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	0.02
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019       Applicable only for Non-RPP Customers       \$/kWh       0.0004         Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2019       \$/kW       (1.0740)         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2019       \$/kW       (0.3377)         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019       Applicable Only for Class B Customers       \$/kW       0.0050)         Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019       \$/kW       (0.0050)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.3850)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.2176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0396         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0585 <tr< td=""><td>Distribution Volumetric Rate</td><td>\$/kW</td><td>10.0478</td></tr<>	Distribution Volumetric Rate	\$/kW	10.0478
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019       \$/kWh       0.0018         Applicable Only for Non-RPP Customers       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kW       (1.0740)         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2019       \$/kW       (0.3377)         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2019       Applicable Only for Class B Customers       \$/kW       0.0895         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.050)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.23850)         Rate Rider for Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019       \$/kW       (0.23850)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.03986         Retail Transmission Rate – Network Service Rate       \$/kW       0.0585       0.0585         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869	Low Voltage Service Rate	\$/kW	0.1170
Applicable Only for Non-RPP Customers       \$/kWh       0.0018         Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kW       (1.0740)         Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until April 30, 2019       \$/kW       (0.3377)         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019       Applicable Only for Class B Customers       \$/kW       (0.0050)         Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019       \$/kW       (0.0050)         Applicable Only for Class B Customers       \$/kW       (0.0050)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.3850)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019       \$/kW       (0.2176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0585         Retail Transmission Rate – Network Service Rate       \$/kW       0.05869       \$         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869       \$	Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019       \$/kW       (1.0740)         Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019       \$/kW       (0.3377)         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019       Applicable Only for Class B Customers       \$/kW       (0.0050)         Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019       \$/kW       (0.0050)         Applicable Only for Class B Customers       \$/kW       (0.0050)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.0176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       (0.0385)         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0385         Retail Transmission Rate – Network Service Rate       \$/kW       2.0304       \$/kW       0.9869	Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019		
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019       \$/kW       (0.3377)         Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019       Applicable Only for Class B Customers       \$/kW       0.0895         Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019       \$/kW       (0.0050)         Applicable Only for Class B Customers       \$/kW       (0.0350)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.0450)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019       \$/kW       (0.2176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0386         Retail Transmission Rate – Network Service Rate       \$/kW       0.0585       0.0585         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869	Applicable Only for Non-RPP Customers	\$/kWh	0.0018
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019       Applicable Only for Class B Customers       \$/kW       0.0895         Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019       \$/kW       (0.0050)         Rate Rider for Disposition of Lass B Customers       \$/kW       (0.0050)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.2176)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019       \$/kW       (0.2176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0396         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0585         Retail Transmission Rate – Network Service Rate       \$/kW       2.0304       \$/kW       0.9869         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869       0.9869	Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	(1.0740)
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019       \$/kW       (0.0050)         Applicable Only for Class B Customers       \$/kW       (0.0050)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.3850)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019       \$/kW       (0.2176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0396         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0585         Retail Transmission Rate – Network Service Rate       \$/kW       2.0304       \$/kW       0.9869         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869       0.9869	Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019	\$/kW	(0.3377)
Applicable Only for Class B Customers       \$/kW       (0.0050)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.3850)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019       \$/kW       (0.2176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0386         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0386         Retail Transmission Rate – Network Service Rate       \$/kW       0.0386         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.0386	Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers	\$/kW	0.0895
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019       \$/kW       (0.3850)         Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019       \$/kW       (0.2176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0396         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0385         Retail Transmission Rate – Network Service Rate       \$/kW       2.0304         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869	Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019		
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019       \$/kW       (0.2176)         Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0396         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0396         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0585         Retail Transmission Rate – Network Service Rate       \$/kW       2.0304         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869	Applicable Only for Class B Customers	\$/kW	(0.0050)
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0396         Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0585         Retail Transmission Rate – Network Service Rate       \$/kW       2.0304         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869	Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	(0.3850)
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order       \$/kW       0.0585         Retail Transmission Rate – Network Service Rate       \$/kW       2.0304         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869	Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019	\$/kW	(0.2176)
Retail Transmission Rate – Network Service Rate       \$/kW       2.0304         Retail Transmission Rate – Line and Transformation Connection Service Rate       \$/kW       0.9869	Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0396
Retail Transmission Rate – Line and Transformation Connection Service Rate     \$/kW     0.9869	Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0585
Retail Transmission Rate – Line and Transformation Connection Service Rate     \$/kW     0.9869			
MONITHI V DATES AND CHARCES - Regulatory Component	Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.9869
MONITHEY DATES AND CHARCES - Regulatory Component			
	MONTHLY BATES AND CHARCES - Regulatory Component		
MONTHLY RATES AND CHARGES - Regulatory Component	MONTHLY RATES AND CHARGES – Regulatory Component		

Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

### STREET LIGHTING SERVICE CLASSIFICATION

This classification applies to an account for roadway lighting with a Municipality, Regional Municipality, Ministry of Transportation and private roadway lighting operation, controlled by photo cells. The consumption for these customers will be based on the calculated connected load times the required lighting times established in the approved Ontario Energy Board street lighting load shape template. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

### **MONTHLY RATES AND CHARGES – Delivery Component**

Service Charge (per Connection)	\$	1.21
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	0.01
Distribution Volumetric Rate	\$/kW	6.4365
Low Voltage Service Rate	\$/kW	0.1288
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019		
Applicable Only for Non-RPP Customers	\$/kWh	0.0018
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	(1.0519)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019	\$/kW	(0.3185)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	0.5854
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019	\$/kW	1.2612
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0870
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019		
Applicable Only for Class B Customers	\$/kW	(0.0047)
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0253
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0375
	•	
Retail Transmission Rate – Network Service Rate	\$/kW	2.6275
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.4291

### MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

### **MicroFIT SERVICE CLASSIFICATION**

This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's microFIT program and connected to the distributor's distribution system. Further servicing details are available in the distributor's Conditions of Service.

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	5.40
ALLOWANCES Transformer Allowance for Ownership - per kW of billing demand/month Primary Metering Allowance for Transformer Losses - applied to measured demand & energy	\$/kW %	(0.60) (1.00)

### SPECIFIC SERVICE CHARGES

### APPLICATION

Customer Administration

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Customer Administration		
Arrears certificate	\$	15.00
Statement of account	\$	15.00
Duplicate invoices for previous billing	\$	15.00
Request for other billing information	\$	15.00
Easement Letter	\$	15.00
Income tax letter	\$	15.00
Account history	\$	15.00
Returned Cheque (plus bank charges)	\$	15.00
Legal letter charge	\$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Special meter reads	\$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	\$	30.00
Non-Payment of Account		
Late Payment - per month	%	1.50
Late Payment - per annum	%	19.56
Collection of account charge - no disconnection	\$	30.00
Disconnect/Reconnect at Meter - during regular hours	\$	65.00
Disconnect/Reconnect at Meter - after regular hours	\$	185.00
Other		
Install/Remove Load Control Device - during regular hours	\$	65.00
Install/Remove Load Control Device - after regular hours	\$	185.00
Disconnect/Reconnect at Meter - during regular hours	\$	65.00
Disconnect/Reconnect at Meter - after regular hours	\$	185.00
Disconnect/Reconnect at Pole - during regular hours	\$	185.00
Disconnect/Reconnect at Pole - after regular hours	\$	415.00
Specific Charge for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect from January 1, 2019	\$	43.63
Temporary Service install and remove - overhead - no transformer	\$	500.00

### **RETAIL SERVICE CHARGES (if applicable)**

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity.

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	\$	100.00
Monthly Fixed Charge, per retailer	\$	20.00
Monthly Variable Charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing monthly charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing monthly credit, per customer, per retailer	\$/cust.	(0.30)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail		
Settlement Code directly to retailers and customers, if not delivered electronically through the		
Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year	\$	no charge
More than twice a year, per request (plus incremental delivery costs)	\$	2.00

### LOSS FACTORS

If the distributor is not capable of prorating changed loss factors jointly with distribution rates, the revised loss factors will be implemented upon the first subsequent billing for each billing cycle.

1.0369
1.0145
1.0266
1.0045

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 24 Filed: June 7, 2018

# ATTACHMENT 24 CUSTOMER BILL IMPACTS POWERSTREAM RZ

### **INCENTIVE REGULATION MODEL FOR 2019 FILERS**

The bill comparisons below must be provided for typical customers and consumption levels. Bill impacts must be provided for residential customers consuming 750 kWh per month and general service customers consuming 2,000 kWh per month and having a monthly demand of less than 50 kW. Include bill comparisons for NonRPP (retailer) as well. To assess the combined effects of the shift to fixed rates and other bill impacts associated with changes in the cost of distributor's 10th consumption percentile (In other words, 10% of a distributor's residential customers consume at or less than this level of consumption on a monthly basi). Refer to page 9 of the Filing Requirements For Electricity Distribution Rate Applications issued July 14, 2016.

For certain classes where one or more customers have unique consumption and demand patterns and which may be significantly impacted by the proposed rate changes, the distributor must show a typical comparison, and provide an explanation.

#### Note:

1. For those classes that are not eligible for the RPP price, the weighted average price including Class B GA through end of February 2017 of \$0.1058/kWh (IESO's Monthly Market Report for February 2017, page 22) has been used to represent the cost of power. For those classes on a retailer contract, applicants should enter the contract price (plus GA) for a more accurate estimate. Changes to the cost of power can be made directly on the bill impact table for the specific class.

2. Please enter the applicable billing determinant (e.g. number of connections or devices) to be applied to the monthly service charge for unmetered rate classes in column N. If the monthly service charge is applied on a per customer basis, enter the number "1". Distributors should provide the number of connections or devices reflective of a typical customer in each class.

#### Table 1

RATE CLASSES / CATEGORIES (eg: Residential TOU, Residential Retailer)		Units	RPP? Non-RPP Retailer? Non-RPP Other?	Current Loss Factor	Proposed Loss Factor	Consumption (kWh)	Demand kW (if applicable)	RTSR	Billing Determinant Applied to Fixed Charge for Unmetered Classes (e.g. # of devices/connect ions)
RESIDENTIAL SERVICE CLASSIFICATION		kWh	RPP	1.0369	1.0369	750		N/A	
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION		kWh	RPP	1.0369	1.0369	2,000		N/A	
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION		kW	Non-RPP (Other)	1.0369	1.0369	80,000	250	DEMAND	
LARGE USE SERVICE CLASSIFICATION		kW	Non-RPP (Other)	1.0145	1.0145	2,800,000	7,350	DEMAND	
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION		kWh	RPP	1.0369	1.0369	150		N/A	1
STANDBY POWER SERVICE CLASSIFICATION		kW						N/A	
SENTINEL LIGHTING SERVICE CLASSIFICATION		kW	RPP	1.0369	1.0369	180	1	DEMAND	1
STREET LIGHTING SERVICE CLASSIFICATION		kW	Non-RPP (Other)	1.0369	1.0369	280	1	DEMAND	1
RESIDENTIAL SERVICE CLASSIFICATION	(10th consumptio	kWh	RPP	1.0369	1.0369	309		N/A	
RESIDENTIAL SERVICE CLASSIFICATION	(Retailer)		Non-RPP (Retailer)	1.0369	1.0369	750		N/A	
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	(Retailer)		Non-RPP (Retailer)	1.0369	1.0369	2,000		N/A	
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									

#### Table 2

					Sub-To	tal			To	otal
RATE CLASSES / CATEGORIES /eg: Residential TOU, Residential Retailer)	Units		4	۹.	В		С	;	A +	B+C
eg. Residential 100, Residential Relater)			\$	%	\$	%	\$	%	\$	%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kWh	\$	0.15	0.5%	\$ (0.78)	-2.6%	\$ (0.94)	-2.4%	\$ (0.99)	-0.9%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	kWh	\$	1.83	2.7%	\$ (0.58)	-0.8%	\$ (0.99)	-1.1%	\$ (15.74)	-5.4%
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION - Non-RPP (Other)	kW	\$	35.83	2.9%	\$ (503.17)	-30.6%	\$ (520.45)	-19.7%	\$ (1,220.90)	-8.9%
ARGE USE SERVICE CLASSIFICATION - Non-RPP (Other)	kW	\$	(276.64)	-1.2%	\$ (5,108.53)	-35.4%	\$ (5,711.96)	-11.8%	\$ (28,602.52)	-6.8%
JNMETERED SCATTERED LOAD SERVICE CLASSIFICATION - RPP	kWh	\$	0.05	0.4%	\$ (0.12)	-1.0%	\$ (0.13)	-1.0%	\$ (1.34)	-4.3%
STANDBY POWER SERVICE CLASSIFICATION -	kW	\$	-	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%
SENTINEL LIGHTING SERVICE CLASSIFICATION - RPP	kW	\$	(0.05)	-0.4%	\$ (2.85)	-17.8%	\$ (2.90)	-15.2%	\$ (4.70)	-11.5%
STREET LIGHTING SERVICE CLASSIFICATION - Non-RPP (Other)	kW	\$	1.37	16.7%	\$ (0.72)	-6.7%	\$ (0.79)	-5.3%	\$ (3.11)	-5.8%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kWh	\$	1.95	7.9%	\$ 1.46	5.7%	\$ 1.40	4.8%	\$ 1.47	2.5%
RESIDENTIAL SERVICE CLASSIFICATION - Non-RPP (Retailer)	kWh	\$	0.15	0.5%	\$ (4.09)	-11.6%	\$ (4.24)	-9.6%	\$ (4.45)	-3.4%
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION - Non-RPP (Retailer)	kWh	\$	1.83	2.7%	\$ (9.38)	-10.9%	\$ (9.79)	-9.2%	\$ (24.98)	-7.1%
		-								

#### Customer Class: RESIDENTIAL SERVICE CLASSIFICATION RPP

RPP / Non-RPP: Consumption Demand **Current Loss Factor** Proposed/Approved Loss Factor 1.0369 Class B

750 kWh - kW 1.0369

			urrent OEB-Appro	ove	d	Ι		Proposed			In	pact
		Rate	Volume		Charge	ĺ	Rate	Volume		Charge		
		(\$)			(\$)		(\$)		ĺ	(\$)	\$ Change	% Change
Monthly Service Charge	\$	21.63	1	\$	21.63	\$	24.83	1	\$	24.83	\$ 3.20	14.79%
Distribution Volumetric Rate	\$	0.0088	750	\$	6.60	\$	0.0044	750	\$	3.30	\$ (3.30	-50.00%
Fixed Rate Riders	\$	0.25	1	\$	0.25	\$	0.27	1	\$	0.27	\$ 0.02	8.00%
Volumetric Rate Riders	\$	-	750	\$	-	\$	0.0003	750	\$	0.23	\$ 0.23	
Sub-Total A (excluding pass through)				\$	28.48				\$	28.63	\$ 0.15	0.51%
Line Losses on Cost of Power	\$	0.0820	28	\$	2.27	\$	0.0820	28	\$	2.27	\$-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0028	750	\$	(2.10)	-\$	0.0038	750	\$	(2.85)	\$ (0.75	35.719
GA Rate Riders										. , ,		
Low Voltage Service Charge	\$	0.0005	750	\$	0.38	\$	0.0005	750	\$	0.38	\$-	0.00%
Smart Meter Entity Charge (if applicable) and/or		0.75			0.75		0.57			0.57	¢ (0.40	04.000
any fixed (\$) Deferral/Variance Account Rate Riders	\$	0.75	1	\$		\$	0.57	1	\$	0.57	\$ (0.18	-24.00%
Sub-Total B - Distribution (includes Sub-Total A)				\$	29.77				\$	28.99	\$ (0.78	-2.64%
RTSR - Network	\$	0.0075	778	\$	5.83	\$	0.0073	778	\$	5.68	\$ (0.16	-2.67%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0040	778	\$	3.11	\$	0.0040	778	\$	3.11	\$-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	38.72				\$	37.78	\$ (0.94	-2.43%
Wholesale Market Service Charge (WMSC)	\$	0.0036	778	\$	2.80	\$	0.0036	778	\$	2.80	\$-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	778	\$	0.23	\$	0.0003	778	\$	0.23	\$-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$-	0.00%
Debt Retirement Charge (DRC)												
											\$-	
TOU - Off Peak	\$	0.0650	488	\$	31.69	\$	0.0650	488	\$	31.69	\$-	0.00%
TOU - Mid Peak	\$	0.0940	128	\$	11.99	\$	0.0940	128	\$	11.99	\$-	0.00%
TOU - On Peak	\$	0.1320	135	\$	17.82	\$	0.1320	135	\$	17.82	\$-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	750	\$	77.85	\$	0.1038	750	\$	77.85	\$-	0.00%
Average IESO Wholesale Market Price	\$	0.1038	750	\$	77.85	\$	0.1038	750	\$	77.85	\$-	0.00%
Total Bill on TOU (before Taxes)				\$	103.49				\$	102.55	\$ (0.94	-0.91
HST		13%		\$	13.45		13%		\$	13.33	\$ (0.12	-0.919
Total Bill on TOU (before 8% Provincial Rebate)				\$					\$	115.88	\$ (1.06	-0.919
8% Provincial Rebate		-8%		\$			-8%		\$	(8.20)		-0.919
Total Bill on TOU				\$	108.67				\$	107.68	\$ (0.99	-0.919
Total Bill on Non-RPP Avg. Price				\$	119.85				\$	118.91	\$ (0.94	-0.78%
HST		13%		\$			13%		\$	15.46	\$ (0.12	
Provincial Rebate		-8%		\$			-8%		\$	(9.51)		-0.789
Total Bill on Non-RPP Avg. Price				\$	125.84				\$	124.86	\$ (0.99	-0.78
Total Bill on Average IESO Wholesale Market Price				\$	119.85				\$	118.91	\$ (0.94	-0.78
HST		13%		\$		1	13%		\$	15.46	\$ (0.12	
Provincial Rebate		-8%		\$			-8%		\$	(9.51)	\$ 0.08	-0.789
Total Bill on Average IESO Wholesale Market Price				\$					\$	124.86		

-2.6%

#### Customer Class: GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION RPP

RPP / Non-RPP: Consumption 2,000 kWh Demand - kW **Current Loss Factor** 1.0369 Proposed/Approved Loss Factor 1.0369

		(	Current OEB-Appro	oved				Proposed				Impa	act
		Rate	Volume		Charge		Rate	Volume	C	harge			
		(\$)		ĺ	(\$)		(\$)			(\$)	\$	Change	% Change
Monthly Service Charge	\$	29.00	1	\$	29.00	\$	29.26	1	\$	29.26	\$	0.26	0.90%
Distribution Volumetric Rate	\$	0.0185	2000	\$	37.00	\$	0.0187	2000	\$	37.40	\$	0.40	1.08%
Fixed Rate Riders	\$	0.52	1	\$	0.52	\$	0.29	1	\$	0.29	\$	(0.23)	-44.23%
Volumetric Rate Riders	\$	0.0010	2000	\$	2.00	\$	0.0017	2000	\$	3.40	\$	1.40	70.00%
Sub-Total A (excluding pass through)				\$	68.52				\$	70.35	\$	1.83	2.67%
Line Losses on Cost of Power	\$	0.0820	74	\$	6.05	\$	0.0820	74	\$	6.05	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0026	2,000	\$	(5.20)	-\$	0.0037	2,000	\$	(7.40)	\$	(2.20)	42.31%
GA Rate Riders										, ,			
Low Voltage Service Charge	\$	0.0004	2,000	\$	0.80	\$	0.0004	2,000	\$	0.80	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or		0.78		¢	0.78		0.57		¢	0.57	¢	(0.04)	00.000/
any fixed (\$) Deferral/Variance Account Rate Riders	\$	0.78	1	\$	0.78	\$	0.57	1	\$		\$	(0.21)	-26.92%
Sub-Total B - Distribution (includes Sub-Total A)				\$	70.95				\$	70.37	\$	(0.58)	-0.82%
RTSR - Network	\$	0.0067	2,074	\$	13.89	\$	0.0065	2,074	\$	13.48	\$	(0.41)	-2.99%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0035	2,074	\$	7.26	\$	0.0035	2,074	\$	7.26	\$	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	92.10				\$	91.11	\$	(0.99)	-1.08%
Wholesale Market Service Charge (WMSC)	\$	0.0036	2,074	\$	7.47	\$	0.0036	2,074	\$	7.47	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	2,074	\$	0.62	\$	0.0003	2,074	\$	0.62	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	2,000	\$	14.00	\$	-	2,000	\$	-	\$	(14.00)	-100.00%
									-		\$	· - ´	
TOU - Off Peak	\$	0.0650	1,300	\$	84.50	\$	0.0650	1,300	\$	84.50	\$	-	0.00%
TOU - Mid Peak	s	0.0940		\$	31.96		0.0940		\$		\$	-	0.00%
TOU - On Peak	s	0.1320	360	\$		s	0.1320		\$		s.	-	0.00%
Non-RPP Retailer Avg. Price	ŝ	0.1038	2,000			s	0.1038	2,000	*		\$	-	0.00%
Average IESO Wholesale Market Price	s	0.1038	2,000	\$	207.60	ŝ	0.1038	-	\$		\$	-	0.00%
	, v	0.1000	2,000	Ŷ	201.00	Ŷ	0.1000	2,000	Ŷ	201.00	Ψ		0.0070
Total Bill on TOU (before Taxes)				\$	278.42	1			\$	263.43	¢	(14.99)	-5.39%
HST		13%		\$	36.19		13%		₽ \$	34.25		(14.95)	-5.39%
Total Bill on TOU (before 8% Provincial Rebate)		1370		\$	314.62		1370		¢	297.67		(16.94)	-5.39%
8% Provincial Rebate		-8%		э \$	(22.27)		-8%		э S	(21.07)		(16.94)	-5.39%
Total Bill on TOU		-0 /6		Ф \$	(22.27)		-0 %		ф Ф	276.60		(15.74)	-5.39%
		_		ş	292.34				ð	270.00	Ъ	(15.74)	-5.39%
Total Bill on Non-RPP Avg. Price				\$	322.04	1			¢	307.05	¢	(14.99)	-4.66%
HST		13%		\$	41.87		13%		\$	39.92		(14.95)	-4.66%
Provincial Rebate		-8%		\$	(25.76)		-8%		\$	(24.56)		1.20	-4.66%
Total Bill on Non-RPP Avg. Price				\$	338.14				\$	322.40		(15.74)	-4.66%
Total Bill on Average IESO Wholesale Market Price				\$	322.04				\$		\$	(14.99)	-4.66%
HST		13%		\$	41.87		13%		\$	39.92		(1.95)	-4.66%
Provincial Rebate		-8%		\$	(25.76) 338.14		-8%		\$ \$	(24.56) 322.40	\$ \$	1.20 (15.74)	-4.66%
Total Bill on Average IESO Wholesale Market Price				¢	338.14				φ	322.40	¢	(15.74)	-4.66%

Class B

#### Customer Class: GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION

RPP / Non-RPP: Non-RPP (Other) Class B - non-Interval Metered



		0	urrent OEB-Appro	ved				Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume	Charg	e			
		(\$)			(\$)		(\$)		(\$)			\$ Change	% Change
Monthly Service Charge	\$	142.24	1	\$	142.24	\$	143.52	1	\$	143.52	\$	1.28	0.90%
Distribution Volumetric Rate	\$	4.2415	250	\$	1,060.38	\$	4.2797	250	\$ 1,0	069.92	\$	9.54	0.90%
Fixed Rate Riders	\$	4.78	1	\$	4.78	\$	1.41	1	\$	1.41	\$	(3.37)	-70.50%
Volumetric Rate Riders	\$	0.0964	250	\$	24.10	\$	0.2099	250	\$	52.48	\$	28.38	117.74%
Sub-Total A (excluding pass through)				\$	1,231.50				\$ 1,2	267.32	\$	35.83	2.91%
Line Losses on Cost of Power	\$		-	\$	-	\$	-	-	\$	-	\$	-	
Total Deferral/Variance Account Rate Riders	\$	1.3590	250	\$	339.75	-\$	1.3730	250	\$ (;	343.25)	\$	(683.00)	-201.03%
GA Rate Riders	\$	0.0004	80,000	\$	32.00	\$	0.0022	80,000	\$	176.00	\$	144.00	450.00%
Low Voltage Service Charge	\$	0.1589	250	\$	39.73	\$	0.1589	250	\$	39.73	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or	\$	-	1	\$		\$	_	1	\$		\$		
any fixed (\$) Deferral/Variance Account Rate Riders	Þ	-	ļ		-	φ	-	1	•	-	•	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	1,642.97					139.80	\$	(503.17)	-30.63%
RTSR - Network	\$	2.6739	250	\$	668.48	\$	2.6130	250			\$	(15.23)	-2.28%
RTSR - Connection and/or Line and Transformation Connection	\$	1.3420	250	\$	335.50	\$	1.3338	250			\$	(2.05)	-0.61%
Sub-Total C - Delivery (including Sub-Total B)				\$	2,646.95						\$	(520.45)	-19.66%
Wholesale Market Service Charge (WMSC)	\$	0.0036	82,952	\$	298.63	\$	0.0036	82,952	\$	298.63	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	82,952	\$	24.89	\$	0.0003	82,952	\$	24.89	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	80,000	\$	560.00	\$	-	80,000	\$	-	\$	(560.00)	-100.00%
											\$	-	
TOU - Off Peak	\$	0.0650	53,919	\$	3,504.72	\$	0.0650	53,919	\$ 3,	504.72	\$	-	0.00%
TOU - Mid Peak	\$	0.0940	14,102	\$	1,325.57	\$	0.0940	14,102	\$ 1,3	325.57	\$	-	0.00%
TOU - On Peak	\$	0.1320	14,931	\$	1,970.94	\$	0.1320	14,931	\$ 1,9	970.94	\$	-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	82,952	\$	8,610.42	\$	0.1038	82,952	\$ 8,0	510.42	\$	-	0.00%
Average IESO Wholesale Market Price	\$	0.1038	82,952	\$	8,610.42	\$	0.1038	82,952	\$ 8,	510.42	\$	-	0.00%
Total Bill on TOU (before Taxes)				\$	10,331.94				\$ 9,3	251.50	\$	(1,080.45)	-10.46%
HST		13%		\$	1,343.15		13%		\$ 1,3	202.69	\$	(140.46)	-10.46%
8% Provincial Rebate		-8%		\$	(826.56)		-8%		\$ (	740.12)	\$	86.44	-10.46%
Total Bill on TOU				\$	10,848.54					,	\$	(1,134.47)	-10.46%
	-			Ŧ					<u> </u>		Ŧ	(1,10111)	
Total Bill on Non-RPP Avg. Price				\$	12,141.13				\$ 11,	060.68	\$	(1,080.45)	-8.90%
HST		13%		\$	1,578.35		13%			437.89		(140.46)	-8.90%
8% Provincial Rebate		-8%		\$	(971.29)		-8%			384.85)		86.44	-8.90%
Total Bill on Non-RPP Avg. Price				\$	12,748.18				\$ 11,	613.71	\$	(1,134.47)	-8.90%
Total D'II an Anna an ISOO Mila Incola Maria ( Drine				¢	40.444.40				*	00.00	¢	(4.000.45)	0.000/
Total Bill on Average IESO Wholesale Market Price		13%		<b>\$</b> 9	<b>12,141.13</b> 1,578.35	1	13%				\$ \$	(1,080.45) (140.46)	<b>-8.90%</b> -8.90%
Total Bill on Average IESO WMP (before 8% Provincial Rebate)		13%		э \$	13,719.47		13%				э \$	(1,220.90)	-8.90%
8% Provincial Rebate		0%		\$	-		0%		\$ 12,	-	\$	-	0.0078
Total Bill on Average IESO Wholesale Market Price		570		\$	13,719.47					498.57	\$	(1,220.90)	-8.90%

#### Customer Class: LARGE USE SERVICE CLASSIFICATION

Non-RPP (Other)

RPP / Non-RPP: Consumption 2,800,000 kWh Demand **Current Loss Factor** 

HST

8% Provincial Rebate

Total Bill on Average IESO WMP (before 8% Provincial Rebate)

Total Bill on Average IESO Wholesale Market Price

Class A

7,350 kW 1.0145 Proposed/Approved Loss Factor 1.0145

			Current OEB-Appro	oved	1	1		Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	6,128.34	1	\$	6,128.34	\$	6,183.50	1	\$	6,183.50	\$	55.16	0.90%
Distribution Volumetric Rate	\$	2.2623	7350	\$	16,627.91	\$	2.2827	7350	\$	16,777.56	\$	149.65	0.90%
Fixed Rate Riders	\$	121.36	1	\$	121.36	\$	60.33	1	\$	60.33	\$	(61.03)	-50.29%
Volumetric Rate Riders	-\$	0.0633	7350	\$	(465.26)	-\$	0.1205	7350	\$	(885.68)	\$	(420.42)	90.36%
Sub-Total A (excluding pass through)				\$	22,412.35				\$	22,135.71	\$	(276.64)	-1.23%
Line Losses on Cost of Power	\$	-	-	\$	-	\$	-	-	\$	-	\$	-	
Total Deferral/Variance Account Rate Riders	-\$	1.2470	7,350	\$	(9,165.45)	-\$	1.9044	7,350	\$	(13,997.34)	\$	(4,831.89)	52.72%
GA Rate Riders						\$	-	2,800,000	\$	-	\$	-	
Low Voltage Service Charge	\$	0.1630	7,350	\$	1,198.05	\$	0.1630	7,350	\$	1,198.05	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or	\$	_	1	\$		\$		1	\$		\$		
any fixed (\$) Deferral/Variance Account Rate Riders	Ŷ	-	1	<u> </u>	-	Ŷ	-	1		-	•	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	14,444.95				\$	9,336.42	•	(5,108.53)	-35.37%
RTSR - Network	\$	3.2305	7,350		23,744.18		3.1569	7,350	\$	23,203.22		(540.96)	-2.28%
RTSR - Connection and/or Line and Transformation Connection	\$	1.4016	7,350	_	10,301.76	\$	1.3931	7,350	_	10,239.29		(62.48)	-0.61%
Sub-Total C - Delivery (including Sub-Total B)				\$	48,490.89				\$	42,778.92		(5,711.96)	-11.78%
Wholesale Market Service Charge (WMSC)	\$	0.0036	2,840,600	\$	10,226.16	\$	0.0036	2,840,600		10,226.16	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	2,840,600	\$	852.18	\$	0.0003	2,840,600	\$	852.18	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	2,800,000	\$	19,600.00	\$		2,800,000	\$	-	\$	(19,600.00)	-100.00%
											\$	-	
TOU - Off Peak	\$	0.0650	1,846,390	\$	120,015.35	\$	0.0650	1,846,390	\$	120,015.35	\$	-	0.00%
TOU - Mid Peak	\$	0.0940	482,902	\$	45,392.79	\$	0.0940	482,902	\$	45,392.79	\$	-	0.00%
TOU - On Peak	\$	0.1320	511,308	\$	67,492.66	\$	0.1320	511,308	\$	67,492.66	\$	-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	2,840,600	\$	294,854.28	\$	0.1038	2,840,600	\$	294,854.28	\$	-	0.00%
Average IESO Wholesale Market Price	\$	0.1038	2,840,600	\$	294,854.28	\$	0.1038	2,840,600	\$	294,854.28	\$	-	0.00%
	<u> </u>												
Total Bill on TOU (before Taxes)				\$	312,070.27				\$	286,758.31	\$	(25,311.96)	-8.11%
HST		13%		\$	40,569.13		13%		\$	37,278.58		(3,290.56)	-8.11%
8% Provincial Rebate		-8%		\$	(24,965.62)		-8%		\$	(22,940.66)		2,024.96	-8.11%
Total Bill on TOU				\$	327,673.78				\$	301,096.22		(26,577.56)	-8.11%
				Ť		-			Ŧ		Ť	(,)	
Total Bill on Non-RPP Avg. Price				\$	374,023.76	1			\$	348,711.79	\$	(25,311.96)	-6.77%
HST		13%		\$	48,623.09	1	13%		\$	45,332.53	\$	(3,290.56)	-6.77%
8% Provincial Rebate		-8%		\$	(29,921.90)		-8%		\$	(27,896.94)		2,024.96	-6.77%
Total Bill on Non-RPP Avg. Price				\$	392,724.94				\$	366,147.38	\$	(26,577.56)	-6.77%
					274 000 70				*	240 744 70	Ļ	(05.044.00)	0 770/
Total Bill on Average IESO Wholesale Market Price				\$	374,023.76				\$	348,711.79	\$	(25,311.96)	-6.77%

\$ \$ \$ \$ \$ \$

48.623.09

422,646.84

422,646.84

13%

0%

45.332.53 \$

394,044.32 \$

\$

9

394,044.32

\$

\$

\$

\$

(3,290,56)

(28,602.52)

(28,602.52)

-6.77%

-6.77%

-6.77%

13%

0%

#### Customer Class: UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION RPP

RPP / Non-RPP: Consumption 150 kWh - kW Demand Current Loss Factor 1.0369 Proposed/Approved Loss Factor 1.0369

			Current OEB-Appro	oved	1		Proposed				Imp	act
		Rate	Volume		Charge	Rate	Volume		Charge			
		(\$)			(\$)	(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	8.68	1	\$	8.68	\$ 8.7	6 1	1\$	8.76	\$	0.08	0.92%
Distribution Volumetric Rate	\$	0.0197	150	\$	2.96	\$ 0.019	150	\$	2.98	\$	0.03	0.90%
Fixed Rate Riders	\$	0.11	1	\$	0.11	\$ 0.0	в 1	1\$	0.08	\$	(0.03)	-27.27%
Volumetric Rate Riders	-\$	0.0004	150	\$	(0.06)	-\$ 0.000	5 150	\$	(0.09)	\$	(0.03)	50.00%
Sub-Total A (excluding pass through)				\$	11.69			\$	11.73	\$	0.05	0.40%
Line Losses on Cost of Power	\$	0.0820	6	\$	0.45	\$ 0.082	0 6	\$	0.45	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0025	150	\$	(0.38)	-\$ 0.003	6 150	\$	(0.54)	\$	(0.17)	44.00%
GA Rate Riders	\$	-	150	\$	-	\$ -	150	\$	-	\$	-	
Low Voltage Service Charge	\$	0.0005	150	\$	0.08	\$ 0.000	5 150	\$	0.08	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or								, ,				
any fixed (\$) Deferral/Variance Account Rate Riders			1	\$	-		1	1\$	-	\$	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	11.84			\$	11.72	\$	(0.12)	-1.00%
RTSR - Network	\$	0.0063	156	\$	0.98	\$ 0.006	2 156	\$	0.96	\$	(0.02)	-1.59%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0037	156	\$	0.58	\$ 0.003	7 156	\$	0.58	\$	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	13.39			\$	13.26	\$	(0.13)	-1.00%
Wholesale Market Service Charge (WMSC)	\$	0.0036	156	\$	0.56	\$ 0.003	6 156	\$	0.56	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	156	\$	0.05	\$ 0.000	3 156	\$	0.05	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$ 0.2	5 1	1 \$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	150	\$	1.05	\$ -	150	\$	-	\$	(1.05)	-100.00%
				Ľ				Ľ		\$	-	
TOU - Off Peak	s	0.0650	98	\$	6.34	\$ 0.065	98	\$	6.34	\$	-	0.00%
TOU - Mid Peak	s		26	\$	2.40				2.40	\$	-	0.00%
TOU - On Peak	s		27	\$	3.56			\$	3.56	\$	-	0.00%
Non-RPP Retailer Avg. Price	ŝ		150	\$	15.57			-	15.57	\$	-	0.00%
Average IESO Wholesale Market Price	ŝ		150		15.57				15.57	\$		0.00%
		0.1000	100	Ŷ	10101	• •••••	100	÷	10.01	Ŷ		0.0070
Total Bill on TOU (before Taxes)				\$	27.60			\$	26.42	\$	(1.18)	-4.29%
HST		13%		\$	3.59	13	26	\$		\$	(0.15)	-4.29%
Total Bill on TOU (before 8% Provincial Rebate)		10 /		\$		10	/0	\$		\$	. ,	-4.29%
8% Provincial Rebate		0%		φ \$	31.15	0	2/	φ \$	29.03	9 \$	(1.54)	-4.2370
Total Bill on TOU		070		\$	31.19	0	/0	\$	29.85	ф \$	(1.34)	-4.29%
				φ	31.19			φ	29.05	φ	(1.34)	-4.25 /8
Total Bill on Non-RPP Avg. Price				\$	30.87			\$	29.69	\$	(1.18)	-3.84%
HST		13%		\$	4.01	13	%	\$	3.86		(0.15)	-3.84%
Provincial Rebate		-8%		\$	(2.47)	-8		\$		\$		-3.84%
Total Bill on Non-RPP Avg. Price				\$	32.41			\$	31.17	\$	(1.24)	-3.84%
Total Bill on Average IESO Wholesale Market Price				\$	30.87			\$	29.69		(1.18)	-3.84%
HST Device side Debate		13%		\$	4.01	13		\$		\$	(0.15)	-3.84%
Provincial Rebate Total Bill on Average IESO Wholesale Market Price		-8%		\$	(2.47) 32.41	-8	/0	\$	(2.37) 31.17		0.09 (1.24)	-3.84%
Total bill on Average IESO Wholesdie Market Frice		_		φ	52.41			φ	31.17	φ	(1.24)	-3.04%

Class B

NOTE: Board model does not populate customer count for MFC and FRR for USL, Sentinel and S/L classes. It requires manual input on Bill Impact sheet every time the bill impacts are executed.

### Customer Class: SENTINEL LIGHTING SERVICE CLASSIFICATION

RPP

 RPP / Non-RPP:

 Consumption
 180
 kWh

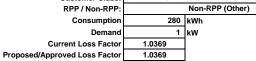
 Demand
 1
 kW

 Current Loss Factor
 1.0369

 Proposed/Approved Loss Factor
 1.0369

		(	Current OEB-Appro	vec	ł			Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume	Charg	je			
		(\$)			(\$)		(\$)		(\$)			\$ Change	% Change
Monthly Service Charge	\$	4.23	1	\$	4.23	\$	4.27	1	\$	4.27	\$	0.04	0.95%
Distribution Volumetric Rate	\$	9.9582	1	\$	9.96	\$	10.0478	1	\$	10.05	\$	0.09	0.90%
Fixed Rate Riders	\$	0.10	1	\$	0.10	\$	0.08	1	\$	0.08	\$	(0.02)	-20.08%
Volumetric Rate Riders	-\$	0.3850	1	\$	(0.39)	-\$	0.5441	1	\$	(0.54)	\$	(0.16)	41.32%
Sub-Total A (excluding pass through)				\$	13.90				\$	13.85	\$	(0.05)	-0.36%
Line Losses on Cost of Power	\$	0.0820	7	\$	0.54	\$	0.0820	7	\$	0.54	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	\$	1.4716	1	\$	1.47	-\$	1.3272	1	\$	(1.33)	\$	(2.80)	-190.19%
GA Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Low Voltage Service Charge	\$	0.1170	1	\$	0.12	\$	0.1170	1	\$	0.12	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or				¢				4	¢		¢		
any fixed (\$) Deferral/Variance Account Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	16.04				\$	13.19	\$	(2.85)	-17.76%
RTSR - Network	\$	2.0778	1	\$	2.08	\$	2.0304	1	\$	2.03	\$	(0.05)	-2.28%
RTSR - Connection and/or Line and Transformation Connection	\$	0.9929	1	\$	0.99	\$	0.9869	1	\$	0.99	\$	(0.01)	-0.60%
Sub-Total C - Delivery (including Sub-Total B)				\$	19.11				\$	16.21	\$	(2.90)	-15.19%
Wholesale Market Service Charge (WMSC)	\$	0.0036	187	\$	0.67	\$	0.0036	187	\$	0.67	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	187	\$	0.06	\$	0.0003	187	\$	0.06	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	180	\$	1.26	\$	-	180	\$	-	\$	(1.26)	-100.00%
				Ľ.							\$	-	
TOU - Off Peak	\$	0.0650	117	\$	7.61	\$	0.0650	117	\$	7.61	\$	-	0.00%
TOU - Mid Peak	ŝ	0.0940	31	\$	2.88	\$	0.0940	31	\$	2.88	\$	-	0.00%
TOU - On Peak	ŝ	0.1320	32	\$	4.28	\$	0.1320	32	\$	4.28	\$	-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	180	\$	18.68	ŝ	0.1038	180	\$	18.68		-	0.00%
Average IESO Wholesale Market Price	ŝ	0.1038	180	\$	18.68	s	0.1038	180	\$	18.68		_	0.00%
	, v	0.1000	100	Ψ	10.00	Ŷ	0.1000	100	Ψ	10.00	Ψ		0.00 %
Total Bill on TOU (before Taxes)				\$	36.10	1			\$	31.94	¢	(4.16)	-11.53%
HST		13%		\$	4.69		13%		<b>₽</b> \$	4.15		(0.54)	-11.53%
Total Bill on TOU (before 8% Provincial Rebate)		1370		\$			1370		\$	36.09		(4.70)	-11.53%
8% Provincial Rebate		0%		φ \$			0%		\$	30.09	\$	(4.70)	-11.55 /6
Total Bill on TOU		0 78		φ \$	40.80		0 78		\$	36.09		(4.70)	44 520/
		_		Þ	40.80				\$	36.09	\$	(4.70)	-11.53%
Total Bill on Non-RPP Avg. Price	-			\$	40.03	T T			\$	35.87	\$	(4.16)	-10.40%
HST		13%		\$	5.20		13%		\$	4.66		(0.54)	-10.40%
Provincial Rebate		-8%		\$			-8%		\$	(2.87)		0.33	-10.40%
Total Bill on Non-RPP Avg. Price				\$	42.03				\$	37.66		(4.37)	-10.40%
Total Bill on Average IESO Wholesale Market Price				\$	40.03				\$	35.87		(4.16)	-10.40%
HST		13%		\$	5.20		13%		\$	4.66		(0.54)	-10.40%
Provincial Rebate		-8%		\$ \$	(3.20) 42.03		-8%		\$ \$	(2.87) 37.66		0.33	-10.40%
Total Bill on Average IESO Wholesale Market Price		_		¢	42.03			_	\$	37.00	ð	(4.37)	-10.40%

### Customer Class: STREET LIGHTING SERVICE CLASSIFICATION



		Rate			-						Imj		
		nuto	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Ionthly Service Charge	\$	1.20	1	\$	1.20	\$	1.21	1	\$	1.21	\$	0.01	0.83%
Distribution Volumetric Rate	\$	6.3791	1	\$	6.38	\$	6.4365	1	\$	6.44	\$	0.06	0.90%
ixed Rate Riders	\$	0.01	1	\$	0.01	\$	0.01	1	\$	0.01	\$	-	0.00%
/olumetric Rate Riders	\$	0.6107	1	\$	0.61	\$	1.9094	1	\$	1.91	\$	1.30	212.66%
Sub-Total A (excluding pass through)				\$	8.20				\$	9.57	\$	1.37	16.66%
ine Losses on Cost of Power	\$	0.1038	10	\$	1.07	\$	0.1038	10	\$	1.07	\$	-	0.00%
otal Deferral/Variance Account Rate Riders	\$	1.3018	1	\$	1.30	-\$	1.2881	1	\$	(1.29)	\$	(2.59)	-198.95%
GA Rate Riders	\$	0.0004	280	\$	0.11	\$	0.0022	280	\$	0.62	\$	0.50	450.00%
ow Voltage Service Charge	\$	0.1288	1	\$	0.13		0.1288	1	\$		\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or				÷		-			÷				
iny fixed (\$) Deferral/Variance Account Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	10.81				\$	10.10	\$	(0.72)	-6.66%
RTSR - Network	\$	2.6888	1	\$	2.69	\$	2.6275	1	\$	2.63	\$	(0.06)	-2.28%
RTSR - Connection and/or Line and Transformation Connection	\$	1.4379	1	\$	1.44	\$	1.4291	1	\$	1.43	\$	(0.01)	-0.61%
Sub-Total C - Delivery (including Sub-Total B)				\$	14.94				\$	14.15	\$	(0.79)	-5.29%
Vholesale Market Service Charge (WMSC)	\$	0.0036	290	\$	1.05	\$	0.0036	290	\$	1.05	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	290	\$	0.09	\$	0.0003	290	\$	0.09	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	280	\$		s	-	280	\$		\$	(1.96)	-100.00%
	•			-		Ť.,			-		ŝ	-	
OU - Off Peak	\$	0.0650	182	\$	11.83	s	0.0650	182	\$	11.83	\$	-	0.00%
OU - Mid Peak	\$	0.0940	48	\$	4.47	\$	0.0940	48	\$		\$	-	0.00%
OU - On Peak	ŝ	0.1320	50	\$	6.65		0.1320	50	\$		\$	-	0.00%
Ion-RPP Retailer Avg. Price	\$	0.1038	280	\$	29.06	\$	0.1038	280	\$		\$		0.00%
werage IESO Wholesale Market Price	ŝ	0.1038	280	\$		s	0.1038	280			Ψ \$		0.00%
	\$	0.1038	280	φ	29.00	φ	0.1030	200	φ	29.00	φ	-	0.00 %
otal Bill on TOU (before Taxes)	-			\$	41.24				\$	38.49	\$	(2.75)	-6.67%
HST		13%		\$	5.36		13%		\$		\$	(0.36)	-6.67%
Provincial Rebate		-8%		գ Տ	(3.30)		-8%		ֆ Տ	(3.08)		0.22	-6.67%
Fite and the second sec		-0 /0		φ \$	(3.30) 43.30		-0 /8		\$	40.42		(2.89)	-6.67%
		_		Þ	43.30				Ð	40.42	æ	(2.09)	-0.07 %
otal Bill on Non-RPP Avg. Price	1			\$	47.35	1			\$	44.60	¢	(2.75)	-5.81%
HST		13%		ф 2	47.35 6.16	1	13%		⊅ \$	<b>44.60</b> 5.80		(0.36)	-5.81%
Provincial Rebate		-8%		\$	(3.79)	1	-8%		\$		\$	0.22	-5.81%
Total Bill on Non-RPP Avg. Price		0,0		\$	49.72		- / -		\$	46.83		(2.89)	-5.81%
otal Bill on Average IESO Wholesale Market Price				\$	47.35				\$		\$	(2.75)	-5.81%
HST		13%		\$	6.16		13%		\$	5.80		(0.36)	-5.81%
Total Bill on Average IESO WMP (before 8% Provincial Rebate)				\$	53.50		00/		\$	50.40	\$	(3.11)	-5.81%
8% Provincial Rebate Total Bill on Average IESO Wholesale Market Price		0%		\$ \$	53.50		0%		\$ \$	50.40	\$ \$	(3.11)	-5.81%
				Ψ	55.50				Ţ.	50.40	Ψ	(3.11)	-5.51%

Class B

### Customer Class: RESIDENTIAL SERVICE CLASSIFICATION

RPP / Non-RPP: Consumption Demand 1.0369 10th Percentile

309 kWh 1.0369 **Current Loss Factor** 

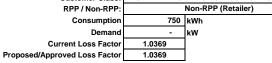
- kW

RPP

Proposed/Approved Loss Factor

		(	Current OEB-Appro				Proposed		Impact			
		Rate	Volume		Charge		Rate	Volume		Charge		
		(\$)			(\$)		(\$)			(\$)	\$ Change	% Change
Monthly Service Charge	\$	21.63	1	\$	21.63	\$	24.83	1	\$	24.83	\$ 3.20	14.7
Distribution Volumetric Rate	\$	0.0088	308.871	\$	2.72	\$	0.0044	308.871	\$	1.36	\$ (1.36)	-50.0
Fixed Rate Riders	\$	0.25	1	\$	0.25	\$	0.27	1	\$	0.27	\$ 0.02	8.0
Volumetric Rate Riders	\$	-	308.871	\$	-	\$	0.0003	308.871	\$	0.09	\$ 0.09	
Sub-Total A (excluding pass through)				\$	24.60				\$	26.55	\$ 1.95	7.94
Line Losses on Cost of Power	\$	0.0820	11	\$	0.93	\$	0.0820	11	\$	0.93	\$-	0.00
Total Deferral/Variance Account Rate Riders	-\$	0.0028	309	\$	(0.86)	-\$	0.0038	309	\$	(1.17)	\$ (0.31)	35.7
GA Rate Riders	\$	-	309	\$	-	\$	-	309	\$	-	\$ -	
Low Voltage Service Charge	\$	0.0005	309	\$	0.15	\$	0.0005	309	\$	0.15	\$ -	0.00
Smart Meter Entity Charge (if applicable) and/or	\$	0.75	1	\$	0.75	s	0.57	1	\$	0.57	\$ (0.18)	-24.00
any fixed (\$) Deferral/Variance Account Rate Riders	Ą	0.75	1			φ	0.57	•	•		· ()	-24.00
Sub-Total B - Distribution (includes Sub-Total A)				\$	25.57				\$	-	\$ 1.46	5.73
RTSR - Network	\$	0.0075	320		2.40	\$	0.0073	320	\$		\$ (0.06)	-2.67
RTSR - Connection and/or Line and Transformation Connection	\$	0.0040	320	\$	1.28	\$	0.0040	320	\$		\$ -	0.00
Sub-Total C - Delivery (including Sub-Total B)				\$	29.26				\$	30.66	\$ 1.40	4.7
Wholesale Market Service Charge (WMSC)	\$	0.0036	320	\$	1.15	\$	0.0036	320	\$	1.15	\$-	0.00
Rural and Remote Rate Protection (RRRP)	\$	0.0003	320	\$	0.10	\$	0.0003	320	\$	0.10	\$-	0.0
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$-	0.0
Debt Retirement Charge (DRC)												
											\$ -	
TOU - Off Peak	\$	0.0650	201	\$	13.05	\$	0.0650	201	\$	13.05	\$-	0.00
TOU - Mid Peak	\$	0.0940	53	\$	4.94	\$	0.0940	53	\$	4.94	s -	0.00
TOU - On Peak	\$	0.1320	56		7.34	\$	0.1320		\$	7.34	\$ -	0.00
Non-RPP Retailer Avg. Price	\$	0.1038	309	\$	32.06	\$	0.1038	309	\$	32.06	\$ -	0.00
Average IESO Wholesale Market Price	\$	0.1038	309		32.06	\$	0.1038		\$		\$ -	0.00
Total Bill on TOU (before Taxes)				\$	56.08	1			\$	57.48	\$ 1.40	2.5
HST		13%		\$	7.29		13%		\$	7.47	\$ 0.18	2.5
Total Bill on TOU (before 8% Provincial Rebate)				\$	63.37				\$	64.95	\$ 1.58	2.5
8% Provincial Rebate		-8%		\$	(4.49)		-8%		\$	(4.60)	\$ (0.11)	2.5
Total Bill on TOU				\$	58.88				\$		\$ 1.47	2.5
Total Bill on Non-RPP Avg. Price				\$	62.82				\$		\$ 1.40	2.2
HST		13%		\$	8.17		13%		\$		\$ 0.18	2.2
Provincial Rebate		-8%		\$	(5.03)		-8%		\$		\$ (0.11)	2.2
Total Bill on Non-RPP Avg. Price				\$	65.96				\$	67.43	\$ 1.47	2.2
Total Bill on Average IESO Wholesale Market Price				\$	62.82				\$	64.22	\$ 1.40	2.2
HST		13%		\$	8.17		13%		\$	8.35	\$ 0.18	2.2
Provincial Rebate		-8%		\$	(5.03)		-8%		\$	(5.14)		2.2
Total Bill on Average IESO Wholesale Market Price				\$	65.96	I			\$	67.43	\$ 1.47	2.2

### Customer Class: RESIDENTIAL SERVICE CLASSIFICATION



		(	urrent OEB-Appro	OEB-Approved				Proposed	Impact				
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	21.63	1	\$	21.63	\$	24.83	1	\$	24.83	\$	3.20	14.79%
Distribution Volumetric Rate	\$	0.0088	750	\$	6.60	\$	0.0044	750	\$	3.30	\$	(3.30)	-50.00%
Fixed Rate Riders	\$	0.25	1	\$	0.25	\$	0.27	1	\$	0.27	\$	0.02	8.00%
Volumetric Rate Riders	\$	-	750	\$	-	\$	0.0003	750	\$	0.23	\$	0.23	
Sub-Total A (excluding pass through)				\$	28.48				\$	28.63	\$	0.15	0.51%
Line Losses on Cost of Power	\$	0.1038	28	\$	2.87	\$	0.1038	28	\$	2.87	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0028	750	\$	(2.10)	-\$	0.0038	750	\$	(2.85)	\$	(0.75)	35.71%
GA Rate Riders	\$	0.0066	750	\$	4.95	\$	0.0022	750	\$	1.65	\$	(3.30)	-66.67%
Low Voltage Service Charge	\$	0.0005	750	\$	0.38	\$	0.0005				\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or	\$	0.75			0.75		0.57			0.57		(0.40)	04.000/
any fixed (\$) Deferral/Variance Account Rate Riders	Þ	0.75	1	\$	0.75	\$	0.57	1	\$	0.57	\$	(0.18)	-24.00%
Sub-Total B - Distribution (includes Sub-Total A)				\$	35.33				\$	-	\$	(4.09)	-11.56%
RTSR - Network	\$	0.0075	778	\$	5.83	\$	0.0073	778	\$	5.68	\$	(0.16)	-2.67%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0040	778	\$	3.11	\$	0.0040	778	\$	3.11	\$	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	44.27				\$	40.03	\$	(4.24)	-9.58%
Wholesale Market Service Charge (WMSC)	\$	0.0036	778	\$	2.80	\$	0.0036	778	\$	2.80	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	778	\$	0.23	\$	0.0003	778	\$	0.23	\$	-	0.00%
Standard Supply Service Charge													
Debt Retirement Charge (DRC)													
											\$	-	
TOU - Off Peak	\$	0.0650	488	\$	31.69	\$	0.0650	488	\$	31.69	\$	-	0.00%
TOU - Mid Peak	\$	0.0940	128	\$	11.99	\$	0.0940	128	\$	11.99	\$	-	0.00%
TOU - On Peak	\$	0.1320	135	\$	17.82		0.1320	135				-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	750	\$	77.85		0.1038	750			\$	-	0.00%
Average IESO Wholesale Market Price	ŝ	0.1038	750		77.85		0.1038	750		77.85		-	0.00%
	÷	011000	100	Ţ	11.00	Ť	0000	100	<u> </u>	11.00	Ŷ		0.0070
Total Bill on TOU (before Taxes)				\$	108.80				\$	104.56	\$	(4.24)	-3.90%
HST		13%		\$	14.14		13%		\$	13.59	\$	(0.55)	-3.90%
Provincial Rebate		-8%		\$	(8.70)		-8%		\$	(8.36)	\$	0.34	-3.90%
Total Bill on TOU				\$	114.24				\$	109.78	\$	(4.45)	-3.90%
				÷		-			÷		·	( ,	
Total Bill on Non-RPP Avg. Price				\$	125.15				\$	120.91	\$	(4.24)	-3.39%
HST		13%		\$	16.27		13%		\$	15.72	\$	(0.55)	-3.39%
Total Bill on Non-RPP Avg. Price (before 8% Provincial Rebate)				\$	141.42				\$	136.63		(4.79)	-3.39%
8% Provincial Rebate		-8%		\$	(10.01)		-8%		\$	(9.67)		0.34	-3.39%
Total Bill on Non-RPP Avg. Price				\$	131.41			_	\$	126.96	\$	(4.45)	-3.39%
Total Bill on Average IESO Wholesale Market Price				\$	125.15				¢	120.91	\$	(4.24)	-3.39%
HST		13%		\$	16.27		13%		\$		\$ \$	(0.55)	-3.39%
Provincial Rebate		-8%		\$	(10.01)		-8%		\$	(9.67)		0.34	-3.39%
Total Bill on Average IESO Wholesale Market Price				\$	131.41				\$	126.96		(4.45)	-3.39%

## Customer Class: GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION

 RPP / Non-RPP:
 Non-RPP (Retailer)

 Consumption
 2,000
 kWh

 Demand
 kW

 Current Loss Factor
 1.0369

 Proposed/Approved Loss Factor
 1.0369

		Current OEB-Approved		Proposed				Impact					
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)	\$	Change	% Change
Monthly Service Charge	\$	29.00	1	\$	29.00	\$	29.26	1	\$	29.26	\$	0.26	0.90%
Distribution Volumetric Rate	\$	0.0185	2000	\$	37.00	\$	0.0187	2000	\$	37.40	\$	0.40	1.08%
Fixed Rate Riders	\$	0.52	1	\$	0.52	\$	0.29	1	\$	0.29	\$	(0.23)	-44.23%
Volumetric Rate Riders	\$	0.0010	2000	\$	2.00	\$	0.0017	2000	\$	3.40	\$	1.40	70.00%
Sub-Total A (excluding pass through)				\$	68.52				\$	70.35	\$	1.83	2.67%
Line Losses on Cost of Power	\$	0.1038	74	\$	7.66	\$	0.1038	74	\$	7.66	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0026	2,000	\$	(5.20)	-\$	0.0037	2,000	\$	(7.40)	\$	(2.20)	42.31%
GA Rate Riders	\$	0.0066	2,000	\$	13.20	\$	0.0022	2,000	\$	4.40	\$	(8.80)	-66.67%
Low Voltage Service Charge	\$	0.0004	2,000	\$	0.80	\$	0.0004		\$	0.80	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or			,	÷			0.57	,	, ,			(0.0.1)	
any fixed (\$) Deferral/Variance Account Rate Riders	\$	0.78	1	\$	0.78	\$	0.57	1	\$	0.57	\$	(0.21)	-26.92%
Sub-Total B - Distribution (includes Sub-Total A)				\$	85.76				\$	76.38	\$	(9.38)	-10.94%
RTSR - Network	\$	0.0067	2,074	\$	13.89	\$	0.0065	2,074	\$	13.48	\$	(0.41)	-2.99%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0035	2,074	\$	7.26	\$	0.0035	2,074	\$	7.26	\$	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	106.91				\$	97.12	\$	(9.79)	-9.16%
Wholesale Market Service Charge (WMSC)	\$	0.0036	2,074	\$	7.47	\$	0.0036	2,074	\$	7.47	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	2,074	\$	0.62	S	0.0003	2,074	\$	0.62	\$	-	0.00%
Standard Supply Service Charge													
Debt Retirement Charge (DRC)	\$	0.0070	2,000	\$	14.00	s	-	2,000	\$	-	\$	(14.00)	-100.00%
	Ť		_,	Ť				_,	+		ŝ	-	
TOU - Off Peak	\$	0.0650	1,300	\$	84.50	s	0.0650	1,300	\$	84.50	ŝ	-	0.00%
TOU - Mid Peak	ŝ	0.0940	340	\$	31.96		0.0940		\$		\$		0.00%
TOU - On Peak	ŝ	0.1320	360	\$	47.52		0.1320		\$	47.52		_	0.00%
Non-RPP Retailer Avg. Price	ŝ	0.1020	2,000	\$		-	0.1038		\$		\$		0.00%
Average IESO Wholesale Market Price	ŝ	0.1030	2,000	φ \$	207.60		0.1038		φ \$	207.60	•	_	0.00%
Average iESS wholesale warker like	¢	0.1038	2,000	ð	207.60	Þ	0.1038	2,000	φ	207.60	¢	-	0.00%
Total Bill on TOU (before Taxes)				\$	292.98	1			\$	269.19	¢	(23.79)	-8.12%
HST		13%		.⊅ \$	38.09		4.00/		<b>թ</b> Տ	34.99		. ,	
		-8%		э \$			13% -8%		э \$			(3.09)	-8.12%
Provincial Rebate		-8%		۵ ۵	(23.44)		-8%		э \$	(21.53)		1.90	-8.12%
Total Bill on TOU				\$	307.63				\$	282.65	\$	(24.98)	-8.12%
						1			•			(00.50)	
Total Bill on Non-RPP Avg. Price		13%		\$ \$	<b>336.60</b> 43.76		13%		\$ \$	312.81 40.66		(23.79) (3.09)	<b>-7.07%</b> -7.07%
Total Bill on Non-RPP Avg. Price (before 8% Provincial Rebate)		13%		⊅ \$	43.76 380.36		13%		э \$	353.47		(3.09)	-7.07%
8% Provincial Rebate		-8%		\$	(26.93)		-8%		\$	(25.02)		1.90	-7.07%
Total Bill on Non-RPP Avg. Price		570		\$	353.43		370		\$	328.45		(24.98)	-7.07%
Total Bill on Average IESO Wholesale Market Price				\$	336.60				\$	312.81		(23.79)	-7.07%
HST		13%		\$	43.76		13%		\$	40.66		(3.09)	-7.07%
Provincial Rebate		-8%		\$	(26.93)		-8%		\$ \$	(25.02)		1.90	-7.07%
Total Bill on Average IESO Wholesale Market Price				\$	353.43				\$	328.45	\$	(24.98)	-7.07%

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 25 Filed: June 7, 2018

# ATTACHMENT 25 IRM MODEL POWERSTREAM RZ

1.0

		Version
Utility Name	Alectra - PowerStream	
Assigned EB Number	EB-2018-0016	
Name of Contact and Title	Indy J. Butany-DeSouza, Vice-President, Regulatory Affairs	
Phone Number	905-821-5727	
Email Address	indy.butany@alectrautilities.com	
We are applying for rates effective	January-01-19	
Rate-Setting Method	Price Cap IR	
Please indicate in which Rate Year the Group 1 accounts were last cleared <sup>1</sup>	2018	
Please indicate the last Cost of Service Re-Basing Year	2017	
Notes		
Pale gray cells represent input ce	lls.	

Pale blue cells represent drop-down lists.

White cells contain fixed values, automatically generated values or formulae.

## Alectra Utilities Corporation PowerStream Rate Zone TARIFF OF RATES AND CHARGES Effective Date January 1, 2018 Implementation Date May 1, 2018

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2017-0024

## **RESIDENTIAL SERVICE CLASSIFICATION**

This classification refers to an account taking electricity at 750 volts or less where the electricity is used exclusively in a separately metered living

### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

Service Charge	\$	21.63
Smart Metering Entity Charge - effective until December 31, 2022	\$	0.57
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$	0.12
Rate Rider for Recovery of Stranded Meter Assets (2016) – effective until September 30, 2018	\$	0.06
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.11
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	\$	0.14
Distribution Volumetric Rate	\$/kWh	0.0088
Low Voltage Service Rate	\$/kWh	0.0005
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018		
Applicable only for Non-RPP Customers	\$/kWh	0.0062
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0003
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kWh	(0.0003)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kWh	(0.0030)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kWh	0.0002
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0075
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0040

## MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR Capacity Based Recovery (CBR) - Applicable for Class B Customers Rural or Remote Electricity Rate Protection Charge (RRRP) Standard Supply Service – Administrative Charge (if applicable)

\$/kWh	0.0032
\$/kWh	0.0004
\$/kWh	0.0003
\$	0.25

## **GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION**

This classification refers to a non-residential account taking electricity at 750 volts or less wheose monthly average peak demand is less than, or is forecast to

## APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

Service Charge	\$	29.00
Smart Metering Entity Charge - effective until December 31, 2022	\$	0.57
Rate Rider for Recovery of Stranded Meter Assets (2016) – effective until September 30, 2018	\$	0.21
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.12
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	\$	0.40
Distribution Volumetric Rate	\$/kWh	0.0185
Low Voltage Service Rate	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018		
Applicable only for Non-RPP Customers	\$/kWh	0.0062
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0003
Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September 30, 2018	\$/kWh	(0.0003)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kWh	(0.0030)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018	\$/kWh	0.0002
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kWh	0.0001
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kWh	0.0002
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kWh	0.0009
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0067
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0035
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0002
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if Applicable)	\$	0.0003
Gandard Guppiy Gorvice - Aurininistrative Gharge (il applicable)	φ	0.20

## **GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION**

This classification refers to a non-residential account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater

## APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a

The rate rider for the disposition of WMS - Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned

The rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

## MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	142.24
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.57
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	\$	4.21
Distribution Volumetric Rate	\$/kW	4.2415
Low Voltage Service Rate	\$/kW	0.1589
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable only to non-RPP non-Interval Metered Customers	\$/kW	2.3303
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable only for Class B Interval Metered Customers at December 31, 2016	\$/kW	(1.6412)
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.1169
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kW	(0.1224)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	0.0184
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019		
Applicable only for Non-Wholesale Market Participants	\$/kW	(1.1367)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.0620
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kW	0.0168
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	0.0796
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0905
Retail Transmission Rate - Network Service Rate	\$/kW	2.6739
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	1.3420
Retail Transmission Rate - Network Service Rate – Interval Metered	\$/kW	2.8030
Retail Transmission Rate - Line and Transformation Connection Service Rate – Interval Metered	\$/kW	1,4520

## **MONTHLY RATES AND CHARGES – Regulatory Component**

Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

## LARGE USE SERVICE CLASSIFICATION

This classification refers to an account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 5,000 kW.

## APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a

The rate rider for the disposition of WMS - Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned

The rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

## **MONTHLY RATES AND CHARGES – Delivery Component**

Service Charge	\$	6,128.34
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	24.34
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	\$	97.02
Distribution Volumetric Rate	\$/kW	2.2623
Low Voltage Service Rate	\$/kW	0.1630
Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 2018	\$/kW	0.1584
Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September 30, 2018	\$/kW	(0.1659)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	(1.3235)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.0840
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kW	0.0090
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	(0.0723)
Retail Transmission Rate - Network Service Rate	\$/kW	3.2305
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	1.4016
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

## STANDBY POWER SERVICE CLASSIFICATION

This classification refers to an account that has Load Displacement Generation and requires the distributor to provide back-up service. Further servicing details

## APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

### MONTHLY RATES AND CHARGES – Delivery Component - APPROVED ON AN INTERIM BASIS

Standby Charge – for a month where standby power is not provided. The charge is applied to the contracted amount (e.g. nameplate rating of generation facility).

\$/kW 2.8334

## UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION

This classification refers to an account taking electricity at 750 volts or less whose average monthly peak demand is less than, or is forecast to be less than, 50

## APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

Service Charge	\$	8.68
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.03
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	\$	0.08
Distribution Volumetric Rate	\$/kWh	0.0197
Low Voltage Service Rate	\$/kWh	0.0005
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable only for non-RPP Customers	\$/kWh	0.0062
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0003
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kWh	(0.0003)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kWh	(0.0029)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kWh	0.0002
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kWh	0.0002
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kWh	0.0001
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kWh	(0.0005)
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0063
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0037
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (INTA)	\$	0.25
	Ψ	0.25

## SENTINEL LIGHTING SERVICE CLASSIFICATION

This classification refers to an unmetered lighting load supplied to a sentinel light. Class B consumers are defined in accordance with O. Reg. 429/04. Further

## APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

Service Charge (per Connection)	\$	4.23
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.02
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	\$	0.04
Distribution Volumetric Rate	\$/kW	9.9582
Low Voltage Service Rate	\$/kW	0.1170
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable only for non-RPP Customers	\$/kW	2.3977
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.1210
Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September 30, 2018	\$/kW	(0.1267)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	(1.0740)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018	\$/kW	0.0641
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0895
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kW	0.0396
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	(0.3850)
Retail Transmission Rate - Network Service Rate	\$/kW	2.0778
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	0.9929
MONTHLY RATES AND CHARGES – Regulatory Component		
······································		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25
	Ψ	0.20

## STREET LIGHTING SERVICE CLASSIFICATION

This classification applies to an account for roadway lighting with a Municipality, Regional Municipality, Ministry of Transportation and private roadway lighting

## APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

Service Charge (per Connection)	\$	1.20
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$	0.00
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	\$	0.01
Distribution Volumetric Rate	\$/kW	6.3791
Low Voltage Service Rate	\$/kW	0.1288
Rate Rider for Disposition of Global Adjustment Account (2016) – effective until September 30, 2018		
Applicable Only for Non-RPP Customers	\$/kW	2.2128
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.1116
Rate Rider for Disposition of Deferral/Variance Account – Power (2016) – effective until September 30, 2018	\$/kW	(0.1169)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	(1.0519)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) – effective until September 30, 2018	\$/kW	0.0592
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0870
Rate Rider for Recovery of ICM (2018) - in effect from May 1, 2018 until the effective date of the next cost of service based rate order	\$/kW	0.0253
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	0.5854
Retail Transmission Rate - Network Service Rate	\$/kW	2.6888
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	1.4379
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

## **MicroFIT SERVICE CLASSIFICATION**

This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's microFIT program and connected

## APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

## MONTHLY RATES AND CHARGES – Delivery Component

Service Charge

5.40

(0.60) (1.00)

## ALLOWANCES

Transformer Allowance for Ownership - per kW of billing demand/month Primary Metering Allowance for Transformer Losses - applied to measured demand & energy \$/kW %

\$

## SPECIFIC SERVICE CHARGES

### APPLICATION

I ne application or these rates and charges shall be in accordance with the Licence or the Distributor and any Gode or Order or the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule

No charges to meet the costs of any work of service done of turnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario it should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not

subject to Ontario Energy Roard approval such as the Debt Retirement Charge the Global Adjustment and the HST

Customer Administration Arrears certificate Statement of account Duplicate invoices for previous billing Request for other billing information Easement Letter Income tax letter Account history Returned Cheque (plus bank charges) Legal letter charge Account set up charge/change of occupancy charge (plus credit agency costs if applicable) Special meter reads Meter dispute charge plus Measurement Canada fees (if meter found correct)	* * * * * * * * * * * * *	15.00 15.00 15.00 15.00 15.00 15.00 15.00 15.00 15.00 30.00 30.00 30.00
Non-Payment of Account Late Payment - per month Late Payment - per annum Collection of account charge - no disconnection Disconnect/Reconnect at Meter - during regular hours Disconnect/Reconnect at Meter - after regular hours	% % \$ \$ \$	1.50 19.56 30.00 65.00 185.00
Other         Install/Remove Load Control Device - during regular hours         Install/Remove Load Control Device - after regular hours         Disconnect/Reconnect at Meter - during regular hours         Disconnect/Reconnect at Meter - during regular hours         Disconnect/Reconnect at Pole - during regular hours         Disconnect/Reconnect at Pole - during regular hours         Disconnect/Reconnect at Pole - after regular hours         Disconnect/Reconnect at Pole - after regular hours         Disconnect/Reconnect at Pole - stpice/year (with the exception of wireless attachments) - in effect until August 31, 2018         Specific Charge for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect from September 1, 2018 until         Specific Charge for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect from January 1, 2018         Specific Charge for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect from January 1, 2018 until         Specific Charge for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect from January 1, 2018         Temporary Service install and remove - overhead - no transformer	* * * * * * * * * *	65.00 185.00 65.00 185.00 185.00 415.00 22.35 28.09 43.63 500.00

## **RETAIL SERVICE CHARGES (if applicable)**

## APPLICATION

I ne application or these rates and charges shall be in accordance with the Licence or the Distributor and any Code or Order or the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule

No rates and charges for the distribution of electricity and charges to meet the costs of any work of service done or turnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price as applicable

it should be noted that this schedule does not list any charges, assessments or credits that are required by law to be involced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity.

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer Monthly Fixed Charge, per retailer Monthly Variable Charge, per customer, per retailer Distributor-consolidated billing monthly charge, per customer, per retailer Retailer-consolidated billing monthly credit, per customer, per retailer	\$ \$ \$/cust. \$/cust. \$/cust.	100.00 20.00 0.50 0.30 (0.30)
Service Transaction Requests (STR) Request fee, per request, applied to the requesting party Processing fee, per request, applied to the requesting party Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the	\$ \$	0.25 0.50
Electronic Business Transaction (EBT) system, applied to the requesting party Up to twice a year More than twice a year, per request (plus incremental delivery costs)	\$ \$	no charge 2.00

## LOSS FACTORS

If the distributor is not capable of prorating changed loss factors jointly with distribution rates, the revised loss factors will be implemented upon the first subsequent billing for each

Total Loss Factor - Secondary Metered Customer < 5,000 kW	1.0369
Total Loss Factor - Secondary Metered Customer > 5,000 kW	1.0145
Total Loss Factor - Primary Metered Customer < 5,000 kW	1.0266
Total Loss Factor - Primary Metered Customer > 5,000 kW	1.0045

Please complete the following continuity schedule for the following Deferral/Variance Accounts. Enter information into green cells only. Column CE shoudl match the latest 2.1.7 RRR filing.

When inputting balances in the continuity schedule, Account 1580 RSVA - Wholesale Market Service Charge is to exclude any amounts relating to CBR. The CBR amounts are to be entered separately in the Class A and Class B 1580 sub-accounts. Only Class B amounts are to be disposed. Class A amounts are not to be disposed.

If you have received approval to dispose of balances from prior years, the starting point for entries in the schedule below will be the balance sheet date as per your general ledger for which you received approval. For example, if in the 2016 EDR process (CoS or IRM) you received approval for the December 31, 2014 balances, the starting point for your entries below should be the 2013 year. This will allow for the correct starting point for the 2014 opening balance columns for both principal and interest.

Please refer to the footnotes for further instructions.

	[					2011										2012		
Account Descriptions Acco	ount Number	Opening Principal Amounts as of Jan 1, 2011	Transactions <sup>2</sup> Debit / (Credit) during 2011	OEB-Approved Disposition during 2011	Principal Adjustments <sup>1</sup> during 2011	Closing Principal Balance as of Dec 31, 2011	Opening Interest Amounts as of Jan 1, 2011	Interest Jan 1 to Dec 31, 2011	OEB-Approved Disposition during 2011	Interest Adjustments <sup>1</sup> during 2011		Opening Principal Amounts as of Jan 1, 2012	Transactions <sup>2</sup> Debit / (Credit) during 2012	OEB-Approved Disposition during 2012	Principal Adjustments <sup>1</sup> during 2012	Closing Principal Balance as of Dec 31, 2012		nterest Jan 1 to Dec 31, 2012
Group 1 Accounts LV Variance Account	1550	0	(680,807)			(680,807)	0	(25,273)			(25,273)	(680,807)	477,919	(680,807)		477,919	(25,273)	(7,005)
Smart Metering Entity Charge Variance Account	1551	0				0	0				0	0				0	0	
RSVA - Wholesale Market Service Charge	1580	0	(22,160,709)			(22,160,709)	0	(453,592)			(453,592)	(22,160,709)	(10,646,313)	(22,160,709)		(10,646,313)	(453,592)	(411,074)
Variance WMS – Sub-account CBR Class A	1580	0				0	0				0	0				0	0	
Variance WMS – Sub-account CBR Class B	1580	0	0.070.000			0	0	(110,107)			0	0	4 005 050	0.070.000		0	0	00 777
RSVA - Retail Transmission Network Charge RSVA - Retail Transmission Connection Charge	1584 1586	0	2,673,296 (3,227,883)			2,673,296 (3,227,883)	0	(116,407) (156,955)			(116,407) (156,955)	2,673,296 (3,227,883)	1,005,953 (588,231)	2,673,296 (3,227,884)		1,005,953 (588,230)	(116,407) (156,955)	62,777 (52,540)
RSVA - Retail Transmission Connection Charge RSVA - Power	1586	0	(3,227,883) 2,102,302		(13)	2,102,289	0				400,055	2,102,289	(588,231) 877,101	(3,227,884) 2,102,302		(588,230) 877,088	400,055	(52,540) 8,778
RSVA - Global Adjustment	1589	0	17,526,364		(13)	17,526,364	0	668,802			668,802	17,526,364	(1,664,568)	17,526,364		(1,664,568)	668,802	259,570
Disposition and Recovery/Refund of Regulatory Balances (2009) <sup>4</sup>	1595	0	(1,042)			(1,042)	0	3,222			3,222	(1,042)	(1,001,000)	(1,042)		(1,00 1,000)	3,222	200,010
Disposition and Recovery/Refund of Regulatory Balances (2010) <sup>4</sup>	1595	0	(1,042)			(1,042)	0	0,222			0,222	(1,042)	(10)	(1,042)		(13)	0,222	
Disposition and Recovery/Refund of Regulatory Balances (2011) <sup>4</sup>	1595	0	2,233,467			2,233,467	0	(1,943,690)			(1,943,690)	2,233,467	(680,508)			1,552,959	(1,943,690)	144,693
Disposition and Recovery/Refund of Regulatory Balances (2012) <sup>4</sup>	1595	0	2,200,401			2,200,407	0	(.,540,000)			(1,040,000)	2,200,407	(000,000)	8,245,690		(8,245,690)	(1,040,000)	. 14,000
Disposition and Recovery/Refund of Regulatory Balances (2013) <sup>4</sup>	1595	0				0	0				0	0		0,240,000		(0,240,000)	0	
Disposition and Recovery/Refund of Regulatory Balances (2014) <sup>4</sup>	1595	0				0	0				0	0				0	0	
Disposition and Recovery/Refund of Regulatory Balances (2015) <sup>4</sup>	1595	0				0	0				0	0				0	0	
Disposition and Recovery/Refund of Regulatory Balances (2015)	1395	0				0	0				0	0				0	0	
Not to be disposed of unless rate rider has expired and balance has been audited	1595	0				0	0				0	0				0	0	
RSVA - Global Adjustment	1589	0	17,526,364	0	0	17,526,364	0	668,802	0		0 668,802	17,526,364	(1,664,568)	17,526,364		(1,664,568)	668,802	259,570
Total Group 1 Balance excluding Account 1589 - Global Adjustment		0	(19,061,376)	0	(13)		0		0		0 (2,292,640)	(19,061,389)	(9,554,094)	(13,049,154)			(2,292,640)	(254,371)
Total Group 1 Balance		0	(1,535,012)	0	(13)	(1,535,025)	0	(1,623,838)	0		0 (1,623,838)	(1,535,025)	(11,218,662)	4,477,210	0	(17,230,897)	(1,623,838)	5,199
LRAM Variance Account (only input amounts if applying for disposition of this account)	1568					0					0	0	716,910			716,910	0	
Total including Account 1568		0	(1,535,012)	0	(13)	(1,535,025)	0	(1,623,838)	0	(	0 (1,623,838)	(1,535,025)	(10,501,752)	4,477,210	0	(16,513,987)	(1,623,838)	5,199

For all OEB-Approved dispositions, please ensure that the disposition amount has the same sign (e.g. debit balances are to have a positive figure and credit balance are to have a negative figure) as per the related OEB decision.

Please provide explanations for the nature of the adjustments. If the adjustment relates to previously OEB-Approved disposed balances, please provide amounts for adjustments and include supporting documentations. For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year.

If the LDC's rate year begins on January 1, 2017, the projected interest is recorded from January 1, 2016 to December 31, 2016 balances adjusted for the disposed balances approved by the OEB in the 2016 rate decision. If the LDC's rate year begins on May 1, 2017, the projected interest is recorded from January 1, 2016 to April 30, 2017 on the December 31, 2015 balances adjusted for the disposed interest balances approved by the OEB in the 2016 rate decision.

Please complete the following continuity schedule for the following Deferral/Variance Accounts. Enter information into green cells only. Column CE should match the latest 2.1.7 RRR filing.

When inputting balances in the continuity schedule, Account 1580 RSVA - Wholesale Market Service Charge is to exclude any amounts relating to CBR. The CBR amounts are to be entered separately in the Class A and Class B 1580 sub-accounts. Only Class B amounts are to be disposed. Class A amounts are not to be disposed.

If you have received approval to dispose of balances from prior years, the starting point for entries in the schedule below will be the balance sheet date as per your general ledger for which you received approval. For example, if in the 2016 EDR process (CoS or IRM) you received approval for the December 31, 2014 balances, the starting point for your entries below should be the 2013 year. This will allow for the correct starting point for the 2014 opening balance columns for both principal and interest.

Please refer to the footnotes for further instructions.

					2013													
Account Descriptions	Account Number	OEB-Approved Disposition during 2012	Interest Adjustments <sup>1</sup> during 2012		Opening Principal Amounts as of Jan 1, 2013	Transactions <sup>2</sup> Debit / (Credit) during 2013	OEB-Approved Disposition during 2013	Principal Adjustments <sup>1</sup> during 2013	Closing Principal Balance as of Dec 31, 2013	Opening Interest Amounts as of Jan 1, 2013	Interest Jan 1 to Dec 31, 2013	OEB-Approved Disposition during 2013	Interest Adjustments <sup>1</sup> during 2013	Closing Interest Amounts as of Dec 31, 2013	Opening Principal Amounts as of Jan 1, 2014	Transactions <sup>2</sup> Debit/ (Credit) during 2014	OEB-Approved Disposition during Adju 2014	Principal ustments <sup>1</sup> during 2014
Group 1 Accounts																		
LV Variance Account	1550	(35,310)		3,032	477,919	(112,182)			365,737	3,032	6,431			9,463	365,737	(133,409)	477,919	
Smart Metering Entity Charge Variance Account	1551	(*******		0	0	185,108			185,108	0	1,632			1,632	185,108	(93,458)		
RSVA - Wholesale Market Service Charge	1580	(780,247)		(84,419)	(10,646,313)	(5,065,917)			(15,712,230)	(84,419)	(200,434)			(284,853)	(15,712,230)	(877,534)	(10,646,313)	
Variance WMS – Sub-account CBR Class A	1580			0	0				0	0				0	0			
Variance WMS – Sub-account CBR Class B	1580			0	0				0	0				0	0			
RSVA - Retail Transmission Network Charge	1584	(77,003)		23,373	1,005,953	2,616,584			3,622,537	23,373	30,713			54,086	3,622,537	1,288,689	1,005,953	
RSVA - Retail Transmission Connection Charge	1586	(204,532)		(4,963)	(588,230)	601,094			12,864	(4,963)	(5,847)			(10,810)	12,864	852,228	(588,230)	
RSVA - Power	1588	431,043		(22,210)	877,088	1,357,196			2,234,284	(22,210)	51,968			29,758	2,234,284	(794,425)	877,088	
RSVA - Global Adjustment	1589	927,145		1,227	(1,664,568)	(3,374,332)			(5,038,900)	1,227	22,026			23,253	(5,038,900)	13,553,905	(1,664,568)	
Disposition and Recovery/Refund of Regulatory Balances (2009) <sup>4</sup>	1595	3,208		14	(15)				(15)	14				14	(15)	2	(15)	
Disposition and Recovery/Refund of Regulatory Balances (2010) <sup>4</sup>	1595			0	0				0	0				0	0			
Disposition and Recovery/Refund of Regulatory Balances (2011) <sup>4</sup>	1595			(1,798,997)	1,552,959	1,575,260			3,128,219	(1,798,997)	8,790			(1,790,207)	3,128,219	124		
Disposition and Recovery/Refund of Regulatory Balances (2012) <sup>4</sup>	1595	86,845		(86,845)	(8,245,690)	2,661,661			(5,584,029)	(86,845)	(105,234)			(192,079)	(5,584,029)	4,519,006		
Disposition and Recovery/Refund of Regulatory Balances (2013) <sup>4</sup>	1595	22,010		(11,510)	0	_,,			()	0	(,			(112,110)	(1,11,1120)	.,		
Disposition and Recovery/Refund of Regulatory Balances (2014) <sup>4</sup>	1595			0	0				0	0				0	0	4,751,092	10,538,166	
Disposition and Recovery/Refund of Regulatory Balances (2015) <sup>4</sup>	1595			0	0				0	0				0	0	4,731,032	10,000,100	
Disposition and Recovery/Refund of Regulatory Balances (2013) Disposition and Recovery/Refund of Regulatory Balances (2016)"	1999			U	U				0	0				0	0			
Not to be disposed of unless rate rider has expired and balance has been audited	1595			0	0				0	0				0	0			
RSVA - Global Adjustment Total Group 1 Balance excluding Account 1589 - Global Adjustment Total Group 1 Balance	1589	927,145 (575,996) 351,149	0 0 0	(1,971,015)	(1,664,568) (15,566,329) (17,230,897)	(3,374,332) 3,818,804 444,472	0 0 0	0	(5,038,900) (11,747,526) (16,786,426)	1,227 (1,971,015) (1,969,788)	22,026 (211,981) (189,955)	0 0 0		23,253 (2,182,996) (2,159,743)	(5,038,900) (11,747,526) (16,786,426)	13,553,905 9,512,314 23,066,219	(1,664,568) 1,664,568 0	0 0 0
LRAM Variance Account (only input amounts if applying for disposition of this account)	1568			0	716,910	(513,961)			202,949	0	13,029			13,029	202,949	73,996		
Total including Account 1568		351,149	0	(1,969,788)	(16,513,987)	(69,489)	0	0	(16,583,477)	(1,969,788)	(176,926)	0	0	(2,146,714)	(16,583,477)	23,140,215	0	0

For all OEB-Approved dispositions, please ensure that the disposition amount has the same sign (e.g: debit balances are to have a positive figure and credit balance are to have a negative figure) as per the related OEB decision.

Please provide explanations for the nature of the adjustments. If the adjustment relates to previously OEB-Approved disposed balances, please provide amounts for adjustments and include supporting documentations. For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year.

For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year

If the LDC's rate year begins on January 1, 2017, the projected interest is recorded from January 1, 2016 to December 31, 2016 balances adjusted for the disposed balances approved by the OEB in the 2016 rate decision. If the LDC's rate year begins on May 1, 2017, the projected interest is recorded from January 1, 2016 to April 30, 2017 on the December 31, 2015 balances adjusted for the disposed interest balances approved by the OEB in the 2016 rate decision.

Please complete the following continuity schedule for the following Deferral/Variance Accounts. Enter information into green cells only. Column CE should match the latest 2.1.7 RRR filing.

When inputting balances in the continuity schedule, Account 1580 RSVA - Wholesale Market Service Charge is to exclude any amounts relating to CBR. The CBR amounts are to be entered separately in the Class A and Class B 1580 sub-accounts. Only Class B amounts are to be disposed. Class A amounts are not to be disposed.

If you have received approval to dispose of balances from prior years, the starting point for entries in the schedule below will be the balance sheet date as per your general ledger for which you received approval. For example, if in the 2016 EDR process (CoS or IRM) you received approval for the December 31, 2014 balances, the starting point for your entries below should be the 2013 year. This will allow for the correct starting point for the 2014 opening balance columns for both principal and interest.

Please refer to the footnotes for further instructions.

		2014						2015											
Account Descriptions	Account Number	Closing Principal Balance as of Dec 31, 2014	Opening Interest Amounts as of Jan 1, 2014	Interest Jan 1 to Dec 31. 2014	OEB-Approved Disposition during 2014	Interest Adjustments <sup>1</sup> during 2014	Closing Interest Amounts as of Dec 31, 2014	Opening Principal Amounts as of Jan 1, 2015	Transactions <sup>2</sup> Debit / (Credit) during 2015	OEB-Approved Disposition during 2015	Principal Adjustments <sup>1</sup> during 2015	Closing Principal Balance as of Dec 31, 15	Opening Interest Amounts as of Jan 1, 15	Interest Jan 1 to Dec 31, 15	OEB-Approved Disposition during 2015	Interest Adjustments <sup>1</sup> during 2015	Closing Interest Amounts as of Dec 31, 15	Opening Principal Amounts as of Jan 1, 2016	Transactions <sup>2</sup> Debit / (Credit) during 2016
Group 1 Accounts LV Variance Account Smart Metering Entity Charge Variance Account RSVA - Wholesale Market Service Charge Variance WMS - Sub-account CBR Class A Variance WMS - Sub-account CBR Class B RSVA - Retail Transmission Network Charge RSVA - Retail Transmission Connection Charge RSVA - Retail Transmission Connection Charge RSVA - Bower RSVA - Global Adjustment Disposition and Recovery/Refund of Regulatory Balances (2009) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2010) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2011) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2012) <sup>4</sup>	1550 1551 1580 1580 1584 1586 1588 1588 1589 1595 1595 1595	(245,591) 91,650 (5,943,451) 0 0 3,905,273 1,453,322 562,771 10,179,573 2 0 3,128,343 (1,065,024)	9,463 1,632 (284,853) 0 54,086 (10,810) 29,758 23,253 14 0 0 (1,790,207) (192,079)	(1,339) 2,228 (58,992) 47,481 10,423 27,275 46,383 56,768 (22,367)	10,057 (240,919) 38,161 (13,609) (9,317) (23,242) 14		(1,933) 3,860 (102,926) 0 0 63,406 13,222 66,350 92,878 0 0 (1,733,439) (214,446)	(245,591) 91,650 (5,943,451) 0 0 3,905,273 1,453,322 562,771 10,179,573 2 0 3,128,343 (1,065,024)	1,878,889 (127,715) (18,323,013) 52,344 2,283,692 (2,787,980) 990,194 (317,281) 5,736,837 10,844 237,164		(3,273,851) 981,651	1,633,298 (36,065) (24,266,464) 52,344 2,283,692 1,117,293 2,443,516 245,490 15,916,410 2 0 (134,664) 153,791	(1,933) 3,860 (102,926) 0 63,406 13,222 66,350 92,878 0 (1,733,439) (214,446)	2,930 653 (122,115) 153 7,620 34,775 22,520 18,480 141,760 (23,253) 3,120		1,717,032 368,236	997 4,513 (225,041) 153 7,620 98,181 35,742 84,830 234,638 0 0 (39,660) 156,910	1,633,298 (36,065) (24,266,464) 52,344 2,283,692 1,117,293 2,443,516 245,490 15,916,410 2 0 (134,664) 153,791	2,598,645 (125,095) (7,562,592) (52,344) (336,421) (3,707,690) 1,633,313 2,176,561 (9,817,313) 991
Disposition and Recovery/Refund of Regulatory Balances (2013) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2014) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2015) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2016) <sup>*</sup> Not to be disposed of unless rate rider has expired and balance has been audited RSVA - Global Adjustment	1595 1595 1595 1595 <b>1595</b>	0 (5,787,074) 0 10,179,573	0 0 0 23,253	(90,778) 46,383	(23,242)	0	02,010	0 (5,787,074) 0 10,179,573	5,684,237 5,736,837	0	173,316	0 70,479 0 15,916,410	0 (368,117) 0 0 92,878	(18,488)	0	33,613	0 (352,992) 0 234,638	0 70,479 0 0 15,916,410	8,671 (9,817,313)
Total Group 1 Balance excluding Account 1589 - Global Adjustment Total Group 1 Balance LRAM Variance Account (only input amounts if applying for disposition of this account) Total including Account 1568	1568	(3,899,780) 6,279,793 276,945 6,556,738	(2,182,996) (2,159,743) 13,029 (2,146,714)	(29,301) 17,082 3,378	61,726 38,484 38,484	000000000000000000000000000000000000000	(2,274,023) (2,181,145) 16,407	(3,899,780) 6,279,793 276,945 6,556,738	(10,418,625) (4,681,788) 296,819 (4,384,969)	0	(2,118,884) (2,118,884) (2,118,884)	(16,437,289) (520,879) 573,764 52,885	(2,274,023) (2,181,145) 16,407	(73,605) 68,155 2,310 70,465	0 0	2,118,881 2,118,881 2,118,881	(228,747) 5,891 18,717 24,608	(16,437,289) (520,879) 573,764 52,885	(5,365,960) (15,183,273) 1,581,007 (13,602,266)

For all OEB-Approved dispositions, please ensure that the disposition amount has the same sign (e.g: debit balances are to have a positive figure and credit balance are to have a negative figure) as per the related OEB decision.

Please provide explanations for the nature of the adjustments. If the adjustment relates to previously OEB-Approved disposed balances, please provide amounts for adjustments and include supporting documentations. For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year.

For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year

If the LDC's rate year begins on January 1, 2017, the projected interest is recorded from January 1, 2016 to December 31, 2016 on the December 31, 2015 balances adjusted for the disposed balances approved by the OEB in the 2016 rate decision. If the LDC's rate year begins on May 1, 2017, the projected interest is recorded from January 1, 2016 to April 30, 2017 on the December 31, 2015 balances adjusted for the disposed interest balances approved by the OEB in the 2016 rate decision.

Please complete the following continuity schedule for the following Deferral/Variance Accounts. Enter information into green cells only. Column CE should match the latest 2.1.7 RRR filing.

When inputting balances in the continuity schedule, Account 1580 RSVA - Wholesale Market Service Charge is to exclude any amounts relating to CBR. The CBR amounts are to be entered separately in the Class A and Class B 1580 sub-accounts. Only Class B amounts are to be disposed. Class A amounts are not to be disposed.

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Please refer to the footnotes for further instructions.

				20	16									20	17				
Account Descriptions	Account Number	OEB-Approved Disposition during 2016	Principal Adjustments <sup>1</sup> during 2016	Closing Principal ( Balance as of Dec 31, 16		Interest Jan 1 to Dec 31, 16	OEB-Approved Disposition during 2016	Interest Adjustments <sup>1</sup> during 2016	Closing Interest Amounts as of Dec 31, 16	Opening Principal Amounts as of Jan 1, 2017	Transactions2 Debit / (Credit) during 2017	OEB-Approved Disposition during 2017	Principal Adjustments1 during 2017	Closing Principal Balance as of Dec 31, 17		Interest Jan 1 to Dec 31, 17	OEB-Approved Disposition during 2017	Interest Adjustments1 during 2017	Closing Interest Amounts as of Dec 31, 17
Group 1 Accounts																			
LV Variance Account	1550	(245,591)		4,477,534	997	31,733	(6,702)		39,432	4,477,534	1,506,288			5,983,822	39,432	62,844			102,277
Smart Metering Entity Charge Variance Account	1551	91,650		(252,810)	4,513	(1,054)	5,640		(2,181)	(252,810)	(389,459)			(642,269)	(2,181)	(3,628)			(5,809)
RSVA - Wholesale Market Service Charge	1580	(5,943,451)		(25,885,605)	(225,041)	(299,766)	(218,327)		(306,480)	(25,885,605)	(7,987,408)			(33,873,012)	(306,480)	(351,627)			(658,107)
Variance WMS – Sub-account CBR Class A	1580			0	153	(153)			(0)	0	(0)			(0)	(0)	0			(0)
Variance WMS – Sub-account CBR Class B	1580			1,947,271	7,620	22,213			29,833	1,947,271	(84,171)			1,863,100	29,833	22,577			52,410
RSVA - Retail Transmission Network Charge	1584	3,905,273		(6,495,670)	98,181	(12,831)	139,232		(53,882)	(6,495,670)	(6,668,761)			(13,164,431)	(53,882)	(117,824)			(171,706)
RSVA - Retail Transmission Connection Charge	1586	1,453,320		2,623,509	35,742	32,517	41,440		26,819	2,623,509	(1,010,067)			1,613,442	26,819	23,719			50,538
RSVA - Power	1588	562,770	(811,309)	1,047,973	84,830	13,235	77,277		20,788	1,047,973	2,567,047		4,413,063		20,788	(21,507)			(720)
RSVA - Global Adjustment	1589	10,179,574	4,970,749	890,272	234,638	157,113	290,529		101,223	890,272	4,877,432		(430,861)	5,336,843	101,223	42,793			144,016
Disposition and Recovery/Refund of Regulatory Balances (2009) <sup>4</sup>	1595			2	0			(21,764)		2				2	(21,764)				(21,764)
Disposition and Recovery/Refund of Regulatory Balances (2010) <sup>4</sup>	1595		7,318	7,318	0			153	153	7,318				7,318	153	88			241
Disposition and Recovery/Refund of Regulatory Balances (2011) <sup>4</sup>	1595		135,000	336	(39,660)	(1,485)		41,188		336				336	43	4			47
Disposition and Recovery/Refund of Regulatory Balances (2012) <sup>4</sup>	1595		(142,316)	12,466	156,910	1,696		(5,332)	153,273	12,466				12,466	153,273	150			153,423
Disposition and Recovery/Refund of Regulatory Balances (2013) <sup>4</sup>	1595			0	0				0	0				0	0				0
Disposition and Recovery/Refund of Regulatory Balances (2014) <sup>4</sup>	1595		(79,150)	(0)	(352,992)	(2,385)		64,903	(290,474)	(0)	1,872		33,769	35,642	(290,474)			1,416	(289,058)
Disposition and Recovery/Refund of Regulatory Balances (2015) <sup>4</sup>	1595			0	0				0	0			,	0	0				0
Disposition and Recovery/Refund of Regulatory Balances (2016)"				0	Ŭ				Ű	Ũ				0	Ŭ				ů
Not to be disposed of unless rate rider has expired and balance has been audited	1595			0	0				0	0				0	0				0
RSVA - Global Adjustment	1589	10,179,574	4,970,749	890,272	234,638	157,113	290,529	0	101,223	890,272	4,877,432	0	(430,861)	5,336,843	101,223	42,793	0	C	144,016
Total Group 1 Balance excluding Account 1589 - Global Adjustment		(176,029)	(890,457)	(22,517,677)	(228,747)	(216,280)	38,560	79,148		(22,517,677)	(12,064,660)	0	4,446,832		(404,439)	(385,206)	0	1,416	(788,229)
Total Group 1 Balance		10,003,545	4,080,292	(21,627,405)	5,891	(59,166)	329,089	79,148		(21,627,405)	(7,187,227)	0	4,015,971	(24,798,661)	(303,216)	(342,413)	0	1,416	
LRAM Variance Account (only input amounts if applying for disposition of this account)	1568			2,154,771	18,717	9,806			28,523	2,154,771	3,375,748			5,530,519	28,523	83,241			111,764
Total including Account 1568		10,003,545	4,080,292	(19,472,634)	24,608	(49,360)	329,089	79,148	(274,693)	(19,472,634)	(3,811,479)	0	4,015,971	(19,268,142)	(274,693)	(259,171)	0	1,416	(532,449)

For all OEB-Approved dispositions, please ensure that the disposition amount has the same sign (e.g: debit balances are to have a positive figure and credit balance are to have a negative figure) as per the related OEB decision.

Please provide explanations for the nature of the adjustments. If the adjustment relates to previously OEB-Approved disposed balances, please provide amounts for adjustments and include supporting documentations. For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year.

For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year

If the LDC's rate year begins on January 1, 2017, the projected interest is recorded from January 1, 2016 to December 31, 2016 balances adjusted for the disposed balances approved by the OEB in the 2016 rate decision. If the LDC's rate year begins on May 1, 2017, the projected interest is recorded from January 1, 2016 to April 30, 2017 on the December 31, 2015 balances adjusted for the disposed interest balances approved by the OEB in the 2016 rate decision.

Please complete the following continuity schedule for the following Deferral/Variance Accounts. Enter information into green cells only. Column CE should match the latest 2.1.7 RRR filing.

When inputting balances in the continuity schedule, Account 1580 RSVA - Wholesale Market Service Charge is to exclude any amounts relating to CBR. The CBR amounts are to be entered separately in the Class A and Class B 1580 sub-accounts. Only Class B amounts are to be disposed. Class A amounts are not to be disposed.

If you have received approval to dispose of balances from prior years, the starting point for entries in the schedule below will be the balance sheet date as per your general ledger for which you received approval. For example, if in the 2016 EDR process (CoS or IRM) you received approval for the December 31, 2014 balances, the starting point for your entries below should be the 2013 year. This will allow for the correct starting point for the 2014 opening balance columns for both principal and interest.

Please refer to the footnotes for further instructions.

			20	18		Projected Inter	rest on Dec-31-17	Balances	2.1.7 RRR	
Account Descriptions	Account Number	Principal Disposition during 2018 - instructed by OEB	Interest Disposition during 2018 - instructed by OEB	Closing Principal Balances as of Dec 31, 2017 Adjusted for Dispositions during 2018	Closing Interest Balances as of Dec 31, 2017 Adjusted for Disposition in 2018	Projected Interest from January 1, 2018 to December 31, 2018 on December 31, 2017 balance adjusted for disposition during 2019 <sup>3</sup>	Total Interest	Total Claim	As of Dec 31-17	Variance RRR vs. 2017 Balance (Principal + Interest)
Group 1 Accounts  LV Variance Account Smart Metering Entity Charge Variance Account RSVA - Wholesale Market Service Charge Variance WMS – Sub-account CBR Class A Variance WMS – Sub-account CBR Class B RSVA - Retail Transmission Network Charge RSVA - Retail Transmission Connection Charge RSVA - Rower RSVA - Global Adjustment Disposition and Recovery/Refund of Regulatory Balances (2010) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2010) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2011) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2012) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2013) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2013) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2014) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2015) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2015) <sup>4</sup> Disposition and Recovery/Refund of Regulatory Balances (2016) <sup>*</sup> Not to be disposed of unless rate rider has expired and balance has been audited	1550 1551 1580 1580 1584 1584 1586 1588 1589 1595 1595 1595 1595 1595 1595	4,477,534 (252,810) (25,885,605) 0 1,947,271 (6,495,670) 2,623,509 1,047,973 890,272 2 7,318 336 12,466 0 0 (0) 0 0	117,006 (6,561) (754,948) 0 (166,419) 72,272 38,944 116,647 (21,764) 280 49 153,489 0 0 (290,474) 0	1,506,288 (389,459) (7,987,408) (0) (84,171) (6,668,761) (1,010,067) 6,980,109 4,446,571 0 0 0 0 0 35,642 0	(14,729) 752 96,841 (0) (11,160) (5,287) (21,734) (39,664) 27,369 (0) (39) (2) (66) 0 1,416 0	27,000 (6,981) (143,174) (0) (119,538) (18,105) 125,118 79,705 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12,271 (6,229) (46,334) (0) (12,668) (124,824) (39,839) 85,455 107,074 (0) (39) (2) (66) 0 2,055 0	1,518,559 (395,688) (8,033,741) (0) (96,840) (6,793,585) (1,049,907) 7,065,564 4,553,645 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6,086,100 (648,079) (34,531,120) (0) 1,915,509 (13,336,137) 1,663,980 4,425,608 940,971 (21,762) 7,559 382 165,889 0 (253,416)	(0) (0) 0 0 (3,601,754) (4,539,888) 0 0 (1)
RSVA - Global Adjustment Total Group 1 Balance excluding Account 1589 - Global Adjustment Total Group 1 Balance	1589	890,272 (22,517,677) (21,627,405)	116,647 (794,558) (677,911)	4,446,571 (7,617,828) (3,171,256)	27,369 6,329 33,698	79,705 (136,550) (56,845)	107,074 (130,221) (23,147)	4,553,645 (7,785,638) (3,231,993)	940,971 (34,525,487) (33,584,516)	(4,539,888) (3,601,754) (8,141,642)
LRAM Variance Account (only input amounts if applying for disposition of this account) Total including Account 1568	1568	2,154,771 (19,472,634)	65,854 (612,057)	3,375,748 204,492	45,910 79,608	60,510	106,420 83,273	3,482,168 250,176	5,642,283 (27,942,233)	(0) (8,141,642)

For all OEB-Approved dispositions, please ensure that the disposition amount has the same sign (e.g: debit balances are to have a positive figure and credit balance are to have a negative figure) as per the related OEB decision.

Please provide explanations for the nature of the adjustments. If the adjustment relates to previously OEB-Approved disposed balances, please provide amounts for adjustments and include supporting documentations. For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year.

For RSVA accounts only, report the net variance to the account during the year. For all other accounts, record the transactions during the year

If the LDC's rate year begins on January 1, 2017, the projected interest is recorded from January 1, 2016 to December 31, 2016 balances adjusted for the disposed balances approved by the OEB in the 2016 rate decision. If the LDC's rate year begins on May 1, 2017, the projected interest is recorded from January 1, 2016 to April 30, 2017 on the December 31, 2015 balances adjusted for the disposed interest balances approved by the OEB in the 2016 rate decision.

### Information from the most recent RRR (2017 for 2019 IRM)

													Approved Recover	ies (class allocation	%)				
Rate Class	Unit	Total Metered kWh	Total Metered kW	Metered kWh for Non- RPP Customers	Metered kW for Non RPP Customers	Metered kWh for Wholesale Market Participants (WMP)		Total Metered kWh less WMP consumption (if applicable)	Total Metered kW less WMP consumption (if applicable)	1595 Recovery Proportion (2009) <sup>1</sup>	1595 Recovery Proportion (2010) <sup>1</sup>	1595 Recovery Proportion (2011) <sup>1</sup>	1595 Recovery Proportion (2012) <sup>1</sup>	1595 Recovery Proportion (2013) <sup>1</sup>	1595 Recovery Proportion (2014) <sup>1</sup>	1595 Recovery Proportion (2015) <sup>1</sup>	1595 Recovery Proportion (2016) <sup>1</sup>	1568 LRAM Variance Account Class Allocation (\$ amounts)	Number of Customers for Residential and GS<50 classes <sup>3</sup>
RESIDENTIAL SERVICE CLASSIFICATION	kWh	2,544,715,408	0	92,138,185	0			2,544,715,408	0	9.77%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	9.8%	\$664,506	331,461
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	kWh	1,005,968,061	0	169,943,241				1,005,968,061	0	5.40%		5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	\$651,272	32,775
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	kW	4,569,203,493	11,884,201	4,198,623,578		28,137,506	54,146	4,541,065,986	11,830,055						83.7%		83.7%		
LARGE USE SERVICE CLASSIFICATION	kW	51,786,631	78,983	51,786,631				51,786,631	78,983						0.2%		0.2%		
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	kWh	13,620,175	0	116,789	0			13,620,175	0	0.04%					0.0%	0.0%	0.0%	-\$3,498	
STANDBY POWER SERVICE CLASSIFICATION	kW	0	0	C	0			0	0	0.00%					0.0%		0.0%	\$0	
SENTINEL LIGHTING SERVICE CLASSIFICATION	kW	297,132 50,321,393	780	19,885	35			297,132 50,321,393	780 139,971						0.0%	0.0%	0.0%	-\$170 \$176,534	
STREET LIGHTING SERVICE CLASSIFICATION	kW	50,321,393	139,971	49,662,017	138,137			50,321,393	139,971	0.93%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	\$176,534	
								0	u										
								0	0										
								0	0										
	Total	8,235,912,292	12,103,934	4,562,290,327	10,938,640	28,137,506	54,146	8,207,774,786	12,049,788	100%	100%	100%	100%	100%	100%	100%	100%	\$2,535,878	364,236
Threshold Test																	unt Balance from Continuity		\$3,482,168
Total Claim (including Account 1568)		\$250,176														Total Balance of Account	1568 in Column T DOES NO	T MATCH the amount entered	on the Continuity Schedule
Total Claim for Threshold Test (All Group 1 Accounts) Threshold Test (Total claim per kWh) <sup>2</sup> Exceeds Threshold? ELECT TO DISPOSE of the Group 1 Account Balances?	I	(\$3,231,993) (\$0.0004) No Yes																	

(\$3,2
(\$0.
1

As per Section 3.2.5 of the 2017 Filing Reo ions, an applicant may elect to dispose of the Group 1 account balances below the threshold.

Care Residual Account balance to be allocated to rate classes in proportion to the recovery share as established when rate infers were implemented. <sup>6</sup> The Threshold Test does not include the amount in 1544. <sup>16</sup> The proportion of customers for the Residual and GS-30 Classes will be used to allocate Account 1551.

### Information from the 2016 RRR

Rate Class	Unit	Total Metered kWh	Total Metered kW	Metered kWh for Non- RPP Customers	Metered kW for Non- RPP Customers	Metered kWh for Wholesale Market Participants (WMP)	Metered kW for Wholesale Market Participants (WMP)	Total Metered kWh less WMP consumption (if applicable)	Total Metered kW less WMP consumption (if applicable)
RESIDENTIAL SERVICE CLASSIFICATION	kWh	2,770,663,827	0	119,404,036	0			2,770,663,827	0
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	kWh	1,035,123,196	0	180,696,305	0			1,035,123,196	0
GENERAL SERVICE 50 to 4.999 kW SERVICE CLASSIFICATION	kW	4,608,279,659	12,138,626	4,190,177,249	10,153,980	30,373,390	57,038	4,577,906,269	12,081,588
LARGE USE SERVICE CLASSIFICATION	kW	67,734,070	149,959	67,734,070	149,959			67,734,070	149,959
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	kWh	13,630,753	0	132,605	0			13,630,753	0
STANDBY POWER SERVICE CLASSIFICATION	kW	0	0	0	0			0	0
SENTINEL LIGHTING SERVICE CLASSIFICATION	kW	314,901	858	15,920	820			314,901	858
STREET LIGHTING SERVICE CLASSIFICATION	kW	52,846,039	148,247	52,181,421	146,077			52,846,039	148,247
0								0	0
								0	0
								0	0
								0	0
	Total	8,548,592,446	12,437,690	4,610,341,606	10,450,836	30,373,390	57,038	8,518,219,056	12,380,652

### GS>50 Interval and non-Interval - 2017

Rate Class	Unit	Total Metered kWh	Total Metered KW	Metered kWh for Non- RPP Customers	Metered kW for Non- RPP Customers	Wholesale Market	Metered kW for Wholesale Market Participants (WMP)	Total Metered kWh less WMP consumption (if applicable)	Total Metered kW less WMP consumption (if applicable)
GS>50 Interval Accounts	kWh	2,116,280,141	5,504,307	1,944,641,711	4,965,781	28,137,506	54,146	2,088,142,635	5,450,161
GS>50 The rest	kWh	2,452,923,351	6,379,894	2,253,981,867	5,755,704			2,452,923,351	6,379,894
GS>50 Total	kW	4,569,203,493	11,884,201	4,198,623,578	10,721,485	28,137,506	54,146	4,541,065,986	11,830,055
control check to RRR		0	0	(0)	0	0	0	0	(0)

### GS>50 Interval and non-Interval - 2016

Rate Class	Unit	Total Metered kWh	Total Metered kW	Metered kWh for Non- RPP Customers	Metered kW for Non- RPP Customers	Metered kWh for Wholesale Market Participants (WMP)	Metered KW for Wholesale Market Participants (WMP)	Total Metered kWh less WMP consumption (if applicable)	Total Metered kW less WMP consumption (if applicable)	
GS>50 Interval Accounts	kWh	2,318,951,031	5,647,087	2,184,532,398	4,698,014	30,373,390	57,038	2,288,577,641	5,590,049	
GS>50 The rest	kWh	2,289,505,114	6,491,539	2,005,644,851	5,455,965			2,289,505,114	6,491,539	
GS>50 Total	kW	4,608,456,145	12,138,626	4,190,177,249	10,153,980	30,373,390	57,038	4,578,082,755	12,081,588	
control check to PPP		176 486	(0)	(0)	0	0	0	176.486	(0)	

### GS>50 Interval and non-Interval - 2017 CIR (based on Proposed 2018 Load Forecast - 2017 CIR EDVAR Model)

Rate Class	Unit	Total Metered kWh	Total Metered kW	Metered kWh for Non RPP Customers	Metered kW for Non- RPP Customers	Metered kWh for Wholesale Market Participants (WMP)	Metered kW for Wholesale Market Participants (WMP)	Total Metered kWh less WMP consumption (if applicable)	Total Metered kW less WMP consumption (if applicable)	
GS>50 Interval Accounts (Allocated)	kWh	0	0		0 0	0	0	0	0	
GS>50 The rest (Allocated)	kWh	0	0		0 0	0	0	0	0	
GS>50 Total	kW	0	0		0 0	0	0	0	0	
2018 EDVAR Model										

No input required. This workshseet allocates the deferral/variance account balances (Group 1 and 1568) to the appropriate classes as per EDDVAR dated July 31, 2009

## Allocation of Group 1 Accounts (including Account 1568)

Rate Class		% of Total non-	% of Customer	% of Total kWh adjusted for		alloc	ated based on Total less WMP			allocated based on Total less WMP						
	% of Total kWh	RPP kWh	Numbers **	WMP	1550	1551	1580	1584	1586	1588	1595_(2009)	1595_(2010)	1595_(2011)	1595_(2012)	1595_(2014)	1568
RESIDENTIAL SERVICE CLASSIFICATION	30.9%	2.0%	91.0%	31.0%	469,201	(360,083)	(2,490,759)	(2,099,068)	(324,398)	2,190,588	0	0	0	0	0	664,506
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	12.2%	3.7%	9.0%	12.3%	185,483	(35,605)	(984,638)	(829,796)	(128,240)	865,975	0	0	0	0	0	651,272
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	55.5%	92.0%	0.0%	55.3%	842,482	0	(4,444,780)	(3,769,015)	(582,478)	3,909,122	0	0	0	0	0	1,052,800
LARGE USE SERVICE CLASSIFICATION	0.6%	1.1%	0.0%	0.6%	9,549	0	(50,689)	(42,717)	(6,602)	44,580	0	0	0	0	0	(5,567)
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	0.2%	0.0%	0.0%	0.2%	2,511	0	(13,331)	(11,235)	(1,736)	11,725	0	0	0	0	0	(3,498)
STANDBY POWER SERVICE CLASSIFICATION	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0
SENTINEL LIGHTING SERVICE CLASSIFICATION	0.0%	0.0%	0.0%	0.0%	55	0	(291)	(245)	(38)	256	0	0	0	0	0	(170)
STREET LIGHTING SERVICE CLASSIFICATION	0.6%	1.1%	0.0%	0.6%	9,278	0	(49,254)	(41,509)	(6,415)	43,319	0	0	0	0	0	176,534
											0	0	0	0	0	0
	100.0%	100.0%	100.0%	100.0%	1,518,559	(395,688)	(8,033,741)	(6,793,585)	(1,049,907)	7,065,564	0	0	0	0	0	2,535,878

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

The purpose of this tab is to calculate the GA rate riders for all current Class B customers of the distributor. Identify the total billed consumption for former Class B customers prior to becoming Class A customers in Column G.

Identify the total interval metered accounts billed consumption, if billed on Actual GA rate. Effective January 2017, the billing determinant and all rate riders for the disposition of GA balances will be calculated on an energy basis (kWhs) regardless of the billing determinant used for distribution rates for the particular class (see Chapter 3, Filing Requirements, section 3.2.5.2)

	Total Metered Non-RPP consumption minus WMP kWh	Total Metered Class A Consumption in 2017 (partial and/or full year Class A customers)* kWh	Total Metered Consumption for New Class A customer(s) in the period prior to becoming Class A (i.e. Jan. 1 - June 30, 2017) kWh	Total Metered Consumption for New Class B customer(s) in the period after becoming Class B (i.e. Jul 1 - Dec 31, 2017) kWh	Total Interval-metered Consumption in 2017 for non-Class A customers kWh	Metered Consumption for Current Class B non- Interval Customers (Non-RPP consumption LESS WMP, Class A and new Class A's former Class B consumption if applicable) kWh	% of total kWh	Total GA \$ allocated to Current Class B Customers	GA Rate Rider
RESIDENTIAL SERVICE CLASSIFICATION GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION LARGE USE SERVICE CLASSIFICATION UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION STANDBY POWER SERVICE CLASSIFICATION SENTINEL LIGHTING SERVICE CLASSIFICATION STREET LIGHTING SERVICE CLASSIFICATION	92,138,185 169,943,241 4,170,486,072 51,786,631 116,789 0 19,885 49,662,017	753,292,526 49,680,913			736,420,985	92,138,185 169,943,241 2,253,981,867 0 116,789 0 19,885 49,662,017	3.5909% 6.6232% 87.8450% 0.0000% 0.0046% 0.0000% 1.9355%	\$301,599 \$4,000,150 \$0 \$207 \$0 \$35	\$0.0018 \$0.0018 \$0.0018 \$0.0000 \$0.0018 \$0.0018 \$0.0018
	4,534,152,821	802,973,439	428,896,411	-	736,420,985	2,565,861,985	100.0%	<b>4,553,645</b> from Sheet 6B	

\*For new Class A customers (who became Class A in 2016), add their consumption only related to July to December period. All Class A customers are interval-metered. They consumption is included in Column D.

\*\*PowerStream bills Class B non-RPP interval billed customers at the actual monthly GA rate (no GA variance) and non-interval customers at the first estimate rate.

2016 DATA	Total Metered Non-RPP consumption minus WMP	Total Metered Class A Consumption in 2016 (partial and/or full year Class A customers)*	Total Metered Consumption for New Class A customer(s) in the period prior to becoming Class A (i.e. Jan. 1 - June 30, 2016)
	kWh	kWh	kWh
RESIDENTIAL SERVICE CLASSIFICATION			
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION			
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION			
LARGE USE SERVICE CLASSIFICATION			
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION			
STANDBY POWER SERVICE CLASSIFICATION			
SENTINEL LIGHTING SERVICE CLASSIFICATION			
STREET LIGHTING SERVICE CLASSIFICATION			

Class A customers. The tables below calculate specific amounts for each customer who made the change. Consistent with both decisions for 2016 rates and EDDVAR, distributors are generally expected to settle the amount through 12 equal adjustments to bills. A one-time settlement is acceptable if the affected customer has expressed a clear preference for this approach. (see Filing Requirements section 3.2.5.2)

Year of Group 1 Account Balance Last Disposed

2016

(e.g. If in the 2017 EDR process, you received approval to dispose the GA variance account balance as of December 31, 2014, please enter 2014 in cell C16.)

## Allocation of total Non-RPP consumption (kWh) between Class B and New Class A (Former Class B non-Interval) customers Total Total 2017

		2017		
Total Class B Consumption for Years Since Last Disposition (Non-RPP consumption LESS WMP and Class A)	A	3,731,179,381	3,731,179,381	
non-Interval Consumption	в	-	-	
Portion of Consumption of Former Class B non-Interval Customers	C=B/A	0.00%		

### Allocation of Total GA Balance \$

Total GA Balance	D	\$ 4,553,645
New Class A Customer(s) <sup>-</sup> Former Class B non-Intervals Portion of GA Balance	E=C*D	\$ -
GA Balance to be disposed to Current Class B Customers (if no Class A to Class B Transition Customers)	F=D-E	\$ 4,553,645

### Allocation of GA Balances to Former Class B non-Interval Customers

# of Former Class B customer(s)	f Former Class B customer(s)		2				
Customer		Total Metered kWh Consumption for each new Class A customer for the period prior to becoming Class A	each new Class A customer for	Interval-Billed* Customer? Yes/No	% of kWh	Customer specific GA allocation for the period prior to becoming Class A	Monthly Equal Payments
Customer 1		4,861,795	4,861,795	Yes		-	
Customer 2		3,930,790	3,930,790	Yes			
Customer 3		6,047,774	6,047,774	Yes			
Customer 4		6,481,812	6,481,812	Yes			
Customer 5		4,803,826	4,803,826	Yes			
Customer 6		2,611,330	2,611,330	Yes			
Customer 7		1,595,116	1,595,116	Yes			
Customer 8		2,387,756	2,387,756	Yes			
Customer 9		5,720,262	5,720,262	Yes			
Customer 10		3,272,370	3,272,370	Yes			
Customer 11		8,441,839	8,441,839	Yes			
Customer 12		2,625,838	2,625,838	Yes			
Customer 13		2,653,445	2,653,445	Yes			
Customer 14		3,147,859	3,147,859	Yes			1
Customer 15		3,332,918	3,332,918	Yes			
Customer 16		4,136,640	4,136,640	Yes			
Customer 17		3,245,970	3,245,970	Yes			
Customer 18		3,177,049	3,177,049	Yes			
Customer 19		2,809,619	2,809,619	Yes			
Customer 20		6,209,492	6,209,492	Yes			
Customer 21		4,527,930	4,527,930	Yes			
Customer 22		3,782,021	3,782,021	Yes			
Customer 23		3,742,652	3,742,652	Yes			
Customer 24		2,782,849	2,782,849	Yes			
Customer 25		5,097,300	5,097,300	Yes			
Customer 26		3,461,136	3,461,136	Yes			
Customer 27		2,918,977	2,918,977	Yes			
Customer 28		5,487,950	5,487,950	Yes			
Customer 29		3,639,314	3,639,314	Yes			
Customer 30		4,521,496	4,521,496	Yes			
Customer 31		2,048,150	2,048,150	Yes			
Customer 32		3,655,014	3,655,014	Yes			
Customer 33		5,198,389	5,198,389	Yes			
Customer 34		2,184,895	2,184,895	Yes			
Customer 35		2,607,538	2,607,538	Yes			
Customer 36		2,832,058	2,832,058	Yes			
Customer 37		8,843,195	8,843,195	Yes			
Customer 38		4,322,961	4,322,961	Yes			
Customer 39		1,753,749	1,753,749	Yes			
Customer 40		3,149,977	3,149,977	Yes			1
Customer 41		8,778,716	8,778,716	Yes			1
Customer 42		1,626,269	1,626,269	Yes			1
Customer 42 Customer 43		3,030,377	3,030,377	Yes			1
Customer 44		5,406,286	5,406,286	Yes			1
Customer 45		3,313,831	3,313,831	Yes		1	
Customer 45 Customer 46		6,473,884	6,473,884	Yes			1
Customer 46 Customer 47		5,059,374	5,059,374	Yes		1	
Customer 47 Customer 48		8,753,052	8,753,052	Yes			1
							1
Customer 49 Customer 50		3,500,169	3,500,169	Yes			1
Customer 50	I	699,837	699,837	Yes	I	I	1

Customer 51	2,342,89	7 2,342,897	Yes	1 1		l .
Customer 52	6,336,35		Yes			1
Customer 53	6,716,39					1
Customer 54	3,540,22		Yes	i I		1
Customer 55	2,775,08			1		
Customer 56	1,147,91		Yes	1		
				1		
Customer 57	10,462,65		Yes	1		
Customer 58	2,036,04			1		
Customer 59	3,726,87			1		
Customer 60	5,799,12			1		
Customer 61	4,815,07		Yes	1		
Customer 62	3,714,53			1		
Customer 63	5,962,74		Yes	1		
Customer 64	4,518,73		Yes	1		
Customer 65	3,188,03		Yes	1		
Customer 66	3,295,88		Yes	i I		1
Customer 67	7,598,34					1
Customer 68	6,024,55					1
Customer 69	1,677,31	4 1,677,314	Yes			1
Customer 70	2,105,71	7 2,105,717	Yes	1		
Customer 71	3,309,93	4 3,309,934	Yes	i I		1
Customer 72	4,898,82	2 4,898,822	Yes	1		
Customer 73	1,991,94	8 1,991,948	Yes	1		
Customer 74	1,520,70		Yes	1		
Customer 75	5,058,89		Yes	1		
Customer 76	3,043,40			1		
Customer 77	3,055,94			1		
Customer 78	3,382,70		Yes	1		
Customer 79	2,254,08		Yes	1		
Customer 80	3,745,24			1		
Customer 81	4,064,85			1		
Customer 82	1,399,44		Yes	i I		1
Customer 83	331,22		Yes			1
Customer 83 Customer 84	331,22		Yes			1
						1
Customer 85	9,112,55		Yes			1
Customer 86	6,594,93					1
Customer 87	5,737,22					1
Customer 88	1,858,00					1
Customer 89	7,131,93					1
Customer 90	7,731,10		Yes			1
Customer 91	5,414,94		Yes			1
Customer 92	2,050,03			i I		1
Customer 93	4,803,84			i I		1
Customer 94	7,769,21		Yes			1
Customer 95	6,473,17		Yes	i I		1
Customer 96	12,619,14					1
Customer 97	8,228,03			i I		1
Customer 98	1,696,28			i I		1
Customer 99	3,470,90	9 3,470,909	Yes			1
Customer 100	3,287,35	6 3,287,356	Yes	i I		1
Customer 101	2,698,15		Yes			l
Total for all Customers	428,896,41	1 428,896,411				
Total for non-Interval billed ONLY		0 0		0.00%	0	

NOTES: \*PowerStream bills non-RPP interval customers using the Actual rate of Global Adjustment provided by the Independent Electricity System Operator (the "IESO").

This tab allocates the GA balance to former Class A customers who contributed to the current Class B GA balance once switched to Class B non-interval customers. The tables below calculate specific amounts for each customer who made the transition. Consistent with both decisions for 2016 rates and EDDVAR, distributors are generally expected to settle the amount through 12 equal adjustments to bills. A one-time settlement is acceptable if the affected customer has expressed a clear preference for this approach. (see Filing Requirements section 3.2.5.2)

Year of Group 1 Account Balance Last Disposed

2016

(e.g. If in the 2017 EDR process, you received approval to dispose the GA variance account balance as of December 31, 2014, please enter 2014 in cell C16.)

### Allocation of total Non-RPP consumption (kWh) between Class B and New Class B non-interval (Former Class A) customers

		Total	2017
Total Class B Consumption for Years Since Last Disposition (Non-RPP consumption LESS WMP and Class A)	A	3,731,179,381	3,731,179,381
New Class B non-Interval Customer(s)' Consumption	В	-	-
Portion of Consumption of New Class B non-Interval Customers	C=B/A	0.00%	

### Allocation of Total GA Balance \$

GA Balance to be disposed to Current Class B Customers	G=D-E-F	\$ 4,553,645	Input into Sheet 6. GA Calculation
New Class A Customer(s)' Former Class B non-Interval Portion of GA Balance	F=Sheet 6A	\$ -	
Portion of GA Balance attributable to Class B	E=C*D	\$ -	
Total GA Calss B Balance adjusted for Class A	D	\$ 4,553,645	

### Allocation of GA Balances to Former Class A Customers

# of Former Class B customer(s)			2				
Customer				Interval-Billed* Customer? Yes/No		Customer specific GA allocation for the period after becoming Class B	Monthly Equal Payments
Customer 1				Yes			
Total		0	0				
Total for non-Interval billed ONLY		0	0		0.00%	\$-	

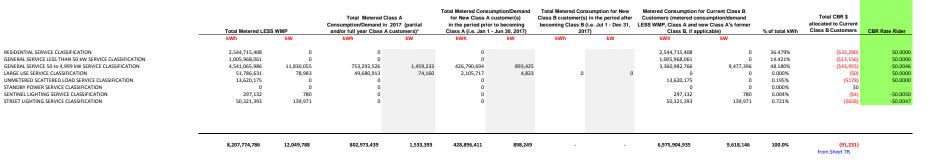
0 96,840

The purpose of this tab is to calculate the CBR rate riders for all current Class B customers of the distributor. Identify and input the total billed consumption for former Class B customers prior to becoming Class A customers in Column H. Identify and input the total billed consumption for former Class A customers after becoming Class B customers in Column H.

> -\$ -\$

### Account 1580

Variance WMS – Sub-account CBR Class A Variance WMS – Sub-account CBR Class B



\*For new Class A customers (who became Class A in 2016), add their consumption only related to July to December period.

This tab allocates the CBR balance to former Class B customers who contributed to the current CBR balance but are now Class A customers. The tables below calculate specific amounts for each customer who made the change. Consistent with both decisions for 2016 rates and EDDVAR, distributors are generally expected to settle the amount through 12 equal adjustments to bills. A one-time settlement is acceptable if the affected customer has expressed a clear preference for this approach. (see Filing Requirements section 3.2.5.2)

Year of Group 1 Account Balance Last Disposed



### Allocation of total Non-RPP consumption (kWh) between Class B and New Class A (Former Class B) customers

		Total	2017
Total MeteredConsumption for Years Since Last Disposition			
(consumption LESS WMP and Class A)	A	7,404,801,346	7,404,801,346
New Class A Customer(s)' Former Class B Consumption	В	428,896,411	428,896,411
Portion of Consumption of Former Class B Customers	C=B/A	5.79%	

### Allocation of Total CBR Class B Balance \$

Total CBR-Class B Balance	D	-\$	96,840
New Class A Customer(s): Former Class B Portion of CBR- Class B Balance	E=C*D	-\$	5,609
CBR-Class B balance to be disposed to Current class B Customers (if no Class A to Class B Transition Customers)	F=D-E		
ousioners)	F=D-E	-Ş	91,231

### Allocation of CBR Class B Balances to Former Class B Customers

# of Former Class B customer(s)	2					
Customer	Consumption for each new Class A customer for the period	Metered kWh Consumption for each new Class A customer for the period prior to becoming Class A in 2017	% of kWh	Customer specific CBR-Class B allocation for the period prior to becoming Class A	Monthly Equal Payments	
Customer 1	4,861,795	4,861,795	1.13%	-\$ 64	-\$ !	5
Customer 2	3,930,790	3,930,790	0.92%	-\$ 51	-\$ 4	4
Customer 3	6,047,774	6,047,774	1.41%	-\$ 79	-\$	7
Customer 4	6,481,812	6,481,812	1.51%	-\$ 85	-\$	7
Customer 5	4,803,826	4,803,826	1.12%	-\$ 63	-\$ !	5
Customer 6	2,611,330	2,611,330	0.61%	-\$ 34	-\$	3
Customer 7	1,595,116	1,595,116	0.37%	-\$ 21	-\$	2
Customer 8	2,387,756	2,387,756	0.56%	-\$ 31	-\$	3
Customer 9	5,720,262	5,720,262	1.33%	-\$ 75	-\$ 6	6
Customer 10	3,272,370	3,272,370	0.76%	-\$ 43	-\$ 4	4
Customer 11	8,441,839	8,441,839	1.97%	-\$ 110	-\$	9
Customer 12	2,625,838	2,625,838	0.61%	-\$ 34	-\$	3
Customer 13	2,653,445	2,653,445	0.62%	-\$ 35	-\$	3
Customer 14	3,147,859	3,147,859	0.73%	-\$ 41	-\$	3
Customer 15	3,332,918	3,332,918	0.78%	-\$ 44	-\$ 4	4
Customer 16	4,136,640	4,136,640	0.96%	-\$ 54	-\$ !	5

Customer 17	3,245,970	3,245,970	0.76%	-\$ 42	
Customer 18	3,177,049	3,177,049		-\$ 42	-\$ 3
Customer 19	2,809,619	2,809,619	0.66%	-\$ 37	-\$ 3
Customer 20	6,209,492	6,209,492	1.45%	-\$ 81	-\$ 7
Customer 21	4,527,930	4,527,930	1.06%	-\$ 59	-\$ 5
Customer 22	3,782,021	3,782,021		-\$ 49	-\$ 4
Customer 23	3,742,652	3,742,652		-\$ 49	-\$ 4
Customer 24	2,782,849	2,782,849		-\$ 36	-\$ 3
Customer 25	5,097,300	5,097,300		-\$ 67	-\$ 6
Customer 26	3,461,136	3,461,136	0.81%	-\$ 45	-\$ 4
Customer 27	2,918,977	2,918,977		-\$ 38	-\$ 3
Customer 28	5,487,950	5,487,950		-\$ 72	-\$ 6
Customer 29	3,639,314	3,639,314		-\$ 48	-\$ 4
Customer 30	4,521,496	4,521,496		-\$ 59	-\$ 5
Customer 31	2,048,150	2,048,150		-\$ 27	-\$ 2
Customer 32	3,655,014	3,655,014		-\$ 48	-\$ 4
Customer 33	5,198,389	5,198,389		-\$ 68	-\$ 6
Customer 34	2,184,895	2,184,895		-\$ 29	-\$ 2
Customer 35	2,607,538	2,607,538		-\$ 34	-\$ 3
Customer 36	2,832,058	2,832,058		-\$ 37	-\$ 3
Customer 37	8,843,195	8,843,195		-\$ 116	-\$ 10
Customer 38	4,322,961	4,322,961		-\$ 57	-\$ 5
Customer 39	1,753,749	1,753,749		-\$ 23	-\$ 2
Customer 40	3,149,977	3,149,977		-\$ 41	-\$ 3
Customer 41	8,778,716	8,778,716		-\$ 115	-\$ 10
Customer 42	1,626,269	1,626,269		-\$ 21	-\$ 2
Customer 43	3,030,377	3,030,377		-\$ 40	-\$ 3
Customer 44	5,406,286	5,406,286		-\$ 40	-\$ 6
Customer 45	3,313,831	3,313,831		-\$ 43	-\$ 4
Customer 46	6,473,884	6,473,884		-\$ 45	-\$ 7
Customer 47	5,059,374	5,059,374	1.18%	-\$ 66	-\$ 6
Customer 48	8,753,052	8,753,052		-\$ 114	-\$ 10
Customer 49	3,500,169	3,500,169		-\$ 46	-\$ 4
Customer 50	699,837	699,837		-\$ 40	-\$ 1
Customer 51	2,342,897	2,342,897		-\$ 31	-\$ 3
Customer 52	6,336,351	6,336,351	1.48%	-\$ 83	-\$ 7
Customer 53	6,716,395	6,716,395		-\$ 88	-\$ 7
Customer 54	3,540,222	3,540,222	0.83%	-\$ 46	-\$ 4
Customer 55	2,775,089	2,775,089	0.65%	-\$ 40	-\$ 3
Customer 56	1,147,914	1,147,914		-\$ 50	-\$ 1
Customer 57	10,462,652	10,462,652		-\$ 137	-\$ 11
Customer 58	2,036,046	2,036,046		-\$ 137	-\$ 2
Customer 59	3,726,870	3,726,870		-\$ 27	-\$ 2
Customer 60	5,799,122	5,799,122		-\$ 49	-\$ 6
Customer 61	4,815,071	4,815,071	1.12%	-\$ 63	-\$ 5
Customer 62	3,714,539	3,714,539	0.87%	-\$ 03	-\$ 4
Customer 63	5,962,741	5,962,741		-\$ 78	-\$ 6
Customer 64	4,518,736	4,518,736		-\$ 78	-\$ 5
Customer 65	3,188,033	3,188,033		-\$ 55	-\$ 3
Customer 66	3,295,887	3,188,033	0.74%	-\$ 42	-\$ 4
Customer 67	7,598,348	7,598,348		-\$ 45 -\$ 99	-\$ 4
			1.77%	-\$ 59	-\$ 8 -\$ 7
Customer 68	6,024,553	6,024,553			-\$ 7
Customer 69	1,677,314 2,105,717	1,677,314	0.39% 0.49%	-\$ 22 -\$ 28	-\$ 2
Customer 70		2,105,717			
Customer 71	3,309,934	3,309,934		-\$ 43	-\$ 4
Customer 72	4,898,822	4,898,822		-\$ 64	-\$ 5 -\$ 2
Customer 73	1,991,948	1,991,948		-\$ 26	
Customer 74	1,520,701	1,520,701		-\$ 20	-\$ 2 -\$ 6
Customer 75	5,058,891	5,058,891		-\$ 66 -\$ 40	
Customer 76	3,043,406	3,043,406	0.71%	- <i>ş</i> 40	-9 3

Customer 77	3,055,943	3,055,943	0.71% -	-\$ 40	-\$	3
Customer 78	3,382,701	3,382,701	0.79% -	-\$ 44	-\$	4
Customer 79	2,254,087	2,254,087	0.53% -	-\$ 29	-\$	2
Customer 80	3,745,242	3,745,242	0.87% -	-\$ 49	-\$	4
Customer 81	4,064,858	4,064,858	0.95% -	-\$ 53	-\$	4
Customer 82	1,399,447	1,399,447	0.33% -	-\$ 18	-\$	2
Customer 83	331,220	331,220	0.08% -	-\$ 4	-\$	(
Customer 84	1,685,011	1,685,011	0.39% -	-\$ 22	-\$	2
Customer 85	9,112,551	9,112,551	2.12% -	-\$ 119	-\$	10
Customer 86	6,594,938	6,594,938	1.54% -	-\$ 86	-\$	7
Customer 87	5,737,222	5,737,222	1.34% -	-\$ 75	-\$	6
Customer 88	1,858,005	1,858,005	0.43% -	-\$ 24	-\$	:
Customer 89	7,131,936	7,131,936	1.66% -	-\$ 93	-\$	:
Customer 90	7,731,101	7,731,101	1.80% -	-\$ 101	-\$	:
Customer 91	5,414,949	5,414,949	1.26% -	-\$ 71	-\$	(
Customer 92	2,050,037	2,050,037	0.48% -	-\$ 27	-\$	1
Customer 93	4,803,846	4,803,846	1.12% -	-\$ 63	-\$	
Customer 94	7,769,212	7,769,212	1.81% -	-\$ 102	-\$	:
Customer 95	6,473,172	6,473,172	1.51% -	-\$ 85	-\$	
Customer 96	12,619,140	12,619,140	2.94% -	-\$ 165	-\$	14
Customer 97	8,228,039	8,228,039	1.92% -	-\$ 108	-\$	9
Customer 98	1,696,288	1,696,288	0.40% -	-\$ 22	-\$	1
Customer 99	3,470,909	3,470,909	0.81% -	-\$ 45	-\$	
Customer 100	3,287,356	3,287,356	0.77% -	-\$ 43	-\$	
Customer 101	2,698,156	2,698,156	0.63% -	-\$ 35	-\$	
Fotal	428,896,411	428,896,411	100.00% -	-\$ 5,609	-\$	46

This tab allocates the CBR-Class B balance to former Class A customers who contributed to the current CBR-Class B balance once switched to Class B customers. The tables below calculate specific amounts for each customer who made the transition. Consistent with both decisions for 2016 rates and EDDVAR, distributors are generally expected to settle the amount through 12 equal adjustments to bills. A one-time settlement is acceptable if the affected customer has expressed a clear preference for this approach. (see Filing Requirements section 3.2.5.2)

2016

Year of Group 1 Account Balance Last Disposed

## Allocation of total Non-RPP consumption (kWh) between Class B and New Class B (Former Class A) customers

		Total	2017
Total Class B Consumption for Years Since Last Disposition (Non-RPP consumption LESS WMP and Class A) New Class B Customer(s)' Consumption	A	7,404,801,346	7,404,801,346
Portion of Consumption of New Class B Customers	C=B/A	0.00%	

### Allocation of Total CBR-Class B Balance \$

Total CBR-Calss B Balance adjusted for Class A	D	-\$	96,840	
New Class B Customer(s): Former Class A Portion of CBR- Class B Balance attributable to Class B	E=C*D	\$		
New Class A Customer(s)' Former Class B Portion of CBR- Class B Balance	F=Sheet 6A	-\$	5,609	
CBR-Class B Balance to be disposed to Current Class B Customers	G=D-E-F	-\$	91,231	Input into Sheet 7. CBR Calculation

### Allocation of CBR-Class B Balances to Former Class A Customers

# of Former Class B customer(s)	1					
Customer	for the period after becoming	each new Class B customer for the period after becoming Class B in 2017			Monthly Equal Payments	
Customer 1						
			0.00%	\$ -	\$	-
			0.00%	\$ -	\$	-
			0.00%	\$-	\$	-
Total	0	0	0.00%	\$ -		

Input required at cell D13 only. This workshseet calculates rate riders related to the Deferral/Variance Account Disposition (if applicable) and rate riders for Account 1568. Rate Riders will not be generated for the microFIT class. 12

Default Rate Rider Recovery Period (in months) Proposed Rate Rider Recovery Period (in months)

12 Rate Rider Recovery to be used below

Rate Class	Unit	Total Metered kWh	Metered kW or kVA	Total Metered kWh less WMP consumption	Total Metered kW less WMP consumption	Allocation of Group 1 Account Balances to All Classes <sup>2</sup>	Allocation of Group 1 Account Balances to Non- WMP Classes Only (if Applicable) <sup>2</sup>	Deferral/Variance Account Rate Rider <sup>2</sup>	Deferral/Variance Account Rate Rider for Non-WMP (if applicable) <sup>2</sup>	Account 1568 Rate Rider
RESIDENTIAL SERVICE CLASSIFICATION	kWh	2,544,715,408	0	2,544,715,408	0	(2,614,518)		(0.0010)	0.0000	0.0003
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	kWh	1,005,968,061	0	1,005,968,061	0	(926,821)		(0.0009)	0.0000	0.0006
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	kW	4,569,203,493	11,884,201	4,541,065,986	11,830,055	(3,509,011)	(535,658)	(0.2953)	(0.0453)	0.0886
LARGE USE SERVICE CLASSIFICATION	kW	51,786,631	78,983	51,786,631	78,983	(45,879)		(0.5809)	0.0000	(0.0705)
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	kWh	13,620,175	0	13,620,175	0	(12,067)		(0.0009)	0.0000	(0.0003)
STANDBY POWER SERVICE CLASSIFICATION	kW	0	0	0	0	0		0.0000	0.0000	0.0000
SENTINEL LIGHTING SERVICE CLASSIFICATION	kW	297,132	780	297,132	780	(263)		(0.3377)	0.0000	(0.2176)
STREET LIGHTING SERVICE CLASSIFICATION	kW	50,321,393	139,971	50,321,393	139,971	(44,581)		(0.3185)	0.0000	1.2612

<sup>1</sup> When calculating the revenue reconciliation for distributors with Class A customers, the balances of sub-account 1580-CBR Class A and B will not be taken into consideration since the rate riders, if any, are calculated outside of the model.

<sup>2</sup> Only for rate classes with WMP customers are the Deferral/Variance Account Rate Riders for Non-WMP (column H and J) calculated separately. For all rate classes without WMP customers, balances in account 1580 and 1588 are included in column H and disposed through a combined Deferral/Variance Account and Rate Rider.

Revenue Reconcilation<sup>1</sup>

> (7,688,798) 0

## Summary - Sharing of Tax Change Forecast Amounts

For the 2017 year, enter any Tax Credits from the Cost of Service Tax Calculation (Positive #)

1. Tax Related Amounts Forecast from Capital Tax Rate Changes	20	18	2019
Taxable Capital (if you are not claiming capital tax, please enter your OEB-Approved Rate Base)			\$ -
Deduction from taxable capital up to \$15,000,000			\$ -
Net Taxable Capital	\$	-	\$ -
Rate			0.00%
Ontario Capital Tax (Deductible, not grossed-up)	\$	-	\$ -
2. Tax Related Amounts Forecast from Income Tax Rate Changes Regulatory Taxable Income			\$ -
Corporate Tax Rate			15.00%
Tax Impact	\$	-	\$ -
Grossed-up Tax Amount	\$	-	\$ -
Tax Related Amounts Forecast from Capital Tax Rate Changes	\$	-	\$ -
Tax Related Amounts Forecast from Income Tax Rate Changes	\$	-	\$ -
Total Tax Related Amounts	\$	-	\$ -
Incremental Tax Savings			\$ -
Sharing of Tax Amount (50%)			\$ -

0

#### Calculation of Rebased Revenue Requirement and Allocation of Tax Sharing Amount. Enter data from the last OEB-Approved Cost of Service application in columns D through I. As per Chapter 3 Filing Requirements, shared tax rate riders are based on a 1 year disposition.

8,235,912,292

		Re-based Billed				Re-based Distribution			Distribution Volumetric Rate	Distribution Volumetric Rate	Revenue		Distribution Volumetric Rate	Distribution Volumetric Rate % Revenue	
Rate Class		Customers or Connections	Re-based Billed kWh	Re-based Billed kW	Re-based Service Charge	Volumetric Rate kWh		Service Charge Revenue	Revenue kWh	Revenue kW	Requirement from Rates	Service Charge % Revenue	% Revenue kWh	% Revenue kW	Total % Revenue
		A	B	C	D	E	F	G = A * D *12	H = B * E	I = C * F	J = G + H + I	K = G / J	L=H/J	M = I / J	N = J/R
RESIDENTIAL SERVICE CLASSIFICATION	kWh	331,461	2,689,802,037	0	18.51	0.0130		73,624,099	34,967,426	0	108,591,525	67.8%	32.2%	0.0%	53.8%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	kWh	32,775	1,031,991,524	0	28.74	0.0183		11,303,471	18,885,445	0	30,188,916	37.4%	62.6%	0.0%	15.0%
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	kW	5,081	4,566,530,904	12,192,632	140.97		4.2037	8,594,518	0	51,254,165	59,848,683	14.4%	0.0%	85.6%	29.7%
LARGE USE SERVICE CLASSIFICATION	kW	2	75,964,677	149,679	6073.68		2.2421	145,768	0	335,595	481,364	30.3%	0.0%	69.7%	0.2%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	kWh	3,044	14,542,413		8.60	0.0195		314,098	283,577	0	597,675	52.6%	47.4%	0.0%	0.3%
STANDBY POWER SERVICE CLASSIFICATION	kW						2.8081	0	0	0	0	0.0%	0.0%	0.0%	0.0%
SENTINEL LIGHTING SERVICE CLASSIFICATION	kW	207	377,900	975	4.19		9.8694	10,408	0	9,621	20,029	52.0%	0.0%	48.0%	0.0%
STREET LIGHTING SERVICE CLASSIFICATION	kW	89,729	45,603,291	127,503	1.19		6.3222	1,281,327	0	806,099	2,087,425	61.4%	0.0%	38.6%	1.0%
0	0							0	0	0	0	0.0%	0.0%	0.0%	0.0%
								0	0	0	0	0.0%	0.0%	0.0%	0.0%
								0	0	0	0	0.0%	0.0%	0.0%	0.0%
								0	0	0	0	0.0%	0.0%	0.0%	0.0%
								0	0	0	0	0.0%	0.0%	0.0%	0.0%
Total		462,298	8,424,812,745	12,470,788				95,273,688	54,136,448	52,405,480	201,815,616				100.0%

#### Rate Class

Real class Responsible Service Classification General Service Liss Than 50 kW Service Classification General Service Sin 4.99 kW Service Classification Lage US Service Classification UNMETERB 2021THERD LOAD SErvice Classification STANDBY POWER SERVICE CLASSIFICATION STANDBY POWER SERVICE CLASSIFICATION STANDBY POWER SERVICE CLASSIFICATION STATET LIGHTING SERVICE CLASSIFICATION STATET LIGHTING SERVICE CLASSIFICATION

	Total kWh (most recent RRR filing)	Total kW (most recent RRR filing)	ocation of Tax vings by Rate Class	Di	stribution Rate Rider	
kWh	2,544,715,408		\$	\$		\$/Custome
kWh	1,005,968,061		\$	\$		\$/kWh
kW	4,569,203,493	11,884,201	\$ -	\$		\$/kW
kW	51,786,631	78,983	\$ -	\$		\$/kW
kWh	13,620,175		\$ -	\$		\$/kWh
kW			\$ -			\$/kWh
kW	297,132	780	\$ -	\$		\$/kW
kW	50,321,393	139,971	\$ -	\$		\$/kW
0			\$ -			
			\$ -			
			\$ -			
			\$ -			
			\$ -			

12,103,934 \$

If the allocated tax sharing amount does not produce a rate rider in one or more rate
class (except for the Standby rate class), a distributor is required to transfer the
entire OEB-approved tax sharing amount into account 1595 for disposition at a
later date (see Filing Requirements, Appendix B)

Columns F and G must match the data from the most recent RRR filing.

Rates have been imported from Tab 2. As well, the Loss Factor has been imported from "Model Specs" tab.

If the data needs to be modified, please make the necessary adjustments and note the changes in your manager's summary.

		Unit	Rate	Non-Loss Adjusted Metered	Non-Loss Adjusted	Applicable	Loss Adjusted
Rate Class	Rate Description	Onit	Nale	kWh	Metered kW	Loss Factor	Billed kWh
Residential Service Classification	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0075	2,544,715,408	0	1.0369	2,638,615,406
Residential Service Classification	Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0040	2,544,715,408	0	1.0369	2,638,615,406
General Service Less Than 50 kW Service Classification	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0067	1,005,968,061	0	1.0369	1,043,088,282
General Service Less Than 50 kW Service Classification	Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0035	1,005,968,061	0	1.0369	1,043,088,282
General Service Greater Than 50 kW Service Classification	Retail Transmission Rate – Network Service Rate	\$/kW	2.6739	2,452,923,351	6,379,894	1.0369	2,543,436,223
General Service Greater Than 50 kW Service Classification	Retail Transmission Rate – Network Service Rate – Interval Metered	\$/kW	2.8030	2,116,280,141	5,504,307	1.0369	2,194,370,879
General Service Greater Than 50 kW Service Classification	Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.3420	2,452,923,351	6,379,894	1.0369	2,543,436,223
General Service Greater Than 50 kW Service Classification	Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered	\$/kW	1.4520	2,116,280,141	5,504,307	1.0369	2,194,370,879
Large Use Service Classification	Retail Transmission Rate – Network Service Rate	\$/kW	3.2305	51,786,631	78,983	1.0145	52,537,537
Large Use Service Classification	Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.4016	51,786,631	78,983	1.0145	52,537,537
Unmetered Scattered Load Service Classification	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0063	13,620,175	0	1.0369	14,122,760
Unmetered Scattered Load Service Classification	Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0037	13,620,175	0	1.0369	14,122,760
Sentinel Lighting Service Classification	Retail Transmission Rate – Network Service Rate	\$/kW	2.0778	297,132	780	1.0369	308,097
Sentinel Lighting Service Classification	Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.9929	297,132	780	1.0369	308,097
Street Lighting Service Classification	Retail Transmission Rate – Network Service Rate	\$/kW	2.6888	50,321,393	139,971	1.0369	52,178,252
Street Lighting Service Classification	Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.4379	50,321,393	139,971	1.0369	52,178,252

Uniform Transmission Rates	Unit	201	7	2018		2019
Rate Description		- Oct 2017 Rate	Nov - Dec 2017 Rate	Rate		Rate
Network Service Rate	kW	\$ 3.66	\$ 3.52	\$ 3.61	\$	
Line Connection Service Rate	kW	\$ 0.87	\$ 0.88	\$ 0.95	\$	
Transformation Connection Service Rate	kW	\$ 2.02	\$ 2.13	\$ 2.34	\$	
Hydro One Sub-Transmission Rates	Unit	201	7	2018		2019
Rate Description		Rat	e	Rate		Rate
Network Service Rate	kW	\$	3.1942	\$ 3.1942	\$	
Line Connection Service Rate	kW	\$	0.7710	\$ 0.7710	\$	
Transformation Connection Service Rate	kW	\$	1.7493	\$ 1.7493	\$	
Both Line and Transformation Connection Service Rate	kW	\$	2.5203	\$ 2.5203	\$	
If needed, add extra host here. (I)	Unit	2016	6	2017		2018
Rate Description		Rat	e	Rate		Rate
Network Service Rate	kW					
Line Connection Service Rate	kW					
Transformation Connection Service Rate	kW					
Both Line and Transformation Connection Service Rate	kW	\$	-	\$ -	\$	
If needed, add extra host here. (II)	Unit	2016	5	2017		2018
Rate Description		Rat	e	Rate		Rate
Network Service Rate	kW					
Line Connection Service Rate	kW					
Transformation Connection Service Rate	kW					
Both Line and Transformation Connection Service Rate	kW	\$	-	\$ -	\$	
Low Voltage Switchgear Credit (if applicable, enter as a		Historica	ll 2016	Current 2017	For	recast

\$

Low Voltage Switchgear Credit (if applicable, enter as a negative value)

In the green shaded cells, enter billing detail for wholesale transmission for the same reporting period as the billing determinants on Tab 10. For Hydro One Sub-transmission Rates, if you are charged a combined Line and Transformer connection rate, please ensure that both the Line Connection and

Transformation Connection columns are completed. If any of the Hydro One Sub-transmission rates (column E, I and M) are highlighted in orange, please double check the billing data entered in "Units Billed" and "Amount" columns. The highlighted rates do not match the Hydro One Sub-transmission rates approved for that time period. If data has been entered correctly, please provide explanation for the discrepancy in rates.

Total Li		tion	nnect	mation Co	Transfor			nnectio	ine C	Li			Network		IESO
Amour		Amount	Α	Rate	Units Billed	it	An	ate	1	Units Billed	Amount		Rate	Units Billed	Month
1,672	\$	665,998	\$	\$2.02	329,702	199	1	.87 3	S	1,156,551	3,904,667	\$	\$3.66	1,066,849	January
	\$	677,769	\$	\$2.02	335,529	275		.87 5		1,129,052	3,857,047	ŝ	\$3.66	1,053,838	February
	\$	669,206	\$	\$2.02	331,290	593		.87 3		1,124,819	3,697,219	\$	\$3.66	1,010,169	March
				• •								•			
	\$	626,984	\$	\$2.02	310,388	535		.87 9		1,112,110	3,521,864	\$	\$3.66	962,258	April
	\$	633,809	\$	\$2.02	313,767	947		.87 9		1,184,997	4,021,011	\$	\$3.66	1,098,637	May
	\$	806,824	\$	\$2.02	399,418	383		.87 3		1,476,302	5,157,233	\$	\$3.66	1,409,080	June
	\$	864,982	\$	\$2.02	428,209	405		.87 3		1,480,925	5,037,002	\$	\$3.66	1,376,230	July
1,970	\$	765,358	\$	\$2.02	378,890	759	1.	.87 \$	\$	1,384,781	4,800,606	\$	\$3.66	1,311,641	August
2,254	\$	886,287	\$	\$2.02	438,756	968	1	.87 5	\$	1,572,377	5,327,957	\$	\$3.66	1,455,726	September
1,611.	\$	646,709	\$	\$2.02	320,153	204		.87 .9	\$	1,109,430	3,643,581	\$	\$3.66	995,514	October
2,153	\$	1,047,932	\$	\$2.13	491,987	948	1	.88 .	S	1,256,759	1,944,608	\$	\$3.52	552,445	November
	\$	330,404	\$	\$2.13	155,119	226		.88 3		1,076,393	5,616,553	\$	\$3.52	1,595,612	December
21,751,	\$	8,622,262	\$	\$ 2.04	4,233,208	443	13	0.87	\$	15,064,496	50,529,348	\$	3.64	\$ 13,887,999	Total
Total Li		tion	nnect	mation Co	Transfor			nnectio	ine C	Lit			Network		Hydro One
														U S DU L	
Amour		Amount	P	Rate	Units Billed	t	An	ate	1	Units Billed	Amount		Rate	Units Billed	Month
496	\$	344,556	\$	\$1.75	196,968	862		.77 \$	9	196,968	626,468	\$	\$3.19	196,127	January
530	\$	368,502	\$	\$1.75	210,657	416		.77 \$	9	210,657	672,696	\$	\$3.19	210,599	February
521	\$	361,738	\$	\$1.75	206,790	435		.77 \$	9	206,790	651,049	\$	\$3.19	203,822	March
459.	\$	318,966	\$	\$1.75	182,339	584		.77 \$	9	182,339	567,729	\$	\$3.19	177,737	April
	\$	352,907	\$	\$1.75	201,742	543		.77 \$		201,742	644,403	\$	\$3.19	201,742	May
	\$	427,196	\$	\$1.75	244,209	286		.77 \$		244,209	780,011	ŝ	\$3.19	244,196	June
	\$	463,694	\$	\$1.75	265,074	372		.77 \$		265,074	846,700	\$	\$3.19	265,074	July
	\$	447,859	\$	\$1.75	256,022	393		.77 9		256,022	817,785	\$	\$3.19	256,022	August
	\$		\$	\$1.75		917		0.77 9			831,942	\$	\$3.19		
		455,855			260,593					260,593				260,454	September
	\$	353,962	\$	\$1.75	202,345	800		.77 9		202,345	645,941	\$	\$3.19	202,223	October
	\$	368,719	\$	\$1.75	210,781	512		.77 9		210,781	672,835	\$	\$3.19	210,643	November
574	\$	398,638	\$	\$1.75	227,884	699		.77 §		227,884	727,581	\$	\$3.19	227,782	December
6,717,	\$	4,662,592	\$	\$ 1.75	2,665,404	027	2	0.77	\$	2,665,404	8,485,139	\$	3.19	\$ 2,656,421	Total
Total Li		tion	nnect	mation Co	Transfor			nnectio	ine C	Lii			Network		Total
Amour		Amount	A	Rate	Units Billed	t	An	ate	1	Units Billed	Amount		Rate	Units Billed	Month
2,168	\$	1,010,554	\$	\$1.92	526,670	062	1	.86 3	\$	1,353,519	4,531,135	\$	\$3.59	1,262,976	January
	\$	1,046,270		\$1.92	546,186	691		.85 \$		1,339,709	4,529,743	ŝ	\$3.58	1,264,437	February
	\$	1,030,944		\$1.92	538,080	028		.85 \$		1,331,609	4,348,268	ŝ	\$3.58	1,213,991	March
	\$	945,950	\$	\$1.92	492,727	119		.86 3		1,294,449	4,089,593	\$	\$3.59	1,139,995	April
	\$	986,716	\$	\$1.91	515,509	490		.86 3		1,386,739	4,665,415	\$	\$3.59	1,300,379	May
	э \$	1,234,020		\$1.91	643,627	668		.86 .8		1,720,511	5,937,244	э \$	\$3.59	1,653,276	June
	э \$	1,328,677		\$1.92	693,283	777		.85 5		1,745,999	5,883,702	э \$	\$3.58	1,641,304	July
	э \$		•	\$1.92	634,912	152		.85 3		1,640,803		э \$	\$3.58 \$3.58		
	ֆ Տ	1,213,217		\$1.91	634,912						5,618,391			1,567,663	August
		1,342,142				885		.86 9		1,832,970	6,159,899	\$	\$3.59	1,716,180	September
	\$	1,000,671		\$1.92	522,498	212		.85 9		1,311,775	4,289,522	\$	\$3.58	1,197,737	October
	\$ \$	1,416,651 729,042	\$ \$	\$2.02 \$1.90	702,768 383,004	460 925		.86 \$		1,467,540 1,304,278	2,617,443 6,344,133	\$ \$	\$3.43 \$3.48	763,088 1,823,393	November December
	¢	3.284.854	\$ 1	\$ 1.93	6.898.612	170	15.	0.86	\$	17,729,900	59,014,488	\$	3.57	\$ 16,544,420	Total
28,469															

Total including deduction for Low Voltage Switchgear Credit

<sup>\$ 28,469,323</sup> 

The purpose of this sheet is to calculate the expected billing when current 2018 Uniform Transmission Rates are applied against historical 2017 transmission units.

IESO	Network			Lir	e Connection		Transfo	nection	Total Line		
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount	
January	1,066,849 \$	3.6100	3,851,325	1,156,551	\$ 0.9500 \$	1,098,723	329,702	\$ 2.3400	\$ 771,503	\$ 1,870,226	
February	1,053,838 \$	3.6100	3,804,355	1,129,052	\$ 0.9500 \$	1,072,599	335,529	\$ 2.3400	\$ 785,138	\$ 1,857,737	
March	1,010,169 \$	3.6100	3,646,710	1,124,819	\$ 0.9500 \$	1,068,578	331,290	\$ 2.3400	\$ 775,219	\$ 1,843,797	
April	962,258 \$	3.6100	3,473,751	1,112,110	\$ 0.9500 \$	1,056,504	310,388	\$ 2.3400	\$ 726,308	\$ 1,782,812	
May	1,098,637 \$	3.6100	3,966,080	1,184,997	\$ 0.9500 \$	1,125,747	313,767	\$ 2.3400	\$ 734,215	\$ 1,859,962	
June	1,409,080 \$	3.6100	5,086,779	1,476,302	\$ 0.9500 \$	1,402,487	399,418	\$ 2.3400	\$ 934,638	\$ 2,337,125	
July	1,376,230 \$	3.6100	4,968,190	1,480,925	\$ 0.9500 \$	1,406,879	428,209	\$ 2.3400	\$ 1,002,009	\$ 2,408,888	
August	1,311,641 \$	3.6100	6 4,735,024	1,384,781	\$ 0.9500 \$	1,315,542	378,890	\$ 2.3400	\$ 886,603	\$ 2,202,145	
September	1,455,726 \$	3.6100	5,255,171	1,572,377	\$ 0.9500 \$	1,493,758	438,756	\$ 2.3400	\$ 1,026,689	\$ 2,520,447	
October	995,514 \$	3.6100	3,593,806	1,109,430	\$ 0.9500 \$	1,053,959	320,153	\$ 2.3400	\$ 749,158	\$ 1,803,117	
November	552,445 \$	3.6100	5 1,994,328	1,256,759	\$ 0.9500 \$	5 1,193,921	491,987	\$ 2.3400	\$ 1,151,249	\$ 2,345,170	
December	1,595,612 \$	3.6100	5,760,158	1,076,393	\$ 0.9500 \$	1,022,574	155,119	\$ 2.3400	\$ 362,979	\$ 1,385,553	
Total	13,887,999 \$	3.61	50,135,676	15,064,496	\$ 0.95 \$	5 14,311,271	4,233,208	\$ 2.34	\$ 9,905,707	\$ 24,216,978	
Hydro One		Network		Lir	e Connection	1	Transfo	rmation Con	nection	Total Line	
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount	
January	196,127 \$	3.1942	626,468	196,968	\$ 0.7710 \$	151,862	196,968	\$ 1.7493	\$ 344,556	\$ 496,419	
February	210,599 \$	3.1942	672,696	210,657	\$ 0.7710 \$	162,416	210,657	\$ 1.7493	\$ 368,502	\$ 530,918	
March	203,822 \$	3.1942	651,049	206,790	\$ 0.7710 \$	159,435	206,790	\$ 1.7493	\$ 361,738	\$ 521,173	
April	177,737 \$	3.1942	567,729	182,339	\$ 0.7710 \$	140,584	182,339	\$ 1.7493	\$ 318,966	\$ 459,550	
May	201,742 \$	3.1942	644,403	201,742	\$ 0.7710 \$	155,543	201,742	\$ 1.7493	\$ 352,907	\$ 508,450	
June	244,196 \$	3.1942	5 780,011	244,209	\$ 0.7710 \$	188,286	244,209	\$ 1.7493	\$ 427,196	\$ 615,481	
July	265,074 \$	3.1942	846,700	265,074	\$ 0.7710 \$	204,372	265,074	\$ 1.7493	\$ 463,694	\$ 668,067	
August	256,022 \$	3.1942	817,785	256,022	\$ 0.7710 \$	197,393	256,022	\$ 1.7493	\$ 447,859	\$ 645,252	
September	260,454 \$				\$ 0.7710 \$		260,593		\$ 455,855	\$ 656,772	
October	202,223 \$				\$ 0.7710 \$			• • •	\$ 353,962	\$ 509,970	
November	210,643 \$				\$ 0.7710 \$		210,781	• • •	\$ 368,719	\$ 531,232	
December	227,782 \$	3.1942	5 727,581	227,884	\$ 0.7710 \$	175,699	227,884	\$ 1.7493	\$ 398,638	\$ 574,337	
Total	2,656,421 \$	3.19	8,485,139	2,665,404	\$ 0.77 \$	2,055,027	2,665,404	\$ 1.75	\$ 4,662,592	\$ 6,717,619	

Total		Network		Line Connection					Transformation Connection					Total Line		
Month	Units Billed		Rate	Amount	Units Billed		Rate		Amount	Units Billed	R	ate		Amount		Amount
January	1,262,976	\$	3.5454	\$ 4,477,793	1,353,519	\$	0.9240	\$	1,250,586	526,670	\$ 2	.1191	\$	1,116,059	\$	2,366,645
February	1,264,437	\$	3.5407	\$ 4,477,051	1,339,709	\$	0.9219	\$	1,235,016	546,186	\$ 2	.1122	\$	1,153,639	\$	2,388,655
March	1,213,991	\$	3.5402	\$ 4,297,759	1,331,609	\$	0.9222	\$	1,228,013	538,080	\$ 2	.1130	\$	1,136,957	\$	2,364,970
April	1,139,995	\$	3.5452	\$ 4,041,480	1,294,449	\$	0.9248	\$	1,197,088	492,727	\$ 2	.1214	\$	1,045,274	\$	2,242,362
May	1,300,379	\$	3.5455	\$ 4,610,483	1,386,739	\$	0.9240	\$	1,281,290	515,509	\$ 2	.1088	\$	1,087,121	\$	2,368,411
June	1,653,276		3.5486	\$ 5,866,790	1,720,511	\$	0.9246	Ŝ	1,590,772	643,627	\$ 2	.1159	\$	1,361,834	Ś	2,952,606
July	1,641,304		3.5428	\$ 5,814,890	1,745,999	\$	0.9228	Ŝ	1,611,251	693,283	\$ 2	.1141	\$	1,465,703	\$	3,076,954
August	1,567,663	Ś	3.5421	\$ 5,552,809	1,640,803	\$	0.9221	Ŝ	1,512,935	634,912	\$ 2	.1018	\$	1,334,461	Ś	2,847,396
September	1,716,180	\$	3.5469	\$ 6.087.113	1,832,970	\$		Ŝ	1.694.675	699,349	\$ 2	.1199	\$	1,482,544	\$	3,177,219
October	1,197,737	Ś	3.5398	\$ 4,239,746	1.311.775		0.9224	Ŝ	1,209,967	522,498	\$ 2	.1112	\$	1,103,120	Ś	2,313,087
November	763,088	\$	3.4952	2,667,163	1,467,540	\$	0.9243	Ŝ	1,356,433	702,768	\$ 2	.1628	\$	1,519,968	\$	2,876,401
December	1,823,393		3.5581	\$ 6,487,738	1,304,278	\$		\$	1,198,272	383,004		.9885	\$	761,617	\$	1,959,889
Total	16,544,420	\$	3.54	\$ 58,620,816	17,729,900	\$	0.92	\$	16,366,298	6,898,612	\$	2.11	\$	14,568,299	\$	30,934,596

Low Voltage Switchgear Credit (if applicable) \$

Total including deduction for Low Voltage Switchgear Credit

\$ 30,934,596

The purpose of this sheet is to calculate the expected billing when forecasted 2019 Uniform Transmission Rates are applied against historical 2017 transmission units.

IESO	Network		Li	Transformation Connection				Total Line			
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount		Amount
January	1,066,849	\$ 3.6100	3,851,325	1,156,551	\$ 0.9500 \$	1,098,723	329,702	\$ 2.3400	\$ 771,503	\$	1,870,226
February	1,053,838	\$ 3.6100	3,804,355	1,129,052	\$ 0.9500 \$	1,072,599	335,529	\$ 2.3400	\$ 785,138	\$	1,857,737
March	1,010,169	\$ 3.6100	3,646,710	1,124,819	\$ 0.9500 \$	1,068,578	331,290	\$ 2.3400	\$ 775,219	\$	1,843,797
April	962,258	\$ 3.6100	3,473,751	1,112,110	\$ 0.9500 \$	1,056,504	310,388	\$ 2.3400	\$ 726,308	\$	1,782,812
May	1,098,637	\$ 3.6100	\$ 3,966,080	1,184,997	\$ 0.9500 \$	1,125,747	313,767	\$ 2.3400	\$ 734,215	\$	1,859,962
June	1,409,080	\$ 3.6100	5,086,779	1,476,302	\$ 0.9500 \$	1,402,487	399,418	\$ 2.3400	\$ 934,638	\$	2,337,125
July	1,376,230	\$ 3.6100	\$ 4,968,190	1,480,925	\$ 0.9500 \$	1,406,879	428,209	\$ 2.3400	\$ 1,002,009	\$	2,408,888
August	1,311,641	\$ 3.6100	4,735,024	1,384,781	\$ 0.9500 \$	1,315,542	378,890	\$ 2.3400	\$ 886,603	\$	2,202,145
September	1,455,726	\$ 3.6100	5,255,171	1,572,377	\$ 0.9500 \$	1,493,758	438,756	\$ 2.3400	\$ 1,026,689	\$	2,520,447
October	995,514	\$ 3.6100	\$ 3,593,806	1,109,430	\$ 0.9500 \$	1,053,959	320,153	\$ 2.3400	\$ 749,158	\$	1,803,117
November	552,445	\$ 3.6100	\$ 1,994,328	1,256,759	\$ 0.9500 \$	1,193,921	491,987	\$ 2.3400	\$ 1,151,249	\$	2,345,170
December	1,595,612	\$ 3.6100	\$ 5,760,158	1,076,393	\$ 0.9500 \$	1,022,574	155,119	\$ 2.3400	\$ 362,979	\$	1,385,553
Total	13,887,999	\$ 3.61	\$ 50,135,676	15,064,496	\$ 0.95 \$	14,311,271	4,233,208	\$ 2.34	\$ 9,905,707	\$	24,216,978
Hydro One		Network		Lii	ne Connection		Transfo	rmation Con	nection	ī	otal Line
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount		Amount
<b>Month</b> January	Units Billed 196,127	Rate		Units Billed	Rate \$ 0.7710 \$	Amount 151,862	Units Billed		Amount \$ 344,556	\$	Amount 496,419
		\$ 3.1942	626,468	196,968			196,968		\$ 344,556		
January	196,127 210,599	\$ 3.1942	626,468 672,696	196,968	\$ 0.7710 \$	151,862	196,968	\$ 1.7493 \$ 1.7493	\$ 344,556	\$	496,419
January February	196,127 210,599	\$ 3.1942 \$ 3.1942	626,468 672,696 651,049	196,968 210,657	\$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416	196,968 210,657	\$ 1.7493 \$ 1.7493 \$ 1.7493	\$ 344,556 \$ 368,502	\$ \$	496,419 530,918
January February March	196,127 210,599 203,822 177,737	\$ 3.1942 \$ 3.1942 \$ 3.1942	626,468           672,696           651,049           567,729	196,968 210,657 206,790 182,339	\$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416 159,435	196,968 210,657 206,790 182,339	\$ 1.7493 \$ 1.7493 \$ 1.7493 \$ 1.7493	\$ 344,556 \$ 368,502 \$ 361,738	\$ \$ \$	496,419 530,918 521,173
January February March April	196,127 210,599 203,822 177,737	\$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942	626,468           672,696           651,049           567,729           644,403	196,968 210,657 206,790 182,339	\$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416 159,435 140,584	196,968 210,657 206,790 182,339	\$ 1.7493 \$ 1.7493 \$ 1.7493 \$ 1.7493 \$ 1.7493 \$ 1.7493	\$ 344,556 \$ 368,502 \$ 361,738 \$ 318,966	\$ \$ \$	496,419 530,918 521,173 459,550
January February March April May	196,127 210,599 203,822 177,737 201,742 244,196	\$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942	626,468           672,696           651,049           567,729           644,403           780,011	196,968 210,657 206,790 182,339 201,742 244,209	\$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416 159,435 140,584 155,543	196,968 210,657 206,790 182,339 201,742	<ul> <li>\$ 1.7493</li> </ul>	\$ 344,556 \$ 368,502 \$ 361,738 \$ 318,966 \$ 352,907	\$ \$ \$ \$	496,419 530,918 521,173 459,550 508,450
January February March April May June	196,127 210,599 203,822 177,737 201,742 244,196 265,074	\$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942 \$ 3.1942	626,468 672,696 651,049 567,729 6644,403 5780,011 846,700	196,968 210,657 206,790 182,339 201,742 244,209	\$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416 159,435 140,584 155,543 188,286	196,968 210,657 206,790 182,339 201,742 244,209	<ul> <li>\$ 1.7493</li> </ul>	\$ 344,556 \$ 368,502 \$ 361,738 \$ 318,966 \$ 352,907 \$ 427,196	\$ \$ \$ \$ \$ \$ \$	496,419 530,918 521,173 459,550 508,450 615,481
January February March April May June June July	196,127 210,599 203,822 177,737 201,742 244,196 265,074 256,022	\$ 3.1942 \$ \$ 3.1942 \$	<ul> <li>626,468</li> <li>672,696</li> <li>651,049</li> <li>567,729</li> <li>644,403</li> <li>780,011</li> <li>846,700</li> <li>817,785</li> </ul>	196,968 210,657 206,790 182,339 201,742 244,209 265,074	\$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416 159,435 140,584 155,543 188,286 204,372	196,968 210,657 206,790 182,339 201,742 244,209 265,074	<ul> <li>\$ 1.7493</li> </ul>	\$ 344,556 \$ 368,502 \$ 361,738 \$ 318,966 \$ 352,907 \$ 427,196 \$ 463,694	\$ \$ \$ \$ \$ \$	496,419 530,918 521,173 459,550 508,450 615,481 668,067
January February March April May June July August	196,127 210,599 203,822 177,737 201,742 244,196 265,074 266,022 260,454	\$ 3.1942 \$ \$ 3.1942 \$	<ul> <li>626,468</li> <li>672,696</li> <li>651,049</li> <li>567,729</li> <li>644,403</li> <li>780,011</li> <li>846,700</li> <li>817,785</li> <li>831,942</li> </ul>	196,968 210,657 206,790 182,339 201,742 244,209 265,074 256,022 260,593	\$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416 159,435 140,584 155,543 188,286 204,372 197,393	196,968 210,657 206,790 182,339 201,742 244,209 265,074 256,022 260,593	<ul> <li>\$ 1.7493</li> </ul>	\$ 344,556 \$ 368,502 \$ 361,738 \$ 318,960 \$ 352,907 \$ 427,196 \$ 463,694 \$ 447,859	\$ \$ \$ \$ \$ \$ \$ \$	496,419 530,918 521,173 459,550 508,450 615,481 668,067 645,252
January February March April May June July August September	196,127 210,599 203,822 177,737 201,742 244,196 265,074 266,022 260,454 202,223	\$ 3.1942 \$ \$ 3.1942 \$	626,468           672,696           657,729           644,403           780,011           846,700           817,785           831,942           6445,941	196,968 210,657 206,790 182,339 201,742 244,209 265,074 256,022 260,593	\$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416 159,435 140,584 155,543 188,286 204,372 197,393 200,917	196,968 210,657 206,790 182,339 201,742 244,209 265,074 256,022 260,593	<ul> <li>\$ 1.7493</li> </ul>	\$ 344,556 \$ 368,502 \$ 361,738 \$ 318,966 \$ 352,907 \$ 427,196 \$ 463,694 \$ 447,859 \$ 455,855 \$ 353,962	\$ \$ \$ \$ \$ \$ \$ \$ \$	496,419 530,918 521,173 459,550 508,450 615,481 668,067 645,252 656,772
January February March April May June July August September October	196,127 210,599 203,822 177,737 201,742 244,196 265,074 266,022 260,454 202,223 210,643	\$ 3.1942 \$ \$ 3.1942 \$	6         626,468           6         672,696           6         651,049           5         567,729           5         644,403           5         780,011           5         846,700           5         817,785           5         831,942           5         645,941           5         672,835	196,968 210,657 206,790 182,339 201,742 244,209 265,074 256,022 260,632 202,345 210,781	\$ 0.7710 \$ \$ 0.7710 \$	151,862 162,416 159,435 140,584 155,543 188,286 204,372 197,393 200,917 156,008	196,968 210,657 206,790 182,339 201,742 244,209 265,074 256,022 260,593 202,345 210,781	<ul> <li>\$ 1.7493</li> </ul>	\$ 344,556 \$ 368,502 \$ 361,738 \$ 318,966 \$ 352,907 \$ 427,196 \$ 463,694 \$ 447,859 \$ 455,855 \$ 353,962 \$ 368,719	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	496,419 530,918 521,173 459,550 508,450 615,481 668,067 645,252 656,772 509,970

Total	Network				Li		Transfo	ction	Total Line							
Month	Units Billed	I	Rate		Amount	Units Billed	Rate		Amount	Units Billed	I	Rate		Amount		Amount
January	1,262,976	\$	3.55	\$	4,477,793	1,353,519	\$ 0.92	\$	1,250,586	526,670	\$	2.12	\$	1,116,059	\$	2,366,645
February	1,264,437	\$	3.54	\$	4,477,051	1,339,709	\$ 0.92	\$	1,235,016	546,186	\$	2.11	\$	1,153,639	\$	2,388,655
March	1,213,991	\$	3.54	\$	4,297,759	1,331,609	\$ 0.92	\$	1,228,013	538,080	\$	2.11	\$	1,136,957	\$	2,364,970
April	1,139,995	\$	3.55	\$	4,041,480	1,294,449	\$ 0.92	\$	1,197,088	492,727	\$	2.12	\$	1,045,274	\$	2,242,362
May	1,300,379	\$	3.55	\$	4,610,483	1,386,739	\$ 0.92	\$	1,281,290	515,509	\$	2.11	\$	1,087,121	\$	2,368,411
June	1,653,276	\$	3.55	\$	5,866,790	1,720,511	\$ 0.92	\$	1,590,772	643,627	\$	2.12	\$	1,361,834	\$	2,952,606
July	1,641,304	\$	3.54	\$	5,814,890	1,745,999	\$ 0.92	\$	1,611,251	693,283	\$	2.11	\$	1,465,703	\$	3,076,954
August	1,567,663	\$	3.54	\$	5,552,809	1,640,803	\$ 0.92	\$	1,512,935	634,912	\$	2.10	\$	1,334,461	\$	2,847,396
September	1,716,180	\$	3.55	\$	6,087,113	1,832,970	\$ 0.92	\$	1,694,675	699,349	\$	2.12	\$	1,482,544	\$	3,177,219
October	1,197,737	\$	3.54	\$	4.239.746	1.311.775	\$ 0.92	\$	1,209,967	522,498	\$	2.11	\$	1.103.120	\$	2.313.087
November	763,088	\$	3.50	\$	2,667,163	1,467,540	\$ 0.92	\$	1,356,433	702,768	\$	2.16	\$	1,519,968	\$	2,876,401
December	1,823,393	\$	3.56	\$	6,487,738	1,304,278	\$ 0.92	\$	1,198,272	383,004	\$	1.99	\$	761,617	\$	1,959,889
Total	16,544,420	\$	3.54	\$	58,620,816	17,729,900	\$ 0.92	\$	16,366,298	6,898,612	\$	2.11	\$	14,568,299	\$	30,934,596

Low Voltage Switchgear Credit (if applicable)

Total including deduction for Low Voltage Switchgear Credit

-

\$ 30,934,596

\$

#### The purpose of this table is to re-align the current RTS Network Rates to recover current wholesale network costs.

Rate Class	Rate Description	Unit	Current RTSR- Network	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Current Wholesale Billing	Adjusted RTSR Network	
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0075	2,638,615,406	0	19,789,616	33.0%	19,338,534	0.0073	
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0067	1,043,088,282	0	6,988,691	11.7%	6,829,392	0.0065	
GENERAL SERVICE GREATER THAN 50 kW SERVICE CLASSIFICAT	Il Retail Transmission Rate – Network Service Rate	\$/kW	2.6739	2,543,436,223	6,379,894	17,059,199	28.4%	16,670,354	2.6130	
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate – Interval Metered	\$/kW	2.8030	2,194,370,879	5,504,307	15,428,573	25.7%	15,076,896	2.7391	
LARGE USE SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kW	3.2305	52,537,537	78,983	255,154	0.4%	249,338	3.1569	
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0063	14,122,760	0	88,973	0.1%	86,945	0.0062	
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kW	2.0778	308,097	780	1,620	0.0%	1,583	2.0304	
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kW	2.6888	52,178,252	139,971	376,353	0.6%	367,775	2.6275	

#### The purpose of this table is to re-align the current RTS Connection Rates to recover current wholesale connection costs.

Rate Class	Rate Description	Unit	Current RTSR- Connection	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Current Wholesale Billing	Adjusted RTSR- Connection	I
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kWh	0.0040	2,638,615,406	0	10,554,462	33.9%	10,490,119	0.0040	
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kWh	0.0035	1,043,088,282	0	3,650,809	11.7%	3,628,553	0.0035	
GENERAL SERVICE GREATER THAN 50 kW SERVICE CLASSIFICAT	It Retail Transmission Rate – Line and Transformation Connection Service	\$/kW	1.3420	2,543,436,223	6,379,894	8,561,818	27.5%	8,509,623	1.3338	
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	1.4520	2,194,370,879	5,504,307	7,992,254	25.7%	7,943,531	1.4431	
LARGE USE SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	1.4016	52,537,537	78,983	110,702	0.4%	110,027	1.3931	
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kWh	0.0037	14,122,760	0	52,254	0.2%	51,936	0.0037	
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	0.9929	308,097	780	774	0.0%	769	0.9869	
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	1.4379	52,178,252	139,971	201,264	0.6%	200,037	1.4291	

#### The purpose of this table is to update the re-aligned RTS Network Rates to recover future wholesale network costs.

The purpose of this table is to update the re-aligned RTS										
Rate Class	Rate Description	Unit	Adjusted RTSR-Network	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Current Wholesale Billing	Proposed RTSR- Network	
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0073	2,638,615,406	0	19,338,534	33.0%	19,338,534	0.0073	
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0065	1,043,088,282	0	6,829,392	11.7%	6,829,392	0.0065	
GENERAL SERVICE GREATER THAN 50 kW SERVICE CLASSIFICAT	I Retail Transmission Rate – Network Service Rate	\$/kW	2.6130	2,543,436,223	6,379,894	16,670,354	28.4%	16,670,354	2.6130	
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate – Interval Metered	\$/kW	2.7391	2,194,370,879	5,504,307	15,076,896	25.7%	15,076,896	2.7391	
LARGE USE SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kW	3.1569	52,537,537	78,983	249,338	0.4%	249,338	3.1569	
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kWh	0.0062	14,122,760	0	86,945	0.1%	86,945	0.0062	
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kW	2.0304	308,097	780	1,583	0.0%	1,583	2.0304	
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate – Network Service Rate	\$/kW	2.6275	52,178,252	139,971	367,775	0.6%	367,775	2.6275	

#### The purpose of this table is to update the re-aligned RTS Connection Rates to recover future wholesale connection costs.

Rate Class	Rate Description	Unit	Adjusted RTSR- Connection	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Current Wholesale Billing	Proposed RTSR- Connection
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kWh	0.0040	2,638,615,406	0	10,490,119	33.9%	10,490,119	0.0040
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kWh	0.0035	1,043,088,282	0	3,628,553	11.7%	3,628,553	0.0035
GENERAL SERVICE GREATER THAN 50 kW SERVICE CLASSIFICAT	It Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	1.3338	2,543,436,223	6,379,894	8,509,623	27.5%	8,509,623	1.3338
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	1.4431	2,194,370,879	5,504,307	7,943,531	25.7%	7,943,531	1.4431
LARGE USE SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	1.3931	52,537,537	78,983	110,027	0.4%	110,027	1.3931
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kWh	0.0037	14,122,760	0	51,936	0.2%	51,936	0.0037
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	0.9869	308,097	780	769	0.0%	769	0.9869
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service	\$/kW	1.4291	52,178,252	139,971	200,037	0.6%	200,037	1.4291

If applicable, please enter any adjustments related to the revenue to cost ratio model into columns C and E. The Price Escalator and Stretch Factor have been set at the 2016 values and will be updated by OEB staff at a later date.

Price Escalator	1.20%	Productivity Factor	0.00%	# of Residential Customers (approved in the last CoS)	331,461	Effective Year of Residential Rate Design Transition (yyyy)	2017
Choose Stretch Factor Group	ш	Price Cap Index	0.90%	Billed kWh for Residential Class (approved in the last CoS)	2,689,802,037	OEB-approved # of Transition Years	4
Associated Stretch Factor Value	0.30%			Rate Design Transition Years Left	2		

Rate Class	Current MFC	MFC Adjustment from R/C Model	Current Volumetric Charge	DVR Adjustment from R/C Model	Price Cap Index to be Applied to MFC and DVR	Proposed MFC	Proposed Volumetric Charge	
RESIDENTIAL SERVICE CLASSIFICATION	21.63		0.0088		0.90%	24.83	0.0044	
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	29.00		0.0185		0.90%	29.26	0.0187	
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	142.24		4.2415		0.90%	143.52	4.2797	
LARGE USE SERVICE CLASSIFICATION	6128.34		2.2623		0.90%	6,183.50	2.2827	
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	8.68		0.0197		0.90%	8.76	0.0199	
STANDBY POWER SERVICE CLASSIFICATION			2.8334		0.90%	0.00	2.8589	
SENTINEL LIGHTING SERVICE CLASSIFICATION	4.23		9.9582		0.90%	4.27	10.0478	
STREET LIGHTING SERVICE CLASSIFICATION	1.20		6.3791		0.90%	1.21	6.4365	
microFIT SERVICE CLASSIFICATION						5.40	0.0000	
Rate Design Transition		Revenue from Rates	Current F/V Split	Decoupling MFC Split	Incremental Fixed Charge (\$/month/year)	New F/V Split	Adjusted Rates <sup>1</sup>	Revenue at New F/V Split
Current Residential Fixed Rate (inclusive of R/C adj.)	21.6300	86,033,996	78.4%	10.8%	2.98	89.2%	24.61	97,887,038
Current Residential Variable Rate (inclusive of R/C adj.)	0.0088	23,670,258	21.6%			10.8%	0.0044	11,835,129
		109,704,253						109,722,167

<sup>1</sup> These are the residential rates to which the Price Cap Index will be applied to.

# Update the following rates if an OEB Decision has been issued at the time of completing this application

		Proposed
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service - Administrative Charge (if applicable)	\$	0.25

#### **Time-of-Use RPP Prices**

As of		May 1, 2018
Off-Peak	\$/kWh	0.0650
Mid-Peak	\$/kWh	0.0940
On-Peak	\$/kWh	0.1320

In the Green Cells below, enter any proposed rate riders that are not already included in this model (e.g.: proposed ICM rate riders). Please note that existing SMIRR and SM Entity Charge do not need to be included below. In column A, the rate rider descriptions must begin with "Rate Rider for". In column C, horse the associated unit from the drop-down menu. In column C, enter the rate rider with a "\$" unit should be rounded to 2 decimal places and all others rounded to 4 decimal places. In column C, enter the rater decimal (e.g. April 30, 2018) or description of the expiry date in text (e.g. the effective date of the next cost of service-based rate order). In column G, choose the sub-total as applicable in the bill impact calculation from the drop-down menu

Rate Rider for Incremental Capital Module (ICM)	\$	0.20	<ul> <li>effective until</li> </ul>	next COS	A
Rate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kWh	0.0003	- effective until	31-Dec-19	A
tate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	\$/kWh	0.0000	- effective until	31-Dec-19	В
			- effective until		
			- effective until		
			- effective until		
			- effective until		
			- effective until		
			- effective until		
			- effective until		
3S<50 SERVICE CLASSIFICATION					
ate Rider for Incremental Capital Module (ICM)	s	0.21	- effective until	next COS	А
tate Rider for Incremental Capital Module (ICM)	\$/kWh	0.0001	<ul> <li>effective until</li> </ul>		Â
Rate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kWh	0.0001	<ul> <li>effective until</li> </ul>		Â
Rate Rider for Necovery of Cost Revenue Adjustment Mechanism variance Account (2014-15 balances) Rate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	\$/kWh	0.0000	<ul> <li>effective until</li> </ul>		В
ate nue for bisposition of capacity based recovery Account (2017) - Applicable only for class b customers	S/ Kaali	0.0000	<ul> <li>effective until</li> </ul>	31-Dec-15	0
			- effective until		
			- effective until		
			- effective until		
			<ul> <li>effective until</li> <li>effective until</li> </ul>		
	s	1.05	- offective until	next COS	۵
Rate Rider for Incremental Capital Module (ICM)	\$ S/kw	1.05	- effective until		A
Rate Rider for Incremental Capital Module (ICM) Rate Rider for Incremental Capital Module (ICM)	\$/kW	0.0314	- effective until	next COS	А
tate Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kW \$/kW	0.0314 0.0886	<ul> <li>effective until</li> <li>effective until</li> </ul>	next COS 31-Dec-19	A A
tate Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Revevery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kW	0.0314	<ul> <li>effective until</li> <li>effective until</li> <li>effective until</li> </ul>	next COS 31-Dec-19	А
tate Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Revevery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kW \$/kW	0.0314 0.0886	<ul> <li>effective until</li> <li>effective until</li> <li>effective until</li> <li>effective until</li> </ul>	next COS 31-Dec-19	A A
tate Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kW \$/kW	0.0314 0.0886	<ul> <li>effective until</li> <li>effective until</li> <li>effective until</li> <li>effective until</li> <li>effective until</li> <li>effective until</li> </ul>	next COS 31-Dec-19	A A
tate Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kW \$/kW	0.0314 0.0886	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19	A A
GS>50 SERVICE CLASSIFICATION Mare Rider for Incremental Capital Module (ICM) Mare Rider for Incremental Capital Module (ICM) Mare Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances) Mare Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	\$/kW \$/kW	0.0314 0.0886	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19	A A
tate Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Revevery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kW \$/kW	0.0314 0.0886	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19	A A
late Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Rocevory of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances) tate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	5/kW 5/kW 5/kW	0.0314 0.0886	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19	A A
Tate Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances) tate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	\$/kW \$/kW	0.0314 0.0886	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19 31-Dec-19	A A
Tate Rider for Incremental Capital Module (ICM) tate Rider for Incremental Capital Module (ICM) tate Rider for Concentration of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers LARGE USER SERVICE CLASSIFICATION tate Rider for Incremental Capital Module (ICM)	5/kW 5/kW 5/kW	0.0314 0.0886 -0.0046	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19 31-Dec-19 next COS	A A B
Vate Rider for Incremental Capital Module (ICM) Vate Rider for Incremental Capital Module (ICM) Vate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances) Vate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers  LARGE USER SERVICE CLASSIFICATION Vate Rider for Incremental Capital Module (ICM) Vate Rider for Incremental Capital Module (ICM)	5/kw 5/kw 5/kw	0.0314 0.0886 -0.0046 45.37	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19 31-Dec-19 next COS next COS	A B
Tate Rider for Incremental Capital Module (ICM) Rate Rider for Incremental Capital Module (ICM) Rate Rider for Revevency of Loss Revenue Adjustment Mechanism Variance Account (2014-15 balances)	5/kw 5/kw 5/kw 5/kw	0.0314 0.0886 -0.0046 45.37 0.0167	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19 31-Dec-19 next COS next COS 31-Dec-19	A B A A
tate Rider for Incremental Capital Module (ICM)     tate Rider for Incremental Capital Module (ICM)     tate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers     tate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	S/kw S/kw S/kw S/kw S/kw	0.0314 0.0886 -0.0046 45.37 0.0167 -0.0705	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19 31-Dec-19 next COS next COS 31-Dec-19	A B A A A
Take Rider for Incremental Capital Module (ICM) Rate Rider for Incremental Capital Module (ICM) Rate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers  LARGE USER SERVICE CLASSIFICATION Rate Rider for Incremental Capital Module (ICM) Rate Rider for Incremental Cap	S/kw S/kw S/kw S/kw S/kw	0.0314 0.0886 -0.0046 45.37 0.0167 -0.0705	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19 31-Dec-19 next COS next COS 31-Dec-19	A B A A A
Late Rider for Incremental Capital Module (ICM) Late Rider for Incremental Capital Module (ICM) Late Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers ARGE USER SERVICE CLASSIFICATION Late Rider for Incremental Capital Module (ICM) Late Rider for Incremental Capital Module (ICM) Late Rider for Incremental Capital Module (ICM)	S/kw S/kw S/kw S/kw S/kw	0.0314 0.0886 -0.0046 45.37 0.0167 -0.0705	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19 31-Dec-19 next COS next COS 31-Dec-19	A B A A A
tate Rider for Incremental Capital Module (ICM)     tate Rider for Incremental Capital Module (ICM)     tate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers     tate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	S/kw S/kw S/kw S/kw S/kw	0.0314 0.0886 -0.0046 45.37 0.0167 -0.0705	<ul> <li>effective until</li> </ul>	next COS 31-Dec-19 31-Dec-19 next COS next COS 31-Dec-19	A B A A A

UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION Rate Rider for Incremental Capital Module (ICM)	S	0.06	- effective until	next COS	А
tate Rider for Incremental Capital Module (ICM)	\$/kWh	0.0001	<ul> <li>effective until</li> </ul>		Â
ate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kWh	-0.0001	<ul> <li>effective until</li> </ul>		A
ate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	\$/kWh	0.0003	<ul> <li>effective until</li> </ul>		B
ate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	\$/KVVII	0.0000	<ul> <li>effective until</li> </ul>	21-D6C-18	ь
			<ul> <li>effective until</li> </ul>		
			<ul> <li>effective until</li> <li>effective until</li> </ul>		
			<ul> <li>effective until</li> <li>effective until</li> </ul>		
			- effective until		
SENTINEL LIGHTING SERVICE CLASSIFICATION					
ate Rider for Incremental Capital Module (ICM)	S	0.03	- effective until	next COS	А
tate Rider for Incremental Capital Module (ICM)	\$/kW	0.0737	<ul> <li>effective until</li> </ul>		Â
tate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kW	-0.2176	<ul> <li>effective until</li> </ul>		Â
tate Rider for Necovery of Cost Revenue Adjustment Mechanism variance Account (2014-15 datances)	\$/kW	-0.0050	<ul> <li>effective until</li> </ul>		B
	<i>Q</i> /KII	5.0050	<ul> <li>effective until</li> </ul>		
			<ul> <li>effective until</li> </ul>		
			<ul> <li>effective until</li> </ul>		
			- effective until		
			<ul> <li>effective until</li> </ul>		
	\$	0.01	- effective until		A
Rate Rider for Incremental Capital Module (ICM)	\$	0.01	<ul> <li>effective until</li> </ul>	next COS	A
Rate Rider for Incremental Capital Module (ICM)	\$/kW	0.0472	<ul> <li>effective until</li> </ul>		A
Rate Rider for Recovery of Lost Revenue Adjustment Mechanism Variance Account (2014-15 balances)	\$/kW	1.2612	<ul> <li>effective until</li> </ul>		A
tate Rider for Disposition of Capacity Based Recovery Account (2017) - Applicable only for Class B Customers	\$/kW	-0.0047	- effective until	31-Dec-19	В
			<ul> <li>effective until</li> </ul>		
			<ul> <li>effective until</li> </ul>		
			<ul> <li>effective until</li> </ul>		
			<ul> <li>effective until</li> </ul>		
			- effective until		
MICROFIT SERVICE CLASSIFICATION			- effective until		
NICROFIT SERVICE CLASSIFICATION			- effective until - effective until		
MICROFIT SERVICE CLASSIFICATION					
NICROFIT SERVICE CLASSIFICATION			- effective until		
MICROFIT SERVICE CLASSIFICATION			<ul> <li>effective until</li> <li>effective until</li> </ul>		
NICROFIT SERVICE CLASSIFICATION			- effective until - effective until - effective until		
VICROFIT SERVICE CLASSIFICATION			<ul> <li>effective until</li> <li>effective until</li> <li>effective until</li> <li>effective until</li> </ul>		
NICROFIT SERVICE CLASSIFICATION			<ul> <li>effective until</li> <li>effective until</li> <li>effective until</li> <li>effective until</li> <li>effective until</li> <li>effective until</li> </ul>		
MICROFIT SERVICE CLASSIFICATION			<ul> <li>effective until</li> </ul>		

## Alectra - PowerStream

TARIFF OF RATES AND CHARGES Effective Date January 1, 2019 Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

## **RESIDENTIAL SERVICE CLASSIFICATION**

This classification refers to an account taking electricity at 750 volts or less where the electricity is used exclusively in a separately metered living accommodation. Customers shall be residing in single-dwelling units that consist of a detached house or one unit of a semi-detached, duplex, triplex or quadruplex house, with a residential zoning. Separately metered dwellings within a town house complex or apartment building also qualify as residential customers. Multi-unit residential establishments such as apartment buildings supplied through one service (bulk metered) shall be classified as general service. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$ \$ \$ \$/kWh \$/kWh \$/kWh \$/kWh \$/kWh	24.83 0.57 0.11 0.20 0.0044 0.0005 0.0004 0.0018 (0.0030) (0.0010) 0.0002
	\$/kWh	0.0073
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0040
MONTHLY RATES AND CHARGES – Regulatory Component		
	\$/kWh	0.0032
	\$/kWh \$/kWh	0.0004 0.0003
Standard Supply Service – Administrative Charge (if RNR)	\$	0.25

TARIFF OF RATES AND CHARGES

Effective Date January 1, 2019

Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

## **GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION**

This classification refers to a non-residential account taking electricity at 750 volts or less wheose monthly average peak demand is less than, or is forecast to be less than, 50 kW. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge Smart Metering Entity Charge - effective until December 31, 2022 Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2019) - effective until April 30, 2019 Applicable only for Non-RPP Customers Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019 Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019 Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019 Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the	\$ \$ \$ \$/kWh \$/kWh \$/kWh \$/kWh \$/kWh \$/kWh \$/kWh \$/kWh \$/kWh \$/kWh	29.26 0.57 0.12 0.21 0.004 0.0004 0.0004 0.0008 (0.0030) (0.0009) 0.0002 0.0002 0.0006 0.0001 0.0001 0.0005 0.0035
Retail Transmission Rate – Line and Transformation Connection Service Rate MONTHLY RATES AND CHARGES – Regulatory Component	\$/kWh	0.0035
Wholesale Market Service Rate (WMS) - not including CBR Capacity Based Recovery (CBR) - Applicable for Class B Customers Rural or Remote Electricity Rate Protection Charge (RRRP) Standard Supply Service – Administrative Charge (if applicable)	\$/kWh \$/kWh \$/kWh \$	0.0032 0.0004 0.0003 0.25

TARIFF OF RATES AND CHARGES

Effective Date January 1, 2019

Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

## **GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION**

This classification refers to a non-residential account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 50 kW but less than 5,000 kW, both regular and interval metered. Class A and Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

or the disposition of WMS – Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their riance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In the rider is applicable to all new Class B customers.

or the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned between Class A and the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their riance disposed through customer specific billing adjustments. This rate order is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	143.52
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$	0.57
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	1.05
Distribution Volumetric Rate	\$/kW	4.2797
Low Voltage Service Rate	\$/kW	0.1589
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kwh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019		
Applicable Only for Non-RPP Customers non-Interval Metered	\$/kWh	0.0018
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	0.0184
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019	\$/kW	(0.2953)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Applicable only for Non-Wholesale Market I	Pa \$/kW	(1.1367)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019		
Applicable only for Non-Wholesale Market Participants	\$/kW	(0.0453)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0905
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019		
Applicable Only for Class B Customers	\$/kW	(0.0046)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	0.0796
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019	\$/kW	0.0886
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0168
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0314
Retail Transmission Rate – Network Service Rate	\$/kW	2.6130
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.3338
Retail Transmission Rate – Network Service Rate – Interval Metered	\$/kW	2.7391
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered	\$/kW	1.4431
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

## TARIFF OF RATES AND CHARGES

Effective Date January 1, 2019

Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

## LARGE USE SERVICE CLASSIFICATION

This classification refers to an account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 5,000 kW. Class A and Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

or the disposition of WMS – Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their riance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In the rider is applicable to all new Class B customers.

or the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP customers that transitioned between Class A and the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their riance disposed through customer specific billing adjustments. This rate order is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019 Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until December 31, 2019 Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until December 31, 2019 Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$ \$ \$/kW \$/kW \$/kW \$/kW \$/kW \$/kW	6,183.50 24.34 45.37 2.2827 0.1630 (1.3235) (0.5809) (0.0723) (0.0705) 0.0090 0.0167
Retail Transmission Rate – Network Service Rate	\$/kW	3.1569
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.3931
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

## TARIFF OF RATES AND CHARGES

Effective Date January 1, 2019

Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

## STANDBY POWER SERVICE CLASSIFICATION

This classification refers to an account that has Load Displacement Generation and requires the distributor to provide back-up service. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

### MONTHLY RATES AND CHARGES – Delivery Component - APPROVED ON AN INTERIM BASIS

Standby Charge – for a month where standby power is not provided. The charge is applied to the contracted amount (e.g. nameplate rating of generation facility).

\$/kW

2.8589

**TARIFF OF RATES AND CHARGES** 

Effective Date January 1, 2019 Implementation Date January 1, 2019

This schedule supersedes and replaces all previously

approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

## UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION

This classification refers to an account taking electricity at 750 volts or less whose average monthly peak demand is less than, or is forecast to be less than, 50 kW and the consumption is unmetered. Such connections include cable TV power packs, bus shelters, telephone booths, traffic lights, railway crossings, etc. The customer will provide detailed manufacturer information/documentation with regard to electrical demand/consumption of the proposed unmetered load. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	8.76
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$	0.03
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	0.06
Distribution Volumetric Rate	\$/kWh	0.0199
Low Voltage Service Rate	\$/kWh	0.0005
5	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019		
Applicable Only for Non-RPP Customers	\$/kWh	0.0018
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kWh	(0.0029)
	\$/kWh	(0.0009)
	\$/kWh	(0.0005)
	\$/kWh	(0.0003)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers	\$/kWh	0.0002
	\$/kWh	0.0001
	\$/kWh	0.0001
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0062
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0037
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

## **TARIFF OF RATES AND CHARGES**

Effective Date January 1, 2019

Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

## SENTINEL LIGHTING SERVICE CLASSIFICATION

This classification refers to an unmetered lighting load supplied to a sentinel light. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge (per Connection)	\$	4.27
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$	0.02
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	0.03
Distribution Volumetric Rate	\$/kW	10.0478
Low Voltage Service Rate	\$/kW	0.1170
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019		
Applicable Only for Non-RPP Customers	\$/kWh	0.0018
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	(1.0740)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019	\$/kW	(0.3377)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Custo	mer: \$/kW	0.0895
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019		
Applicable Only for Class B Customers	\$/kW	(0.0050)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	(0.3850)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 201	9 \$/kW	(0.2176)
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0396
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0737
Retail Transmission Rate – Network Service Rate	\$/kW	2.0304
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.9869
MONTHLY RATES AND CHARGES – Regulatory Component		

Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

TARIFF OF RATES AND CHARGES

Effective Date January 1, 2019

Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

\$

0.25

## STREET LIGHTING SERVICE CLASSIFICATION

This classification applies to an account for roadway lighting with a Municipality, Regional Municipality, Ministry of Transportation and private roadway lighting operation, controlled by photo cells. The consumption for these customers will be based on the calculated connected load times the required lighting times established in the approved Ontario Energy Board street lighting load shape template. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES – Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

#### MONTHLY RATES AND CHARGES - Delivery Component

Standard Supply Service - Administrative Charge (if applicable)

Service Charge (per Connection)	\$	1.21
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$	0.01
Distribution Volumetric Rate	\$/kW	6.4365
Low Voltage Service Rate	\$/kW	0.1288
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019		
Applicable only for Non-RPP Customers	\$/kWh	0.0004
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019		
Applicable Only for Non-RPP Customers	\$/kWh	0.0018
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	\$/kW	(1.0519)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019	\$/kW	(0.3185)
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2018) - effective until April 30, 2019	\$/kW	0.5854
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) (2019) - effective until December 31, 2019	\$/kW	1.2612
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019		
Applicable Only for Class B Customers	\$/kW	0.0870
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019	φπαν	0.0010
Applicable Only for Class B Customers	\$/kW	(0.0047)
	φ/κνν	(0.0047)
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0253
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of the next cost of service based rate order	\$/kW	0.0472
Retail Transmission Rate – Network Service Rate	\$/kW	2.6275
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.4291
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Natal of Nonote Electrony Nate Frice and Se (NNN)	ψητατή	0.0005

TARIFF OF RATES AND CHARGES

Effective Date January 1, 2019

Implementation Date January 1, 2019

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EB-2018-0016

## MicroFIT SERVICE CLASSIFICATION

This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's microFIT program and connected to the distributor's distributor's distribution system. Further servicing details are available in the distributor's Conditions of Service.

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

#### MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	5.40
ALLOWANCES Transformer Allowance for Ownership - per kW of billing demand/month Primary Metering Allowance for Transformer Losses - applied to measured demand & energy	\$/kW %	(0.60) (1.00)

## SPECIFIC SERVICE CHARGES

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

#### **Customer Administration**

Arrears certificate	\$	15.00
Statement of account	\$	15.00
Duplicate invoices for previous billing	\$	15.00
Request for other billing information	\$	15.00
Easement Letter	\$	15.00
Income tax letter	\$	15.00
Account history	\$	15.00
Returned Cheque (plus bank charges)	\$	15.00
Legal letter charge	\$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Special meter reads	\$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	\$	30.00
Non-Payment of Account		
Late Payment - per month	%	1.50
Late Payment - per annum	%	19.56
Collection of account charge - no disconnection	\$	30.00
Disconnect/Reconnect at Meter - during regular hours	\$	65.00
Disconnect/Reconnect at Meter - after regular hours	\$	185.00

## **TARIFF OF RATES AND CHARGES**

Effective Date January 1, 2019

#### Implementation Date January 1, 2019

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2018-0016

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1.0145 1.0266

1.0045

Other		
Install/Remove Load Control Device - during regular hours	\$	65.00
Install/Remove Load Control Device - after regular hours	\$	185.00
Disconnect/Reconnect at Meter - during regular hours	\$	65.00
Disconnect/Reconnect at Meter - atter regular hours	\$	185.00
Disconnect/Reconnect at Pole - during regular hours	\$	185.00
Disconnect/Reconnect at Pole - after regular hours	\$	415.00
e for Access to the Power Poles - \$/pole/year (with the exception of wireless attachments) - in effect from January 1, 2019 Temporary Service install and remove - overhead - no transformer	\$ \$	43.63 500.00

## **RETAIL SERVICE CHARGES (if applicable)**

#### APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Debt Retirement Charge, the Global Adjustment and the HST.

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity.

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	\$	100.00
Monthly Fixed Charge, per retailer	\$	20.00
Monthly Variable Charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing monthly charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing monthly credit, per customer, per retailer	\$/cust.	(0.30)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail		
Settlement Code directly to retailers and customers, if not delivered electronically through the		
Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year	\$	no charge
More than twice a year, per request (plus incremental delivery costs)	\$	2.00

## LOSS FACTORS

If the distributor is not capable of prorating changed loss factors jointly with distribution rates, the revised loss factors will be implemented upon the first subsequent billing for each billing cycle.

Total Loss Factor - Secondary Metered Customer < 5,000 kW Total Loss Factor - Secondary Metered Customer > 5,000 kW Total Loss Factor - Primary Metered Customer < 5,000 kW Total Loss Factor - Primary Metered Customer > 5,000 kW

The bill comparisons below must be provided for typical customers and consumption levels. Bill impacts must be provided for residential customers consuming 750 kWh per month and general service customers consuming 2,000 kWh per month and having a monthly demand of less than 50 kW. Include bill comparisons for Non-RPP (retailer) as well. To assess the combined effects of the shift to fixed rates and other bill impacts associated with changes in the cost of distribution service, applicants are to include a total bill impact for a residential customer at the distributor's 10th consumption percentile (in other words, 10% of a distributor's residential customer at the distributor's for Electricity Distributions issued July 14, 2016.

For certain classes where one or more customers have unique consumption and demand patterns and which may be significantly impacted by the proposed rate changes, the distributor must show a typical comparison, and provide an explanation.

#### Note:

1. For those classes that are not eligible for the RPP price, the weighted average price including Class B GA through end of February 2017 of \$0.1058/kWh (IESO's Monthly Market Report for February 2017, page 22) has been used to represent the cost of power. For those classes on a retailer contract, applicants should enter the contract price (plus GA) for a more accurate estimate. Changes to the cost of power can be made directly on the bill impact table for the specific class.

2. Please enter the applicable billing determinant (e.g. number of connections or devices) to be applied to the monthly service charge for unmetered rate classes in column N. If the monthly service charge is applied on a per customer basis, enter the number "1". Distributors should provide the number of connections or devices reflective of a typical customer in each class.

#### Table 1

RATE CLASSES / CATEGORIES (eg: Residential TOU, Residential Retailer)		Units	RPP? Non-RPP Retailer? Non-RPP Other?	Current Loss Factor	Proposed Loss Factor	Consumption (kWh)	Demand kW (if applicable)	RTSR	Billing Determinant Applied to Fixed Charge for Unmetered Classes (e.g. # of devices/connect ions).
RESIDENTIAL SERVICE CLASSIFICATION		kWh	RPP	1.0369	1.0369	750		N/A	
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION		kWh	RPP	1.0369	1.0369	2,000		N/A	
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION		kW	Non-RPP (Other)	1.0369	1.0369	80,000	250	DEMAND	
LARGE USE SERVICE CLASSIFICATION		kW	Non-RPP (Other)	1.0145	1.0145	2,800,000	7,350	DEMAND	
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION		kWh	RPP	1.0369	1.0369	150		N/A	1
STANDBY POWER SERVICE CLASSIFICATION		kW						N/A	
SENTINEL LIGHTING SERVICE CLASSIFICATION		kW	RPP	1.0369	1.0369	180	1	DEMAND	1
STREET LIGHTING SERVICE CLASSIFICATION		kW	Non-RPP (Other)	1.0369	1.0369	280	1	DEMAND	1
RESIDENTIAL SERVICE CLASSIFICATION	(10th consumptio	kWh	RPP	1.0369	1.0369	309		N/A	
RESIDENTIAL SERVICE CLASSIFICATION	(Retailer)		Non-RPP (Retailer)	1.0369	1.0369	750		N/A	
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION	(Retailer)		Non-RPP (Retailer)	1.0369	1.0369	2,000		N/A	
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									
Add additional scenarios if required									

#### Table 2

		Sub-Total											Total				
RATE CLASSES / CATEGORIES (eg: Residential TOU, Residential Retailer)	Units		4	٩	В			С			A + B + C						
			\$	%		\$	%		\$	%		\$	%				
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kWh	\$	0.18	0.6%	\$	(0.74)	-2.5%	\$	(0.90)	-2.3%	\$	(0.95)	-0.9%				
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION - RPP	kWh	\$	1.87	2.7%	\$	(0.54)	-0.8%	\$	(0.95)	-1.0%	\$	(15.70)	-5.4%				
GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION - Non-RPP (Other)	kW	\$	37.66	3.1%	\$	(501.34)	-30.5%	\$	(518.61)	-19.6%	\$	(1,218.83)	-8.9%				
ARGE USE SERVICE CLASSIFICATION - Non-RPP (Other)	kW	\$	(242.27)	-1.1%	\$	(5,074.16)	-35.1%	\$	(5,677.59)	-11.7%	\$	(28,563.68)	-6.8%				
JNMETERED SCATTERED LOAD SERVICE CLASSIFICATION - RPP	kWh	\$	0.06	0.5%	\$	(0.11)	-0.9%	\$	(0.12)	-0.9%	\$	(1.33)	-4.3%				
STANDBY POWER SERVICE CLASSIFICATION -	kW	\$	-	0.0%	\$	-	0.0%	\$	-	0.0%	\$	-	0.0%				
SENTINEL LIGHTING SERVICE CLASSIFICATION - RPP	kW	\$	(0.02)	-0.2%	\$	(2.82)	-17.6%	\$	(2.88)	-15.1%	\$	(4.67)	-11.5%				
STREET LIGHTING SERVICE CLASSIFICATION - Non-RPP (Other)	kW	\$	1.38	16.8%	\$	(0.71)	-6.6%	\$	(0.78)	-5.2%	\$	(3.10)	-5.8%				
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kWh	\$	1.99	8.1%	\$	1.50	5.9%	\$	1.44	4.9%	\$	1.51	2.6%				
RESIDENTIAL SERVICE CLASSIFICATION - Non-RPP (Retailer)	kWh	\$	0.18	0.6%	\$	(4.05)	-11.4%	\$	(4.20)	-9.5%	\$	(4.41)	-3.4%				
GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION - Non-RPP (Retailer)	kWh	\$	1.87	2.7%	\$	(9.34)	-10.9%	\$	(9.75)	-9.1%	\$	(24.94)	-7.1%				
		-									1						

# Customer Class: RESIDENTIAL SERVICE CLASSIFICATION RPP / Non-RPP: RPP Class B Consumption 750 kWh Demand - kW

Current Loss Factor 1.0369
Proposed/Approved Loss Factor 1.0369

		Current OEB-Approved			Proposed				Impact				
		Rate	Volume		Charge	Rate		Volume	Charge				
		(\$)			(\$)		(\$)		(\$)		\$ Change	% Change	
Monthly Service Charge	\$	21.63	1	\$	21.63	\$	24.83	1	\$ 24.83	\$	3.20	14.79%	
Distribution Volumetric Rate	\$	0.0088	750	\$	6.60	\$	0.0044	750	\$ 3.30	\$	(3.30)	-50.00%	
Fixed Rate Riders	\$	0.25	1	\$	0.25	\$	0.31	1	\$ 0.31	\$	0.06	24.00%	
Volumetric Rate Riders	\$	-	750	\$	-	\$	0.0003	750	\$ 0.23	\$	0.23		
Sub-Total A (excluding pass through)				\$	28.48				\$ 28.67	\$	0.18	0.65%	
Line Losses on Cost of Power	\$	0.0820	28	\$	2.27	\$	0.0820	28	\$ 2.27	\$	-	0.00%	
Total Deferral/Variance Account Rate Riders	-\$	0.0028	750	\$	(2.10)	-\$	0.0038	750	\$ (2.85)	\$	(0.75)	35.71%	
GA Rate Riders					. ,						. ,		
Low Voltage Service Charge	\$	0.0005	750	\$	0.38	\$	0.0005	750	\$ 0.38	\$	-	0.00%	
Smart Meter Entity Charge (if applicable) and/or	\$	0.75	1	\$	0.75	¢	0.57	1	\$ 0.57	¢	(0.18)	-24.00%	
any fixed (\$) Deferral/Variance Account Rate Riders	Ψ	0.75	1	·		Ψ	0.57		• • • •		. ,		
Sub-Total B - Distribution (includes Sub-Total A)				\$					\$ 29.03	· ·	(0.74)	-2.50%	
RTSR - Network	\$	0.0075	778		5.83	\$	0.0073	778	\$ 5.68	\$	(0.16)	-2.67%	
RTSR - Connection and/or Line and Transformation Connection	\$	0.0040	778	\$	-	\$	0.0040		\$ 3.11		-	0.00%	
Sub-Total C - Delivery (including Sub-Total B)				\$	38.72				\$ 37.82		(0.90)	-2.33%	
Wholesale Market Service Charge (WMSC)	\$	0.0036	778	\$	2.80	\$	0.0036	778	\$ 2.80	\$	-	0.00%	
Rural and Remote Rate Protection (RRRP)	\$	0.0003	778	\$	0.23	\$	0.0003	778	\$ 0.23	\$	-	0.00%	
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$ 0.25	\$	-	0.00%	
Debt Retirement Charge (DRC)													
										\$	-		
TOU - Off Peak	\$	0.0650	488	\$	31.69	\$	0.0650	488	\$ 31.69	\$	-	0.00%	
TOU - Mid Peak	\$	0.0940	128	\$	11.99	\$	0.0940	128	\$ 11.99	\$	-	0.00%	
TOU - On Peak	\$	0.1320	135	\$	17.82	\$	0.1320	135	\$ 17.82	\$	-	0.00%	
Non-RPP Retailer Avg. Price	\$	0.1038	750	\$	77.85	\$	0.1038	750	\$ 77.85	\$	-	0.00%	
Average IESO Wholesale Market Price	\$	0.1038	750	\$	77.85	\$	0.1038	750	\$ 77.85	\$	-	0.00%	
				İ					•	·			
Total Bill on TOU (before Taxes)				\$	103.49				\$ 102.59	\$	(0.90)	-0.87%	
HST		13%		\$	13.45		13%		\$ 13.34	\$	(0.12)	-0.87%	
Total Bill on TOU (before 8% Provincial Rebate)				\$	116.95				\$ 115.93	\$	(1.02)	-0.87%	
8% Provincial Rebate		-8%		\$	(8.28)		-8%		\$ (8.21)	\$	0.07	-0.87%	
Total Bill on TOU				\$	108.67				\$ 107.72		(0.95)	-0.87%	
				Ĺ									
Total Bill on Non-RPP Avg. Price	I			\$	119.85				\$ 118.95	\$	(0.90)	-0.75%	

Customer Class:	GENERAL SERV	ICE LESS THAN 50 kW SERVICE CL	ASSIFICATION	
RPP / Non-RPP:		RPP	Class B	
Consumption	2,000	kWh		
Domand	_	L-\A/		

Demand	-	kW
Current Loss Factor	1.0369	
Proposed/Approved Loss Factor	1.0369	

		(	Current OEB-Appro	oved	ł			Proposed				Impa	act
		Rate	Volume		Charge		Rate	Volume	Charg	e			
		(\$)		Ì.	(\$)		(\$)		(\$)		\$	\$ Change	% Change
Monthly Service Charge	\$	29.00	1	\$	29.00	\$	29.26	1	\$	29.26	\$	0.26	0.90%
Distribution Volumetric Rate	\$	0.0185	2000	\$	37.00	\$	0.0187	2000	\$	37.40	\$	0.40	1.08%
Fixed Rate Riders	\$	0.52	1	\$	0.52	\$	0.33	1	\$	0.33	\$	(0.19)	-36.54%
Volumetric Rate Riders	\$	0.0010	2000	\$	2.00	\$	0.0017	2000	\$	3.40	\$	1.40	70.00%
Sub-Total A (excluding pass through)				\$	68.52				\$	70.39	\$	1.87	2.73%
Line Losses on Cost of Power	\$	0.0820	74	\$	6.05	\$	0.0820	74	\$	6.05	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0026	2,000	\$	(5.20)	-\$	0.0037	2,000	\$	(7.40)	\$	(2.20)	42.31%
GA Rate Riders										, ,			
Low Voltage Service Charge	\$	0.0004	2,000	\$	0.80	\$	0.0004	2,000	\$	0.80	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or	\$	0.78	4	\$	0.78	\$	0.57	4	\$	0.57	¢	(0.21)	00.000/
any fixed (\$) Deferral/Variance Account Rate Riders	φ	0.78	1			ð	0.57	1	-			· · /	-26.92%
Sub-Total B - Distribution (includes Sub-Total A)				\$	70.95				\$	70.41	\$	(0.54)	-0.76%
RTSR - Network	\$	0.0067	2,074	\$	13.89	\$	0.0065	2,074	\$	13.48	\$	(0.41)	-2.99%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0035	2,074	\$	7.26	\$	0.0035	2,074	\$	7.26	•	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	92.10				\$	91.15	\$	(0.95)	-1.04%
Wholesale Market Service Charge (WMSC)	\$	0.0036	2,074	\$	7.47	\$	0.0036	2,074	\$	7.47	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	2,074	\$	0.62	\$	0.0003	2,074	\$	0.62	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	2,000	\$	14.00	\$	-	2,000	\$	-	\$	(14.00)	-100.00%
											\$	-	
TOU - Off Peak	\$	0.0650	1,300	\$	84.50	\$	0.0650	1,300	\$	84.50	\$	-	0.00%
TOU - Mid Peak	\$	0.0940	340	\$	31.96	\$	0.0940	340	\$	31.96	\$	-	0.00%
TOU - On Peak	\$	0.1320	360	\$	47.52		0.1320	360	\$	47.52	\$	-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	2,000	\$	207.60		0.1038	2,000		07.60		-	0.00%
Average IESO Wholesale Market Price	\$	0.1038	2,000		207.60		0.1038	2,000		07.60		-	0.00%
	¥			Ť		÷		_,	÷ –		÷		
Total Bill on TOU (before Taxes)				\$	278.42	1			\$ 2	63.47	\$	(14.95)	-5.37%
HST		13%		\$	-		13%		•	34.25		(1.94)	-5.37%
Total Bill on TOU (before 8% Provincial Rebate)				\$						97.72		(16.90)	-5.37%
8% Provincial Rebate		-8%		\$			-8%			21.08)		1.20	-5.37%
Total Bill on TOU				\$	292.34		070			76.64		(15.70)	-5.37%
				Ť					+ -		L.	(10110)	0.01 /0
Total Bill on Non-RPP Avg. Price				\$	322.04				\$ 3	07.09	\$	(14.95)	-4.64%
HST		13%		\$	41.87		13%		\$	39.92	\$	(1.94)	-4.64%
Provincial Rebate		-8%		\$	(25.76)		-8%			24.57)		1.20	-4.64%
Total Bill on Non-RPP Avg. Price				\$	338.14				\$ 3	22.44	\$	(15.70)	-4.64%
Total D'II an Assesse IFOO Mile Isaala Mari et Deba				é	200.04				¢ ^	07.00	<b>—</b>	(14.05)	4.0.40
Total Bill on Average IESO Wholesale Market Price HST		13%		\$ \$	<b>322.04</b> 41.87		13%			<b>07.09</b> 39.92		(14.95) (1.94)	<b>-4.64%</b> -4.64%
Provincial Rebate		-8%		ф \$	(25.76)	1	-8%			39.92 24.57)		(1.94)	-4.64%
Total Bill on Average IESO Wholesale Market Price		-0 /0		\$	338.14		576			22.44		(15.70)	-4.64%
				É								,	

# Customer Class: GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION RPP / Non-RPP: Non-RPP (Other) Class B - non-Interval Metered Consumption 80,000 kWh KM

Demand 250 kW Current Loss Factor 1.0369 Proposed/Approved Loss Factor 1.0369

		(	Current OEB-Appro	ovec				Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)		ĺ	(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	142.24	1	\$	142.24	\$	143.52	1	\$	143.52	\$	1.28	0.90%
Distribution Volumetric Rate	\$	4.2415	250	\$	1,060.38	\$	4.2797	250	\$	1,069.92	\$	9.54	0.90%
Fixed Rate Riders	\$	4.78	1	\$	4.78	\$	1.62	1	\$	1.62	\$	(3.16)	-66.11%
Volumetric Rate Riders	\$	0.0964	250	\$	24.10	\$	0.2164	250	\$	54.10	\$	30.00	124.48%
Sub-Total A (excluding pass through)				\$	1,231.50				\$	1,269.16	\$	37.66	3.06%
Line Losses on Cost of Power	\$	-	-	\$	-	\$	-	-	\$	-	\$	-	
Total Deferral/Variance Account Rate Riders	\$	1.3590	250	\$	339.75	-\$	1.3730	250	\$	(343.25)	\$	(683.00)	-201.03%
GA Rate Riders	\$	0.0004	80,000	\$	32.00	\$	0.0022		\$	176.00	\$	144.00	450.00%
Low Voltage Service Charge	\$	0.1589	250	\$	39.73	ŝ	0.1589		\$	39.73	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or				,					,				
any fixed (\$) Deferral/Variance Account Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	1,642.97				\$	1,141.63	\$	(501.34)	-30.51%
RTSR - Network	\$	2.6739	250	\$	668.48	\$	2.6130	250	\$	653.25	\$	(15.23)	-2.28%
RTSR - Connection and/or Line and Transformation Connection	\$	1.3420	250	\$	335.50	\$	1.3338	250	\$	333.45	\$	(2.05)	-0.61%
Sub-Total C - Delivery (including Sub-Total B)				\$	2,646.95				\$	2,128.33	\$	(518.61)	-19.59%
Wholesale Market Service Charge (WMSC)	\$	0.0036	82,952	\$	298.63	\$	0.0036	82,952	\$	298.63	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	82,952	\$	24.89	\$	0.0003	82,952	\$	24.89	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	80,000	\$	560.00	\$	-	80,000	\$	-	\$	(560.00)	-100.00%
	·			Ľ					·		\$	-	
TOU - Off Peak	\$	0.0650	53,919	\$	3,504.72	\$	0.0650	53,919	\$	3,504.72	\$	-	0.00%
TOU - Mid Peak	ŝ	0.0940	14,102			ŝ	0.0940		\$	1,325.57	\$	-	0.00%
TOU - On Peak	ŝ	0.1320	14,931		1,970.94		0.1320		\$	1,970.94	-	-	0.00%
Non-RPP Retailer Avg. Price	ŝ	0.1038	82,952		8,610.42		0.1038		\$	8,610.42		-	0.00%
Average IESO Wholesale Market Price	é	0.1038	82,952				0.1038		\$	8,610.42		-	0.00%
	Ψ	0.1050	02,352	Ψ	0,010.42	Ψ	0.1050	02,552	Ψ	0,010.42	Ψ	-	0.0078
Total Bill on TOU (before Taxes)				\$	10,331.94	1			\$	9,253.33	¢	(1,078.61)	-10.44%
HST		13%		• \$	1.343.15		13%		₽ \$	1,202.93		(140.22)	-10.44%
8% Provincial Rebate		-8%		э \$	(826.56)		-8%		φ \$	(740.27)		86.29	-10.44%
Total Bill on TOU		-070		Ф \$	10.848.54		-0%		Ф \$	9,716.00	э \$		-10.44%
				¢	10,848.54				Þ	9,716.00	Þ	(1,132.54)	-10.44%
Tatal Dillion New DDD Aven Delan	-			¢	40 444 40	1			¢	44.000 54	¢	(4.070.04)	-8.88%
Total Bill on Non-RPP Avg. Price HST		13%		\$ \$	12,141.13 1.578.35		13%		\$ \$	<b>11,062.51</b> 1,438,13		(1,078.61) (140.22)	-8.88%
8% Provincial Rebate		-8%		\$	(971.29)		-8%		\$	(885.00)		86.29	-8.88%
Total Bill on Non-RPP Avg. Price		-070		\$	12,748.18		070		\$	11,615.64		(1,132.54)	-8.88%
				Ĺ	,				Ť	,	Ť	(.,	
Total Bill on Average IESO Wholesale Market Price				\$	12,141.13				\$	11,062.51	\$	(1,078.61)	-8.88%
HST		13%		\$	1,578.35		13%		\$	1,438.13		(140.22)	-8.88%
Total Bill on Average IESO WMP (before 8% Provincial Rebate)				\$	13,719.47				\$	12,500.64	\$	(1,218.83)	-8.88%
8% Provincial Rebate		0%		\$	12 710 47		0%		\$ \$	12,500.64	\$	(1 219 02)	0.000/
Total Bill on Average IESO Wholesale Market Price				Þ	13,719.47				þ	12,500.64	Þ	(1,218.83)	-8.88%

# Customer Class: LARGE USE SERVICE CLASSIFICATION RPP / Non-RPP: Non-RPP (Other) Class A Consumption 2,800,000 kWh Demand 7,350 kW

Current Loss Factor 1.0145
Proposed/Approved Loss Factor 1.0145

		0	urrent OEB-Appro	oved				Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	6,128.34	1	\$	6,128.34	\$	6,183.50	1	\$	6,183.50	\$	55.16	0.90%
Distribution Volumetric Rate	\$	2.2623	7350	\$	16,627.91	\$	2.2827	7350	\$	16,777.56	\$	149.65	0.90%
Fixed Rate Riders	\$	121.36	1	\$	121.36	\$	69.71	1	\$	69.71	\$	(51.65)	-42.56%
Volumetric Rate Riders	-\$	0.0633	7350	\$	(465.26)	-\$	0.1171	7350	\$	(860.69)	\$	(395.43)	84.99%
Sub-Total A (excluding pass through)				\$	22,412.35				\$	22,170.08	\$	(242.27)	-1.08%
Line Losses on Cost of Power	\$	-	-	\$	-	\$	-	-	\$	-	\$	-	
Total Deferral/Variance Account Rate Riders	-\$	1.2470	7,350	\$	(9,165.45)	-\$	1.9044	7,350	\$	(13,997.34)	\$	(4,831.89)	52.72%
GA Rate Riders			,	,	(-,,	\$	-		\$	-	\$	-	
Low Voltage Service Charge	\$	0.1630	7,350	\$	1,198.05	\$	0.1630		\$	1,198.05	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or					,	÷.			÷	,	÷		
any fixed (\$) Deferral/Variance Account Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	14,444.95				\$	9,370.79	\$	(5,074.16)	-35.13%
RTSR - Network	\$	3.2305	7,350	\$	23,744.18	\$	3.1569	7,350	\$	23,203.22	\$	(540.96)	-2.28%
RTSR - Connection and/or Line and Transformation Connection	\$	1.4016	7,350	\$	10,301.76	\$	1.3931	7,350	\$	10,239.29	\$	(62.48)	-0.61%
Sub-Total C - Delivery (including Sub-Total B)				\$	48,490.89				\$	42,813.29	\$	(5,677.59)	-11.71%
Wholesale Market Service Charge (WMSC)	\$	0.0036	2,840,600	\$	10,226.16	\$	0.0036	2,840,600	\$	10,226.16	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	2,840,600	\$	852.18	\$	0.0003	2,840,600	\$	852.18	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	ŝ	0.0070	2,800,000	\$	19,600.00	s	-	2,800,000	\$	-	\$	(19,600.00)	-100.00%
···· ··· ··· ··· ··· ··· ··· ··· ···· ··· ····	•		_,,	Ť	,	*		_,,	-		ŝ	-	
TOU - Off Peak	\$	0.0650	1,846,390	\$	120,015.35	s	0.0650	1,846,390	\$	120,015.35	\$	-	0.00%
TOU - Mid Peak	\$	0.0940	482,902		45,392.79		0.0940	482,902		45,392.79	\$	-	0.00%
TOU - On Peak	ŝ	0.1320	511,308		67,492.66		0.1320	511,308		67,492.66	\$	-	0.00%
Non-RPP Retailer Avg. Price	ŝ	0.1038	2,840,600		294,854.28		0.1038	2,840,600		294,854.28	\$	-	0.00%
Average IESO Wholesale Market Price	ŝ	0.1038	2,840,600		294,854.28	ŝ	0.1038		\$	294,854.28	\$		0.00%
	Ŷ	0.1058	2,840,000	φ	294,034.20	φ	0.1058	2,840,000	φ	294,034.20	φ	-	0.0078
Total Bill on TOU (before Taxes)	-			\$	312,070.27	1			\$	286,792.68	¢	(25,277.59)	-8.10%
HST		13%		.₽ \$	40,569.13		13%		₽ \$	37,283.05		(3,286.09)	-8.10%
8% Provincial Rebate		-8%		э \$	(24,965.62)		-8%		э \$	(22,943.41)		(3,286.09) 2,022.21	-8.10%
		-8%		ф С			-8%		Ð				
Total Bill on TOU				\$	327,673.78				\$	301,132.31	\$	(26,541.47)	-8.10%
	-			<b>^</b>	074 000 70				¢.	0.40 7.40 4.0	<u>_</u>	(05.077.50)	0.70%
Total Bill on Non-RPP Avg. Price		13%		\$ \$	374,023.76 48,623.09		13%		<b>\$</b> \$	348,746.16 45,337.00		(25,277.59) (3,286.09)	<b>-6.76%</b> -6.76%
8% Provincial Rebate		-8%		ф \$	(29,921.90)		-8%		э \$	(27,899.69)		2,022.21	-6.76%
Total Bill on Non-RPP Avg. Price		-070		\$	392,724.94		070		\$	366,183.47		(26,541.47)	-6.76%
				,								, , , , , , , , , , , , , , , , , , , ,	
Total Bill on Average IESO Wholesale Market Price				\$	374,023.76				\$	348,746.16	\$	(25,277.59)	-6.76%
HST		13%		\$	48,623.09		13%		\$	45,337.00	\$	(3,286.09)	-6.76%
Total Bill on Average IESO WMP (before 8% Provincial Rebate)				\$	422,646.84				\$	394,083.16		(28,563.68)	-6.76%
8% Provincial Rebate		0%		\$	400 646 04		0%		\$	204 092 40	\$	(28 562 60)	6 700/
Total Bill on Average IESO Wholesale Market Price				\$	422,646.84		_		\$	394,083.16	\$	(28,563.68)	-6.76%

Customer Class:	UNMETERED SC	CATTERED LOAD SE	ERVICE CLASSIFICATION
RPP / Non-RPP:		RPP	Class B
Consumption	150	kWh	
Demand	-	kW	
Current Loss Factor	1.0369		
Proposed/Approved Loss Factor	1.0369	]	

			Current OEB-Appro	oved	1			Proposed				Imp	act
		Rate	Volume	ĺ.	Charge		Rate	Volume		Charge			
		(\$)		ĺ –	(\$)		(\$)		ĺ	(\$)		\$ Change	% Change
Monthly Service Charge	\$	8.68	1	\$	8.68	\$	8.76	1	\$	8.76	\$	0.08	0.92%
Distribution Volumetric Rate	\$	0.0197	150	\$	2.96	\$	0.0199	150	\$	2.98	\$	0.03	0.90%
Fixed Rate Riders	\$	0.11	1	\$	0.11	\$	0.09	1	\$	0.09	\$	(0.02)	-18.18%
Volumetric Rate Riders	-\$	0.0004	150	\$	(0.06)	-\$	0.0006	150	\$	(0.09)	\$	(0.03)	50.00%
Sub-Total A (excluding pass through)				\$	11.69				\$		\$	0.06	0.48%
Line Losses on Cost of Power	\$	0.0820	6	\$	0.45	\$	0.0820	6	\$	0.45	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0025	150	\$	(0.38)	-\$	0.0036	150	\$	(0.54)	\$	(0.17)	44.00%
GA Rate Riders	\$	-	150	\$	-	\$	-		\$		\$	-	
Low Voltage Service Charge	\$	0.0005	150	\$	0.08	ŝ	0.0005		\$		\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or	Ť			Ť		*			Ť				
any fixed (\$) Deferral/Variance Account Rate Riders			1	\$	-			1	\$	-	\$	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	11.84				\$	11.73	\$	(0.11)	-0.92%
RTSR - Network	\$	0.0063	156	\$	0.98	\$	0.0062	156	\$	0.96	\$	(0.02)	-1.59%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0037	156	\$	0.58	\$	0.0037	156	\$	0.58	\$	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	13.39				\$		\$	(0.12)	-0.93%
Wholesale Market Service Charge (WMSC)	\$	0.0036	156	\$	0.56	\$	0.0036	156	\$	0.56	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	156	\$	0.05	S	0.0003	156	\$	0.05	\$	-	0.00%
Standard Supply Service Charge	ŝ	0.25	1	\$	0.25		0.25		\$		\$	-	0.00%
Debt Retirement Charge (DRC)	ŝ	0.0070	150	\$	1.05		-	150			\$	(1.05)	-100.00%
	Ť	0.001.0	100	Ť		Ť		100	Ť		\$	-	10010070
TOU - Off Peak	\$	0.0650	98	\$	6.34	s	0.0650	98	\$	6.34	\$	-	0.00%
TOU - Mid Peak	ŝ	0.0940	26	\$	2.40		0.0940		\$		\$	_	0.00%
TOU - On Peak	ŝ	0.1320	20	\$	3.56		0.1320	20	\$		\$	_	0.00%
Non-RPP Retailer Avg. Price	ŝ	0.1038	150	\$		ŝ	0.1038		\$		\$	-	0.00%
Average IESO Wholesale Market Price	ې د	0.1038	150	-	15.57		0.1038	150			φ \$	-	0.00%
Average iESO Wholesale Market File	¢	0.1036	150	φ	15.57	Þ	0.1038	150	φ	15.57	þ	-	0.00%
Total Bill on TOU (before Taxes)				\$	27.60	T			¢	26.43	¢	(1.17)	-4.25%
HST		13%		э \$	3.59		13%				.թ Տ	(0.15)	-4.25%
Total Bill on TOU (before 8% Provincial Rebate)		13%		э \$			13%					(0.15)	-4.25%
		00/			31.19		00/		\$	29.80	\$	(1.33)	-4.25%
8% Provincial Rebate		0%		\$	-		0%		\$	-	\$	-	
Total Bill on TOU				\$	31.19	<u> </u>			\$	29.86	\$	(1.33)	-4.25%
Tatal Bill on New DDD Aven Dates				\$	30.87				\$	29.70	¢	(1.17)	-3.80%
Total Bill on Non-RPP Avg. Price HST		13%		¢ 2	4.01		13%		¢ ¢	3.86		(0.15)	-3.80%
Provincial Rebate		-8%		\$	(2.47)		-8%		\$	(2.38)		0.09	-3.80%
Total Bill on Non-RPP Avg. Price		070		\$	32.41		370		\$	31.18		(1.23)	-3.80%
												<u> </u>	
Total Bill on Average IESO Wholesale Market Price				\$	30.87				\$	29.70	\$	(1.17)	-3.80%
HST		13%		\$	4.01		13%		\$		\$	(0.15)	-3.80%
Provincial Rebate		-8%		\$	(2.47)		-8%		\$	(2.38)		0.09	-3.80%
Total Bill on Average IESO Wholesale Market Price				\$	32.41				\$	31.18	\$	(1.23)	-3.80%

#### Customer Class: SENTINEL LIGHTING SERVICE CLASSIFICATION

RPP

 RPP / Non-RPP:

 Consumption
 180
 kWh

 Demand
 1
 kW

 Current Loss Factor
 1.0369

 Proposed/Approved Loss Factor
 1.0369

		c	urrent OEB-Appro	vec	ł			Proposed				Impa	act
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	4.23	1	\$	4.23	\$	4.27	1	\$	4.27	\$	0.04	0.95%
Distribution Volumetric Rate	\$	9.9582	1	\$	9.96	\$	10.0478	1	\$	10.05	\$	0.09	0.90%
Fixed Rate Riders	\$	0.10	1	\$	0.10	\$	0.09	1	\$	0.09	\$	(0.01)	-10.04%
Volumetric Rate Riders	-\$	0.3850	1	\$	(0.39)	-\$	0.5289	1	\$	(0.53)	\$	(0.14)	37.38%
Sub-Total A (excluding pass through)				\$	13.90				\$	13.88	\$	(0.02)	-0.17%
Line Losses on Cost of Power	\$	0.0820	7	\$	0.54	\$	0.0820	7	\$	0.54	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	\$	1.4716	1	\$	1.47	-\$	1.3272	1	\$	(1.33)	\$	(2.80)	-190.19%
GA Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Low Voltage Service Charge	\$	0.1170	1	\$	0.12	\$	0.1170	1	\$	0.12	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or			4	ŕ				4	¢		¢		
any fixed (\$) Deferral/Variance Account Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$		
Sub-Total B - Distribution (includes Sub-Total A)				\$	16.04				\$	13.21	\$	(2.82)	-17.60%
RTSR - Network	\$	2.0778	1	\$	2.08	\$	2.0304	1	\$	2.03	\$	(0.05)	-2.28%
RTSR - Connection and/or Line and Transformation Connection	\$	0.9929	1	\$	0.99	\$	0.9869	1	\$	0.99	\$	(0.01)	-0.60%
Sub-Total C - Delivery (including Sub-Total B)				\$	19.11				\$	16.23	\$	(2.88)	-15.05%
Wholesale Market Service Charge (WMSC)	\$	0.0036	187	\$	0.67	\$	0.0036	187	\$	0.67	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	187	\$	0.06	\$	0.0003	187	\$	0.06	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	180	\$	1.26	\$	-	180	\$	-	\$	(1.26)	-100.00%
											\$	-	
TOU - Off Peak	\$	0.0650	117	\$	7.61	\$	0.0650	117	\$	7.61	\$	-	0.00%
TOU - Mid Peak	ŝ	0.0940	31	\$	2.88	\$	0.0940	31	\$		\$	-	0.00%
TOU - On Peak	ŝ	0.1320	32	\$	4.28	\$	0.1320	32	\$		\$	-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	180	\$	18.68	s	0.1038	180	\$		\$	-	0.00%
Average IESO Wholesale Market Price	é	0.1038	180	\$	18.68	ŝ	0.1038		\$		\$		0.00%
	Ψ	0.1050	100	Ψ	10.00	Ψ	0.1050	100	Ψ	10.00	Ψ	_	0.0070
Total Bill on TOU (before Taxes)	1			\$	36.10	1			\$	31.97	¢	(4.14)	-11.46%
HST		13%		\$ \$	4.69		13%		₽ \$		\$ \$	(0.54)	-11.46%
Total Bill on TOU (before 8% Provincial Rebate)		1370		\$	40.80		1376		\$			(4.67)	-11.46%
8% Provincial Rebate		0%		э \$			0%		э \$		ф \$	(4.67)	-11.40%
Total Bill on TOU		0%		Ф \$			0%		Ф \$			(1.07)	44.400/
	_			\$	40.80				\$	36.12	\$	(4.67)	-11.46%
Total Bill on Non-RPP Avg. Price	1			\$	40.03	1			\$	35.89	¢	(4.14)	-10.33%
HST		13%		\$ \$	5.20		13%		\$		\$ \$	(0.54)	-10.33%
Provincial Rebate		-8%		\$	(3.20)		-8%		\$	(2.87)		0.33	-10.33%
Total Bill on Non-RPP Avg. Price		570		\$	42.03				\$	37.69		(4.34)	-10.33%
Total Bill on Average IESO Wholesale Market Price				\$	40.03				\$		\$	(4.14)	-10.33%
HST		13%		\$	5.20	1	13%		\$		\$	(0.54)	-10.33%
Provincial Rebate		-8%		\$	(3.20)		-8%		\$	(2.87)		0.33	-10.33%
Total Bill on Average IESO Wholesale Market Price				\$	42.03				\$	37.69	\$	(4.34)	-10.33%

# Customer Class: STREET LIGHTING SERVICE CLASSIFICATION RPP / Non-RPP: Non-RPP (Other) Class B Consumption 280 kWh Demand 1 kW Current Loss Factor 1.0369

Proposed/Approved Loss Factor 1.0369

		С	urrent OEB-Appro	vec	đ			Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	1.20	1	\$	1.20	\$	1.21	1	\$	1.21	\$	0.01	0.83%
Distribution Volumetric Rate	\$	6.3791	1	\$	6.38	\$	6.4365	1	\$	6.44	\$	0.06	0.90%
Fixed Rate Riders	\$	0.01	1	\$	0.01	\$	0.01	1	\$	0.01	\$	-	0.00%
Volumetric Rate Riders	\$	0.6107	1	\$	0.61	\$	1.9191	1	\$	1.92	\$	1.31	214.25%
Sub-Total A (excluding pass through)				\$	8.20				\$	9.58	\$	1.38	16.78%
Line Losses on Cost of Power	\$	0.1038	10	\$	1.07	\$	0.1038	10	\$	1.07	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	\$	1.3018	1	\$	1.30	-\$	1.2881	1	\$	(1.29)	\$	(2.59)	-198.95%
GA Rate Riders	\$	0.0004	280	\$	0.11	\$	0.0022	280	\$	0.62	\$	0.50	450.00%
Low Voltage Service Charge	\$	0.1288	1	\$	0.13	\$	0.1288	1	\$	0.13	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or				÷									
any fixed (\$) Deferral/Variance Account Rate Riders	\$	-	1	\$	-	\$	-	1	\$	-	\$	-	
Sub-Total B - Distribution (includes Sub-Total A)				\$	10.81				\$	10.10	\$	(0.71)	-6.57%
RTSR - Network	\$	2.6888	1	\$	2.69	\$	2.6275	1	\$	2.63	\$	(0.06)	-2.28%
RTSR - Connection and/or Line and Transformation Connection	\$	1.4379	1	\$	1.44	\$	1.4291	1	\$	1.43	\$	(0.01)	-0.61%
Sub-Total C - Delivery (including Sub-Total B)				\$	14.94				\$	14.16	\$	(0.78)	-5.22%
Wholesale Market Service Charge (WMSC)	\$	0.0036	290	\$	1.05	\$	0.0036	290	\$	1.05	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	290	\$	0.09	\$	0.0003	290	\$	0.09	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)	\$	0.0070	280	\$	1.96	\$	-	280	\$	-	\$	(1.96)	-100.00%
											\$	-	
TOU - Off Peak	\$	0.0650	182	\$	11.83	\$	0.0650	182	\$	11.83	\$	-	0.00%
TOU - Mid Peak	\$	0.0940	48	\$	4.47	\$	0.0940	48	\$		\$	-	0.00%
TOU - On Peak	ŝ	0.1320		\$		\$	0.1320	50	\$		\$	-	0.00%
Non-RPP Retailer Avg. Price	ŝ	0.1038	280	\$	29.06	\$	0.1038	280	\$		\$	-	0.00%
Average IESO Wholesale Market Price	ŝ	0.1038	280	-	29.06	s	0.1038		\$			_	0.00%
	Ψ	0.1050	200	Ψ	23.00	Ψ	0.1050	200	Ψ	23.00	Ψ	_	0.00%
Total Bill on TOU (before Taxes)	1			\$	41.24	1			\$	38.50	¢	(2.74)	-6.64%
HST		13%		\$	5.36		13%		\$		\$	(0.36)	-6.64%
Provincial Rebate		-8%		\$	(3.30)		-8%		\$	(3.08)		0.22	-6.64%
Total Bill on TOU		070		¢	43.30		-070		\$	40.43		(2.88)	-6.64%
				φ	43.30				φ	40.45	φ	(2.00)	-0.04 /8
Total Bill on Non-RPP Avg. Price				\$	47.35				\$	44.61	\$	(2.74)	-5.79%
HST		13%		\$	6.16	1	13%		\$			(0.36)	-5.79%
Provincial Rebate		-8%		\$	(3.79)	1	-8%		\$	(3.57)		0.22	-5.79%
Total Bill on Non-RPP Avg. Price				\$	49.72				\$	46.84	\$	(2.88)	-5.79%
Total Bill on Average IESO Wholesale Market Price		1001		\$	47.35	1	1001		\$		\$	(2.74)	-5.79%
HST Total Bill on Average IESO WMP (before 8% Provincial Rebate)		13%		\$	6.16 53.50		13%		\$ \$		\$ \$	(0.36) (3.10)	-5.79% -5.79%
8% Provincial Rebate		0%		Ф \$	- 55.50		0%		Ф \$		Ф \$	(3.10)	-3.79%
Total Bill on Average IESO Wholesale Market Price		0 /8		\$	53.50		576		\$		\$	(3.10)	-5.79%
												, , , , , , , , , , , , , , , , , , , ,	

# Customer Class: RESIDENTIAL SERVICE CLASSIFICATION RPP / Non-RPP: RPP 10th Percentile

Consumption 309 kWh Demand - kW Current Loss Factor 1.0369 Proposed/Approved Loss Factor 1.0369

		C	urrent OEB-Appro	ved	1			Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	21.63	1	\$	21.63	\$	24.83	1	\$	24.83	\$	3.20	14.79%
Distribution Volumetric Rate	\$	0.0088	308.871	\$	2.72	\$	0.0044	308.871	\$	1.36	\$	(1.36)	-50.00%
Fixed Rate Riders	\$	0.25	1	\$	0.25	\$	0.31	1	\$	0.31	\$	0.06	24.00%
Volumetric Rate Riders	\$	-	308.871	\$	-	\$	0.0003	308.871	\$	0.09	\$	0.09	
Sub-Total A (excluding pass through)				\$	24.60				\$	26.59	\$	1.99	8.10%
Line Losses on Cost of Power	\$	0.0820	11	\$	0.93	\$	0.0820	11	\$	0.93	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0028	309	\$	(0.86)	-\$	0.0038	309	\$	(1.17)	\$	(0.31)	35.71%
GA Rate Riders	\$	-	309	\$	-	\$	-	309	\$	-	\$	-	
Low Voltage Service Charge	\$	0.0005	309	\$	0.15	\$	0.0005	309	\$	0.15	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or	\$	0.75		\$	0.75	s	0.57	4	\$	0.57	\$	(0.40)	-24.00%
any fixed (\$) Deferral/Variance Account Rate Riders	Þ	0.75	1	· ·		þ	0.57	1		0.57	Э	(0.18)	-24.00%
Sub-Total B - Distribution (includes Sub-Total A)				\$	25.57				\$	27.08	\$	1.50	5.88%
RTSR - Network	\$	0.0075	320	\$	2.40	\$	0.0073	320	\$	2.34	\$	(0.06)	-2.67%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0040	320	\$	1.28	\$	0.0040	320	\$	1.28	\$	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	29.26				\$	30.70	\$	1.44	4.92%
Wholesale Market Service Charge (WMSC)	\$	0.0036	320	\$	1.15	\$	0.0036	320	\$	1.15	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	320	\$	0.10	\$	0.0003	320	\$	0.10	\$	-	0.00%
Standard Supply Service Charge	\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
Debt Retirement Charge (DRC)													
											\$	-	
TOU - Off Peak	\$	0.0650	201	\$	13.05	\$	0.0650	201	\$	13.05	\$	-	0.00%
TOU - Mid Peak	\$	0.0940	53	\$	4.94	\$	0.0940	53	\$	4.94	\$	-	0.00%
TOU - On Peak	\$	0.1320	56	\$	7.34	\$	0.1320	56	\$	7.34	\$	-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	309	\$	32.06	\$	0.1038	309	\$		\$	-	0.00%
Average IESO Wholesale Market Price	\$	0.1038	309	\$	32.06	\$	0.1038	309	\$	32.06	\$	-	0.00%
Total Bill on TOU (before Taxes)				\$	56.08				\$	57.52	\$	1.44	2.57%
HST		13%		\$	7.29		13%		\$		\$	0.19	2.57%
Total Bill on TOU (before 8% Provincial Rebate)				\$	63.37				\$	65.00		1.63	2.57%
8% Provincial Rebate		-8%		\$	(4.49)		-8%		\$	(4.60)		(0.12)	2.57%
Total Bill on TOU				\$	58.88				\$	60.40	\$	1.51	2.57%
Total Bill on Non-RPP Avg. Price		10		\$	62.82	1			\$	64.26		1.44	2.29%
HST		13%		\$	8.17	1	13%		\$		\$	0.19	2.29%
Provincial Rebate		-8%		\$ \$	(5.03) 65.96		-8%		\$ \$	(5.14) 67.47		(0.12) 1.51	2.29%
Total Bill on Non-RPP Avg. Price				Þ	00.96				Þ	67.47	¢	1.51	2.29%
Total Bill on Average IESO Wholesale Market Price				\$	62.82				\$	64.26	\$	1.44	2.29%
HST		13%		\$ \$	8.17	1	13%		\$ \$			0.19	2.29%
Provincial Rebate		-8%		\$	(5.03)	1	-8%		\$	(5.14)		(0.12)	2.29%
Total Bill on Average IESO Wholesale Market Price				\$	65.96				\$	67.47		1.51	2.29%

#### Customer Class: RESIDENTIAL SERVICE CLASSIFICATION RPP / Non-RPP: Non-RPP (Retailer)

 RPP / Non-RPP:
 Non-F

 Consumption
 750
 kWh

 Demand
 kW

 Current Loss Factor
 1.0369
 Proposed/Approved Loss Factor
 1.0369

		С	urrent OEB-Appro	vec	1			Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	21.63	1	\$	21.63	\$	24.83	1	\$	24.83	\$	3.20	14.79%
Distribution Volumetric Rate	\$	0.0088	750	\$	6.60	\$	0.0044	750	\$	3.30	\$	(3.30)	-50.00%
Fixed Rate Riders	\$	0.25	1	\$	0.25	\$	0.31	1	\$	0.31	\$	0.06	24.00%
Volumetric Rate Riders	\$	-	750	\$	-	\$	0.0003	750	\$		\$	0.23	
Sub-Total A (excluding pass through)				\$	28.48				\$	28.67	\$	0.18	0.65%
Line Losses on Cost of Power	\$	0.1038	28	\$	2.87	\$	0.1038	28	\$	2.87	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0028	750	\$	(2.10)	-\$	0.0038	750	\$	(2.85)	\$	(0.75)	35.71%
GA Rate Riders	\$	0.0066	750	\$	4.95	ŝ	0.0022		\$		\$	(3.30)	-66.67%
Low Voltage Service Charge	\$	0.0005	750	\$		ŝ	0.0005		\$		\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or									·		•		
any fixed (\$) Deferral/Variance Account Rate Riders	\$	0.75	1	\$	0.75	\$	0.57	1	\$	0.57	\$	(0.18)	-24.00%
Sub-Total B - Distribution (includes Sub-Total A)				\$	35.33				\$	31.28	\$	(4.05)	-11.45%
RTSR - Network	\$	0.0075	778	\$	5.83	\$	0.0073	778	\$	5.68	\$	(0.16)	-2.67%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0040	778	\$	3.11	S	0.0040	778	\$	3.11	\$	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)	1			\$	44.27				\$	40.07	\$	(4.20)	-9.49%
Wholesale Market Service Charge (WMSC)	\$	0.0036	778	\$	2.80	\$	0.0036	778	\$		\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	ŝ	0.0003	778	\$	0.23	ŝ	0.0003	778	\$		\$	-	0.00%
Standard Supply Service Charge	Ť	0.0000		Ŷ	0.20	Ť	0.0000		Ŷ	0.20	Ψ		0.0070
Debt Retirement Charge (DRC)													
Debt Realement Onlarge (DRO)											\$		
TOU - Off Peak	*	0.0650	488	¢	31.69	\$	0.0650	488	¢		э \$	-	0.00%
TOU - Mid Peak	ф ф	0.0850		э \$			0.0850					-	0.00%
	Þ					-					\$	-	
TOU - On Peak	\$	0.1320	135		17.82		0.1320	135				-	0.00%
Non-RPP Retailer Avg. Price	\$	0.1038	750	\$	77.85	\$	0.1038	750	\$		\$	-	0.00%
Average IESO Wholesale Market Price	\$	0.1038	750	\$	77.85	\$	0.1038	750	\$	77.85	\$	-	0.00%
						1							
Total Bill on TOU (before Taxes)				\$	108.80				\$	104.60		(4.20)	-3.86%
HST		13%		\$	14.14		13%		\$			(0.55)	-3.86%
Provincial Rebate		-8%		\$	(8.70)		-8%		\$	()		0.34	-3.86%
Total Bill on TOU				\$	114.24				\$	109.83	\$	(4.41)	-3.86%
Total Bill on Non-RPP Avg. Price				\$	125.15				\$	120.95		(4.20)	-3.36%
HST		13%		\$	16.27		13%		\$	15.72		(0.55)	-3.36%
Total Bill on Non-RPP Avg. Price (before 8% Provincial Rebate)				\$	141.42				\$	136.68		(4.75)	-3.36%
8% Provincial Rebate		-8%		\$	(10.01) 131.41		-8%		\$	(9.68) <b>127.00</b>		0.34 (4.41)	-3.36% -3.36%
Total Bill on Non-RPP Avg. Price				þ	131.41				Þ	127.00	Þ	(4.41)	-3.36%
Total Bill on Average IESO Wholesale Market Price				\$	125.15				\$	120.95	\$	(4.20)	-3.36%
HST		13%		\$	16.27		13%		\$		-	(0.55)	-3.36%
Provincial Rebate		-8%		\$	(10.01)		-8%		\$			0.34	-3.36%
Total Bill on Average IESO Wholesale Market Price				\$	131.41				\$	127.00	\$	(4.41)	-3.36%

# Customer Class: GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION RPP / Non-RPP: Non-RPP (Retailer)

 RPP / Non-RPP:
 Non-F

 Consumption
 2,000
 kWh

 Demand
 kW

 Current Loss Factor
 1.0369

 Proposed/Approved Loss Factor
 1.0369

		C	urrent OEB-Appro	veo	ł			Proposed				Imp	act
		Rate	Volume		Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)		\$ Change	% Change
Monthly Service Charge	\$	29.00	1	\$	29.00	\$	29.26	1	\$	29.26	\$	0.26	0.90%
Distribution Volumetric Rate	\$	0.0185	2000	\$	37.00	\$	0.0187	2000	\$	37.40	\$	0.40	1.08%
Fixed Rate Riders	\$	0.52	1	\$	0.52	\$	0.33	1	\$	0.33	\$	(0.19)	-36.54%
Volumetric Rate Riders	\$	0.0010	2000	\$	2.00	\$	0.0017	2000	\$	3.40	\$	1.40	70.00%
Sub-Total A (excluding pass through)				\$	68.52				\$	70.39	\$	1.87	2.73%
Line Losses on Cost of Power	\$	0.1038	74	\$	7.66	\$	0.1038	74	\$	7.66	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0026	2,000	\$	(5.20)	-\$	0.0037	2,000	\$	(7.40)	\$	(2.20)	42.31%
GA Rate Riders	\$	0.0066	2,000	\$	13.20	\$	0.0022	2,000	\$	4.40	\$	(8.80)	-66.67%
Low Voltage Service Charge	\$	0.0004	2,000	\$	0.80	\$	0.0004	2,000	\$	0.80	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or		0.70		¢	0.70		0.57	1	¢	0.57	¢	(0.04)	20.000/
any fixed (\$) Deferral/Variance Account Rate Riders	\$	0.78	1	\$	0.78	Þ	0.57	1	\$	0.57	Ą	(0.21)	-26.92%
Sub-Total B - Distribution (includes Sub-Total A)				\$	85.76				\$	76.42	\$	(9.34)	-10.89%
RTSR - Network	\$	0.0067	2,074	\$	13.89	\$	0.0065	2,074	\$	13.48	\$	(0.41)	-2.99%
RTSR - Connection and/or Line and Transformation Connection	\$	0.0035	2,074	\$	7.26	\$	0.0035	2,074	\$	7.26	\$	-	0.00%
Sub-Total C - Delivery (including Sub-Total B)				\$	106.91				\$	97.16	\$	(9.75)	-9.12%
Wholesale Market Service Charge (WMSC)	\$	0.0036	2,074	\$	7.47	\$	0.0036	2,074	\$	7.47	\$	-	0.00%
Rural and Remote Rate Protection (RRRP)	\$	0.0003	2,074	\$	0.62	\$	0.0003	2,074	\$	0.62	\$	-	0.00%
Standard Supply Service Charge													
Debt Retirement Charge (DRC)	\$	0.0070	2,000	\$	14.00	\$	-	2,000	\$	-	\$	(14.00)	-100.00%
											\$	-	
TOU - Off Peak	\$	0.0650	1,300	\$	84.50	\$	0.0650	1,300	\$	84.50	\$	-	0.00%
TOU - Mid Peak	\$	0.0940	340	\$	31.96	\$	0.0940	340	\$	31.96	\$	-	0.00%
TOU - On Peak	\$	0.1320	360	\$	47.52	\$	0.1320	360	\$	47.52	\$	-	0.00%
Non-RPP Retailer Avg. Price	ŝ	0.1038	2,000	\$	-		0.1038	2.000	\$	-		-	0.00%
Average IESO Wholesale Market Price	\$	0.1038	2,000	\$			0.1038	2,000	\$			-	0.00%
	÷	011000	2,000	÷	201100	Ť	0.1000	2,000	Ŷ	201100	Ŷ		0.0070
Total Bill on TOU (before Taxes)	1			\$	292.98				\$	269.23	\$	(23.75)	-8.11%
HST		13%		\$	38.09		13%		\$	35.00	\$	(3.09)	-8.11%
Provincial Rebate		-8%		\$	(23.44)		-8%		\$	(21.54)	\$	1.90	-8.11%
Total Bill on TOU				\$	· · ·				\$	. ,		(24.94)	-8.11%
				Ť	001100				÷	202.00	÷	(	0
Total Bill on Non-RPP Avg. Price	1			\$	336.60	1			\$	312.85	\$	(23.75)	-7.06%
HST		13%		\$		1	13%		\$	40.67		(3.09)	-7.06%
Total Bill on Non-RPP Avg. Price (before 8% Provincial Rebate)				\$					\$			(26.84)	-7.06%
8% Provincial Rebate		-8%		\$			-8%		\$			1.90	-7.06%
Total Bill on Non-RPP Avg. Price				\$	353.43			_	\$	328.49	\$	(24.94)	-7.06%
Total Bill on Average IESO Wholesale Market Price				\$	336.60				\$	312.85	¢	(23.75)	-7.06%
HST		13%		э \$		1	13%		Տ			(3.09)	-7.06%
Provincial Rebate		-8%		\$		1	-8%		\$			1.90	-7.06%
Total Bill on Average IESO Wholesale Market Price		- / *		\$					\$			(24.94)	-7.06%

#### Alectra - PowerStream Rates

MONTHLY RATES AND CHARGES - DELIVERY COMPONENT

0.57

2		3	4	5	6	7
Description		J. J		0		
	Effective until	Туре	Customers	Billing	2018	2019
RESIDENTIAL	Encouve unui		oustoiners	Determinant		
Service Charge Distribution Volumetric Rate		Rate Rate		\$ \$/kWh	21.63 0.0088	24.83 0.0044
Low Voltage Service Rate		Rate		\$/kWh	0.0005	0.0005
Rate Rider for Disposition of Smart Grid True-up Variance Account (2014 balance)	September 30, 2018	Rate Rider		\$		
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until Septemb	September 30, 2018	Rate Rider		\$	0.12	
Rate Rider for Recovery of Stranded Meter Assets (2016) - effective until September 30, 2018 Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20	September 30, 2018 September 30, 2018	Rate Rider Rate Rider		\$ \$/kWh	0.06	
Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September	September 30, 2018	Rate Rider		\$/kWh		
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of	September 30, 2018 next COS	Rate Rider Rate Rider	non_RPP	\$/kWh \$	0.0062	0.20
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 20	December 31, 2019 December 31, 2019	Rate Rider Rate Rider		\$/kWh		0.0003 (0.0010)
2019				\$/kWh \$/kWh		
Applicable Only for Non-RPP Customers December 31, 2019	December 31, 2019	Rate Rider	non-RPP	\$/kWh		0.0018
Applicable Only for Class B Customers Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019	December 31, 2019	Rate Rider	Class B			0.0000
Applicable only for Non-RPP Customers	April 30, 2019			\$/kWh	0.0004	0.0004
Smart Metering Entity Charge - effective until December 31, 2022 Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	December 31, 2022 April 30, 2019	Rate Rider		\$ \$/kWh	0.5700 (0.0030)	0.5700 (0.0030)
2019	-			\$/kWh		
Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of	April 30, 2019 f the next cost of service base	d rate order		\$	0.0002 0.1100	0.0002 0.1100
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	December 31, 2018			\$	0.1400	
Retail Transmission Rate - Network Service Rate Retail Transmission Rate - Line and Transformation Connection Service Rate		Rate Rate		\$/kWh \$/kWh	0.0075 0.0040	0.0073 0.0040
				ç, itt i i i		
GENERAL SERVICE LESS THAN 50 KW					<u> </u>	
Service Charge Distribution Volumetric Rate		Rate Rate		\$	29.00 0.0185	29.26 0.0187
Low Voltage Service Rate		Rate		\$/kWh \$/kWh	0.0004	0.0004
Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until Septembe		Rate Rider Rate Rider		\$/kWh	0.0003 (0.0003)	
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September	September 30, 2018 September 30, 2018	Rate Rider	non_RPP	\$/kWh <b>\$/kWh</b>	(0.0003) 0.0062	
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until Septemb	September 30, 2018	Rate Rider	_	\$/kWh	0.0002	
Rate Rider for Recovery of Stranded Meter Assets (2016) - effective until September 30, 2018 Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of	September 30, 2018 next COS	Rate Rider Rate Rider		\$ \$	0.21	0.21
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of	next COS	Rate Rider		\$/kWh		0.0001
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 20	December 31, 2019 December 31, 2019	Rate Rider Rate Rider		\$/kWh \$/kWh		0.0006 (0.0009)
2019				\$/kWh		
Applicable Only for Non-RPP Customers December 31, 2019	December 31, 2019	Rate Rider	non-RPP	\$/kWh		0.0018
Applicable Only for Class B Customers Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019	December 31, 2019	Rate Rider	Class B			0.0000
Applicable only for Non-RPP Customers	April 30, 2019	Rate Rider	non_RPP	\$/kWh	0.0004	0.0004
Smart Metering Entity Charge - effective until December 31, 2022 Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	December 31, 2022 April 30, 2019	Rate Rider		\$ \$/kWh	0.5700 (0.0030)	0.5700 (0.0030)
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of		d rate order		\$/kWh	0.0001	0.0001
2019 Applicable Only for Class B Customers	April 30, 2019			\$/kWh	0.0002	0.0002
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA)		d and a surface		\$/kWh	0.0009	0.0009
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	the next cost of service base December 31, 2018	d rate order		\$ \$	0.1200 0.4000	0.1200
Retail Transmission Rate - Network Service Rate		Rate Rate		\$/kWh	0.0067	0.0065
Retail Transmission Rate - Line and Transformation Connection Service Rate		Rate		\$/kWh	0.0035	0.0035
GENERAL SERVICE GREATER THAN 50 KW						
Service Charge		Rate		\$	142.24	143.52
Distribution Volumetric Rate Low Voltage Service Rate		Rate Rate		\$/kW \$/kW	4.2415 0.1589	4.2797 0.1589
Transformer Discount	0	Rate		\$/kW	(0.6000)	(0.6000)
Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until Septembe	September 30, 2018 September 30, 2018	Rate Rider Rate Rider		\$/kW \$/kW	0.1169 (0.1224)	
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018				\$/kW		
Applicable only for Class B Interval Metered Customers at December 31, 2016	September 30, 2018	Rate Rider	non_RPP			
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until Septemb Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	September 30, 2018 April 30, 2019	Rate Rider		\$/kW \$/kW	0.0620 0.0184	0.0184
	1,			\$/kW		
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Applicable only for Non-Wholesale Market Participants	April 30, 2019				(1.1367)	(1.1367)
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of	next COS	Rate Rider		\$		1.05
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA)	next COS December 31, 2019	Rate Rider Rate Rider		\$/kW \$/kW		0.0314 0.0886
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31,	December 31, 2019	Rate Rider		\$/kW \$/kWh		(0.2953)
2019			_			
Applicable Only for Non-RPP Customers non-Interval Metered Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until	December 31, 2019	Rate Rider	non-RPP	\$/kW		0.0018
December 31, 2019	Describe of costs	Dette Di t	01- 0			(0.00.00)
Applicable Only for Class B Customers	December 31, 2019	Rate Rider	Class B			(0.0046)
Applicable only for Non-Wholesale Market Participants	December 31, 2019	Rate Rider		\$/kW		(0.0453)
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of				\$ \$/kW	0.5700 0.0168	0.5700 0.016
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30,	How occurs a service base			\$/kW	0.0100	0.010
2018 Applicable only to non-RPP non-Interval Metered Customers	September 30, 2018	Rate Rider	non_RPP		2.3303	
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018				\$		
	December 31, 2018				4.2100	

		\$/kwh		
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers	April 30, 2019		0.0004	0.0004
	, ipin 66; 2016	\$/kW	0.0001	0.0001
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA)	April 30, 2019	0.000	0.0796	0.0796
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30,		\$/kW		
2019				
Applicable Only for Class B Customers	April 30, 2019		0.0905	0.0905
Retail Transmission Rate - Network Service Rate	Rate	\$/kW	2.6739	2.6130
Retail Transmission Rate - Line and Transformation Connection Service Rate	Rate	\$/kW	1.3420	1.3338
Retail Transmission Rate - Network Service Rate	Rate	\$/kW	2.8030	2.7391
Retail Transmission Rate - Line and Transformation Connection Service Rate	Rate	\$/kW	1.4520	1.4431

LARGE USE Service Charge		Rate		\$	6,128.34	6,183.50
Distribution Volumetric Rate		Rate		\$/kW	2.2623	2.2827
Low Voltage Service Rate Transformer Discount		Rate Rate		\$/kW \$/kW	0.1630 (0.6000)	0.1630 (0.6000)
Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20	September 30, 2018	Rate Rider		\$/kW	0.1584	(0.0000)
Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until Septembe	September 30, 2018	Rate Rider		\$/kW	(0.1659)	
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until Septemb	September 30, 2018	Rate Rider		\$/kW	0.0840	
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date or Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date or	next COS	0 0		\$ \$/kW		45.37 0.0167
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA)	next COS December 31, 2019	Rate Rider		\$/kW		(0.0705)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 20	December 31, 2019	Rate Rider		\$/kW		(0.5809)
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019				\$/kWh		
Applicable Only for Non-RPP Customers	December 31, 2019	Rate Rider	non-RPP			0.0000
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until				\$/kW		
December 31, 2019 Applicable Only for Class B Customers	December 31, 2019	Rate Rider	Class B			0.0000
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	April 30, 2019	Nate Nider	01233 D	\$/kW	(1.3235)	(1.3235)
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of				\$/kW	0.0090	0.0090
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA)	the next cost of service base	d rate order		\$ \$/kW	24.3400	24.3400
(2018) - effective until April 30, 2019	April 30, 2019				(0.0723)	(0.0723)
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	December 31, 2018			\$	97.02	
Retail Transmission Rate - Network Service Rate		Rate		\$/kW	3.2305	3.1569
Retail Transmission Rate - Line and Transformation Connection Service Rate		Rate		\$/kW	1.4016	1.3931
UNMETERED SCATTERED LOAD Service Charge		Rate		\$	8.68	8.76
Distribution Volumetric Rate		Rate		\$/kWh	0.0197	0.0199
Low Voltage Service Rate	0	Rate		\$/kWh	0.0005	0.0005
Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until Septembe	September 30, 2018 September 30, 2018	Rate Rider Rate Rider		\$/kWh \$/kWh	0.0003 (0.0003)	
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September	September 30, 2018	Rate Rider	non_RPP	\$/kWh	0.0062	
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until Septemb	September 30, 2018	Rate Rider		\$/kWh	0.0002	
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	April 30, 2019 December 31, 2018			\$/kWh \$	(0.0029) 0.08	-0.0029
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of	next COS	0		\$		0.06
Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date o Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA)	next COS December 31, 2019	0		\$/kWh \$/kWh		0.0001 (0.0003)
Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 20	December 31, 2019	Rate Rider		\$/kWh		(0.0003)
Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31,				\$/kWh		
2019 Applicable Only for Non-RPP Customers	December 31, 2019	Rate Rider	non-RPP			0.0018
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until	200011201 01, 2010		ilon tu t	\$/kWh		0.0010
December 31, 2019	Describer 04, 0040	Dete Didee	Olasa D			0.0000
Applicable Only for Class B Customers	December 31, 2019	Rate Rider	Class B			0.0000
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of	the next cost of service base	d rate order		\$	0.0300	0.0300
Pote Bides for Dispecifies of Clobal Adjustment Assount (2019) _ offective until Assil 20, 2010				\$/kWh		
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers	April 30, 2019				0.0004	0.0004
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30,				\$/kWh		
2019 Applicable Only for Class B Customers	April 20, 2010				0.0002	0.0002
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of	April 30, 2019 the next cost of service base	d rate order		\$/kWh	0.0002	0.0002
Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA)	April 30, 2019			\$/kWh	(0.0005)	(0.0005)
Retail Transmission Rate - Network Service Rate		Rate Rate		\$/kWh \$/kWh	0.0063 0.0037	0.0062 0.0037
Retail Transmission Rate - Line and Transformation Connection Service Rate						
Retail Transmission Rate - Line and Transformation Connection Service Rate						
		Rate		\$	4.23	4.27
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate		Rate		\$/kW	4.23 9.9582	10.0478
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate	September 30, 2018	Rate Rate		\$/kW \$/kW	4.23 9.9582 0.1170	
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September 30, 20	September 30, 2018 September 30, 2018	Rate		\$/kW \$/kW \$/kW \$/kW	4.23 9.9582	10.0478
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September		Rate Rate Rate Rider		\$/kW \$/kW \$/kW	4.23 9.9582 0.1170 0.1210	10.0478
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September 30, 20		Rate Rate Rate Rider	non_RPP	\$/kW \$/kW \$/kW \$/kW	4.23 9.9582 0.1170 0.1210	10.0478
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account (2016) - effective until September Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September	September 30, 2018	Rate Rate Rate Rider Rate Rider	non_RPP	\$/kW \$/kW \$/kW \$/kW <b>\$/kW</b> \$/kW	4.23 9.9582 0.1170 0.1210 (0.1267)	10.0478
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Accounts (2016) - effective until September 30, 2018	September 30, 2018 September 30, 2018	Rate Rate Rate Rider Rate Rider Rate Rider	non_RPP	\$/kW \$/kW \$/kW \$/kW <b>\$/kW</b>	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b>	10.0478
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account (2016) - effective until September Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider	non_RPP	\$/kW \$/kW \$/kW \$/kW \$/kW \$/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895	10.0478 0.1170 0.0895
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Accounts (2016) - effective until September Rate Rider for Disposition of Capacity Based Recovery Accounts (2016) - effective until September Rate Rider for Disposition of Capacity Based Recovery Accounts (2016) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base	Rate Rate Rate Rider Rate Rider Rate Rider d rate order	non_RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641	0.0478 0.1170 0.0895 0.0396
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider	non_RPP	\$/kW \$/kW \$/kW \$/kW \$/kW \$/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895	0.0478 0.1170 0.0895 0.0396 0.03
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Gapat Algustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until September Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition Loss Revuew Adjustment Mechanism Variance Account (RAMVA)	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS next COS December 31, 2019	Rate Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider 0	non_RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176)
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Gopal Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Gopal 2 Deferral/Variance Accounts (2016) - effective until September 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2016) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider tor Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Ri	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS	Rate Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider 0	non_RPP	SrkW SrkW SrkW SrkW SrkW SrkW SrkW SrkW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895	0.0478 0.1170 0.0895 0.0396 0.03 0.0737
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2019 Applicable only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Defarral/Variance Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Sido Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Sido Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS next COS December 31, 2019	Rate Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider 0 0 Rate Rider	non_RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895	0.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377)
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 22 Rate Rider for Disposition of Deferral/Variance Account - Power (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until the effective date of Rate Rider for Disposition of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective Rate Rider for Disposition	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS next COS December 31, 2019	Rate Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider 0	non_RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895	0.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176)
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2019 Applicable only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Defarral/Variance Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Sido Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Sido Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS next COS December 31, 2019 December 31, 2019	Rate Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider 0 0 Rate Rider	-	SrkW SrkW SrkW SrkW SrkW SrkW SrkW SrkW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895	0.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377)
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Legrand/Variance Accounts (2016) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Legrand/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Legrand/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Legrand/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until December 31, 20 Rate Rider for Disposition of Cabal Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Cabal Adjustment Account (2019) - in effect until December 31, 20 Rate Rider for Disposition of Cabal Rightsmert Account (2019) - in effect until December 31, 20 Rate Rider for Disposition of Cabal Rightsmert Account (2019) - effective until December 31, 20 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Cabal Rightsmerts Rate Rider for D	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS December 31, 2019 December 31, 2019 December 31, 2019	Rate Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider 0 0 Rate Rider	-	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895 0.0396	0.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377)
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - effective until December 31, 20 Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 20 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 20 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Cisposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Second Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Second Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Cl	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider	non-RPP	SrkW SrkW SrkW SrkW SrkW SrkW SrkW SrkW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377) 0.0018 (0.0050)
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Deferral/Variance Account (2016) - effective until September 30, 2018 Applicable only for on-RPP Customers Rate Rider for Disposition of Gabal Adjustment Account (2016) - effective until September 30, 2018 Applicable only for Class B Customers Rate Rider for Disposition of Gabal Adjustment Account (2016) - effective until September 30, 2018 Applicable only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 20 Rate Rider for Disposition of Deferral/Variance Account (LARMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 20 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Rase S Customers Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of 2018 Foregone Revenue - effective unt	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377) 0.0018
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Account (2016) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - effective until Capital Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2018 Active for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until Rate Rider for Recovery	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Lest Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until the effective date of Rate Rider for Disposition of Lest Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Deferral/Variance Account (2019) - in effect until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capachy Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of Incremental Capital Module (2018) - in	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service basel- next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 the next cost of service basel- April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.03 0.03 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0200 0.0004
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Account (2016) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - effective until Capital Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2018 Active for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until Rate Rider for Recovery	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for on-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Disposition of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Lost Revue Adjustment Machanism Variance Account (RAMVA) Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 201 Applicable Only for Class B Customers Rate Rider for Disposition of Deferral/Variance Account (RAMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Rase S Customers Rate Rider for Disposition of Global Adjustment Account (2018) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - in effective until December 31, 2019 Applicable Only for Class B Customers Rate Rider for Disposition of Global Adjustment Account (2018) - in effective until April 30, 2019 Applicable Only for Class B Customers Ra	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 0 Rate Rider Rate Rider Rate Rider Rate Rider	non-RPP	SrkW SrkW SrkW SrkW SrkW SrkW SrkW SrkW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895 0.0396 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.039 0.039 (0.0377) 0.0018 (0.3377) 0.0018 (0.0050) 0.0200 0.0200 (0.3850)
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 201 Rate Rider for Disposition of Deferral/Variance Account (2016) - effective until September 30, 2018 Applicable only for on-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Disposition of Grobal Adjustment Account (2016) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018 Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effe	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895 0.0396 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.03 0.033 0.0737 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0200 0.0004 (1.0740)
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2018) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Capatily Based Recovery Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Capatily Based Recovery Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 2018 Rate Rider for Disposition of Global Adjustment Account (2018) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - in effect until April 30, 2019 Applicable only for Non-RPP Customers Rate Rider for Disposition of Global Adjustm	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider Rate Rider d rate order	non-RPP	S/k/W S/k/W S/k/W S/k/W S/k/W S/k/W S/k/W S/k/W S/k/W S/k/W S/k/W S/k/W S/k/W	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396 0.0396 0.0396 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.073 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0004 (1.0740) (0.3850) 2.0304
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 20 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2019 Applicable Only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2019 Applicable Only for Class B Customers Rate Rider for Disposition of Lopacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Disposition of Lopacity Based Recovery Account (2019) - in effect until the effective date of Rate Rider for Disposition of Lopacity Based Recovery Account (2019) - in effect until the effective date of Rate Rider for Disposition of Lopac Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until Becember 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until Becember 31, 2018 Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until Based Retar	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0400 0.0200 0.0004 (1.0740) (0.3850) 2.0778 0.9929	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 0.02176) (0.3377) 0.0018 (0.0050) 0.0200 0.0200 0.0200 0.0200 0.0200 0.0200 0.0004 (1.0740) (0.3855) 0.3859 0.0304 0.3859 0.0304 0.3859 0.0304
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 201 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Cust Adjustance Accounts (2019) - effective until Customers Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2018 Applicable only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2018) - effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - effect until the effective date of	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider d rate order Rate Rider Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0390 0.0004 (1.0740) (0.3850) 2.0778 0.9929	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0004 (1.0740) (0.3850) 2.0304 0.9869
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 2018 Active To Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Deferral/Variance Account (LRAMVA) Rate Rider for Disposition of Deferral/Variance Account (LRAMVA) Rate Rider for Disposition of Deferral/Variance Account (LRAMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 20 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2018) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Accoun	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019 April 30, 2019	Rate Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider 0 0 Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0200000000	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0200 0.0200 0.0200 0.0004 (1.0740) (0.3850) 2.0304 0.3859 2.0304 0.3869
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 201 Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Cust Adjustance Accounts (2019) - effective until Customers Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2018 Applicable only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2018) - effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - effect until the effective date of	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baser next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019 April 30, 2019	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider d rate order Rate Rider d rate order Rate Rider Rate Rider Rate Rider Rate Rider	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0390 0.0004 (1.0740) (0.3850) 2.0778 0.9929	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0004 (1.0740) (0.3850) 2.0304 0.9869
Retail Transmission Rate - Line and Transformation Connection Service Rate  SENTINEL  Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for on-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable only for Ino-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Accounts (2019) - inflect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Deferral/Variance Account (2019) - effective until December 31, 20 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until April 30, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30, 2019 Applicable Only for Rase S Customers Rate Rider for Disposition of Deferral/Variance Account (2018) - effective unt	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baseners next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019 April 30, 2019 September 30, 2018 September 30, 2018	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider 0 Rate Rider Rate Rider d rate order Rate Rider Rate Rate Rate Rate Rate Rate Rate Rate	non-RPP	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0390 0.0400 0.0200 0.0004 (1.0740) (0.3850) <b>2.0778</b> 0.9929 0.9929	10.0478 0.1170 0.0895 0.0396 0.03 0.073 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0004 (1.0740) (0.3850) 2.0304 0.9869
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2019 Applicable Only for Iclass B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Lost Revenue Adjustment Account (2019) - effective until April 30, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Deferral/Variance Account (2018) - effective until April 30, 2019 Applicable Only for Non-RPP Customers R	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019 April 30, 2019 April 30, 2019 September 30, 2018 September 30, 2018 September 30, 2018	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rider Rate Rate Rate Rate Rate Rate Rate Rate	non-RPP Class B	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0004 (1.0740) (0.3850) 2.0304 0.9869 1.21 6.4365 0.1288
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2018 Applicable Only for Class B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2019) - effective until Customers Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until the effective date of Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2018 Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2018) - effective until Beeffective date of Rate Rider for Disposition of Global Adjustment Account (2018) - in effect until the effective date of Rate Rider for Disposition of Global Adjustment Account (2018) - effective until April 30, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30,	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service baseners next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019 April 30, 2019 September 30, 2018 September 30, 2018	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider 0 Rate Rider Rate Rider d rate order Rate Rider Rate Rate Rate Rate Rate Rate Rate Rate	non-RPP Class B	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) <b>2.3977</b> 0.0641 0.0895 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0396 0.0390 0.0400 0.0200 0.0004 (1.0740) (0.3850) <b>2.0778</b> 0.9929 0.9929	10.0478 0.1170 0.0895 0.0396 0.03 0.073 (0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0004 (1.0740) (0.3850) 2.0304 0.9869
Retail Transmission Rate - Line and Transformation Connection Service Rate SENTINEL Service Charge (per Connection) Distribution Volumetric Rate Low Voltage Service Rate Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until September 30, 2018 Applicable only for non-RPP Customers Rate Rider for Disposition of Global Adjustment Account (2016) - effective until September 30, 2019 Applicable Only for Iclass B Customers Rate Rider for Disposition of Capacity Based Recovery Account (2016) - effective until September 30, 2019 Applicable Only for Class B Customers Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Lost Revenue Adjustment Account (2019) - effective until Capital Module (2019) - in effect until the effective date of Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Lost Revenue Adjustment Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Deferral/Variance Account (2018) - effective until Applicable Only for Non-RPP Customers Rate Rider for Disposition of Lost Revenue Adjustment Account (2018) - in effect until the effective date of Rate Rider for Disposition of Deferral/Variance Account (2018) - effective until April 30, 2019 Applicable Only for Non-RPP Customers Rate Rider for Disposition of Deferral/Variance Account (2018) - effective until April 30, 2019 Applicable only for Non-R	September 30, 2018 September 30, 2018 September 30, 2018 April 30, 2019 the next cost of service base next COS next COS next COS December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 December 31, 2019 April 30, 2019 April 30, 2019 April 30, 2019 April 30, 2019 September 30, 2018 September 30, 2018 September 30, 2018	Rate Rate Rate Rider Rate Rider Rate Rider Rate Rider 0 Rate Rider Rate Rider Rate Rider d rate order Rate Rider Rate Rate Rate Rate Rate Rate Rate Rate	non-RPP Class B	S/kW S/kW S/kW S/kW S/kW S/kW S/kW S/kW	4.23 9.9582 0.1170 0.1210 (0.1267) 2.3977 0.0641 0.0895 0.0396	10.0478 0.1170 0.0895 0.0396 0.03 0.0737 0.2176) (0.3377) 0.0018 (0.0050) 0.0200 0.0004 (1.0740) (0.3850) 2.0304 0.9869 1.21 6.4365 0.1288

Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date o Rate Rider for Recovery of Incremental Capital Module (2019) - in effect until the effective date o Rate Rider for Disposition of Lost Revenue Adjustment Mechanism Variance Account (LRAMVA) Rate Rider for Disposition of Deferral/Variance Accounts (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - effective until December 31, 20 Rate Rider for Disposition of Global Adjustment Account (2019) - field Rate Rider for Disposition of Global Adjustment Account (2019) - field Rate Rider for Disposition of Global Adjustment Account (2019) - field Rate Rider for Disposition of Global Adjustment Account (2019) - field Rate Rider for Disposition of Rate Rider for Disposition for Rate Rider for Disposition for Rate Rider for Rate Rider for Rate Rider Rate Rider for Rate Rate Rate Rate Rate Rate Rate Rate	next COS December 31, 2019	Rate Rider Rate Rider 0 Rate Rider		\$ \$/kW \$/kW \$/kW		0.01 0.0472 1.2612 (0.3185)
2019 Applicable Only for Non-RPP Customers	December 31, 2019	Rate Rider	non-RPP			0.0018
Rate Rider for Disposition of Capacity Based Recovery Account (2019) - effective until December 31, 2019				\$/kW		
Applicable Only for Class B Customers	December 31, 2019	Rate Rider	Class B			(0.0047)
Rate Rider for Recovery of 2018 Foregone Revenue - effective until December 31, 2018	December 31, 2018			\$	0.0100	
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until April 30, 2019	April 30, 2019			\$/kW	(1.0519)	(1.0519)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until April 30,				\$/kW		
2019						
Applicable Only for Class B Customers	April 30, 2019				0.0870	0.0870
Rate Rider for Recovery of Incremental Capital Module (2018) - in effect until the effective date of	the next cost of service base	ed rate order		\$/kW	0.0253	0.0253
Retail Transmission Rate - Network Service Rate		Rate		\$/kWh	2.6888	2.6275
Retail Transmission Rate - Line and Transformation Connection Service Rate		Rate		\$/kWh	1.4379	1.4291

# POWERSTREAM Rate Zone

Distribution Bill Impacts										
Customer Class	Billing Units	Average Monthly	2019 vs. 2018							
		Volume		\$	%					
Residential	kWh	750	\$	0.18	0.6%					
GS<50	kWh	2,000	\$	1.87	2.7%					
GS>50	kW	250	\$	37.66	3.1%					
Large User	kW	7,350	\$	(242.27)	(1.1)%					
Street Lighting	kW	1	\$	1.38	16.8%					

Table excludes the impact of HST (13%) & Provincial Rebate (8%)

Distribution Bill and All Rate Rider Bill Impacts										
Customer Class	Billing Units	Average Monthly		2019	vs. 2018					
		Volume		\$	%					
Residential	kWh	750	\$	(0.74)	(2.5)%					
GS<50	kWh	2,000	\$	(0.54)	(0.8)%					
GS>50	kW	250	\$	(501.34)	(30.5)%					
Large User	kW	7,350	\$	(5,074.16)	(35.1)%					
Street Lighting	kW	1	\$	(0.71)	(6.6)%					

Table excludes the impact of HST (13%) & Provincial Rebate (8%)

Total Bill Impacts											
Customer Class	Billing Units	Average Monthly		2019	vs. 2018						
Gustomer Glass	Bining Onits	Volume		\$	%						
Residential	kWh	750	\$	(0.90)	(0.9)%						
GS<50	kWh	2,000	\$	(14.95)	(5.4)%						
GS>50	kW	250	\$	(1,078.61)	(8.9)%						
Large User	kW	7,350	\$	(25,277.59)	. ,						
Street Lighting	kW	1	\$	(2.74)	(5.8)%						

Table excludes the impact of HST (13%) & Provincial Rebate (8%)

Total Bill Impacts including HST										
Customer Class	Billing Units	Average Monthly	2018 vs. 2017 after 8% rebate							
		Volume		\$	%					
Residential	kWh	750	\$	(0.95)	(0.9)%					
GS<50	kWh	2,000	\$	(15.70)	(5.4)%					
GS>50	kW	250	\$	(1,218.83)	(8.9)%					
Large User	kW	7,350	\$	(28,563.68)	(6.8)%					
Street Lighting	kW	1	\$	(3.10)	(5.8)%					

#### Back to Index

Index						
Customer Class:	RESIDENTIAL SE	RVIC	CE CLASSIFIC	CATION		
RPP / Non-RPP:		RI	PP	Class E	3	
Consumption	7	750 I	kWh			
Demand	-	. I	kW			
Current Loss Factor	1.0369					
Proposed/Approved Loss Factor	1.0369					
				With Fair Hydro	Act, 2017 Reductions (RAT	E APPLICATION)
			-			

	Current OEB-Approved			Proposed				Impact					
		Rate	Volume	(	Charge		Rate	Volume		Charge			
		(\$)			(\$)		(\$)			(\$)	\$	Change	% Change
Monthly Service Charge	\$	21.63	1	\$	21.63	\$	24.83	1	\$	24.83	\$	3.20	14.79%
Distribution Volumetric Rate	\$	0.0088	750	\$	6.60	\$	0.0044	750	\$	3.30	\$	(3.30)	-50.00%
Fixed Rate Riders	\$	0.25	1	\$	0.25	\$	0.31	1	\$	0.31	\$	0.06	24.00%
Volumetric Rate Riders	\$	-	750	\$	-	\$	0.0003	750	\$	0.23	\$	0.23	
Sub-Total A (excluding pass through)				\$	28.48				\$	28.67	\$	0.18	0.65%
Line Losses on Cost of Power	\$	0.0820	28	\$	2.27	\$	0.0820	28	\$	2.27	\$	-	0.00%
Total Deferral/Variance Account Rate Riders	-\$	0.0028	750	\$	(2.10)	-\$	0.0038	750	\$	(2.85)	\$	(0.75)	35.71%
GA Rate Riders	\$	-	-			\$	-	-					
Low Voltage Service Charge	\$	0.0005	750	\$	0.38	\$	0.0005	750	\$	0.38	\$	-	0.00%
Smart Meter Entity Charge (if applicable) and/or any fixed (\$) Deferral/Variance Account Rate Riders	\$	0.75	1	\$	0.75	\$	0.57	1	\$	0.57	\$	(0.18)	-24.00%
Sub-Total B - Distribution													
(includes Sub-Total A)				\$	29.77				\$	29.03	\$	(0.74)	-2.50%
RTSR - Network	\$	0.0075	778	\$	5.83	\$	0.0073	778	\$	5.68	\$	(0.16)	-2.67%
RTSR - Connection and/or Line		0.0040	778	\$	3.11	~	0.0040	778	\$	3.11	¢		0.00%
and Transformation Connection	Þ	0.0040	//8	Э	3.11	>	0.0040	//8	\$	3.11	\$	-	0.00%
Sub-Total C - Delivery				\$	38.72				\$	37.82	\$	(0.90)	-2.33%
(including Sub-Total B)				٣	00.72				Ŷ	07.02	٣	(0.50)	2.0070
Wholesale Market Service	\$	0.0036	778	\$	2.80	\$	0.0036	778	\$	2.80	\$	-	0.00%
Charge (WMSC) Rural and Remote Rate													
Protection (RRRP)	\$	0.0003	778	\$	0.23	\$	0.0003	778	\$	0.23	\$		0.00%
Standard Supply Service Charge	ŝ	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$		0.00%
Debt Retirement Charge (DRC)	\$	-	-	Ŧ	0.20	S	-	-	Ť		Ŧ		
OESP	ŝ	_	-			ŝ					\$	1.1	
TOU - Off Peak	\$	0.0650	488	\$	31.69	\$	0.0650	488	\$	31.69	\$	1.1	0.00%
TOU - Mid Peak	\$	0.0940	128	\$	11.99	S	0.0940	128	\$	11.99	\$	1.1	0.00%
TOU - On Peak	ŝ	0.1320	135	\$	17.82	ŝ	0.1320	135	\$	17.82	\$	1.1	0.00%
Total Bill on TOU (before Taxes)	1			\$	103.49				\$	102.59	\$	(0.90)	-0.87%
HST		13%		\$	13.45		13%		\$	13.34	\$	(0.12)	-0.87%
Total Bill on TOU (before 8% Provincial Rebate)				\$	116.95				\$	115.93	\$	(1.02)	-0.87%
8% Provincial Rebate		-8%		\$	(8.28)		-8%		\$	(8.21)	\$	0.07	-0.87%
Total Bill on TOU				\$	108.67				\$	107.72	\$	(0.95)	-0.87%
			_		_							_	

				Without a	iny	Fair Hydro	o Act, 2017 R	edu	uctions			
	Curre	ent OEB-App	rov	ed			Proposed				Imp	pact
	Rate	Volume	(	Charge		Rate	Volume		Charge			
	(\$)			(\$)		(\$)			(\$)	\$	Change	% Change
\$	21.63	1	\$	21.63	\$	24.83	1	\$	24.83	\$	3.20	14.79%
\$	0.0088	750	\$	6.60	\$	0.0044	750	\$	3.30	\$	(3.30)	-50.00%
\$	0.25	1	\$	0.25	\$	0.31	1	\$	0.31	\$	0.06	24.00%
\$	-	750	\$	-	\$	0.0003	750	\$	0.23	\$	0.23	
			\$	28.48				\$	28.67	\$	0.18	0.65%
\$	0.1151	28	\$	3.18	\$	0.1151	28	\$	3.18	\$	-	0.00%
-\$	0.0028	750	\$	(2.10)	-\$	0.0038	750	\$	(2.85)	\$	(0.75)	35.71%
				. ,					. ,		. ,	
\$ \$	- 0.0005	-	\$	0.00	\$ \$	- 0.0005	-	\$	0.00	\$		0.000/
Þ	0.0005	750	Э	0.38	\$	0.0005	750	Э	0.38	Э	-	0.00%
\$	0.75	1	\$	0.75	\$	0.57	1	\$	0.57	\$	(0.18)	-24.00%
			\$	30.69				\$	29.94	\$	(0.75)	-2.43%
\$	0.0075	778	\$	5.83	\$	0.0073	778	\$	5.68	\$	(0.16)	-2.67%
\$	0.0040	778	\$	3.11	\$	0.0040	778	\$	3.11	\$		0.00%
φ	0.0040	110	ዓ	3.11	9	0.0040	110	9	3.11	9	•	0.00 %
			\$	39.63				\$	38.73	\$	(0.90)	-2.27%
\$	0.0036	778	\$	2.80	\$	0.0036	778	\$	2.80	\$	-	0.00%
\$	0.0021	778	\$	1.63	\$	0.0021	778	\$	1.63	\$	-	0.00%
\$	0.25	1	\$	0.25	\$	0.25	1	\$	0.25	\$	-	0.00%
\$	0.0007	750	\$	0.53	\$	0.0007	750	\$	0.53			
\$	0.0011	778	\$	0.86	\$	0.0011	778	\$	0.86	\$		0.00%
\$	0.0910	488	\$	44.36	\$	0.0910	488	\$	44.36	\$	-	0.00%
\$	0.1330	128	\$	16.96	\$	0.1330	128	\$	16.96	\$	-	0.00%
\$	0.1850	135	\$	24.98	\$	0.1850	135	\$	24.98	\$	-	0.00%
			\$	131.99				\$	131.09	\$	(0.90)	-0.68%
	13%		\$	17.16		13%		\$	17.04	\$	(0.12)	-0.68%
			\$	149.15				\$	148.13	\$	(1.02)	-0.68%
			\$	-		0%		\$	-	\$	-	
			\$	149.15				\$	148.13	\$	(1.02)	-0.68%
				37%					38%			

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 26 Filed: June 7, 2018

# ATTACHMENT 26 GA WORKFORM POWERSTREAM RZ

#### Account 1589 Global Adjustment (GA) Analysis Workform

Input cells	
Drop down cells	

Note 1 Year(s) Requested for Disposition

2017	

Note 2 Consumption Data Excluding for Loss Factor (Data to agree with RRR as applicable)

Year		2017				
Total Metered excluding WMP	C = A+B	8,207,774,786	-	-	kWh	100%
RPP	A	3,673,621,965			kWh	44.8%
Non RPP	B = D+E	4,534,152,821	-	-	kWh	55.2%
Non-RPP Class A	D	802,973,439			kWh	9.8%
Non-RPP Class B*	E	3,731,179,381			kWh	45.5%

\*Non-RPP Class B consumption reported in this table is not expected to directly agree with the Non-RPP Class B Including Loss Adjusted Billed Consumption in the GA Analysis of Expected Balance table below. The difference should be equal to the loss factor.

#### Note 3 GA Billing Rate

GA is billed on the

1st Estimate Non-interval metered

2017

#### GA Billing Rate Description

Non-interval metered customers are billed throughout the month and consumption is allocated between months based on the number of days in each month in the billing period. The consumption for each month is billed at the 1st estimate rate for that month.

Interval metered customers are billed for the calendar month in the middle of the next month. Consumption is for a single month and the actual GA rate is known at the time of billing and used to bill GA.

Limitations of PowerStream's billing system calcualtion of unbilled amounts will lead to significant timing differences between the GA revenue booked in the year versusthat shown in the GA Workform.

# Note 4 GA Analysis of Expected Balance

Year	2017								
				Non-RPP Class B					
	Non-RPP Class B	Deduct Previous	Add Current Month Unbilled Loss	Including Loss					
	Including Loss Adjusted	Month Unbilled Loss	Adjusted	Adjusted Consumption,	CA Pate to be Rilled for	\$ Consumption at GA Rate	GA Actual Rate	\$ Consumption at	Expected GA
Calendar Month	Billed Consumption	Adjusted Consumption		Adjusted for Unbilled	Month (\$/kWh)	Billed	Paid (\$/kWh)	Actual Rate Paid	Variance (\$)
	kWh	kWh	kWh	kWh	Monar (wixwii)	Dilicu	i dia (antini)	Actual Nate Fuld	Valiance (4)
	KVVII	KVVII	KVVII	KVVII					
	F	G	н	l = F-G+H	J	K = I*J	L	M = I*L	=М-К
January - Interval metered	153,986,496	179,978,188	171,712,875	145,721,183		· · · · · · · · ·	\$ 0.08227	\$ 11,988,482	
January - Non-interval metered	217,315,409	222,052,626	230,811,900	226,074,684	\$ 0.06687	\$ 15,117,614	\$ 0.08227	\$ 18,599,164	\$ 3,481,550
January - Total	371,301,905	402,030,814	402,524,775	371,795,866		\$ 27,106,096		\$ 30,587,646	
February - Interval metered	165,891,257	171,712,875	163,070,351	157,248,733				\$ 13,584,718	
February - Non-interval metered	202,996,677	230,811,900	196,259,913	168,444,691	\$ 0.10559		\$ 0.08639	\$ 14,551,937	-\$ 3,234,138
February - Total	368,887,935	402,524,775	359,330,264	325,693,424		\$ 31,370,793		\$ 28,136,655	
March - Interval metered	150,111,033	163,070,351	179,832,353	166,873,036	\$ 0.07135				\$ -
March - Non-interval metered	230,838,883	196,259,913	177,415,769	211,994,739	\$ 0.08409		\$ 0.07135	\$ 15,125,825	-\$ 2,700,813
March - Total	380,949,916	359,330,264	357,248,123	378,867,775		\$ 29,733,029		\$ 27,032,216	-\$ 2,700,813
April - Interval metered	173,694,696	179,832,353	162,823,231	156,685,573	\$ 0.10778	\$ 16,887,571	\$ 0.10778	\$ 16,887,571	\$-
April - Non-interval metered	168,786,991	177,415,769	192,021,679	183,392,900	\$ 0.06874	\$ 12,606,428	\$ 0.10778	\$ 19,766,087	\$ 7,159,659
April - Total	342,481,687	357,248,123	354,844,909	340,078,474		\$ 29,493,999		\$ 36,653,658	
May - Interval metered	152,398,947	162,823,231	160,945,955	150,521,672	\$ 0.12307	\$ 18,524,702	\$ 0.12307	\$ 18,524,702	\$-
May - Non-interval metered	213,494,264	192,021,679	177,735,124	199,207,709	\$ 0.10623	\$ 21,161,835	\$ 0.12307	\$ 24,516,493	\$ 3,354,658
May - Total	365,893,211	354,844,909	338,681,079	349,729,381		\$ 39,686,537		\$ 43,041,195	\$ 3,354,658
June - Interval metered	164,016,933	160,945,955	171,973,675	175,044,653	\$ 0.11848	\$ 20,739,290	\$ 0.11848	\$ 20,739,290	\$ -
June - Non-interval metered	191,497,804	177,735,124	187,089,278	200,851,958	\$ 0.11954	\$ 24,009,843	\$ 0.11848	\$ 23,796,940	-\$ 212,903
June - Total	355,514,737	338,681,079	359,062,953	375,896,611		\$ 44,749,134		\$ 44,536,230	-\$ 212,903
July - Interval metered	170,320,465	171,973,675	181,512,900	179,859,691	\$ 0.11280	\$ 20,288,173	\$ 0.11280	\$ 20,288,173	\$-
July - Non-interval metered	188,484,856	187,089,278	198,532,244	199,927,822	\$ 0.10652	\$ 21,296,312	\$ 0.11280	\$ 22,551,858	\$ 1,255,547
July - Total	358,805,321	359,062,953	380,045,144	379,787,513		\$ 41,584,485		\$ 42,840,031	\$ 1,255,547
August - Interval metered	98,328,866	181,512,900	101,173,535	17,989,500	\$ 0.10109	\$ 1,818,559	\$ 0.10109	\$ 1,818,559	\$-
August - Non-interval metered	206,681,340	198,532,244	183,551,830	191,700,926	\$ 0.11500	\$ 22,045,606	\$ 0.10109	\$ 19,379,047	-\$ 2,666,560
August - Total	305,010,205	380,045,144	284,725,365	209,690,426		\$ 23,864,165		\$ 21,197,605	-\$ 2,666,560
Sept - Interval metered	110,236,940	101,173,535	102,601,801	111,665,206	\$ 0.08864	\$ 9,898,004	\$ 0.08864	\$ 9,898,004	\$-
Sept - Non-interval metered	195,412,953	183,551,830	184,127,938	195,989,061	\$ 0.12739		\$ 0.08864	\$ 17,372,470	-\$ 7,594,576
Sept - Total	305,649,894	284,725,365	286,729,738	307,654,267		\$ 34,865,050		\$ 27,270,474	-\$ 7,594,576
October - Interval metered	100,086,146	102,601,801	90,600,416	88,084,761	\$ 0.12563	\$ 11,066,089	\$ 0.12563	\$ 11,066,089	\$ -
October - Non-interval metered	191,972,467	184,127,938	163,791,847	171,636,376	\$ 0.10212		\$ 0.12563	\$ 21,562,678	
October - Total	292,058,612	286,729,738	254,392,263	259,721,137		\$ 28,593,595		\$ 32,628,766	\$ 4,035,171
November - Interval metered	100,424,409	90,600,416	100,807,577	110.631.569	\$ 0.09704	\$ 10.735.687	\$ 0.09704	\$ 10.735.687	

November - Non-interval metered	181,523,792	163,791,847	162,135,875	179,867,820	\$ 0.11164	\$ 20,080,443	\$ 0.09704	\$ 17,454,373	-\$	2,626,070
November - Total	281,948,200	254,392,263	262,943,452	290,499,389		\$ 30,816,131		\$ 28,190,061	-\$	2,626,070
December - Interval metered	100,630,480	100,807,577	108,515,106	108,338,009	\$ 0.09207	\$ 9,974,680	\$ 0.09207	\$ 9,974,680	\$	-
December - Non-interval metered	159,978,657	162,135,875	197,070,456	194,913,238	\$ 0.08391	\$ 16,355,170	\$ 0.09207	\$ 17,945,662	\$	1,590,492
December - Total	260,609,137	262,943,452	305,585,562	303,251,247		\$ 26,329,850		\$ 27,920,342	\$	1,590,492
2017 total - Interval metered	1,640,126,669	1,767,032,857	1,695,569,774	1,568,663,586		\$ 157,412,347		\$ 157,412,347	\$	-
2017 total - Non-Interval metered	2,348,984,093	2,275,526,022	2,250,543,853	2,324,001,924		\$ 230,780,517		\$ 232,622,534	\$	1,842,016
2017 year - Total	3,989,110,762	4,042,558,879	3,946,113,627	3,892,665,510		\$ 388,192,864		\$ 390,034,880	\$	1,842,016

	Item	Applicability of Reconciling Item (Y/N)	Amount (Quantify if it is a significant reconciling item)	Explanation
	ange in Principal Balance in the GL (i.e. Transactions in the Ye	ar)	\$ 4,877,432	
	Remove impacts to GA from prior year RPP Settlement true up	Y		DR \$4,971k related to prior year but included in the GL in the current year, therefore, should
	process that are booked in current year			record CR in current year
	Add impacts to GA from current year RPP Settlement true up	Y		CR \$4,540k relates to current year but recorded in the GL in the following year, therefore, should
1b	process that are booked in subsequent year		\$4,539,888	record the CR in current year
2a	Remove prior year end unbilled to actual revenue differences	Ν		No prior year end unbilled to actual revenue differences booked in current year
2b	Add current year end unbilled to actual revenue differences	Ν		No current year end unbilled to actual revenue differences booked in the following year
	Remove difference between prior year accrual to forecast from long term load transfers	Ν		No difference between prior year accrual to forecast from long term load transfers
3b	Add difference between current year accrual to forecast from long term load transfers	Ν		No difference between current year accrual to forecast from long term load transfers
4	Remove GA balances pertaining to Class A customers	N		Insignificant amount relating to Class A customers
	Significant prior period billing adjustments included in current year GL balance but would not be included in the billing consumption used in the GA Analysis	Ν		No significant prior period billing adjustments
6	Total calculated costs using published rates compared to the actual IESO costs	Ν		Not a reconciling item
7				
8				
9				
10				
	Adjusted Net Change in Principal Balance in the GL		\$4,446,572	
	Net Change in Expected GA Balance in the Year Per Analysis		\$1,842,016	
	Unresolved Difference		(\$2,604,555)	
	Unresolved Difference as % of Expected GA Payments to			
	IESO		-0.7%	

Note 7 Cumulative Expected GA Balance (if multiple years requested for disposition)

Year	Annual Net Change in Expected GA Balance from GA Analysis (cell K47)	Annual Net Change in Principal GA Requesed for Disposition (cell K48)	Preliminary Difference (cell K49)	Total Reconciling Items (cell D70)	Unresolved Difference	Payments to IESO (cell J47)	Unresolved Difference as % of Expected GA Payments to IESO
2017	\$ 1,842,016	\$ 4,877,432	\$ 3,035,416	\$ 4,446,572	-\$ 2,604,555	\$ 390,034,880	-0.7%
					\$-		0.0%
					\$-		0.0%
					\$-		0.0%
Cumulative Balance	\$ 1,842,016.45	\$ 4,877,432.07	\$ 3,035,415.62	\$ 4,446,571.87	-\$ 2,604,555.41	\$ 390,034,880.21	N/A

### Additional Notes and Comments

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 27 Filed: June 7, 2018

# ATTACHMENT 27 LOST REVENUE ADJUSTMENT MECHANISM VARIANCE ACCOUNT WORK FORM POWERSTREAM RZ

Ontar	rio Energy Board		
		LRAMVA Work Form:	
		Summary Tab	Version 2.0 (2017)
Legend	User Inputs (Green)		
	Drop Down List (Blue)		
	Auto Populated Cells (White)		
	Instructions (Grey)		

LDC Name

Alectra -former PowerStream

#### Application Details

Please fill in the requested information: a) the amounts approved in the previous LRAMVA application, b) details on the current application, and c) documentation of changes if applicable.

A. Previous LRAMVA Application			B. Current LRAMVA Application			
Previous LRAMVA Application (EB#)	EB-2014-	0108/EB-2015-0003	Current LRAMVA Application (EB#)		EB-2017-00	24
Application of Previous LRAMVA Claim	2015 IRM	Application/2016 CIF	Application of Current LRAMVA Claim		2018 IRM A	pplica
Period of LRAMVA Claimed in Previous Application	2011-201	2/2013	Period of New LRAMVA in this Applica	ation	2014-2015	
Amount of LRAMVA Claimed in Previous Application	\$	206,935.00	Actual Lost Revenues (\$)	А	\$	
			Forecast Lost Revenues (\$)	в	\$	
			Carrying Charges (\$)	с	\$	
			LRAMVA (\$) for Account 1568	A-B+C	\$	

#### Table 1-a. LRAMVA Totals by Rate Class

Please update the customer rate classes applicable to the LDC in Table 1-a below. This will update all tables throughout the workform. The LRAMA total by rate class in Table 1-a should be used to inform the determination of rate riders in the Deferral and Variance Account Work Form or RM Rate Generator Model. If the LDC has more than 14 customer classes, LDCs are required to add rows to Table 1-a and update all tables and formulas in the work form accordingly. Please also ensure that the principle amounts in column E of Table 1-a capture the appropriate years and amounts for the LRAMA claim.

Customer Class	Billing Unit	Principle (\$)	Carrying Charges (\$)	Total LRAMVA (\$)	
Residential	kWh	\$0	\$22,451	\$22,451	charge
GS<50 kW	kWh	\$0	\$22,003	\$22,003	charge
GS>50 kW	kW	\$0	\$35,569	\$35,569	charge
Large Use	kW	\$0	-\$188	-\$188	credit to custom
Unmetered Scattered Load	kWh	\$0	-\$118	-\$118	credit to custom
Sentinel Lighting	kW	\$0	-\$6	-\$6	credit to custom
Street Lighting	kW	\$0	\$9,802	\$9,802	charge
		\$0	\$0	\$0	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
Total		\$0	\$89.513	\$89.513	net revenue

#### Table 1-b. Annual LRAMVA Breakdown by Year and Rate Class

In column C of Table 1-b below, please indicate with a 'check mark' the years in which LRAMVA has been claimed. This is to ensure that there are no amounts claimed retroactively. If you have inserted a check-mark for a particular year, please delete the amounts associated with actual and forecast lost revenues studied not be included in the current LRAMVA disposition, with the exception of the case noted below.

Depending on the period of LRAMVA to be claimed in the current application, LDCs are expected to adjust the applicable totals for carrying charges in row 83 of this table and the years included in the Total LRAMVA balance in row 84, as appropriate.

Description	LRAMVA Previously Claimed	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting								Total
		kWh	kWh	kW	kW	kWh	kW	kW								
2011 Actuals 2011 Forecast	Yes								\$0.00 \$0.00							
Amount Cleared	\$0.00															\$0.00
2012 Actuals 2012 Forecast	Yes								\$0.00 \$0.00							
Amount Cleared	\$0.00															\$0.00
2013 Actuals 2013 Forecast	Yes								\$0.00 \$0.00							
Amount Cleared	\$0.00															\$0.00
2014 Actuals 2014 Forecast		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00							
Amount Cleared																
2015 Actuals 2015 Forecast		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00							
Amount Cleared																
2016 Actuals 2016 Forecast		\$1,265,387.09 (\$623,331.84)	\$870,449.57 (\$241,180.80)	\$1,679,587.02 (\$662,355.86)	\$0.00 (\$5,378.76)	\$0.00 (\$3,379.76)	\$0.00 (\$163.90)	\$186,097.26 (\$19,365.08)	\$0.00 \$0.00	\$4,001,520.94 (\$1,555,156.00)						
Amount Cleared																
2017 Actuals 2017 Forecast		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00
Amount Cleared																
2018 Actuals 2018 Forecast		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00
Amount Cleared																
2019 Actuals		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

#### C. Documentation of Changes Original Amount

Amount for Final Disposition

\$ 89,512.73 \$ 89,512.73

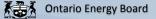
2019 Forecast	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Amount Cleared															
2020 Actuals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2020 Forecast	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Amount Cleared															
Carrying Charges	\$22,450.53	\$22,003.43	\$35,569.18	(\$188.08)	(\$118.18)	(\$5.73)	\$9,801.57	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$89,512.73
Total LRAMVA Balance	\$664,506	\$651,272	\$1,052,800	-\$5,567	-\$3,498	-\$170	\$176,534	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,535,878
Note: LDC to make note of assumptions included above, if any															

#### Table 1-c. Breakdown of Incremental and Persisting Lost Revenues Amounts (Dollars)

LDCs are requested to clear the cells in the table to show only the amounts related to this LRAMVA application. This table is a check on the LRAMVA disposition providing a breakdown of actual incremental and persisting savings by year.

	2011	2012	2013	3	2014	2015	2016	2017	2018	2019	2020		Total
2011	s -	s	- \$	-	\$ -	s -	\$ 261,163.5	s -	s -	s -	s -	\$	261,163.59
2012		\$	- \$		\$ .	ş .	\$ 406,153.9	\$ -	s -	\$	s -	\$	406,153.91
2013			\$	-	\$.	\$ -	\$ 471,518.5	s -	s -	\$ -	s -	\$	471,518.58
2014					s -	s -	\$ 811,245.6	s -	s -	\$ -	s -	\$	811,245.63
2015						\$ .	\$ 803,201.7	s -	s -	\$	s -	\$	803,201.72
2016							\$ 1,062,140.2	s -	s -	\$ -	s -	\$	1,062,140.26
2017								s -	s -	\$ -	s -	\$	-
2018									s -	\$ -	s -	\$	
2019										\$	s -	\$	
2020											s -	\$	
Actual Lost Revenues	s -	s	- s		s -	s -	\$ 3,815,423.6	s -	s -	s -	s -	s	3,815,423.69
Forecast Lost Revenues	s -	s	- s		\$ -	s -	\$ 1,555,156.0	) \$ -	s -	s -	s -	\$	1,555,156.00
Carrying Charges	s -	s	- s	-	\$ 160.8	\$ 904.01	\$ 14,616.6	\$ 45,661.64	\$ 89,512.73	\$ 89,512.73	\$ 89,512.73	s	329,881.34
Total					\$ 160.8								2,590,149.02

2 of 60



# LRAMVA Work Form: Summary of Changes

Version 2.0 (2017)

Legend

User Inputs (Green) Drop Down List (Blue) Instructions (Grey)

#### Table X-1. Changes in Assumptions from Generic Inputs in Work Form

Please document any changes in assumptions made to the work form that affect the calculation of LRAMVA. This may include, but are not limited to, the use of different monthly multipliers to claim demand savings from energy efficiency programs; use of different rate allocations between savings and adjustments; claiming historical savings persistence beyond a re-basing year; inclusion of additional adjustments affecting distribution rates; use of a different LRAMVA threshold; etc. All important changes should be highlighted in the work form as well.

No.	Tab	Cell Reference	Description	Rationale
1	4. 2011-2014 LRAM	B325	Replaced "Small Commercial Demand Response (HD)" with "Business Refrigeration Local	Not in the list of programs; there are no additional rows to enter programs that not listed
2	4. 2011-2014 LRAM	B454	Replaced "Small Commercial Demand Response (HD)" with "Business Refrigeration Local	Not in the list of programs; there are no additional rows to enter programs that not listed
3				
4	4. 2011-2014 LRAM	N326-N326, N454-N455	Added Monthly Multiplies of 12	Business Refrigeration program - savings for GS<50 and GS>50 classes
5	1. LRAMVA Summary			
6		Added Tab 8	Tab added to include S/L adjustment into the LRAMVa model and total claim	For consistent reporting purposes
7	1. LRAMVA Summary	E34, F34	Added principal and carrying interest from Tab 8	For consistent reporting purposes
8				
9				
10				
11				
12				
13				
14				
etc.				

#### Table X-2. Updates to LRAMVA Disposition

LDCs are requested to document any changes related to interrogatories or questions during the application process that affect the LRAMVA amount.

No.	Tab	Cell Reference	Description	Rationale
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
etc.				

Contario Energy Boar		LRAMVA Work Form:	
		Forecast Lost Revenues	Version 2.0 (2017)
egend	User Inputs (Green)		
	Drop Down List (Blue) Auto Populated Cells (White)		
	Instructions (Grey)		
able 2-a. LRAMVA Threshold	2013		

Please provide the LRAMVA threshold approved in the cost of service (COS) application, which is used as the comparator against actual savings in the period of the LRAMVA daim. The LRAMVA threshold should generally be consistent with the annualized savings targets developed from Appendix 2-1. If a manual update is required to reflect a different allocation of forecast savings that was approved by the OEB, please note the changes and provide rationale for the change in Tab 1-a.

kWh         kWh <th></th> <th>Residential GS-50 kW GS&gt;50 kW Large Use Unintered Statister Sentinel Lighting Street Lighting</th> <th></th>		Residential GS-50 kW GS>50 kW Large Use Unintered Statister Sentinel Lighting Street Lighting	
		kWh kWh kW kW kWh kW kW	
	kWh	44,207,932 16,984,563 73,463,176 1,251,684 208,627 7,674 976,097	
kW 202,051 195,431 3,732 20 2,868	kW	195,431 3,732 20 2,868	
Summary 44,207,932 16,984,563 195,431 3,732 208,627 20 2,868 0 0 0 0 0 0 0 0 0 0	Summary	<u>44,207,932</u> <u>16,984,563</u> <u>195,431</u> <u>3,732</u> <u>208,627</u> <u>20</u> <u>2,868</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u>	0 0 0

Basis of Threshold	0.5* 201X + 20XX + 0.5 * 20XX (if available)
Source of Threshold	2013 Settlement Agreement, p. X

Table 2-b. LRAMVA Threshold

2017

Please provide the LRAMVA threshold approved in the last COS application, which is used as the comparator against actual savings in the period of the LRAMVA claim. The LRAMVA threshold should generally be consistent with the annualized savings targets developed from Appendix 2-1. If a manual update is required to reflect a different allocation of forecast savings that was approved by the OEB, please note the changes and provide rationale for the change in Tab 1-a.

	Total				Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting							
		kWh	kWh	kW	kW	kWh	kW	kW							
kWh	80,983,843	48,703,932	32,279,911												
kW	321,969			321,969											
Summary		48,703,932	32,279,911	321,969	0	0	0	0	0	0	0	0	0	0	0

0.5\* 201X + 20XX + 0.5 \* 20XX (if available) Basis of Threshold 20XX Settlement Agreement, p. X

Source of Threshold

#### Table 2-c. Inputs for LRAMVA Thresholds

Please complete Table 2-c below by selecting the appropriate LRAMVA threshold year in column C. The LRAMVA threshold values in Table 2-c will auto-populate from Tables 2-a and 2-b depending on the year selected. If there was no LRAMVA threshold established for a particular year, please select the "blank" option, although it is generally expected that 2 COS applications would have been approved during the 2011 to 2020 period. The LRAMVA threshold values in Table 2-c will be auto-populated in Table 4 and 5 of this work form.

Year	LRAMVA Threshold (select year)	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting							
		kWh	kWh	kW	kW	kWh	kW	kW							
2011		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013	2013	44,207,932	16,984,563	195,431	3,732	208,627	20	2,868	0	0	0	0	0	0	0
2014	2013	44,207,932	16,984,563	195,431	3,732	208,627	20	2,868	0	0	0	0	0	0	0
2015	2013	44,207,932	16,984,563	195,431	3,732	208,627	20	2,868	0	0	0	0	0	0	0
2016	2013	44,207,932	16,984,563	195,431	3,732	208,627	20	2,868	0	0	0	0	0	0	0
2017	2017	48,703,932	32,279,911	321,969	0	0	0	0	0	0	0	0	0	0	0
2018		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020		0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: LDC to make note of assumptions included above, if any

Ontario Energy Board

# LRAMVA Work Form: Distribution Rates

Version 2.0 (2017)

Legend

User Inputs (Green) Auto Populated Cells (White) Instructions (Grey)

Tables

<u>Table 3</u> Table 3-a.

#### Table 3. Inputs for Distribution Rates and Adjustments by Rate Class

The rate classes in column B of Table 3 below are auto-populated from the customer class inputs in Table 1-a of the Summary Tab. Please provide the distribution rates by rate year and applicable adjustments per rate class starting from column D of Table 3 below. Any adjustments that affect distribution rates can be incorporated in the calculation by expanding the 'plus' button at the left hand bar. Table 3 will convert the distribution rates to a calendary year rate (January to December) based on the number of months from January to the start of the LDC's rate year, entered in row 16 of Table 3 or entered to as period 1). If rates are already on a January 1 to December 3 timeline, please enter 0 in row 16.

	Billing Unit	May 1, 2010 to Apr 30, 2011	May 1, 2011 to Apr 30, 2012	May 1, 2011 to Dec 31, 2012	Jan 1, 2013 to Dec 31, 2013	Jan 1, 2014 to Dec 31, 2014	Jan 1, 2015 to Dec 31, 2015	Jan 1, 20 Dec 31,		Jan 1, 2017 to Dec 31, 2017	update	upo	late	upo	late	update
Rate Year		2010	2011	2012	2013	2014	2015	201	6	2017	2018	20	19	20	20	2021
Period 1 (# months)	1	4	4	4	1	2	12	9		0						
Period 2 (# months)		8	8	5	11	10	0	3		12	12	1	2	1	2	12
Residential			-				-	\$ (	0.0143							
Rate rider for tax sharing	-							φ (	5.0145							
Rate rider for foregone revenue	kWh															
Changes in Transformer Allowance																
djusted rate								S (	0.0143		\$ -	\$	-	\$	-	
Calendar year equivalent				1			1		0.0141	1	\$-	\$		\$	-	
S<50 kW								\$ (	0.0142							
Rate rider for tax sharing	1															
tate rider for foregone revenue	kWh							\$ (	0.0009							
hanges in Transformer Allowance																
Adjusted rate									0.0151		\$ -		-	\$	-	
Calendar year equivalent								\$ (	0.0142		\$-	\$	-	\$	-	
S>50 kW								\$ 3	3.3877							
ate rider for tax sharing																
ate rider for foregone revenue	kW							\$ (	0.1857							
hanges in Transformer Allowance																
djusted rate									3.5734		\$ -		-	\$	-	
Calendar year equivalent								\$ 3	3.3892		\$-	\$	-	\$	-	
arge Use								\$	1.4414							
Rate rider for tax sharing	1.14								0750							
Rate rider for foregone revenue	kW							\$ (	0.0759							
Changes in Transformer Allowance	-							\$	1.5173		\$ -	\$		S		
Adjusted rate Calendar year equivalent									1.4413		\$ - \$ -	\$ \$		\$ \$	-	
alendar year equivalent								\$	1.4413		ş -	\$	-	\$	-	
Jnmetered Scattered Load								\$ (	0.0162							
Rate rider for tax sharing	1							y (								
Rate rider for foregone revenue	kWh							\$ (	0.0009							
Changes in Transformer Allowance	1							-								
Adjusted rate	-							\$ (	0.0171		\$-	\$	-	\$	-	
Calendar year equivalent									0.0162		\$ -	\$		Ŝ	-	
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Sentinel Lighting								\$ 8	8.1615							
Rate rider for tax sharing	1															
ate rider for foregone revenue	kW							\$ (	0.4232							
hanges in Transformer Allowance	1															
djusted rate	1							\$ 8	3.5847		\$-	\$	-	\$	-	
Calendar year equivalent							•		3.1591	•	\$ -	\$	-	\$	-	
·																
Street Lighting								\$ 6	6.7744							
Rate rider for tax sharing																
Rate rider for foregone revenue	kW							\$ (	).2721							

Changes in Transformer Allowance																					
Adjusted rate											\$	7.0465			\$	-	\$	-	\$	-	
Calendar year equivalent											\$	6.7526			\$	-	\$	-	\$	-	
T																					
)																					
Rate rider for tax sharing																					
Rate rider for foregone revenue																					
Changes in Transformer Allowance																					
Adjusted rate	\$	- \$	-	\$	-	\$	-	\$	- \$		\$	-	\$	-	\$	-	\$	-	\$	-	
Calendar year equivalent		\$	-	\$	-	\$	-	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
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Rate rider for tax sharing																					
Rate rider for foregone revenue																					
Changes in Transformer Allowance				-																	
Adjusted rate	\$	- \$	-	\$	-	\$		\$	- \$			-	\$	-	\$	-	\$	-	\$	-	
Calendar year equivalent		\$	-	\$	-	\$	-	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
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Ate rider for tax sharing					_			_													
Rate rider for fax sharing					_			_							_						
Changes in Transformer Allowance																					
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Adjusted rate	\$	- \$	-		-	\$ \$		\$ \$	- \$	-		-	\$ \$	-	\$ \$	-	\$ \$	-	\$ \$	-	
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Rate rider for tax sharing																					
Rate rider for foregone revenue																					
Changes in Transformer Allowance																					
Adjusted rate	S	- \$	-	s	-	s	-	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
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Rate rider for tax sharing																					
Rate rider for foregone revenue																					
Changes in Transformer Allowance																					
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Rate rider for tax sharing																					
Rate rider for foregone revenue																					
Changes in Transformer Allowance																					
Adjusted rate	\$	- S	-	\$	-	\$	-	\$	- \$	-	\$	-	\$		\$	-	\$		\$	-	
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Rate rider for tax sharing																					
Rate rider for foregone revenue																					
Changes in Transformer Allowance																					
Adjusted rate	\$	- \$		\$	-	\$	-	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
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Note: LDC to make note of assumptions affecting the distribution rates above, if any

#### Table 3-a. Distribution Rates by Rate Class

Table 3-a below pulls the average distribution rates from Table 3 above. Please ensure that the distribution rates relevant to the years of the LRAMVA disposition are used by clearing the rates for year(s) that are not part of the LRAMVA claim. The distribution rates that remain in Table 3-a will be carried over to Tabs 4 and 5 of the work form to calculate lost revenues.

Year	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting							
	kWh	kWh	kW	kW	kWh	kW	kW							
2011	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2012	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2013	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2014	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2015	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2016	\$0.0141	\$0.0142	\$3.3892	\$1.4413	\$0.0162	\$8.1591	\$6.7526	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2017	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2018	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2019	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
2020	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000

Note: LDC to make note of assumptions affecting the distribution rates above, if any

# **LRAMVA Work Form:** 2011 - 2014 Lost Revenues Work Form

Legend	User Inputs (Green)
	Auto Populated Cells (White)
	Instructions (Grey)
Instructions	1. LDCs can apply for disposition of LRAMVA amounts at any time, but at a minimum, must do so as part of a cost of service (COS) application. The following LRAMVA work forms apply to LDCs that need to recover lost revenues frinput or manually link the savings, adjustments and program savings persistence in these tables from the LDC's Persistence Reports provided by the IESO (which are pasted following Tab 7. Persistence Data, tabs "7-a. 2011, 7-b. 20 tables below.
	2. Please ensure that the IESO verified savings adjustments apply back to the program year it relates to. For example, savings adjustments related to 2012 programs that were reported by the IESO in 2013 should be included in the 2 for persisting savings to be claimed in future years, past year's initiative level savings results need to be filled out in the tables below. If the IESO adjustments were made available to the LDC after the LRAMVA was approved, the per can be claimed as past approved LRAMVA amounts are considered to be final.
	3. The work forms below include the monthly multipliers for most programs in order to claim demand savings from energy efficiency programs, consistent with the monthly multipliers indicated in the OEB's updated LRAM policy relate 0182. Demand Response (DR3) savings should generally not be included with the LRAMVA calculation, unless suported by empirical evidence. LDCs are requested to confirm the monthly multipliers for all programs each year as pla different monthly multiplier is used, please include rationale in Tab 1-a and highlight the change.
	4. LDC are requested to input the applicable rate class allocation percentages indicating the customer's share of consumption to allocate actual savings to the rate classes. The generic template currently includes the same allocation savings adjustments. If a different allocation is proposed for savings adjustments, please highlight the change and provide rationale in Tab 1-a. Please also be advised that the same rate classes (of up to 14) are carried over from the manually update the tables and formulas below if more rate classes are needed.
	5. The persistence of future savings is expected to be included in the distributor's load forecast after re-basing. LDCs are requested to delete the applicable savings persistence rows (auto-calculated after the LRAMVA totals for the y savings is already captured in the updated load forecast. LDCs are requested to provide assumptions about the years that persistence is captured in the load forecast calculation in the "Notes" section below each table. If this is not th articulate the rationale for including the persistence of future savings beyond the re-basing year in Tab 1-a.
Tables	Table 4-a. 2011 Lost Revenues
	Table 4-b. 2012 Lost Revenues
	Table 4-c. 2013 Lost Revenues
	Table 4-d. 2014 Lost Revenues

Table 4-a. 2011 Lost Revenues Work Form			<u>Go to Persistence</u>	Report														
		Net Energy Savings (kWh)			N	et Energy Sav	/ings Persist	ence (kWh)					Net Demand Savings (kW)			Net Pe	ak Deman	d Savings
Program	Results Status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Monthly Multiplier	2011	2012	2013	2014	2015	2016

Consumer Program

Actual CDM Savings in 2011	33,668,862			14,617	
Forecast CDM Savings in 2011					
/ariance to CDM 2011-2014 report	5,192,089		· ·	0	
Distribution Rate in 2011					
Lost Revenue in 2011 from 2011 programs					
Forecast Lost Revenues in 2011					
LRAMVA in 2011					
2011 Savings Persisting in 2012					
2011 Savings Persisting in 2013					
2011 Savings Persisting in 2014					
2011 Savings Persisting in 2015					
2011 Savings Persisting in 2016					
2011 Savings Persisting in 2017					
2011 Savings Persisting in 2018					
2011 Savings Persisting in 2019					
2011 Savings Persisting in 2020					

	Return to top		Go to Persiste	ence Report													
	Net Energy Savings (kWh)			Ne	et Energy Sav	vings Persist	tence (kWh)					Net Demand Savings (kW)			Net Pe	ak Deman	ld Savings
Results Status	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Monthly Multiplier	2012	2013	2014	2015	2016	2017
				1			1										1
	47,585,871											18,513					
	-1											1					
		Results       Net Energy Savings (kWh)         2012         47,585,871         -1	Net Energy Savings (kWh)       2012     2013	Net Energy Savings (kWh)       2012     2013       2014	Net Energy Savings (kWh)         Net           2012         2013         2014         2015           47,585,871         -1         -1         -1	Net Energy Savings (kWh)         Net Energy Savings           2012         2013         2014         2015         2016           47,585,871         -1         1         -1         -1         -1         -1         -1         -1         -1         -1         -1         -1         -1         1         -1         1	Net Energy Savings (kWh)         Net Energy Savings Persist           2012         2013         2014         2015         2016         2017           47,585,871         1	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)           2012         2013         2014         2015         2016         2017         2018           47,585,871	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)           2012         2013         2014         2015         2016         2017         2018         2019           47,585,871	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)           2012         2013         2014         2015         2016         2017         2018         2019         2020           47,585,871	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)           2012         2013         2014         2015         2016         2017         2018         2019         2020         2021           47,585,871 <td>Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Monthly           2012         2013         2014         2015         2016         2017         2018         2019         2020         2021         Monthly           47,585,871</td> <td>Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Net Energy Savings Persistence (kWh)         Net Demand Savings (kW)         Net Demand Savings (kW)           2012         2013         2014         2015         2016         2017         2018         2019         2020         2021         Multiplier         2012           47,585,871                  18,513          </td> <td>Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Net Demand Savings (kW)         Net Demand Savings (kW)</td> <td>Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Multiplier         Net Demand Savings (kW)         Net Demand Savings (kW)         Net Demand Sa</td> <td>Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Net Demand Savings (kWh)         Net Demand Savings (kWh)         Net Demand Savings (kWh)         Net Demand Saving (kWh)         Net Dema</td> <td>Net Energy Savings (kVh)         Net Energy Savings Persistence (kWh)         Net Energy Savings (kWh)         Net Demand Savings (kWh)           1         1         1         1         1         1</td>	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Monthly           2012         2013         2014         2015         2016         2017         2018         2019         2020         2021         Monthly           47,585,871	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Net Energy Savings Persistence (kWh)         Net Demand Savings (kW)         Net Demand Savings (kW)           2012         2013         2014         2015         2016         2017         2018         2019         2020         2021         Multiplier         2012           47,585,871                  18,513	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Net Demand Savings (kW)         Net Demand Savings (kW)	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Multiplier         Net Demand Savings (kW)         Net Demand Savings (kW)         Net Demand Sa	Net Energy Savings (kWh)         Net Energy Savings Persistence (kWh)         Net Demand Savings (kWh)         Net Demand Savings (kWh)         Net Demand Savings (kWh)         Net Demand Saving (kWh)         Net Dema	Net Energy Savings (kVh)         Net Energy Savings Persistence (kWh)         Net Energy Savings (kWh)         Net Demand Savings (kWh)           1         1         1         1         1         1

Table 4-c. 2013 Lost Revenues Work Form	Return to top	Go to Persistence Report		
	Net Energy Savings (kWh)	Net Energy Savings Persistence (kWh)	Net Demand Savings (kW)	Net Peak Demand Savings

Program	Results Status	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Monthly Multiplier	2013	2014	2015	2016	2017	2018
Consumer Program																		
Actual CDM Savings in 2013		58,023,337											32,555					
Forecast CDM Savings in 2013																		
Variance to CDM 2011-2014 report		-1											0					
Distribution Rate in 2013																		
Lost Revenue in 2013 from 2011 programs																		
Lost Revenue in 2013 from 2012 programs																		
Lost Revenue in 2013 from 2013 programs																		
Total Lost Revenues in 2013																		
Forecast Lost Revenues in 2013																		
LRAMVA in 2013																		
2013 Savings Persisting in 2014																		
2013 Savings Persisting in 2015																		
2013 Savings Persisting in 2016																		
2013 Savings Persisting in 2017																		
2013 Savings Persisting in 2018																		
2013 Savings Persisting in 2019																		
2013 Savings Persisting in 2020																		

Table 4-d. 2014 Lost Revenues Work Form Return to Top Go to Persistence Report Net Energy Net Demand Net Energy Savings Persistence (kWh) Net Peak Demand Savings Savings (kWh) Savings (kW) Monthly Results Program Multiplier Status 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2014 2015 2016 2017 2018 2019 Consumer Program Actual CDM Savings in 2014 87,740,970 42,675 Forecast CDM Savings in 2014 Variance to CDM 2011-2014 report 0 0 Distribution Rate in 2014 Lost Revenue in 2014 from 2011 programs Lost Revenue in 2014 from 2012 programs Lost Revenue in 2014 from 2013 programs Lost Revenue in 2014 from 2014 programs Total Lost Revenues in 2014 Forecast Lost Revenues in 2014 LRAMVA in 2014 2014 Savings Persisting in 2015 2014 Savings Persisting in 2016 2014 Savings Persisting in 2017 2014 Savings Persisting in 2018 2014 Savings Persisting in 2019 2014 Savings Persisting in 2020

Note: LDC to make note of assumptions included above



Legend

Instructions

rom the 2011-2014 period. Please 012, 7-j. 2020") to complete the
2012 program savings table. In order rsistence of those savings adjustments
d to peak demand savings in EB-2016- aceholder values are provided. If a
percentage for programs and its

ercentage for programs and its Summary Tab 1. LDCs would need to

ear) if future year's persistence of he case, the LDC is requested to clearly

Tables

#### Table 4-a. 2011 Lost Revenues Work Form

	Persisten	ce (kW)									Rate Allo	ocations for LRA	MVA	
Program	2017	2018	2019	2020	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting			
Consumer Program					kWh	kWh	kW	kW	kWh	kW	kW			

Actual CDM Savings in 2011	3,782,022	7,280,610	26,999	0	0	0	0	0	0	0	0	0
Forecast CDM Savings in 2011	0	0	0	0	0	0	0	0	0	0	0	0
Variance to CDM 2011-2014 report												
Distribution Rate in 2011	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
Lost Revenue in 2011 from 2011 programs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Forecast Lost Revenues in 2011	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LRAMVA in 2011												
2011 Savings Persisting in 2012	3,763,723	7,262,488	26,962	0	0	0	0	0	0	0	0	0
2011 Savings Persisting in 2013	3,763,723	7,028,982	26,956	0	0	0	0	0	0	0	0	0
2011 Savings Persisting in 2014	8,945,422	5,627,647	26,934	0	0	0	0	0	0	0	0	0
2011 Savings Persisting in 2015	8,346,549	5,396,438	25,024	0	0	0	0	0	0	0	0	0
2011 Savings Persisting in 2016	7,195,284	5,355,323	24,686	0	0	0	0	0	0	0	0	0
2011 Savings Persisting in 2017	6,507,195	2,250,186	22,574	0	0	0	0	0	0	0	0	0
2011 Savings Persisting in 2018	6,497,362	2,071,472	20,401	0	0	0	0	0	0	0	0	0
2011 Savings Persisting in 2019	7,064,750	1,941,431	18,078	0	0	0	0	0	0	0	0	0
2011 Savings Persisting in 2020	5,305,397	1,941,431	18,078	0	0	0	0	0	0	0	0	0

## Table 4-b. 2012 Lost Revenues Work Form

	Persistend	ce (kW)									Rate Alle	ocations for LR	AMVA			
Program	2018	2019	2020	2021	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting					
Consumer Program					kWh	kWh	kW	kW	kWh	kW	kW					
Actual CDM Savings in 2012					5,913,745	11,605,581	61,842	0	0	0	0	0	0	0	0	0
Forecast CDM Savings in 2012					0	0	0	0	0	0	0	0	0	0	0	0
Variance to CDM 2011-2014 report Distribution Rate in 2012 Lost Revenue in 2012 from 2011 programs Lost Revenue in 2012 from 2012 programs Total Lost Revenues in 2012 Forecast Lost Revenues in 2012 LRAMVA in 2012					\$0.00000 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b>											
2012 Savings Persisting in 2013 2012 Savings Persisting in 2014					5,866,225 5,866,225	11,410,518 10,562,874	59,962 59,887	0 0								
2012 Savings Persisting in 2015					5,863,821	9,278,551	59,183	0	0	0	0	0	0	0	0	0
2012 Savings Persisting in 2016					5,400,626 4,690,258	9,277,427 6,643,803	58,499 55,925	0	0	U	0	U	U	0	U	U
2012 Savings Persisting in 2017 2012 Savings Persisting in 2018					4,201,582	6,522,381	55,925 54,990	0	0	0	0	0	0	0	0	0
2012 Savings Persisting in 2019					4,196,916	6,513,004	54,990	0	0	0	0	0	0	0	0	0
2012 Savings Persisting in 2020					3,959,486	6,281,978	52,136	0	0	0	0	0	0	0	0	0

Note: LDC to make note of assumptions included above

# Table 4-c. 2013 Lost Revenues Work Form

Persistence (kW)	Rate Allocations for LRAMVA
-	

Program	2019	2020	2021	2022	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting					
Consumer Program					kWh	kWh	kW	kW	kWh	kW	kW					
Actual CDM Savings in 2013					5,785,909	9,516,689	91,899	0	0	0	0	0	0	0	0	0
Forecast CDM Savings in 2013					44,207,932	16,984,563	195,431	3,732	208,627	20	2,868	0	0	0	0	0
Variance to CDM 2011-2014 report	·	•														
Distribution Rate in 2013					\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
Lost Revenue in 2013 from 2011 programs					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Lost Revenue in 2013 from 2012 programs					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Lost Revenue in 2013 from 2013 programs					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Lost Revenues in 2013					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Forecast Lost Revenues in 2013					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LRAMVA in 2013																
2013 Savings Persisting in 2014					5,752,822	9,494,260	86,246	0	0	0	0	0	0	0	0	0
2013 Savings Persisting in 2015					5,661,202	9,046,628	86,114	0	0	0	0	0	0	0	0	0
2013 Savings Persisting in 2016					5,273,110	7,579,947	85,428	0	0	0	0	0	0	0	0	0
2013 Savings Persisting in 2017					5,035,852	4,208,329	79,789	0	0	0	0	0	0	0	0	0
2013 Savings Persisting in 2018					4,789,814	4,170,654	77,525	0	0	0	0	0	0	0	0	0
2013 Savings Persisting in 2019					4,758,129	4,170,654	77,525	0	0	0	0	0	0	0	0	0
2013 Savings Persisting in 2020					4,745,439	4,155,187	77,503	0	0	0	0	0	0	0	0	0

### Table 4-d. 2014 Lost Revenues Work Form

	Persisten	ice (kW)									Rate Allo	ocations for LR	MVA			
Program	2020	2021	2022	2023	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting					
Consumer Program					kWh	kWh	kW	kW	kWh	kW	kW	0				0
Actual CDM Savings in 2014					15,843,307	20,665,641	110,223	0	0	0	0	0	0	0	0	0
Forecast CDM Savings in 2014					44,207,932	16,984,563	195,431	3,732	208,627	20	2,868	0	0	0	0	0
Variance to CDM 2011-2014 report Distribution Rate in 2014	·				\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
Lost Revenue in 2014 from 2011 programs					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Lost Revenue in 2014 from 2012 programs					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Lost Revenue in 2014 from 2013 programs					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Lost Revenue in 2014 from 2014 programs					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Lost Revenues in 2014					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Forecast Lost Revenues in 2014 LRAMVA in 2014					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2014 Savings Persisting in 2015					13,845,910	18,513,635	109,168	0	0	0	0	0	0	0	0	0
2014 Savings Persisting in 2016					13,159,783	18,007,059	109,168	0	0	0	0	0	0	0	0	0
2014 Savings Persisting in 2017					13,141,079	15,093,923	107,845	0	0	0	0	0	0	0	0	0
2014 Savings Persisting in 2018					12,902,164	15,093,923	103,033	0	0	0	0	0	0	0	0	0
2014 Savings Persisting in 2019					12,683,366	14,758,566	100,468	0	0	0	0	0	0	0	0	0
2014 Savings Persisting in 2020					12,674,558	14,542,210	97,954	0	0	0	0	0	0	0	0	0

Note: LDC to make note of assumptions included above



Legend

Instructions

Tables

## Table 4-a. 2011 Lost Revenues Work Form

Program		Total	
Consumer Program			

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Actual CDM Savings in 2011	0	0	
Forecast CDM Savings in 2011	0	0	
Variance to CDM 2011-2014 report			
Distribution Rate in 2011	\$0.00000	\$0.00000	
Lost Revenue in 2011 from 2011 programs	\$0.00	\$0.00	\$ -
Forecast Lost Revenues in 2011	\$0.00	\$0.00	\$ -
LRAMVA in 2011			\$ -
2011 Savings Persisting in 2012	0	0	
2011 Savings Persisting in 2013	0	0	
2011 Savings Persisting in 2014	0	0	
2011 Savings Persisting in 2015	0	0	
2011 Savings Persisting in 2016	0	0	
2011 Savings Persisting in 2017	0	0	
2011 Savings Persisting in 2018	0	0	
2011 Savings Persisting in 2019	0	0	
2011 Savings Persisting in 2020	0	0	

#### Table 4-b. 2012 Lost Revenues Work Form

Program			Total	
Consumer Program				
Actual CDM Savings in 2012	0	0		
Forecast CDM Savings in 2012	0	0		
Variance to CDM 2011-2014 report				
Distribution Rate in 2012	\$0.00000	\$0.00000		
Lost Revenue in 2012 from 2011 programs	\$0.00	\$0.00	\$	-
Lost Revenue in 2012 from 2012 programs	\$0.00	\$0.00	\$	-
Total Lost Revenues in 2012	\$0.00	\$0.00	\$	-
Forecast Lost Revenues in 2012	\$0.00	\$0.00	\$	-
LRAMVA in 2012			\$	-
2012 Savings Persisting in 2013	0	0		
2012 Savings Persisting in 2014	0	0		
2012 Savings Persisting in 2015	0	0		
2012 Savings Persisting in 2016	0	0		
2012 Savings Persisting in 2017	0	0		
2012 Savings Persisting in 2018	0	0		
2012 Savings Persisting in 2019	0	0		
2012 Savings Persisting in 2020	0	0		

Note: LDC to make note of assumptions included above

## Table 4-c. 2013 Lost Revenues Work Form

Program				Total
Consumer Program				
Actual CDM Savings in 2013	0	0		
Forecast CDM Savings in 2013	0	0		
Variance to CDM 2011-2014 report		·	_	
Distribution Rate in 2013	\$0.00000	\$0.00000		
Lost Revenue in 2013 from 2011 programs	\$0.00	\$0.00	\$	-
Lost Revenue in 2013 from 2012 programs	\$0.00	\$0.00	\$	-
Lost Revenue in 2013 from 2013 programs	\$0.00	\$0.00	\$	-
Total Lost Revenues in 2013	\$0.00	\$0.00	\$	-
Forecast Lost Revenues in 2013	\$0.00	\$0.00	\$	-
LRAMVA in 2013			\$	-
2013 Savings Persisting in 2014	0	0		
2013 Savings Persisting in 2015	0	0		
2013 Savings Persisting in 2016	0	0		
2013 Savings Persisting in 2017	0	0		
2013 Savings Persisting in 2018	0	0		
2013 Savings Persisting in 2019	0	0		
2013 Savings Persisting in 2020	0	0		

# Table 4-d. 2014 Lost Revenues Work Form

Program			Total
Consumer Program			
Actual CDM Savings in 2014	0	0	
Forecast CDM Savings in 2014	0	0	
Variance to CDM 2011-2014 report			
Distribution Rate in 2014	\$0.00000	\$0.00000	
Lost Revenue in 2014 from 2011 programs	\$0.00	\$0.00	\$ -
Lost Revenue in 2014 from 2012 programs	\$0.00	\$0.00	\$ -
Lost Revenue in 2014 from 2013 programs	\$0.00	\$0.00	\$ -
Lost Revenue in 2014 from 2014 programs	\$0.00	\$0.00	\$ -
Total Lost Revenues in 2014	\$0.00	\$0.00	\$ -
Forecast Lost Revenues in 2014	\$0.00	\$0.00	\$ -
LRAMVA in 2014			\$ -
2014 Savings Persisting in 2015	0	0	
2014 Savings Persisting in 2016	0	0	
2014 Savings Persisting in 2017	0	0	
2014 Savings Persisting in 2018	0	0	
2014 Savings Persisting in 2019	0	0	
2014 Savings Persisting in 2020	0	0	

Note: LDC to make note of assumptions included above

1921	io Energy Board LRAMVA Work Form: 2020 Lost Revenues Work Form
Legend	User Inputs (Green)
	Auto Populated Cells (White)
	Instructions (Grey)
Instructions	<ol> <li>LUCS can apply for disposition of LRAMVA amounts at any time, but at a minimum, must do so as part of a cost of service (COS) application. The following LRAMVA work forms apply to LPCs that need to procycer gate revenues from 2. Please ensure that the IESO versions are interest relates to CIG programs that were reported by 3. The work forms below include the monthly multipliers for most programs in order to claim demand savings from energy efficiency programs, consistent with the monthly multipliers 4. LDC are requested to input the applicable rate class allocation percentages indicating the customer's share of consumption to allocate grams. USC are requested to forecast after re-basing. LDCs are requested to forecast after re-basing. LDCs are requested to detete the applicable savings persistence rows (auto- cast) and after the ISAMVA trafs for the venal calcalated after the last to the rest that the venal calcalated after the last to the traffer the venal calcalated after the last to traffer the saving the venal calcalated after the last to the rest the venal calcalated after the last to the rest the venal calcalated after the last to the rest the venal calcalated after the last to the saving the venal calcalated after the last to the saving the venal calcalated after the last to the saving the venal calcalated after the last to the saving the venal calcalated aft</li></ol>

Table 5-a. 2015 Lost Revenues Table 5-b. 2016 Lost Revenues Table 5-c. 2017 Lost Revenues Table 5-d. 2018 Lost Revenues Table 5-e. 2019 Lost Revenues Table 5-f. 2020 Lost Revenues

Tables

Table 5-a. 2015 Lost Revenues Work Form		Go to Persistence Re	port															
		Net Energy Savings (kWh)	Net Demand Savings (kW)							Rate Alloc	ations for LRAM	<b>I</b> VA						
Program	Results Status	2015	2015	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting								Total
Legacy Framework				kWh	kWh	kW	kW	kWh	kW	kW								
Residential Program     Coupon Initiative     Adjustment to 2015 savings	Verified True-up	1,027,535 46,083	69 2	<b>100.00%</b> 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
2 Bi-Annual Retailer Event Initiative Adjustment to 2015 savings	Verified True-up	2,194,924	163 0	<b>100.00%</b> 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Appliance Retirement Initiative Adjustment to 2015 savings	Verified True-up	155,424	23 0	<b>100.00%</b> 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
<u>4</u> HVAC Incentives Initative Adjustment to 2015 savings	Verified True-up	3,175,791 43,375	1,685 22	<b>100.00%</b> 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
5 Residential New Construction and Major Adjustment to 2015 savings	Verified True-up	58,971 805,682	21 42	<b>100.00%</b> 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Commercial & Institutional Program     Enerov Audit Initiative     Adjustment to 2015 savings	Verified True-up	875,115	187	0.00%	0.00%	<b>100.00%</b>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
7 Efficiency: Equipment Replacement Incentive	Verified	51,722,543	6,257	0.0078	14%	86%	0.0076	0.00%	0.00%	0.0078	0.0078	0.00%	0.0078	0.0078	0.0078	0.0078	0.00%	100%
<ul> <li>Initiative Adjustment to 2015 savings</li> </ul>	True-up	2,316,888	399	0.00%	14.00%	86.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
B Direct Install Lighting and Water Heating Initiative Adjustment to 2015 savings	Verified True-up	2,024,454	487	0.00%	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
9 New Construction and Major Renovation	Verified	1,437,827	316			100.00%												100%
Adjustment to 2015 savings	True-up	903,373	186	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
10 Existing Building Commissioning Incentive Initiative Adjustment to 2015 savings	Verified True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Industrial Program Process and Systems Upgrades Initiatives -																		
11 Process and Systems Upgrades Initiatives - Project Incentive Initiative Adjustment to 2015 savings	Verified True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%

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Process and Systems Upgrades Initiatives -																	
12 Monitoring and Targeting Initiative	Verified																0%
Adjustment to 2015 savings	True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
13 Process and Systems Upgrades Initiatives - Energy Manager Initiative Adjustment to 2015 savings	Verified True-up	1,293,617 274	0.00%	0.00%	100.00% 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Low Income Program           14         Low Income Initiative           Adjustment to 2015 savings	Verified True-up	147,287 12	<b>100%</b> 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Other <u>15</u> Aboriginal Conservation Program Adjustment to 2015 savings	Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
16 Program Enabled Savings Adjustment to 2015 savings	Verified True-up	235,240 27	0.00%	0.00%	100.00% 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Conservation Fund Pilots 17 Conservation Fund Pilot - EnerNOC Adjustment to 2015 savings	Verified True-up	130,073 0	0.00%	0.00%	<b>100.00%</b> 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
18 Loblaws Pilot Adjustment to 2015 savings	Verified True-up	901,493 131	0.00%	0.00%	100.00% 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
19 Conservation Fund Pilot - SEG Adjustment to 2015 savings	Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
20 Social Benchmarking Pliot Adjustment to 2015 savings	Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Conservation First Framework Residential Province-Wide Programs 21 Save on Energy Coupon Program Adjustment to 2015 savings	Verified True-up	6,484,457 424 810,288 59	<b>100%</b> 100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
22 Save on Energy Heating and Cooling Program	Verified	3,220,099 1,696	100%														100%
Adjustment to 2015 savings	True-up	506,403 258	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100 /8
23 Save on Energy New Construction Program	Verified	0	100.00%														100%
Adjustment to 2015 savings	True-up	992 0	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
24 Save on Energy Home Assistance Program Adjustment to 2015 savings	Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Non-Residential Province-Wide Programs 25 Save on Enerov Audit Funding Program	Verified	0 0			100.00%												100%
Adjustment to 2015 savings           26         Save on Energy Retrofit Program	True-up Verified	311,335 66 4.388.100 592	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
Adjustment to 2015 savings	True-up Verified	12,562,665 1,734	0.00%	14.00%	86.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
27 Save on Energy Small Business Lighting Program Adjustment to 2015 savings	True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
28 Save on Energy High Performance New Construction Program Adjustment to 2015 savings	Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
29 Save on Energy Existing Building Commissioning Program Adjustment to 2015 savings	Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
30 Save on Energy Process & Systems Upgrades	Verified																0%
Adjustment to 2015 savings 31 Save on Energy Monitoring & Targeting	True-up Verified		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Adjustment to 2015 savings	True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
32 Save on Energy Energy Manager Program Adjustment to 2015 savings	Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Local & Regional Programs 33 Business Refrigeration Local Program	Verified																0%
Adjustment to 2015 savings <u>34</u> First Nation Conservation Local Program	True-up Verified		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Adjustment to 2015 savings 35 Social Benchmarking Local Program Adjustment to 2015 savings	True-up Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Pilot Programs Enersource Hydro Mississauga Inc			/0					//		//	//		//				
36 Performance-Based Conservation Pilot Prooram - Conservation Fund Adjustment to 2015 savings	Verified True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
3Z EnWin Utilities Ltd Building Optimization Pilot	Verified																0%
Adjustment to 2015 savings	True-up		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

2015 Savings Persisting in 2016 2015 Savings Persisting in 2017 2015 Savings Persisting in 2018 2015 Savings Persisting in 2019 2015 Savings Persisting in 2020 Note: LDC to make note of assumptions included a				18,498,335 18,493,785 18,488,713 18,426,148 18,331,323	11,869,887 11,241,823 11,241,823 11,241,823 11,241,823 11,241,823	110,298 109,650 108,212 108,212 100,988	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
Variance to CDM Final Verified 2016 report Distribution Rate in 2015 Lost Revenue in 2015 from 2011 programs Lost Revenue in 2015 from 2013 programs Lost Revenue in 2015 from 2014 programs Lost Revenue in 2015 from 2014 programs Total Lost Revenues in 2015 Forecast Lost Revenues in 2015 LRAMVA in 2015		0	0	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$0.00000 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>\$0.00</b> <b>\$0.00</b>	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Actual CDM Savings in 2015 Forecast CDM Savings in 2015		99,706,929	15,543	18,677,311 44,207,932	11,963,081 16,984,563	111,870 195,431	0 3,732	0 208,627	0 20	0 2,868	0	0	0	0	0	0	0	
Adjustment to 2015 savings	True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
49 Toronto Hydro-Electric System Limited - PFP -	Verified			]														0%
Adjustment to 2015 savings	True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Toronto Hydro-Electric System Limited - Direct 48 Install - RTU Controls (Pilot Savings)	Verified																	0%
47 Toronto Hydro-Electric System Limited - Direct Install - Hydronic (Pilot Savings) Adjustment to 2015 savings	Verified True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
<u>46</u> Direct Install - RTU Controls Adjustment to 2015 savings	Verified True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Adjustment to 2015 savings	True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
45 Oakville Hydro Electricity Distribution Inc Direct Install - Hydronic	Verified			]														0%
Niagara-on-the-Lake Hydro Inc Direct Install 44 Energy Efficiency Measures for the Adricultural Sector Adjustment to 2015 savings	Verified True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Adjustment to 2015 savings	True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
43 Kitchener-Wilmot Hydro Inc Pilot - DCKV	Verified																	0%
Adjustment to 2015 savings	True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Hydro Ottawa Limited - Residential Demand 42 Response Wi-Fi Thermostat Pilot	Verified																	0%
Adjustment to 2015 savings	True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Hydro Ottawa Limited - Conservation Voltage 41 Regulation (CVR) Leveraging AMI Data Pilot	Verified			]														0%
40 Horizon Utilities Corporation - Social Benchmarking Pilot Adjustment to 2015 savings	Verified True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Adjustment to 2015 savings	True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	078
Horizon Utilities Corporation - ECM Furnace	Verified			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%
38 EnWin Utilities Ltd Re-Invest Pilot Adjustment to 2015 savings	Verified True-up			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%

# LRAMVA Work Form: Carrying Charges by Rate Class

Legend	User Inputs (Green)
	Auto Populated Cells (White)
	Instructions (Grey)

Instructions
 Please update Table 6 as new approved prescribed interest rates for deferral and variance accounts become available. The quarterly interest rates are used to calculate the carrying charges for LRAMVA. Starting from column I, the principle will auto-populate as monthly variances in Table 6-a, and are multiplied by the interest rates from column H to determine the monthly variances on carrying charges for each rate class by year.
 The annual carrying charges totals in Table 6-a below pertain to the amount that was originally collected in interest from forecasted CDM savings and what should have been collected based on actual CDM savings. As the amounts calculated in Table 6-a are cumulative, LDCs are requested to enter any collected interest amounts into the "Amounts Cleared" row in order to clear the balance and calculate outstanding variances on carrying charges.

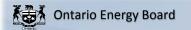
Table 6. Prescrib	ed Interest Rates	Table 6-a. Ca	Iculation of Ca	rrying Cost	s by Rate Cla	SS	<u>(</u>	<u>Go to Tab 1: Summary</u>					
Quarter	Approved Deferral & Variance Accounts	Month	Period	Quarter	Monthly Rate	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Total
2011 Q1	1.47%	Jan-11	2011	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2011 Q2	1.47%	Feb-11	2011	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2011 Q3	1.47%	Mar-11	2011	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2011 Q4	1.47%	Apr-11	2011	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2012 Q1	1.47%	May-11	2011	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2012 Q2	1.47%	Jun-11	2011	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2012 Q3	1.47%	Jul-11	2011	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2012 Q4	1.47%	Aug-11	2011	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2013 Q1	1.47%	Sep-11	2011	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2013 Q2	1.47%	Oct-11	2011	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2013 Q3	1.47%	Nov-11	2011	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2013 Q4	1.47%	Dec-11	2011	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2014 Q1	1.47%	Total for 2011				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2014 Q2	1.47%												
2014 Q3	1.47%	Opening Balan	ce for 2012			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2014 Q4	1.47%	Jan-12	2011-2012	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2015 Q1	1.47%	Feb-12	2011-2012	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2015 Q2	1.10%	Mar-12	2011-2012	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2015 Q3	1.10%	Apr-12	2011-2012	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2015 Q4	1.10%	May-12	2011-2012	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2016 Q1	1.10%	Jun-12	2011-2012	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2016 Q2	1.10%	Jul-12	2011-2012	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2016 Q3	1.10%	Aug-12	2011-2012	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2016 Q4	1.10%	Sep-12	2011-2012	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2017 Q1	1.10%	Oct-12	2011-2012	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2017 Q2	1.10%	Nov-12	2011-2012	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2017 Q3	1.10%	Dec-12	2011-2012	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2017 Q4	1.50%	Total for 2012				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2018 Q1	1.50%	Amount Cleared	ł										
2018 Q2	1.89%	Opening Balan	ce for 2013			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2018 Q3	1.89%	Jan-13	2011-2013	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2018 Q4	1.89%	Feb-13	2011-2013	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2019 Q1		Mar-13	2011-2013	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2019 Q2		Apr-13	2011-2013	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2019 Q3		May-13	2011-2013	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2019 Q4		Jun-13	2011-2013	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2020 Q1		Jul-13	2011-2013	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2020 Q2		Aug-13	2011-2013	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2020 Q3		Sep-13	2011-2013	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

2020 Q4	

Check OEB website

Oct-13	2011-2013	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Nov-13	2011-2013	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Dec-13	2011-2013	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Total for 2013				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Amount Cleared	1										
Opening Balan	ce for 2014			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Jan-14	2011-2014	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Feb-14	2011-2014	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Mar-14	2011-2014	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Apr-14	2011-2014	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.59	\$2
May-14	2011-2014	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5.35	\$5
Jun-14	2011-2014	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7.77	\$7
Jul-14	2011-2014	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11.61	\$1 <sup>-</sup>
Aug-14	2011-2014	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.17	\$10
Sep-14	2011-2014	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20.91	\$20
Oct-14	2011-2014	Q3 Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.06	\$2
Nov-14	2011-2014	Q4 Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.00	\$3
Dec-14		Q4 Q4		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.95	
	2011-2014	Q4	0.12%								
Total for 2014				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$160.86	\$16
Amount Cleared											
Opening Balan				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$160.86	\$16
Jan-15	2011-2015	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.39	\$4
Feb-15	2011-2015	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.18	\$4
Mar-15	2011-2015	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$54.43	\$5
Apr-15	2011-2015	Q2	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.41	\$4
May-15	2011-2015	Q2	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$49.30	\$4
Jun-15	2011-2015	Q2	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$52.34	\$5
Jul-15	2011-2015	Q3	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$59.41	\$5
Aug-15	2011-2015	Q3	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$64.73	\$6
Sep-15	2011-2015	Q3	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$68.40	\$6
Oct-15	2011-2015	Q4	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$76.63	\$7
Nov-15	2011-2015	Q4	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$85.95	\$8
Dec-15	2011-2015	Q4 Q4	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$100.99	<del>پ</del> ہ \$10
otal for 2015	2011-2015	Q4	0.09%	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$100.99 \$904.01	\$10 \$90
				\$U.UU	\$U.UU	\$0.00	\$0.00	\$0.00	\$0.00	\$904.01	290
mount Cleared											
Opening Balan		<u>.</u>	0.000/	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$904.01	\$90
Jan-16	2011-2016	Q1	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 -\$0.26	\$0.00	\$112.87	\$11
Feb-16	2011-2016	Q1	0.09%	\$49.05	\$48.07	\$77.71	-\$0.41		-\$0.01	\$117.66	\$29
Mar-16	2011-2016	Q1	0.09%	\$98.09	\$96.14	\$155.41	-\$0.82	-\$0.52	-\$0.03	\$138.69	\$48
Mar-16 Apr-16	2011-2016 2011-2016	Q1 Q2	0.09%	\$98.09 \$147.14	\$96.14 \$144.21	\$155.41 \$233.12	-\$0.82 -\$1.23	-\$0.52 -\$0.77	-\$0.03 -\$0.04	\$138.69 \$146.71	\$48 \$66
Mar-16 Apr-16 May-16	2011-2016 2011-2016 2011-2016	Q1 Q2 Q2	0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18	\$96.14 \$144.21 \$192.28	\$155.41 \$233.12 \$310.82	-\$0.82 -\$1.23 -\$1.64	-\$0.52 -\$0.77 -\$1.03	-\$0.03 -\$0.04 -\$0.05	\$138.69 \$146.71 \$164.58	\$48 \$66 \$86
Mar-16 Apr-16 May-16 Jun-16	2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q2	0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23	\$96.14 \$144.21 \$192.28 \$240.35	\$155.41 \$233.12 \$310.82 \$388.53	-\$0.82 -\$1.23 -\$1.64 -\$2.05	-\$0.52 -\$0.77 -\$1.03 -\$1.29	-\$0.03 -\$0.04 -\$0.05 -\$0.06	\$138.69 \$146.71 \$164.58 \$172.58	\$48 \$66 \$86 \$1,04
Mar-16 Apr-16 May-16 Jun-16 Jul-16	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q2 Q2 Q3	0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83	\$48 \$66 \$86 \$1,04 \$1,23
Mar-16 Apr-16 May-16 Jun-16 Jul-16 Aug-16	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q2 Q3 Q3	0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.08	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33	\$48 \$66 \$86 \$1,04 \$1,23 \$1,42
Mar-16 Apr-16 May-16 Jun-16 Jul-16 Aug-16 Sep-16	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q3 Q3 Q3 Q3	0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33 \$214.68	\$48 \$66 \$86 \$1,04 \$1,23 \$1,42 \$1,60
Mar-16 Apr-16 May-16 Jun-16 Jul-16 Aug-16 Sep-16 Oct-16	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$245.23 \$343.32 \$392.37 \$441.41	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$466.23 \$543.94 \$621.64 \$699.35	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.70	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33 \$214.68 \$236.89	\$48 \$66 \$1,04 \$1,23 \$1,42 \$1,60 \$1,80
Mar-16 Apr-16 May-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37 \$441.41 \$490.46	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.70 -\$4.11	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33 \$214.68 \$236.89 \$244.97	\$48 \$66 \$86 \$1,04 \$1,23 \$1,42 \$1,60 \$1,80 \$1,98
Mar-16 Apr-16 Jun-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$258.76	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$3.70 -\$4.11 -\$4.52	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.32 -\$2.32 -\$2.28	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33 \$214.68 \$236.89 \$224.97 \$269.69	\$48 \$66 \$1,04 \$1,23 \$1,42 \$1,60 \$1,80 \$1,98 \$2,18
Mar-16 Apr-16 Jun-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37 \$441.41 \$490.46	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.70 -\$4.11	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33 \$214.68 \$236.89 \$244.97	\$48 \$66 \$1,04 \$1,23 \$1,42 \$1,60 \$1,80 \$1,98 \$2,18
Mar-16 Apr-16 Jun-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 otal for 2016	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$258.76	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$3.70 -\$4.11 -\$4.52	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.32 -\$2.32 -\$2.28	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33 \$214.68 \$236.89 \$224.97 \$269.69	\$48 \$66 \$1,04 \$1,23 \$1,42 \$1,60 \$1,80 \$1,98 \$2,18
Mar-16           Apr-16           Jun-16           Jul-16           Aug-16           Sep-16           Oct-16           Dec-16           Dec-16           otal for 2016           mount Cleared	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b>	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$432.62 \$440.69 \$528.76 <b>\$3,172.56</b>	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 <b>\$5,128.54</b>	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.11 -\$4.52 - <b>\$27.12</b>	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.32 -\$2.32 -\$2.28	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33 \$214.68 \$236.89 \$244.97 \$269.69 \$3,123.49	\$48 \$86 \$1,04 \$1,22 \$1,42 \$1,60 \$1,80 \$1,96 \$2,18 \$1,96 \$1,96 \$1,96 \$1,96 \$1,96 \$1,96 \$1,96 \$1,96 \$1,96 \$1,040\$\$1,04 \$1,040\$\$
Mar-16 Apr-16 Jun-16 Jun-16 Jul-16 Sep-16 Oct-16 Nov-16 Dec-16 Dec-16 Dec-16 Dec-16 Dec-10 De	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$245.23 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> \$3,237.03	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$258.76	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$3.70 -\$4.11 -\$4.52	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$2.84 -\$17.04	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.14 -\$0.83	\$138.69 \$146.71 \$164.58 \$172.58 \$192.83 \$207.33 \$214.68 \$236.89 \$224.97 \$269.69	\$48 \$66 \$88 \$1,04 \$1,23 \$1,42 \$1,60 \$1,80 \$1,90 \$2,18 \$14,61 \$14,61
Mar-16 Apr-16 Jun-16 Jul-16 Aug-16 Aug-16 Oct-16 Nov-16 Dec-16 Dec-16 Dec-16 mount Cleared pening Balan Jan-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 ce for 2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$245.23 \$343.32 \$343.32 \$342.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b>	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 <b>\$3,172.56</b> \$3,172.56 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 <b>\$5128.54</b> <b>\$5128.54</b>	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.11 -\$4.52 - <b>\$27.12</b> - <b>\$27.12</b> -\$4.93	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$17.04 -\$17.04	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.83 -\$0.83 -\$0.83 -\$0.83 -\$0.83	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$236.89 \$244.97 \$269.69 <b>\$3,123.49</b> \$33,123.49 \$287.04	\$48 \$66 \$86 \$1.04 \$1.23 \$1.42 \$1.60 \$1.88 \$1.98 \$2,18 <b>\$14,61</b> <b>\$14,61</b> \$14,61 \$2,37
Mar-16 Apr-16 Jun-16 Jun-16 Jul-16 Sep-16 Oct-16 Nov-16 Dec-16 otal for 2016 mount Cleared pening Balan Jan-17 Feb-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q4	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> \$688.55 \$688.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$440.69 \$528.76 <b>\$3,172.56</b> <b>\$3,172.56</b> \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$621.64 \$699.35 \$777.05 \$8854.76 \$ <b>5,128.54</b> <b>\$5,128.54</b> \$932.46 \$932.46	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.52 -\$27.12 -\$27.12 -\$4.93 -\$4.93 -\$4.93 -\$4.93	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$17.04 -\$17.04 -\$3.10 -\$3.10	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.14 -\$0.83 -\$0.83 -\$0.83 -\$0.15 -\$0.15 -\$0.15	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$2268.89 \$244.97 \$269.69 \$ <b>3,123.49</b> \$ <b>3,123.49</b> \$287.04 \$287.04	\$48 \$66 \$88 \$1,04 \$1,22 \$1,42 \$1,80 \$1,90 \$2,18 <b>\$14,61</b> \$14,61 \$2,33 \$2,33 \$2,34
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Aug-16 Sep-16 Oct-16 Dec-16 Dec-16 Dec-16 Dec-16 Dec-16 Teal and a set pening Balan Jan-17 Feb-17 Mar-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q4 Q4 Q1 Q1	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> \$588.55 \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$430.69 \$528.76 <b>\$3,172.56</b> <b>\$3,172.56</b> \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 \$5,128.54 \$932.46 \$932.46 \$932.46	-\$0.22 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.28 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.52 -\$27.12 -\$4.53 -\$4.53 -\$4.53 -\$4.93 -\$4.93 -\$4.93	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$17.04 -\$3.10 -\$3.10 -\$3.10	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15	\$138.69 \$146.71 \$164.58 \$172.58 \$102.83 \$207.33 \$214.68 \$2268.69 \$244.97 \$269.69 \$3,123.49 \$287.04 \$259.26 \$287.04	\$44 \$66 \$86 \$1,04 \$1,22 \$1,42 \$1,60 \$1,86 \$1,96 \$2,18 \$14,61 \$14,61 \$14,61 \$12,37 \$2,33 \$2,33 \$2,33
Mar-16 Apr-16 May-16 Jul-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 otal for 2016 mount Cleared pening Balan Jan-17 Feb-17 Mar-17 Apr-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q4 Q1 Q1 Q1 Q2	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$245.23 \$343.32 \$343.32 \$342.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> \$588.55 \$588.55 \$588.55 \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 <b>\$3,172.56</b> <b>\$3,172.56</b> \$576.83 \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$693.35 \$777.05 \$854.76 \$5,128.54 \$5,128.54 \$932.46 \$932.46 \$932.46 \$932.46	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.52 -\$27.12 -\$4.93 -\$4.93 -\$4.93 -\$4.93 -\$4.93 -\$4.93	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$3.10 -\$3.10 -\$3.10 -\$3.10	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$226.89 \$244.97 \$269.69 <b>\$3,123.49</b> \$244.97 \$269.69 <b>\$3,123.49</b> \$287.04 \$259.26 \$259.26 \$259.26	\$44 \$66 \$10 \$1,04 \$1,22 \$1,42 \$1,60 \$1,80 \$1,96 \$1,96 \$14,61 \$14,61 \$14,61 \$14,61 \$2,37 \$2,34 \$2,33 \$2,23 \$2,23
Mar-16 Apr-16 May-16 Jun-16 Jul-16 Sep-16 Oct-16 Nov-16 Dec-16 otal for 2016 mount Cleared pening Balan Jan-17 Feb-17 Mar-17 May-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q1 Q1 Q1 Q1 Q2 Q2	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$245.23 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> \$588.55 \$588.55 \$588.55 \$588.55 \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$440.69 \$528.76 <b>\$3,172.56</b> <b>\$3,172.56</b> \$576.83 \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$693.55 \$7777.05 \$854.76 \$5,128.54 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.93 -	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$17.04 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$236.89 \$244.97 \$269.69 <b>\$3,123.49</b> \$287.04 \$259.26 \$287.04 \$277.78 \$267.04	\$44 \$66 \$88 \$1,04 \$1,22 \$1,42 \$1,60 \$1,80 \$2,16 \$14,61 \$2,33 \$2,34 \$2,33 \$2,34 \$2,33 \$2,34 \$2,33 \$2,36 \$2,33 \$2,36 \$2,33 \$2,36
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 Dec-16 Dec-16 Dec-16 Dec-17 Mar-17 Feb-17 Mar-17 Apr-17 Jun-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q4 Q1 Q1 Q1 Q1 Q2 Q2	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> \$588.55 \$588.55 \$588.55 \$588.55 \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$430.69 \$528.76 \$3,172.56 \$3,172.56 \$576.83 \$576.83 \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 \$5,128.54 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46	-\$0.22 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.52 -\$27.12 -\$4.53 -\$4.53 -\$4.53 -\$4.93	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15	\$138.69 \$146.71 \$164.58 \$172.58 \$102.83 \$207.33 \$214.68 \$2268.69 \$244.97 \$269.69 \$3,123.49 \$242.97 \$269.69 \$3,123.49 \$287.04 \$259.26 \$287.04 \$259.26 \$287.04 \$277.78	\$44 \$66 \$86 \$1,04 \$1,22 \$1,42 \$1,60 \$1,86 \$1,96 \$2,16 \$14,61 \$14,61 \$14,61 \$14,61 \$2,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,33 \$2,33 \$2,33 \$2,37
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 <b>otal for 2016</b> mount Cleared <b>pening Balan</b> Jan-17 Feb-17 Mar-17 May-17 Jun-17 Jul-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q1 Q1 Q1 Q1 Q1 Q2 Q2 Q2 Q2 Q2 Q3	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$244.24 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$588.55</b> \$588.55 \$588.55 \$588.55 \$588.55 \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 \$3,172.56 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$693.35 \$777.05 \$854.76 \$5,128.54 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46	-\$0.22 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.29 -\$4.11 -\$4.52 -\$27.12 -\$4.93 -	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$226.89 \$244.97 \$269.69 <b>\$3,123.49</b> \$287.04 \$259.26 \$287.04 \$259.26 \$287.04	\$44 \$66 \$10 \$1,04 \$1,22 \$1,44 \$1,60 \$1,86 \$1,96 \$1,96 \$14,61 \$14,61 \$14,61 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36
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Mar-16 Apr-16 May-16 Jun-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 <b>otal for 2016</b> mount Cleared <b>pening Balan</b> Jan-17 Feb-17 Mar-17 Apr-17 May-17 Jul-17 Aug-17 Sep-17 Oct-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q1 Q1 Q1 Q1 Q1 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q3 Q3 Q3 Q3 Q3 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q2	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$244.24 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$588.55</b> \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 \$3,172.56 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 \$5,128.54 \$5,128.54 \$932.46\$}\$932.46 \$932.46 \$932.46\$}\$932.46 \$932.46\$}\$932.46 \$932.46\$}\$932.46 \$932.46\$}\$932.46	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.29 -\$4.11 -\$4.52 -\$27.12 -\$4.93 -	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$2.84 -\$17.04 -\$3.10 -	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$226.89 \$244.97 \$269.69 <b>\$3,123.49</b> \$287.04 \$259.26 \$287.04 \$257.78 \$287.04 \$277.78 \$287.04 \$277.78 \$287.04	\$44 \$66 \$10 \$1,22 \$1,42 \$1,60 \$1,86 \$1,96 \$2,37 \$2,34 \$2,37 \$2,33 \$2,35 \$2,55
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 Octal for 2016 mount Cleared pening Balan Jan-17 Feb-17 May-17 Jun-17 Jun-17 Jun-17 Aug-17 Sep-17 Oct-17 Nov-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4	0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$224.28 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$688.55</b> \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 <b>\$3,172.56</b> <b>\$3,172.56</b> <b>\$3,172.56</b> \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 \$5,128.54 \$932.46\$932.46 \$932.46 \$932.46\$932.46	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.93 -	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$17.04 -\$17.04 -\$3.10	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.20 -\$	\$138.69 \$146.71 \$164.58 \$172.58 \$172.58 \$207.33 \$214.68 \$236.89 \$244.97 \$269.69 \$3,123.49 \$244.97 \$269.69 \$3,123.49 \$247.04 \$259.26 \$287.04 \$277.78 \$287.04 \$277.78 \$287.04 \$2	\$48 \$66 \$10,04 \$1,22 \$1,42 \$1,60 \$1,80 \$2,37 \$2,34 \$2,37 \$2,33 \$2,33 \$2,37 \$2,33 \$2,33 \$2,37 \$2,33 \$2,37 \$2,57 \$2,
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Mar-16 Apr-16 May-16 Jun-16 Jun-16 Aug-16 Sep-16 Oct-16 Dec-16 <b>otal for 2016</b> <b>otal for 2016</b> <b>otal for 2016</b> <b>mount Cleared</b> <b>pening Balan</b> Jan-17 Feb-17 Mar-17 Apr-17 May-17 Jun-17 Jun-17 Jun-17 Sep-17 Oct-17 Nov-17 Dec-17 <b>otal for 2017</b>	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4	0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$224.28 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$688.55</b> \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 <b>\$3,172.56</b> <b>\$3,172.56</b> <b>\$3,172.56</b> \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 \$5,128.54 \$932.46\$932.46 \$932.46 \$932.46\$932.46	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.93 -	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$17.04 -\$17.04 -\$3.10	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.20 -\$	\$138.69 \$146.71 \$164.58 \$172.58 \$172.58 \$207.33 \$214.68 \$236.89 \$244.97 \$269.69 \$3,123.49 \$244.97 \$269.69 \$3,123.49 \$247.04 \$259.26 \$287.04 \$277.78 \$287.04 \$277.78 \$287.04 \$2	\$44 \$66 \$86 \$1,04 \$1,22 \$1,44 \$1,60 \$1,86 \$1,96 \$2,18 \$14,61 \$14,61 \$14,61 \$14,61 \$12,37 \$2,33 \$2,35 \$2,55 \$
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Sep-16 Oct-16 Nov-16 Dec-16 <b>otal for 2016</b> mount Cleared <b>opening Balan</b> Jan-17 May-17 May-17 May-17 Apr-17 May-17 Sep-17 Oct-17 Nov-17 Dec-17 <b>otal for 2017</b> mount Cleared	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4	0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$244.24 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$588.55</b> \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 \$3,172.56 \$3,172.56 \$576.83 \$57	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$693.35 \$777.05 \$854.76 \$5,128.54 \$932.46\$932.46 \$932.46 \$932.46 \$932.46\$932.46	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.52 -\$4.93 -	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$3.10 -\$	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.20 -\$0.20 -\$0.20 -\$0.20 -\$0.20	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$236.89 \$244.97 \$260.69 \$3,123.49 \$244.97 \$260.69 \$3,123.49 \$287.04 \$259.26 \$287.04 \$2277.78 \$287.04 \$2277.78 \$287.04 \$2277.04 \$287.04	\$44 \$66 \$10 \$1,04 \$1,22 \$1,42 \$1,80 \$1,96 \$2,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36 \$2,37 \$2,33 \$2,36 \$2,37 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,37 \$2,37 \$2,36 \$2,37 \$2,37 \$2,37 \$2,36 \$2,37 \$2,37 \$2,37 \$2,36 \$2,37
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 Octal for 2016 mount Cleared Opening Balan Jan-17 Feb-17 Mar-17 Mar-17 Jun-17 Jun-17 Jun-17 Sep-17 Oct-17 Nov-17	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q1 Q1 Q1 Q1 Q2 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4	0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$294.28 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$588.55</b> \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$432.62 \$430.69 \$528.76 \$3,172.56 \$3,172.56 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83 \$576.83	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 \$5,128.54 \$932.46\$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46\$932.46	\$0.22 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.52 -\$27.12 -\$4.93 -\$4.9	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$3.10 -\$3.20 -\$3.10 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.20 -\$3.10 -\$3.20 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.10 -\$3.10 -\$3.20 -	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.20 -\$	\$138.69 \$146.71 \$164.58 \$172.58 \$102.83 \$207.33 \$214.68 \$2236.89 \$244.97 \$269.69 \$3,123.49 \$244.97 \$269.69 \$3,123.49 \$287.04 \$259.26 \$287.04 \$277.78 \$287.04 \$277.78 \$287.04 \$277.78 \$391.42 \$3391.42	\$44 \$66 \$86 \$1,04 \$1,23 \$1,42 \$1,80 \$1,98 \$2,18 <b>\$14,61</b> <b>\$14,61</b> <b>\$14,61</b> \$2,37 \$2,34 \$2,37 \$2,23 \$2,24 \$2,25 \$2,
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Sep-16 Oct-16 Nov-16 Dec-16 <b>otal for 2016</b> mount Cleared <b>opening Balan</b> Jan-17 May-17 May-17 May-17 Apr-17 May-17 Sep-17 Oct-17 Nov-17 Dec-17 <b>otal for 2017</b> mount Cleared	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q2 Q2 Q2 Q2 Q2 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4	0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$244.24 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$588.55</b> \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 \$3,172.56 \$3,172.56 \$576.83 \$57	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$693.35 \$777.05 \$854.76 \$5,128.54 \$932.46\$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46\$932.46	-\$0.82 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.52 -\$4.93 -	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$2.58 -\$3.10 -\$	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.20 -\$0.20 -\$0.20 -\$0.20 -\$0.20	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$236.89 \$244.97 \$260.69 \$3,123.49 \$244.97 \$260.69 \$3,123.49 \$287.04 \$259.26 \$287.04 \$2277.78 \$287.04 \$2277.78 \$287.04 \$2277.04 \$287.04	\$44 \$66 \$86 \$1,04 \$1,23 \$1,42 \$1,60 \$1,80 \$2,18 \$14,61 \$14,61 \$12,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$3,244\$\$5,66\$\$5,66\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$5,76\$\$\$5,76\$\$\$5,76\$\$\$5,76\$\$\$5,76\$\$\$5,76\$\$\$5,76\$\$\$5,76\$\$\$5,76\$\$\$\$5,76\$\$\$\$5,76\$\$\$\$5,76\$\$\$\$5,76\$\$\$\$\$5,76\$\$\$\$\$\$\$\$\$\$
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Sep-16 Oct-16 Nov-16 Dec-16 <b>otal for 2016</b> <b>otal for 2016</b> <b>otal for 2016</b> <b>mount Cleared</b> <b>pening Balan</b> Jan-17 Apr-17 Mar-17 Mar-17 May-17 Jun-17 Jun-17 Jun-17 Sep-17 Oct-17 Nov-17 Dec-17 <b>otal for 2017</b> mount Cleared <b>opening Balan</b> Jan-18	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017	Q1 Q2 Q2 Q3 Q3 Q3 Q4 Q4 Q4 Q4 Q4 Q4 Q1 Q1 Q1 Q1 Q2 Q2 Q2 Q3 Q3 Q3 Q3 Q3 Q3 Q4 Q4 Q4 Q4	0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$244.24 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$588.55</b> \$588.55 \$	\$96.14 \$144.21 \$192.28 \$240.35 \$228.41 \$336.48 \$3384.55 \$432.62 \$440.69 \$528.76 \$3,172.56 \$576.83 \$576	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 \$5,128.54 \$932.46\$932.46 \$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46	\$0.22 \$1.23 \$1.64 \$2.05 \$2.47 \$2.88 \$3.29 \$3.29 \$3.29 \$3.29 \$4.11 \$4.52 \$2.7.12 \$4.52 \$2.7.12 \$4.53 \$4.53 \$4.93	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$3.10 -\$3.20 -\$3.10 -\$3.10 -\$3.20 -\$3.10 -\$3.20 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.22 -\$5.60 -	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.20 -\$	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$2236.89 \$244.97 \$269.69 \$3,123.49 \$287.04 \$259.26 \$287.04 \$259.26 \$287.04 \$277.78 \$287.04 \$287.04 \$277.78 \$287.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$29	\$44 \$66 \$66 \$1,04 \$1,23 \$1,42 \$1,60 \$1,88 \$2,18 \$14,61 \$14,61 \$14,61 \$12,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,566 \$
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 <b>otal for 2016</b> <b>otal for 2016</b> <b>mount Cleared</b> <b>opening Balan</b> Jan-17 Feb-17 Mar-17 Mar-17 May-17 Jun-17 Jun-17 Jun-17 Sep-17 Oct-17 Nov-17 Dec-17 <b>otal for 2017</b> <b>mount Cleared</b> <b>pening Balan</b> Jan-18 Feb-18	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017 2011-2018 2011-2018 2011-2018 2011-2018	Q1           Q2           Q2           Q3           Q3           Q3           Q4           Q2           Q2           Q2           Q2           Q3           Q3           Q3           Q3           Q3           Q3           Q3           Q3           Q3           Q4           Q4           Q4           Q4           Q4           Q4           Q4           Q1           Q1           Q1	0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$244.23 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> \$588.55	\$96.14 \$144.21 \$192.28 \$240.35 \$288.41 \$336.48 \$384.55 \$432.62 \$480.69 \$528.76 \$3,172.56 \$576.83 \$576.85	\$155.41 \$233.12 \$310.82 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$669.35 \$777.05 \$854.76 \$5,128.54 \$932.46 \$934.92 \$932.46\$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.57 \$932.57\$\$956\$\$957\$\$957\$\$957\$\$957\$\$957\$\$957\$\$9	-\$0.22 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.29 -\$4.11 -\$4.52 -\$27.12 -\$4.93 -	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.57.60 -\$4.22 -\$5.84 -\$5.8	-\$0.03 -\$0.04 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.20 -\$	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$226.89 \$244.97 \$269.69 \$3,123.49 \$287.04 \$259.26 \$287.04 \$259.26 \$287.04 \$2277.78 \$287.04 \$2277.78 \$287.04 \$2277.78 \$287.04 \$	\$44 \$66 \$66 \$1,04 \$1,23 \$1,42 \$1,60 \$1,98 \$2,21 <b>\$14,61</b> \$14,61 \$2,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,36 \$3,22 \$3,25 \$3,55 \$3,55 \$3,55 \$3,55\$\$\$3,55\$\$3,55\$\$\$3,55\$\$\$3,55\$\$\$3,55\$\$\$3,55\$\$\$3,55\$\$\$3,55\$\$\$3,55\$\$\$3,55\$\$\$\$3,55\$\$\$\$3,55\$\$\$\$\$\$3,55\$\$\$\$\$\$\$\$
Mar-16 Apr-16 May-16 Jun-16 Jun-16 Sep-16 Oct-16 Dec-16 Oct-16 Dec-16 <b>otal for 2016</b> <b>otal for 2016</b> <b>otal for 2016</b> <b>mount Cleared</b> <b>pening Balan</b> Jan-17 Apr-17 Mar-17 May-17 Jun-17 Jun-17 Jun-17 Sep-17 Oct-17 Nov-17 Dec-17 <b>otal for 2017</b> <b>mount Cleared</b> <b>opening Balan</b> Jan-18	2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2016 2011-2017	Q1           Q2           Q2           Q3           Q3           Q3           Q4           Q4           Q4           Q1           Q1           Q1           Q1           Q1           Q1           Q2           Q3           Q4           Q4	0.09% 0.09%	\$98.09 \$147.14 \$196.18 \$245.23 \$244.24 \$343.32 \$392.37 \$441.41 \$490.46 \$539.50 <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$3,237.03</b> <b>\$588.55</b> \$588.55 \$	\$96.14 \$144.21 \$192.28 \$240.35 \$228.41 \$336.48 \$3384.55 \$432.62 \$440.69 \$528.76 \$3,172.56 \$576.83 \$576	\$155.41 \$233.12 \$310.82 \$388.53 \$466.23 \$543.94 \$621.64 \$699.35 \$777.05 \$854.76 \$5,128.54 \$932.46\$932.46 \$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46 \$932.46\$932.46 \$932.46 \$932.46\$932.46 \$932.46\$932.46 \$932.46\$932.46	-\$0.22 -\$1.23 -\$1.64 -\$2.05 -\$2.47 -\$2.88 -\$3.29 -\$3.29 -\$3.70 -\$4.11 -\$4.52 -\$27.12 -\$4.52 -\$27.12 -\$4.53 -\$4.53 -\$4.93	-\$0.52 -\$0.77 -\$1.03 -\$1.29 -\$1.55 -\$1.81 -\$2.07 -\$2.32 -\$2.58 -\$2.84 -\$17.04 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.10 -\$3.57.60 -\$4.22	-\$0.03 -\$0.04 -\$0.05 -\$0.06 -\$0.08 -\$0.09 -\$0.10 -\$0.11 -\$0.13 -\$0.13 -\$0.14 -\$0.83 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.15 -\$0.20 -\$	\$138.69 \$146.71 \$164.58 \$172.58 \$122.83 \$207.33 \$214.68 \$2236.89 \$244.97 \$269.69 \$3,123.49 \$287.04 \$259.26 \$287.04 \$259.26 \$287.04 \$277.78 \$287.04 \$287.04 \$277.78 \$287.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$297.04 \$29	\$44 \$66 \$66 \$1,04 \$1,23 \$1,42 \$1,60 \$1,88 \$2,18 \$14,61 \$14,61 \$14,61 \$12,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,34 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,36 \$2,37 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,37 \$2,36 \$2,566 \$

Jun-18	2011-2018	Q2	0.16%	\$1,011.24	\$991.10		-\$8.47	-\$5.32	-\$0.26		\$3,853.02
Jul-18	2011-2018	Q3	0.16%	\$1,011.24	\$991.10	\$1,602.14	-\$8.47	-\$5.32	-\$0.26	\$262.60	\$3,853.02
Aug-18	2011-2018	Q3	0.16%	\$1,011.24	\$991.10	\$1,602.14	-\$8.47	-\$5.32	-\$0.26	\$262.60	\$3,853.02
Sep-18	2011-2018	Q3	0.16%	\$1,011.24	\$991.10	\$1,602.14	-\$8.47	-\$5.32	-\$0.26	\$262.60	\$3,853.02
Oct-18	2011-2018	Q4	0.16%	\$1,011.24	\$991.10	\$1,602.14	-\$8.47	-\$5.32	-\$0.26	\$262.60	\$3,853.02
Nov-18	2011-2018	Q4	0.16%	\$1,011.24	\$991.10	\$1,602.14	-\$8.47	-\$5.32	-\$0.26	\$262.60	\$3,853.02
Dec-18	2011-2018	Q4	0.16%	\$1,011.24	\$991.10	\$1,602.14	-\$8.47	-\$5.32	-\$0.26	\$262.60	\$3,853.02
Total for 2018				\$22,450.53	\$22,003.43	\$35,569.18	-\$188.08	-\$118.18	-\$5.73	\$9,801.57	\$89,512.73
Amount Cleared											
Opening Balance for 2019				\$22,450.53	\$22,003.43	\$35,569.18	-\$188.08	-\$118.18	-\$5.73	\$9,801.57	\$89,512.73
Jan-19	2011-2019	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Feb-19	2011-2019	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Mar-19	2011-2019	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apr-19	2011-2019	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
May-19	2011-2019	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jun-19	2011-2019	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jul-19	2011-2019	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Aug-19	2011-2019	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sep-19	2011-2019	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Oct-19	2011-2019	Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Nov-19	2011-2019	Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Dec-19	2011-2019	Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total for 2019				\$22,450.53	\$22,003.43	\$35,569.18	-\$188.08	-\$118.18	-\$5.73	\$9,801.57	\$89,512.73
Amount Cleared	Amount Cleared										
Opening Balance for 2020				\$22,450.53	\$22,003.43	\$35,569.18	-\$188.08	-\$118.18	-\$5.73	\$9,801.57	\$89,512.73
Jan-20	2011-2020	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Feb-20	2011-2020	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Mar-20	2011-2020	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apr-20	2011-2020	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
May-20	2011-2020	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



# Supporting Documentation: LDC Persistence Savings Results from IESO

Version 2.0 (2017)

Legend

Instructions (Grey)

**Supporting Documentation** 

The following tabs 7-a to 7-j must be populated with the verified savings results from the IESO's (or former OPA's) persistence reports. The persistence data tabs have been structured in a way to match the formatting of the persistence report provided by the IESO.

 Tab 7-a. 2011

 Tab 7-b. 2012

 Tab 7-c. 2013

 Tab 7-d. 2014

 Tab 7-e. 2015

 Tab 7-f. 2016



Legend

User Inputs (Green) Instructions (Grey)

# Table 7-a. 2011 Persisting Savings

## Go to Tab 4.

1. LDCs are requested to paste a copy of the 2011 "LDC CDM Program Results Persistence Report"in the space below as it relates to the calculation of LRAMVA.

2. Please ensure that verified adjustments to 2011 programs that become available in future evaluation audits are included in the 2011 form below.

#	Portfolio	Program	Initiative	LDC	Sector	Conservation Resource Type	(Implementation) Year
	1 Tier 1	Consumer	Appliance Exchange	PowerStream		EE	2011
	2 Tier 1	Consumer	Appliance Retirement	PowerStream	Residential	EE	2011
	3 Tier 1	Consumer	Bi-Annual Retailer Event	PowerStream	Residential	EE	2011
	4 Tier 1				Residential	EE	2011
	5 Tier 1	Consumer	HVAC Incentives	PowerStream	Residential	EE	2011
	6 Tier 1	Consumer	Residential Demand Response	PowerStream	Residential	DR	2011
	7 Tier 1	Consumer	Retailer Co-op	PowerStream	Residential	EE	2011
	8 Tier 1	Business	Commercial Demand Response (part of the Residential program schedule)	PowerStream	Commercial	& DR	2011
	9 Tier 1	Business	Demand Response 3 (part of the Industrial program schedule)	PowerStream	Commercial	& DR	2011
	10 Tier 1	Business	Direct Install Lighting	PowerStream	Commercial	8 EE	2011
	11 Tier 1	Business	Retrofit	PowerStream			2011
	12 Tier 1	Business	Energy Audit	PowerStream			2011
	13 Tier 1	Business	High Performance New Construction		Commercial		2011
	14 Tier 1	Industrial	Demand Response 3	PowerStream		DR	2011
	15 Tier 1	Industrial	Retrofit	PowerStream		EE	2011
	16 Tier 1		gran Data Centre Incentive Program		Commercial		2011
	17 Tier 1		gran Electricity Retrofit Incentive Program	PowerStream			2011
	18 Tier 1		gran High Performance New Construction		Commercial		2011
	19 Tier 1	Pre-2011 Prog	gran Multifamily Energy Efficiency Rebates	PowerStream	Commercial	& EE	2011
	20						
	21						
	22						
	23						
	24						
	25						
	etc.						

### Supporting Documentation: 2011 LDC Persistence Savings Results from IESO

Tx (Transmission) or Dx (Distribution) Connected	Status	Notes	Activity Unit Name		Gross Summer Peak Demand Savings (kW)	Gross Energy Savings (kWh)	Net Verified Annual	Peak Demand Sa	vings at the End-Us	ser Level (kW)			
							2011	2012	2013	2014	2015	2016	2017
	Final; Release Final; Release		Appliances Appliances	152 2,986	30 339	36,794 2,465,802	15.41 158.62	15.41 158.62	15.41 158.62	5.83 156.58	- 110.68	-	-
	Final; Release Final; Release		Products Products	57,776 34,625	100 70	1,785,664 1,174,884	111.62 79.66	111.62 79.66	111.62 79.66	111.62 79.66	103.85 74.88	95.35 69.66	77.13 58.87
		New participa		10,174 2,234	4,700 1,251	8,684,756 3,239	2,828.95 1,251.04	2,828.95	2,828.95	2,828.95	2,828.95	2,828.95	2,828.95
	Final; Release	Custom retaile	Devices	134 -	-	3,450	0.11	0.11 -	0.11 -	0.11 -	0.11 -	0.11 -	0.06
	Final; Release Final; Release Final; Release		Projects Projects	12 1,943 148	1,639 1,967 1,673	48,536 5,703,882 9,981,644	1,243.13 2,105.84 1,224.60	- 2,103.07 1,224.60	- 2,017.35 1,223.95	- 1,531.40 1,223.45	- 1,531.16 1,026.35	- 1,521.79 1,001.26	- 280.48 867.78
	Final; Release	: Not evaluated Not evaluated	Audits	6	- 33	- 139,736	- 16.44	- 16.44	- 16.44	- 16.44	- 16.44	- 16.44	- 16.44
	Final; Release		Projects	11 34	3,125 684	154,591 4,169,768	2,633.63 501.59	- 501.59	- 501.59	- 501.04	- 501.04	- 501.04	- 458.67
	Final; Release	Not evaluated	Projects	5 195	81 3,752	533,038 18,243,264	81.40 1,958.17	81.40 1,958.17	81.40 1,958.17	81.40 1,958.17	81.40 1,958.17	81.40 1,958.17	81.40 1,958.17
		Not evaluated		8	422 110	2,165,793 286,080	210.84 75.07	210.84 75.07	210.84 75.07	210.84 75.07	210.84 75.07	210.84 75.07	210.84 75.07



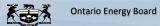
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-		-	-	-
76.63	92.90	44.07	6.27	6.26	6.26	5.81	5.81	4.91	-	-		-	-	-
58.25	68.26	38.23	4.78	4.78	4.78	4.68	4.68	4.43	-	-	-	-	-	-
2,828.95	2,828.95	2,828.95	2,828.95	2,828.95	2,828.95	2,828.95	2,828.95	2,828.95	2,828.95	2,828.95	2,293.85	-	-	-
	-	-	-	-		-	-	-	-		-	-	-	-
0.06	0.06	0.01	-	-		-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
264.13	264.13	264.13	240.83	240.83	33.87	33.87	33.87	-	-	-	-	-	-	-
780.53	655.77	655.77	652.82	636.19	89.40	86.87	86.87	65.76	42.30	31.06	31.06	31.06	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	16.44	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
397.98	314.42	314.42	313.78	311.99	28.55	28.55	28.55	16.64	5.39	-	-	-	-	-
81.40	81.40	81.40	81.40	81.40	81.40	81.40	81.40	81.40	81.40	81.40	81.40	81.40	-	-
1,958.17	1,958.17	1,958.17	1,958.17	1,958.17	1,958.17	-	-	-	-	-	-	-	-	-
210.84	210.84	210.84	210.84	210.84	210.84	210.84	210.84	107.96	107.96	107.96	107.96	107.96	107.96	107.96
75.07	75.07	75.07	75.07	75.07	75.07	-	-	-	-	-	-	-	-	-

2033	2034	2035	2036	2037	2038	2039	2040	2011	2012	2013	2014	2015
-	-	-	-	-	-	-	-	18,962.23	18,962.23	18,962.23	10,401.35	-
-	-	-	-	-	-	-	-	1,160,946.42	1,160,946.42	1,160,946.42	1,159,117.20	841,804.5
-	-	-	-	-	-	-	-	1,950,839.43	1,950,839.43	1,950,839.43	1,950,839.43	1,782,923.5
-	-	-	-	-	-	-	-	1,295,153.27	1,295,153.27	1,295,153.27	1,295,153.27	1,191,910.2
-	-	-	-	-	-	-	-	5,192,089.11	5,192,089.11	5,192,089.11	5,192,089.11	5,192,089.1
-	-	-	-	-	-	-	-	3,239.30		-	-	-
-	-	-	-	-	-	-	-	2,334.81	2,334.81	2,334.81	2,334.81	2,334.
-	-	-	-	-	-	-	-	-		-	-	-
-	-	-	-	-	-	-	-	48,535.59	-		-	-
-	-	-	-	-	-	-	-	5,296,277.52	5,288,648.25	5,055,893.56	3,655,866.73	3,655,241.
-	-	-	-	-	-	-	-	7,512,896.73	7,512,896.73	7,509,317.98	7,507,386.49	6,426,037.
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	69,868.01	69,868.01	69,868.01	69,868.01	69,868.
-	-	-	-	-	-	-	-	154,590.90	•		-	-
-	-	-	-	-	-	-	-	3,213,756.83	3,213,756.83	3,213,756.83	3,211,656.34	3,211,656.3
-	-	-	-	-	-	-	-	533,038.00	533,038.00	533,038.00	533,038.00	533,038.
	-	-	-	-	-	-	-	9,540,023.70	9,540,023.70	9,540,023.70	9,540,023.70	9,540,023.
107.96	107.96	107.96	107.96	-	-	-	-	1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.
-	-	-	-	-	-	-	-	194,534.40	194,534.40	194,534.40	194,534.40	194,534.

2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
-	-	-	-	-	-	-	-	-	-
1,599,482.57 1,079,121.58 5,192,089.11	1,205,907.89 846,248.40 5,192,089.11	1,201,508.79 840,828.93 5,192,089.11	1,552,865.65 1,056,860.62 5,192,089.11	498,301.05 408,461.80 5,192,089.11	179,422.09 133,343.08 5,192,089.11	157,940.25 108,210.12 5,192,089.11	157,940.25 108,210.12 5,192,089.11	116,645.51 98,584.55 5,192,089.11	116,645.51 98,584.55 5,192,089.11
-	-	-	-	-	-	-	-	-	-
2,334.81	1,294.47	1,294.47	1,294.47	315.52	-	-	-		-
					-				
3,634,354.24 6,329,764.14	681,068.75 5,777,805.56	668,794.80 5,326,802.48	668,794.80 4,763,679.94	668,794.80 4,763,679.94	515,583.62 4,725,522.30	515,583.62 4,236,987.75	25,426.59 442,962.77	25,426.59 433,242.22	25,426.59 433,242.22
			-	-	-	-	-	-	-
69,868.01	69,868.01	69,868.01	69,868.01	69,868.01	69,868.01	69,868.01	69,868.01	69,868.01	69,868.01
-	-					-			-
3,211,656.34	2,994,466.37	2,571,857.64	2,048,952.99	2,048,952.99	2,040,709.06	2,029,566.12	40,015.29	40,015.29	40,015.29
533,038.00	533,038.00	533,038.00	533,038.00	533,038.00	533,038.00	533,038.00	533,038.00	533,038.00	533,038.00
9,540,023.70	9,540,023.70	9,540,023.70	9,540,023.70	9,540,023.70	9,540,023.70	9,540,023.70	9,540,023.70	-	-
1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.46	1,082,896.46
194,534.40	194,534.40	194,534.40	194,534.40	194,534.40	194,534.40	194,534.40	194,534.40		-

105,984.96 95,720.53 5,192,089.11 - -	5,192,089.11	5,192,089.11	4,713,593.85				-		-	- - -	-
105,984.96 95,720.53 5,192,089.11 - - -	5,192,089.11 - -	- - 5,192,089.11 -	- - 4,713,593.85		:	-			-		-
95,720.53 5,192,089.11 - - -	- 5,192,089.11 - -	- 5,192,089.11 -	4,713,593.85	-	-		-	-			
5,192,089.11 - - -	5,192,089.11 - -	5,192,089.11	4,713,593.85	-		-	-	-			
-	-	-		-							-
:	-		-			-	-	-	-	-	-
		-		-	-	-	-	-	-	-	-
			-		-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
		-			-	-	-	-	-	-	-
-		-				-	-	-		-	
369,764.49	161,827.44	62,274.72	62,274.72	62,274.72						-	
-	-	-	-	-							
69,868.01	69,868.01		-				-		-		
-	-		-								-
15,370.33	4,976.29			-							
533,038.00	533,038.00	533,038.00	533,038.00	533,038.00	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
554,466.26	554,466.26	554,466.26	554,466.26	554,466.26	554,466.26	554,466.26	554,466.26	554,466.26	554,466.26	554,466.26	-

2038	2039	2040
-	-	-
-	-	-
	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
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-	-	-
-	-	-
	-	-
	-	-
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-	-	-



### Supporting 2012 LDC Persistence



#### Table 7-b. 2012 Persisting Savings

#### Go to Tab 4.

1. LDCs are requested to paste a copy of the 2012 "LDC CDM Program Results Persistence Report" in the space below as it relates to the calculation of LRAMVA.

2. Please ensure that verified adjustments to 2012 programs that become available in future evaluation audits are included in the 2012 form below.

	# F	Portfolio	Program	Initiative	LDC	Sector	Conservation Resource Type	(Implementation) Year	Tx (Transmission) or Dx (Distribution) Connected	Status	Notes	Activity Unit Name	Participation		Gross Energy Savings (kWh)
		Tier 1			PowerStream		FF	2012					110	31	55.075
		lier 1 Tier 1		Appliance Exchange Appliance Retirement	PowerStream		FF	2012		Final; Release Final; Release			110	31 202	1.412.653
		Tier 1		Bi-Annual Retailer Event	PowerStream		FF	2012		Final: Release			70.426	108	1,939,860
		Tier 1		Conservation Instant Coupon Booklet	PowerStream		EE	2012		Final; Release			2.051	15	88.018
	5 1	Tier 1				Residential	EE	2012		Final; Release			7,614	3,278	5,614,936
	6 1	Tier 1	Consumer	Residential Demand Response	PowerStream	Residential	DR	2012		Final; Release	ed August 31,	Devices	7,780	3,873	28,587
		Tier 1		Direct Install Lighting	PowerStream		EE	2012		Final; Release		Projects	1,628	1,523	5,758,088
	8 1	Tier 1	Business	Retrofit	PowerStream	C&I	EE	2012	1	Final; Release	ed August 31,	Projects	388	6,207	33,903,387
	9 1	Tier 1	Business	Energy Audit	PowerStream	C&I	EE	2012		Final: Release	ed August 31.	Audits	10	52	251.763
	10 1	Tier 1	Business	Demand Response 3 (part of the Industrial program schedule)	PowerStream	C&I	DR	2012		Final; Release	ed August 31,	Facilities	11	1,232	17,913
	11 1	Tier 1	Home Assistance	Home Assistance Program	PowerStream	Residential	EE	2012		Final; Release			258	36	313
	12 1			Demand Response 3	PowerStream		DR	2012		Final; Release			12	3,186	76,793
	13 1			Energy Manager	PowerStream			2012		Final; Release			2	21	40,000
	14 1			High Performance New Construction	PowerStream		EE	2012		Final; Release		Projects	9	644	2,745,770
	15 1			Program Enabled Savings	PowerStream			2012		Final; Release			11	-	-
for 2011		Tier 1 True Up		Retrofit	PowerStream		EE	2011		Final; Release			26	287	1,915,166
for 2011		Tier 1 True Up		Direct Install Lighting	PowerStream		EE	2011		Final; Release Final: Release			2	3	5,333
for 2011		Tier 1 True Up		Energy Audit	PowerStream		EE	2011		Final; Release			1	5	25,176 46
for 2011 for 2011		Fier 1 True Up Fier 1 True Up		High Performance New Construction	PowerStream PowerStream		FF	2011 2011		Final; Release			;	(2) 663	46 1.466.819
for 2011		Tier 1 True Up		Residential New Construction	PowerStream			2011 2011		Final; Releas			5	663	1,466,819 4,872
for 2011		Tier 1 True Up		HVAC Incentives	PowerStream			2011		Final; Releas			(1,634)	(445)	(445)
Grouped wit				Bi-Annual Retailer Event	PowerStream			2011		Final: Releas			5,431	(445)	157.569
	24 25 etc.										9		.,		

Documentation: Savings Results from IESO

t verified Annu	ual Peak Demand	d Savings at the	End-User Level (	kW)																						
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	20 22	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	T
-	16.1	16.1	16.1	15.7	-	-				-				-		-			-		-	-				-
-	93.6	93.6	93.6	91.3	54.1		-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	
-	98.2 15.3	98.2	98.2 15.3	98.2 15.3	89.9 15.2	76.1 15.2	57.0 13.0	56.8 13.0	56.8 13.0	36.6	14.3	14.3 0.2	14.3 0.2	14.1 0.2	14.1	13.7 0.2	3.9	3.9	3.9	3.9	-	-	-	-	-	
	1,635.2	15.3 1,635.2	1,635.2	15.3	1,635.2	1,635.2	13.0	13.0	13.0	13.0 1,635.2	0.2 1,635.2	1,635.2	1,635.2	1,635.2	0.2 1,635.2	1,635.2	1,635.2	1.635.2	1.253.6	-	-	-		-	-	
-	3,872.6	1,635.2	1,035.2	1,035.2	1,035.2	1,035.2	1,035.2	1,035.2	1,035.2	1,035.2	1,635.2	1,035.2	1,035.2	1,035.2	1,035.2	1,035.2	1,035.2	1,635.2	1,253.6	-						
	1,437.1	1,435.0	1,234.1	946.7	946.4	244.0	244.0	234.6	234.6	234.6	218.8	218.8	14.7	14.7	14.7					-						
-	4,689.8	4,669.6	4,662.0	4,590.8	4,590.8	4,349.0	4,254.2	4,254.2	4,008.7	2,730.4	2,629.9	2,629.9	980.6	937.7	937.7	222.5	155.3	155.3	155.3	155.3	-	-		-	-	
	51.8	51.8	51.8	51.8	-																					
	1,232.3	-	-	-																						
	35.9	34.5	34.5	34.5	34.4	34.4	33.5	33.5	26.1	23.7	22.2	22.2	18.1	18.1	10.7	10.1	10.1	10.1	10.1	10.1	13					
-	3,186.5	-	-	-	-	-	-	-	-	-			-	-	-	-	-		-	-	-	-		-	-	
-	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	644.4	644.4	644.4	644.4	644.4	644.4	644.4	644.4	644.4	644.4	644.4	644.4	-	-		-	-			-	-	-		-	-	
-	-	-	-				-		-				-	-		-	-	-		-	-	-		-	-	
210.6	210.6	210.6	209.4	205.1	205.1	169.5	104.3	89.7	89.7	87.9	87.9	11.9	0.8	0.7	-	-	-	-	-	-	-	s	-	-	-	
2.5 5.2	2.5 5.2	2.5 5.2	2.5 5.2	2.5 5.2	2.5	0.3	0.3	0.3	0.3	0.3	0.3	-	-		-	-	-	-	•	-	-	-	-	-	-	
(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	- (0.9)	- (0.9)	- (0.9)	- (0.9)	- (0.9)	- (0.9)	- (0.9)	(0.9)	- (0.9)	(0.9)		-	-	-		-	-	-		-	-	
331.3	331.3	331.3	331.3	331.3	331.3	331.3	331.3	331.3	331.3	331.3	331.3	331.3	331.3	331.3												
331.3 0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-	-		-	-	-		-	-	
(445.3) 7.2	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(445.3)	(358.3)	-	-	-	-	-	-	-	
	7.2	7.2	7.2	7.2	6.5	3.7	3.7	3.7	1.2	0.5	0.5	0.5	0.5	0.5	0.5	-		-								

				Net Verified Annual Ene	rgy Savings at the End-Us	er Level (kWh)												
2034	2039	2044	-	201	2012	20 13	201	2015	2016	2011	2018	2019	20 20	2021	20 2	20 2	202	202
~	Ű	0		-	~	~	-	01		-	ω	Ũ	U	-	N	ű	-	01
-	-	-			28,384.0	28,384.0	28,384.0	28,029.6	-			-	-	-	-	-	-	
-	-	-			662,322.5	662,322.5	662,322.5	660,272.8	411,737.3	•		•	•				-	
-	-				1,777,858.0	1,777,858.0	1,777,858.0	1,777,858.0	1,598,181.3	1,299,549.6	886,426.1	884,583.5	884,583.5	449,301.1	333,440.0	323,077.3	323,077.3	300,52
-	-				92,817.4	92,817.4	92,817.4	92,817.4	91,422.9	91,422.9	43,050.7	42,813.1	42,813.1	42,813.1	6,953.5	5,600.0 2.761.284.8	5,600.0 2,761,284.8	4,81
-	-				2,761,284.8 28.586.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,761,28
-	-	-			5,424,342.7	5.415.635.0	4.573.454.4	3,341,962.3	3.340.837.5	891.386.3	891.386.3	882.009.2	882,009.2	882,009.2	726.932.6	726.932.6	14.695.8	14,69
					25,834,396.8	25,767,976.2	25,742,596.8	25,509,177.4	25,509,177.4	24,717,523.6	24,157,030.4	24,157,030.4	23,087,410.6	15,754,901.7	14,199,021.1	14,131,085.3	4,337,256.2	4,196,41
-	-				251,762.5 17,912.5	251,762.5	251,762.5	251,762.5	-	-								
-	-				313.1	287.5	287.5	287.5	- 284.1	284.1	267.8	266.2	123.5	121.3	108.2	108.2	94.8	ş
-	-				76,793.0	207.5	207.5	207.5	204.1	204.1	207.0	200.2	123.5	121.3	108.2	106.2	94.0	5
					36.000.0	36.000.0	36.000.0	36.000.0	36.000.0	36.000.0	36.000.0	36.000.0	36.000.0	36.000.0	36.000.0			
					2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9	2,745,769.9		
-	-	-			-	-	· · · ·	· · · ·	-	· · · ·	-		-	-	-	-	-	
-	-	-		1,423,968.7	1,423,968.7	1,423,968.7	1,419,671.9	1,403,001.4	1,402,953.0	1,252,094.4	910,524.5	854,405.4	854,405.4	831,143.2	800,103.1	291,728.5	249,103.9	248,85
-	-	-		4,951.6	4,951.6	4,951.6	4,951.6	4,951.6	4,951.6	691.4	691.4	691.4	691.4	486.8	486.8	-	-	
-	-	-		25,176.3	25,176.3	25,176.3	25,176.3	25,176.3	-		-	-	-	•	-	-		
-	-	-		22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	2
-	-	-		733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,409.4	733,40
-	-	-		2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,436.2	2,43 (814,45
-				(814,450.3) 144,940,9	(814,450.3) 144,940,9	(814,450.3) 144,940.9	(814,450.3) 144,940,9	(814,450.3) 144,940,9	(814,450.3) 131,709.7	(814,450.3) 71,108.6	(814,450.3) 71.094.1	(814,450.3) 71,094.1	(814,450.3) 15,683.9	(814,450.3) 13,176,2	(814,450.3) 12.099.8	(814,450.3) 12,099.8	(814,450.3) 10.041.0	(814,45)
-	-	-		144,940.9	144,940.9	144,940.9	144,940.9	144,940.9	131,709.7	71,108.6	71,094.1	71,094.1	15,683.9	13,176.2	12,099.8	12,099.8	10,041.0	10,04

2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
- 300,521.7	- 296,410.7	- 83,167.1	83,167.1	83,167.1	83,167.1	-			-	-	-	-	-	
4,812.4	4,634.4		-											
2,761,284.8	2,761,284.8	2,761,284.8	2,761,284.8	2,420,037.4	-	-	-	-		-	-	-		
-	-			-	-	-	-	-		-	-	-	-	
14,695.8	-				-	-	-	-	-	-	-	-	-	
4,196,413.5	646,031.5	460,511.6	460,511.6	460,511.6	460,511.6	-	-	-		-	-	-	-	
-							-				-			
-					-	-	-	-		-	-	-		
36.7	31.8	31.8	31.8	31.8	31.8	9.5	-	-		-	-	-	-	
-	-				-	-	-	-	-	-	-	-	-	
-	-				-	-	-	-		-	-	-	-	
-	-					-	-	-	-	-	-	-	-	
-	-	-	-			-	-	-	-	-	-	-	-	
245,946.7	-	•	•	•	-	-	-	-	-	-	-	-	-	
-	-	•	•	•	-	-	-	-	-	-	-	-	-	
-		-	-	-	-	-		-	-	-	-	-	-	
-						-		-			-		-	
-							-				-			
(814,450.3)	(814,450.3)	(814,450.3)	(736,838.6)		-	-	-	-			-		-	
10,028.9	(014,400.0)	(014,400.0)	(100,000.0)											



### Supp 2013 LDC Persi



#### Table 7-c. 2013 Persisting Savings

Go to Tab 4.

1. LDCs are requested to paste a copy of the 2013 "LDC CDM Program Results Persistence Report" in the space below as it relates to the calculation of LRAMVA.

2. Please ensure that verified adjustments to 2013 programs that become available in future evaluation audits are included in the 2013 form below.

	#	Portfolio	Program	Initiative	LDC	Sector	Conservation Resource Type	(Implementation) Year	Tx (Transmission) or Dx (Distribution) Connected	Status	Notes	Activity Unit Name	t Activity / Participation (i.e. # of appliances)	Gross Summer Peak Demand Savings (kW)	Gross Energy Savings (kWh)
for 2012		LDC	Business	Energy Audit Funding		Commercial		2012			N/A	Audit	1.0	5.2	25,176.3
		LDC	Business	Energy Audit Funding		Commercial		2013			N/A	Audit	9.0	120.8	659,796.2
		LDC	Business	DR-3		Commercial		2013			N/A	Facilities	17.0		
		LDC	Business	New Construction	PowerStream	Commercial		2013			N/A		4.0	1,441.2	2,925,209.4
for 2012		LDC				Commercial		2012			N/A	Projects	47.0	755.2	4,063,658.7
		LDC	Business	Retrofit		Commercial i		2013			N/A	Projects	727.0	7,036.7	38,768,552.6
for 2012		LDC	Business	Small Business Lighting		Commercial		2012			N/A	Projects	3.0	3.4	14,832.5
		LDC	Business	Small Business Lighting		Commercial		2013			N/A	Projects	2,315.0	2,463.2	8,416,741.6
		LDC	Consumer	Annual Coupons	PowerStream		EE	2013			Custom load		23,028.1	30.8	454,211.3
	10 1		Consumer	Appliance Exchange	PowerStream		EE	2013			Dehumidifier		187.0	73.6	131,257.6
		LDC	Consumer	Appliance Retirement	PowerStream		EE	2013			N/A	Appliances	830.0	113.5	752,637.7
		LDC	Consumer	Bi-Annual Retailer Events	PowerStream		EE	2013			Custom load		62,717.2	75.8	1,091,430.9
		LDC	Consumer	Home Assistance Program	PowerStream		EE	2013			N/A	Projects Con		45.5	595,251.2
		LDC	Consumer	HVAC	PowerStream		EE	2013			Blended Loar		7,946.0	3,411.6	5,927,244.8
for 2011	15 1		Consumer	HVAC	PowerStream			2011			Blended Loa		5.0	2.3	4,253.8
for 2012		LDC	Consumer	HVAC			EE	2012			Blended Loa		160.0	74.1	132,515.3
		LDC	Consumer	peaksaverPLUS	PowerStream		DR	2006			N/A	Devices	48.0		
		LDC	Consumer	peaksaverPLUS	PowerStream		DR	2007			N/A	Devices	487.0		
		LDC	Consumer	peaksaverPLUS	PowerStream		DR	2008			N/A	Devices	623.0		
		LDC	Consumer	peaksaverPLUS	PowerStream		DR	2009			N/A	Devices	3,537.0		
	21 1		Consumer	peaksaverPLUS	PowerStream		DR	2010			N/A	Devices	1,418.0		
		LDC	Consumer	peaksaverPLUS	PowerStream		DR	2011			N/A	Devices	2,182.0		
	23 1		Consumer	peaksaverPLUS	PowerStream		DR	2012			N/A	Devices	1,855.0		
	24 1		Consumer	peaksaverPLUS	PowerStream		DR	2013			N/A	Devices	11,002.0		
		LDC	Consumer	peaksaverPLUS (IHD)	PowerStream		DR	2012	Dx		N/A	Devices	6,205.0		
	26 1		Consumer	peaksaverPLUS (IHD)	PowerStream		DR	2013			N/A	Devices	13,473.0		
	27 1		Industrial	DR-3	PowerStream		DR	2013			N/A	Facilities	10.0		
		LDC	Industrial	DR-3	PowerStream		DR	2013			N/A	Facilities	5.0		
	29 1		Industrial	Energy Manager	PowerStream	Industrial	EE	2013			N/A		40.0	467.5	4,130,757.4
for 2011		LDC	Other	Program Enabled Savings	PowerStream		EE	2011			N/A		1.0		5,574.0
	31		Other	Program Enabled Savings	PowerStream		EE	2012			N/A		16.0	184.7	1,234,217.0
for 2012			Other	Program Enabled Savings	PowerStream	Other	EE	2013	Dx		N/A		4.0	5.2	7,515.0
for 2012	32 1		Other	Frogram Enabled Gavings											
for 2012	33 1	LDC	Pre-2011	HPNC	PowerStream	Commercial		2013			N/A		1.0		
for 2012	33 I 34 I	LDC			PowerStream PowerStream	Commercial	EE	2013 2013			N/A N/A	Appliances	1.0 0.9	0.1	856.5

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					1							1							1		1	1		Τ
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
	5.2	5.2	5.2	5.2					1					1										<u> </u>
		79.3	79.3	79.3	79.3																			
		1,921.5																						
	493.8	778.3 493.8	778.3 493.6	778.3	778.3 490.4	778.3	778.3 475.4	778.3 475.4	778.3 468.0	778.3	778.3 382.9	729.2	729.2 327.0	729.2 321.9	729.2 321.9	726.4 234.1			-	13.7	-	-	-	
	493.8	493.8 5.114.5	493.6 5.108.3	490.4 5,098.2	490.4	4/9.3 4,867.3		4/5.4	468.0	442.0	4,124.1	3/1.9	3,471.8	1,505.0	321.9	234.1	13.7 1.263.6	13.7 421.7	13.7 414.9	414.9	414.9	-	-	
	3.2	3.2	3.2	2.8	2.8	4,007.3	4,769.9	4,789.9	4,768.2	4,659.9	4,124.1	0.3	3,471.0	1,505.0	1,403.4	1,403.4	1,203.0	421.7	414.9	414.9	414.9			
	0.2	2,326.6	2,326.6	2,206.9	1,825.6	760.5	756.6	756.6	743.5	743.5	743.5	717.6	324.7	27.2	27.2	27.2	-							
		34.3	34.3	33.1	28.3	28.3	28.3	28.3	28.3	21.2	21.2	17.0	17.0	17.0	17.0	17.0	17.0	16.4	9.6	9.6	9.6	-		
		38.7	38.7	38.7	38.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		53.0	53.0	53.0	52.0	32.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	78.6	78.6	74.3	59.5	59.5	59.5	59.5	59.4	51.1	51.1	37.1	23.9	23.9	23.5	23.5	23.2	20.0	11.8	11.8	11.8	-	-	
-	-	45.5	44.1	44.0	40.8	39.4	38.3	37.0	37.0	23.3	23.0	18.9	18.9	15.9	15.9	6.0	4.9	4.9	4.9	4.9	4.9	3.1	-	
1.4	1.4	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8 1.4	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,657.8	1,286.8			-	
1.4	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	27.1				
	32.2	27.2	32.2	52.2	52.2	32.2	32.2	52.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	52.2	52.2	27.1	-	-	-	
		276.0																						
		353.1																						
		1,987.9																						
		795.2																						
		1,220.3																						
		1.038.7																						
		6,198.8																						
		-																						
		4,959.4											-	-					-			-	-	
_		1,446.9	95.7	95.7	84.7	20.0	0.7	0.7																
- 3.2	- 3.2		95.7 3.2	95.7 3.2	84.7	20.0	0.7	0.7	0.7	-		-	-	-	-			-		-	-	-	-	
	3.2 184.7	1,446.9 420.8								- 132.0	- 132.0	- 132.0	- 132.0	- 132.0	- 132.0	- 52.0	- 52.0	- 52.0	- 52.0	- 52.0	-	•	:	
		1,446.9 420.8 <b>3.2</b>	3.2	3.2	-	-	-	-	-													-		
-	184.7	1,446.9 420.8 3.2 184.7	3.2 184.7	3.2 184.7	- 184.7	- 170.0	- 170.0	- 170.0	- 132.0	132.0	132.0	132.0	132.0	132.0	132.0	52.0	52.0	52.0	52.0	52.0		-	-	
-	184.7	1,446.9 420.8 3.2 184.7 5.2	3.2 184.7 5.2	3.2 184.7 5.2	- 184.7 5.2	- 170.0 5.2	- 170.0 -	- 170.0	- 132.0 -	132.0	132.0	132.0	132.0	132.0	132.0	52.0	52.0	52.0	52.0	52.0		-	-	

					Net Verified Ann	ual Energy Savings at th	e End-User Level (kWh)										
2036	2037	2038	2039	2040	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
						25,176.3	25,176.3	25,176.3	25,176.3								
							436,056.9 28,335.8	436,056.9	436,056.9	436,056.9							
	-	-	-	-	-	-	1,579,613.1	1,579,613.1	1,579,613.1	1,579,613.1	1,579,613.1	1,579,613.1	1,579,613.1	1,579,613.1	1,579,613.1	1,579,613.1	1,274,189
	-	-	-	-	-	2,712,548.2	2,712,548.2	2,711,913.9	2,700,377.5	2,700,377.5	2,660,248.3	2,642,538.8	2,642,538.8	2,612,035.6	2,494,611.5	2,221,019.9	2,175,842
	-	-			-		28,469,682.0	28,448,544.1	28,412,483.3	28,293,824.3	27,648,870.3	27,240,344.3	27,240,344.3	27,195,210.4	26,756,851.7	23,875,070.1	20,057,295
-	-	-	-	-		13,972.8	13,972.8	13,972.8	12,582.6	12,582.6	3,085.0	3,085.0	3,085.0	3,085.0	3,085.0	1,313.9	1,313
-	-	-	-				7,944,312.5	7,944,312.5	7,498,603.0	6,038,248.3	2,701,017.2	2,688,801.7	2,688,801.7	2,675,740.5	2,675,740.5	2,675,740.5	2,440,160
	-	-	-		-		511,654.7 69.085.3	511,654.7	491,937.7 69.085.3	416,772.7	416,772.7	416,772.7	416,772.7	416,425.4	302,811.2	302,811.2	275,330
	-	-	-				69,085.3 354,569,7	69,085.3 354,569.7	69,085.3	69,085.3 353.646.8	219.260.2					-	-
-	-	-	-				1,140,455.9	1,140,455.9	1.071.740.7	837,233.1	837,233.1	837.233.1	837,233.1	836.246.5	703.234.7	703.234.7	611,927
	-	-	-	-	-		595,251.2	568.879.2	566.404.8	504.869.8	478.089.0	456.920.9	431.665.8	422.616.0	159,748,1	159.456.1	123.635
							2,830,425.8	2.830.425.8	2,830,425.8	2,830,425.8	2.830.425.8	2.830.425.8	2,830,425.8	2,830,425.8	2.830.425.8	2,830,425.8	2,830,425
	-	-	-	-	2,560,2	2.560.2	2,560.2	2,560.2	2,560.2	2,560.2	2,560.2	2,560,2	2,560.2	2,560.2	2,560,2	2,560.2	2,560.
	-	-	-	-	_,	64,771.2	64,771.2	64,771,2	64,771.2	64,771.2	64,771.2	64,771.2	64,771.2	64,771.2	64,771.2	64,771.2	64,771
							61.6 646.7 806.8 5,016.0 2,113.6 3,120.7 2,639.2 1,843.8 - - 124,709.8 3,2,946.1										
	-	-	-		-		3,717,681.6	1.523.477.5	1.523.477.5	1,356,131.5	693,704.6	510,624.0	510,624.0	510,624.0		-	
-			-	-	5,574.0	5,574.0	5,574.0	5,574.0	5,574.0	-	-	-	-	-	-	-	-
-	-	-	-	-		1,234,217.0	1,234,217.0	1,234,217.0	1,234,217.0	1,234,217.0	1,182,970.0	1,182,970.0	1,182,970.0	841,617.0	841,617.0	841,617.0	841,617
-	-	-	-	-	-		7,515.0	7,515.0	7,515.0	7,515.0	7,515.0		-				
							221,916.0	221,916.0	221,916.0	221,916.0	221,916.0	221,916.0	221,916.0	221,916.0	221,916.0	221,916.0	221,916
-	-	-	-	-	-		406.0	406.0	406.0	406.0	219.3			-	-	-	-
						551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551.0	551

2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
1,274,189.2	1,274,189.2	1,274,189.2	1,257,812.7	-	-	-	-	-	-		-					
1,905,964.5	1,887,539.0	1,887,539.0	1,359,885.8	35,763.0	35,763.0	35,763.0	35,763.0	-	-	-	-	-	-	-	-	-
19,683,069.9	8,197,275.5	8,046,095.0	8,046,095.0	6,637,302.8	885,974.3	870,640.1	870,640.1	870,640.1			-					
965,484.2	27,183.5	27,183.5	27,183.5	-												
271,409.1	271,409.1	270,293.4	270,293.4	270,064.7	261,719.3	153,623.4	153,623.4	153,623.4	-		-	-	-	-	-	
-			-	-		-	-	-	-				-	-	-	-
-	-	-	-	- 369.982.8	-	-	-	-	-		-	-	-	-	-	
393,410.3 123,635.3	393,410.3 113,504.0	372,648.7 113.504.0	372,648.7 36,414,7	369,982.8	319,357.3 27.437.7	187,455.6 27,437.7	187,455.6 27,437,7	187,455.6 27,437.7	22,729.6	-		-	-	-	-	-
2,830,425.8	2,830,425.8	2,830,425.8	2,830,425.8	2,830,425.8	2,830,425.8	2,830,425.8	2,498,643.1	21,437.7	22,729.0					-	-	
2,560.2	2,560.2	2,560.2	2,560.2	2,560.2												
64,771.2				2,560.2	2,278.6	-	-	-		-	-	-	-	-	-	-
	64,771.2	64,771.2	64,771.2	64,771.2	2,278.6 64,771.2	- 59,593.7	-	-	-	-	-	-	-	-	-	-
	64,771.2															
		64,771.2	64,771.2	64,771.2	64,771.2	59,593.7		-	-	-		-	-	-	-	
841517.0		64,771.2	64,771.2	64,771.2	64,771.2	59,593.7										
<b>841,617.0</b> - 221,916.0	841,617.0	64,771.2 841,617.0	64,771.2 379,600.0	64,771.2 379,600.0	64,771.2 379,600.0	59,593.7 379,600.0		-		-	-			- - -		- - - - -
841,617.0	841,617.0	64,771.2 841,617.0	64,771.2 379,600.0	64,771.2 	64,771.2 379,600.0	59,593.7 379,600.0	379,600.0			-		- - -		-	- - -	



### **Supporting Doc** 2014 LDC Persistence Sav



### Table 7-d. 2014 Persisting Savings

1. LDCs are requested to paste a copy of the 2014 "LDC CDM Program Results Persistence Report" in the space below as it relates to the calculation of LRAMVA.

Go to Tab 4.

2. Please ensure that verified adjustments to 2014 programs that become available in future evaluation audits are included in the 2014 form below.

#	Portfolio	Program	Initiative	LDC	Sector	Conservation Resource Type	(Implementation) Year	Tx (Transmission) or Dx (Distribution) Connected	Status	Notes	Activity / Participation (i.e. # of appliances)	Gross Summer Peak Demand Savings (kW)	Gross Energy Savings (kWh)
1		Consumer	Appliance Retirement				2014						
2		Consumer	Appliance Exchange				2014						
3		Consumer	HVAC				2014						
4		Consumer	Conservation Instant Coupons Initiative				2014						
5							2014						
6		Consumer	New Construction				2014						
7		Business	Retrofit				2014						
8		Business	SBL				2014						
9		Business	Commissioning				2014						
10		Business	New Construction				2014						
11		Business	Audit Funding				2014						
12		Industrial	EEM				2014						
13		Industrial	REM				2014						
14		Low Income	HAP				2014						
15		Business	Loblaws Pilot				2014						
16		Program Enabled	Program Enabled Savings										
17													
18													
19													
20													
21													
22													
23													
24													
25													
etc.													

# umentation: ings Results from IESO

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
0	0	0	52 49	52	52	51 49	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	2,097	49 2,097	49 2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	2,097	1,887	0	0	0	0	0	0	0
0	0	ō	150	141	136	136	136	136	136	136	136	120	85	85	85	85	85	84	37	37	37	37	0	0	0	ō	0	c
0	0	0	534	466	431	431	431	431	431	430	430	402	366	310	310	308	308	308	250	250	250	250	0	0	0	0	0	C
0	0	0	9 6,546	9 6,545	9 6,545	9 6,434	9 6,434	9 6,434	9 6,190	9 6,190	9 5,880	9 4,849	9 3,759	9 3,664	7 2,211	7 2,207	7 2,207	7 1,778	7 465	7 465	7 465	7 465	7	7	7	7	7	7
0	0	0	2,609	2,556	2,429	1,561	1,561	1,561	1,561	1,560	1,560	4,649	1,536	455	2,211	2,207	2,207	1,776	405	405	405	405	0	0	0	0	0	
0	0	0	2,003	2,000	2,425	0	1,501	0	0	0	0	0	1,550	400	0	0	0	0	0	0	0	0	0	0	0	0	0	c
0	0	0	2,555	2,555	2,555	2,555	2,555	2,555	2,555	2,555	2,555	2,555	2,555	2,544	2,542	2,542	2,517	11	11	0	0	0	0	0	0	0	0	C
0	0	0	401	401	401	401	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C
0	0	0	221	205	205	205	205	205	205	205	205	205	130	67	65	65	59	48	48	48	48	48	0	0	0	0	0	C
0	0	0	34	34	32	31	30	30	29	29	19	19	17	17	15	15	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	25	25	0	0	0	0	0	0	ů.	0	ů,	0	0	0	0	0	0	0	0	c
0	0	0	217	217	217	217	217	12	12	12	12	12	12	12	12	12	12	0	0	0	0	0	0	0	0	0	0	C
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C

2011	2012		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
0		0	0	347,037	347,037	347,037	346,306	218,798	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0		0	0	86,818	86,818	86,818	86,818	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0		0	0	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,877,285	3,688,983	0
0		0	0	2,017,781 8,158,701	1,874,707 7.077.587	1,798,259 6.514,170	1,798,259 6,514,170	1,798,259 6.514,170	1,798,259 6,514,170	1,798,259	1,794,996	1,794,996	1,549,058	1,369,921	1,353,300	1,353,300	1,345,466	1,345,466	1,342,411	586,130	586,130 3.983.616	586,130 3.983.616	586,130 3.983.616
0		0	0	8,158,701	150.061	6,514,170	6,514,170	6,514,170	6,514,170	6,514,170 150.061	6,511,348 150.061	6,511,348 150.061	6,055,916 150.061	5,887,503 150.061	4,978,522 150.061	4,978,522 107,285	4,907,230 107,285	4,907,230 107,285	4,900,292 107,285	3,983,616 107,285	3,983,616	3,983,616	3,983,616
0		0	0	43,902,735	43,900,082	43,900,082	43.507.635	43.507.635	43.507.635	41,962,234	41.962.234	40,321,102	33.509.881	26.297.460	25.370.302	15.675.913	15.663.945	15.663.945	12.405.527	1,075,928	1.075.928	1,075,928	1,075,928
0		0	0	9,552,857	9,343,643	8,837,067	5,978,873	5,978,873	5,978,873	5,978,873	5,978,303	5,978,303	5,978,303	5,753,472	1,486,043	9,627	9,627	9,627	12,400,021	1,070,020	1,070,020	1,070,020	1,070,020
ő		0	0	109.537	109.537	109.537	0,070,070	0,070,070	0,070,070	0,010,010	0,070,000	0,070,000	0,070,000	0,100,412	1,400,040	0,027	0,021	0,027	0	0	0	0	0
ō		0	ō	7,971,154	7,971,154	7,971,154	7,971,154	7,971,154	7,971,154	7,971,154	7,971,154	7,971,154	7,971,154	7,971,154	7,952,311	7,947,990	7,947,990	7,736,655	83,792	83,792	0	0	0
0		0	0	1,958,207	1,958,207	1,958,207	1,958,207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0		0	0	1,183,172	1,183,172	1,183,172	1,183,172	1,183,172	1,183,172	1,183,172	1,183,172	1,183,172	1,183,172	814,239	391,376	322,485	322,485	309,525	295,779	295,779	295,779	295,779	295,779
0		0	0	2,009	2,009	2,009	2,009	2,009	2,009	2,009	2,009	2,009	2,009	2,009	2,009	0	0	0	0	0	0	0	0
0		0	0	433,704	432,415	386,154	368,180	343,592	343,592	334,783	329,674	132,539	132,141	118,774	118,774	109,986	109,986	20,541	19,291	19,291	19,291	19,291	19,291
0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0		0	0	1,291,513	1,291,513	1,291,513	1,291,513	1,291,513	112,076	112,076	112,076	112,076	112,076	112,076	112,076	112,076	112,076	112,076	0	0	0	0	0
0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

r							
	2034	2035	2036	2037	2038	2039	2040
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	1
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	107,285	107,285	107,285	107,285	107,285	107,285	107,285
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	15,192	0	0	0	0	0	0
	15,192	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0



### 2015 LD

Legend

User Inputs (Green)

Instructions (Grey)

### Table 7-e. 2015 Persisting Savings

Go to Tab 5.

1. LDCs are requested to paste a copy of the 2015 "LDC CDM Program Results Persistence Report"in the space below as it relates to the calculation of LRAMVA.

2. Please ensure that verified adjustments to 2015 programs that become available in future evaluation audits are included in the 2015 form below.

#	Portfolio	Program	Initiative	LDC	Sector	Conservation Resource Type	(Implementation) Year	Tx (Transmission) or Dx (Distribution) Connected	Status	Notes	Activity Unit Name
	1	Coupon Initiative									
	2	Bi-Annual Retailer Event Initiative									
	3	Appliance Retirement Initiative									
	4	HVAC Incentives Initiative									
	5										
	6	Energy Audit Initiative									
	7	Efficiency: Equipment Replacement Incentive Initiative									
	8	Direct Install Lighting and Water Heating Initiative									
	9	New Construction and Major Renovation Initiative									
	10	Existing Building Commissioning Incentive Initiative									
	11	Process and Systems Upgrades Initiatives - Project Incentive Initiative									
	12	Process and Systems Upgrades Initiatives - Energy Manager Initiative									
	13	Process and Systems Upgrades Initiatives - Monitoring and Targeting Initiative									
	14	Low Income Initiative									
	15	Loblaws Pilot									
	16	Social Benchmarking Pliot									
	17	Conservation Fund Pilot - SEG									
	18	Conservation Fund Pilot - EnerNOC									
	19	Aboriginal Conservation Program									
	20	Program Enabled Savings									
N	21	Save on Energy Coupon Program									
NG	22	Save on Energy Heating and Cooling Program									
NG	23	Save on Energy Home Assistance Program									
NG	24	Save on Energy Audit Funding Program									
N	etc.	Save on Energy Retrofit Program									

### Supporting Docun C Persistence Saving

	Gross Energy Savings (kWh)

### nentation: gs Results from IESO

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
				69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	56.0	56.0	56.0	56.0	
				163.0	158.0	158.0	158.0	158.0	158.0	158.0	158.0	158.0	158.0	118.0	102.0	102.0	102.0	1
				23.0	23.0	23.0	22.0	14.0	-	-	-	-	-	-	-	-	-	
				1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,685.0	1,
				21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	
				187.0	187.0	187.0	187.0	-	-	-	-	-	-	-	-	-	-	
				6,257.0	6,257.0	6,218.0	6,218.0	6,218.0	6,218.0	6,047.0	6,047.0	5,859.0	5,299.0	3,809.0	3,726.0	2,621.0	2,603.0	2,6
				487.0	465.0	311.0	311.0	311.0	311.0	311.0	311.0	311.0	311.0	306.0	132.0	-	-	
				316.0	316.0	316.0	316.0	316.0	316.0	316.0	316.0	315.0	315.0	315.0	315.0	314.0	314.0	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				274.0	220.0	200.0	200.0	196.0	175.0	158.0	150.0	138.0	123.0	45.0	21.0	21.0	21.0	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				12.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0	7.0	7.0	7.0	6.0	6.0	
				131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	-	-	-	-	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					-	-	-	-	-	-	-	-	-	-	-	-	-	
				27.0	27.0													
				424.0	420.0	420.0	420.0	420.0	420.0	420.0	420.0	420.0	420.0	370.0	369.0	369.0	367.0	
				1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,696.0	1,6
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
				592.0	592.0	581.0	581.0	581.0	581.0	553.0	553.0	542.0	450.0	229.0	229.0	110.0	110.0	



												Net Verified	Annual Energ	gy Savings at	the End-User	Level (kWh)		
	_								_					-				
2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040		2011	2012	2013	2014	2015	2016	2017
56.0				22.0	-	-	-	-	-	-	-					1,027,535.0	1,018,620.0	1,018,620.0
102.0	69.0	69.0	69.0	69.0	-	-	-	-	-	-						2,194,924.0	2,119,365.0	2,119,365.0
-	-	-	-	-	-	-	-	-	-	-						155,424.0	155,424.0	155,424.0
1,685.0			1,495.0	-	-	-	-	-	-	-						3,175,791.0	3,175,791.0	3,175,791.0
21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	•	-	-						58,971.0	58,971.0	58,971.0
-	-	-	-	-	-	-	-	-	-	-						875,115.0	875,115.0	875,115.0
1,866.0	308.0	308.0	308.0	308.0	-	-	-	-	-	-						51,722,543.0	51,722,543.0	51,599,822.0
-	-	-	-	-	-	-	-	-	-	-						2,024,454.0	1,931,260.0	1,339,668.0
-	-	-	-	-	-	-	-	-	-	-						1,437,827.0	1,437,827.0	1,437,827.0
-	-	-	-	-	-	-	-	-	-	-						-	•	-
-	-	-	-	-	-	-	-	-	-	-						-	•	-
-	-	-	-	-	-	-	-	-	-	-						1,293,617.0	949,437.0	808,737.0
-	-	-	-	-	-	-	-	-	-	-						-	•	-
1.0	1.0	1.0	1.0	1.0	1.0	-	-	-	-	-						147,287.0	115,538.0	110,988.0
-	-	-	-	-	-	-	-	-	-	-						901,493.0	901,493.0	901,493.0
-	-	-	-	-	-	-	-	-	-	-						-	•	•
-	-	-	-	-	-	-	-	-	-	-						•	•	-
-	-	-	-	-	-	-	-	-	-	-						130,073.0	•	-
-	-	-	-	-	-	-	-	-	-	-						-		-
-	-				-	-	-	-	-	-						235,240.0	235,240.0	
366.0	101.0	101.0	101.0	101.0	-	-	-	-	-	-						6,484,457.0	6,429,030.0	6,429,030.0
1,696.0	1,696.0	1,696.0	1,526.0	-	-	-	-		-	-						3,220,099.0	3,220,099.0	3,220,099.0
-	-	-	-	-	-	-	-	-	-	-						-	-	•
-	-	-	-		-	-	-	-	-	-						-		-
92.0	71.0	71.0	71.0	71.0	-	-	-	-	-	-						4,388,100.0	4,388,100.0	4,353,851.0

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1,018,620.0	1,018,620.0	1,018,620.0	1,018,620.0	1,018,276.0	1,018,276.0	1,018,276.0	897,223.0	892,900.0	892,900.0	891,106.0	891,106.0	890,669.0
2,119,365.0	2,119,365.0	2,119,365.0	2,119,365.0	2,119,365.0	2,119,365.0	2,119,365.0	1,879,773.0	1,625,033.0	1,625,033.0	1,625,033.0	1,625,033.0	1,625,033.0
154,902.0	94,825.0	-	-	-	-	-	-	-	-	-	-	-
3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0	3,175,791.0
58,971.0	58,971.0	58,971.0	58,971.0	58,971.0	58,971.0	58,971.0	58,971.0	58,971.0	58,971.0	58,971.0	58,971.0	58,971.0
875,115.0	-	-	-	-	-	-	-	-	-	-	-	-
51,599,822.0	51,599,822.0	51,599,822.0	50,635,032.0	50,635,032.0	49,277,020.0	45,797,398.0	34,800,889.0	32,466,175.0	17,844,990.0	17,789,612.0	17,789,612.0	12,430,736.0
1,339,668.0	1,339,668.0	1,339,668.0	1,339,668.0	1,339,668.0	1,339,668.0	1,339,668.0	1,288,435.0	512,252.0	-	-	-	-
1,437,827.0	1,437,827.0	1,437,827.0	1,437,827.0	1,437,827.0	1,434,849.0	1,434,849.0	1,434,849.0	1,434,849.0	1,426,262.0	1,426,262.0	1,330,511.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
808,737.0	793,295.0	752,682.0	643,670.0	620,972.0	590,250.0	492,441.0	199,030.0	55,120.0	55,120.0	55,120.0	•	-
•	-	-	-	-	-	-	-	-	-	-	•	-
106,438.0	103,950.0	103,950.0	101,695.0	98,746.0	50,947.0	50,839.0	50,075.0	50,075.0	48,541.0	48,541.0	4,848.0	4,848.0
901,493.0	901,493.0	901,493.0	901,493.0	901,493.0	901,493.0	901,493.0	-	-	-	-	•	-
•	-	-	-	-	-	-	-	-	-	-	•	-
•	-	-	-	-	-	-	-	-	-	-	•	-
•	-	-	-	-	-	-	-	-	-	-	•	-
•	-	-	-	-	-	-	-	-	-	-	•	-
•	-	-	-	-	-	-	-	-	-	-	•	-
6,429,030.0	6,429,030.0	6,429,030.0	6,429,030.0	6,424,967.0	6,424,967.0	6,424,967.0	5,994,848.0	5,961,614.0	5,961,614.0	5,839,430.0	5,839,430.0	5,826,645.0
3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0	3,220,099.0
	-	-	-	•	-		-	-	-	•		
	-	-	-				-	-	-			
4,353,851.0	4,353,851.0	4,353,851.0	4,182,174.0	4,182,174.0	4,142,538.0	3,581,795.0	2,225,182.0	2,217,083.0	603,928.0	603,928.0	603,928.0	460,858.0

2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
			34	35	36	37	38	39	40
 346,273.0	346,273.0	346,273.0	346,273.0	-	-	-	-	-	-
1,094,648.0	1,094,648.0	1,094,648.0	1,094,648.0	-	-	-	-	-	-
	· · · · · ·	· · · · ·	-	-	-	-	-	-	-
3,175,791.0	3,175,791.0	3,006,226.0	-	-			-	-	-
58,971.0	58,971.0	58,971.0	58,971.0	51,586.0	51,586.0	51,586.0	-	-	-
- 808,201.0	- 808,201.0	- 808,201.0	- 808,201.0	-	-	-	-	-	-
000,201.0	000,201.0	000,201.0	000,201.0						
								-	
			-	-	-	-	-	-	-
			-	-			-	-	-
-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-
4,848.0	4,848.0	4,848.0	4,848.0	4,140.0	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	•	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
	-	-	-	-			-	-	-
1,606,139.0	- 1,606,139.0	1,606,139.0	1,606,139.0						
3,220,099.0	3,220,099.0	3,068,338.0		-			-	-	
-	-	-		-			-	-	-
	-		-	-			-	-	-
175,878.0	175,878.0	175,878.0	175,878.0	-			-	-	



### Supporting Docume 2016 LDC Persistence Savings

Legend

User Inputs (Green)

Instructions (Grey)

### Table 7-f. 2016 Persisting Savings

1. LDCs are requested to paste a copy of the 2016 "LDC CDM Program Results Persistence Report" in the space below as it relates to the calculation of LRAMVA.

2. Please ensure that verified adjustments to 2016 programs that become available in future evaluation audits are included in the 2016 form below.

Go to Tab 5.

#	Portfolio	Program	Initiative	LDC	Sector	Conservation Resource Type	(Implementation) Year	Tx (Transmission) or Dx (Distribution) Connected	Status	Notes	Activity Unit Name	Activity / Participation (i.e. # of appliances)	Gross Summer Peak Demand Savings (kW)	Gross Energy Savings (kWh)	 Net Verifi
															2011
2 3 4 5 6 7 7 8 9 9 10		ergy Heating & ergy New Con ergy Audit Fur ergy Retrofit F ergy Small Bus ergy High Perl ergy Energy M frigeration In vent Pilot Proc	& Cooling Pro struction Pro nding Program Program siness Lightir formance Ne lanager Prog centives Loca ogram	ng Program m w Construct gram al Program	ction Progr	am Fund Pilot Progra	m								

# ntation: Results from IESO

ed Annual Peak Demand Savings at the End-User Level (kW)

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
				2,147.0	2,147.0	2,147.0	2,147.0	2,147.0	2,147.0	2,147.0	2,147.0	2,147.0	2,137.0	2,056.0	2,056.0	2,056.0	2,054.0	1,798.0	1,798.0	787.0	-	-
				1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,995.0	1,798.0
				104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	101.0	-	-	-
				22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	6.0	-	-	-	-	-	-	-	-
				9,760.0	9,577.0	9,577.0	9,577.0	9,577.0	9,511.0	9,511.0	9,511.0	9,466.0	9,466.0	9,346.0	7,600.0	4,751.0	4,751.0	605.0	98.0	98.0	98.0	98.0
				15.0	15.0	15.0	15.0	14.0	14.0	11.0	10.0	9.0	7.0	6.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
				397.0	397.0	397.0	397.0	397.0	397.0	397.0	397.0	397.0	397.0	397.0	397.0	397.0	397.0	397.0	298.0	242.0	238.0	231.0
				145.0	79.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	46.0	25.0	25.0	25.0	20.0	20.0	20.0	20.0	20.0	20.0
				137.0	136.0	136.0	114.0	102.0	102.0	102.0	102.0	102.0	102.0	89.0	85.0	85.0	85.0	85.0	-	-	-	
				13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	11.0	11.0	4.0	4.0	-	-
				1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-

						Net Verif	ied Annua	l Energy Sa	avings at th	ne End-Use	r Level (kWh)						
							-	1			1						
2035	2036	203	2038	2039	2040	2011	201	2013	201	2015	2016	2017	2018	2019	2020	2021	2022
5	6	7	8	9	0	4	2	ω	4	5	6	7	80	9	0	1	2
-	-	-	-	-	-						32,980,841.0	32,980,841.0	32,980,841.0	32,980,841.0	32,980,841.0	32,980,841.0	32,980,841.0
-	-	-	-	-	-						6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0
-	-	-	-	-	-						330,563.0	330,563.0	330,563.0	330,563.0	330,563.0	330,563.0	330,563.0
-	-	-	-	-	-						170,854.0	170,854.0	170,854.0	170,854.0	170,854.0	170,854.0	170,854.0
98.0	-	-		-	-						60,465,338.0	59,505,868.0	59,505,868.0	59,505,868.0	59,505,868.0	59,000,951.0	59,000,951.0
1.0	1.0	1.0		-	-						60,829.0	60,829.0	60,829.0	60,829.0	56,838.0	56,838.0	40,800.0
231.0	231.0	231.0	231.0	231.0	231.0						1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0
20.0	-	-	-	-	-						1,619,649.0	888,301.0	667,610.0	617,845.0	617,845.0	343,518.0	343,518.0
-	-	-	-	-	-						1,013,502.0	1,009,583.0	1,009,583.0	878,605.0	804,761.0	784,899.0	784,899.0
-	-	-	-	-	-						202,605.0	202,605.0	202,605.0	202,605.0	202,605.0	202,605.0	202,605.0
-	-	-	-	-	-						6,077.0	6,077.0	6,077.0	6,077.0	6,077.0	6,077.0	6,077.0

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
3	2,975,449.0	32,975,449.0	32,819,269.0	32,386,370.0	32,366,345.0	32,366,345.0	32,193,898.0	28,113,020.0	28,113,020.0	12,529,658.0	-	-	-	-	-	-
	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,696,541.0	6,520,592.0	-	-	-	-
	330,563.0	330,563.0	330,563.0	330,563.0	330,563.0	330,563.0	330,563.0	330,563.0	320,393.0	-	-	-	-	-	-	-
	170,854.0	170,854.0	170,854.0	42,182.0	-	-	-	-	-	-	-	-	-	-	-	-
5	9,000,951.0	58,676,226.0	58,676,226.0	57,941,446.0	48,819,150.0	26,272,122.0	26,272,122.0	2,673,019.0	75,780.0	75,780.0	75,780.0	75,780.0	75,780.0	-	-	-
	34,589.0	29,548.0	22,234.0	18,598.0	7,001.0	1,980.0	1,980.0	1,980.0	1,980.0	1,980.0	1,980.0	1,980.0	1,980.0	1,980.0	1,980.0	-
	1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0	1,646,039.0	1,220,094.0	981,218.0	954,161.0	899,463.0	899,463.0	899,463.0	899,463.0	899,463.0
	343,518.0	343,518.0	295,986.0	152,324.0	152,324.0	152,324.0	145,604.0	145,604.0	145,604.0	145,604.0	145,604.0	145,604.0	145,604.0	-	-	-
	784,899.0	784,899.0	784,899.0	736,152.0	713,410.0	713,410.0	713,410.0	713,410.0	-	-	-	-	-	-	-	-
	202,605.0	202,605.0	202,605.0	202,605.0	202,605.0	202,605.0	169,609.0	169,609.0	60,975.0	60,975.0	-	-	-	-	-	-
	6,077.0	6,077.0	6,077.0	6,077.0	6,077.0	6,077.0	6,077.0	4,572.0	4,572.0	4,572.0	4,572.0	-	-	-	-	-

N	N
2039	2040
-	-
-	-
-	-
-	-
-	-
- 899,463.0	- 899,463.0
-	-
-	
-	-
-	-

#### Legend

User Inputs (Green) Auto Populated Cells (White) Instructions (Grey)

1. Please update Table 6 as new approved prescribed interest rates for deferral and variance accounts become available. The quarterly interest rates are used to calculate the carrying charges for LRAMVA. Starting Instructions The annual carrying charges totals in Table 6-a are cumulative, LDCs are requested to enter any collected interest amounts into the "Amounts Cleared" row in order to clear the balance and calculate outstanding variances on carrying charges.

#### Table 6. Prescribed Interest Rates

Quarter	Approved Deferral & Variance Accounts
2011 Q1	1.47%
2011 Q2	1.47%
2011 Q3	1.47%
2011 Q4	1.47%
2012 Q1	1.47%
2012 Q2	1.47%
2012 Q3	1.47%
2012 Q4	1.47%
2013 Q1	1.47%
2013 Q2	1.47%
2013 Q3	1.47%
2013 Q4	1.47%
2014 Q1	1.47%
2014 Q2	1.47%
2014 Q3	1.47%
2014 Q4	1.47%
2015 Q1	1.47%
2015 Q2	1.10%
2015 Q3	1.10%
2015 Q4	1.10%
2016 Q1	1.10%
2016 Q2	1.10%
2016 Q3	1.10%
2016 Q4	1.10%
2017 Q1	1.10%
2017 Q2	1.10%
2017 Q3	1.10%
2017 Q4	1.50%
2018 Q1	
2018 Q2	
2018 Q3	
2018 Q4	
2019 Q1	
2019 Q2	
2019 Q3	
2019 Q4	
2020 Q1	
2020 Q2	
2020 Q3	
2020 Q4	

Month	Period	Quarter	Monthly Rate	Residential	GS<50 kW	GS>50 kW	Large Use	Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Total
Jan-11	2011	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Feb-11	2011	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Mar-11	2011	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Apr-11	2011	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0
May-11	2011	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0
Jun-11	2011	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0
Jul-11	2011	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
Aug-11	2011	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0
Sep-11	2011	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		ŞI
Oct-11	2011	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		ŞI
Nov-11	2011	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		Ş
Dec-11	2011	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
otal for 2011				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$
mount Cleared	o for 2012			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	s
Jan-12	2011-2012	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		s
Feb-12	2011-2012	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		ŝ
Mar-12	2011-2012	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		ŝ
Apr-12	2011-2012	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
May-12	2011-2012	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
Jun-12	2011-2012	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
Jul-12	2011-2012	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
Aug-12	2011-2012	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
Sep-12	2011-2012	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		ŝ
Oct-12	2011-2012	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		ŝ
Nov-12	2011-2012	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		s
Dec-12	2011-2012	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
otal for 2012				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
mount Cleared											
pening Balanc	e for 2013			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$
Jan-13	2011-2013	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Feb-13	2011-2013	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	5
Mar-13	2011-2013	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		93
Apr-13	2011-2013	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		9
May-13	2011-2013	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
Jun-13	2011-2013	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$
Jul-13	2011-2013	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		9
Aug-13	2011-2013	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		9
Sep-13	2011-2013	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		9
Oct-13	2011-2013	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		9
Nov-13	2011-2013	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		5
Dec-13	2011-2013	Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
otal for 2013			<u> </u>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
mount Cleared				<b>60.00</b>	<b>60.00</b>	<b>60.00</b>	<b>60.00</b>	60.00		60.00	
pening Balanc		01	0.129/	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Jan-14	2011-2014	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Feb-14 Mar-14	2011-2014	Q1 Q1	0.12%	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00		9
Mar-14 Apr-14	2011-2014 2011-2014	Q1 Q2	0.12%	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		

#### Check OEB website

May-14	2011-2014	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jun-14	2011-2014	Q2	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jul-14	2011-2014	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Aug-14	2011-2014	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sep-14	2011-2014	Q3	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Oct-14 Nov-14	2011-2014 2011-2014	Q4 Q4	0.12%	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00
Dec-14	2011-2014	Q4 Q4	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total for 2014	2011-2014	Q4	0.12 /0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00
Amount Cleared				\$0.00	+0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Opening Balance				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jan-15	2011-2015	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Feb-15	2011-2015	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Mar-15	2011-2015	Q1	0.12%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apr-15	2011-2015	Q2	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
May-15	2011-2015	Q2	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jun-15	2011-2015	Q2	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jul-15	2011-2015	Q3	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Aug-15	2011-2015	Q3	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sep-15	2011-2015	Q3	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Oct-15	2011-2015	Q4	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Nov-15	2011-2015	Q4	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Dec-15	2011-2015	Q4	0.09%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total for 2015				\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Amount Cleared				00.03	0.00	£0.00	\$0.00	£0.00	£0.00	£0.00	£0.00
Opening Baland Jan-16	2011-2016	Q1	0.09%	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00
Jan-16 Feb-16	2011-2016	Q1	0.09%	\$0.00	\$48.07	\$0.00	-\$0.41	-\$0.26	-\$0.00	\$0.00	\$0.00
Mar-16	2011-2016	Q1 Q1	0.09%	\$49.05	\$48.07	\$77.71 \$155.41	-\$0.41 -\$0.82	-\$0.26	-\$0.01	\$12.74 \$25.47	\$186.88
Apr-16	2011-2016	Q2	0.09%	\$98.09	\$96.14	\$155.41	-\$0.82	-\$0.52	-\$0.03	\$25.47	\$560.63
May-16	2011-2016	Q2 Q2	0.09%	\$196.18	\$192.28	\$310.82	-\$1.64	-\$0.77	-\$0.05	\$50.95	\$747.50
Jun-16	2011-2016	Q2	0.09%	\$245.23	\$240.35	\$388.53	-\$2.05	-\$1.29	-\$0.06	\$63.68	\$934.38
Jul-16	2011-2016	Q3	0.09%	\$294.28	\$288.41	\$466.23	-\$2.47	-\$1.55	-\$0.08	\$76.42	\$1,121.25
Aug-16	2011-2016	Q3	0.09%	\$343.32	\$336.48	\$543.94	-\$2.88	-\$1.81	-\$0.09	\$89.16	\$1,308.13
Sep-16	2011-2016	Q3	0.09%	\$392.37	\$384.55	\$621.64	-\$3.29	-\$2.07	-\$0.10	\$101.89	\$1,495.00
Oct-16	2011-2016	Q4	0.09%	\$441.41	\$432.62	\$699.35	-\$3.70	-\$2.32	-\$0.11	\$114.63	\$1,681.88
Nov-16	2011-2016	Q4	0.09%	\$490.46	\$480.69	\$777.05	-\$4.11	-\$2.58	-\$0.13	\$127.36	\$1,868.75
Dec-16	2011-2016	Q4	0.09%	\$539.50	\$528.76	\$854.76	-\$4.52	-\$2.84	-\$0.14	\$140.10	\$2,055.63
Total for 2016				\$3,237.03	\$3,172.56	\$5,128.54	-\$27.12	-\$17.04	-\$0.83	\$840.61	\$12,333.76
Amount Cleared	1										
<b>Opening Balance</b>				\$3,237.03	\$3,172.56	\$5,128.54	-\$27.12	-\$17.04	-\$0.83	\$840.61	\$12,333.76
Jan-17	2011-2017	Q1	0.09%	\$588.55	\$576.83	\$932.46	-\$4.93	-\$3.10	-\$0.15	\$152.84	\$2,242.50
Feb-17	2011-2017	Q1	0.09%	\$588.55	\$576.83	\$932.46	-\$4.93	-\$3.10	-\$0.15	\$152.84	\$2,242.50
Mar-17	2011-2017	Q1	0.09%	\$588.55	\$576.83	\$932.46	-\$4.93	-\$3.10	-\$0.15	\$152.84	\$2,242.50
Apr-17	2011-2017	Q2	0.09%	\$588.55	\$576.83	\$932.46	-\$4.93	-\$3.10	-\$0.15	\$152.84	\$2,242.50
May-17	2011-2017	Q2	0.09%	\$588.55	\$576.83	\$932.46	-\$4.93	-\$3.10	-\$0.15	\$152.84	\$2,242.50
Jun-17 Jul-17	2011-2017 2011-2017	Q2 Q3	0.09%	\$588.55 \$588.55	\$576.83 \$576.83	\$932.46 \$932.46	-\$4.93 -\$4.93	-\$3.10 -\$3.10	-\$0.15 -\$0.15	\$152.84 \$152.84	\$2,242.50 \$2,242.50
		Q3								\$152.84	
Aug-17 Sep-17	2011-2017 2011-2017	Q3	0.09%	\$588.55 \$588.55	\$576.83 \$576.83	\$932.46 \$932.46	-\$4.93 -\$4.93	-\$3.10 -\$3.10	-\$0.15 -\$0.15	\$152.84	\$2,242.50 \$2,242.50
Oct-17	2011-2017	Q4	0.13%	\$802.57	\$786.59	\$1,271.54	-\$6.72	-\$4.22	-\$0.20	\$208.42	\$3,057.96
Nov-17	2011-2017	Q4	0.13%	\$802.57	\$786.59	\$1,271.54	-\$6.72	-\$4.22	-\$0.20	\$208.42	\$3,057.96
Dec-17	2011-2017	Q4	0.13%	\$802.57	\$786.59	\$1,271.54	-\$6.72	-\$4.22	-\$0.20	\$208.42	\$3,057.96
Total for 2017				\$10,941.69	\$10,723.79	\$17,335.31	-\$91.66	-\$57.60	-\$2.79	\$2,841.39	\$41,690.14
Amount Cleared											
<b>Opening Balance</b>				\$10,941.69	\$10,723.79	\$17,335.31	-\$91.66	-\$57.60	-\$2.79	\$2,841.39	\$41,690.14
Jan-18	2011-2018	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Feb-18	2011-2018	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Mar-18	2011-2018	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apr-18	2011-2018	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
May-18	2011-2018	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jun-18	2011-2018	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jul-18	2011-2018	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Aug-18	2011-2018	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sep-18 Oct-18	2011-2018 2011-2018	Q3 Q4	0.00%	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00
Nov-18	2011-2018	Q4 Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Dec-18	2011-2018	Q4 Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total for 2018	_020.0	<b>u</b> ,	0.0070	\$10,941.69	\$10,723.79	\$17,335.31	-\$91.66	-\$57.60	-\$2.79	\$2,841.39	\$41,690.14
Amount Cleared						,	÷:			. ,	
Opening Baland				\$10,941.69	\$10,723.79	\$17,335.31	-\$91.66	-\$57.60	-\$2.79	\$2,841.39	\$41,690.14
Jan-19	2011-2019	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Feb-19	2011-2019	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Mar-19	2011-2019	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apr-19	2011-2019	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
May-19	2011-2019	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	2011-2019	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jun-19		Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jul-19	2011-2019										
Jul-19 Aug-19	2011-2019	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jul-19						\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00

Nov-19	2011-2019	Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Dec-19	2011-2019	Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total for 2019				\$10,941.69	\$10,723.79	\$17,335.31	-\$91.66	-\$57.60	-\$2.79	\$2,841.39	\$41,690.14
Amount Cleared											
<b>Opening Balance</b>	ce for 2020			\$10,941.69	\$10,723.79	\$17,335.31	-\$91.66	-\$57.60	-\$2.79	\$2,841.39	\$41,690.14
Jan-20	2011-2020	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Feb-20	2011-2020	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Mar-20	2011-2020	Q1	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apr-20	2011-2020	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
May-20	2011-2020	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jun-20	2011-2020	Q2	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Jul-20	2011-2020	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Aug-20	2011-2020	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sep-20	2011-2020	Q3	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Oct-20	2011-2020	Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Nov-20	2011-2020	Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Dec-20	2011-2020	Q4	0.00%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total for 2020				\$10,941.69	\$10,723.79	\$17,335.31	-\$91.66	-\$57.60	-\$2.79	\$2,841.39	\$41,690.14
Amount Cleared											

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Ontario Energy Board

### **LRAMVA Work Form: Street Light Adjustment**

NOTE: This tab calculates an adjustment for the SL LED projects. This amount is incremental to the LRAMVA amounts accounted for in the LRAMVA Work Form (tabs 4. 2011-2014 LRAM and 5. 2015-2020 LRAM).

#### Table 8-1: Impact on Revenues - 2014 (according to billing dates)

Street Lights Rates	2014 \$6.5692	2015 \$6.6546			Year 2015	N	ITG Ratio 76%									
2014	Jan	Feb		Mar	Apr		May	Jun	Jul	Aug		Sep	Oct	Nov	Dec	Total
LED Replacements:																
# of LED replacements				4,494				1,509	1,745	1,108						8,856
Running # of LED replacements				4,494	4,494		4,494	6,003	7,748	8,856		8,856	8,856	8,856	8,856	8,856
Load Reduction:																
kW Load Removed				690.276				232.844	256.833	259.377						1,439.330
Replacement kW Load				260.514				87.554	99.895	116.792						564.755
Reduction in kW demand	-	-		429.762	-		-	145.290	156.938	142.585		-	-	-	-	874.575
Reduction in Monthly kW demand				429.762	429.762		429.762	575.052	731.990	874.575		874.575	874.575	874.575	874.575	5,290.939
Revenue Reduction			\$	2,143.34	\$ 2,143.34	\$	2,143.34	\$ 2,867.93	\$ 3,650.63	\$ 4,361.73	\$	4,361.73	\$ 4,361.73	\$ 4,361.73	\$ 4,361.73	\$ 34,757.24
Accum. Revenue Reduction (2014 YTD)			\$	2,143.34	\$ 4,286.67	\$	6,430.01	\$ 9,297.94	\$ 12,948.57	\$ 17,310.30	\$ 3	21,672.03	\$ 26,033.77	\$ 30,395.50	\$ 34,757.24	\$ 34,757.24
Carrying Charges:																
Principal balance	\$ -	\$ -	\$	-	\$ 2,143.34	\$	4,286.67	\$ 6,430.01	\$ 9,297.94	\$ 12,948.57		17,310.30	\$ 21,672.03	\$ 26,033.77	\$ 30,395.50	
Interest Rate	1.47%	1.47%		1.47%	1.47%		1.47%	1.47%	1.47%	1.47%		1.47%	1.47%	1.47%	1.47%	
Days	31	28	3	31	30		31	30	31	31		30	31	30	31	365
Interest	\$ -	\$ -	\$	-	\$ 2.59	\$	5.35	\$ 7.77	\$ 11.61		\$		\$	\$ 31.45	\$ 37.95	\$ 160.86
Accumulated interest		\$ -	\$	-	\$ 2.59	\$	7.94	\$ 15.71	\$ 27.32	\$ 43.48	\$	64.40	\$ 91.46	\$ 122.91	\$ 160.86	

#### Table 8-2: Impact on Revenues - 2015 (according to billing dates)

2015	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct		Nov	Dec	Total
LED Replacements:														
# of LED replacements				358	448	725		727		11,423				13,681
Running # of LED replacements	8,856	8,856	8,856	9,214	9,662	10,387	10,387	11,114	11,114	22,537		22,537	22,537	22,537
Load Reduction:														
kW Load Removed				107.400	134.400	217.500		215.350		2,042.693				2,717.343
Replacement kW Load				40.288	61.737	104.481		82.432		721.700				1,010.638
Reduction in kW demand	-	-	-	67.112	72.663	113.019	-	132.918	-	1,320.993		-	-	1,706.705
Reduction in Monthly kW demand	874.575	874.575	874.575	941.687	1,014.350	1,127.369	1,127.369	1,260.287	1,260.287	2,581.280		2,581.280	2,581.280	12,981.299
Revenue Reduction	\$ 4,418.44	\$ 4,418.44	\$ 4,418.44	\$ 4,757.49	\$ 5,124.59	\$ 5,695.58	\$ 5,695.58	\$ 6,367.09	\$ 6,367.09	\$ 13,040.87	\$	13,040.87	\$ 13,040.87	\$ 86,385.35
Accum. Revenue Reduction (2014-2015)	\$ 39,175.67	\$ 43,594.11	\$ 48,012.55	\$ 52,770.04	\$ 57,894.63	\$ 63,590.21	\$ 69,285.78	\$ 75,652.88	\$ 82,019.97	\$ 95,060.84	\$1	108,101.71	\$ 121,142.59	\$ 121,142.59
Carrying Charges:														
Principal balance	\$ 34,757.24	\$ 39,175.67	\$ 43,594.11	\$ 48,012.55	\$ 52,770.04	\$ 57,894.63	\$ 63,590.21	\$ 69,285.78	\$ 75,652.88	\$ 82,019.97	\$	95,060.84	\$ 108,101.71	
Interest Rate	1.47%	1.47%	1.47%	1.10%	1.10%	1.10%	1.10%	1.10%	1.10%	1.10%		1.10%	1.10%	
Days	31	28	31	30	31	30	31	31	30	31		30	31	365
Interest	\$ 43.39	\$ 44.18	\$ 54.43	\$ 43.41	\$ 49.30	\$ 52.34	\$ 59.41	\$ 64.73	\$ 68.40	\$ 76.63	\$	85.95	\$ 100.99	\$ 743.15
Accumulated interest	\$ 204.25	\$ 248.43	\$ 302.86	\$ 346.27	\$ 395.57	\$ 447.91	\$ 507.32	\$ 572.05	\$ 640.45	\$ 717.07	\$	803.02	\$ 904.01	
Interest on 2014 Balance	\$ 43.39	\$ 39.19	\$	\$ 31.42	\$	\$ 31.42	\$ 32.47	\$	\$ 31.42	32.47	\$	31.42	\$ 32.47	
Interest on 2015 Activities		\$ 4.98	\$	\$ 11.98	\$	\$ 20.92	\$ 26.94	\$ 32.26	\$	\$ 44.16	\$	54.52	\$ 68.52	
Total	\$ 43.39	\$ 44.18	\$ 54.43	\$ 43.41	\$ 49.30	\$ 52.34	\$ 59.41	\$ 64.73	\$ 68.40	\$ 76.63	\$	85.95	\$ 100.99	
Var	\$ -	\$	-	\$ -										

#### Table 8-3: LRAMVA - Street Light LED Adjustment SUMMARY (2014-2015)

	2014	2015	Total
LED Replacements in year	8,856	13,681	22,537
Reduction in kW demand	874.58	1,706.71	2,581.28
Reduction in billed kW	5,290.94	12,981.30	18,272.24
Revenue Reduction	\$ 34,757.24	\$ 86,385.35	\$ 121,142.59
Carrying Charges	\$ 160.86	\$ 743.15	\$ 904.01
Adjustment to Street Lighting LRAMVA	\$ 34,918.10	\$ 87,128.51	\$ 122,046.60

Application Nu	umber	City			Gross Verified Savings (kWh)	Net Verified Savings (kWh)	Persistence (Years)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	118488	City of Markham	30-Jul-15	6,049,567	5,731,384		8 years @ 100%, then 1 year @ 86.97%, then 1 year @ 82.01%, then 1 year @ 34.58%	4,077,739	4,077,739	4,077,739	4,077,739	4,077,739	4,077,739	4,077,739	4,077,739	3,546,410	3,344,154	1,410,082
	136829	City of Barrie	30-Oct-15	6,438,647	7,934,352	6,297,130	12 years @ 100%	6,297,130	6,297,130	6,297,130	6,297,130	6,297,130	6,297,130	6,297,130	6,297,130	6,297,130	6,297,130	6,297,130
	149745	Town of Aurora	29-Jul-16	1,444,940	1,603,304	1,270,218	12 years at 100%	1,270,218	1,270,218	1,270,218	1,270,218	1,270,218	1,270,218	1,270,218	1,270,218	1,270,218	1,270,218	1,270,218

#### Net to Gross Ratio

				Total NTG Ratio	Average NTG Ratio		
2015	City of Markham	5,731,384	4,077,739	71%	76%		
2013	City of Barrie	7,934,352	6,297,130	79%	70%	78%	
2016	Town of Aurora	1,603,304	1,270,218	79%	79%		

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 28 Filed: June 7, 2018

### ATTACHMENT 28 2016 FINAL IESO RESULTS REPORT POWERSTREAM RZ

## Final Verified 2016 Annual LDC CDM Program Results Report Letter from the Vice-President, Conservation & Corporate Relations

June 30, 2017

I am pleased to provide LDCs with their Final Verified 2016 Annual Results Report. Collectively in 2016, LDCs achieved 1.2 TWh of energy savings persisting to 2020. When combined with the 2015 results, LDCs have achieved 2.6 TWh of energy savings, representing 38 % of the 7 TWh target. The results show positive progress towards the achievement of the Conservation First Framework (CFF) target and demonstrate the continued collaboration between LDCs and the IESO in promoting a culture of conservation across the province.

Key highlights from the 2016 final results include the following:

- The Coupons program produced a record achievement, delivering 428 GWh of energy savings in 2016, more than doubling the results from 2015. LED light bulbs remained the most common measure accounting for 75 % of coupons redeemed and 96 % of savings.
- The Retrofit program continues to be the highest performing program achieving 567 GWh of energy savings in 2016, despite experiencing a 29 % reduction in savings over the 2015 results (including adjustments). Lighting measures continue to produce the majority of savings, 74 % in 2016, with non-lighting measures accounting for the remainder.
- The success of the Coupons program supported residential sector programs in achieving a larger share of the portfolio savings in 2016 than in previous years, accounting for 44 % of target achievement, with business sector programs and local and pilot programs accounting for 54 % and 1 %, respectively.
- o It is important to note that there remains a considerable data lag, representing completed, but unreported projects for the Retrofit and Process and Systems Upgrades Programs. Together, these programs have roughly 250 GWh in unverified savings waiting to be reported by LDCs. It is anticipated that these savings will be reported in future year's 2016 adjustments.
- As with 2015, the IESO evaluation methodology enabled further granulation of net verified results in 2016, resulting in increased LDC-specific and regional level net-to-gross adjustment factors, where data permitted.
- Four LDCs have achieved at least 90 % of their CFF target, and nine others are above 50 %. These early successes are prompting increased dialogue between LDCs with respect to potential target exchange, which is both permitted and encouraged under the CFF.

There were minor revisions to the final results relative to the preliminary results including: 1) revisions/corrections to program savings assumptions / adjustments as required (primarily to participation levels for Coupons Program and Heating & Cooling Program); 2) the inclusion of an additional five LDC Innovation Fund and Conservation Fund Pilot Programs; and 3) amendments based on comments received by LDCs as part of their review of the preliminary results. Further details on the revisions between the preliminary and the final 2016 verified results can be found in the 2016 Frequently Asked Questions (FAQs) and Evaluation Findings Report which will be posted along with the results on the LDC extranet.

Please note that all results contained within this report are considered to be final verified results. Projects included in this report are reflected in the accompanying LDC Project List Report. Any program activity not captured in this report will be included as part of a future adjustment process.

In terms of next steps, as with the 2015 CFF results, Final Verified 2016 Annual Results Reports will be posted on the IESO website in early July. In addition, LDC-Program level and portfolio-level cost effectiveness test results will be available on September 15, 2017, as outlined in the Energy Conservation Agreement version 3.0 update. Finally, 2016 EM&V reports will be available later this summer along with key program recommendations to be shared with the LDC Working Groups and the IESO.

We appreciate your collaboration and cooperation throughout the reporting and evaluation process. As we look ahead, the IESO will be focusing on enhancing its communication and support services to further support LDCs in the delivery of programs and to increase customer participation in these programs. I look forward to continuing to work together in achieving success in the Conservation First Framework.

Sincerely,

Terry Young Vice-President, Conservation & Corporate Relations Independent Electricity System Operator

## Final Verified 2016 Annual LDC CDM Program Results Report Table of Contents

#	ŧ	Worksheet Name	Worksheet Description
ſ	1	How to Use This Report	Describes the contents and structure of this report
	2	Report Summary	<ul> <li>A high level summary of the Final 2016 Annual Verified Results Report, including:</li> <li>1) progress toward the LDC's <ul> <li>a) Allocated 2020 Energy Savings Target;</li> <li>b) Allocated 2015-2020 LDC CDM Plan Budget;</li> <li>c) CDM Plan 2015-2020 Forecasts;</li> </ul> </li> <li>3) annual savings and spending;</li> <li>4) Annual FCR Progress;</li> <li>5) annual LDC CDM Plan spending progress;</li> <li>6) graphs describing: <ul> <li>a) contribution to 2020 Target Achievement by program;</li> <li>b) 2015 LDC CDM Plan Budget Spending by Sector;</li> <li>c) annual energy savings persistence to 2020 by year;</li> <li>d) your Allocated Target achievement progress relative to your peers; and</li> <li>e) your LDC CDM Plan Budget Spending progress relative to your peers;</li> </ul> </li> </ul>
	3	LDC Rankings	A comprehensive report of each LDC's performance rankings against all other LDCs in major performance categories.
	4	LDC Progress	<ul> <li>A comprehensive report of 2016 conservation results including:</li> <li>1) activity;</li> <li>2) savings including; <ul> <li>a) energy and peak demand;</li> <li>b) net and gross;</li> <li>c) CDM Plan forecasts, verified actuals and relative progress;</li> <li>d) Allocated Target and Target acheivement; and</li> </ul> </li> <li>3) spending, including participant incentives and administrative expenses and IESO Value Added Services Costs.</li> <li>Data is grouped by category and summarized at the LDC level.</li> </ul>
	5	Province-Wide Progress	<ul> <li>A comprehensive report of 2016 conservation results including:</li> <li>1) activity;</li> <li>2) savings including; <ul> <li>a) energy and peak demand;</li> <li>b) net and gross;</li> <li>c) CDM Plan forecasts, verified actuals and relative progress;</li> <li>d) Allocated Target and Target acheivement; and</li> </ul> </li> <li>3) spending, including participant incentives and administrative expenses and IESO Value Added Services Costs.</li> <li>Data is grouped by category and summarized at the province wide level.</li> </ul>
	6	LDC Savings Persistence	A report detailing the gross and net energy and peak demand savings persistence by program and implementation year (2015, 2015 Adjustment and 2016) at the LDC Level.
	7	Province-Wide Persistence	A report detailing the gross and net energy and peak demand savings persistence by program and implementation year (2015, 2015 Adjustment and 2016) at the province wide Level.
	8	Methodology	A description of the methods used to calculate energy savings, financial results and cost-effectiveness.
	9	Reference Table	Provides detailing how Province wide Consumer Program results were allocated to specific LDCs.
	10	Glossary	Definitions for the terms used throughout this report.

## Final Verified 2016 Annual LDC CDM Program Results Report How to Use this Report

The IESO is pleased to provide you with the 2016 Annual Verified Results Report.

This report provides:

- 1) electricity savings;
- 2) annual Full Cost Recovery funding model program progress; and
- peak demand savings;
- 4) IESO Value Added Services Costs
- in accordance with Section 9.2(b)(i) of the Energy Conservation Agreement.

In addition to the above, this report also provides in greater detail:

- 1) program participation results including:
- a) forecasts; b) actuals; and c) progress (forecast versus (vs) actuals);
- 2) program savings results including:
- a) net 2020 annual energy and peak demand savings;
- b) allocated target, target achievement and progress towards target;
- c) incremental net first year energy and peak demand savings;
- d) annual net-to-gross and realization rate adjustments; and
- e) incremental gross first year energy and peak demand savings;
- and where available reported by: i) forecasts; ii) verified actuals; and iii) progress (forecast vs actuals);

3) program spending including:

- a) participation incentive spending;
- b) administrative expense spending (including IESO value-added services costs);
- c) aggregated total spending; and
- d) allocated budget, LDC CDM Plan budget spending and progress towards budget;
- and for each cost: i) forecasts; ii) verified actuals; and iii) progress (forecast vs actuals);
- 4) program savings results persistence for:
- a) gross energy savings;
- b) gross peak demand savings;
- c) net energy savings; and
- d) net peak demand savings;

by both the LDC specific level and the province-wide aggregated level for 2016 and 2015 including 2015 Adjustments.

This report's format is consistent with the IESO issued Monthly Participation and Cost Report in that it is a dynamic sheet that can be expanded or collapsed by clicking the + button or "Show Detail" feature under the Data tab. Each of the four results categories listed above have been grouped together for easy accessibility.

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1 Progress Report	~			<u>^</u>	â	ê	ŝ	<u>^</u>	<u>^</u>	<u>^</u>	<u>^</u>	^	<u>^</u>	<u>^</u>	^	^	<u>^</u>	^	^	^	^	^	^	^	^	^	^	^	^
2 For: Province Wide	- E	ving	vin S	ving	Energy >	nanc	20	nanc	ving	ving	a di	nding	nding	ding	ading	ding		불	B	탈	Ratio	Benefit	Cost	le fit	Ratio	left	est B	Test	Group
# Programs	Partkip	CFF LDC CDM Plan Target)>	rst Year Energy Savings	r Peak Demand Sa	Net-to-Gross Adjustment - E	Adjustment - Peak Dei	ealization Rate - E	Realization Rate - Peak Dei	Incremental First Year Energy Savin	r Peak Demand Saving	Savings Group	ant Incentive Sper	LDC Administrative Expense Sper	tive Expense Sper	Expense Sper	CDM Plan Budget Sper	Spending G	sss Test - Gross Be	eness Test - Gross Cost	ness Test - Net Benefit	est - Net Benefit	ss Test - Gross Be	eness Test - Gross	ness Test - Net Benefit	fest - Net Benefit	tiveness Test - Be	Cost Effectiveness Test -	Cost Effectiveness	ectiveness Tests
6 2015-2020 Conservation First Framewor	k Programs		토	Yea	ê	Adju	~	İzati	E I E	Yea		Particip	istra	sta	istra	ē		ive m	Effective		ness	ivene	Effectiv			Ĕ	ost B		۳.
7         Residential Province Wide Programs           1         Issee on Energy Caupon Program           9         2. Save on Energy Neuro Construction           11         Save on Energy Neuro Construction           11         4. Save on Energy Neuro Construction           11         4. Save on Energy Neuro Construction           11         4. Save on Energy Neuro Construction           11         4. Save on Energy Neuro Construction           12         Save on Energy Neuro Neurone-Wide           13         Save on Energy Neuro Neurone-Wide           14         Bouiness Dravince-Wide Programs           15         Save on Energy Neuro Neurone-Wide           16         5. Save on Energy Neurone Neuros           17         Save on Energy Neurone Neuros           18         B. Save on Energy Neurone Neuros           19         Save on Energy Neurone Neuros           20         10 Save on Energy Neurone Neuros           21         Save on Energy Neurone Neuros           22         12 Save on Energy Neurone Neuros           23         Save on Energy Neurone Neuros           24         14 Save on Energy Neurone Neuros           25         Sautotatal Sames Province-Wide Program           26         13	Program Program Program Program Program Nation Program National Program National Program Upgrades Program Upgrades Program Upgrades Program Local Program Local Program Local Program Assistance Local Program Munines Liphting Local Program m Cal Program To be conformed tial Water Heating Pilot Progra m	Net Incremental 2020 Annual Energy Savings (Progress towards 2015 - 2020 CFF LDC CDM Pan Target) Net Incremental 2020 Annual Pearl Demand Savings		Net Incremental First Year Peak Demand Saving	Net-to-	Net-to-Gross /		Real	Gross Increment	Gross Incremental First Year		Rin	LDC Admin	Value Added Services Provider Administratis	Total Administrative	Total 2015-2020 CFF LDC		Total Resource Cost - Cost Effective mess Test - Gross Benefit	Total Resource Cost Effe	Total Resource Cost - Cost Effective	Total Resource Cost - Cost Effectivene	Program Administrator Cost Effective	Program Administrator Cost Effe	Program Administrator Cost effective	Program Administrator Cost Effectiveness	Lewlized Unit Energy Cost - Cost	Levelized Unit Energy Cost - Co	Levelted Unit Energy Cost	Gast
Please note:																													
1) Cost Effectiveness Test (CET	) results including:																												
<ul> <li>a) total resource cost test;</li> </ul>																													
b) program administration o	ost test;																												
c) levelized unit energy cost	test;																												

and for each test: i) benefits; ii) cost; iii) net benefit; iv) benefit ratio; at the LDC and province wide level will not be available in this report but

will be provided to LDCs by September 15 2017, as per the Energy Conservation Agreement, version 3.0.

2) forecasts of: a) activity; b) savings; and c) spending; included in this report are based on approved LDC CDM Plan - Cost Effectiveness Tools as of April 1, 2017 (from the i) Program Design; ii) Budget Inputs; iii) Savings Results; and iv) CE Results; worksheets); Please note that this does not contain data for Legacy Framework program spending or CFF pilot program activity, savings, spending or cost effectiveness.

3) Annual FCR Progress only includes Full Cost Recovery funding model program savings results and excludes Pay-for-Performance funding model program savings results.

4) The complete list of approved programs and pilots as of April 1, 2017 approved LDC CDM Plans have been included, however only programs and pilots in market for a sufficient period of time to enable a valid EM&V process will have verified results.

5) 2015 Adjustments consists of projects completed in 2015 but were not reported to the IESO by the 2015 Verified Results Reporting deadline of March 31, 2016.

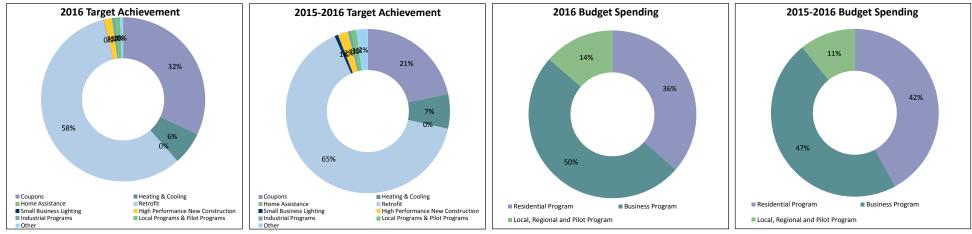
6) Pilot program savings are attributed to the LDC where the pilot program project is located in; and

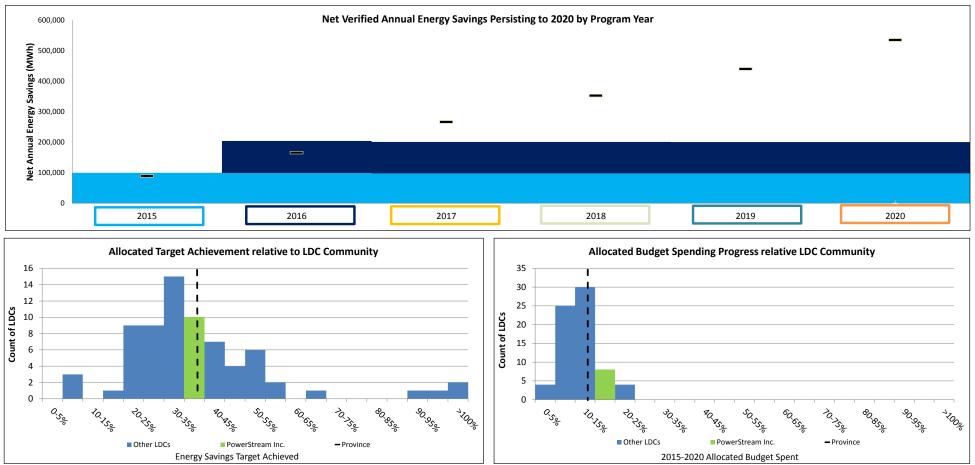
7) This Annual Verified Results Report provides results for the LDC and province only. No aggregated reporting is provided for LDCs that are part of a joint CDM plan;

For: PowerStream Inc.

Results # Metric	2015 Verified Results	2016 Verified Results	2015-2016 Verified Results	Allocated Target / Budget	Progress versus	2015-2020 LDC CDM Plan Forecast	2015-2016 Progress versus 2015-2020 LDC CDM Plan Forecast	2016 LDC CDM Plan Forecast	2016	2015-2016 LDC CDM Plan Forecast	2015-2016 Progress versus 2015-2016 LDC CDM Plan Forecast
1 Net Verified Annual Energy Savings Persisting to 2020	97,487 MWh	103,019 MWh	200,506 MWh	535,440 MWh	37 %	535,440 MWh	37 %	76,739 MWh	134 %	165,941 MWh	121 %
2 LDC Ranking - Net Verified Annual Energy Savings Persisting to 2020	3	3	3	3	27	3	31	4	25	3	38
3 Total Spending (\$)	\$ 5,019,129	\$ 19,030,891	\$ 24,050,020	\$ 140,696,240	17 %	\$ 140,696,239	17 %	\$ 26,679,184	71 %	\$ 34,058,293	71 %
4 LDC Ranking - Total Spending (\$)	2	3	3	3	8	3	9	3	28	3	31

A	inual Results				Cos	st Effectiveness				Ar	nnual FCR Progress	
#	Metric	2015	2016	Total	#	Test	2015	2016	Total	#	Metric	Result
1	Net Verified Annual Energy Savings Persisting to 2020 (MWh)	97,487 MWh	103,019 MWh	200,506 MWh	1	Total Resource Cost Test (Ratio)	n/a	tbd	tbd	1	2015-2016 Incremental Net Verified 2020 Annual Energy Savings from Full Cost Recovery Programs	200,506 MWh
2	Net Verified Incremental First Year Energy Savings (MWh)	99,707 MWh	105,193 MWh	204,900 MWh	2	Program Administrator Cost Test (Ratio)	n/a	tbd	tbd	2	2015-2016 Incremental Net 2020 Annual Energy Savingsfrom Full Cost Recovery Program per CDM Plan Forecast	165,941 MWh
3	Total Spending (\$)	\$ 5,019,129	\$ 19,030,891	\$ 24,050,020	3	Levelized Unit Energy Cost Result (¢/kWh)	n/a	tbd	tbd	3	FCR Progress (%)	121 %





# LDC	Net Verified Annual Energy	v Savings Persistin	e to 2020												Cotal Spending											
" "	2015	Verified	Verified	2016	2015-2016	Allocated	2015-2016	2015-2020	2015-2016	2016	2016	2015-2016	2015-2016	3	2015	Verified	Verified	2016	2015-2016	Allocated	2015-2016	2015-2020	2015-2016	2016 20	6 2015-20	16 2015-2016
	Verified Results		Adjusted 2015	Verified Results	Verified Results	Target	Progress versus	LDC CDM Plan	Progress versus 2015-2020	LDC CDM Plan	Progress versus	LDC CDM Plan	Progress versu 2015-2016	۱s کا	/erified Spending	2015 Adjustment	Adjusted 2015	Verified Spending	Verified Spending	Budget	Progress versus Allocated	LDC CDM Plan	Progress versu: 2015-2020	s LDC CDM Plan Pro	gress versus LDC CDI	M Plan Progress versus 2015-2016
		Adjustment Results	Results				Target	Porecast	LDC CDM Plan	rorecast	LDC CDM Plan	Porecast	LDC CDM Plan			Adjustment Spending	Spending				Budget	Forecast	LDC CDM Plan	LD	CDM Plan	LDC CDM Plan
									Forecast		Forecast		Forecast										Forecast	Fo	ecast	Forecast
	Value LDC (kWh) Banking	Value (kWh)	Value LDC (kWh) Rankin	Value LD Ig (kWh) Ra	C Value LDC Inking (kWh) Ranki	Value L ing (kWh) R	DC Value LD anking (%) Ra #) (#	IC Value LDC Inking (kWh) Ranking	Value LDC (%) Ranking	Value LDC (kW/b) Bankin	Value LDC g (%) Rankir	Value (kW/b)	LDC Value Ranking (%)	LDC N	/alue LDC	Value king (\$)	Value LDC (\$) Ranki	ng (\$) LDC Ranking (#)	Value LDC (\$) Ranking	Value (\$)	LDC Value LDC Ranking (%) Ranki	Value LDC	Value L	LDC Value LDC Va Ranking (\$) Ranking (%		LDC Value LDC Ranking (%) Ranking
	(#)	(	(#)	(#)	) (#)	(	#) (#	nking (kWh) Ranking ) (#)	(%) Ranking (#)	(#)	(#)	ng (kWh)	Ranking (%) (#)	Ranking (#)	(#)	king (\$)	(#)	(#)	(\$) Ranking (#)	(9)	Ranking (%) Ranki (#) (#)	(#)		(#) (#)	Ranking (\$) (#)	(#) (#)
																				-						
1 Algoma Power Inc. 2 Atikokan Hydro Inc.	1,031,011 5	7 25,818		58 1,285,402 67 189,357	52 2,342,230 68 301,570	56 7,510,000 68 1,140,000	54 31	45 11,100,760 4 54 1,139,590 6	21 66	816,284 127,788	54 157 71 148	16 1,777,226 18 170,828		34	39,320	22 59,951	99,271	20 344,836 4 43 50,265 6	444,108 42 5 50,265 66	2,107,963 311,330		3 3,449,717 9 374,405	45 13	24 683,154 43 19 56,766 71		737,814 43 60 37 56,772 71 89 10
3 Attawapiskat Power Corporation	35,822 7	0 2,343		70 0	69 38,165	70 510,000	70 7	71 556,816 6	7 71	209,344	66 0	69 209,344	68 18	70	0	30 0	0	43 0 6	0 69	148,832		69 1,846,142	54 0	69 386,748 52		386,748 52 0 69
4 Bluewater Power Distribution Corporation	7,755,327 2	1 268,687	8,024,013	26 5,570,598	28 13,594,611	30 62,370,000	19 22	65 62,370,000 1	22 64	7,092,037	25 79	56 14,839,910	25 92	57	5,119	29 0	5,119	41 1,340,938 2	1,346,056 27	15,838,687	20 8	56 15,838,687	20 8	54 2,579,261 19		584,380 21 52 50
5 Brantford Power Inc. 6 Burlington Hydro Inc.	7,457,011 2 12,632,309 1	2 1,458,523 8 1,975,945	8,915,534 14,608,254	25 10,499,455 18 11.531.861	19 19,414,989 15 26,140,115	21 54,320,000 16 99,040,000	22 36	33 54,880,608 2 55 99,040,000 1	35 36	9,918,198 11,672,695	18 106 15 99	39 17,760,851 47 18,090,682	22 109 21 144	46	0 118.667	30 29,000 17 193.116	29,000 311.783	30 1,564,432 2 12 2,472,234 1	2 1,593,432 24 2,784,017 13	14,048,458 25,825,521	22 11	30 11,591,730 37 25,890,159	23 14	16 2,207,285 23 38 3,893,532 15		236,285 23 71 28 377,008 12 57 43
7 Canadian Niagara Power Inc.	3,502,396 3	7 5,579,808		23 5,553,280		27 28,480,000	32 51	12 28,104,418 3	52 15	4,745,580	30 117				162,334	14 58,069		13 1,200,961 2	1,421,364 26	7,355,555		5 6,338,440	35 22	4 1,589,930 29		543,473 29 86 12
8 Centre Wellington Hydro Ltd. 9 Chapleau Public Utilities Corporation	1,581,029 5	3 109,971	1,690,999 278,818	53 1,548,975 64 191,711	50 3,239,975 67 470,529	52 8,730,000 66 1.050.000	50 37	30 8,729,845 50 18 1.057,696 60	37 33	2,771,886	40 56	62 4,123,814 21 508 197	39 79	60	0	30 0	0	43 276,194 4 42 19,890 6	276,194 50 23,244 68	2,252,724 298,764	51 12	26 2,252,724 60 298,764	51 12	29 651,826 44 59 57,618 69		51,826 44 42 59 57,618 69 40 62
10 COLLUS PowerStream Corp.	1,637,947 5	4 3,485 1 385,929	2,023,876	49 2,194,349	44 4,218,225	47 16,860,000	39 25	58 16,860,000 3	25 57	2,047,097	42 107	38 3,784,720	41 111	43	157,689	15 0	157,689	16 636,318 3	8 794,008 31	4,446,841	39 18	7 4,446,841	39 18	8 842,348 39	55 04	57,618 69 40 62 118,451 35 71 30
11 Cooperative Hydro Embrun Inc.	120,443 6	6 19,234	139,677	66 730,806	57 870,483	62 1,790,000	65 49	15 1,790,697 6	49 18	241,547	65 303	2 320,602		9	0	30 0	0	43 61,223 6	61,223 65	525,743	65 12	28 525,743	68 12	31 78,227 68		78,227 68 78 17
12 E.L.K. Energy Inc. 13 Energy+ Inc.	1,662,553 4	9 583,829 3 60.025.983	2,246,382	47 1,963,393	48 4,209,775	48 16,200,000	41 26	56 16,203,264 4 4 106,219,451 1	26 54	1,785,578	45 110 17 142	36 3,064,492	45 137 8 136	29	0	30 0	0	43 435,083 4 43 2,916,887 1	2 435,083 43	4,273,057 25.873.071	41 10	41 4,273,057 32 23.678.815	41 10	42 504,219 48 28 4,939,935 10		504,219 48 86 13 039,935 11 59 39
14 Enersource Hydro Mississauga Inc.	59,582,917	5 15,701,481	75,284,398	6 80,992,918	4 156,277,316	4 483,270,000	4 32	42 483,273,204	32 42	79,419,033	3 102	42 149,356,740	4 105	50	0	30 0	0	43 5,508,332	5,508,332 8	122,499,403	4 4	68 123,761,401	4 4	68 20,565,231 4	27 66 23,	154,175 4 24 66
15 Entegrus Powerlines Inc.	38,558,192 14,809,440 1	8 3,536,019		9 14,186,934	13 56,281,145	11 56,830,000	21 99	3 62,079,147 2 47 152,801,848 1	91 3	5,611,768	27 253	4 34,007,927	14 165	21	374,365	8 60,099	434,464	8 2,370,550 1	2,805,014 12	14,695,867		6 13,843,474	21 20	6 2,447,799 20		048,339 19 92 6
16 EnWin Utilities Ltd. 17 Erie Thames Powerlines Corporation	14,809,440 1 5,180,177 2	5 2,675,379 7 922,335		16 29,365,888 30 2,555,215	9 46,850,707 40 8,657,726	12 151,300,000 34 27,630,000	33 31	47 152,801,848 1 44 39,589,797 2	31 45	44,722,046 3,215,423	5 66 37 79	61 64,562,249 55 21,956,460	9 73 19 39	68	23,149	30 111,618 25 19,384	111,618 42,533	19 2,430,728 1 26 561,528 3	2,542,346 15 0 604,060 37	38,421,929 7,104,954		64 38,421,929 55 7,020,999	33 9	64 11,447,244 8 52 1,352,450 30		147,244 8 22 67 524,690 30 40 63
18 Espanola Regional Hydro Distribution Corporation	502,006 6	1 14,537	516,543	62 339,978	65 856,521	63 2,410,000	64 36	34 1,998,806 6	43 23	328,608	64 103	40 328,608	65 261	10	5,306	28 0	5,306	40 57,969 6	63,275 63	685,489	64 9	48 759,788	67 8	57 141,751 63		141,751 64 45 58
19 Essex Powerlines Corporation 20 Festival Hydro Inc.	3,819,710 3 4,822,853 3	6 1,720,380 0 2.088.958	5,540,090 6,911,811	33 7,059,017	26 12,599,107 21 16,328,885	31 31,430,000 26 34,650,000	30 40	24 31,430,000 23 17 29,884,429 31	40 29	7,103,736	24 99	46 9,728,188 7 4,336,821	29 130	35	176,840	12 6,737	183,577 8,075	14 1,818,727 1 37 1,003,864 2	8 2,002,304 17 9 1,011,939 29	8,532,573 8,768,149	30 23	1 8,421,412 29 8,768,149	30 24	3 1,871,165 25 32 1,323,777 32		199,199 25 91 8 323,777 33 76 18
21 Fort Albany Power Corporation	29,906 7	1 1,956	31,862	27 9,417,074 71 0 65 553,935	69 31,862	71 340,000	71 9	69 373,387 7	55 10 9 70	197,235	68 0	69 197,235	70 16	71	0	30 0	0,075	43 0 6	0 69	98,990	71 0	69 1,682,107	58 0	69 345,251 55	0 69	345,251 55 0 69
22 Fort Frances Power Corporation	254,688 6	5 11,215	265,903		60 819,838	64 4,000,000	61 20	67 3,687,415 6	22 62	348,835	63 159	15 486,914	64 168	19	0	30 0	0	43 92,580 6	92,580 60	1,109,758		59 1,119,638	63 8	58 124,580 66		124,601 66 74 23
23 Greater Sudbury Hydro Inc. 24 Grimsby Power Incorporated	6,959,582 2 2,804,724 4	3 3,141,790 0 319,119	10,101,372 3,123,843	22 9,312,088 40 2,159,053	22 19,413,460 45 5,282,896	22 34,740,000 43 10,850,000	27 56	7 23,985,670 3 14 10,863,961 4	81 5	3,943,302	34 236	5 3,943,302 33 3,670,614	40 492	2	112,497	18 0	112,497 34,500	18 1,425,683 2 29 292,926 4	1,538,180 25 3 327,426 48	9,672,498 2,894,613	26 16	10 9,117,459 31 2.894,612	27 17	10 1,701,015 28 33 633,209 45	04 11 1,	701,015 28 90 9 533,209 45 52 52
25 Guelph Hydro Electric Systems Inc.	58,594,547	6 2,215,864	60,810,411	8 8,394,053	24 69,204,463	9 99,040,000	13 70	5 99,040,001 1	70 7	7,470,386	22 112	35 59,741,607	11 116	41	278,441	10 103,065	381,506	11 1,377,942 2	1,759,447 20	24,920,625	14 7	62 23,290,402	15 8	60 3,782,778 16	36 63 4,2	255,743 16 41 61
26 Halton Hills Hydro Inc.	5,500,566 2	5 212,955		31 4,755,591 44 2,417,972	32 10,469,112	33 30,940,000 44 3,180,000	31 34	38 30,962,677 2	34 39	3,268,861	36 145 62 654	20 6,234,990	34 168	20	0	30 0	0	43 604,017 3 36 71,209 6	6 604,017 38	8,387,497 843,903		61 8,387,497 45 843 903	31 7	62 1,310,004 33 45 122,762 67		158,606 31 41 60 122,762 67 66 36
27 Hearst Power Distribution Company Limited 28 Horizon Utilities Corporation	70,835,688	4 6,703,611	77,539,298	4 2,417,972	42 4,913,361 6 122,423,572	44 3,180,000 6 330,680,000	6 37	31 366,197,247	154 1 33 41	41,674,275	7 108	1 1,033,780 37 116,705,818	59 475	49	2,679,921	3 194,944	2.874.865	3 10.061.393	81,272 62	84,830,304	6 15	45 843,903 12 84,830,304	6 10	45 122,762 67		122,762 67 66 36 564,321 5 73 25
29 Hydro 2000 Inc.	80,683 6	8 3,633	84,316	68 257,750 57 1,339,759	66 342,066	67 1,360,000	66 25	57 1,360,459 6	25 56	165,677	69 156	17 215,261	67 159	22	0	30 0	0	43 41,957 6	41,957 67	394,750	66 11	38 394,750	69 11	39 56,806 70	74 24	56,806 70 74 24
30 Hydro Hawkesbury Inc. 31 Hydro One Brampton Networks Inc.	1,162,440 5	6 26,255 9 6,302,266	1,188,695	57 1,339,759 10 41,650,660	51 2,528,454 7 77 531 030	54 7,920,000 8 255,160,000	53 32	43 7,920,346 5 49 255 160 000	32 43 30 46	1,335,307	50 100 8 102	44 2,406,871 41 70 364 866	49 105	48	363.847	30 0 9 139,709	503.556	43 189,396 5 7 7 314 450	2 189,396 53 7 7,818,006 7	2,139,160	52 9	51 2,139,160 27 66,798,530	52 9	50 399,100 51 30 14,629,427 7		399,100 51 47 57 194,829 7 52 49
32 Hydro One Networks Inc.	220,487,100	1 89,902,682		1 208,374,078	2 518,763,860	2 1,220,690,000	2 42	19 1,263,550,435	41 26	257,427,028	2 81	54 477,719,756	1 109	43	1,742,284	4 32,818	1,775,101	5 44,738,829	46,513,930 2	338,355,409	2 14	16 341,857,197	1 14	17 62,293,684 2		338,190 2 73 26
33 Hydro Ottawa Limited	57,247,836	7 15,553,929	72,801,765	7 59,247,505	5 132,049,269	5 394,540,000	5 33	40 394,559,846	33 40	42,147,373	6 141	23 99,489,881	6 133	32	389,296	7 0	389,296	10 13,469,631	13,858,927 4	105,242,155	5 13	19 105,242,156	5 13	21 17,214,251 5	78 17 17,5	591,400 6 79 16
34 InnPower Corporation 35 Kashechewan Power Corporation	1,850,172 4 40,200 6	7 132,220	1,982,392	50 2,561,285	39 4,543,677 69 42,829	46 13,010,000 69 520,000	44 35 69 8	35 13,009,980 4 70 438,286 70	35 37	3,158,377 209,344	38 81 66 0	53 4,728,558 69 209,344	35 96 68 20	54	0	30 0	0	43 467,510 4 43 0 6	467,510 41	3,680,241	44 13 69 0	23 3,680,241 69 1.741,263	44 13 56 0	25 851,157 37 69 358,436 54	55 45 8	351,157 38 55 48 358,436 54 0 69
36 Kenora Hydro Electric Corporation Ltd.	1,606,080 5	2 65,793	1,671,873	54 552,901	61 2,224,774	57 5,270,000	57 42	21 5,269,561 5	42 24	1,403,058	48 39	65 1,596,071	56 139	28	0	30 0	0	43 124,005 5	124,005 59	1,407,448	57 9	52 1,688,937	57 7	61 220,129 59	56 43	220,150 59 56 46
37 Kingston Hydro Corporation	4,445,966 3	2 1,046,947 1 2,654,908		35 2,580,410 12 14,184,542	38 8,073,324 14 38,704,692	36 34,500,000 14 105,710,000	29 23	63 37,182,911 2 32 105,712,088 11	22 65	11,465,768 17,127,724	16 23	68 14,206,168 52 27,136,429	26 57	65	0	30 17,728	17,728	34 566,812 3 43 1.754,249 2	584,540 39 1.754,249 21	8,674,286	29 7	63 8,631,873 65 27,710,719	29 7	63 1,716,251 27 65 4,634,072 14		716,251 27 34 65 534,072 15 38 64
38 Kitchener-Wilmot Hydro Inc. 39 Lakefront Utilities Inc.	21,865,242 1 2,239,136 4	4 280,605	2,519,741	12 14,184,542 43 1,185,986	14 38,704,692 53 3,705,727	14 105,710,000 50 12,170,000	45 30	48 12,201,915 4	37 34 30 47	1,739,771	46 68	52 27,136,429 60 3,639,829	43 102	51	0	30 0	0	43 1,754,249 2 43 265,025 5	265,025 51	3,077,834	45 9	53 3,077,834	46 9	51 511,743 46		511,744 46 52 51
40 Lakeland Power Distribution Ltd.	4,432,710 3	3 708,780	5,141,489	37 2,495,021	41 7,636,510	37 15,770,000	42 48	16 15,832,919 4	48 20	1,345,374	49 185	9 4,319,290	37 177	16	0	30 0	0	43 433,380 4	433,380 44	4,142,391	42 10	40 4,142,392	42 10	41 511,363 47		511,364 47 85 14
41 London Hydro Inc. 42 Midland Power Utility Corporation	28,534,591 1 2,860,953 3	0 3,454,236 9 301.878		11 31,824,871 39 2.402,265	8 63,813,698 43 5,565,096	10 196,660,000 41 10.830,000	8 32	41 219,747,453 13 10,830,000 44	29 50	34,869,274 1,433,109	9 91 47 168	49 63,862,340 14 3.063.543	10 100	53	1,611,279	5 506,532	2,117,811	4 8,721,449 43 345.045 4	10,839,260 6 345,045 47	51,192,690 2,739,690		2 51,389,905 24 2,739,690	8 21	5 9,187,376 9 26 432,693 49		560,376 9 102 3 132,694 49 80 15
43 Milton Hydro Distribution Inc.	9,889,501 1	9 476,099	10,365,601	21 6,501,088	27 16,866,689	25 45,360,000	24 37	29 45,363,753 24	37 32	5,584,323	28 116	30 9,970,719	28 169	18	0	30 41,699	41,699	27 1,563,222 2	3 1,604,921 23	11,911,927	24 13	17 11,908,123	22 13	18 2,051,810 24	76 18 2,2	205,823 24 73 27
44 Newmarket-Tay Power Distribution Ltd.	8,218,024 2	0 840,996 7 1.752.111	9,059,020	24 4,962,518	31 14,021,538	28 36,240,000	26 39	25 26,923,645 3	52 14	4,271,910	32 116 23 145	32 4,271,910	38 328	7	51,311	20 0	51,311	23 1,009,481 2	3 1,060,792 28	9,649,555	27 11	35 9,993,198	25 11	40 1,842,766 26		342,766 26 58 41 378,879 22 99 4
45 Niagara Peninsula Energy Inc. 46 Niagara-on-the-Lake Hydro Inc.	12,742,252 1 2,598,018 4	2 369.192	14,494,363 2,967,210	19 10,838,434 41 3,401,852	17 25,332,796 36 6,369,062	18 74,440,000 39 11,680,000	46 55	37 74,440,000 1 8 11.877,636 4	34 38 54 13	3,546,990	23 145 35 96	19 20,191,139 48 6,289,627	33 101	52	0	30 40,000	40,000	28 2,317,811 1 43 424,921 4	2,357,811 16 424,921 45	19,056,865		25 19,056,865 14 2.321,538	49 18	27 2,378,879 22 7 828,092 40		378,879 22 99 4 328,092 41 51 53
47 North Bay Hydro Distribution Limited	4,245,690 3	5 12,427,153	16,672,842	17 4,001,370	34 20,674,212	20 20,260,000	37 102	2 17,933,641 3	115 2	2,300,259	41 174	12 2,300,259	50 899	1	27,296	23 0	27,296	31 713,129 3	740,425 33	5,545,424	37 13	18 5,738,692	37 13	23 992,259 35		992,259 37 75 22
48 Northern Ontario Wires Inc. 49 Oakville Hydro Electricity Distribution Inc.	509,731 6 21,252,248 1	0 38,057 2 2,499,447	547,788	60 907,761 13 15,431,935	56 1,455,549 11 39,183,630	59 4,310,000 13 92,390,000	59 34	39 2,998,209 6 20 93,974,490 11	49 19	492,913 13,265,566	61 184 14 116	10 492,913 31 34 517 814	63 295 13 114	8 42	6,212	27 0	6,212	39 156,126 5 21 3.120,547 1	5 162,339 56 3,198,065 10	1,174,934 24,575,982	59 14	15 1,139,682 21 24,574,176	62 14 13 13	15 212,627 61 22 4,665,101 13		212,627 61 76 19 742,101 13 67 34
50 Orangeville Hydro Limited	3,398,117 3	8 314,840		38 2,056,808	46 5,769,766	40 14,150,000	43 41	22 14,301,698 4	40 27	1,194,829	51 172	13 2,889,637	47 200	11	0	30 0	0	43 229,432 5	229,432 52	3,705,603		66 3,705,604	43 6	66 412,100 50	56 44 4	112,100 50 56 47
51 Orillia Power Distribution Corporation 52 Oshawa PUC Networks Inc.	1,662,040 5 5,046,074 2	0 246,213 8 1,182,326	1,908,253 6,228,399	52 2,008,907 29 11,449,535	47 3,917,160 16 17,677,934	49 16,580,000 23 73,010,000	40 24	62 16,653,694 3 61 73,010,000 1	24 60	5,922,408 8,484,484	26 34 20 135	66 7,529,238 24 24,199,815	32 52	66	0	30 17,378	17,378 24,000	35 605,352 3 33 1,975,382 1	1 622,730 35 7 1,999,382 18	4,318,856 19,963,922	40 14	13 4,289,364 42 19,918,698	40 15	14 765,330 42 43 3,504,522 17		331,580 40 75 21 504,522 17 57 44
52 Osnawa PUC Networks Inc. 53 Ottawa River Power Corporation	2,779,858 4	8 1,182,326 1 156,362	2,936,220	42 1,812,492	49 4,748,712	45 8,720,000	51 54	9 8,724,947 5	54 59	985,681	20 135 52 184	24 24,199,815 11 2,614,339	48 182	15	0	30 24,000	24,000	43 353,106 4	353,106 46	2,282,373	50 15	42 19,918,698 11 2,282,373	50 15	43 3,504,522 17 12 366,122 53		304,522 17 57 44 366,122 53 96 5
54 Peterborough Distribution Incorporated	4,979,980 2	9 554,811		34 5,186,524	30 10,721,314	32 37,880,000	25 28	52 42,122,834 2	25 55	20,077,835	10 26	67 25,666,491	17 42	67	0	30 43,197	43,197	25 847,015 3	890,212 30	9,781,455	25 9	49 9,581,681	26 9	48 4,697,210 12		597,210 14 19 68
55 PowerStream Inc. 56 PUC Distribution Inc.	76,511,169 4,538,096 3	3 20,976,284 1 659,247		3 103,018,833 36 8,793,170	3 200,506,286 23 13,990,513	3 535,440,000 29 26,410,000	3 37	27 535,440,000 11 18,988,655 3	37 31	76,738,762 3,121,781	4 134 39 282	25 165,941,199 3 3,121,781	3 121	38	5,019,130 58,515	2 0	5,019,130 58,515	2 19,030,891 22 729,307 3	3 24,050,021 3 1 787,822 32	140,696,240 7,440,107	3 17	8 140,696,240 39 7,217,989	3 17	9 26,679,186 3 37 1,346,637 31		058,295 3 71 31 846,637 32 59 40
57 Renfrew Hydro Inc.	351,383 6	3 32,771	384,155	63 418,059	64 802,214	65 4,170,000	60 19	68 4,169,705 5	19 68	595,808	58 70	58 946,461	60 85	59	8,025	26 0	8,025	38 82,258 6	90,283 61	1,070,574		57 1,070,547	64 8	55 170,067 62		178,092 62 51 54
58 Rideau St. Lawrence Distribution Inc.	1,353,836 5	5 95,782		56 570,963	59 2,020,581	58 5,020,000	58 40	23 5,020,495 5	40 28	561,831	59 102	43 1,627,920	55 124	37	0	30 0	0	43 124,517 5	8 124,517 58	1,306,239		46 1,306,239	60 10	46 217,038 60		217,038 60 57 42
59 Sioux Lookout Hydro Inc. 60 St. Thomas Energy Inc.	537,110 5 2,146,544 4	9 7,737 5 188,013	544,847 2,334,556	61 485,367 46 4,191,889	63 1,030,214 33 6,526,446	61 3,700,000 38 17,510,000	52 28 38 37	53 3,699,848 6 28 11,992,835 4	28 51	621,773 1,971,651	43 213	57 764,616 8 1,971,651	61 135 51 331	31	25,415	24 0	25,415	43 61,605 6 32 579,723 3	61,605 64 605,138 36	1,016,095 4,643,532	62 6 38 13	67 1,219,314 20 4,558,730	51 5 38 13	67 128,495 64 20 850,507 38		128,512 65 48 56 350,507 39 71 29
61 Thunder Bay Hydro Electricity Distribution Inc.	5,286,985 2	6 13,266,747	18,553,733	15 7,141,247	25 25,694,979	17 48,420,000	23 53	10 58,393,454 2	44 22	17,239,812	11 41	64 36,097,692	12 71	63	485,575	6 48,109	533,684	6 2,110,681 1	2,644,365 14	12,927,445		4 10,763,047	24 25	2 2,413,463 21	87 9 2,8	885,599 20 92 7
62 Tillsonburg Hydro Inc.	1,886,420 4	6 243,278 2 78 444 901	2,129,698	48 673,753	58 2,803,451 1 544,957,695	53 11,310,000	47 25	59 4,901,901 5 36 1,437,213,978	57 8	741,159 270,786,926	56 91 1 99	50 1,483,941 45 467,933,206	57 189	13	122,716 7,855,850	16 0	122,716 8.252.517	17 158,627 5 1 42,611,695	2 281,343 49 50,864,212 1	2,881,461 400,296,506	48 10	43 939,108 22 320,548,882	65 30	1 126,641 65		167,576 63 168 2 960,069 1 70 33
63 Toronto Hydro-Electric System Limited 64 Veridian Connections Inc.	197,146,346 16,332,332 1	4 2,693,631	19,025,963	2 269,366,448 14 18,086,912	10 37,112,875	1 1,576,050,000 15 152,970,000	9 24	60 152,970,000	38 30 24 58	14,873,397	13 122	45 467,933,206 28 31,199,796	15 119	39	275,672	11 121,369	397,041	9 4,125,057	4,522,099 9	400,296,506 40,482,340	9 11	22 320,548,882 33 40,482,340	9 11	11 64,707,553 1 34 4,935,532 11		203,645 10 87 11
65 Wasaga Distribution Inc.	2,385,191 4	3 26,401	2,411,591	45 1,165,103	54 3,576,694	51 6,320,000	55 57	6 6,319,847 5	57 9	530,215	60 220	6 1,837,059	52 195	12	0	30 0	0	43 176,877 5	8 176,877 54	1,814,647	55 10	44 1,814,647	55 10	44 232,600 58		232,600 58 76 20
66 Waterloo North Hydro Inc. 67 Welland Hydro-Electric System Corp.	12,799,897 1 1,729,306 4	6 1,083,855 8 230,560	13,883,752	20 10,576,686 51 3,416,423	18 24,460,438 35 5,376,290	19 82,380,000 42 25,500,000	16 30 35 21	50 82,384,212 10 66 25,500,101 33	30 48	8,465,944	21 125 33 86	26 15,800,261 51 8,694,159	23 155	23	163 173	30 0	163.173	43 1,816,067 1 15 571,216 3	0 1,816,067 19 7 734,389 34	21,192,868 6,584,437		54 21,192,868 34 6.584,434	16 9 34 11	53 3,185,447 18 35 932,633 36		185,447 18 57 45 108,547 36 66 35
68 Wellington North Power Inc.	709,927 5	8 86,269	796,196	59 522,470	62 1,318,666	60 5,890,000	56 22	64 5,897,926 5	22 61	757,400	55 69	59 1,467,327	58 90	58	0	30 0	0	43 141,935 5	141,935 57	1,493,412	56 10	47 1,493,412	59 10	47 236,870 57	60 37	236,870 57 60 38
69 West Coast Huron Energy Inc.	438,855 6	2 1,041,276	1,480,131	55 1,033,396	55 2,513,526	55 8,080,000	52 31	46 8,175,845 5	31 44	829,562	53 125	27 1,752,338	54 143	26	0	30 0	0	43 169,605 5	169,605 55	2,012,404	54 8	58 2,012,404	53 8	56 240,844 56		240,844 56 70 32
70 Westario Power Inc. 71 Whitby Hydro Electric Corporation	4,282,957 3 6,210,809 2	4 1,285,842 4 410,389		32 3,071,071 28 10,455,293	37 8,639,870 20 17,076,491	35 23,010,000 24 58,440,000	20 29	26 23,824,531 3 51 58,440,000 2	36 35 29 49	5,570,909 9,262,887	29 55 19 113	63 9,007,283 34 15,473,631	24 110	44	50,281	21 0	50,281	43 553,926 4 24 1,690,118 2	1,740,399 22	6,101,269 15,860,460	19 11	50 6,101,269 36 15,860,460	19 11	49 1,152,483 34 36 811,391 41		152,485 34 48 55 311,391 42 214 1
Total	1,117,489,826	372.776.418	1.490.266.244	1,154,154,798	2,644,421,042	6,999,990,000	38	6.961.838.409	38	1.160.312.103	99	2.298.209.799	115		22.426.566	2,398,699	24.825.265	205.478.075	230,303,339	1.835.264.933	13	1,753,574,871	13	324,567,014	63 353.3	772,247 65
<u>k</u>																										

Progress Report	A Net Incremental First Year Energy Savings		Net Incremental First Year Peak Demand Savings	
For: PowerStream Inc.	Forecasted (kWh)	Verified (kWh) Progress (%)	Forecasted (kW) Verified (kW)	Progress (%)         Minings         Minings
# Participa LDC COM Plan Ta	Peak Demand Sa 2015 2016 2013 2019 2019 2019 2019 2019	Total 2015 2015 Adjustment in 2016 Adjusted 2015 2016 Total Total Total Total Total Total	2015 2016 2016 2013 2013 2019 2019 2019 2015 Adjustment In 2016 Adjustment In 2016 2016 Adjustment In 2016	Adjusted 2015 2016 Total Peak Demand Sa Peak Demand Sa itment - Peak Der itment - Peak Der alization Rate - Er alization Rate - Er st Year Energy Sa Peak Demand Sa
2015-2020 Conservation First Framework Programs     44       Residential Province-Wide Programs     1       1 Save on Energy Coupon Program     2       2 Save on Energy Heating & Cooling Program     91       3 Save on Energy New Construction Program     91		5,264,723         6,484,457         810,288         7,294,745         32,980,841         40,275,586         143%         324%         264%           7,129,846         3,220,099         506,403         3,726,502         6,696,541         10,423,043         349%         195%         231%         E           0         0         992         930,563         331,555	342         684         0         0         0         1,026         424         59         483         2,147         2,63           872         1,063         985         955         926         896         5,697         1,696         258         1,954         1,995         3,94           0         0         0         0         0         0         0         0         0         104         10	
A Save on Energy Home Assistance Program Sub-total: Residential Province-Wide Programs Business Province-Wide Program S Save on Energy Audit Funding Program	6,155,241         13,699,428         3,357,261         3,258,183         3,157,270         3,058,164         32,6           130,547         1,501,292         1,501,292         1,501,292         1,501,292         1,501,292         7,6	290,978         0         0         0         0         0         0         0% </td <td>0         14         9         9         9         9         50         0         0         0         0           1,214         1,761         994         964         935         905         6,773         2,120         317         2,437         4,246         6,66           27         303         303         303         303         1,542         0         66         66         22         8</td> <td>88 244% 7% 27% ti</td>	0         14         9         9         9         9         50         0         0         0         0           1,214         1,761         994         964         935         905         6,773         2,120         317         2,437         4,246         6,66           27         303         303         303         303         1,542         0         66         66         22         8	88 244% 7% 27% ti
6 Save on Energy Netrofit Program     Save on Energy Netrofit Program     Save on Energy High Performance New Construction Program     Save on Energy High Performance New Construction Program       9 Save on Energy Netting Building Commissioning Program     Save on Energy Netting Building Commissioning Program     Save on Energy Netting Building Commissioning Program       10 Save on Energy Netting Building Commissioning Program     Save on Energy Manager Program     Save on Energy Monitoring & Targeting Program       12 Save on Energy Monitoring & Targeting Program     Save on Energy Monitoring Program     Save Save Save Save Save Save Save Save	0         12,885,105         0         0         25,7           0         342,000         342,000         342,000         5,622,718         342,000         6,5           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0	2,392,48         4,388,100         12,562,665         16,950,765         60,465,338         77,416,103         255%         129%         145%           5,770,210         0         0         0         60,465,338         77,416,103         256%         129%         145%           5,770,210         0         0         0         60,829         60,829         0%         0%           0         0         0         1,646,039         1,646,039         481%         481%         481%           0         0         0         0         0         0         0         1           1,053,230         0         0         0         0         0         0         200%         200%           0         0         0         0         0         0         0         200%         200%           0         0         0         0         0         0         0         0         200%         200%	1,214         7,491         7,968         8,410         8,747         8,946         42,776         552         1,734         2,326         9,760         12,08           0         3,215         3,215         0         0         0         6430         0         0         0         15         1           0         109         109         109         397         109         833         0         0         0         397         38           0	15 0% 0% 97 364% 364% 0 0
14 Save on Energy Process & Systems Upgrades Program - P4P     au       Sub-total: Business Province-Wide Programs     au       Local & Regional Programs     au       15 JAdaptive Thermostat Local Program     business	0         0         0         0         0         0         0           6,746,766         62,458,211         66,585,466         58,273,421         63,250,185         59,535,364         316,8           0         0         0         0         0         0         0         0		0         0	
16     Business Refrigeration Incentives Local Program     000000000000000000000000000000000000	0         2,082,415         4,818,611         0         0         0         6,5           0	j>01,026         0         0         0         1,013,502         1,013,502         49%         49%           0	0         284         658         0         0         942         0         0         0         137         13 <td>37     48%     48%       0    </td>	37     48%     48%       0
24 Social Benchmarking Local Program 25 THESL Swimming Pool Efficiency Local Program Sub-total: Local & Regional Programs LDC Innovation Fund Pilot Programs		1,560,003         0         0         0         0         0         0%         0	0         2,372         1,896         647         580         963         6,458         0         0         0         0           0	0 0% 0% 0 377 5% 5%
26       Air Source Heat Pump for Residential Water Heating Pilot Program         27       Building Optimization Pilot Program         28       Conservation Voltage Regulation Leveraging AMI Data Pilot Program         29       Demand Control Kitchen Ventilation Pilot Program         30       Direct Install - Hydronic Pilot Program	0         0         0         0         0         0           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0	0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0	0       0       0       0       0       0       0         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0	
31 Direct Install - RTU Controls Pilot Program 32 Electronically Commutated Furnace Motor Pilot Program 33 Electronics Takeback Pilot Program 34 Home Energy Assessment and Retrofit Pilot Program 35 HONI HP Pilot Program 36 [4P4 HP for Class B Office Pilot Program	0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0	0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0	0         0	
37     Performance Based Conservation Pilot Program       38     Re-Invest Pilot Program       39     Residential Direct Install Pilot Program       40     Residential Direct Mail Pilot Program       41     Residential Direct Rest Pump Pilot Program	0         0         0         0         0         0           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0	0         0         0         0         0         0           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0	0         0	
42       Residential Install Pilot Program         43       Social Benchmarking Pilot Program         44       Solar Powered Attic Ventilation Pilot Program         45       Truckload Event Pilot Program         Sub-total:       LDC Innovation Fund Pilot Programs         Program Enabled Savings       Program Enabled Savings		0         0	0         13         1	
46 Save on Energy Retrofit Program Enabled Savings     47 Save on Energy High Performance New Construction Program Enabled Savi     48 Save on Energy Process & Systems Upgrades Program Enabled Savings     Sub-total: Program Enabled Savings     Other			·     · <td></td>	
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2011-2014-2015 Extension Legacy Framework Programs         Residential Program         57       Appliance Retirement Initiative         58       Coupon Initiative         59       Bi-Annual Retailer Event Initiative         60       HVAC Incentives Initiative         61       Residential Rew Construction and Major Renovation Initiative         Sub-total: Residential Program	1,008,891         -         -         -         1,0           4,079,350         -         -         -         4,0           1,141,255         -         -         -         1,1           0         -         -         -         1,1	93,077         155,424         0         155,424         -         155,424         167%         167%           1,008,891         1,027,535         46,083         1,073,618         -         1,073,618         106%	16         -         -         -         16         23         0         23         -         24           75         -         -         -         -         75         69         2         71         -         77           267         -         -         -         -         267         163         0         163         -         16           933         -         -         -         -         933         -         -         1,085         22         1,707         -         1,70           0         -         -         -         -         0         21         42         63         -         66           1,291         -         -         -         -         1,291         -         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02         -         2,02	07 183% 183% 63
Commercial & Institutional Program           62         Energy Audit Initiative           63         Efficiency: Equipment Replacement Incentive Initiative           64         Direct Install Ughting and Water Heating Initiative           65         New Construction and Major Renovation Initiative           66         Existing Building Commissioning Incentive Initiative           66         Existing Building Commissioning Incentive Initiative           61         Example 1 & Binstitutional Program	66,030,288         -         -         -         66,030,288           2,842,576         -         -         -         2,8         -         2,8         -         2,8         -         2,8         -         2,8         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         2,8         -         -         -         2,8         -         -         -         2,8         -         -         -         -         7         0         -         -         -         -         7         0         -         -         -         -         -         7         0         -         -         -         -         -         7         0         -         -         -         -         -         7         0         -         -         -         -         -	1,240,198         875,115         1,926,895         2,802,010         -         2,802,010         22.6%         22.6%         52.82%         54.039,431         -         54,039,431         22.6%         82%         82%         82%         82%         82%         82%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         32.6%         6%<	254         -         -         -         254         187         411         598         -         555         8,711         -         -         -         8,711         6,257         399         6,656         -         6,665         -         6,665         -         6,656         -         502         -         502         -         502         -         502         -         50	87 121% 121% 02 37% 377% 0 0
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71       Aboriginal Conservation Program         72       Program Enabled Savings         Sub-total: Other		0         0         0         -         0         0         235,240         -         235,240         -         235,240         -         235,240         -         235,240         -         235,240         -         10         10         10         10         11         10         10         11         10         10         11 <th1< th=""> <th11< th=""> <th1< td=""><td>0         -         -         -         0         0         0         -         -           0         -         -         -         -         0         27         0         27         -         2           0         -         -         -         0         27         0         27         -         2           11,040         -         -         -         11,040         9,521         1,062         10,583         -         10,58           13,495         15,641         19,144         16,487         18,045         19,485         102,297         12,364         3,179         15,543         14,736         30,27</td><td></td></th1<></th11<></th1<>	0         -         -         -         0         0         0         -         -           0         -         -         -         -         0         27         0         27         -         2           0         -         -         -         0         27         0         27         -         2           11,040         -         -         -         11,040         9,521         1,062         10,583         -         10,58           13,495         15,641         19,144         16,487         18,045         19,485         102,297         12,364         3,179         15,543         14,736         30,27	

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<ul> <li>Abdenmann (2007)</li> /ul>

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Total				105,192,838	103,498,101	103,277,410	103,096,667	103,018,832	102,219,726	102,203,688	102,192,085	101,862,319	101,651,293	100,158,897	90,940,055	68,388,006	68,175,843	40,494,357	36,638,959	20,496,328	7,878,638	7,643,419	1,122,827	901,443	901,443	899,463	899,463	899,463
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Direct Install Lighting and Water Heating Initiative	2016																											
Efficiency: Equipment Replacement Incentive Initiative	2016																											
Energy Audit Initiative	2016																											
Residential New Construction and Major Renovation Initiative	2016																											-
HVAC Incentives Initiative	2016						-					-		-		-												

	ings Persistence Report Province Wide Program / Initiative Name	Implementation Year	rgy Savings >	and Savings >	fied Savings >	rgy Savings >
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3	Save on Energy Heating & Cooling Program Save on Energy New Construction Program Save on Energy Home Assistance Program	2015 2015 2015	<b>Gross Verified</b>	ied Peal	Gross <sup>1</sup>	t Verifi
5	Save on Energy Audit Funding Program	2015 2015 2015	Gros	Verif		Ne
8	Save on Energy High Performance New Construction Program Save on Energy Existing Building Commissioning Program	2015 2015 2015		Gross		
11 12	Save on Energy Energy Manager Program Save on Energy Monitoring & Targeting Program	2015 2015 2015				
14 15	Save on Energy Process & Systems Upgrades Program - P4P Adaptive Thermostat Local Program Business Refrigeration Incentives Local Program	2015 2015 2015				
17 18	Conservation on the Coast Small Business Lighting Local Program Conservation on the Coast Small Business Lighting Local Program First Nations Conservation Local Program	2015 2015 2015				
20	High Efficiency Agriculturual Pungun Local Program Instant Savings Local Program OPsaver Local Program	2015 2015 2015				
23 24	PUMPsaver Local Program	2015 2015 2015				
26 27	Air Source Heat Pump for Residential Water Heating Pilot Program	2015 2015 2015 2015				
29 30	Demand Control Kitchen Ventilation Pilot Program Direct Install - Hydronic Pilot Program Direct Install - RTU Controls Pilot Program	2015 2015 2015				
32 33	Electronically Commutated Furnace Motor Pilot Program Electronics Takeback Pilot Program	2015 2015 2015				
35 36	HONI HP Pilot Program P4P for Class B Office Pilot Program Performance Based Conservation Pilot Program	2015 2015 2015				
38 39		2015 2015 2015				
41	Residential Ductess Heat Pump Pilot Program Residential Install Pilot Program Social Benchmarking Pilot Program	2015 2015 2015				
44 45	Solar Powered Attic Ventilation Pilot Program Truckload Event Pilot Program	2015 2015 2015				
47	Save on Energy Process & Systems Upgrades Program Enabled Savings	2015 2015				
50 51	Proposed Program or Pilot Unassigned Target EnerNOC Conservation Fund Pilot Program	2015 2015 2015				
53 54	Loblaw P4P Conservation Fund Pilot Program Ontario Clean Water Agency P4P Conservation Fund Pilot Program	2015 2015				
56 57	Social Benchmarking Conservation Fund Pilot Program Appliance Retirement Initiative	2015 2015 2015				
59 60	Bi-Annual Retailer Event Initiative HVAC Incentives Initiative	2015 2015 2015				
61 62 63	Residential New Construction and Major Renovation Initiative Energy Audit Initiative Efficiency: Equipment Replacement Incentive Initiative	2015 2015 2015				
64 65 66	Direct Install Lighting and Water Heating Initiative New Construction and Major Renovation Initiative Existing Building Commissioning Incentive Initiative	2015 2015 2015				
67 68 69	Process and Systems Upgrades Initiatives - Project Incentive Initiative Process and Systems Upgrades Initiatives - Energy Manager Initiative Process and Systems Upgrades Initiatives - Monitoring and Targeting Initiat	2015 2015 i 2015				
70 71	Low Income Initiative Low Income Initiative Aboriginal Conservation Program Program Enabled Savings	2015 2015 2015				
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76 77 78	Save on Energy Home Assistance Program Save on Energy Audit Funding Program Save on Energy Retrofit Program	2015 Adjustment 2015 Adjustment 2015 Adjustment 2015 Adjustment				
79 80 81		2015 Adjustment 2015 Adjustment 2015 Adjustment				
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88 89	Business Refrigeration Incentives Local Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
91 92	First Nations Conservation Local Program High Efficiency Agriculturual Pumping Local Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
94 95	OPsaver Local Program PUMPsaver Local Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
97 98	THESL Swimming Pool Efficiency Local Program Air Source Heat Pump for Residential Water Heating Pilot Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
100 101	Conservation Voltage Regulation Leveraging AMI Data Pilot Program Demand Control Kitchen Ventilation Pilot Program Direct Install - Hydronic Pilot Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
103	Direct Install - RTU Controls Pilot Program Electronically Commutated Furnace Motor Pilot Program Electronics Takeback Pilot Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
106	Home Energy Assessment and Retrofit Pilot Program HONI HP Pilot Program P4P for Class B Office Pilot Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
109 110	Performance Based Conservation Pilot Program Re-Invest Pilot Program Residential Direct Install Pilot Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
112 113	Residential Direct Mail Pilot Program Residential Ductless Heat Pump Pilot Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
115 116	Social Benchmarking Pilot Program	2015 Adjustment 2015 Adjustment 2015 Adjustment				
118 119	Save on Energy Retrofit Program Enabled Savings	2015 Adjustment				
121 122	Proposed Program or Pilot Unassigned Target EnerNOC Conservation Fund Pilot Program	2015 Adjustment 2015 Adjustment				
124 125	Home Depot Home Appliance Market Uplift Conservation Fund Pilot Progra Loblaw P4P Conservation Fund Pilot Program	2015 Adjustment 2015 Adjustment 2015 Adjustment 2015 Adjustment				
127 128		2015 Adjustment 2015 Adjustment				
130 131	Bi-Annual Retailer Event Initiative	2015 Adjustment 2015 Adjustment 2015 Adjustment				
133 134	HVAC Incentives Initiative Residential New Construction and Major Renovation Initiative Energy Audit Initiative	2015 Adjustment 2015 Adjustment 2015 Adjustment				
136 137	Efficiency: Equipment Replacement Incentive Initiative Direct Install Lighting and Water Heating Initiative New Construction and Major Renovation Initiative	2015 Adjustment 2015 Adjustment 2015 Adjustment				
139 140	Process and Systems Upgrades Initiatives - Energy Manager Initiative	2015 Adjustment 2015 Adjustment 2015 Adjustment				
142 143	Process and Systems Upgrades Initiatives - Monitoring and Targeting Initiat Low Income Initiative Aboriginal Conservation Program	2015 Adjustment 2015 Adjustment				
144 2015 2016	Program Enabled Savings Adjustment Total	2015 Adjustment				
145 146	Save on Energy Coupon Program Save on Energy Heating & Cooling Program Save on Energy New Construction Program	2016 2016 2016				
148 149	Save on Energy Home Assistance Program Save on Energy Audit Funding Program	2016 2016 2016				
151 152	Save on Energy Small Business Lighting Program Save on Energy High Performance New Construction Program	2016 2016 2016 2016				
154 155	Save on Energy Process & Systems Upgrades Program Save on Energy Energy Manager Program	2016 2016 2016 2016				
157 158	Save on Energy Retrofit Program - P4P Save on Energy Process & Systems Upgrades Program - P4P	2016 2016				
160 161	Conservation on the Coast Home Assistance Local Program	2016 2016 2016 2016				
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166 167	Instant Savings Local Program OPsaver Local Program PUMPsaver Local Program	2016 2016 2016				
170	Social Benchmarking Local Program THESL Swimming Pool Efficiency Local Program Air Source Heat Pump for Residential Water Heating Pilot Program	2016 2016 2016				
173	Demand Control Kitchen Ventilation Pilot Program	2016 2016 2016				
176	Direct Install - Hydronic Pilot Program Direct Install - RTU Controls Pilot Program Electronically Commutated Furnace Motor Pilot Program	2016 2016 2016				
177 178 179	Electronics Takeback Pilot Program Home Energy Assessment and Retrofit Pilot Program HONI HP Pilot Program	2016 2016 2016				
180 181 182	P4P for Class B Office Pilot Program Performance Based Conservation Pilot Program Re-Invest Pilot Program	2016 2016 2016				
183 184	Residential Direct Install Pilot Program	2016 2016 2016				
186	Residential Install Pilot Program Social Benchmarking Pilot Program	2016 2016 2016				
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Net Verified Pea

#### General

All results are at the end-user level (not including transmission and distribution losses) and reported to IESO by April 15, 2017. 2015 results are based on projects completed between January 1, 2015 and December 31, 2015 and reported to the IESO by March 31, 2016. 2015 Adjustment results are based on projects completed between January 1, 2015 and December 31, 2015 and reported to the IESO by March 31, 2016. 2015 Adjustment results are based on projects completed between January 1, 2015 and December 31, 2015 and reported to the IESO by March 31, 2016. 2015 Adjustment results are based on projects completed between January 1, 2016 and December 31, 2015 and reported to the IESO by April 15, 2017.

Legacy Framework results are based on projects begun prior to an LDC's transition to the Conservation First Framework program and completed by December 31, 2015. Conservation First Framework results are based on projects begun after an LDC's transition to the Conservation First Framework program and projects transitioned to the Conservation First Framework through a valid Extension Agreement or eligible Programs.

S	Savings Calculations	
#	Project Type	Attributing Savings to LDCs
	1 Descentative Measures and Projects Programs	Gross Reported Savings = Activity * Per Unit Assumption Savings Gross Verified Savings = Gross Reported Savings * Realization Rate Net Verified Savings = Gross Kenford Savings * Net-Gross Ratio All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)
	2 Engineered and Custom Projects / Programs	Gross Reported Savings = Reported Savings Gross Verified Savings = foross Reported Savings * Realization Rate Net Verified Savings = Gross Kenfled Savings * Net-to-Gross Ratio All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)
	3 Adjustments to Previous Years' Verified Results	All variances from the Final Annual Results Reports from prior years will be adjusted within this report. Any variances with regards to projects counts, data lag, and calculations etc., will be made within this report. Considers the annual effect of energy savings.

#### Cost Determination

2015-2020 Conservation First Framework

Costs are determined and allocated to the period based on the date the cost has been reported to the IESO regardless of when the cost was incurred.

Eg. If an LDC reports by the December 2016 IESO Reporting Period: 1) program savings; 2) Participant Incentives; and 3) Administrative Expenses associated with a 2016 completed project, then: a) the savings; b) expenditures; and c) corresponding cost effectiveness; are attributed to the 2016 program year.

However if the same is reported in or after the January 2017 IESO Reporting Period: i) the savings will be attributed to the 2016 program year; ii) the expenditures will be attributed to the 2017 program year and will not appear in the 2016 Verified Results Report; but iii) the project's Participant Incentives will be used to calculate 2016 Cost Effectiveness;

#	Program	Attributing Savings to LDCs	Project List Date	Savings 'start' Date	Calculating Resource Savings
1	Save on Energy Coupon Program	LDC-coded coupons directly attributed to LDC; Otherwise results are allocated based on Consumer Program Allocation Reference Table.	April 15, 2017	Savings are considered to begin in the year in which the coupon was redeemed.	
2	Save on Energy Heating & Cooling Program	Results directly attributed to LDC based on customer applications and postal code.	April 15, 2017	Savings are considered to begin in the year that the installation occurred.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the
3	Save on Energy New Construction Program	Results are directly attributed to LDC based on LDC identified in LDC Report	April 15, 2017	Savings are considered to begin in the year of the project completion date.	market (gross) taking into account net-to-gross factors such as free- ridership and spillover (net) at the measure level.
4	Save on Energy Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year in which the measures were installed.	
5	Save on Energy Audit Funding Program	Projects are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total saving resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&X protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) gross). Net savings taks into account net-to-gross factors such as free-ridership and spillover (net).
6	Save on Energy Retrofit Program	Projects are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year of the actual project completion date as reported in the LDC Report	Peak demand and energy savings are determined by the total saving for a given project as reported in the iCON system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EA&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects, within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
7	Save on Energy Small Business Lighting Program	Results are directly attributed to LDC based on the LDC specified on the work order.	April 15, 2017	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the assings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).
	Save on Energy High Performance New Construction Program	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total saving for a given project as reported in the CDM LDC Report Template.
9	Save on Energy Existing Building Commissioning Program	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year of the actual project completion date.	Preliminary unverified net savings are calculated by multiplying reported savings by 2014 Net-to-gross ratios and realization rates.
10	Save on Energy Process and Systems Upgrades Program	Results are directly attributed to LDC based on LDC identified in application.	April 15, 2017	Savings are considered to begin in the year in which the project was in-service.	Peak demand and energy savings are determined by the total saving from a given project as reported (reported). A realization rate is
11	Save on Energy Energy Manager Program	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year in which the project was completed by the energy manager.	applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what
	Save on Energy Monitoring and Targeting Program	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year in which the incentive project was completed.	was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

# 1					
	Initiative	Attributing Savings to LDCs	Project List Date	Savings 'start' Date	Calculating Resource Savings
1 s	saveONenergy Appliance Retirement Initiative	Includes both retail and home pickup stream. Retail stream allocated based on average of 2008 & 2009 residential throughput; Home pickup stream directly attributed by postal code or customer selection.	April 15, 2017	Savings are considered to begin in the year the appliance is picked up.	
2 s	saveONenergy Conservation Instant Coupon Booklet	LDC-coded coupons directly attributed to LDC. Otherwise results are allocated based on average of 2008 & 2009 residential throughput.	April 15, 2017	Savings are considered to begin in the year in which the coupon was redeemed.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the
3 s	saveONenergy Bi-Annual Retailer Event	Results are allocated based on average of 2008 & 2009 residential throughput.	April 15, 2017	Savings are considered to begin in the year in which the event occurs.	market (gross) taking into account net-to-gross factors such as free- ridership and spillover (net) at the measure level.
4 9	saveONenergy HVAC Incentives	Results directly attributed to LDC based on customer applications and postal code.	April 15, 2017	Savings are considered to begin in the year that the installation occurred.	
5 s	saveONenergy Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the iCon system.	April 15, 2017	Savings are considered to begin in the year of the project completion date.	
6 s	saveONenergy Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported (goos). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
7 s	saveONenergy Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the iCon system. Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see page for Building type to Sector mapping.	April 15, 2017	Savings are considered to begin in the year of the actual project completion date in the iCON system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the ICON system (reported). A realization rate is applied to the reported savings: to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LOC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track). Additional Note: project counts were derived by filtering out invalid statuses (e.g. Post-Project Submission - Payment denied by LDC] and only including projects with an "Actual Project Completion Date" in 2014)
8 s	saveONenergy Direct Installed Lighting	Results are directly attributed to LDC based on the LDC specified on the work order.	April 15, 2017	Savings are considered to begin in the year of the actual project	Peak demand and energy savings are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).
9 s	saveONenergy New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	completion date.	Peak demand and energy savings are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually
10 s	saveONenergy Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017		realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
11 \$	saveONenergy Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application.	April 15, 2017	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings
12 s	saveONenergy Energy Manager	Results are directly attributed to LDC based on LDC identified in application.	April 15, 2017	Savings are considered to begin in the year in which the project was completed by the energy manager. If no date is specified the savings will begin the year of the Quarterly Report submitted by the energy manager.	from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross
13 s	saveONenergy Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in application.	April 15, 2017	Savings are considered to begin in the year in which the incentive project was completed.	factors such as free-ridership and spillover (net).
14 s	saveONenergy Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	Savings are considered to begin in the year in which the measures	Peak demand and energy savings are determined using the measure level per unit assumption multiplied by the uptake of each measure
15 /	Aboriginal Conservation Program	Results are directly attributed to LDC based on LDC identified in the application.	April 15, 2017	were installed.	(gross), taking into account net-to-gross factors such as free- ridership and spillover (net) at the measure level.
16 F	Program Enabled Savings		April 15, 2017		

cal Distribution Company	Allocation (%)
oma Power Inc.	0.18
awapiskat Power Corporation	0.01
ewater Power Distribution Corporation	0.62
ntford Power Inc.	0.67
lington Hydro Inc.	1.34
adian Niagara Power Inc.	0.35
tre Wellington Hydro Ltd.	0.11
pleau Public Utilities Corporation	0.03
perative Hydro Embrun Inc.	0.25
K. Energy Inc.	0.25
rgy+ Inc.	1.12
rsource Hydro Mississauga Inc.	4.64
egrus Powerlines Inc.	0.70
Vin Utilities Ltd.	1.49
Thames Powerlines Corporation	0.32
anola Regional Hydro Distribution Corporation	0.06
ex Powerlines Corporation	0.61
tival Hydro Inc.	0.32
t Albany Power Corporation	0.01
t Frances Power Corporation	0.09
msby Power Incorporated	0.18
elph Hydro Electric Systems Inc.	0.85
ton Hills Hydro Inc.	0.59
irst Power Distribution Company Limited	0.05
izon Utilities Corporation	3.72
ro 2000 Inc.	0.04
ro Hawkesbury Inc.	0.15
Iro One Brampton Networks Inc.	3.59
iro One Networks Inc.	27.29
Iro Ottawa Limited	6.61
Power Corporation hechewan Power Corporation	0.33
echewan Power Corporation ora Hydro Electric Corporation Ltd.	0.02
gston Hydro Corporation	0.29
hener-Wilmot Hydro Inc.	1.51
efront Utilities Inc.	0.11
eland Power Distribution Ltd.	0.23
don Hydro Inc.	2.61
land Power Utility Corporation	0.10
on Hydro Distribution Inc.	0.66
market-Tay Power Distribution Ltd.	0.60
gara Peninsula Energy Inc.	0.82
gara-on-the-Lake Hydro Inc. Th Bay Hydro Distribution Limited	0.13
thern Ontario Wires Inc.	0.42
ville Hydro Electricity Distribution Inc.	1.51
ngeville Hydro Limited	0.20
lia Power Distribution Corporation	0.22
awa PUC Networks Inc.	1.48
awa River Power Corporation	0.12
erborough Distribution Incorporated	0.46
erStream Inc.	7.82
Distribution Inc.	0.65
frew Hydro Inc.	0.05
zau St. Lawrence Distribution Inc.	0.07
x Lookout Hydro Inc.	0.08
nomas cnergy inc.	0.82
onburg Hydro Inc.	0.12
nto Hydro-Electric System Limited	15.57
idian Connections Inc.	2.39
saga Distribution Inc.	0.18
terloo North Hydro Inc.	0.96
	0.31
land Hydro-Electric System Corp.	
lland Hydro-Electric System Corp.	0.06
lington North Power Inc.	0.06
ington North Power Inc.	

#	Term	Definition
	Reporting Terms	
1	Forecast	An LDCs' forecast of program activity, savings, net-to-gross adjustments, expenditures and cost effectiveness as indicated in each LDC's submitted CDM Plan Cost Effectiveness Tools. Forecasts at the province wide level are the sum of all LDCs' forecasts.
2	Reported	Program activity savings and expenditures as determined by the LDC. For savings: 1) for prescriptive projects/programs: calculating quantity x prescriptive savings assumptions; and 2) for engineered or custom program projects/programs: calculated using prescribed methodologies.
3	Verified	The IESO's annually EM&V assessed program activity, savings, net-to-gross, expenditures and cost effectiveness. Preliminary Verified results are provided by June 1st of each year and Final Verified results are provided by July 1st of each year.
4	Adjustment	Verified results that were achieved in previous years but were not provided in a previous years' Annual Verified Results Report.
5	Progress or Comparison	An assessment of Actual results versus Verified results.
	Framework Terms	
6	2011-2014+2015 Extension Legacy Framework	Programs in market from 2011-2015 resulting from the April 23, 2010 GEA CDM Ministerial Directive and funded separately from 2015-2020 Conservation First Framework Programs but Whose savings in 2015 are attributed towards the 2015-202 Conservation First Framework target.
7	2015-2020 Conservation First Framework	Programs in market from 2015-2020 resulting from the March 31, 2014 CFF Ministerial Directive and funded separately from 2011-2014+2015 Extension Legacy Framework Programs.
8	LDC Innovation Fund	A source of funding under the 2015-2020 Conservation First Framework separate from LDC CDM Plan Budgets that the IESO maintains to support LDC led program design and market testing of new initiatives. Savings from LDC Innovation Fund pilot programs contribute to the LDCs savings targets based on the LDC service territory the pilot program is delivered in.
9	Conservation Fund	A source of funding external to the 2015-2020 Conservation First Framework that provides financial support for innovative electricity conservation technologies, practices, research, and pilot programs. Savings from Conservation Fund pilot programs contribute to the LDCs savings targets based on the LDC service territory the pilot program is delivered in.
	Programs Terms	
10	Program	A Conservation & Demand Management offering focusing on a particular opportunity or customer end-use (e.g. Coupon; or Retrofit;) from the 2015-2020 Conservation Firs Framework.
11	Province-Wide Program	Programs available to all LDCs to deliver and that are consistent across the province.
12	Regional Program	Programs designed by LDCs to serve their region and approved by the IESO.
_	Local Program	Programs designed by LDCs to serve their communities and approved by the IESO. A program pilot that may achieve energy or demand savings and is funded separately
	Pilot Program Initiative	from an LDC's CDM Plan Budget. A Conservation & Demand Management offering focusing on a particular opportunity or customer end-use (e.g. Fridge & Freezer Pickup) from the 2011-2014-2015 Extension Legacy Framework
	Activity Terms	Extension Legacy Framework.
16	Participation	A measure of the level of program participation, such as number of projects, homes,
_	Unit of Measure	equipment, etc For a specific initiative the relevant type of participation acquired in the market place (e.g. appliances picked up; coupon products installed; HVAC equipment installed; audits performed; or projects completed;).
	Savings Terms	
18	Energy Savings	Energy savings attributable to conservation and demand management activities.
19	Peak Demand Savings	Peak Demand savings attributable to conservation and demand management activities, as determined by the IESO'S EM&V Protocols.
20	Incremental Savings	The energy or peak demand savings newly attributable to activity procured in a particular reporting period based on when the savings are considered to 'start'. Savings attributed to activity performed or completed in 2016 are presented as 2016 savings.
21	First Year Savings	The energy or peak demand savings that occur in the year it was achieved (includes resource savings from only new program activity).
22	Annual Savings	The energy or peak demand savings that occur in a given year (includes resource savings from new program activity and resource savings persisting from previous years).
23	Gross Savings	The energy or peak demand savings that have been reported based on a conservation and demand management program's participation tracking.
24	Net Savings	The energy or peak demand savings attributable to conservation and demand management activities, net of free-riders, spill over, etc.
25	Realization Rate	A comparison of originally reported savings and observed or measured savings that adjusts reported savings to arrive at verified savings. Accounts for discrepancies such as audited measure counts; adjustment for connected demand savings to peak demand savings; etc.
26	Net-to-Gross Adjustment	The ratio of net savings to gross savings, which takes into account factors such as free-ridership, spillover, etc.
27	Free-ridership	The percentage of participants who would have implemented the program measure o practice in the absence of the program.
28	Spillover	Reductions in energy consumption and/or demand caused by the presence of the energy efficiency program, beyond the program-related gross savings of the participants. There can be participant and/or non-participant spillover.
29	Allocated Target	Each LDC's assigned portion of the Province's 7 TWh Net 2020 Annual Energy Savings Target of the 2015-2020 Conservation First Framework.
	Costs Terms	
30	Participant Incentive	Costs incurred in the delivery of a program related to incenting participants to perform peak demand or energy savings.
		Costs reported by the LDC in the delivery of a program related to labour, marketing, third-party expenses, etc.
_	LDC Administrative Expense	Costs incurred by the IESO's Value Added Service Provider related to associated programs (Coupons and Heating & Cooling), and charged to the LDC in which the
32	IESO Value Added Services Cost	Costs incurred by the IESO's Value Added Service Provider related to associated programs (Coupons and Heating & Cooling), and charged to the LDC in which the programs's activity took place.
32		programs (Coupons and Heating & Cooling), and charged to the LDC in which the
32	IESO Value Added Services Cost	programs (Coupons and Heating & Cooling), and charged to the LDC in which the programs's activity took place. The sum of LDC Adminsitrative Expense and IESO Value Added Services Cost.
32	IESO Value Added Services Cost	programs (Coupons and Heating & Cooling), and charged to the LDC in which the programs's activity took place. The sum of LDC Adminsitrative Expense and IESO Value Added Services Cost. The sum of Total Administrative Expenses and Participant Incentives. All costs are presented based on the period reported by LDCs to the IESO, not
32	IESO Value Added Services Cost Total Administrative Expense	programs (Coupons and Heating & Cooling), and charged to the LDC in which the programs's activity took place.         The sum of LDC Administrative Expense and IESO Value Added Services Cost.         The sum of Total Administrative Expenses and Participant Incentives.         All costs are presented based on the period reported by LDCs to the IESO, not necessarily associated with reported activity.         E.g. if an LDC reports by the December 2016 IESO Reporting Period: 1) program savings; 2) Participant Incentives; and 3) Administrative Expenses associated with 2016 completed project, then: a) the savings; b) expenditures; and c) corresponding cost effectiveness; are attributed to the 2016 program year.
32 33 34	IESO Value Added Services Cost Total Administrative Expense	programs (Coupons and Heating & Cooling), and charged to the LDC in which the programs's activity took place.           The sum of LDC Administrative Expense and IESO Value Added Services Cost.           The sum of Total Administrative Expenses and Participant Incentives.           All costs are presented based on the period reported by LDCs to the IESO, not necessarily associated with reported activity.           E.g. If an LDC reports by the December 2016 IESO Reporting Period: 1) program savings; 2) Participant Incentives; and 3) Administrative Expenses associated with 2016 completed project, then: a) the savings; b) expenditures; and c) corresponding cost effectivenes; are attributed to the 2016 program year.           However if the same is reported in or after the lanuary 2017 IESO Reporting Period: 1) the savings will be attributed to the 2016 program year; ii) the expenditures will be attributed to the 2012 program year and will not appear in the 2016 Verified Results Report; but iii) the project's Participant Incentives will be used to calculate
32 33 34	IESO Value Added Services Cost Total Administrative Expense Delivery Cost	programs (Coupons and Heating & Cooling), and charged to the LDC in which the programs's activity took place.         The sum of LDC Administrative Expense and IESO Value Added Services Cost.         The sum of Total Administrative Expenses and Participant Incentives.         All costs are presented based on the period reported by LDCs to the IESO, not necessarily associated with reported activity.         E.g. if an LDC reports by the December 2016 IESO Reporting Period: 1) program savings; 2) Participant Incentives; and 3) Administrative Expenses associated with 2016 completed project, then: a) the savings; b) expenditures; and c) corresponding cost effectiveness; are attributed to the 2016 Program year.         However if the same is reported in or after the January 2017 IESO Reporting Period: 1) the savings; will be attributed to the 2016 program year; ii) the expenditures will be assing to the Cost Effectiveness;         Results Report; but iii) the project's Participant Incentives will be used to calculate 2016 Cost Effectiveness;         Each LDC's assigned portion of the Province's \$ 1.835 billion CDM Plan Budget of the
32 33 34	IESO Value Added Services Cost Total Administrative Expense Delivery Cost Allocated Budget	programs (Coupons and Heating & Cooling), and charged to the LDC in which the programs's activity took place.           The sum of LDC Administrative Expense and IESO Value Added Services Cost.           The sum of Total Administrative Expenses and Participant Incentives.           All costs are presented based on the period reported by LDCs to the IESO, not necessarily associated with reported activity.           E.g. if an LDC reports by the December 2016 IESO Reporting Period: 1) program savings; 2) Participant Incentives; and 3) Administrative Expenses associated with 2016 completed project, then: a) the savings; b) expenditures; and c) corresponding cost effectiveness; are attributed to the 2016 POGram year.           However if the same is reported in or after the January 2017 IESO Reporting Period; 1) the expenditures will be attributed to the 2016 program year.           However if the same is reported in or after the January 2017 IESO Reporting Period; 1) the expenditures will be attributed to the 2016 program year; ii) the expenditures will be attributed to the 2017 program year and will not appear in the 2016 Verified Results Report; but iii) the project's Participant Incentives will be used to calculate 2016 Cost Effectiveness;           Each LDC's assigned portion of the Province's \$ 1.835 billion CDM Plan Budget of the 2015-2020 Conservation First Framework.           A cost effectiveness test that measures the net cost of CDM based on the total costs of the province is the set that measures the net cost of CDM based on the total costs of the 2015-2020 Conservation First Framework.
32 33 34 35 36	IESO Value Added Services Cost Total Administrative Expense Delivery Cost Allocated Budget Cost Effectiveness Terms	programs (Coupons and Heating & Cooling), and charged to the LDC in which the programs's activity took place.         The sum of LDC Administrative Expense and IESO Value Added Services Cost.         The sum of Total Administrative Expense and Participant Incentives.         All costs are presented based on the period reported by LDCs to the IESO, not necessarily associated with reported activity.         Eq. If an LDC reports by the December 2016 IESO Reporting Period: 1) program savings; 2) Participant Incentives; and 3) Administrative Expenses associated with 2016 completed project, then: a) the savings; b) expenditures; and c) corresponding cost effectiveness; are attributed to the 2016 program year.         However if the same is reported in or after the January 2017 IESO Reporting Period; i) the expenditures will be attributed to the 2016 program year; ii) the expenditures will be attributed to the 2016 Drogram year; iii) the expenditures will be attributed to the 2016 Drogram year; iii the expenditures will be attributed to the 2016 Drogram year; iii the expenditures will be attributed to the 2016 Drogram year; iii the expenditures will be attributed to the 2016 Drogram year; iii the used to calculate 2016 Cost Effectiveness;         Each LDC's assigned portion of the Province's \$ 1.835 billion CDM Plan Budget of the 2015-2020 Conservation First Framework.

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 29 Filed: June 7, 2018

# ATTACHMENT 29 INCREMENTAL CAPITAL MODULE POWERSTREAM RZ

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 18 19 20 21 22 23 24 25															
2	A DAO	ntario Ene	rgy Boa	ard											
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12	Note: Depen	ding on the se	lections m	ade below,	certain wo	orksheets	in this workb	ook will be hid	dden.				Version	4.10	
13							-		_	_			_		
14				Util	ity Name	Alectra U	tilities Corpora	tion - PowerSt	ream Rate	Zone					
15															
18				Assigned E	B Number	EB-2018-	0016								
19									<i>"</i> • • •						
20			Nam	e of Contac	t and litle	Natalie Y	eates, Director	r, Regulatory A	mairs & Rep	porting					
21				Phone	Number	905-283-4	1005								
23				FIIONE	Number	303-203-	+035								
24				Email	Address	natalie.ve	ates@alectra	utilities.com							
25															
		Is this Capita	l Module b	peing filed in	n a CoS or		Duine Com	10		Rate					
26 27			Price	e-Cap IR Ap	plication?		Price-Cap	IK		Year	2019				
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28 29					applying:										
29	A I a a fina 1 163														
	Alectra Util	ities Corporati	ion - Powe		nte Zone is plying for:		ICM Appro	val							
32 33 34 35				ap	prying ior.										
34				Last Reba	sing Year:		2017		1						
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38					data exists		2017								
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42		Strech Fa	ctor Assig	ned to Mide	dle Cohort		111								
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10	Based on the i	nputs above, th	e growth fa	actor utilized	in the	2017 Boar	d-Approved Distri	bution Revenues							
	Materiality Thr	eshold Calculat	ion will be	determined I	by:				-						
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51		Notes													
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54			i die greet	in cents repress	ene input de										
55			Pale blue	cells represer	nt drop-dow	n lists. The	applicant should	d select the app	ropriate item	from the dr	op-down lis	st.			
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57			White cell	ls contain fixe	d values, au	tomatically of	generated value	s or formulae.							
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60		lodel is protected by													
61	adaptation, trans	vide a copy of this i lation, modification,	reverse engi	neering or other	use or disser	nination of thi	s model without th	e express written	consent of the	Ontario Ener	gy Board is p	prohibited. If	you		
62	provide a copy of	this model to a per trictions noted abov	son that is ad	vising or assist	ing you in pre	paring the app	olication or review	ng your draft rate	order, you mus	st ensure that	the person u	inderstands a	and		
63	-				den he Meri	int the second	diana dha ann			46.0.00	at the state		-		
64 65	wnie this model	has been provided	III Excel forma	at and is require	a to be tiled w	ntn tne applica	auons, the onus re	mains on the appl	icant to ensure	e ine accuracj	y or the data a	ana the result	IS.		
05	OEB policies reaar	ling rate-setting and	d rebasina foll	lowing distribute	or consolidatio	ons could allow	v a distributor to n	ot rebase rates for	up to ten vears	s. A distributo	r could also a	pply for and	receive OEB		
	approval to defer i	ebasing. If a distrib	utor is under l	Price Cap IR for n	nore than fou	r years after re	basing and applie								



Select the appropriate rate classes as they appear on your most recent Board-Approved Tariff of Rates and Charges, excluding the MicroFit Class.

How many classes are on your most recent Board-Approved Tariff of Rates and Charges?

7

Select Your Rate Classes from the **Blue Cells** below. Please ensure that a rate class is assigned to **each shaded cell**.

### **Rate Class Classification**

- 1 RESIDENTIAL
- 2 GENERAL SERVICE LESS THAN 50 KW
- 3 GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION
- 4 LARGE USE SERVICE CLASSIFICATION
- 5 UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION
- 6 SENTINEL LIGHTING
- 7 STREET LIGHTING

## Capital Module Applicable to ACM and ICM Alectra Utilities Corporation - PowerStream Rate Zone

Input the billing determinants and base distribution rates associated with Alectra Utilities Corporation - PowerStream Rate Zone's 2017 Board-Approved Distribution Revenues. Sheets 4 & 5 calculate the NUMERATOR portion of the growth factor calculation.

		2017 Board-Ap	proved Distribution	2017 Board-Approved Distribution Revenues				
Rate Class	Units	Billed Customers or Connections	Billed kWh	Billed kW (if applicable)	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	
RESIDENTIAL	\$/kWh	331,461	2,689,802,037		18.51	0.0130	0.0000	
GENERAL SERVICE LESS THAN 50 KW	\$/kWh	32,775	1,031,991,524		28.74	0.0183	0.0000	
GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION	\$/kW	5,081	4,566,530,904	12,192,632	140.97	0.0000	4.2037	
LARGE USE SERVICE CLASSIFICATION	\$/kW	2	75,964,677	149,679	6073.68	0.0000	2.2421	
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	\$/kWh	3,044	14,542,413		8.60	0.0195	0.0000	
SENTINEL LIGHTING	\$/kWh	207	377,900	975	4.19	0.0000	9.8694	
STREET LIGHTING	\$/kW	89,729	45,603,291	127,503	1.19	0.0000	6.3222	

## Capital Module Applicable to ACM and ICM Alectra Utilities Corporation - PowerStream Rate Zone

Calculation of 2017 Revenue Requirement. No input required.

		2017 E	Board-Approve	d Distribution Re	venues									
Rate Class	Billed Customers or Connections	Billed kWh	Billed kW (if applicable)	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Revenue Requirement from Rates	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Total % Revenue
	Α	в	с	D	E	F	G = A * D *12	H = B * E	I = C * F	J = G + H + I	K = G / J	L = H / J	M = I / J	N = J / R
RESIDENTIAL	331,461	2,689,802,037		18.51	0.0130	0.0000	73,624,117	34,967,426	0	108,591,544	67.8%	32.2%	0.0%	53.8%
GENERAL SERVICE LESS THAN 50 KW	32,775	1,031,991,524		28.74	0.0183	0.0000	11,303,442	18,885,445	0	30,188,887	37.4%	62.6%	0.0%	15.0%
GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION	5,081	4,566,530,904	12,192,632	140.97	0.0000	4.2037	8,595,223	0	51,254,165	59,849,388	14.4%	0.0%	85.6%	29.7%
LARGE USE SERVICE CLASSIFICATION	2	75,964,677	149,679	6,073.68	0.0000	2.2421	145,768	0	335,595	481,364	30.3%	0.0%	69.7%	0.2%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	3,044	14,542,413		8.60	0.0195	0.0000	314,141	283,577	0	597,718	52.6%	47.4%	0.0%	0.3%
SENTINEL LIGHTING	207	377,900	975	4.19	0.0000	9.8694	10,408	0	9,621	20,029	52.0%	0.0%	48.0%	0.0%
STREET LIGHTING	89,729	45,603,291	127,503	1.19	0.0000	6.3222	1,281,330	0	806,099	2,087,429	61.4%	0.0%	38.6%	1.0%
Total	462,299	8,424,812,745	12,470,788				95,274,429	54,136,448	52,405,480	201,816,357				100.0%

# Capital Module Applicable to ACM and ICM

Ontario Energy Board

Applicants Rate Base		2017 Boar	d-Appro	oved Distributio	n Revenues
Average Net Fixed Assets Gross Fixed Assets - Re-based Opening Add: CWIP Re-based Opening Re-based Capital Additions Re-based Capital Disposals Re-based Capital Retirements Deduct: CWIP Re-based Closing Gross Fixed Assets - Re-based Closing Average Gross Fixed Assets	\$\$\$ \$ -\$ \$	1,183,508,943 57,486,862 114,494,289 2,734,108 39,959,632 1,312,796,354	B C D E F	1,248,152,649	H = ( A + G ) / 2
Accumulated Depreciation - Re-based Opening Re-based Depreciation Expense Re-based Disposals Re-based Retirements Accumulated Depreciation - Re-based Closing	\$ \$ \$ \$ \$	229,378,962 52,272,173 717,703 - 280,933,432	J K L		
Average Accumulated Depreciation			\$	255,156,197	N = (I + M) / 2
Average Net Fixed Assets			\$	992,996,452	O = H - N
Working Capital Allowance Working Capital Allowance Base Working Capital Allowance Rate Working Capital Allowance	\$	1,197,449,515 7.5%	P Q \$	89,808,714	R = P * Q
Rate Base			\$	1,082,805,165	S = O + R
Return on Rate Base Deemed ShortTerm Debt % Deemed Long Term Debt % Deemed Equity % Short Term Interest Long Term Interest Return on Equity Return on Rate Base Distribution Expenses Amortization Ontario Capital Tax Grossed Up PILs Low Voltage Transformer Allowance	\$ \$ \$ \$	4.00% 56.00% 40.00% 1.76% 3.88% 8.78% 96,167,243 50,974,104 2,745,639 2,236,782	AH AJ AK AL AM AN	43,312,207 606,370,893 433,122,066 762,295 23,542,374 38,028,117 <b>62,332,786</b>	W = S * T $X = S * U$ $Y = S * V$ $AC = W * Z$ $AD = X * AA$ $AE = Y * AB$ $AF = AC + AD + AE$
			AO \$	152,123,768	AP = SUM ( AG : AO )
Revenue Offsets Specific Service Charges Late Payment Charges Other Distribution Income Other Income and Deductions	-\$ -\$ -\$	3,474,784 2,076,532 2,025,296 5,141,699	AR AS	12,718,312	AU = SUM ( AQ : AT )
Revenue Requirement from Distribution Rates			\$	201,738,243	AV = AF + AP + AU
Rate Classes Revenue Rate Classes Revenue - Total (Sheet 5)			\$	201,816,357	AW
Difference			-\$	78,114	AZ = AV - AW
Difference (Percentage - should be less than 1%)				-0.04%	BA = AZ / AW

## Capital Module Applicable to ACM and ICM Alectra Utilities Corporation - PowerStream Rate Zone

Alectra Utilities Corporation - Powerstream Rate Zone

Input the billing determinants associated with Alectra Utilities Corporation - PowerStream Rate Zone's 2016 Actual Distribution Revenues. This sheet calculates the DENOMINATOR portion of the growth factor calculation. Pseudo Revenue Requirement Calculation.

	2016 Actu	ual Distribution R	evenues	2017 Base Rates										
Rate Class	Billed Customers or Connections A	Billed kWh B	Billed kW C	Monthly Service Charge D	Distribution Volumetric Rate kWh E	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	Total Revenue By Rate Class J = G + H + I	Service Charge % Revenue K = G / J <sub>total</sub>	Distribution Volumetric Rate % Revenue kWh L = H / J <sub>total</sub>	Distribution Volumetric Rate % Revenue kW M = I / J <sub>total</sub>	Total % Revenue N = J / J <sub>total</sub>
RESIDENTIAL	325,741	2,777,974,550		18.51	0.0130	0.0000	72,353,591	36,113,669	0	108,467,260	36.1%	18.0%	0.0%	54.2%
GENERAL SERVICE LESS THAN 50 KW	32,395	1,041,512,339		28.74	0.0183	0.0000	11,172,388	19,059,676	0	30,232,063	5.6%	9.5%	0.0%	15.1%
GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION	4,969	4,592,208,771	11,856,847	140.97	0.0000	4.2037	8,405,759	0	49,842,628	58,248,387	4.2%	0.0%	24.9%	29.1%
LARGE USE SERVICE CLASSIFICATION	2	67,387,072	130,430	6,073.68	0.0000	2.2421	145,768	0	292,437	438,205	0.1%	0.0%	0.1%	0.2%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	2,945	13,692,255		8.60	0.0195	0.0000	303,924	266,999	0	570,923	0.2%	0.1%	0.0%	0.3%
SENTINEL LIGHTING	195	314,360	859	4.19	0.0000	9.8694	9,805	0	8,478	18,282	0.0%	0.0%	0.0%	0.0%
STREET LIGHTING	88,914	52,642,446	146,080	1.19	0.0000	6.3222	1,269,692	0	923,547	2,193,239	0.6%	0.0%	0.5%	1.1%
Total	455,161	8,545,731,793	12,134,216				93,660,927	55,440,344	51,067,090	200,168,360				100.0%

## Capital Module Applicable to ACM and ICM Aloctra Utilities Corporation - PowerStream Rate Zone

Current Revenue from Rates

This sheet is used to determine the applicant's most current allocation of revenues (after the most recent revenue to cost ratio adjustment, if applicable) to appropriately allocate the incremental revenue requirement to the classes.

Most Recent Board-Approved Base Rates 2017 Board-Approved Distribution Revenues

Rate Class	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Re-based Billed Customers or Connections	Re-based Billed kWh	Re-based Billed kW	Current Base Service Charge Revenue	Current Base Distribution Volumetric Rate kWh Revenue	Current Base Distribution Volumetric Rate kW Revenue	Total Current Base Revenue	Service Charge % Total Revenue	Distribution Volumetric Rate % Total Revenue	Distribution Volumetric Rate % Total Revenue	Total % Revenue
	Α	В	с	D	E	F	G = A * D *12	H = B * E	I = C * F	J = G + H + I	L = G / J <sub>total</sub>	$M = H / J_{total}$	N = I / J <sub>total</sub>	$O = J / J_{total}$
RESIDENTIAL	21.63	0.0088	0.0000	331,461	2,689,802,037		86,034,017	23,670,258	0	109,704,275	42.22%	11.62%	0.00%	53.8%
GENERAL SERVICE LESS THAN 50 KW	29.00	0.0185	0.0000	32,775	1,031,991,524		11,405,173	19,055,414	0	30,460,587	5.60%	9.35%	0.00%	14.9%
GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION	142.24	0.0000	4.2415	5,081	4,566,530,904	12,192,632	8,672,580	0	51,715,453	60,388,033	4.26%	0.00%	25.38%	29.6%
LARGE USE SERVICE CLASSIFICATION	6128.34	0.0000	2.2623	2	75,964,677	149,679	147,080	0	338,616	485,696	0.07%	0.00%	0.17%	0.2%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	8.68	0.0197	0.0000	3,044	14,542,413		316,968	286,129	0	603,097	0.16%	0.14%	0.00%	0.3%
SENTINEL LIGHTING	4.23	0.0000	9.9582	207	377,900	975	10,502	0	9,707	20,209	0.01%	0.00%	0.00%	0.0%
STREET LIGHTING	1.20	0.0000	6.3791	89,729	45,603,291	127,503	1,292,862	0	813,353	2,106,215	0.63%	0.00%	0.40%	1.0%
Total							107,879,182	43,011,801	52,877,129	203,768,112				100.0%

## Capital Module Applicable to ACM and ICM

Alectra Utilities Corporation - PowerStream Rate Zone

No Input Required.

#### **Final Threshold Calculation**

Thresho	$ld  Value(\%) = 1 + \left[ \left( \frac{RB}{d} \right) \times \left( g + PCI \times (1+g) \right) \right] $	< ((1 + g))	$(1 + PCI))^{n-1} + 10\%$	6
	Year		2019	
	Year in which Applicant is applying		2	n
	Price Cap Index		0.90%	PCI
	Growth Factor Calculation			
	2017 Board-Approved Distribution Revenues		\$201,816,357	
	2016 Actual Distribution Revenues		\$200,168,360	
	Growth Factor		0.82%	g (Note 1)
	Dead Band		10%	
	Average Net Fixed Assets			
	Gross Fixed Assets Opening	¢	1,183,508,943	
	Add: CWIP Opening	¢	57,486,862	
	Capital Additions	φ Φ	114,494,289	
	Capital Disposals	φ _Φ	2,734,108	
	Capital Retirements	¢	2,754,100	
	Deduct: CWIP Closing	\$ \$ -\$ \$ -\$	39,959,632	
	Gross Fixed Assets - Closing	\$	1,312,796,354	
	Closs Lixed Assets - Closing	Ψ	1,012,700,004	
	Average Gross Fixed Assets	\$	1,248,152,649	
			, , , , ,	
	Accumulated Depreciation - Opening	\$	229,378,962	
	Depreciation Expense	\$	52,272,173	
	Disposals	-\$	717,703	
	Retirements	-\$ \$	-	
	Accumulated Depreciation - Closing	\$	280,933,432	
	Average Accumulated Depreciation	\$	255,156,197	
	Average Net Fixed Assets	\$	992,996,452	
	Working Capital Allowance			
	Working Capital Allowance Base	\$	1,197,449,515	
	Working Capital Allowance Rate	-	8%	
	Working Capital Allowance	\$	89,808,714	
	Rate Base	\$	1,082,805,165	RB
	Depreciation	\$	52,272,173	d
	Threshold Value (varies by Price Cap IR Year s	ubseque	ent to CoS rebasing)	
	Price Cap IR Year 2018		146%	
	Price Cap IR Year 2019	-	146%	
	Price Cap IR Year 2020	-	147%	
	Price Cap IR Year 2021		148%	
	THE REPORT			m) ) ) ) , , , , , , , , , , , , , , , ,
	Threshold CAPEX		70 000 007	Threshold Value $\times d$
	Price Cap IR Year 2018	\$	76,239,665	
	Price Cap IR Year 2019	\$	76,564,006	
	Price Cap IR Year 2020	\$	76,893,960	
	Price Cap IR Year 2021	\$	77,229,625	

**Note 1:** The growth factor g is annualized, depending on the number of years between the numerator and denominator for the calculation. Typically, for ACM review in a cost of service and in the fourth year of Price Cap IR, the ratio is divided by 2 to annualize it. No division is normally required for the first three years under Price Cap IR.

Capital Module

### Applicable to ACM and ICM Alectra Utilities Corporation - PowerStream Rate Zone

#### Identify ALL Proposed ACM projects and related CAPEX costs in the relevant years

		Cost of Service		Price Cap I	R								
		Test Year	Year 1	Year 2 2019	Year 3 2020	Year 4 2021							
Distribution System Plan CAPEX		2017	2018 \$	102,074,174	2020	2021							
Materiality Threshold		\$	76,239,665 \$	76,564,006	76,893,960 \$	77,229,625							
Maximum Eligible Incremental Capital (Forecasted Capex less													
Threshold)		\$ - \$	- \$	25,510,168	5 - \$	-							
Project Descriptions:	Туре	Test Year 2017	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Total						
Barrie TS Upgrade- Metering and Feeder Relocation			\$	2,100,000									
Road Authority YRRT Yonge St Bathurst Ave from Hwy 7 to Teston Road - 6 km of OH relocation			\$	13,272,246 5,500,000			\$ 13,272,246 \$ 5,500,000						
Balliurst Ave from Hwy 7 to reston Road - 6 km of OH relocation			2	5,500,000			\$ -						
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Total Cost of ACM Projects		\$ - \$	- \$	20,872,246	5 - \$		\$ 20,872,246						
Maximum Allowed Incremental Capital		Ś	. \$	20,872,246			\$ 20,872,246						
Waxinun Allowed incremental capital		2		20,072,240	· · ·		20,072,240						
							Year 2	Price Cap IR	Year 3				
		Test Year 2017		Year 1 2018			2019		Year 3 2020		Year	4 2021	
Distribution System Plan CAPEX		S - S		2010	s	102,074,174	2015	s -	2020	Ś	-	2021	
Materiality Threshold		\$	76,239,665		\$	76,564,006		\$ 76,893,96	0	\$	77,229,625		
Maximum Eligible Incremental Capital (Forecasted Capex less													
Threshold)		\$ - \$	-		\$	25,510,168		\$ -		\$	-		
		Test Year		Year 1			Year 2		Year 3		Year	4	
		2017		2018			2019		2020			2021	
Project Descriptions: Barrie TS Upgrade- Metering and Feeder Relocation	Туре	Pr	oposed ACM/ICM Am	ortization Expense	CCA	Proposed ACM/ICM 2,100,000	Amortization Expense \$ 63,000	CCA Proposed ACM/ICM \$ 168,000 \$	Amortization Expense	CCA Proposed	d ACM/ICM Amortia	ation Expense	CCA
Road Authority YRRT Yonge St		Ś	-								-		
Bathurst Ave from Hwy 7 to Teston Road - 6 km of OH relocation			-		\$			\$ 1,061,780 <b>\$</b>		\$	-		
bachdrist Ave noin nwy 7 to reston Road - o kin of on relocation		\$			\$	13,272,246 5,500,000		\$ 1,061,780 \$		\$			
batturst Ave Holl Hwy 7 to restol Road - 0 kill of officiation		\$			\$	13,272,246 : 5,500,000 : -	\$ 308,754	\$ 1,061,780 \$ \$ 440,000 \$ \$		\$ \$ \$	-		
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		\$ \$ \$			\$ \$ \$	13,272,246 : 5,500,000 : - - -	\$ 308,754	\$ 1,061,780 \$ \$ 440,000 \$ \$ \$ \$ \$ \$ \$	· · · · · · · · · · · · · · · · · · ·	\$	-		
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		\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	13,272,246	\$ 308,754	\$         1,061,780         \$           \$         440,000         \$           \$         \$         \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			
Total Cost of Projects		\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	13,272,246	\$ 308,754 \$ 127,947 	\$         1,061,780         \$           \$         440,000         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$           \$         \$         \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		- S	

# Capital Module Applicable to ACM and ICM

Alectra Utilities Corporation - PowerStream Rate Zone

### **Incremental Capital Adjustment**

Current Revenue Requirement - Total			\$	201,738,243	Α
Return on Rate Base					
ncremental Capital			\$	20,872,246	В
Depreciation Expense			\$	499,701	С
ncremental Capital to be included in Rate Base			\$	20,372,545	D = B - C
Deemed ShortTerm Debt %	4.0%	Е	\$	814,902	G = D * E
Deemed Long Term Debt %	56.0%	F	\$	11,408,625	H = D * F
Short Term Interest	1.76%	Т	\$	14,342	K = G * I
ong Term Interest	3.88%	J	\$	442,940	L = H * J
Return on Rate Base - Interest			¢	457 283	M = K + L
cerum on Rate Base - Interest			\$	457,283	W = K + L
Deemed Equity %	40.00%	N	\$	8,149,018	P = D * N
Return on Rate Base -Equity	8.78%	о	\$	715,484	Q = P * O
Return on Rate Base - Total			\$	1,172,766	R = M + Q
mortization Expense - Incremental		~	<b>^</b>		
		C	\$	499,701	S
		C	\$	499,701	S
Grossed up PIL's		0	\$	499,701 715,484	S T
Grossed up PIL's Regulatory Taxable Income					-
Grossed up PIL's Regulatory Taxable Income Add Back Amortization Expense		0	\$	715,484	т
Grossed up PIL's Regulatory Taxable Income Add Back Amortization Expense Deduct CCA		0	\$	715,484 499,701	T U V
Grossed up PIL's Regulatory Taxable Income Add Back Amortization Expense Deduct CCA Incremental Taxable Income Current Tax Rate	26.5%	0	\$ \$ \$	715,484 499,701 1,669,780	T U
Grossed up PIL's Regulatory Taxable Income Add Back Amortization Expense Deduct CCA ncremental Taxable Income	26.5%	o s	\$ \$ \$	715,484 499,701 1,669,780	T U V
Grossed up PIL's Regulatory Taxable Income Add Back Amortization Expense Deduct CCA Incremental Taxable Income Current Tax Rate PIL's Before Gross Up	26.5%	o s	\$ \$ \$ -\$	715,484 499,701 1,669,780 454,595	T U V W = T + U - V Y = W * X
Grossed up PIL's Regulatory Taxable Income Add Back Amortization Expense Deduct CCA Incremental Taxable Income Current Tax Rate PIL's Before Gross Up Incremental Grossed Up PIL's	26.5%	o s	\$ \$ \$ -\$	715,484 499,701 1,669,780 454,595 120,468	T U V W = T + U - V Y = W * X
Grossed up PIL's Regulatory Taxable Income Add Back Amortization Expense Deduct CCA Incremental Taxable Income Current Tax Rate PIL's Before Gross Up	26.5%	o s	\$ \$ \$ -\$	715,484 499,701 1,669,780 454,595 120,468	T U V W = T + U - V
Segulatory Taxable Income  dd Back Amortization Expense  deduct CCA  acremental Taxable Income  furrent Tax Rate IL's Before Gross Up  acremental Grossed Up PIL's  Commental Revenue Requirement  return on Rate Base - Total	26.5%	O S X Q S	\$ \$ -\$ -\$ \$	715,484 499,701 1,669,780 454,595 120,468 163,901	T U V W = T + U - V Y = W * X Z = Y / (1 - X
Brossed up PIL's     egulatory Taxable Income     dd Back Amortization Expense     educt CCA     acremental Taxable Income     urrent Tax Rate IL's Before Gross Up     acremental Grossed Up PIL's     Decemental Revenue Requirement eturn on Rate Base - Total mortization Expense - Total	26.5%	O S X Q S	\$ \$ <u>-</u> \$ -\$ -\$	715,484 499,701 1,669,780 454,595 120,468 163,901 1,172,766	T U V W = T + U - V Y = W * X Z = Y / (1 - X AA
Consistent up PIL's  Regulatory Taxable Income  Add Back Amortization Expense  Deduct CCA  Incremental Taxable Income  Current Tax Rate  PIL's Before Gross Up Incremental Grossed Up PIL's  Incremental Revenue Requirement	26.5%	O S X Q S	\$ \$ -\$ -\$ \$	715,484 499,701 1,669,780 454,595 120,468 163,901 1,172,766 499,701	T U V W = T + U - V Y = W * X Z = Y / (1 - X AA AB



#### Calculation of incremental rate rider. Choose one of the 3 options:

● Fixed and Variable Rate Riders ○ Variable Only Rate Rider ○ Fixed Only Rate Rider

			Distribution		
	Service Charge %	<b>Distribution Volumetric</b>	Volumetric Rate %		<b>Distribution Volumetric</b>
Rate Class	Revenue	Rate % Revenue kWh	Revenue kW	Service Charge Revenue	Rate Revenue kWh
	From Sheet 8	From Sheet 8	From Sheet 8	Col C * Col I <sub>total</sub>	Col D* Col I <sub>total</sub>
RESIDENTIAL	42.22%	11.62%	0.00%	636,940	175,239
GENERAL SERVICE LESS THAN 50 KW	5.60%	9.35%	0.00%	84,436	141,074
GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION	4.26%	0.00%	25.38%	64,206	0
LARGE USE SERVICE CLASSIFICATION	0.07%	0.00%	0.17%	1,089	0
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	0.16%	0.14%	0.00%	2,347	2,118
SENTINEL LIGHTING	0.01%	0.00%	0.00%	78	0
STREET LIGHTING	0.63%	0.00%	0.40%	9,572	0
Total	52.94%	21.11%	25.95%	798,667	318,431

Distribution Volumetric Rate Revenue kW Col E* Col Intel	Total Revenue by Rate Class	Billed Customers or Connections From Sheet 4	Billed kWh	Billed kW	Service Charge Rate Rider Col F / Col K / 12	Distribution Volumetric Rate kWh Rate Rider Col G / Col L	Distribution Volumetric Rate kW Rate Rider Col H / Col M
0	812.179	331.461	2,689,802,037		0.20	0.0000	0.0000
0	225,510	32,775	1,031,991,524		0.21	0.0001	0.0000
382,867	447,074	5,081	4,566,530,904	12,192,632	1.05	0.0000	0.0314
2,507	3,596	2	75,964,677	149,679	45.37	0.0000	0.0167
0	4,465	3,044	14,542,413		0.06	0.0001	0.0000
72	150	207	377,900	975	0.03	0.0000	0.0737
6,022	15,593	89,729	45,603,291	127,503	0.01	0.0000	0.0472
391,468	1,508,566	462,299	8,424,812,745	12,470,788			
	1 508 566						

1,508,566 From Sheet 11, E83

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# ATTACHMENT 30 2017 ROE (RRR 2.1.5.6) ALECTRA UTILITIES

	A B C E	D E F	G	Н	I J K
	Regulated Return on Equity (ROE) - Summary				
6	Regulated Rate of Return on Deemed Equity (ROE) A distributor shall report, in the form and manner determined by the OEB, the F	Regulated Return on Equity (ROE) earn	ed in the re	porting year.	
7	The reported ROE is to be calculated on the same basis as was used in the dis				
9 10 11	Inputs by Distributor: Revenue/gain items are to be entered as negative num Filing Guide for the detailed guidance on the inputs of the form and appendices	bers and expense/loss items are to be es.	entered as p	positive numbers (to align with RRR 2.1.7 trial balance	e). Please read the RRR
11 12 13 14	Information from the distributor's last CoS Decision and Order and the success Industry Relations Enquiry if you have any questions.		have been	pre-populated in this form. Please review each input f	or accuracy and contact
16 17	Legend		1		
18 19	Calculated cell Automated/linked cell				
21	Input cell				
22	The CoS Decision and Order EB number for the ROE	EB-2016-0025/EB-2016-0360		Data source:	
	Accounting standard used in CoS Decision and Order	MIFRS	хх УУ	CoS Decision and Order (last CoS establishing the CoS Decision and Order	current reporting years base rates)
27 28	Regulated net income				
29 30	Regulated net income (loss), as per RRR 2.1.7	\$77,029,537.60	а	RRR 2.1.7 - USoA 3046 * (-1)	
32	Adjustment items: Non-rate regulated items and other adjustments (Appendix 1)	\$13,551,714.09	b	Appendix 1 cell (aq)	Please provide USoAs
	Unrealized (gains)/losses on interest rate swaps (Not applicable if recorded in Other Comprehensive		с		
33	Income) Actuarial (gains)/losses on OPEB and/or Pensions not		d		Please provide USoAs
35 36	approved by the OEB		-		
38	Non-recoverable donations (Appendix 2) Net interest/carrying charges from DVAs (Appendix 3)	\$0.00 \$560,885.60	e f	Appendix 2 cell (be) Appendix 3 cell (cc)	
40	Interest adjustment for deemed debt (Appendix 4) Adjusted regulated net income before tax adjustments	-\$8,602,646.36 \$82,539,490.93	g g	Appendix 4 cell (dg)	
42	Adjusted regulated net income before tax adjustments	\$82,539,490.93	h=a+b+c+	+0+e+1+g	
	Future/deferred taxes expense Current income tax expense	\$10,986,040.59	i I	RRR 2.1.7 - USoA 6115 RRR 2.1.7 - USoA 6110	
46	(Does not include future income tax)	-\$469,520.33			
47 48 49 50	Deduct: Current income tax expense for regulated ROE purposes (Appendix 6)	\$990,617.30	k	Appendix 6 cell (fq)	
51	Adjusted regulated net income	\$92,065,393.88	l=h+i+j-k		
54 55	Deemed Equity				
	Rate base: Cost of power	\$2,489,690,903.09	m	RRR 2.1.7 - Sum of USoA 4705 - 4751 inclusive	
	Operating expenses before any applicable adjustments		n1	RRR 2.1.7 - Sum of USoA 4505-4640, 4805-5695, 6105, 6205 , 6210, and 6225, then subtract ROE Summary cell (d) and subtract ROE Summary cell	
58 59		\$233,507,336.53		(e)	
61	Other Adjustments:	to 000 070 50			Please provide USoAs
62 63 64	Net Synergy Savings/Transition Costs Adjusted operating expenses	\$2,032,670.53 \$231,474,666.00	n2 n=n1-n2		various OM&A
65 66		2231,474,000.00	=1-112		
67	Total Cost of Power and Operating Expenses Working capital allowance % as approved in the last		o=m+n p	CoS Decision and Order	
69	Decision and Order Total working capital allowance (\$)	10.66% \$290,076,249.66	q=o*p		
72 73	PP&E Opening balance - regulated PP&E (NBV) (Appendix 5)	\$2,376,442,007.70	r	Appendix 5 cell (ec)	
74 75	Adjusted closing balance - regulated PP&E (NBV) (Appendix 5)	\$2,505,427,987.45	s	Appendix 5 cell (ej)	
78	Average regulated PP&E Total rate base	\$2,440,934,997.58 \$2,731,011,247.24	t=(r+s)/2 u=q+t		
81 82	Regulated deemed short-term debt % and \$         4.00% % v           Regulated deemed long-term debt % and \$         56.00% % w           Regulated deemed equity % and \$         40.00% % x	\$109,240,449.89 \$1,529,366,298.45 \$1,092,404,498.90	v1=v*u w1=w*u x1=x*u	Cell (v) from CoS Decision and Order Cell (w) from CoS Decision and Order Cell (x) from CoS Decision and Order	
85	Regulated Rate of Return on Deemed Equity (ROE) Achieved ROE%	8.43% %	y= I / x1		
86 87	Deemed ROE% from the distributor's last CoS Decision and Order		z	CoS Decision and Order	
88	and Order Difference - maximum deadband 3%	-0.47% %	z1 = y-z		
	ROE status for the year (Over-earning/Under-earning/Within 300 basis points deadband)	Within 300 basis points deadband	z2		If the distributor is in an over-earning position as indicated in z2 , please complete Appendices 7 & 8. If the distributor is in an under-earning position as indicated in z2 , please complete
91 92	uuuuu uu				If the distributor is in an under-earning position as indicated in 22 , please complete Appendices 9 & 10.
93 94					
54					

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 31 Filed: June 7, 2018

# ATTACHMENT 31 ICM BUSINESS CASES POWERSTREAM RZ

Project Name York Region Rapid Transit (YRRT) VIVA Bus Rapid Transit (BRT) Y2 and H2 Projects

Project Duration 2016-2019

## Expected in-service date

Various sections will be energized as the projects progresses throughout 2016-2019.

Category System Access

## **Background**

This project involves the relocation of overhead and underground distribution assets as required to accommodate YRRT and BRT developments. In its decision related to Alectra's 2018 Electricity Distribution Rate Application and Incremental Capital Funding ("ICM") Application, the OEB approved the YRRT project for ICM funding of \$11.24MM, effective May 1, 2018, identifying that "[t]he work is mandatory under the *Public Service Works on Highways Act*<sup>1</sup>".

This investment is required to complete the remaining work on the H2 and Y2 sections for the multiyear project related to the YRRT relocations. All sections related to multi-year YRRT project area illustrated in Figure 2. Alectra Utilities plans to complete the 2019 scope of the H2 and Y2 pertaining to the YRRT relocations; these will be put into service in 2019.

This project addresses the investment need as a result of mandatory relocation of electrical distribution assets to support the Bus Rapid Transit ("BRT") as requested by the York Region Rapid Transit ("YRRT") road authority under the *Public Service Work on Highway Act*.

Since 1971, York Region's population has increased nearly seven fold. Growth projections indicate that by 2041, the region will add 630,000 to the existing population of 1.2 million. In addition to the population growth, employment projections for York Region forecast approximately 325,000 new jobs will be created, which will spur further economic activity and York Region's economy. Most of the forecasted population growth is expected to occur in the southern municipalities of York region namely Richmond Hill, Vaughan and Markham.

The existing regional road network consists of more than 4,100 lane kilometers of urban and rural roads that carry more than six billion vehicle kilometers of travel annually. In order to meet the transportation needs resulting from the forecasted growth, York Region issued a revised Transportation Master Plan ("TMP") in 2016. This plan expands on the 2009 Transportation Master Plan. The TMP maps out the transportation requirements to 2041 and specifically shapes the Rapid Transit outlook for the York Region.

<sup>&</sup>lt;sup>1</sup> Decision and Order, EB-2017-0024, April 6, 2018

Building on the 2009 TMP, the 2016 TMP proposes further enhancements to the transportation infrastructure and expands on several Rapid Transit corridors per the VIVA Expansion Plan to now include Jane Street, Major Mackenzie Drive and Leslie Street/Don Mills Road in addition to Yonge Street, Highway 7 and David Drive from the original vivaNext Plan.

The major Rapid Transit Corridors that will be in Alectra's (PowerStream RZ) service territory include:

## Yonge Street Rapid Transit Corridor

The vivaNext rapidway from Highway 7 to 19<sup>th</sup> Avenue is currently under construction, with the exception of the historic core of Richmond Hill from Major Mackenzie Drive to Levendale Avenue.

## Highway 7 Rapid Transit Corridor

The 2016 TMP proposes the construction of a median rapidway plus six traffic lanes from Helen Street West to Kipling Avenue. The rapidway segment, from Helen Street west to Highway 400, was the first Metrolinx wave funded project. It is scheduled to be completed by 2019. The area east of Highway 400 to Bowes Road is under construction and is being coordinated with the opening of Toronto –York Spadina Subway extension in 2017.

## Jane Street

Jane Street is part of the Viva Network Expansion Plan, with curbside stations being constructed between Highway 7 and Major Mackenzie Drive starting in 2018. Jane Street was identified for widening to six lanes in 2009 plan and rapid transit along Jane Street will provide service connections with the Toronto-York Spadina Subway Expansion

Metrolinx and York Region have been constructing BRT Rapidways along various routes in York Region since 2010. Metrolinx is providing the financial funding for these transportation infrastructure projects. The construction and the day-to-day operation of the BRT Rapidways is overseen by York Region Rapid Transit Corporation ("YRRTC").

Due to the project scope, size and complexity, YRRTC has separated the initiative into several sections and phases as illustrated in the project summary in Figure 1.

- 1) Highway 7 Markham, Richmond Hill and Vaughan, Davis Drive Newmarket (H3.1, H3.2, H3.3, d1 and H2-VMC, 2010-2017)
- 2) Yonge Street (Y2.1, Y2.2 and Y 3.2, 2010-2018)
- 3) Highway 7 West Vaughan, West of Commerce, Bathhurst and Centre ,(H2 –West and H2 East 2015-2020)
- 4) Highway 7 East Markham Centre (H3.4, 2016-2020)

	S	ummary of Currently	y Funded Capital Pro	jects to 2021		
Summary: Project Descriptions	Highway 7 – Markham, Richmond Hill and Vaughan Davis Drive - Newmarket [H3.1, H3.2, H3.3, D1 and H2-VMC] 2010-2017	Yonge Street [Y2.1, Y2.2, Y3.2] 2014-2018	Highway 7 West - Vaughan West of Commerce, Bathurst & Centre H2-West and H2-East [Phase 2] 2015-2020	Highway 7 East- Markham Centre [H3.4] 2016-2020	Facilities & Terminals 2012-2021 - Federal Government - York Region and local municipalities - TrSSE - Individual contracts per facility – PCL, SmartREIT and TBD - CSIC - Federal Contribution Agreement(s) - Design Build/ Bid Build Agreements - TBD - Provincial Quick Wins - Tri-party Access and Service Agreements - YRRTC Board - York Region - Federal Management Committee - TYSSE	
Key Partners	- Metrolina - York Region and local municipalities - Kiewit-ElisDon - VRRTC/YC2002 – 10 year partnership	- Metrolinx - York Region and local municipalities - RapidLINK Constructors	Metroline     York Region and local municipalities     Infrastructure Ontario     EDCO	- Metrolinx - York Region and local municipalities - Contract award to third party - TBD		
Procurement / Legal Arrangements	Design Build Contract     Obtions Master Agreement     Project Charters     Rapid Transit Agreement with York     Region     Vork Region Access and Operating     Agreement with Netrolins     Project Implementation Plan	Public procurament     Design Build Contract     Metralinx Master Agreement     Project Charter     Repid Transit Agreement with York     Pegion     York Region Operating Agreement     with Metrolinx     Project Implementation Plan	Public Procurement / Alternative Finance Procurement [AFP]     Metrolinx Master Agreement     Project Onster     Project Agreement     Region     Project Implementation Plan     York Region     Project Implementation Plan     York Region Operating Agreement     with Metrolins	Public procurement     Contract arrangements tod     York Region Operating     Agreement with Metroline		
Governance	- VRRTC Board/Metholinx Board     - Netrolinx Program Executive     Group/Senior Staff Working Group     - Joint coordination meetings with     contractor and project management     teams	YRRTC Board/Metrolinx Board     Metrolinx Program Executive     Group/Senior Staff Working Group     Joint coordination meeting with     contractor and project management     team	YRRTC Board/Metrolinx Board     Metrolinx Program Executive     Group/Senior Staff Working Group     Joint Project Committee     Project Management Team     Works Committee - meetings with     contractor and project management     teams	- VPRTC Board/Metrolinx Board - Metrolinx Program Executive Group/Senior Staff Working Group - Unionville mobility hub working group		
Delivery Agent	- VRRTC	- уните	- Infrastructure Ontario: Procurement Advisor - YRRTC	- VARTC	- чинтс	
Project Completion	Construction complete 2017     Project and program close out	- Construction complete 2018 - Project and program close out	Construction complete 2019     Project and program close out	- Construction complete 2020 - Project and program close out	Construction complete 2021     Project and program closeout	

## Figure 1 – Project Summary for Funded YRRTC Projects 2010-2020

In order to accommodate the development of this transportation infrastructure, Alectra is required to relocate a significant amount of both overhead and underground plant, including express 27.6kV feeders that have been identified as posing a conflict to the construction of the rapidway.

Since 2010, the PowerStream RZ has been relocating overhead and underground plant to accommodate road widening and shifting of the boulevard to support the YRRT build. The following are details of the work completed to date:

- 1) H3.2: Highway 7, East of Bayview Ave to West of Warden Avenue
- 2) H2 VMC: Highway 7, West of Edgeley Boulevard to East of Bowes Road in Vaughan
- 3) H2 West: Sections along Highway 7, Helen Street East of Highway 400 in Vaughan
- 4) H2 East: Sections on Centre Street from Highway 7 to Bathurst Street, on Bathurst Street from Centre Street to Highway 7 in Vaughan, Highway 7 from Bathurst Street to Yonge Street in Richmond Hill
- 5) Y2.2: Sections on Yonge Street from 19th Avenue to Levendale Road
- 6) Y2.1: Sections on Yonge Street from Major Mackenzie Drive to Highway 407 in Richmond Hill,

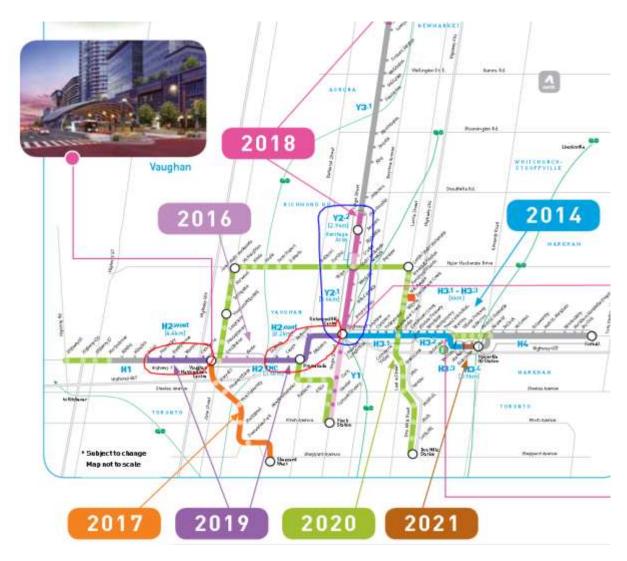
The timelines for the project are dictated by the YRRTC in conjunction with the project contractors RapidLink and the joint venture of EllisDon Capital Inc. and Coco Paving Inc. ("EDCO").

## <u>Scope</u>

The current BRT Rapidways phases under construction are Y2 and H2, as illustrated in Figure 2.

The Y2 project is illustrated and outlined in blue. The Y2 consists of two project sections along Yonge Street referred to as Y2.1 (from Highway 7 to Major Mackenzie Drive) and Y2.2 (from Levendale Road to 19<sup>th</sup> Avenue) totaling to approximately 6.5 km of BRT Rapidway. The contract for this project, valued at approximately \$260MM, was awarded by YRRTC to Rapid Link. The Y2 project is structured as a Design-Build initiative.

The H2 project is illustrated and outlined in red. The H2 consists of two project sections H2-West and H2-East totaling approximately 8.5 km of BRT Rapidway. The contract for this project, valued at approximately \$ 330MM, was awarded by YRRTC to EDCO. The H2 project is being done through Alternative Financing and Procurement (AFP) structure as a Design-Build-Finance project. Figure 2 illustrates the BRT route and the proposed construction schedule.



## Figure 2 – BRT Rapidways Project

The Y2 and H2 rapidway projects are located on major streets, with significant overhead, as well as underground distribution system plant including express 27.6kV feeders, which pose a conflict to construction of the rapidways.

Based on known designs and plans, Alectra has assessed the scope of the required relocation work which involves both overhead and underground relocations, as well as Joint-Use Trench ("JUT") to accommodate road widening and shifting of the boulevard. Table 1 and Table 2 provide the high level hydro relocation scope necessary to facilitate the construction of the rapidway.

## Table 1 – Detailed Work for Y2

		Y2.1				
Phase/Stage	Description	Work	Length of Underground Alignment	Length of 1000 MCM CU	Length of 350 MCM CU	Number of Switchgear
Stage 4	0	Concrete Encased Ductbank Installation, Cable Installation and Final Terminations/Cutovers	1430m	)m 16830m !		4
Stage 5,6	Yonge St- East Side - High Tech Blvd. to 16th Ave.	Final Terminations/Cutovers	1340m 9450m 3:		3150m	0
Stage 7,8	5	Concrete Encased Ductbank Installation, Cable Installation and Final Terminations/Cutovers	2000m	14370m	4790m	5
		Y2.2				
Phase/Stage	Description	Work	Length of Underground Alignment	Length of 1000 MCM CU	Length of 350 MCM CU	Number of Switchgear
Stage 7,8,9	Yonge St- East Side - South of Devonsleigh Blvd. to 19th Ave.	Cable Installation and Final Terminations/Cutovers	775m 4725m		875m	2

Y2.1 from a construction standpoint has been staged in three sections (stages 4, 5&6, 7&8) as outlined in Table 1.

Y2.2 from a construction standpoint has been staged in one section (stages 7, 8 and 9) which includes relocation work on Yonge Street East from South of Devonsleigh Boulevard to 19<sup>th</sup> Avenue.

The Y2.1 and Y2.2 project is being constructed under a Design – Build project structure. There are uncertainties in regards to the timelines, final road alignment, resource allocation as well as the technical challenges as the majority of work is underground. The Y2.1 and Y2.2 began in 2018 and will continue in 2019.

## Table 2 – Detailed Work for H2

	H2-East									
Phase/Stage	Description	Work	Number of Poles	Number of LIS	Length of Underground Alignment	Length of 1000 MCM CU	Length of 2/0 AL	Number of poles where neutral is to be raised		
Phase 3B and 3C	along Bathurst, from Flamingo to North End of Project	Installation of poles including OH equipments, Cable Insallation and Final Terminations/Cutovers, Neutral Raising along	41	3	57m	0m	171m	50		
Phase 4	along Centre, from New Westminster to Concord	Installation of poles including OH equipments, Cable Insallation and Final Terminations/Cutovers	4	0	10m	0m	30m	0		
Phase 5	along Centre, from Concord to West of Dufferin	Installation of poles including OH equipments, Cable Installation and Final Terminations/Cutovers	22	6	180m	0m	540m	0		
		H2-West								
Phase/Stage	Description	Work	Number of Poles	Number of LIS	Length of Underground Alignment	Length of 1000 MCM CU	Length of 2/0 AL	Number of Switchgear		
Phase 2	along Hwy 7, from C1 to Aberdeen	Installation of poles including OH equipments,Cable Installation and Final Terminations/Cutovers	6	1	40m	0m	120m	0		
Phase 3	along Weston Road	Installation of poles, concrete encased ductbank, and switchgears	8	0	400m	2400m	0m	2		
Phase 4 & 5	along Hwy 7, Nova Star to West of Edgeley	Installation of poles, 4-bore shot crossing Hwy 400	29	8	360m	2160m	0m	2		
Phase 6	along Hwy 7, C1 to West End of Project	Installation of poles including OH equipments, Cable Installation and Final Terminations/Cutovers	24	0	280m	0m	840m	0m		

H2 East from a construction standpoint has been staged in three stages (Phase 3B & 3C, Phase 4 and Phase 5) as outlined in Table 2.

H2 West from a construction standpoint has been staged in four stages (Phase 2, Phase 3, Phase 4 & 5 and Phase 6) as outlined in Table 2. It is expected that majority of the work for the H2 will be completed in 2018 and small portion will be left to be completed in 2019.

## **Options Considered**

Alectra is obligated to relocate the Distribution plant to facilitate expansion of the roads and transportation infrastructure. This project is deemed mandatory under the PSWHA.

## Financial Impact

Table 3 provides the forecasted in-service expenditures from 2018 to 2019, based on the scope of relocation work as determined from firm designs and construction timelines received from YRRT as well as the project contractors, RapidLink and EDCO.

Table 3 – 2018/2019 In-service Capital Additions for the YRRT Project Y2 and H2 Sections

	Y2 Section	
	2018 (\$000)	2019 (\$ 000)
Gross	12,700	24,172
Contributed	6,350	12,086
Net	6,350	12,086

H2 Section			
	2018 (\$000)	2019 (\$000)	
Gross	12,713	3,680	
Contributed	7,820	2,494	
Net	4,893	1,186	

	Total YRRT	
	2018 (\$000)	2019 (\$000)
Gross	\$25,413	\$27,853
Contributed	\$14,170	\$14,581
Net	\$11,243	\$13,272

Alectra's is confident that this scope of work will be completed in 2019 based on availability of completed designs, established contractors and resources as well as demand from YRRTC to complete the work. Alectra identifies that any variance in this project will be addressed through a project-specific ICM true-up mechanism.

#### Project Name

Barrie TS Upgrade Feeder and Wholesale Metering Relocation

Project Duration 2019

Expected in-service date 12/31/2019

Category System Service

#### <u>Summary</u>

As part of regional planning, led by the Independent Electricity System Operator ("IESO") for the South Georgian Bay/Muskoka planning region, the need to renew and rebuild the Barrie Transmission Station ("TS") was identified. The Barrie TS station renewal is required as the equipment (i.e., power transformers, 44kV switchgear, circuit breakers, disconnect switches and ancillary station equipment) have reached end-of-life. Barrie TS is owned and operated by Hydro One Networks Inc. ("Hydro One"). Hydro One is scheduled to undertake the station rebuild in 2019. As a result of the station rebuild, Alectra is required to relocate six feeders that service Alectra customers in the City of Barrie, along with the corresponding wholesale revenue metering equipment required for compliance with the IESO Market Rules. This work is required to be completed in 2019, in conjunction and coordination another local distribution company ("LDC") also serviced by Barrie TS, and with Hydro One's station rebuild.

#### Background

As part of regional planning work, Hydro One initiated a Needs Screening process for the South Georgian Bay/Muskoka planning region in 2014. The South Georgian Bay/Muskoka Needs Screening study team determined that there was a need for coordinated regional planning, resulting in the initiation of the Scoping Assessment process with the IESO.

The South Georgian Bay/Muskoka Scoping Assessment Outcome Report was filed in June 2015 and identified two sub-regions for coordinated regional planning: Barrie/Innisfil and Parry Sound/Muskoka. The two sub-regions are shown in Figure 1, below.



Figure 1 – Barrie/Innisfil and Parry Sound/Muskoka IRRP Sub-Regions

The process to develop the Barrie/Innisfil Integrated Regional Resource Plan ("IRRP") was initiated in 2015. The IESO Scoping Assessment Report included a recommendation that the needs identified in the Barrie/Innisfil Sub-region be further explored to ensure transmission and distribution supply adequacy, sustainment of assets (including the asset at the Barrie TS which were reaching end-of-life) and the potential for coordinated solutions.

In 2015, Hydro One Transmission identified sustainment needs at Barrie TS driven by the 115/44 kV station transformers reaching end-of-life, along with the 44 kV switchgear, circuit breakers, disconnect switches and other station equipment.

Barrie TS was placed in-service in 1962. The 44 kV switchyard assets at Barrie TS have been identified by Hydro One as being in need of replacement in the near term. Barrie TS is currently supplied by the 230/115 kV autotransformers at Essa TS via the Essa 115 kV switchyard and 115 kV circuits E3/4B. These assets were built in the 1950s; many of them have already exceeded their expected life and are in need of replacement in the near and medium term.



Figure 2 – Map of Barrie/Innisfil IRRP Region

The timing and replacement options for Barrie TS were discussed among the IRRP Working Group members. It was determined that based on the existing and forecast station demand, that Barrie TS and E3/4B should be rebuilt to 230 kV, with 75/125 MVA 230/44 kV rated transformers. The end-of-life replacement of Barrie TS will also add approximately 50 MW of incremental supply capacity to serve the south Barrie and Innisfil area. Additional information on the IRRP outcomes can be found on IESO regional planning site.<sup>1</sup>

The IRRP Working Group recommended that Hydro One proceed with the project consisting of rebuilding the Barrie TS and upgrading the capacity from 55/92 MVA to 75/125MVA as well as upgrading the E3/4B transmission line from 115KV to 230KV. Construction to renew Barrie TS is expected to begin in February 2019. A hand off letter was issued by IESO to Hydro One in December 2015 to begin development of a project to replace the existing Barrie TS and the E3/4B transmission line with a new 230KV Infrastructure.

The details of the letter can be found on the IESO regional planning site.<sup>2</sup> Further, Alectra confirmed with Hydro One that this project was included in Hydro One's 2017-2018 Transmission Rate Application (EB-2016-0160) and is proceeding, as planned.

Currently, all seven existing 44 kV feeder positions available at Barrie TS have been allocated to the LDCs. Six of these feeders are used to supply Alectra customers and one is used to

<sup>&</sup>lt;sup>1</sup> <u>http://www.ieso.ca/barrie-innisfil</u>

<sup>&</sup>lt;sup>2</sup> http://www.ieso.ca/-/media/files/ieso/document-library/regional-planning/barrie-innisfil/barrie-innisfil\_ieso-letter-to-hydroone-20151207.pdf?la=en

supply customers of another LDC. The updated Barrie TS will have six feeders allocated to supply Alectra and two feeders for the other LDC customers.

As per the Hydro One plan, the new station will be constructed west of the existing station, thereby expanding the fenced area westward. Hydro One will also move the station egress westward and include an additional feeder for the other LDC. The feeder egress relocation and additional feeder will require integration reconfiguration for the six Alectra feeders emanating from the station. Alectra will need to relocate the existing feeders, 13M3 to 13M8, to match with the breaker line up of the new station, while ensuring that there are no conflicts with the other LDC circuits. An additional conflict with Alectra's 23M24 Midhurst TS feeder, which is currently routed along the west side of the Barrie TS property, has also been identified and will require relocation.

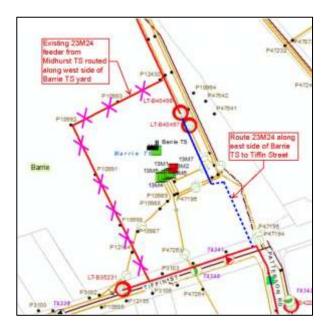
With the rebuilding of the Barrie TS, Alectra is also responsible for the installation of revenue metering equipment at Barrie TS, as per Schedule 4 of the Hydro One Customer Wholesale Revenue Metering Agreement and Chapter 6 of the IESO Market Rules. The existing Barrie TS utilizes bus metering. Hydro One has presented Alectra with the option to either contribute 100% capital towards the bus metering, or utilize Alectra-owned Primary Metering Enclosures ("PME"). After evaluation of options, Alectra determined that primary metering enclosures are preferable due to the lower cost and ease of access.

### <u>Scope</u>

Hydro One will also be moving the station egress westward and adding an additional feeder. As a result, the feeder designations will change to 13M1-13M2 for the other LDC and 13M3-13M8 for Alectra.

The feeder integration will have the two other LDC circuits proceeding west from the station along Tiffin Street. Alectra will need to relocate feeders 13M3-13M8 to match the breaker line up for the upgraded station, while avoiding crossing the 13M1 and 13M2 circuits.

Alectra will need to relocate the existing Midhurst feeder 23M24, which goes along the west side of Barrie TS, to accommodate the westward expansion of the upgraded station. The 23M24 will be relocated to the east side of Barrie TS for integration on Tiffin Street, as per Figure 3.



#### Figure 3 – 23M24 Routing

In addition to the feeder reconfiguration, Alectra is responsible for upgrading the revenue metering equipment at Barrie TS as per Schedule 4 of the Hydro One Customer Wholesale Revenue Metering Agreement, as identified above. Alectra will install six primary metering enclosures (PME), two element delta metering and associated communication, protection and switching.

#### Options Considered

The following options were considered for the upgraded Barrie TS:

#### Option 1: Status Quo - Maintain existing station feeder integration and Metering

The existing feeder integration at Barrie TS cannot be accommodated with the upgraded station, since Hydro One will be moving the station egress westward. The new westerly routing of the new 44KV feeder to the other LDC poses a conflict with the existing 23M24 circuit and will need to be relocated.

#### Option 2: Relocate Feeder and Utilize Station Bus Wholesale Metering

This option involves relocating seven feeders (13M3-13M8, 23M24) to align with the new breaker line-up as well as installation of station bus metering at the new station yard at Barrie TS.

As per Schedule 4 of the Hydro One Customer Wholesale Revenue Metering Agreement, Alectra is responsible for upgrading the revenue metering equipment at Barrie TS. The two possible revenue metering options are; (i) station bus metering, or; (ii) utility feeder metering using PME's.

Alectra has noted accessibility issues with the existing station bus metering at Barrie TS. In addition, installation of bus metering is a determined to be more expensive solution than feeder metering utilizing primary metering enclosures.

The total cost for the option of relocating seven feeders and installing bus metering is \$2.59MM.

#### **Option 3: Relocate Feeder and Utilize Feeder Wholesale Metering**

This option involves relocating seven feeders (13M3-13M8, 23M24) to align with the new breaker line-up as well as installation of feeder metering utilizing primary metering enclosures (PMEs) at the new station yard at Barrie TS.

The installation of feeder metering using PMEs is more economical and will address the access constraints associated with the bus metering. The total cost for this option is \$2.10MM.

#### Recommended Solution:

The recommended option must ensure that Hydro One is able to complete the construction of the upgraded Barrie TS. Additionally, the recommended option must ensure Alectra is able to maintain access and safely operate feeders and revenue metering.

The recommended solution is Option 3, which consists of relocating seven feeders (Midhurst 23M24 to the east side of the Barrie TS for integration on Tiffin Street, relocating six feeders 13M3-13M8) to match the breaker line up for the upgraded station, and installation of feeder metering utilizing PMEs for wholesale metering. The recommended option is more cost effective and solves the access issues associated with the bus metering and is a more cost effective.

#### Financial Impact

Total budget for the project is \$2.1MM. The project budget includes the relocation of the Midhurst 23M24 feeder, the reconfiguration of the 13M3-13M8 feeders and the installation of feeder metering utilizing PMEs.

Expenditure	Capital Expenditure (\$000)
Feeder Material	609
Metering Material	353
Labour + Trucking	1,136
Total	2,098

#### Table 1 – Project Budget 2019

<u>Project Name</u> Bathurst Street Road Widening from Highway 7 to Teston Road

Project Duration 2019

Expected in-service date 12/31/2019

Category System Access

#### <u>Summary</u>

This project addresses the investment need, as a result of the mandatory relocation of electrical distribution assets on Bathurst Street, as requested by the road authority under the *Public Service Work on Highway Act* ("PSWHA").

#### Background

Alectra installs the majority of its electrical distribution infrastructure in Vaughan along road rights of way, that are owned and managed by the City of Vaughan and the Regional Municipality of York. Alectra's distribution equipment occupies these road allowances at no cost. In exchange, Alectra is obligated to remove, relocate, or reconstruct its facilities, in order to accommodate the specific requirements of the road authorities. The road authorities' road works program drives plant relocation scope and timing. Relocation of assets to accommodate road work impacts both overhead and underground distribution plant. Alectra remains compliant with the PSWHA, in regards to regulatory obligations and recovery of capital contributions. As per the PSWHA, Alectra recovers capital contributions related to 50% of expenditures from labour and labour saving device costs.

Timelines for the execution of the road works at Bathurst Street from Highway 7 to Teston Road are determined by Regional Municipality of York.

Through active participation in meetings with the City of Vaughan, Town of Richmond Hill and the Region Municipality of York, Alectra monitors road work planning and schedules road widening projects according to the most recent project developments and requests from the road authority. Alectra also monitors the progress of environmental assessments, site plans and zoning amendments to ensure that plans and schedules reflect the timing and pacing of the investments needed. System access investments related to road work are estimated through scope derived from preliminary designs and historical spending from similar projects. It includes consideration of previous phases of multi-year road work projects, as well as continuous meetings and discussions with the road authority.

### <u>Scope</u>

To expand the transportation system, in order to accommodate growth and increased travel demands resulting from development in Richmond Hill and Vaughan, the Regional Municipality of York is widening Bathurst Street from Highway 7 to Teston Road from four to six lanes, as well as including Transit-High Occupancy Vehicle ("HOV") lanes and off-street cycling facilities. The length of the road widening is approximately 6km in the City of Vaughan and Town of Richmond Hill. The 2019 scope of the relocation of Alectra assets includes both overhead distribution system (i.e., approximately 121 poles), as well as underground distribution system assets.

#### **Options Considered**

The following options were considered for the upgraded Bathurst Street road widening project:

### Option 1: Status Quo

This is a mandatory investment. Not proceeding with this project would be in direct violation of the PSWHA and Section 3.4 of the Distribution System Code.

### Option 2: Installation of underground feeder cables in place of an overhead system.

Alectra examined the option of replacing the overhead system with underground feeders. The benefit of undergrounding an overhead system includes protection from elements such as weather related events, animal contacts and collisions from vehicles. However, the option to underground the distribution system was estimated to cost between \$25MM and \$35MM and was determined to be uneconomical, relative to relocating the overhead system. In Alectra's Customer Engagement activity related to the ICM application, Alectra customers in the PowerStream rate zone ("PRZ") provided their preferences for the Bathurst road widening project. All three of the business groups indicated a preference to proceed with the project in the current configuration of overhead and underground system. The preference identified by residential customers was divided; 46% of the customers preferred the current mix, as compared to 45% of the customers that preferred a full underground system with higher rate impact. The PRZ Customer Engagement report is included as attachment 34.

# Option 3: Relocate Overhead and Underground Assets Based on the Current Configuration

Alectra will comply with the PSWHA and work with the Regional Municipality of York, the City of Vaughan and Town of Richmond Hill to relocate plant in a safe, cost effective manner.

The total investment expenditure required in 2019 to address this need is \$7.5MM less capital contributions of \$2.0MM for a net expenditure of \$5.5MM. The scope includes the installation of new poles, transfer of conductor to the new poles and removal of old poles on the overhead

portion and relocation of the underground cables. The 2019 scope will be constructed and put in service in 2019.

### Recommended Solution:

Option 3 -Relocate Overhead and Underground Assets based on current configuration. Road Projects are a mandatory obligation under the DSC, Section 3.4. – Relocation of Plant that requires Alectra to address the relocation of its assets when requested by a road authority.

- Regulatory / Public Policy Responsiveness Alectra is obligated to relocate assets in order to meet its regulatory obligations to the Regional Municipality of York.
- Reputational Risk The execution of requests to move assets ensures that Alectra is not held responsible for delaying projects undertaken by the road authorities.

If this project is not approved, this mandatory work will still need to be completed to comply with the DSC and PSWHA. A reassessment of other planned discretionary projects would need to be completed to determine the potential project deferrals that would be required to fund this work.

#### Financial Impact

This multiyear project has a total net estimated cost of \$12.5MM with capital contribution of \$4.2MM resulting in a net expenditure of \$8.3MM.

#### Table 1 – Net Capital Expenditures

Net Capital Expenditures (\$000)	2019	2020
Bathurst Road Widening	5,500	2,800

The total investment expenditure in 2019 required to address this need is \$7.5MM less capital contributions of \$2.0MM for a net expenditure of \$5.5MM as outlined in Table-2. The 2019 project scope will be completed and in-service by the fourth quarter of 2019.

#### Table 2 – 2019 Project Scope Budget- Bathurst Road Widening

Expenditure	Capital Expenditure (\$000)
Material	3,500
Labour + Trucking	4,000
Capital Contribution	(2,000)
Total	5,500

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 32 Filed: June 7, 2018

# ATTACHMENT 32 ICM REVENUE REQUIREMENT BY PROJECT POWERSTREAM RZ

#### Alectra Utilities - PowerStream Rate Zone 2019 ICM Revenue Requirement by Project

Project Description	Return on Rate base	Amortization	Incremental Grossed Up PILs	Total Revenue Requirement
Road Authority YRRT Yonge St	\$746,257	\$308,753	(\$107,351)	\$947,659
Bathurst Ave from Hwy 7 to Teston Road	\$309,248	\$127,947	(\$44,486)	\$392,709
System Access				\$1,340,368
Barrie TS Upgrade- Metering and Feeder Relocation	\$117,262	\$63,000	(\$12,064)	\$168,198
System Service				\$168,198
Total Incremental Revenue Requirement				\$1,508,566

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 33 Filed: June 7, 2018

# ATTACHMENT 33 2019 CAPITAL SPENDING BY PROJECT POWERSTREAM RZ

SYSTEM ACCESS	\$000s
Bathurst Road Widening	5,500
New Commercial Subdivision Development - SOUTH	1,000
New Residential Subdivision Development - NORTH	2,558
New Residential Subdivision Development - SOUTH	7,453
New Subdivision Development - Secondary Service Lateral - SOUTH	1,827
Residential Meter "ICON F" Meter Replacement Program	2,280
Road Authority Expenditure PS North	1,328
Road Authority Expenditure PS South	7,009
Road Authority YRRT Yonge St - H2 portion	3,210
Sub-Total Material Projects	32,165
Miscellaneous Projects (under materiality threshold)	6,364
Total System Access	38,529
SYSTEM RENEWAL	
4-Circuit Pole Storm Hardening	1,686
Cable Injection - (V01) - Yonge - Steeles - Bathurst - Center	1,313
Cable Injection - (V37) - Langstaff and Weston	1,564
Cable Replacement – (V08) - Steeles Ave and New Westminster	2,464
Cable Replacement Projects	2,242
Pad Mount Transformer Replacement	1,029
Pole Replacement Program	3,915
Radial Supply Remediation/Conversion - 13.8 kV to 27.6 kV on Miller Ave	1,535
Rear Lot Supply Remediation - Royal Orchard - North	2,353
Storm damage - Replacement of distribution equipment due to storm	1,035
Switchgear Replacement Program	2,171
Switchgears - Unscheduled Replacement	1,703
Unforeseen Projects Initiated by Alectra Utilities	1,703
Unscheduled Replacement of Failed Equipment	5,205
Sub-Total Material Projects	29,292
Miscellaneous Projects (under materiality threshold)	8,711
Total System Renewal	38,003
SYSTEM SERVICE	
Barrie TS Upgrade - Feeders and Metering	2,100
Distribution Automation Switches / Reclosers	1,471
Install Two 27.6kV Ccts on 16th Ave from Hwy 404 to Woodbine Ave	1,119
Install two additional 27.6 kV ccts on Hwy 7 from Jane St to Weston Rd	2,377
Sub-Total Material Projects	7,067
Miscellaneous Projects (under materiality threshold)	9,978
Total System Service	17,044
GENERAL PLANT	
PowerStream Rate Zone Allocation of General Plant	8,498
Total General Plant	8,498
2019 Budget	102,074

2019 Budget Ca	oital Pro	ject Listing	J - General Plant Alectra	
	CEN			

GENERAL PLANT - ALECTRA UTILITIES	
Bucket Trucks & RBDs	1,540
CIS Modifications (Regulatory Enhancements)	1,519
Smart Grid - Other	1,337
Tools, Shop and Garage Equipment	1,185
Sub-Total Material Projects	5,582
Miscellaneous Projects (under materiality threshold)	16,529
Total General Plant	22,111

EB-2018-0016 Alectra Utilities Corporation 2019 EDR Application Attachment 34 Filed: June 7, 2018

# ATTACHMENT 34 INNOVATIVE CUSTOMER ENGAGEMENT REPORT POWERSTREAM RZ



# **Customer Engagement**

# **2019 ICM Rate Application**

**Incremental Capital Module (ICM)** 

May 29, 2018

Prepared for:

Alectra Utilities 2185 Derry Road West Mississauga, Ontario L5N 7A6



**Report | PRIVILEGED AND CONFIDENTIAL** 

# **Customer Engagement Report**

May 29, 2018

# Confidentiality

This Report and all of the information and data contained within it may <u>not</u> be released, shared or otherwise disclosed to any other party, without the prior, written consent of Alectra Utilities Corporation ("Alectra Utilities").

# Acknowledgement

This report has been prepared by Innovative Research Group Inc. ("INNOVATIVE") for Alectra Utilities. The conclusions drawn, and opinions expressed are those of the authors.

#### **Innovative Research Group Inc.**

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# **Executive Summary**

Alectra Utilities Corporation (Alectra Utilities) has engaged Innovative Research Group Inc. (INNOVATIVE) to assist in meeting Alectra Utilities' customer engagement commitments under the Renewed Regulatory Framework for Electricity Distributors.

Alectra Utilities has capital investment requirements for the **Enersource** and **PowerStream** rate zones for 2019 that are not funded through existing distribution rates. To meet the capital investment needs in each of these rate zones, Alectra Utilities plans to submit an Incremental Capital Module (ICM) application to the Ontario Energy Board (OEB). The outcome of this application will determine Alectra Utilities' electricity distribution rates in each rate zone for 2019 and will help set the pace for capital investments.

Alectra Utilities engages customers in a wide variety of ongoing customer service and market research activities that help inform its customer service efforts. INNOVATIVE has been tasked with supplementing these efforts with activities focused on bringing customers' needs and preferences regarding outcomes and trade-offs into Alectra's planning process.

In approaching the design of this round of engagement, INNOVATIVE and Alectra Utilities considered the comprehensive nature of the utility's previous 2017 customer engagement. That effort included a voluntary online workbook, completed by 17,595 customers, and randomly recruited focus groups, leading up to random digit dialing customer telephone surveys. While the earlier engagement provided a strong base of knowledge about customers general views on ICM projects, the specific nature of projects being considered required a new engagement.

Alectra also needed to collect customer feedback to provide input to the start of Alectra Utilities' first consolidated Distribution Service Plan for the period covering 2020 to 2024.

INNOVATIVE's view is the two tasks work well within a single engagement as the DSP components help customers to ground their views on the ICM within the broader context of Alectra's services and rates while minimizing the demands Alectra Utilities is placing on customers.

# **Key Findings**

# **Customer Needs**

The clear majority of Alectra Utilities' customers in the PowerStream and Enersource rate zones are satisfied with the current service they receive. When asked how Alectra Utilities can improve service, top responses were either "nothing" or "lower rates".

Enersource RZ	Resid	ential	Small E	Susiness	Mid-N	/larket	Large	e Use
Core Measures	May 2017	May 2018	May 2017	May 2018	May 2017	May 2018	May 2017	May 2018
Overall Satisfaction	79%	86%	82%	83%	78%	88%	6/7	7/9
Awareness of Merger	41%	61%	60%	67%	58%	65%	5/7	9/9
Familiarity with Enersource	84%	85%	84%	82%	88%	88%	7/7	9/9
PowerStream RZ	Resid	ential	Small Business		Mid-Market		Large	e Use
Core Measures	May 2017	May 2018						
		IVIAY 2010	May 2017	May 2018	May 2017	May 2018	May 2017	May 2018
Overall Satisfaction	79%	83%	May 2017 73%	May 2018 83%	May 2017 77%	May 2018 <b>80%</b>	May 2017 N/A	May 2018
Overall Satisfaction Awareness of Merger	79% 52%							

# **Customer Priorities**

The top two priorities for Alectra Utilities as identified by the three smaller customer classes in both the Enersource and PowerStream rate zones are:

- 1. Delivering reasonable distribution rates; and
- 2. Ensuring reliable electrical service;

These are also the top two priorities for large use customers, but in both the Enersource and PowerStream rate zones, these customers rank reliability over price.

Residential and GS<50kW customers in both rate zones rank minimizing the impact on the environment as their third priority. GS>50kW customers in both rate zones and PowerStream's large use customers place helping customers to reduce or manage consumption as their third priority. Enersource large use customers are focused on safety as their third priority.

Enersource RZ	Resid	ential	Small B	lusiness	Mid-N	<b>Aarket</b>	Large	e Use
Priorities	May 2017	May 2018	May 2017	May 2018	May 2017	May 2018	May 2017	May 2018
1 <sup>st</sup>	Prices	Prices	Prices	Prices	Prices	Prices	Reliability	Reliability
2 <sup>nd</sup>	Reliability	Reliability	Reliability	Reliability	Reliability	Reliability	Behind the meter solutions	Prices
3 <sup>rd</sup>	Reduce/ Manage consumption	Minimizing impact on the environment	Reduce/ Manage consumption	Minimizing impact on the environment	Reduce/ Manage consumption	Reduce/ Manage consumption	Extreme weather mitigation	Safety*

\* Option not offered in 2017: "Ensuring the safety of electricity infrastructure"

PowerStream	Resid	lential	Small Business		Mid-Market		Large Use	
RZ Priorities	May 2017	May 2018	May 2017	May 2018	May 2017	May 2018	May 2017	May 2018
1 <sup>st</sup>	Prices	Prices	Prices	Prices	Prices	Prices	N/A	Reliability
2 <sup>nd</sup>	Reliability	Reliability	Reliability	Reliability	Reliability	Reliability	N/A	Price
3 <sup>rd</sup>	Reduce/ Manage consumption	Minimizing impact on the environment	Extreme weather mitigation	Minimizing impact on the environment	Extreme weather mitigation	Reduce/ Manage consumption	N/A	Reduce/ Manage consumption

# **Reliability Priorities**

The top reliability concern for customers is the *overall number of outages*. All six business groups ranked this number one and the two residential groups had it as second.

The second concern is the *length of outages during extreme events*. This was the top concern for the residential customers in both rate zones, second for 3-of-4 general service customer groups and third for the remaining Enersource small business group.

The third concern was the *overall length of day-to-day outages* with the two groups of larger Enersource customers (mid-market and large use) choosing it as their second priority and five of the remaining six groups choosing it as third.

Enersource RZ Reliability Priorities	Residential	Small Business	Mid-Market	Large Use
1 <sup>st</sup>	Extreme weather restoration times	Overall number of outages	Overall number of outages	Overall number of outages
2 <sup>nd</sup>	Overall number of outages	Extreme weather restoration times	The overall length of outages	The overall length of outages
3 <sup>rd</sup>	The overall length of outages	The overall length of outages	Extreme weather restoration times	Improving power quality
PowerStream RZ Reliability Priorities	Residential	Small Business	Mid-Market	Large Use
	Residential Extreme weather restoration times	Small Business Overall number of outages	Mid-Market Overall number of outages	Large Use Overall number of outages
Reliability Priorities	Extreme weather	Overall number of	Overall number of	Overall number of

# **Distribution System Plan (DSP) Trade Offs**

Consistent with last year's Enersource survey, a majority of customers in all eight customer groups believe Alectra Utilities should invest in renewal now, rather than defer to the future.

There are clear majorities in the two residential and four GS groups that support investing in general plant now, rather than finding ways to make do with existing equipment and tools. Large Use customers in both rate zones are more evenly divided on this question.

Enersource RZ	Residential	Small Business	Mid-Market	Large Use
Investments in Aging Infrastructure				
<b>Invest What it Takes</b> Enersource should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.	61%	60%	74%	7/9
<b>Defer Investments</b> Enersource should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.	30%	29%	22%	1/9
General Plant Investments				
Make Necessary Investments Enersource should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.	69%	55%	64%	4/9
<b>Find Ways to Make Do</b> Enersource should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.	27%	37%	33%	3/9

PowerStream RZ	Residential	Small Business	Mid-Market	Large Use
Investments in Aging Infrastructure				
<b>Invest What it Takes</b> PowerStream should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.	50%	62%	66%	6/13
<b>Defer Investments</b> PowerStream should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.	37%	27%	27%	2/13
General Plant Investments				
Make Necessary Investments PowerStream should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.	63%	59%	61%	4/13
Find Ways to Make Do PowerStream should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.	31%	38%	32%	5/13

There are also clear majorities among all eight for investments in system service. Support for these investments is strongest among the large use customers.

Finally, we find not all investments are equally welcome. Every customer group agrees that modernization can generally wait for the normal renewal process. This is consistent with the earlier finding that customers are generally happy with the service they receive today. There is no immediate pressure to improve customer experience outside of basic reliability if it means paying more.

Enersource RZ	Residential	Small Business	Mid-Market	Large Use
System Service Investments				
Proactively Invest in System Capacity Enersource should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.	58%	57%	73%	8/9
Delay Investments in System Capacity To help keep rate increases down, Enersource should delay investments in system capacity needs until customers start to experience a decline in reliability.	33%	31%	23%	0/9
Investments in Modernizing the Distribution System				
<b>Invest in Modernization Now</b> Enersource should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.	34%	34%	41%	3/9
<b>Modernize as Part of Normal System Renewal</b> Enersource should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.	60%	58%	56%	5/9
PowerStream RZ	Residential	Small Business	Mid-Market	Large Use
System Service Investments				
System Service Investments Proactively Invest in System Capacity PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.	57%	56%	64%	6/13
Proactively Invest in System Capacity PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth	<b>57%</b> 34%	<b>56%</b> 32%	<b>64%</b> 29%	<b>6/13</b> 3/13
Proactively Invest in System Capacity PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills. Delay Investments in System Capacity To help keep rate increases down, PowerStream should delay investments in system capacity needs until				
Proactively Invest in System Capacity PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.  Delay Investments in System Capacity To help keep rate increases down, PowerStream should delay investments in system capacity needs until customers start to experience a decline in reliability.				

# **Enersource ICM Projects**

Enersource rate zone customer groups are divided on leaky transformers. Majorities in the residential and GS<50kW respondent groups prefer to pay more to replace the leaky transformers now. GS>50kW customers and Large Use customers prefer to stick with replacement within the current renewal plan.

Enersource RZ	Residential	Small Business	Mid-Market	Large Use
	n=501	n=202	n=200	n=9
Leaky Transformers				
<b>Replace Leaking Transformers</b> I am willing to have my bill increased by about [Res: \$0.12; SB: \$0.39; MM: \$6.21] a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.	58%	52%	40%	3 of 9
Existing Renewal Plan Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.	38%	42%	58%	6 of 9
Don't know	3%	6%	3%	

All Enersource customer groups prefer to at least replace the 78 most pressing poles now and large proportions would like to replace all the poles now or replace the existing above ground system with an underground one, even though the cost of these options is much higher.

Enersource RZ	Residential	Small Business	Mid-Market	Large Use
	n=501	n=202	n=200	n=9
Rometown Overhead				
<b>Replace Reactively</b> Enersource should continue to operate the Rometown overhead system, and replace equipment reactively as it fails	19%	29%	23%	2 of 9
Partial Replacement Enersource should proceed now to replace 78 of the 198 poles in the most pressing need resulting in a monthly increase of [Res: \$0.03; SB: \$0.09; MM: \$1.51] for the average customer	17%	19%	26%	2 of 9
Full Replacement Enersource should proceed now to replace all 198 poles at a cost of 3.2 million dollars, resulting in a monthly increase of [Res: \$0.05 ; SB: \$0.16 ; MM: \$2.62] for the average customer	28%	18%	28%	3 of 9
Replace with Underground System Enersource should proceed now to replace the Rometown overhead system with an underground system at a cost of between \$12 and 18 million dollars, resulting in a monthly increase of between [Res: \$0.19-\$0.28; \$51; \$0.61-\$0.92; MM: \$9.81-\$14.72] for the average customer	38%	26%	20%	1 of 9
Don't know	8%	8%	4%	1 of 9

# **PowerStream ICM Projects**

As mentioned earlier, only one of the ICM project had alternatives that delivered different outcomes for customers. For the *Bathurst Road widening*, we found all three of the business groups preferred staying with the current mix of overhead and underground wires rather than replacing with an entirely underground system. However, residential customers are divided with 46% preferring the current mix to 45% preferring the all underground system option at a higher rate impact.

PowerStream RZ	Residential	Small Business	Mid-Market	Large Use
Fowerstream KZ	n=505	n=205	n=200	n=13
Bathurst Road Widening				
Move Current Mix Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of [Res: \$0.06; SB: \$0.11; MM: \$2.64] for the average customer.	46%	48%	62%	6 of 13
Replace with Underground System Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between [Res: \$0.25-\$0.35; SB: \$0.51-\$0.72; MM: \$11.98-\$16.78]for the average customer	45%	40%	31%	2 of 13
Don't know	8%	12%	8%	5 of 13

# **ICM Bill Impacts**

In all eight of the PowerStream and Enersource customer groups, majorities say the proposed rate increase for 2019 is reasonable rather than unreasonable.

Enersource RZ	Residential	Small Business	Mid-Market	Large Use
	n=501	n=202	n=200	n=9
Opinion of Proposed Plan				
The proposed rate increase is reasonable Res: \$0.15   SB: \$0.48   MM: \$7.72	72%	60%	56%	7 of 9
The proposed rate increase is unreasonable	25%	33%	42%	
Don't know	3%	6%	2%	2 of 9

PowerStream RZ	Residential	Small Business	Mid-Market	Large Use
	n=505	n=205	n=200	n=13
Opinion of Proposed Plan				
The proposed rate increase is reasonable Res: \$0.21   SB: \$0.43   MM: \$10.03	63%	66%	59%	8 of 13
The proposed rate increase is unreasonable	33%	23%	34%	2 of 13
Don't know	4%	8%	6%	3 of 13

# Conclusion

The customer engagement INNOVATIVE has conducted for Alectra Utilities in respect of its 2019 ICM application has built upon work done in 2018. The learnings from Alectra Utilities' 2018 ICM application provided a firm foundation for the design of this engagement, allowing Alectra to save the large scale voluntary engagement for customer feedback on the second stage of the DSP development. Looking across the 2017 and 2018 engagements, there are more consistencies than differences.

### Some of the core findings remain the same:

- Customers in these two rate zones are generally satisfied with the service they receive, even to the point where they are reluctant to pay more to receive modernization benefits sooner than normal renewal will provide.
- Among competing priorities, price is generally number one followed by reliability. The exception is large use customers for whom reliability is first, with price second.
- Despite price concerns, customers are willing to consider paying more to maintain a reliable system.
- Again, despite general price concerns, most customers particularly residential customers

   are willing to pay more for specific projects that enhance the system, such as
   undergrounding specific overhead systems.

### We have learned two new things in particular.

- 1. We now have an initial understanding of the hierarchy of priorities among reliability needs. Future engagements will be able to test these priorities through reactions to specific projects.
- 2. When in comes to modernization, it appears that most customers are reluctant to increase rates for projects that would raise standards in the system but are beyond the level needed for the normal replacement of aging and failing equipment. This finding could be seen as conflicting with customer feedback on specific projects in other parts of this engagement. As a result, we suggest testing reactions to specific types of modernization projects in the next stage of Alectra Utilities' DSP customer engagement.

#### There is more consistent support for the ICM projects tested this year compared to last year.

With the exception of larger Enersource business customers (mid-market and large use) on the replacement of *leaky transformers*, customer groups supported the investment levels and pacing proposed by Alectra Utilities, or even higher.

A majority of respondents from all eight customer groups felt the overall proposed 2019 ICM rate increase was reasonable, given the benefits.

# **About this Consultation**

# **Core Engagement Design Considerations**

INNOVATIVE was asked to collect input to inform two sets of planning activities:

- 1. To provide input at the start of Alectra Utilities' first consolidated Distribution Service Plan for the period covering 2020 to 2024.
- 2. To provide input into process for assessing the appropriateness of various projects for a 2019 ICM application including customer views on bill impacts.

The DSP feedback is more general in nature. Since DSP planning is only beginning, Alectra Utilities is not yet at the point where it can seek feedback on specific Alectra DSP-related projects (for 2020-2024). It is Alectra Utilities' intention to conduct a second round of engagement as planning proceeds. However, it is possible to collect input on needs, outcomes and general trade-offs at this point in the process to be responsive to direction of the OEB.

The ICM feedback is more project specific. As ICM applications are defined as project specific, the consultation was focused on the specific projects Alectra Utilities was considering for ICM funding.

# **Engagement Overview**

### Building on learnings from previous customer engagements:

As noted earlier, in approaching the design of this round of engagement, INNOVATIVE and Alectra Utilities considered the comprehensive nature of the utility's previous 2017 customer engagement. That effort included a voluntary online workbook, completed by 17,595 customers, and randomly recruited focus groups, leading up to random digit dialing customer telephone surveys.

The previous engagement found support for ICM projects varied by rate zone, rate class and project type. The diagnostic questions in the workbook and discussion groups found that the basic format for testing projects worked.

While the earlier study provided a strong foundation for moving forward, the specific nature of projects being considered required a new engagement.

In planning the level of engagement for this round of feedback, one concern is how often the utility can sustain the level of engagement secured in the 2017 consultation. The view was that customer participation in these consultation activities would likely decline if repeated too frequently. As noted above, the basic approach used to secure ICM feedback tested well with customers in the qualitative elements and that since the previous ICM engagement occurred just a year ago, it was unlikely views about the engagement tool would have changed significantly. In addition, it was felt that projects in the DSP would likely have more impact on the value delivered to more customers than the incremental projects discussed in the ICM. With those two considerations in mind, the judgment was that the second phase of DSP consultation should receive priority for large scale voluntary engagement.

Another consideration for this phase of the engagement was timing. There were several comments from the OEB and intervenors related to the 2017 customer engagement process. As part of Alectra Utilities' final argument in that proceeding, the utility identified a number of issues where it looked for clarification of the OEB's intentions in its 2018 ICM decision. The feeling was that it would be prudent to avoid spending significant resources on a customer consultation before the Board had the opportunity to provide further direction and clarity. Alectra Utilities' 2018 decision was received on April 5<sup>th</sup>.

The 2017 customer engagement ensured that Alectra Utilities had a strong general sense of customer needs and preferences. For this reason (and those noted above), it was decided the best vehicle for this phase of Alectra Utilities' ongoing customer engagement was to move directly to telephone and online surveys.

Using a stratified random sample telephone survey ensures the team was able to update those views with a representative sample of Alectra Utilities' customers to capture any emerging needs or shifting priorities and to generate feedback on the specific projects being considered for this application through an engagement tool that allows us to generalise to the broader customer base.

Priority was given to focusing first on rate zones that had potential ICM projects for consideration (i.e. the PowerStream and Enersource rate zones).

# Sample Frame

For the purposes of executing the customer surveys, Alectra Utilities provided INNOVATIVE with a confidential list of customers' contact information.

The contact list included only customers with telephone contact information on file and who had been a customer of Alectra Utilities for at least a year. The information contained in the contact list included customer name, telephone number(s), postal code and total annual electricity consumption for the year.

Only one customer per household or business was eligible to complete their respective survey. Respondents were screened to certify that only customers responsible for paying or overseeing their electricity bill were interviewed. This step was taken to ensure that survey respondents represented the most qualified person within a household or business to answer questions about their electricity bill and trade-offs between reliability and particular project investments.

Before retiring any randomly selected telephone numbers from the contact list, 8 attempts were made to reach a potential respondent for each unique telephone number, or until an interviewer received a hard refusal. Each night a new sample was released from the contact list to replace completed or retired numbers.

# Sample Design

Quotas were set by electricity consumption levels and geographic considerations from within the Enersource and PowerStream rate zones to obtain a representative customer sample.

The telephone surveys followed a stratified random sampling methodology. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics (in

this case: customer class, rate zone, and electricity usage). A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the customer population. These subsets of the strata are then pooled to form a random sample.

Residential and General Service customers were divided into quartiles based on annual electricity usage to ensure the sample had a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households and businesses.

Screening questions were designed to ensure only customers who received an electricity bill from Alectra Utilities were included. In addition, residential customers needed to have primary or shared responsibility over their household's electricity bill. In the case of businesses and other organisations, only the organisations' decision makers on electricity use were included in the business completes. Business customers could also be household customers of Alectra Utilities but were reminded to respond as their organization's decision-maker as best as possible.

Weights have <u>not</u> been applied to any of the six surveys as the stratified random samples are accurate representations of actual customer distribution by rate.

The very largest customers in these two rate zones (2MW+) were sent an online version of the survey.

### **Survey Development**

# The core topics for customer engagement are well defined in the "Handbook for Rate Applications":

- Do customers have any outstanding needs?
- What outcomes do customers want Alectra Utilities to focus on?
- What are the priorities among those outcomes?
- What are customers' preferences on the core trade-offs that must be addressed in the Alectra Utilities' DSP?
- What are customers' preferences on the ICM proposals?

# Every customer consultation has two key challenges that need to be overcome to successfully engage customers so that they can provide meaningful answers:

- 1. Customers begin with limited knowledge of their utility.
- 2. The average customer is not prepared to give a lot of time to a consultation.

#### There are important implications from these challenges:

- 1. To ensure the engagement includes a representative sample, all consultation tools must give low information participants the information they need to provide a meaningful answer to any question.
- 2. All consultation tools need to limit the time demands they place on participants or else risking bias by losing less engaged customers.

### **Covering the Basics:**

Any survey or workbook must begin with the assumption that respondent knows very little about the utility. In this case, due to the merger, the engagement tools had to start with the name. Question B5 of the telephone surveys established awareness of the name and the introduction in B6 established the language to be used as the survey progressed. While awareness of the merger is up significantly from a year ago, we still find over 40% of residential and 27% of small business customers are not aware of the merger.

It is also important to ensure that customers understand what a distributor does and does not do, as well as what portion of their bill applies to the distributor. All customers must at least have that information at hand before more substantive questions can be addressed. This was addressed with questions B7 and B10 in the telephone survey. Without those questions, INNOVATIVE could not be sure if the comments being collected were focused on Alectra Utilities and its responsibilities, or if they were focused on other elements of the electricity system.

Finally, before moving into the discussion of the ICM projects and their potential rate impacts, questions E19 and E26 established the basics of the rate approval and Price Cap IR process.

# **DSP Trade-Off Questions:**

In terms of more substantive questions, combining the engagement for the initial phase of the DSP with the ICM was both a more efficient use of customer time and ensured that responses to the ICM questions were informed responses.

Customers generally do not have pre-existing opinions readily available on the issues of interest to this application. It is well documented that people "construct" opinions as needed. There is substantial literature on how to help people do that fairly and effectively<sup>1</sup>.

When members of the public "construct" opinions, they do it based on considerations that are easily accessible in their minds. As a survey moves to asking more detailed questions, it is important that the survey raises the full range of considerations that might underpin an opinion on that question.

The telephone surveys were able to raise the range of key considerations for customer opinions with a few simple questions. B8 and B9 allowed us to collect information about customers' needs. Questions C12, C13, C14 and C15 allowed customers to provide feedback on the goals Alectra Utilities should pursue in their on-going business planning. Both closed and open-ended questions were used here. The list for the closed-ended questions was revised from the earlier engagement to add *safety* as a topic. Other items were condensed using feedback from testing focus groups to keep the list to a manageable size for a phone survey. Open-ended questions were provided as a 'safety-valve' for customers to express specific needs and to identify other priority outcomes. Finally, D16, D17, and D18 were added to provide further insight into what specific elements of reliability are given the highest priority by customers to give direction to planners in the DSP process.

This approach ensured that customers did not move into the more detailed questions until they had considered their own needs and the broad range of goals the utility should pursue.

<sup>&</sup>lt;sup>1</sup> John Zaller (1992) The Nature and Origins of Mass Opinion and Philip E. Converse (1964) The Nature of Belief Systems in Mass Publics.

The first set of detailed questions focused on trade-offs in the DSP process. Since System Access is non-discretionary, information on this area of capital investment was introduced at the beginning of this section, but no questions were asked. E22 addressed the trade-off between reliability and cost. E23 covered general plant. System Service was the topic of E24. E25 asked for customer general views on system modernization investments.

# **ICM Questions:**

The ICM questions varied according to the specific projects being considered in each rate zone. Where PowerStream has design options that deliver different potential outcomes to customers, customers were asked to provide their preference between those options. Customers were also asked about the total bill impact of these projects.

Enersource RZ respondents were asked about two ICM renewal projects; *leaky transformers* and the *Rometown area overhead system*. In each, respondents were given a short introduction of the issue and asked to choose between the alternative approaches available. In each case, the options tied costs to potential benefits.

PowerStream RZ respondents were asked to consider three ICM projects. The *York Regional Rapid Transit* project is a system access project with no major design choices. The *Barrie TS* project has two options with no differences in customer outcomes, so Alectra Utilities is proposing the least expensive option. Those two projects were described to customers, but no project specific questions were asked. PowerStream RZ respondents were then asked about the design choices for *Bathurst Street road widening project*. Again, the options for this ICM project tied costs to potential benefits.

# **Changes in Approach**

There were several changes in survey design intended to address issues raised from the previous 2017 customer engagement.

- 1. In the 2017 customer engagement, a concern was raised about using a *question skip* approach in the ICM section, wherein customers had the choice to skip specific project details. In this round of customer engagement, the decision was made to keep the survey short enough to ensure that all respondents were asked about each individual ICM project.
- 2. In the 2018 ICM rate application decision, the OEB expressed a desire for more projectspecific customer feedback. While it is too early in the DSP process to identify specific projects, an effort was made to develop project specific questions in the ICM section where there were alternatives that created meaningful differences in customer outcomes.
- 3. To provide better insight into vulnerable customers, questions were added to identify LEAP qualified respondents. Segmentation sidebars were added to show how vulnerable customer responses compare to other customers.
- 4. There has been an effort made to provide more relevant background information for DSP trade-off questions. This includes familiarity with how distribution rates are set in Ontario (E19). E21 shares information about current reliability experienced by the average customer as well as the share of outages due to equipment failure before asking about the renewal trade-off focus question (E22).

# **Field Schedule**

### **Questionnaire Testing Focus Groups**

Based on the qualitative elements of the 2017 engagement, the project team was confident in the general approach to the survey. However, the new projects involved new questions and some other changes were made primarily in response to intervenor and OEB staff comments. To ensure the surveys presented customers with clear and unambiguous information and questions needed for them to provide meaningful feedback on Alectra Utilities' DSP and ICM options, INNOVATIVE conducted questionnaire testing focus groups with randomly recruited customers (i.e., Residential, GS < 50kW and GS>50kW).

10 customer focus groups took place prior to the launch of the telephone and online surveys:

#### May 8, 2018:

- <u>2 Focus Groups</u>: residential and GS < 50 kW groups with Enersource RZ customers
- <u>2 Focus Groups</u>: residential and GS < 50 kW groups with PowerStream RZ customers

#### May 8, 2018:

- <u>3 Focus Groups</u>: residential, GS < 50 kW, and GS > 50 kW groups with Enersource RZ customers
- <u>3 Focus Groups</u>: residential, GS < 50 kW, and GS > 50 kW groups with PowerStream RZ customers

Questionnaires were edited to provide better clarity following the two focus group dates.

### **Telephone Survey Field Dates**

Telephone surveys where in field between May 10 and 29, 2018:

#### Telephone survey field dates and sample sizes for the Enersource rate zone:

- Residential survey field date: May 10-20 | n=501; margin of error ±4.4%, 19 times out of 20
- **GS < 50 kW** survey field date: May 11-29 | n=202; margin of error ±6.8%, 19 times out of 20
- GS > 50 kW survey field date: May 15-28 | n=200; margin of error ±6.7%, 19 times out of 20

#### Telephone survey field dates and sample sizes for the PowerStream rate zone:

- Residential survey field date: May 10-22 | n=505; margin of error ±4.3%, 19 times out of 20
- **GS < 50 kW** survey field date: May 11-24 | n=205; margin of error ±6.8%, 19 times out of 20
- *GS* > 50 kW survey field date: May 11-28 | n=200; margin of error ±6.6%, 19 times out of 20

Alectra Utilities' Residential customers were contacted by telephone between 4pm and 9pm on weekdays; between 11am and 9pm on Saturdays; and between 12pm and 9pm on Sundays. General Service customers were contacted weekdays between 9am and 5pm. INNOVATIVE conducted all interviews through its computer assisted telephone interviewing (CATI) system.

# **Online Survey Field Dates**

An online survey was designed for individual Large Use customers (2MW+) in both of Alectra Utilities' Enersource and PowerStream rate zones.

Alectra Utilities provided INNOVATIVE with an email contact list consisting of the prime contact for each of its Large Use customers in the Enersource and PowerStream rate zones. INNOVATIVE provided each customer contact with a unique URL via an email invitation so that only customers identified by Alectra Utilities were able to complete the survey and only once.

Customers were sent three reminder emails to encourage survey participation. In addition, Alectra Utilities' staff followed up with customers by telephone to encourage survey participation.

The analysis of this survey is based on 9 of 36 eligible responses (25% completion rate) from Large Use customers in the Enersource rate zone and 13 of 47 responses (28% completion rate) from Large Use customers in the PowerStream rate zone.

Individual Large Use customer responses were anonymous and no identifiable respondent information was shared with Alectra Utilities. Responses were combined within the Enersource and PowerStream rate zones to protect the confidentiality of individual Large Use customers.

The Large Use customer online survey was in field between May 17 and 29, 2018.

		Methodology	Field Dates	Targeted Sample Size	Actual Sample Size
	Enersource RZ Residential	Telephone	May 10-20, 2018	n=500	n=501
	Enersource Small Business (GS < 50 kW)	Telephone	May 11-29, 2018	n=200	n=202
enersource	Enersource Mid-Market (GS > 50 kW)	Telephone	May 15-28, 2018	n=200	n=200
	Enersource Key Accounts	Online	May 17-29, 2018	N/A	9 of 36
alectra	PowerStream Residential	Telephone	May 10-22, 2018	n=500	n=505
	PowerStream Small Business (GS < 50 kW)	Telephone	May 11-24, 2018	n=200	n=205
Stream	PowerStream Mid-Market (GS > 50 kW)	Telephone	May 11-28, 2018	n=200	n=200
	PowerStream Key Accounts	Online	May 17-29, 2018	N/A	13 of 47

# Field Schedule Overview Table:

# **Environmental Controls**

It is important to be able to identify factors that may influence customer preferences and distinguish between what is within, and what is outside a LDCs influence or control.

Perceptions of LDCs often tend to move with **general perceptions of the sector** rather than in response to the local utility. We currently see this in Ontario with respect to public attitudes towards the electricity sector and frustration with existing electricity rates.

In addition, perceptions of utilities are also strongly correlated with **financial circumstances**. In tough times perception and preference can change because customers are struggling with bills, not because of anything the LDC has, or has not, done.

Control questions help distributors distinguish between utility driven preferences and externally driven preferences. INNOVATIVE uses two questions to help capture external phenomena:

- 1) **Financial Hardship:** The cost of my electricity bill has a major impact on my finances / the bottom line of my organization and requires I do without some other important priorities/ results in some important spending priorities and investments being put off.
- 2) General Feelings Towards the Sector: Customers are well served by the electricity system in Ontario.

In addition, INNOVATIVE added a new question to enable additional analysis.

3) **Vulnerable Consumers**: In response to OEB and intervenor comments on previous Alectra Utilities (and its legacy LDC) rate applications, questions have been added to identify customers who are eligible for the LEAP program to help assess whether vulnerable consumer have unique needs or preferences.

Segmentation "side bars" have been provided for *Financial Hardship* and *General Feelings Towards the Sector* as appropriate in the detailed reports.

Appendix 1.0



# Enersource Rate Zone 2019 ICM Application Consultation



MAY 2018 STRICTLY PRIVILEGED AND CONFIDENTIAL

# **Survey Methodologies**



### **Field and Design**

For the quantitative portion of the customer consultation, Alectra Utilities invited Enersource heritage customers from three rate classes to participate in a 10-15 minute telephone survey.

- The residential survey fielded from May 10-20, 2018 amongst n=501 residential customers, with a margin of error of ±4.4%, 19 times out of 20.
- The small business survey fielded from May 11-29, 2018 amongst n=202 small business customers, with a margin of error of ±6.8%, 19 times out of 20.
- The mid-market survey fielded from May 15-28, 2018 amongst n=200 mid-market business customers, with a margin of error of ±6.6%, 19 times out of 20.

INNOVATIVE conducted all interviews through its computer assisted telephone interviewing (CATI) system.

This generalizable telephone survey used a stratified random sampling approach based on a known characteristic, in this case, consumption by rate class (residential, GS<50kW and GS>50kW).

Sample lists were provided by Alectra Utilities. Screening questions were designed to ensure only customers who received an electricity bill from Alectra Utilities were included. In addition, residential customers needed to have primary or shared responsibility over their household's electricity bill and only the organizations' decision makers on electricity use were included in the business completes. Business customers could also be household customers of Alectra Utilities, but were reminded to respond as their organization's decision-maker as best as possible.

**Note**: Graphs and tables may not always total 100% due to rounding values rather than any error in data. Sums are added before rounding numbers. Caution interpreting results with small n-sizes.



# **Consumption Quartiles**

The tables below illustrate the strata divisions for each rate class, based on consumption quartiles.

Dividing customer sample into quartiles based on known characteristics was used to develop accurate quotas to ensure the sample was representative of Enersource's customer base.

Residential	Quartile	Target	Actual	Difference
	Low consumption	n=125	n=125	0
	Medium-low	n=125	n=125	0
	Medium-high	n=125	n=126	+1
	High consumption	n=125	n=125	0
	Total	n=500	n=501	+1

S.	Quartile	Target	Actual	Difference
Small Business	Low consumption	n=50	n=51	+1
	Medium-low	n=50	n=53	+3
	Medium-high	n=50	n=48	-2
	High consumption	n=50	n=50	0
	Total	n=200	n=202	+2

Mid-Market	Quartile	Target	Actual	Difference
	Low consumption	n=50	n=50	0
	Medium-low	n=50	n=50	0
	Medium-high	n=50	n=50	0
	High consumption	n=50	n=50	0
	Total	n=200	n=200	0



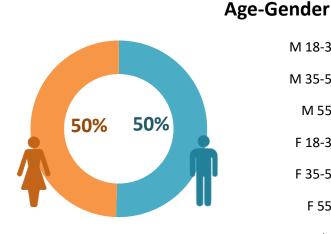


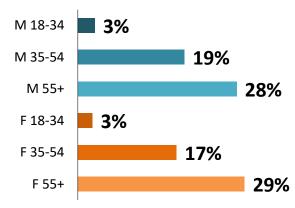


# **Residential Rate Class**



## Segmentation & Demographics





Residential

Note: 'Refused' (1%) not shown.

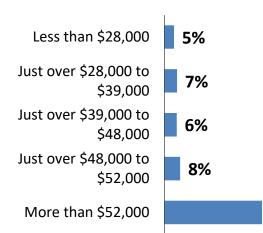
### **Household Size**



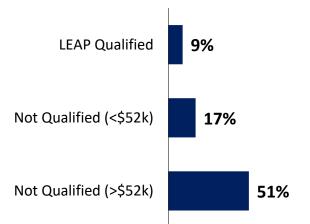
51%

Note: 'Refused' (1%) not shown.

### **Household Income**



**LEAP Qualification** 



Note: 'Refused' (20%), Not sure (3%) not shown.

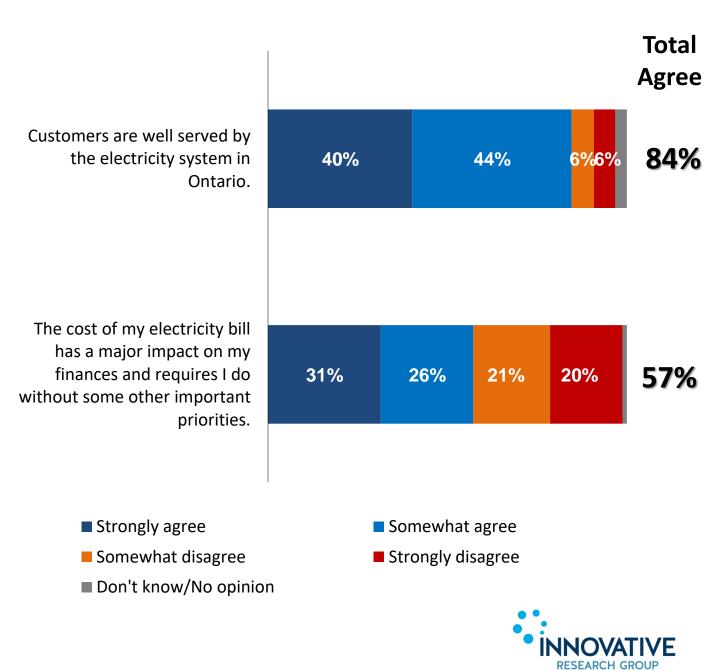
Note: 'Refused' (20%), Not sure (3%) not shown.

## Segmentation & Demographics



For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

[asked all respondents, n=501]

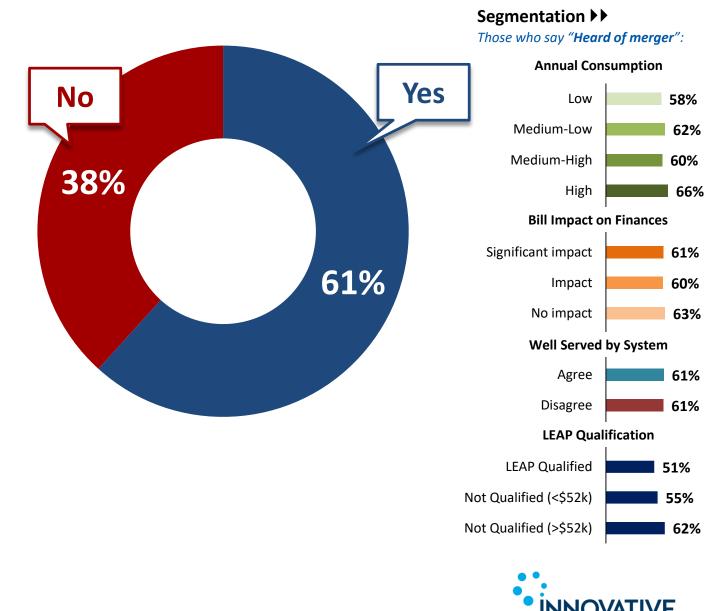


## Awareness of Merger

Residential

You may have recently heard that Enersource has merged with neighbouring electricity distributors to form a new company called Alectra Utilities.

Had you heard of the Alectra Utilities merger before this survey? [asked all respondents, n=501]



7

RESEARCH GROUP

## Familiarity with Enersource

First, let's talk about your experience. As you may know, Enersource operates and maintains the local electricity distribution system in Mississauga. This is the system that takes the electricity from provincial transmission lines and brings it to your home through a network of wires, poles and other equipment that is owned and operated by Enersource.

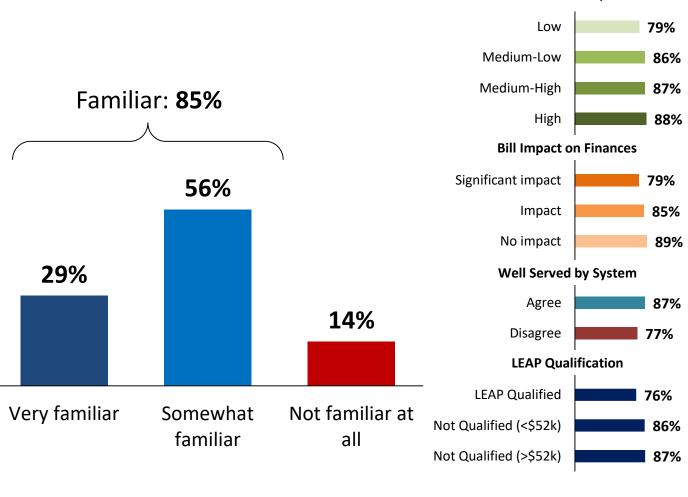
How familiar are you with Enersource? [asked all respondents, n=501]

#### Segmentation **>>**



**Annual Consumption** 

Residential





## **Satisfaction with Services**

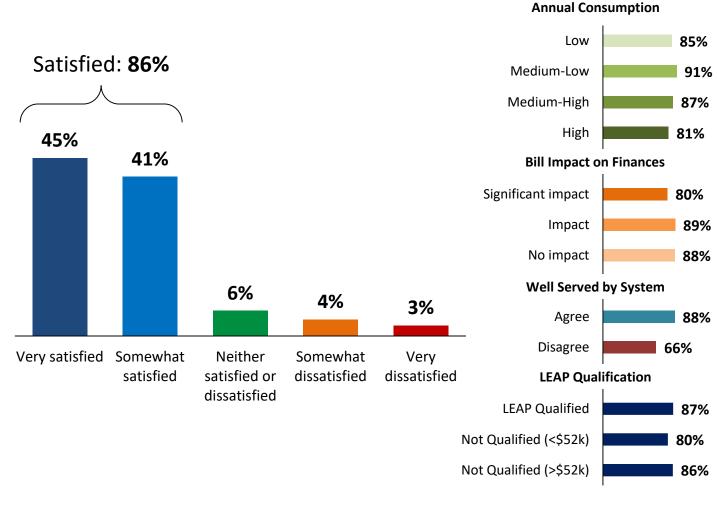


In general, how satisfied or dissatisfied are you with the services you receive from Enersource? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

[asked all respondents, n=501]



Those who say "Satisfied":



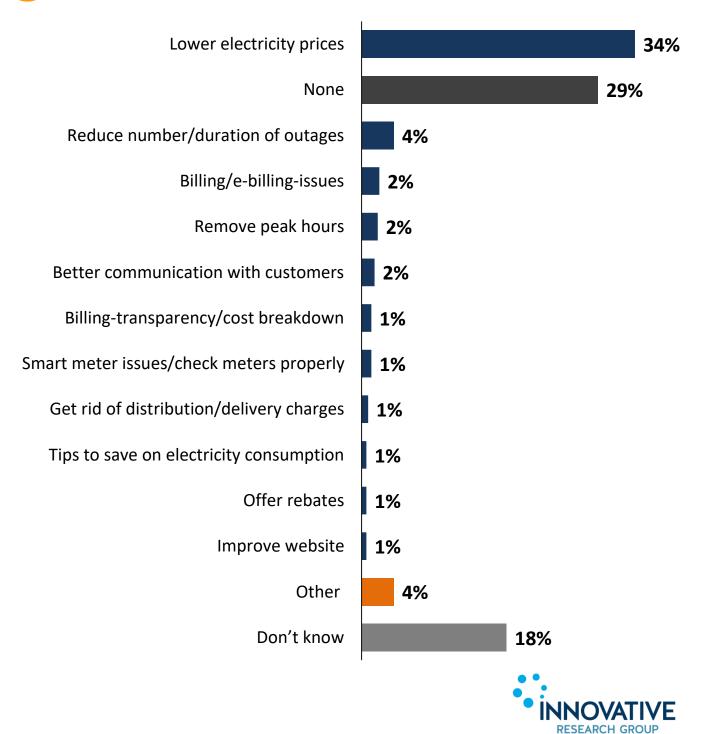


## Suggestions for Improvements



Q

Is there anything in particular Enersource can do to improve its service to you? [asked all respondents, n=501]

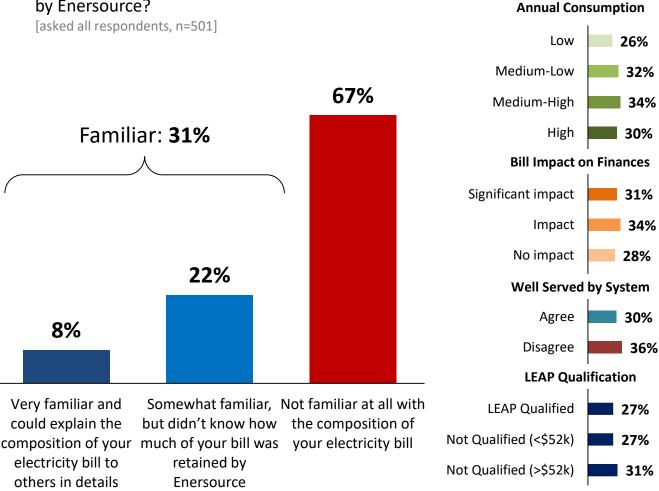


## Familiarity with Amount of Electricity Bill Remitted



I'd now like to talk with you about your electricity bill ... While Enersource is responsible for collecting payment for the entire electricity bill, they retain about 23% of the typical residential customer's bill. This is about \$25.02 on an average \$108.48 monthly residential electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your electricity bill that is retained by Enersource? Segmentation ►► Those who say "Familiar":







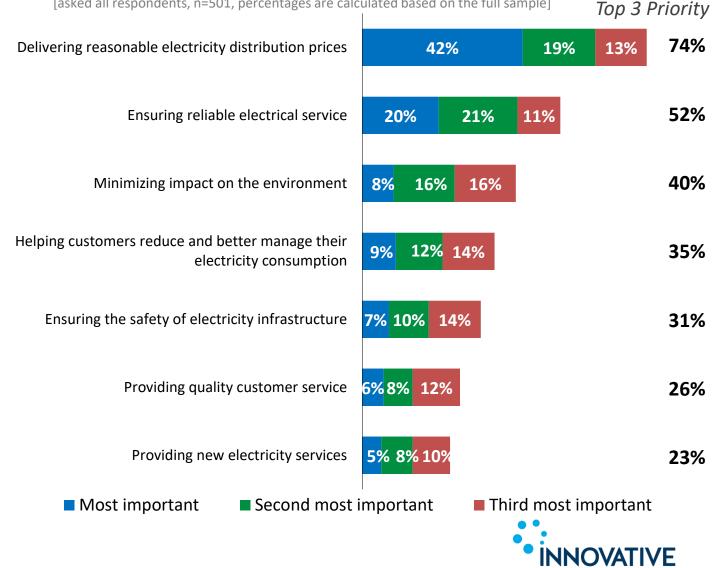
## **Customer Priorities**

Now lets talk about our second topic – outcomes. Enersource regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for Enersource.

Among the following Enersource priorities, please tell me which one is most important to you.

[asked all respondents, n=501, percentages are calculated based on the full sample]



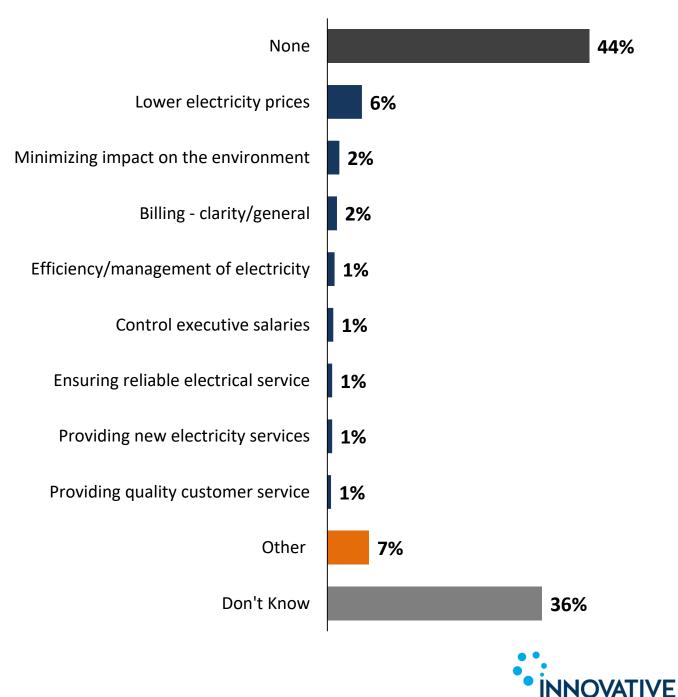
RESEARCH GROUP

## **Additional Priorities**



Are there any other important priorities that Enersource should be focusing on that weren't included in the previous list I read to you?

[asked all respondents, n=501]



RESEARCH GROUP



## **System Reliability**

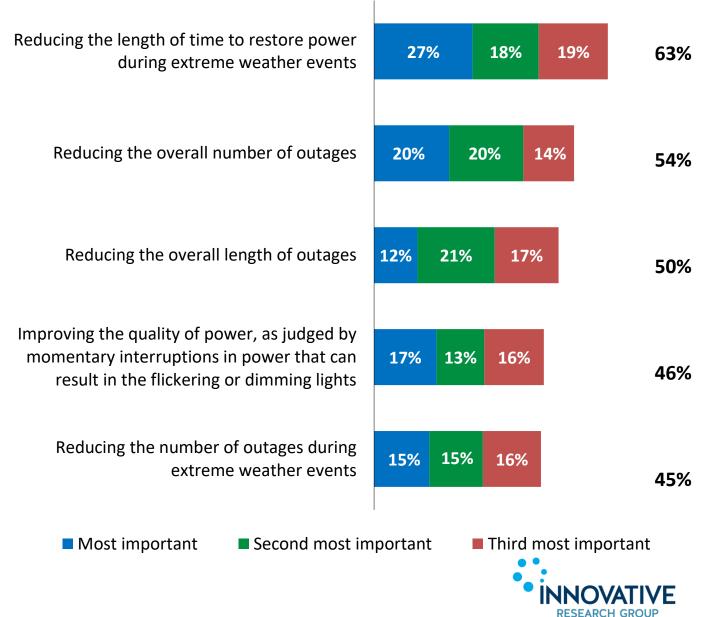
We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

[asked all respondents, n=501, percentages are calculated based on the full sample]

Top 3 Priority



## Familiarity with how Electricity Rates are Set



*Now, lets turn to our third topic, investment trade-offs.* The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

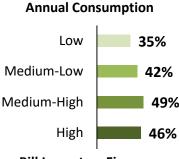
The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

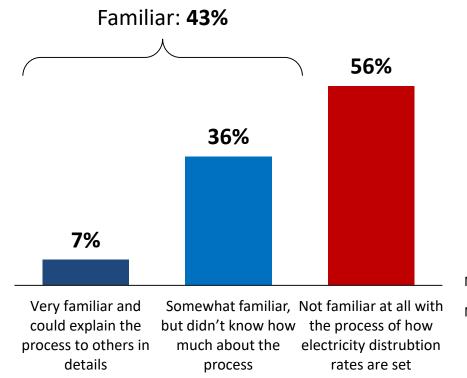
Before this survey, how familiar were you with how electricity distribution rates are set in Ontario? [asked all respondents, n=501]

### Segmentation **>>**

Those who say "Familiar":

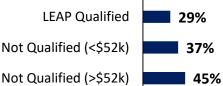


#### **Bill Impact on Finances**



Significant impact 43% Impact 42% No impact 43% Well Served by System Agree 43% Disagree 48%

#### **LEAP Qualification**







"Alectra Utilities is now starting to create its first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category, called system access, includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure."



## **Replacing Aging Infrastructure**

While Enersource works hard to prolong the life of the assets that make up Mississauga's distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.08 outages a year for an average of 35 minutes and 40 seconds. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 56% of unscheduled outages are as a result of equipment failure in the Enersource rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. Enersource must decide the pace at which it replaces this aging equipment.

#### Segmentation **>>**

Those who say "invest what it takes to maintain system reliability":

**Annual Consumption** 

Residential



Which of the following statements best represents

Low 56% Medium-Low 65% Medium-High 62% High 60% **Bill Impact on Finances** 61% Significant impact 49% Impact 50% No impact 76% Well Served by System Agree 62% Disagree 48% **LEAP Qualification** LEAP Qualified 49% 30% Not Qualified (<\$52k) 55% Not Qualified (>\$52k) 66%

Enersource should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.

Enersource should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.

ESEARCH GROUP

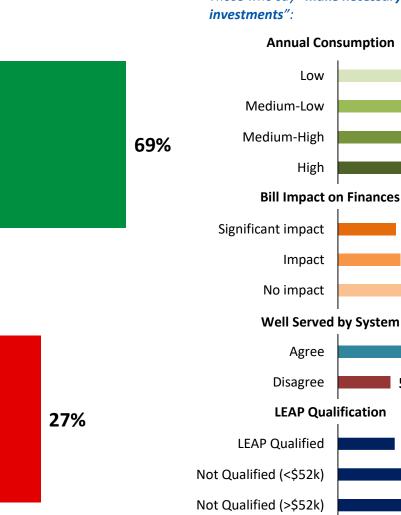
## **General Plant Investments**

As a company, Enersource needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [asked all respondents, n=501]

Enersource should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.

Enersource should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.



Segmentation 🕨

Those who say "make necessary

Residential

67%

69%

70%

69%

61%

66%

75%

71%

56%

60%

71%

71%



Note: 'Don't know' (3%), 'Refused' (1%) not shown.

## **System Service Investments**

With growth in various parts of Mississauga comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

## With this in mind, which of the following statements best represents your point of view?

[asked all respondents, n=501]

Enersource should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.

To help keep rate increases down, Enersource should delay investments in system capacity needs until customers start to experience a decline in reliability.

#### system capacity": **Annual Consumption** Low 56% Medium-Low 59% Medium-High 56% 58% High 62% **Bill Impact on Finances** Significant impact 46% Impact 55% No impact 68% Well Served by System Agree 60% Disagree 48% **LEAP Qualification** 33% LEAP Qualified 44% Not Qualified (<\$52k) 49% Not Qualified (>\$52k) 64%



Segmentation 🕨

Those who say "proactively invest in

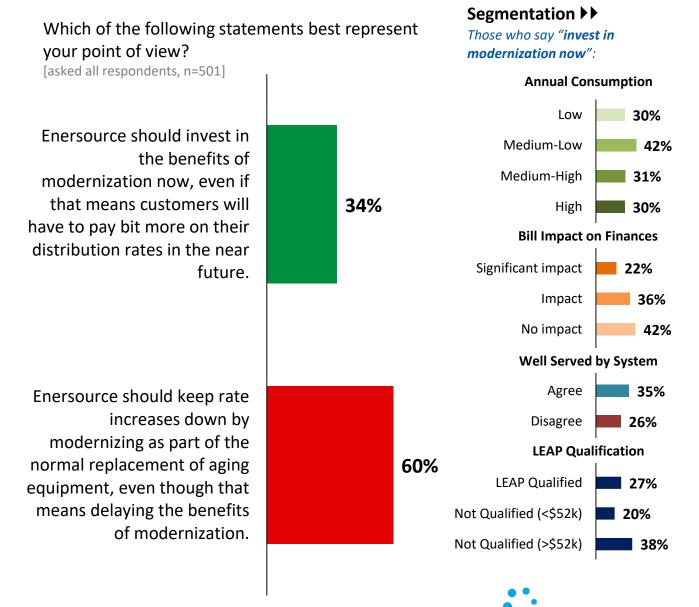
Residential

## Modernizing the Distribution System

There are new technologies that Enersource can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliability or reduce the impact on the environment.

Residential

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

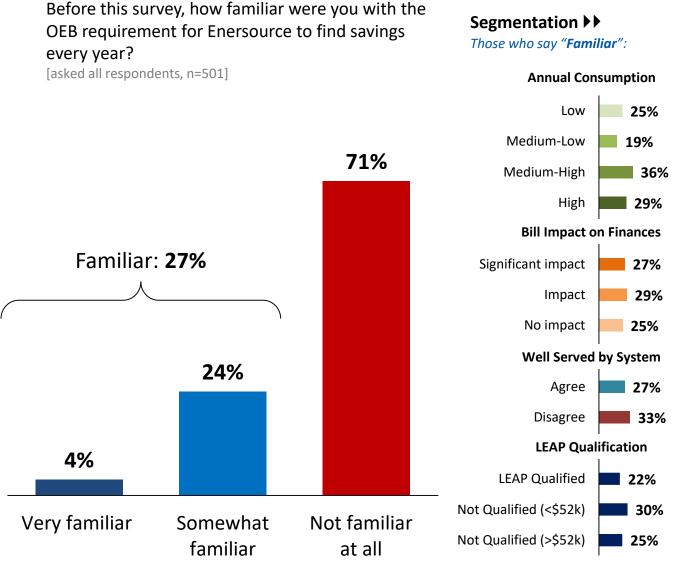


ESEARCH GROUP

## Familiarity with OEB "Cost Saving" Requirements



As we mentioned earlier, the rates you pay to Enersource are set by the OEB through a public process. Enersource's current rates were approved in a 2013 application and will be in place until 2027. Each year Enersource is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires Enersource to keep cost increases below inflation.







"Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for Enersource to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, Enersource has identified two system renewal projects that need more investment than the existing budget allows. System renewal projects are a mix of replacing aging infrastructure and emergency repairs."

### Leaky Transformers

"One of these projects deals with leaky transformers. Enersource has 25,000 transformers which are used to reduce the voltage of electricity as it moves from major transmission lines to the lines going into homes and businesses. Earlier this decade, Enersource identified a backlog of almost 4,000 transformers that show signs of leaking. By the end of this year, over 3,000 of these transformers will have been replaced. However, that will still leave over 600 needing replacement."



## Leaky Transformers

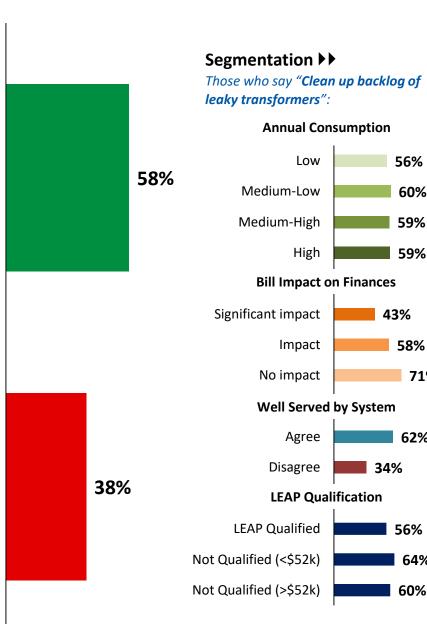
Residential

Which of the following is closest to your point of view regarding Ensource's proposed transformer replacement program?

[asked all respondents, n=501]

I am willing to have my bill increased by about 12 cents a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.

Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.





60%

59%

58%

62%

64%

60%

71%



"Another proposed project addresses the Rometown area Overhead system. There are 198 poles in this particular system. 68 out of 198 have been flagged as poor while another 56 are seen to be in fair condition. A total of 78 have been flagged for urgent replacement. This network of poles uses older technologies that will be replaced when the system is eventually rebuilt, but any repairs done today will have to use the older technology. It is more efficient to replace all the poles at once than to replace them one at a time but it costs less in the short run only to replace the poles most in need of repair."

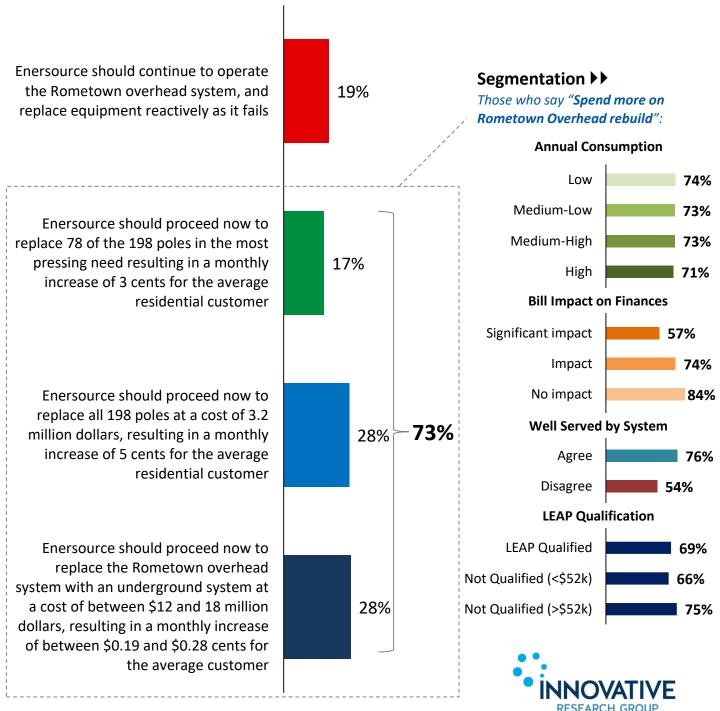


## **Rometown Overhead**

Residential

Which of the following is closest to your point of view regarding Ensource's proposed Rometown Overhead system rebuild program?

[asked all respondents, n=501]



Note: 'Don't know' (8%) not shown.

## **Opinion of Proposed ICM** Rate Impact

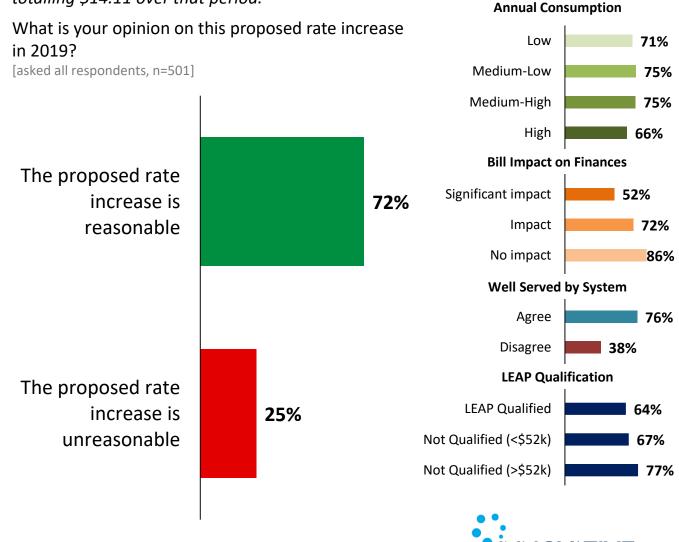


As I mentioned earlier, each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation. In order to reduce the backlog of leaking transformers and to replace the most high risk poles in the Rometown overhead system, Enersource would need to add a 15 cent charge to the typical residential customers monthly electricity bill, from 2019 to 2026.

That would result in an annual increase of \$1.76 each year over the course of the next eight years – *totalling \$14.11 over that period*.

Segmentation **>>** 

Those who say **"Rate increase is** reasonable":



ESEARCH GROUP



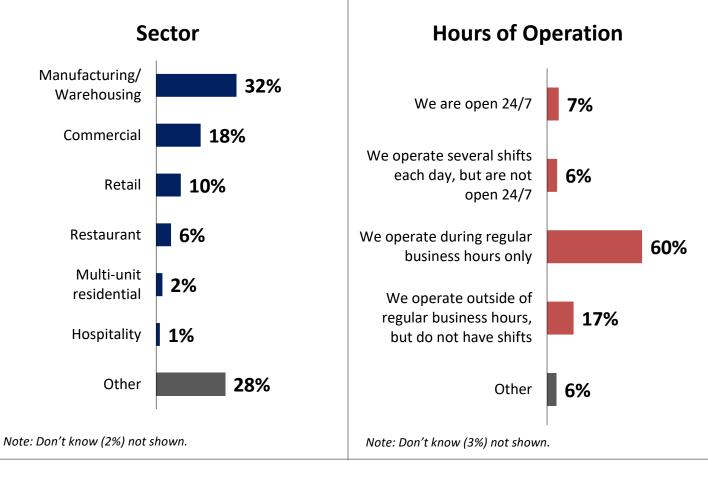


# **Small Business Rate Class**

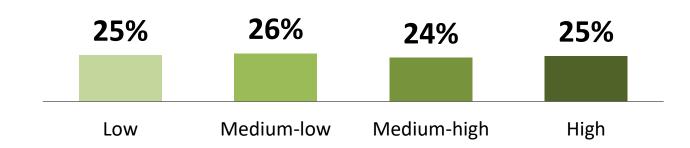


## Segmentation & Firmographics

Small Business



### **Annual Consumption**

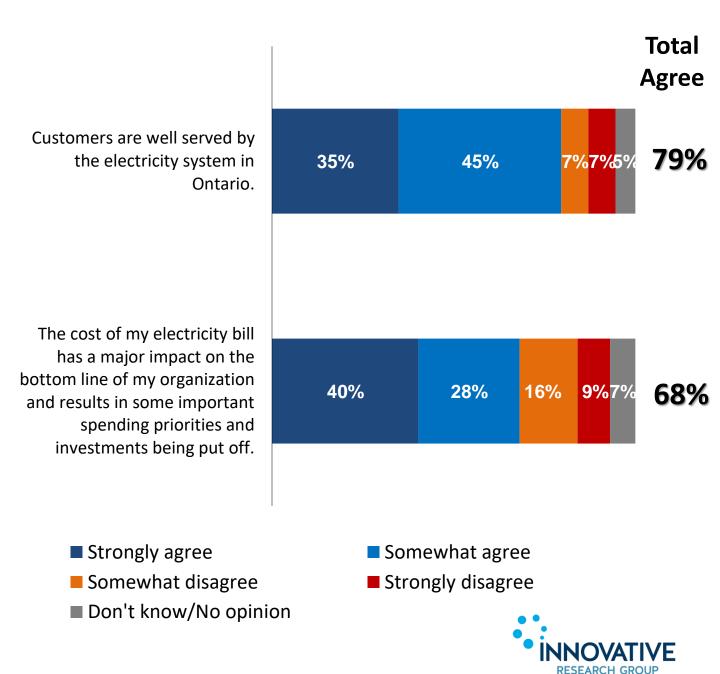


## Segmentation & Firmographics



For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

[asked all respondents, n=202]



## **Awareness of Merger**

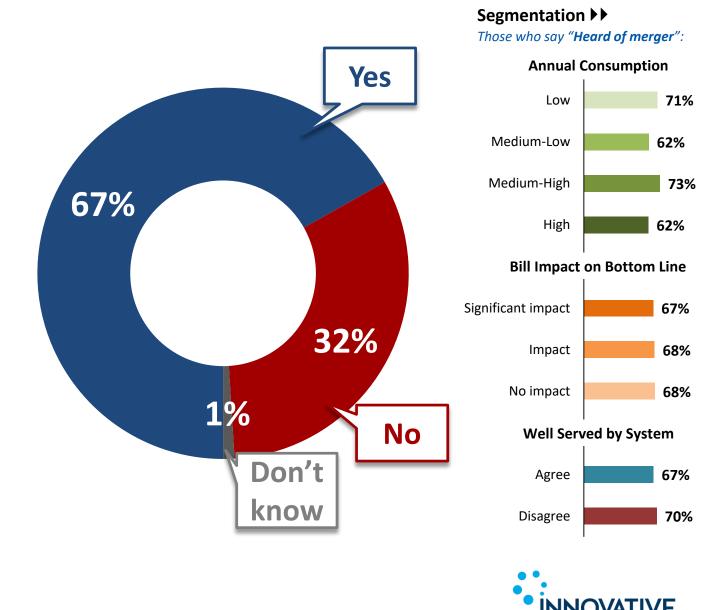
You may have recently heard that Enersource has merged with neighbouring electricity distributors to form a new company called Alectra Utilities.

FEE

Small

**Business** 

Had you heard of the Alectra Utilities merger before this survey? [asked all respondents, n=202]



**RESEARCH GROUP** 



## Familiarity with Enersource

First, let's talk about your experience. As you may know, Enersource operates and maintains the local electricity distribution system in Mississauga. This is the system that takes the electricity from provincial transmission lines and brings it to your home through a network of wires, poles and other equipment that is owned and operated by Enersource.

How familiar are you with Enersource? [asked all respondents, n=202]

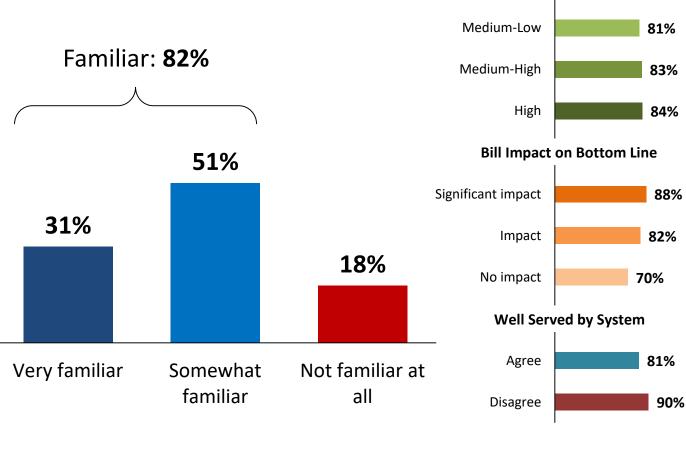
### Segmentation **>>**

Those who say "Familiar":

Low

**Annual Consumption** 

78%



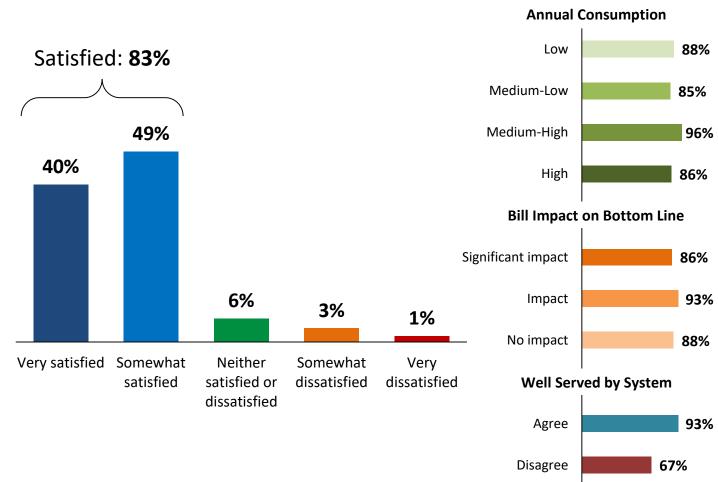


## Satisfaction with Services

In general, how satisfied or dissatisfied are you with the services your organization receives from Enersource? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

[asked all respondents, n=202]





Those who say "Satisfied":

ΓΞ

Small

**Business** 

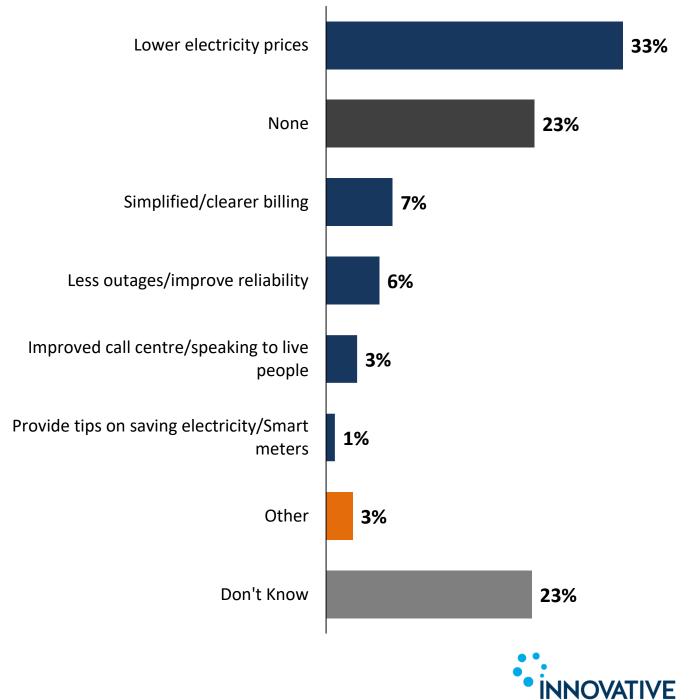


## Suggestions for Improvements



Is there anything in particular Enersource can do to improve its service to your organization?

[asked all respondents, n=202]



RESEARCH GROUP

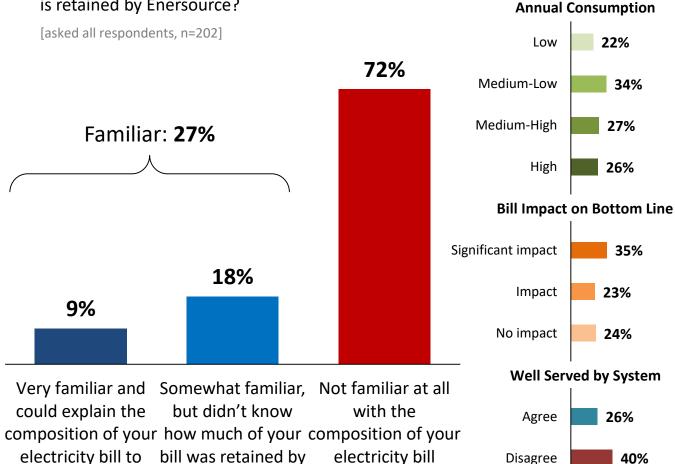
## Familiarity with Amount of Electricity Bill Remitted



I'd now like to talk with you about your electricity bill ... While Enersource is responsible for collecting payment for the entire electricity bill, they retain about 24% of the typical small business customer's bill. This is about \$73.33 on an average \$306.98 monthly small business electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by Enersource?

Segmentation **>>** Those who say "Familiar":



electricity bill to bothers in details

bill was retained by Enersource



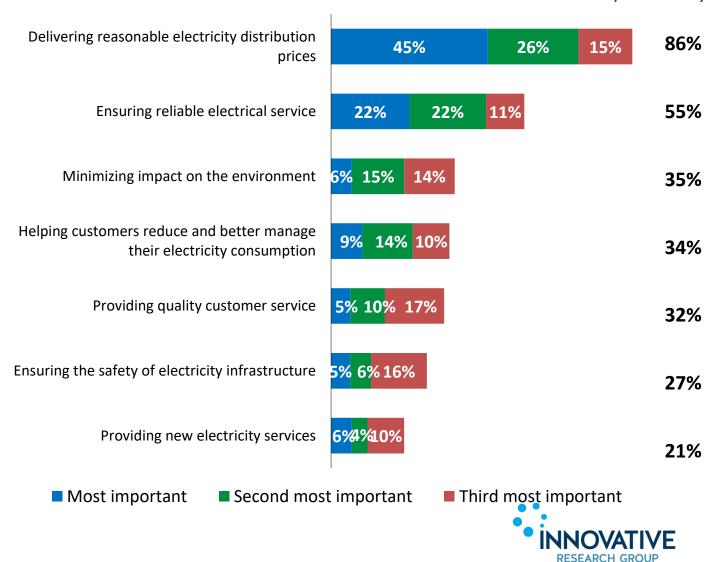
## **Customer Priorities**

Now lets talk about our second topic – outcomes. Enersource regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for Enersource.

Among the following Enersource priorities, please tell me which one is most important to you.

[asked all respondents, n=202, percentages are calculated based on the full sample] Top 3 Priority

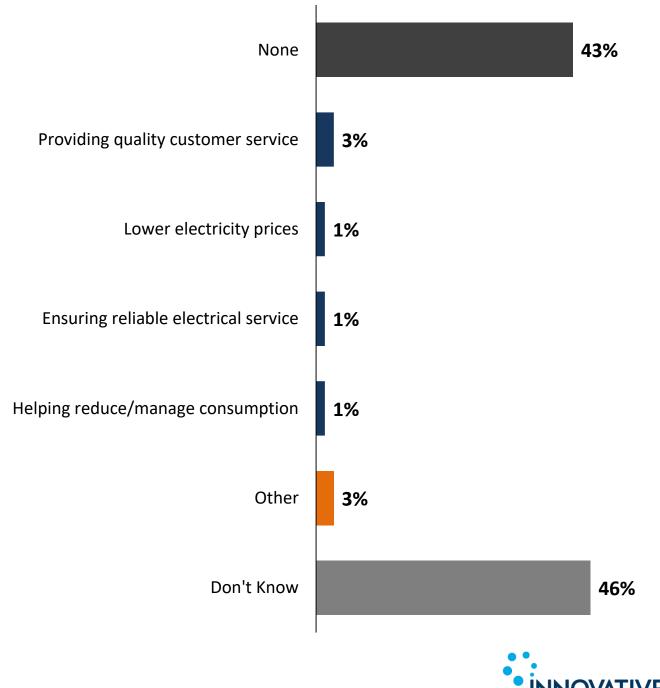


# Small Business

## **Additional Priorities**

Are there any other important priorities that Enersource should be focusing on that weren't included in the previous list I read to you?

[asked all respondents, n=202]



RESEARCH GROUP



## System Reliability

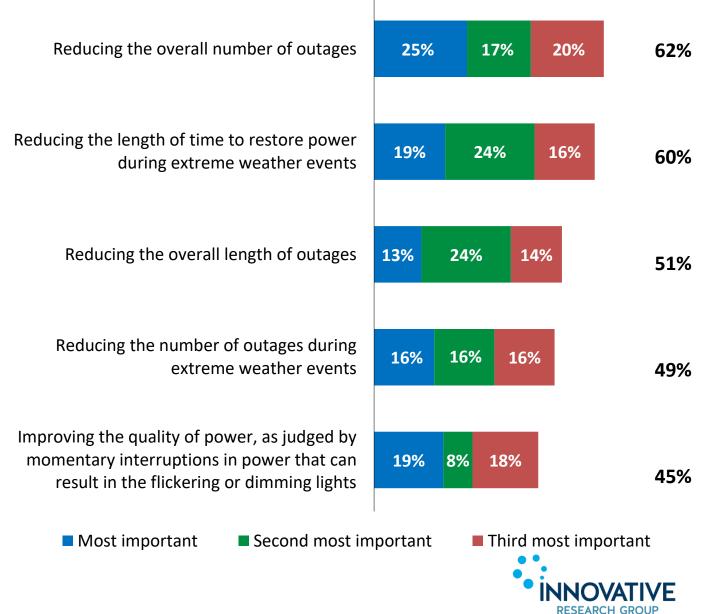
We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

[asked all respondents, n=202, percentages are calculated based on the full sample]

Top 3 Priority



## Familiarity with how **Electricity Rates are Set**

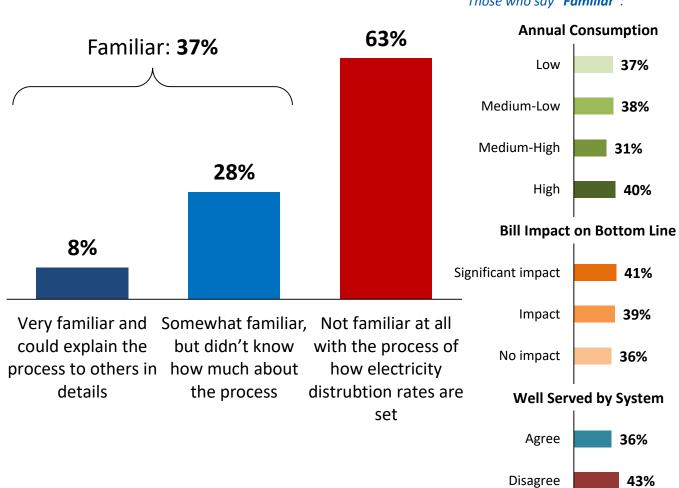


Now, lets turn to our third topic, investment trade-offs. The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distribution rates are set in Ontario? [asked all respondents, n=202] Segmentation **>>** 



Those who say "Familiar":



"Alectra Utilities is now starting to create its first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure."



## Investments in Aging Infrastructure

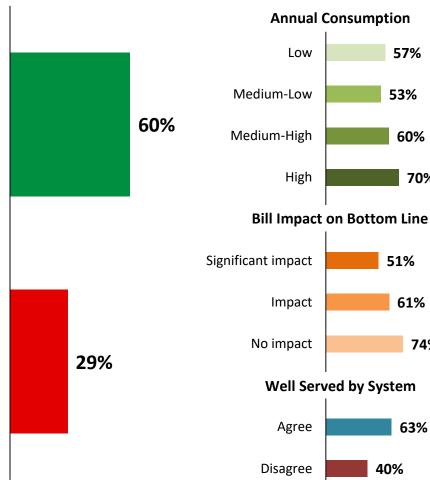
While Enersource works hard to prolong the life of the assets that make up Mississauga's distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.08 outages a year for an average of 35 minutes and 40 seconds. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 56% of unscheduled outages are as a result of equipment failure in the Enersource rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. Enersource must decide the pace at which it replaces this aging equipment.

#### Which of the following statements best represents your point of view?

[asked all respondents, n=202]

Enersource should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.

Enersource should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.



#### Segmentation >>

Those who say "invest what it takes to maintain system reliability":

57%

53%

60%

51%

61%

74%

63%

70%



# Fine Small Business

### **General Plant Investments**

As a company, Enersource needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information.

Which of the following statements best represents your point of view? [asked all respondents, n=202]

Enersource should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.

Enersource should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.

Segmentation **>>** Those who say "make necessary investments": **Annual Consumption** Low 63% Medium-Low 49% 55% Medium-High 58% High 52% **Bill Impact on Bottom Line** Significant impact 47% Impact 59% No impact 62% Well Served by System 37% Agree 61% Disagree 27%

ESEARCH GROUP

## **System Service Investments**

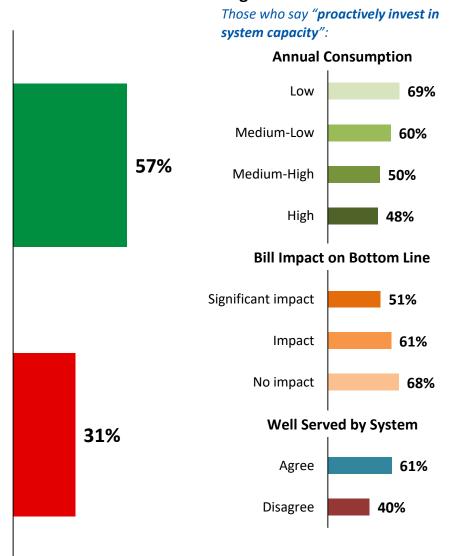
With growth in various parts of Mississauga comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view? Segmentation >>

[asked all respondents, n=202]

Enersource should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.

To help keep rate increases down, Enersource should delay investments in system capacity needs until customers start to experience a decline in reliability.





T

Small

## Modernizing the Distribution System

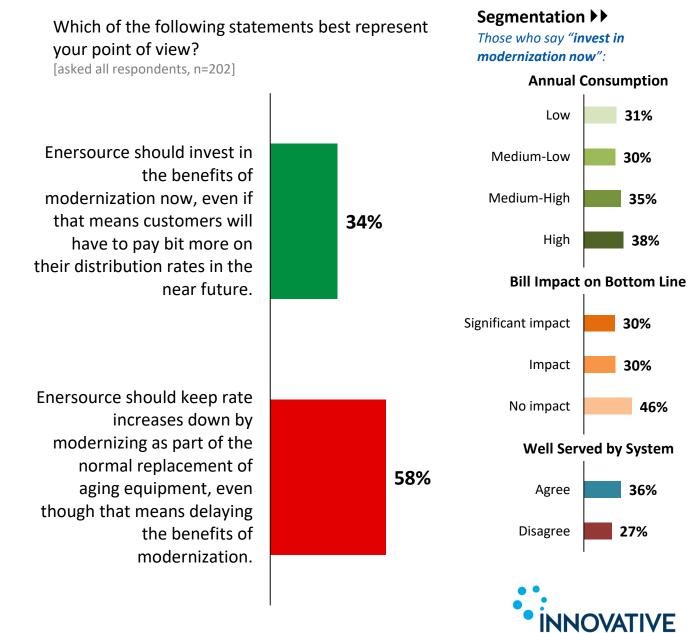
There are new technologies that Enersource can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliability or reduce the impact on the environment.

FI-T

Small

**Business** 

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

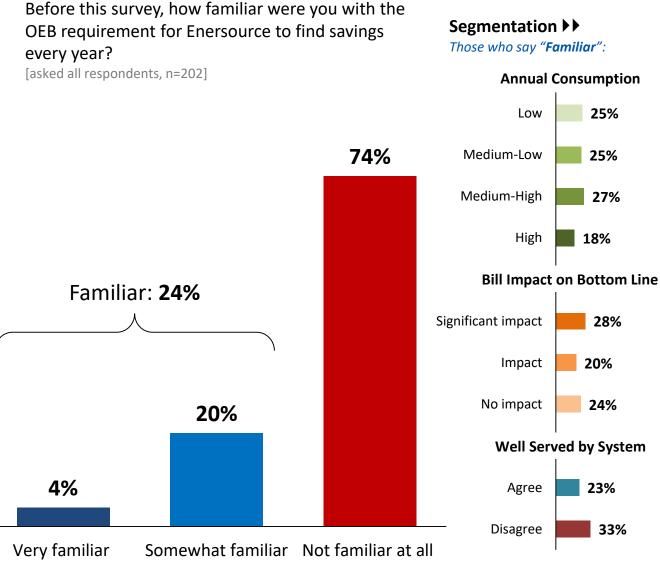


ESEARCH GROUP

## Familiarity with OEB "Cost Saving" Requirements



As we mentioned earlier, the rates you pay to Enersource are set by the OEB through a public process. Enersource's current rates were approved in a 2013 application and will be in place until 2027. Each year Enersource is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires Enersource to keep cost increases below inflation.





Note: 'Don't know' (2%) not shown.



"Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for Enersource to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, Enersource has identified two system renewal projects that need more investment than the existing budget allows. System renewal projects are a mix of replacing aging infrastructure and emergency repairs."

#### Leaky Transformers

"One of these projects deals with leaky transformers. Enersource has 25,000 transformers which are used to reduce the voltage of electricity as it moves from major transmission lines to the lines going into homes and businesses. Earlier this decade, Enersource identified a backlog of almost 4,000 transformers that show signs of leaking. By the end of this year, over 3,000 of these transformers will have been replaced. However, that will still leave over 600 needing replacement."



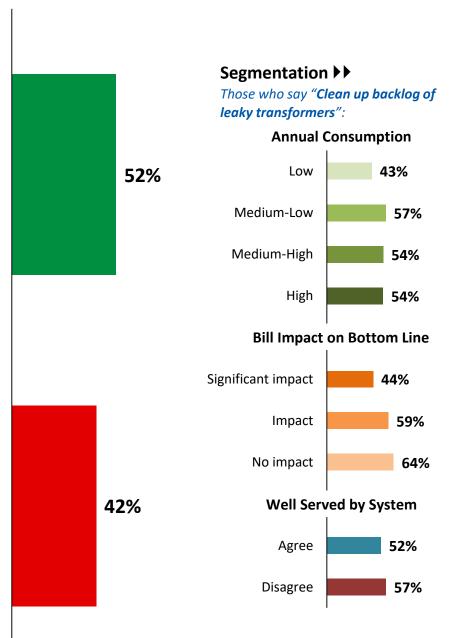
## Leaky Transformers

Which of the following is closest to your point of view regarding Ensource's proposed transformer replacement program?

[asked all respondents, n=202]

I am willing to have my bill increased by about 39 cents a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.

Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.





Small



"Another proposed project addresses the Rometown area Overhead system. There are 198 poles in this particular system. 68 out of 198 have been flagged as poor while another 56 are seen to be in fair condition. A total of 78 have been flagged for urgent replacement. This network of poles uses older technologies that will be replaced when the system is eventually rebuilt, but any repairs done today will have to use the older technology. It is more efficient to replace all the poles at once than to replace them one at a time but it costs less in the short run only to replace the poles most in need of repair."

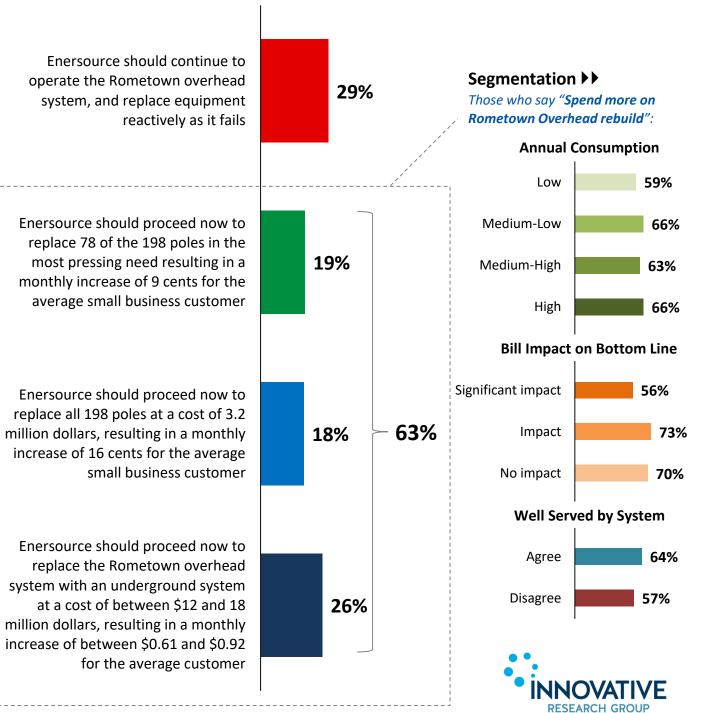


# Fine Small Business

### **Rometown Overhead**

Which of the following is closest to your point of view regarding Ensource's proposed Rometown Overhead system rebuild program?

[asked all respondents, n=202]



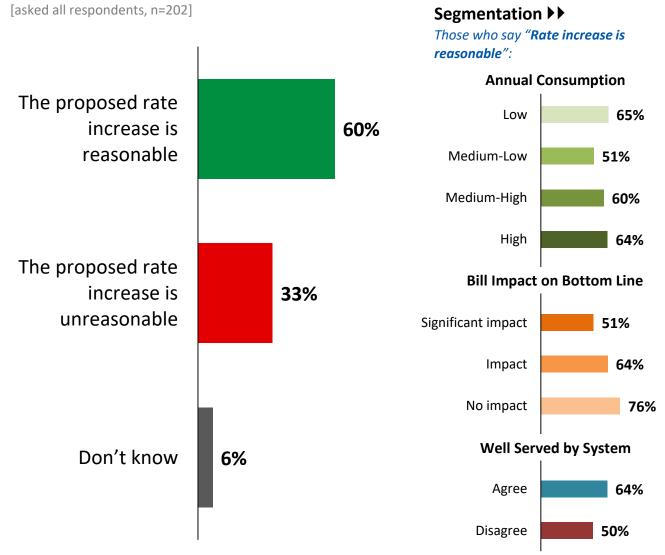
## **Opinion of Proposed ICM** Rate Impact



As I mentioned earlier, each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation. In order to reduce the backlog of leaking transformers and to replace the most high risk poles in the Rometown overhead system, Enersource would need to add a 48 cent charge to the typical small business customers monthly electricity bill, from 2019 to 2026.

That would result in an annual increase of \$5.76 each year over the course of the next eight years – *totalling \$46.08 over that period*.

What is your opinion on this proposed rate increase in 2019?







## **Mid-Sized Business Rate Class**





## Segmentation & Firmographics

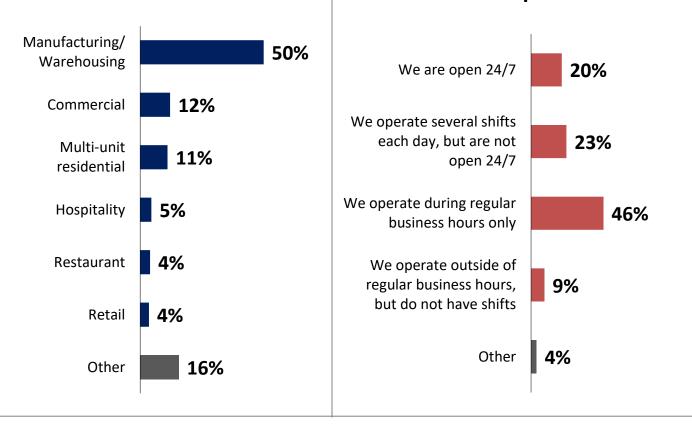
**Sector** 

Hours of Operation

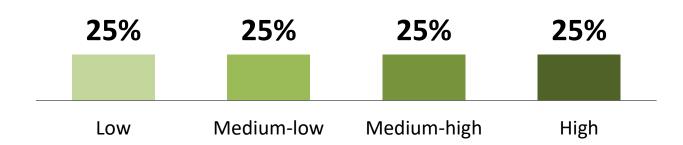
▦

Mid-Sized

**Business** 



#### **Annual Consumption**

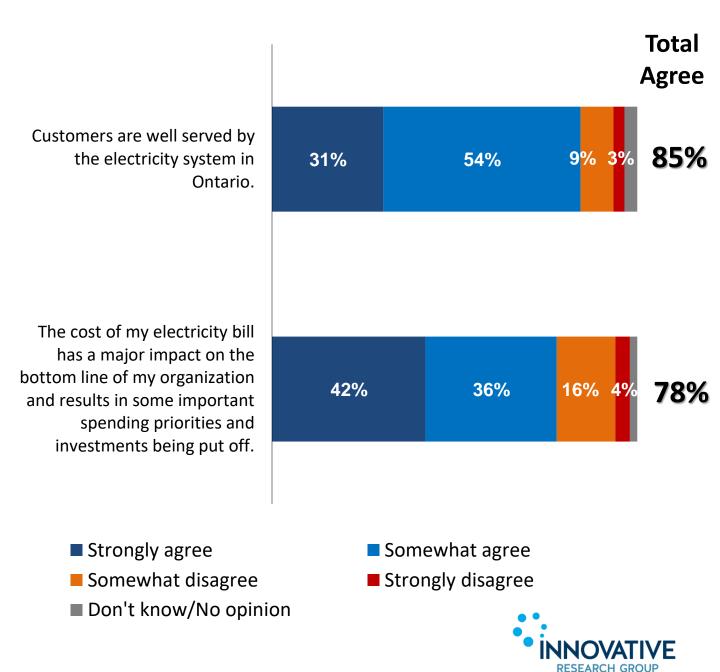


## Segmentation & Firmographics



For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

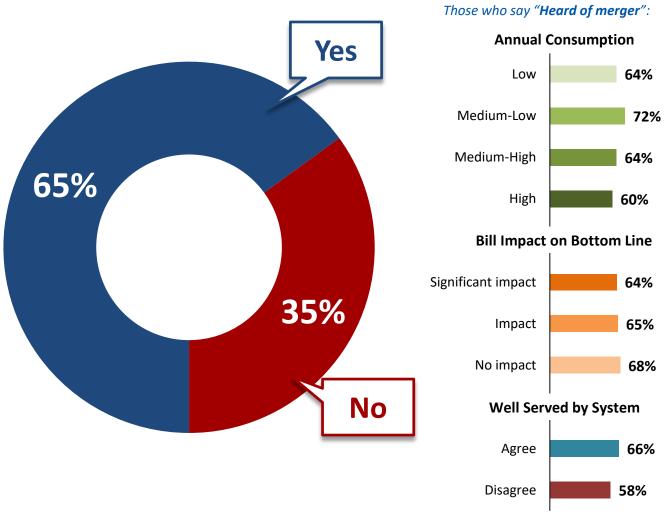
[asked all respondents, n=200]



## **Awareness of Merger**

You may have recently heard that Enersource has merged with neighbouring electricity distributors to form a new company called Alectra Utilities.

Had you heard of the Alectra Utilities merger before this survey? [asked all respondents, n=200]



Segmentation ▶▶

**Mid-Sized** 





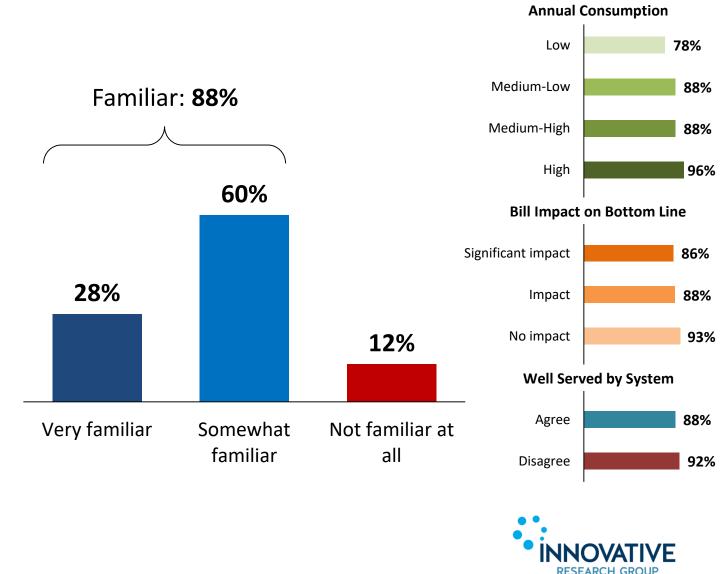
## Familiarity with Enersource

First, let's talk about your experience. As you may know, Enersource operates and maintains the local electricity distribution system in Mississauga. This is the system that takes the electricity from provincial transmission lines and brings it to your home through a network of wires, poles and other equipment that is owned and operated by Enersource.

How familiar are you with Enersource? [asked all respondents, n=200]

#### Segmentation **>>**

Those who say "Familiar":

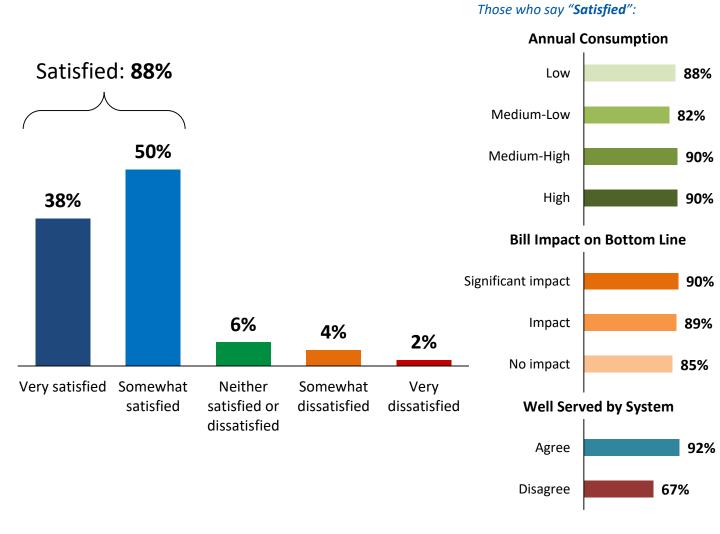


Note: 'Don't know' (1%) not shown.

## **Satisfaction with Services**

In general, how satisfied or dissatisfied are you with the services your organization receives from Enersource? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

[asked all respondents, n=200]





Segmentation ▶▶

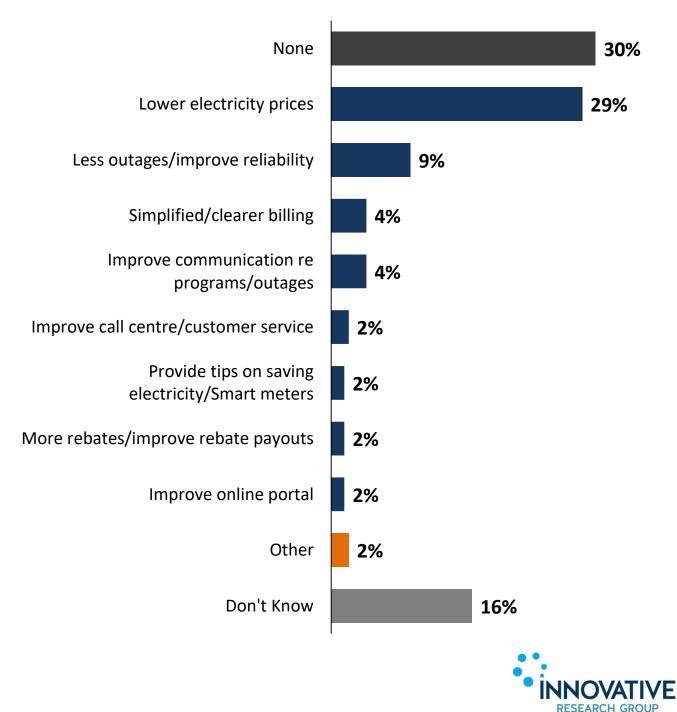
Mid-Sized

## Suggestions for Improvements



Is there anything in particular Enersource can do to improve its service to your organization?

[asked all respondents, n=200]



## Familiarity with Amount of Electricity Bill Remitted

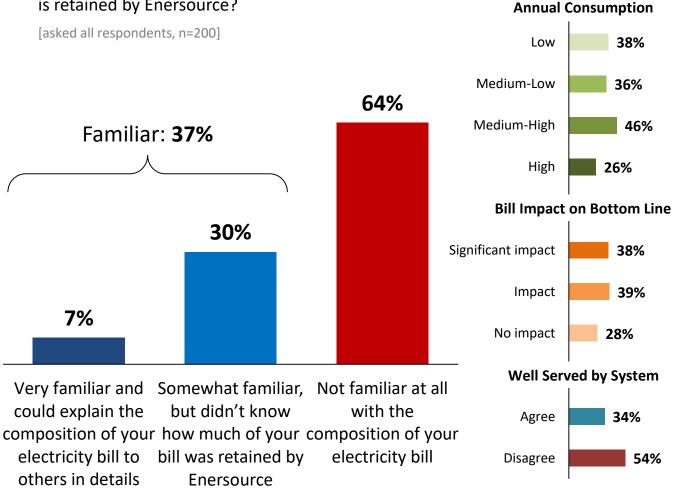
I'd now like to talk with you about your electricity bill ... While Enersource is responsible for collecting payment for the entire electricity bill, they retain about 8% of the typical mid-sized business customer's bill. This is about \$1,294.51 on an average \$16,862.84 monthly mid-sized business electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by Enersource?

Segmentation **>>** 

Those who say "Familiar":

Mid-Sized







## **Customer Priorities**

Now lets talk about our second topic – outcomes. Enersource regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for Enersource.

Among the following Enersource priorities, please tell me which one is most important to you.

[asked all respondents, n=200, percentages are calculated based on the full sample]

Top 3 Priority

Delivering reasonable electricity distribution prices	32%	32%	11%	74%
Ensuring reliable electrical service	30%	15% 12%		57%
Helping customers reduce and better manage their electricity consumption	14% 20%	21%		55%
Minimizing impact on the environment	5 <mark>%10%</mark> 17%			31%
Ensuring the safety of electricity infrastructure	<mark>8%</mark> 9% 14%			31%
Providing quality customer service	<mark>8%</mark> 7% 15%			29%
Providing new electricity services	<mark>3%8%</mark> 11%			22%
Most important Second most	t important	Third mos	t important	

RESEARCH GROUP

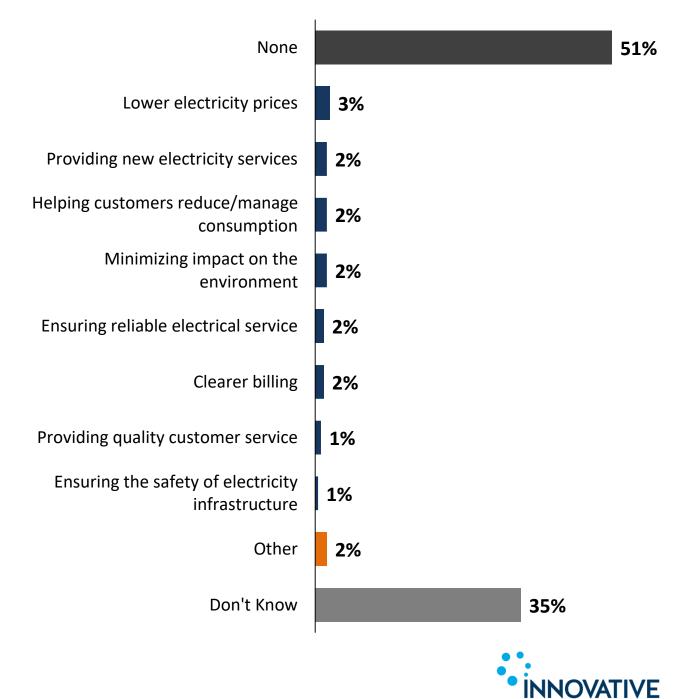
## **Additional Priorities**

Are there any other important priorities that Enersource should be focusing on that weren't included in the previous list I read to you?

Mid-Sized

**Business** 

[asked all respondents, n=200]



RESEARCH GROUP



## System Reliability

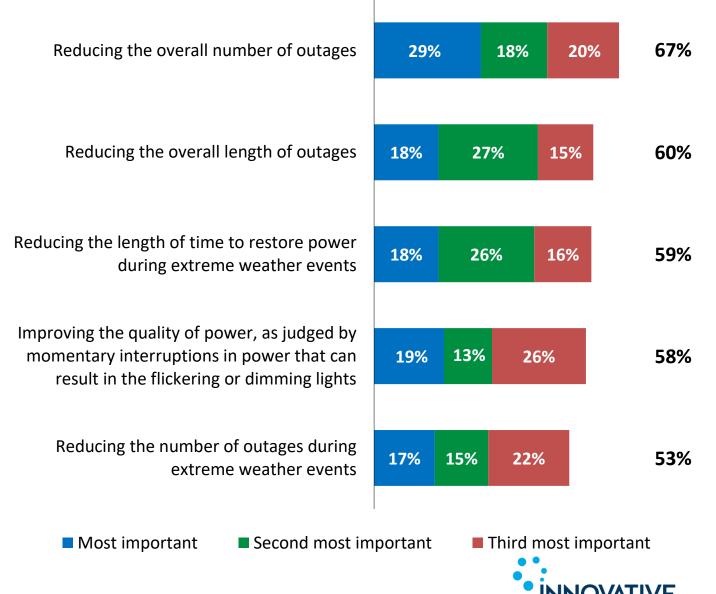
We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

[asked all respondents, n=200, percentages are calculated based on the full sample]

Top 3 Priority



RESEARCH GROUP

## Familiarity with how Electricity Rates are Set



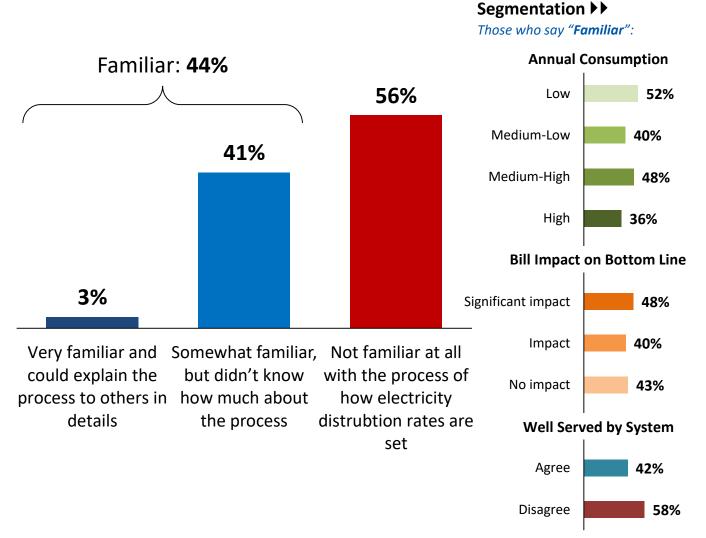
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*Now, lets turn to our third topic, investment trade-offs.* The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distribution rates are set in Ontario? [asked all respondents, n=200]



Mid-Sized Business

"Alectra Utilities is now starting to create its first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure."



## Investments in Aging Infrastructure

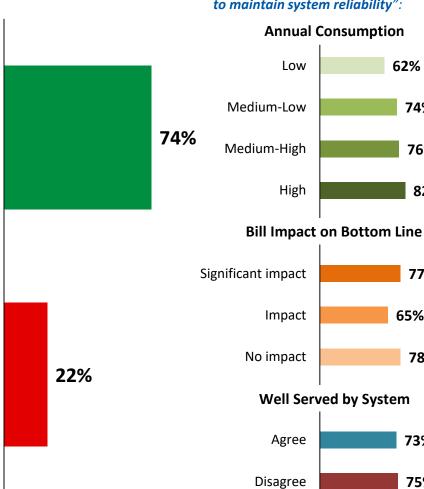
While Enersource works hard to prolong the life of the assets that make up Mississauga's distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.08 outages a year for an average of 35 minutes and 40 seconds. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 56% of unscheduled outages are as a result of equipment failure in the Enersource rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. Enersource must decide the pace at which it replaces this aging equipment.

#### Which of the following statements best represents your point of view?

[asked all respondents, n=200]

Enersource should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.

Enersource should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.



#### Segmentation >>

Those who say "invest what it takes to maintain system reliability":

Mid-Sized

**Business** 

62%

74%

76%

82%

77%

78%

73%

75%

65%

## **General Plant Investments**

As a company, Enersource needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [asked all respondents, n=200]

Enersource should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.

Enersource should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.

Those who say "make necessary investments": **Annual Consumption** Low 68% Medium-Low 56% 64% Medium-High 64% High 66% **Bill Impact on Bottom Line** Significant impact 68% Impact 65% No impact 55% Well Served by System 33% Agree 66% Disagree 50%

Segmentation **>>** 

ESEARCH GROUP

Mid-Sized

## System Service Investments

With growth in various parts of Mississauga comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view? Segmentation **>>** 

[asked all respondents, n=200] Those who say "proactively invest in system capacity": **Annual Consumption** Enersource should proactively invest in system Low capacity infrastructure to Medium-Low ensure customers in high growth areas do not 73% Medium-High experience a decrease in reliability, even if this adds a High small increase to customer bills. Significant impact Impact To help keep rate increases No impact down, Enersource should delay investments in system capacity needs until 23% customers start to

86% 66% 64% **Bill Impact on Bottom Line** 75% 68% 75% Well Served by System Agree 74% Disagree 67%



experience a decline in

reliability.

Mid-Sized

**Business** 

74%

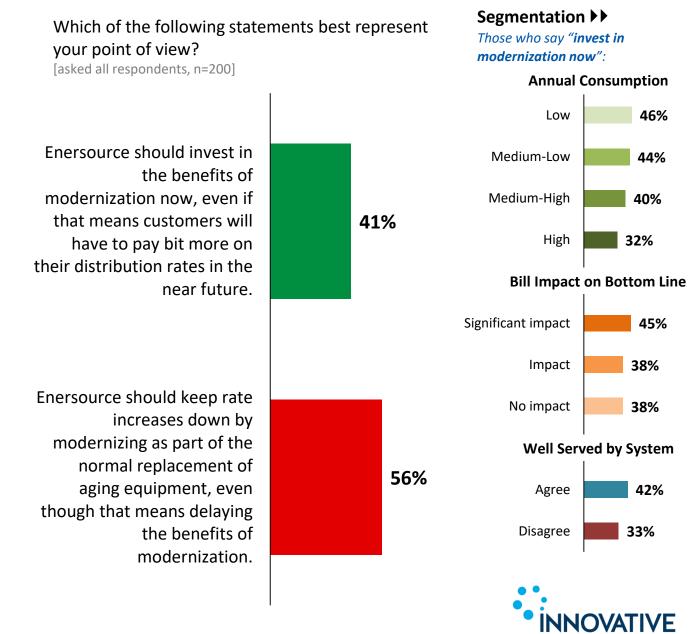
# Modernizing the Distribution System

There are new technologies that Enersource can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliability or reduce the impact on the environment.

Mid-Sized

**Business** 

These investments would create a better grid, but are not required to maintain the reliability that you experience today.



Note: 'Don't know' (3%), 'Refused' (1%) not shown.

ESEARCH GROUP

# Familiarity with OEB "Cost Saving" Requirements

Mid-Sized Business

As we mentioned earlier, the rates you pay to Enersource are set by the OEB through a public process. Enersource's current rates were approved in a 2013 application and will be in place until 2027. Each year Enersource is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires Enersource to keep cost increases below inflation.

Before this survey, how familiar were you with the Segmentation **>> OEB** requirement for Enersource to find savings Those who say "Familiar": every year? [asked all respondents, n=200] **Annual Consumption** 30% Low 74% Medium-Low 20% Medium-High 28% High 26% Familiar: 26% **Bill Impact on Bottom Line** Significant impact 31% Impact 19% 25% No impact 28% Well Served by System Agree 23% 1% Disagree 42% Very familiar Somewhat familiar Not familiar at all

Mid-Sized Business

"Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for Enersource to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, Enersource has identified two system renewal projects that need more investment than the existing budget allows. System renewal projects are a mix of replacing aging infrastructure and emergency repairs."

#### Leaky Transformers

"One of these projects deals with leaky transformers. Enersource has 25,000 transformers which are used to reduce the voltage of electricity as it moves from major transmission lines to the lines going into homes and businesses. Earlier this decade, Enersource identified a backlog of almost 4,000 transformers that show signs of leaking. By the end of this year, over 3,000 of these transformers will have been replaced. However, that will still leave over 600 needing replacement."



## Leaky Transformers

Which of the following is closest to your point of view regarding Ensource's proposed transformer replacement program?

[asked all respondents, n=200]

I am willing to have my bill increased by about \$6.21 a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.

Segmentation **>>** Those who say "Clean up backlog of leaky transformers": **Annual Consumption** Low 42% 40% Medium-Low 46% Medium-High 36% High 36% **Bill Impact on Bottom Line** Significant impact 37% Impact 40% No impact 45% Well Served by System 58% Agree 41% Disagree 33%

Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.

Note: 'Don't know' (3%) not shown.

Mid-Sized

Mid-Sized Business

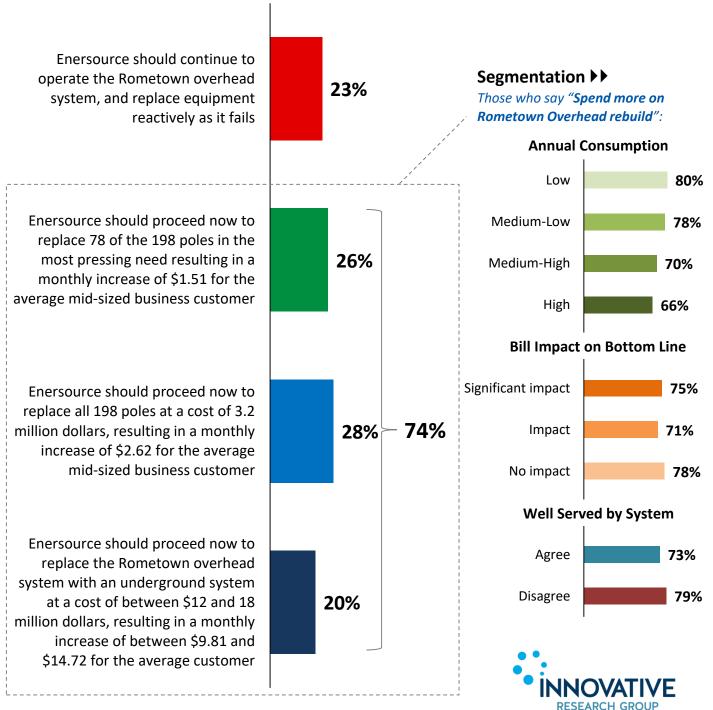
"Another proposed project addresses the Rometown area Overhead system. There are 198 poles in this particular system. 68 out of 198 have been flagged as poor while another 56 are seen to be in fair condition. A total of 78 have been flagged for urgent replacement. This network of poles uses older technologies that will be replaced when the system is eventually rebuilt, but any repairs done today will have to use the older technology. It is more efficient to replace all the poles at once than to replace them one at a time but it costs less in the short run only to replace the poles most in need of repair."



## Rometown Overhead

Which of the following is closest to your point of view regarding Enersource's proposed Rometown Overhead system rebuild program?

[asked all respondents, n=200]



Mid-Sized

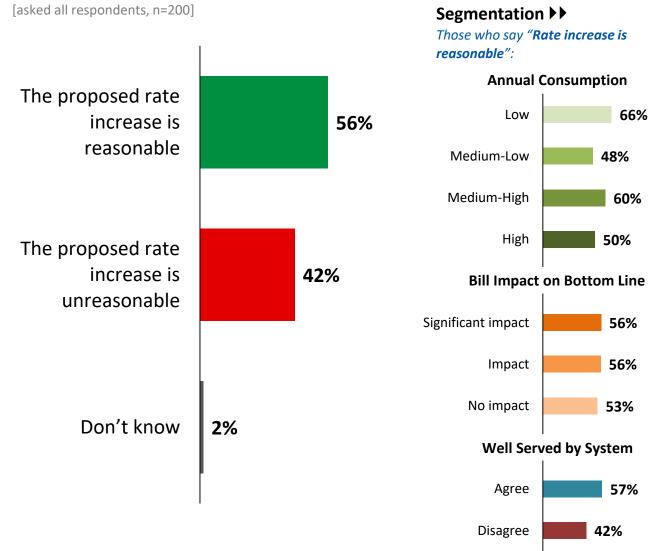
## **Opinion of Proposed ICM** Rate Impact

Mid-Sized Business

As I mentioned earlier, each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation. In order to reduce the backlog of leaking transformers and to replace the most high risk poles in the Rometown overhead system, Enersource would need to add a \$7.72 charge to the typical mid-sized business customers monthly electricity bill, from 2019 to 2026.

That would result in an annual increase of \$92.64 each year over the course of the next eight years – *totalling \$741.12 over that period*.

What is your opinion on this proposed rate increase in 2019?







# Large Use Customers (2MW+)



# **Custom Online Survey:** *Methodology*



## Survey Design

These are the findings of an **Innovative Research Group** (INNOVATIVE) online survey conducted among **Large Use customers** (2MW+) in the **Enersource rate zone** between May 17 and 29, 2018.

The focus of these surveys was to collect feedback on expectation, needs and preference as well as trade-offs related to DSPs and specific projects brought forward for the purposes of the ICM applications. Each of surveys were customized to reflect the estimated rate impacts for individual Large Use customers related to specific capital projects in the Enersource rate zone.

Alectra Utilities provided INNOVATIVE with an email contact list consisting of the prime contact for each of its **36 Large Use customers** in the Enersource rate zone. INNOVATIVE provided each key account contact with a unique URL via an email invitation so that only customers identified by Alectra Utilities were able to complete the survey and complete the survey only once.

Customers were sent <u>three reminder emails</u> to encourage survey participation. In addition, Alectra Utilities staff followed up with customers by telephone to encourage survey participation.

The analysis of this report is based on **9 of 36** Large Use customers in the Enersource rate zone (**a survey completion rate of 25%**).

Individual Large Use customers responses were anonymous and no identifiable respondent information was shared with Alectra Utilities. Responses were combined to protect the confidentiality of individual Large Use customers.

**Note**: Graphs and tables may not always total 100% due to rounding values rather than any error in data. Sums are added before rounding numbers. Caution interpreting results with small n-sizes.

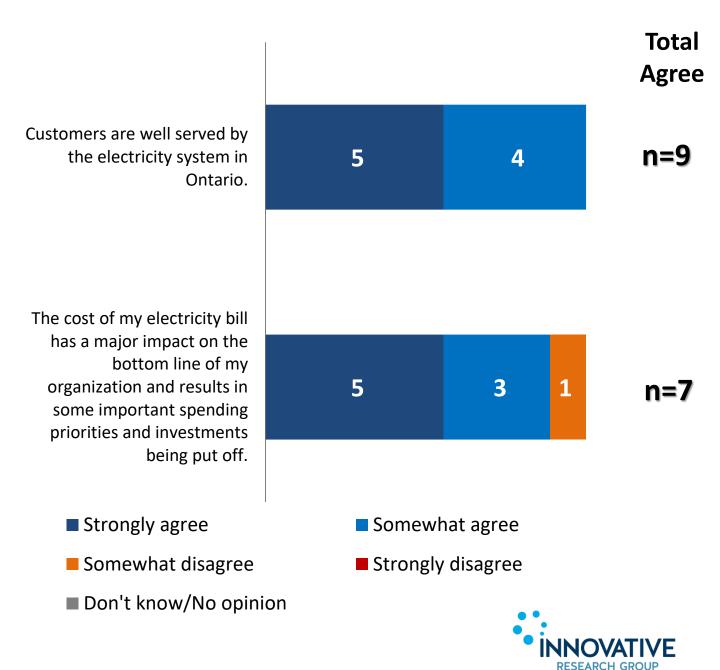


# Segmentation & Firmographics



For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

[asked all respondents, n=9]

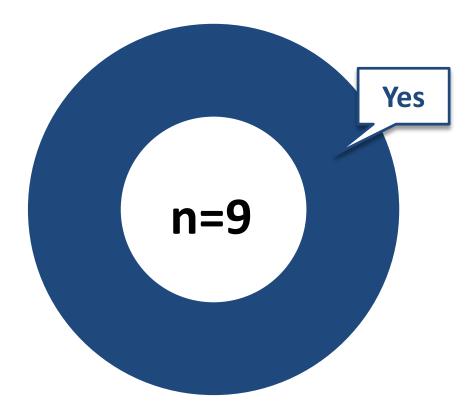


## **Awareness of Merger**



You may have recently heard that **Enersource** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

Had you heard of the Alectra Utilities merger before this survey? [asked all respondents, n=9]



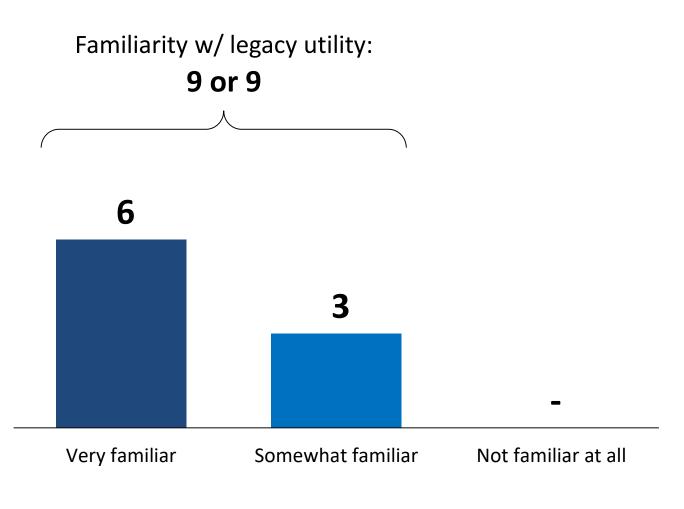


# Large Use (2MW+)

## Familiarity with Enersource

First, let's talk about your experience. As you may know, **Enersource** operates and maintains the local electricity distribution system in this area. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by **Enersource**.

How familiar are you with Enersource? [asked all respondents, n=9]





Note: 'Don't know' (0) not shown.

## Satisfaction with Services

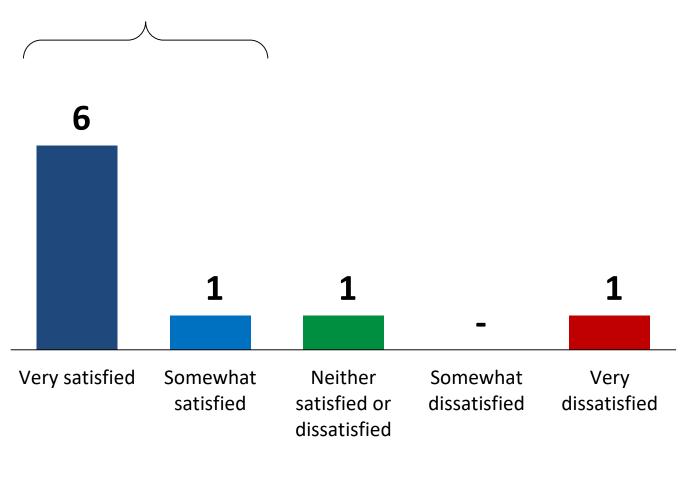
In general, how satisfied or dissatisfied are you with the services your organization receives from **Enersource**? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

Large Use

(2MW+)

[asked all respondents, n=9]

## Satisfied: 7 of 9



RESEARCH GROUP

## Suggestions for Improvements



Q

Is there anything in particular **Enersource** can do to improve its service to your organization?

[asked all respondents, n=9]

# 4 of 9 → Nothing/Don't know

## Verbatim:

#### **Respondent 1)**

Communication as to 'why?' During power outages communications should be improved to their large customers.

#### Respondent 2)

Enersource has been great in getting ahead of some of the distribution issues in the past and operates really well.

#### **Respondent 3)**

Improve reliability of the grid system to the customer. There has been many power disruptions lasting a few seconds that takes down the plant entirely, and at times more than one a day. Would like to see feedback from Enersource as to what they are doing to address these issues and more detail to what impacts our particular feed(s) that would help eliminate these problems.

#### Respondent 4)

We were very satisfied with Enersource and our relationship in terms of communication and reliability meetings. However, since the merger to Alectra, we have not heard from anyone and service has somewhat decreased. We want to restart our reliability meetings.

#### **Respondent 5)**

We would appreciate periodic meetings (quarterly), either face to face or thru calls, with an Account Manager, to discuss any pending changes to service or billing, and/or answer specific questions we my have.



# Familiarity with Amount of Electricity Bill Remitted



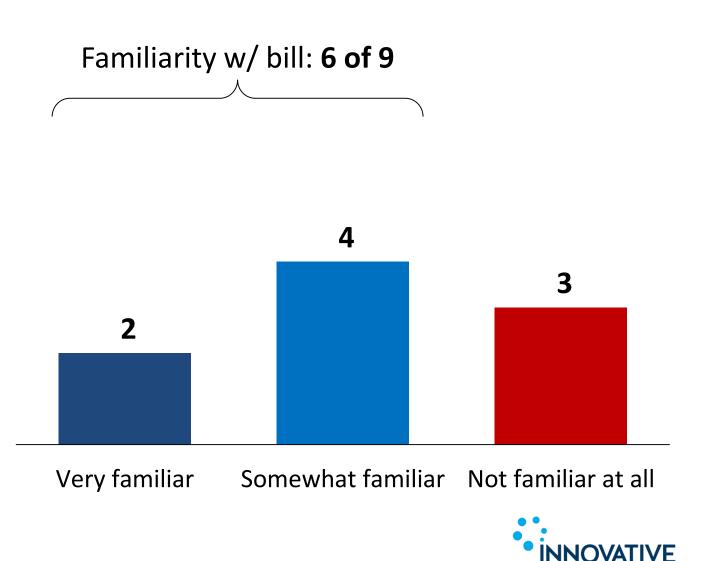
#### 0

The next question is specifically about [PIPE]'s electricity bill.

While **Enersource** is responsible for collecting payment for the entire electricity bill, they retain about [**PIPE**] of your organization's bill. This is about [**PIPE**] on your average [**PIPE**] monthly electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by **Enersource**?

[asked all respondents, n=9]



Note: 'Don't know' (0) not shown.

RESEARCH GROUP

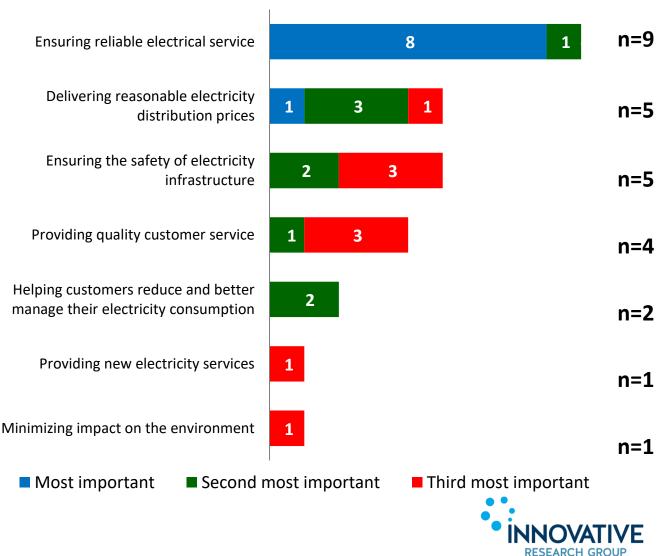
## **Customer Priorities**

Now lets turn to our second topic – outcomes. Enersource regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for Enersource.

Among the following Enersource priorities, please tell me which one is most important to you.

[asked all respondents, n=9]



Note: 'Don't know' (0) not shown.

Large Use

Top 3 Priority

(2MW+)

## **Additional Priorities**



Are there any other important priorities that Enersource should be focusing on that weren't included in the previous list I read to you?

[asked all respondents, n=12]

## 7 of 9 $\rightarrow$ No/Don't know

## Verbatim:

### **Respondent 1)**

- a) Electrical reliability is most important; increased maintenance surveys and improved infrastructure.
- b) Outage communications is also very important to us.

### **Respondent 2)**

Reliability is my most important priority.





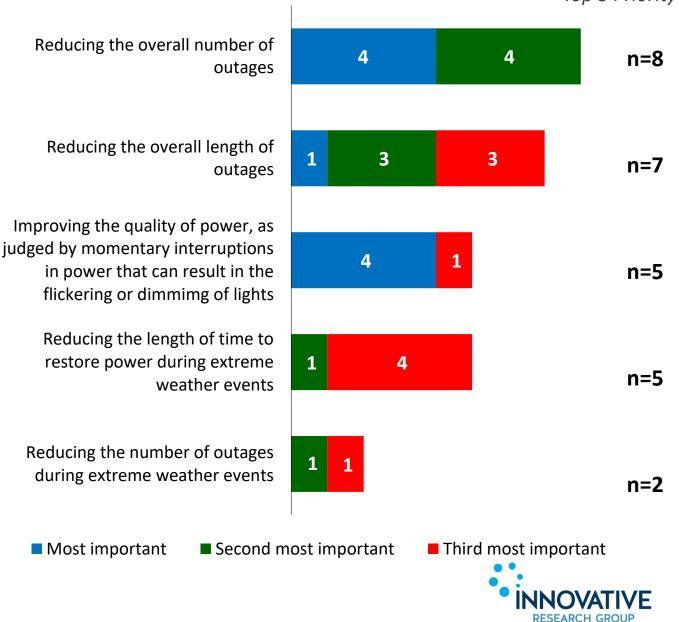
# System Reliability

### We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

[asked all respondents, n=9]



Top 3 Priority

Note: 'Don't know' (0) not shown.

## Familiarity with how Electricity Rates are Set

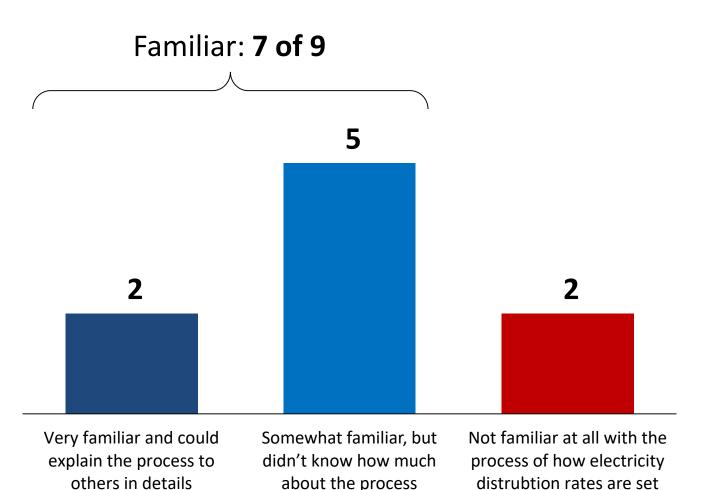


*Now, lets turn to our third topic: investment trade-offs*. The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the OEB. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distribution rates are set in Ontario? [asked all respondents, n=9]



Note: 'Don't know' (0) not shown.



"Alectra Utilities is now starting to create its first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure."



## Investments in Aging Infrastructure



While Enersource works hard to prolong the life of the assets that make up Mississauga's distribution system, eventually these assets reach the end of their useful life and require replacement.

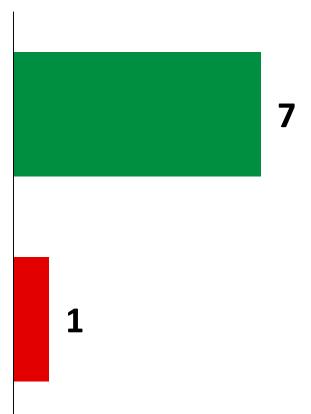
Currently the average customer experiences **1.08 outages** a year for an average of **35 minutes and 40 seconds**. When adjusted to remove outages due to loss of supply from the transmission system and major storms, **56% of unscheduled outages** are as a result of equipment failure in the Enersource rate zone.

However, it is not possible to predict exactly when a specific piece of aging equipment will fail. Enersource must decide the pace at which it replaces this aging equipment.

Which of the following statements best represents your point of view? [asked all respondents, n=9]

PowerStream should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.

PowerStream should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.



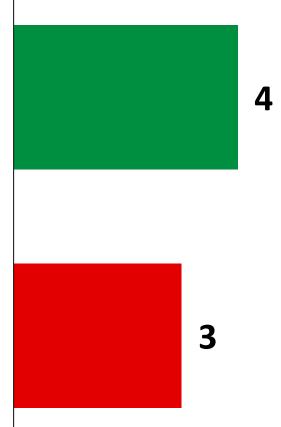
## **General Plant Investments**

As a company, Enersource needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information.

Which of the following statements best represents your point of view? [asked all respondents, n=9]

PowerStream should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.

PowerStream should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.





Large Use

(2MW+)

## **System Service Investments**

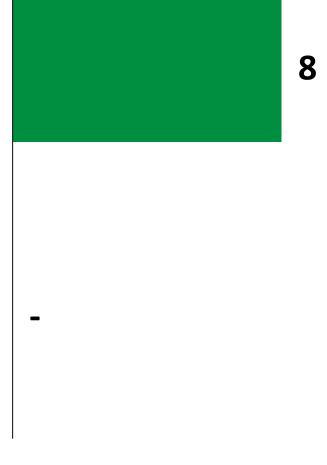
With growth in various parts of the Enersource service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

[asked all respondents, n=9]

PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.

To help keep rate increases down, PowerStream should delay investments in system capacity needs until customers start to experience a decline in reliability.





Large Use

(2MW+)

# Modernizing the Distribution System



Q

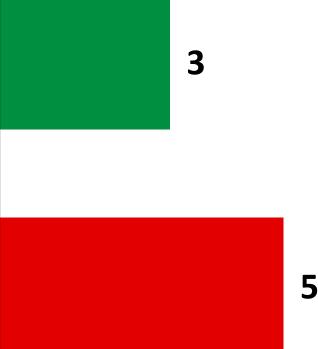
There are new technologies that Enersource can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliability or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [asked all respondents, n=9]

PowerStream should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.

PowerStream should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.





Note: 'Don't know' (n=1) not shown.

# Familiarity with OEB "Cost Saving" Requirements

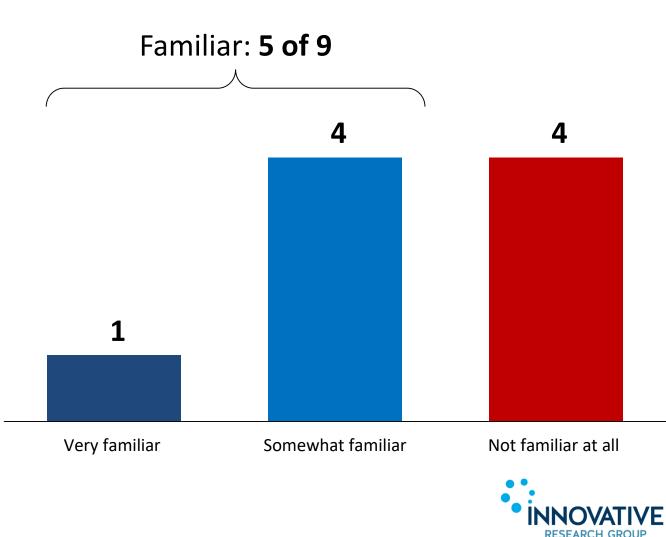


As we mentioned earlier, the rates you pay to Enersource are set by the OEB through a public process. Enersource's current rates were approved in a 2013 application and will be in place until 2027.

Each year Enersource is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires Enersource to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for Enersource to find savings every year?

[asked all respondents, n=9]



Note: 'Don't know' (0) not shown.

Large Use (2MW+)

"Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for Enersource to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, Enersource has identified two system renewal projects that need more investment than the existing budget allows. System renewal projects are a mix of replacing aging infrastructure and emergency repairs."

## Leaky Transformers

"One of these projects deals with leaky transformers. Enersource has 25,000 transformers which are used to reduce the voltage of electricity as it moves from major transmission lines to the lines going into homes and businesses. Earlier this decade, Enersource identified a backlog of almost 4,000 transformers that show signs of leaking. By the end of this year, over 3,000 of these transformers will have been replaced. However, that will still leave over 600 needing replacement."



## Leaky Transformers



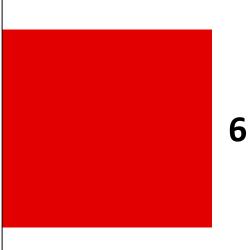
Which of the following is closest to your point of view regarding Ensource's proposed transformer replacement program?

[asked all respondents, n=9]

I am willing to have my bill increased by about \$[PIPE] a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.



Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.





Note: 'Don't know' (0) not shown.

Large Use (2MW+)

"Another proposed project addresses the Rometown area Overhead system. There are 198 poles in this particular system.

- 68 out of 198 have been flagged as poor while another 56 are seen to be in fair condition.
- A total of 78 have been flagged for urgent replacement.

This network of poles uses older technologies that will be replaced when the system is eventually rebuilt, but any repairs done today will have to use the older technology. It is more efficient to replace all the poles at once than to replace them one at a time but it costs less in the short run only to replace the poles most in need of repair."



# Mid-Sized Business

## **Rometown Overhead**

Which of the following is closest to your point of view regarding Enersource's proposed Rometown Overhead system rebuild program?

[asked all respondents, n=200]

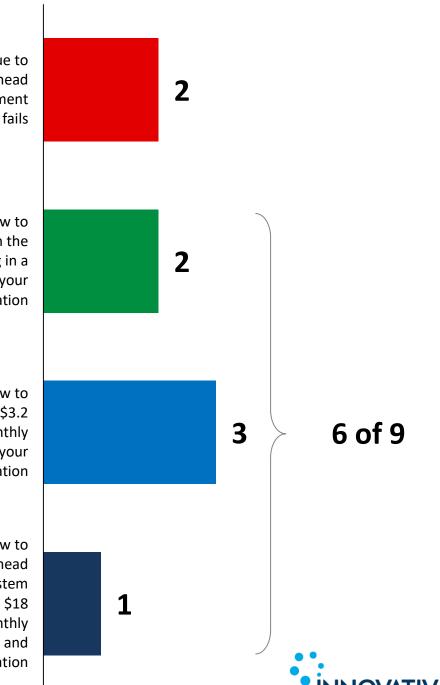
Enersource should continue to operate the Rometown overhead system, and replace equipment reactively as it fails

Enersource should proceed now to replace 78 of the 198 poles in the most pressing need resulting in a monthly increase of \$[PIPE] for your organization

Enersource should proceed now to replace all 198 poles at a cost of \$3.2 million, resulting in a monthly increase of \$[PIPE] for your organization

Enersource should proceed now to replace the Rometown overhead system with an underground system at a cost of between \$12 and \$18 million dollars, resulting in a monthly increase of between \$[PIPE] and \$[PIPE] for your organization

Note: 'Don't know' (1) not shown.



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# **Opinion of Proposed ICM** Rate Impact

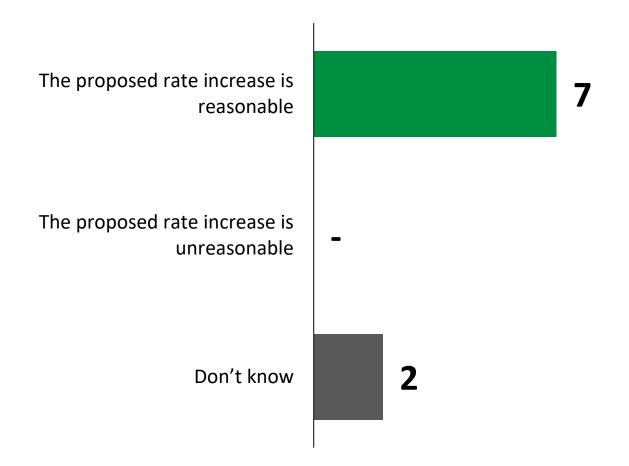


As I mentioned earlier, each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation.

In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, Enersource would need to add a [**PIPE**] charge to the typical mid-sized business customers monthly electricity bill, from 2019 to 2026.

That would result in an annual increase of [**PIPE**] each year over the course of the next eight years – *totalling* [**PIPE**] *over that period*.

What is your opinion on this proposed rate increase in 2019? [asked all respondents, n=9]



## **Final Thoughts**



Q

Before this survey concludes, do you have any additional comments or feedback you'd like to share with Alectra Utilities?

Note: all feedback is anonymous and you will <u>not</u> be identified to Alectra Utilities without your expressed permission.

# 6 of 9 → Nothing/Don't know

## Verbatim:

#### **Respondent 1)**

Alectra/Enersource should find efficiencies to cover the cost of the projects rather than result in increased billing costs.

#### **Respondent 2)**

Thank you for all your help in getting our facilities on-boarded with the recent changes at Alectra.

#### **Respondent 3)**

We would like to continue with quarterly or biannual reliability meetings with Alectra, like we did with Enersource. We had developed a really good relationship.

We need strong communications and continued strong relationship with engineering department to respond back to inquiries.



## Building Understanding.

Personalized research to connect you and your audiences.

For more information, please contact:

## **Jason Lockhart**

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### **Julian Garas**

Senior Consultant (t) 416-640-4133 (e) jgaras@innovativeresearch.ca Appendix 2.0



# PowerStream Rate Zone 2019 ICM Application Consultation





MAY 2018 STRICTLY PRIVILEGED AND CONFIDENTIAL

# **Survey Methodologies**



### **Field and Design**

For the quantitative portion of the customer consultation, Alectra Utilities invited **PowerStream** heritage customers from three rate classes to participate in a 10-15 minute telephone survey.

- The residential survey fielded from May 10-22, 2018 amongst n=505 residential customers, with a margin of error of ±4.4%, 19 times out of 20.
- The small business survey fielded from May 11-24, 2018 amongst n=205 small business customers, with a margin of error of ±6.8%, 19 times out of 20.
- The mid-market survey fielded from May 11-28, 2018 amongst n=200 mid-market business customers, with a margin of error of ±6.9%, 19 times out of 20.

INNOVATIVE conducted all interviews through its computer assisted telephone interviewing (CATI) system.

This generalizable telephone survey used a stratified random sampling approach based on known characteristics of customers including region and consumption by rate class (residential, GS<50kW and GS>50kW).

Sample lists were provided by Alectra Utilities. Screening questions were designed to ensure only customers who received an electricity bill from Alectra Utilities were included. In addition, residential customers needed to have primary or shared responsibility over their household's electricity bill and only the organization's decision makers on electricity use were included in the business completes. Business customers could also be household customers of Alectra Utilities, but were reminded to respond as their organization's decision-maker as best as possible.

**Note**: Graphs and tables may not always total 100% due to rounding values rather than any error in data. Sums are added before rounding numbers. Caution interpreting results with small n-sizes.



# **Consumption Quartiles**

The tables below illustrate the strata divisions for each rate class, based on region and consumption quartiles.

Dividing customer sample into quartiles based on known characteristics was used to develop accurate quotas to ensure the sample was representative of PowerStream's customer base.

	Region	Low	Medium-Low	Medium-High	High	Total
Residential	Aurora	8	7	8	8	31
	Barrie	20	20	19	20	79
	Bradford	3	3	3	3	12
	Markham	37	33	36	32	138
	Richmond Hill	23	22	20	23	88
	Vaughan	29	34	32	34	129
	Other	7	7	7	7	28
	Total	127	126	125	127	505

	Region	Low	Medium-Low	Medium-High	High	Total
	Aurora	3	3	0	3	9
SS	Barrie	8	8	14	11	41
Business	Bradford	1	1	1	2	5
Small Bus	Markham	9	14	8	9	40
	Richmond Hill	6	5	5	5	21
Sm	Vaughan	19	15	22	17	73
	Other	6	4	2	4	16
	Total	52	50	52	51	205

Rate Class	Low	Medium- Low	Medium- High	High	Total
Mid-Market	n=50	n=50	n=50	n=50	n=200

Note: Due to small sample size, no regional quotas were set for mid-market customers in the PowerStream rate zone.





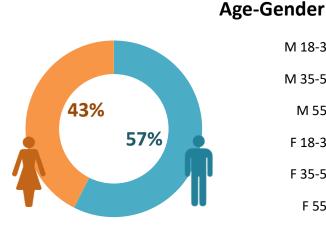


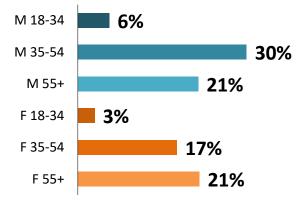
# **Residential Rate Class**



## Segmentation & Demographics

Residential





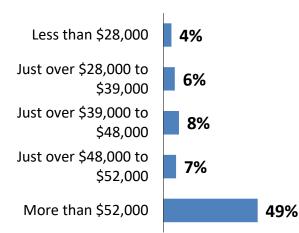
Note: 'Refused' (2%) not shown.

### **Household Size**

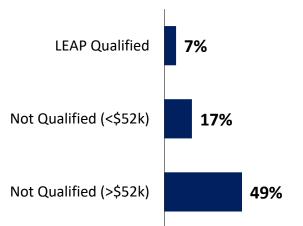


Note: 'Refused' (2%) not shown.

### Household Income After Tax



**LEAP Qualification** 



Note: 'Refused' (24%), 'Not sure' (2%) not shown.

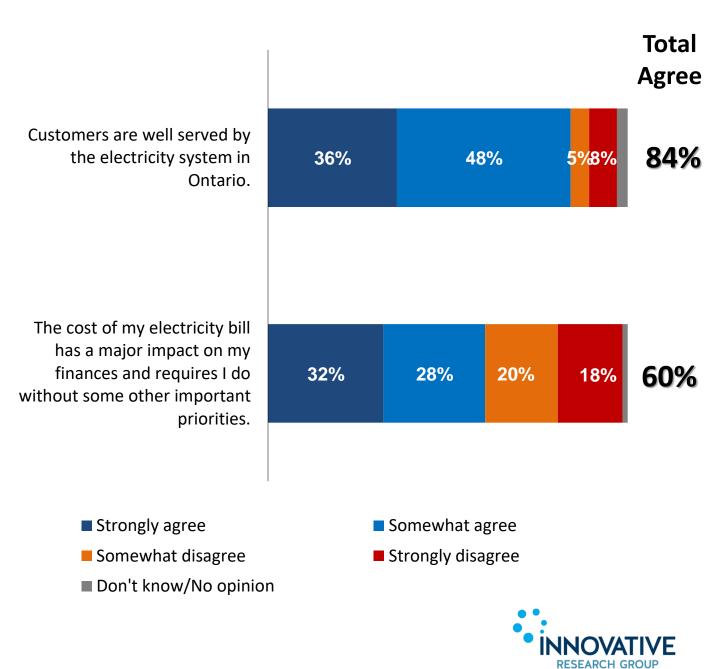
Note: 'Refused' (24%), 'Not sure' (2%) not shown.

## Segmentation & Demographics



For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

[asked all respondents, n=505]

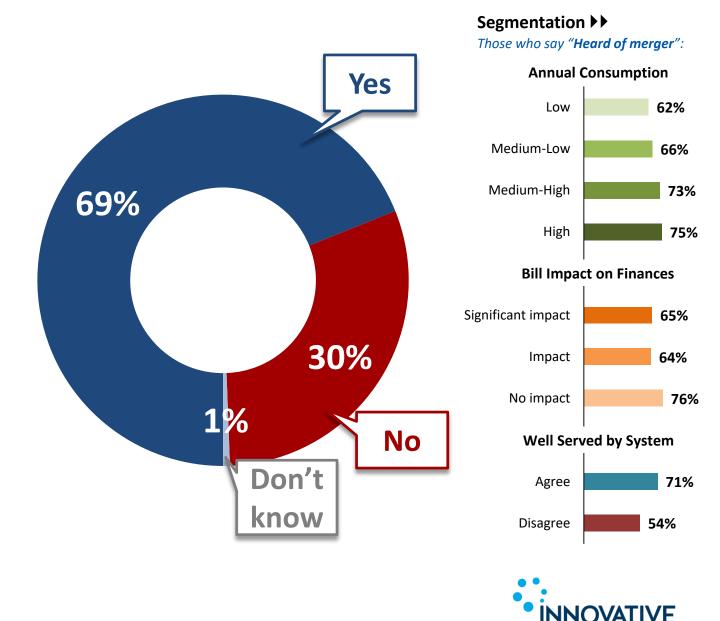


## **Awareness of Merger**



You may have recently heard that PowerStream has merged with neighbouring electricity distributors to form a new company called Alectra Utilities.

Had you heard of the Alectra Utilities merger before this survey? [asked all respondents, n=505]



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## Familiarity with PowerStream

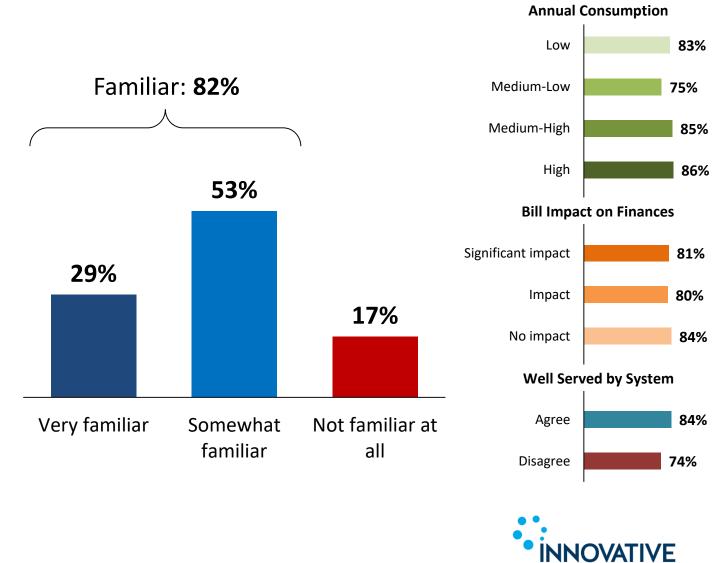


Firstly, let's talk about your experience. As you may know, PowerStream operates and maintains the local electricity distribution system in this area. This is the system that takes the electricity from provincial transmission lines and brings it to your home through a network of wires, poles and other equipment that is owned and operated by PowerStream.

How familiar are you with PowerStream? [asked all respondents, n=505]

Segmentation **>>** 





RESEARCH GROUP

## **Satisfaction with Services**

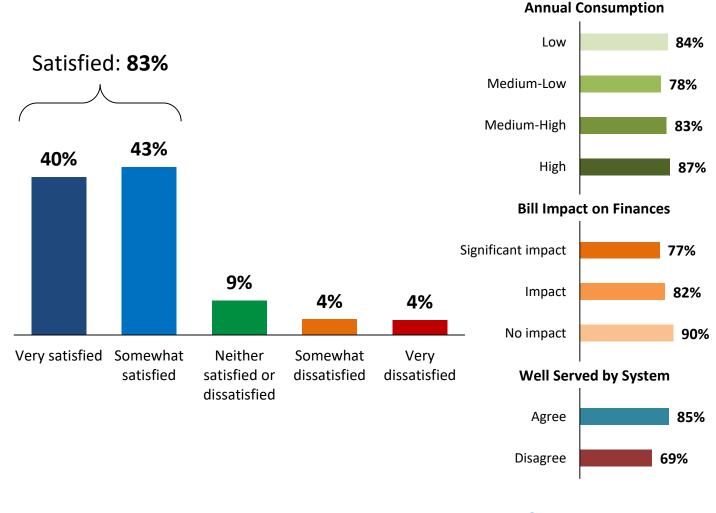


In general, how satisfied or dissatisfied are you with the services you receive from PowerStream? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

[asked all respondents, n=505]



Those who say "Satisfied":



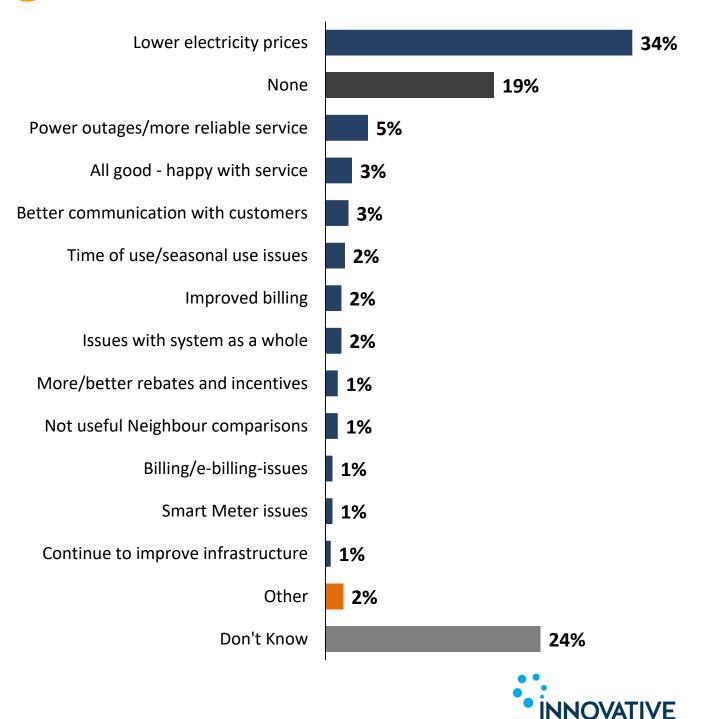


## Suggestions for Improvements



Q

Is there anything in particular PowerStream can do to improve its service to you? [asked all respondents, n=505]



RESEARCH GROUP

## Familiarity with Amount of Electricity Bill Remitted



I'd now like to talk with you about your electricity bill ... While Powerstream is responsible for collecting payment for the entire electricity bill, they retain about 26% of the typical residential customer's bill. This is about \$28.48 on an average \$108.81 monthly residential electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with Segmentation **>>** the percentage of your electricity bill that is Those who say "Familiar": retained by PowerStream? **Annual Consumption** [asked all respondents, n=505] 27% Low Medium-Low 32% Medium-High 35% 62% Familiar: 33% High 39% **Bill Impact on Finances** Significant impact 35% 25% Impact 32% No impact 31% 8% Well Served by System Agree 33% Very familiar and Somewhat familiar, Not familiar at all with could explain the but didn't know how the composition of Disagree 35% composition of your much of your bill was your electricity bill

electricity bill to others in details retained by

PowerStream

# Residential

#### **Customer Priorities**

Now lets talk about our second topic – outcomes. PowerStream regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for PowerStream.

Among the following PowerStream priorities, please tell me which one is most important to you.

[asked all respondents, n=505, percentages are calculated based on the full sample]

Top 3 Priority

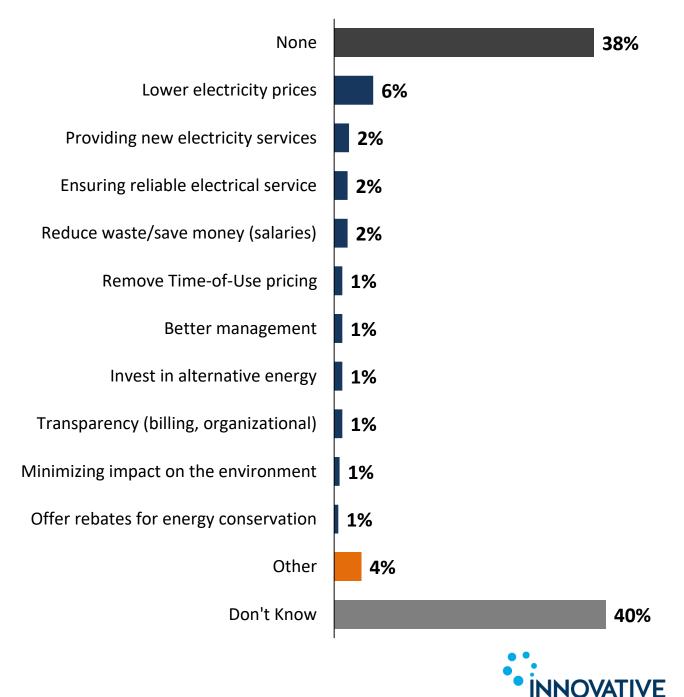
Delivering reasonable electricity distribution prices	40%		24%	13%	77%
Ensuring reliable electrical service	22%	24%	12%		57%
Minimizing impact on the environment	<mark>9%</mark> 11%	18%			38%
Helping customers reduce and better manage their electricity consumption	<mark>8%</mark> 11%	13%			31%
Ensuring the safety of electricity infrastructure	<mark>8%</mark> 9% 1	14%			31%
Providing quality customer service	5 <mark>%</mark> 9% 13	%			27%
Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation)	<mark>6%</mark> 9%  9%	6			24%
Most important Second most important Third most important					



#### **Additional Priorities**

Are there any other important priorities that PowerStream should be focusing on that weren't included in the previous list I read to you?

[asked all respondents, n=505]





#### **System Reliability**

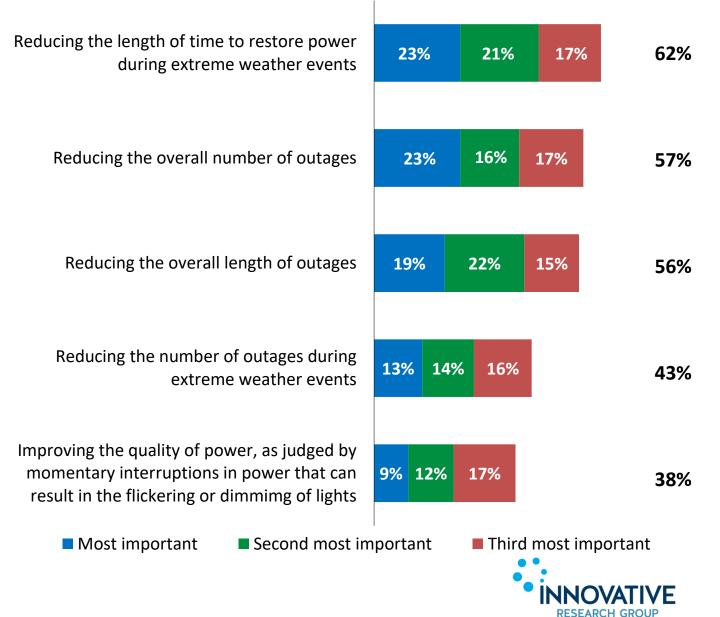
We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

[asked all respondents, n=505, percentages are calculated based on the full sample]

Top 3 Priority



#### Familiarity with how Electricity Rates are Set

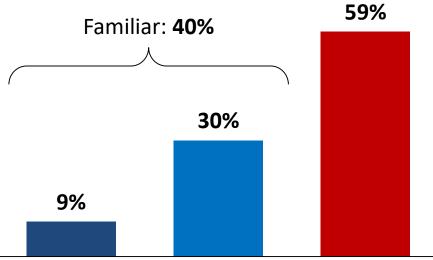


*Now, lets turn to our third topic, investment trade-offs.* The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

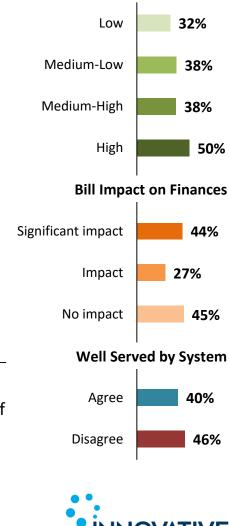
Before this survey, how familiar were you with how electricity distribution rates are set in Ontario? [asked all respondents, n=505]



Very familiar and Somewhat familiar, Not familiar at all could explain the but didn't know with the process of process to others how much about how electricity in details the process distrubtion rates are set Segmentation ►►

Those who say "Familiar":

**Annual Consumption** 



Note: 'Don't know' (1%) not shown.



"Alectra Utilities is now starting to create its first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure."



#### Investments in Aging Infrastructure

Residential

While PowerStream works hard to prolong the life of the assets that make up its distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences **1.1 outages a year for an average of 57 minutes**. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 42% of unscheduled outages are as a result of equipment failure in the PowerStream rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. PowerStream must decide the pace at which it replaces this aging equipment.

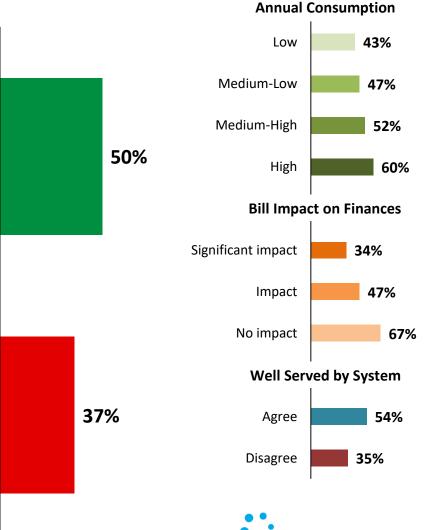
#### Which of the following statements best represents your point of view? [asked all respondents, n=505]

Segmentation ►►

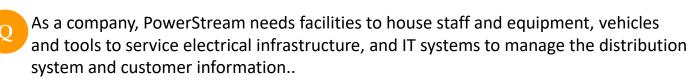
Those who say "Invest what it takes":

PowerStream should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.

PowerStream should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.



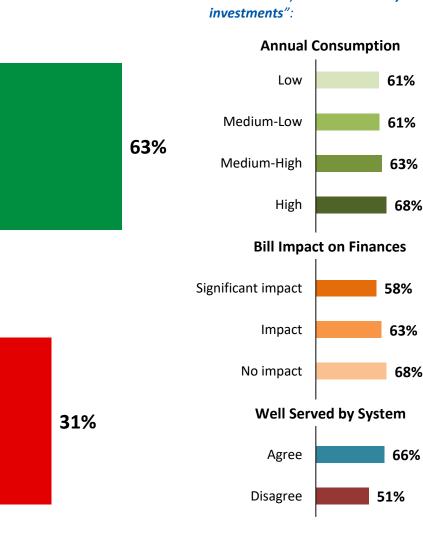
## **General Plant Investments**



Which of the following statements best represents your point of view? [asked all respondents, n=505]

PowerStream should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.

PowerStream should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.





Segmentation ▶▶ Those who say "make necessary

Residential

#### **System Service Investments**

With growth in various parts of the PowerStream service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

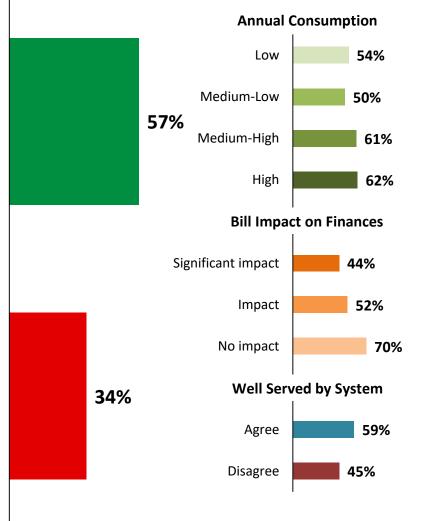
[asked all respondents, n=505]

PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.

To help keep rate increases down, PowerStream should delay investments in system capacity needs until customers start to experience a decline in reliability. Segmentation **>>** 

Those who say "proactively invest in system capacity":

Residential



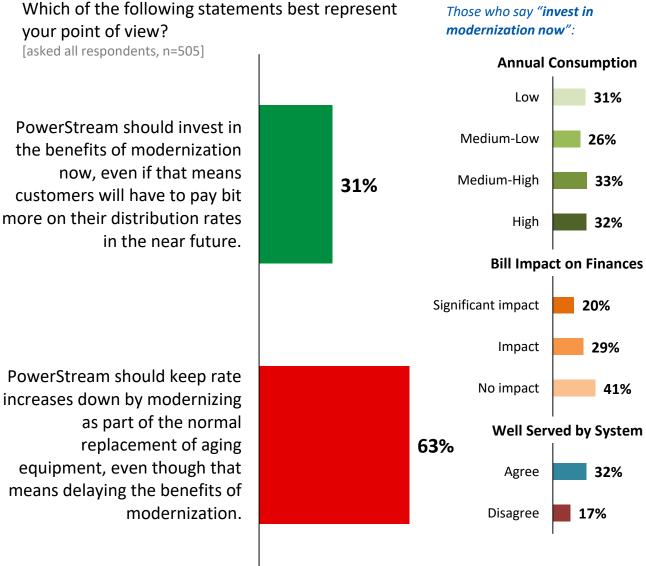


Note: 'Don't know' (6%), 'Refused' (4%) not shown.

## **Modernizing the Distribution** System

There are new technologies that PowerStream can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliability or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.



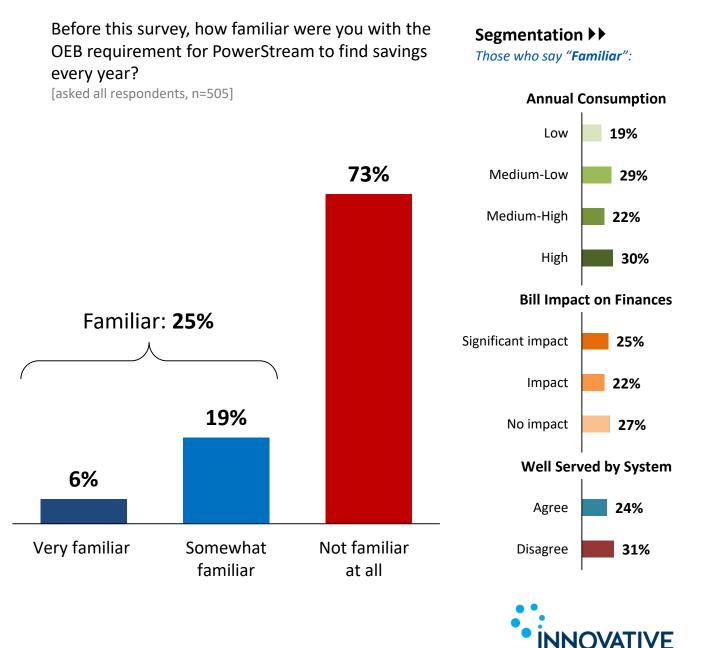
Segmentation ▶▶

Residential

#### Familiarity with OEB "Cost Saving" Requirements



As we mentioned earlier, the rates you pay to PowerStream are set by the OEB through a public process. PowerStream's current rates were approved in a 2017 application and will be in place until 2027. Each year PowerStream is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires PowerStream to keep cost increases below inflation.





"Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for PowerStream to apply for additional rate increases for discrete projects projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, PowerStream has identified three projects that need more investment than the existing budget allows.

One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project."





"The third project involves relocating both overhead and underground wires and supporting equipment as part of the Bathurst Street road widening from Highway 7 to Teston road.

*Powerstream has two options for this project. It can [ROTATE]:* 

- move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, OR
- replace the overhead system with an underground system for better protection against weather and collisions from vehicles at a cost of between \$25 and \$35 million dollars."



#### Bathurst Street Road Widening



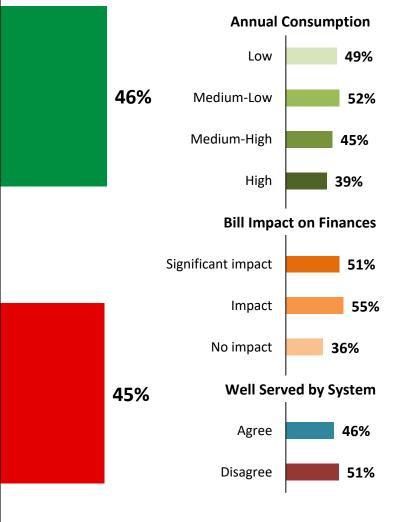
Given earlier customer feedback emphasizing the need to keep rate increases down, PowerStream is currently planning on taking the first option - to move the current mix of overhead and underground wires and equipment

Which option do you prefer? [asked all respondents, n=505]

Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of 6 cents for the average residential customer.

Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between 25 cents and 35 cents for the average residential customer Segmentation **>>** 

Those who say "Move current mix of equipment":





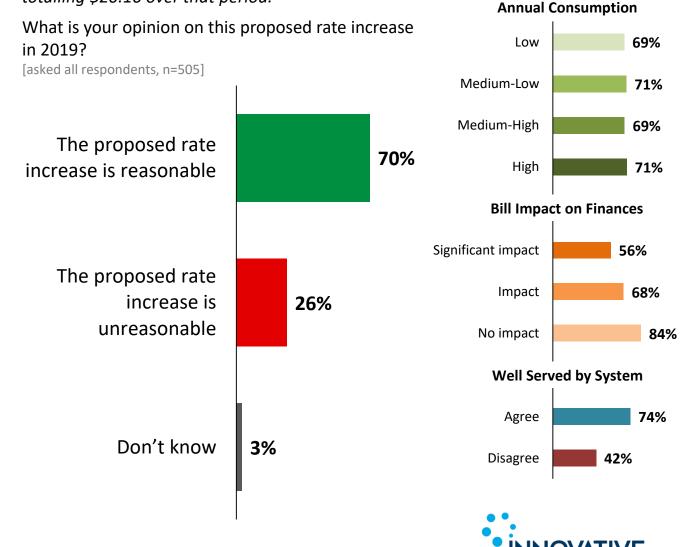
## **Opinion of Proposed ICM** Rate Impact



As I mentioned earlier, each year PowerStream is permitted to increase rates to reflect inflation minus a stretch factor which requires PowerStream to find savings to keep cost increases below inflation. In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, PowerStream would need to add a 21 cent charge to the typical residential customers monthly electricity bill, from 2019 to 2026. Segmentation

That would result in an annual increase of \$2.52 each year over the course of the next eight years – *totalling \$20.16 over that period*.

Those who say "**Rate increase is** reasonable":



## **Opinion of Proposed ICM Rate Impact**





What is your opinion on this proposed rate increase in 2019? [asked all respondents, n=505]

#### Bill Impact on Finances

Proposed 2019 Rate Increase	The cost of n impact on n without som			
	Sig. Impact [n=162]	<b>lmpact</b> [n=143]	<b>No Impact</b> [n=193]	Total
The proposed rate increase is reasonable	56%	68%	84%	70%
The proposed rate increase is unreasonable	41%	27%	12%	26%

#### Low-income Energy Assistance Program (LEAP) Qualification

	LE,			
Qua	LEAP Qualified [n=37]	Not Qualified (<\$52k) [n=88]	Not Qualified (>\$52k) [n=248]	Total
The proposed rate increase is reasonable	68%	60%	78%	70%
The proposed rate increase is unreasonable	30%	34%	20%	26%





# **Small Business Rate Class**

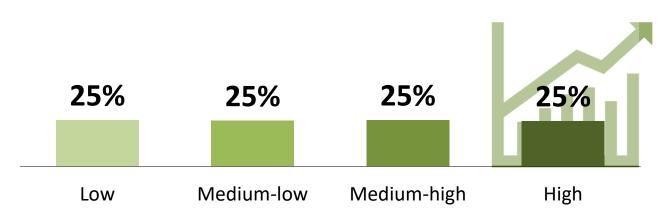


## Segmentation & Firmographics

Small Business

Sector **Hours of Operation** Manufacturing/ 21% Warehousing 6% We are open 24/7 Commercial 18% We operate several shifts each day, but are not 6% Retail 11% open 24/7 We operate during regular 62% 6% Restaurant business hours only Multi-unit We operate outside of 2% 15% regular business hours, residential but do not have shifts Hospitality 2% 4% Other Other 36% Don't know 6% Don't know 4%

#### **Annual Consumption**



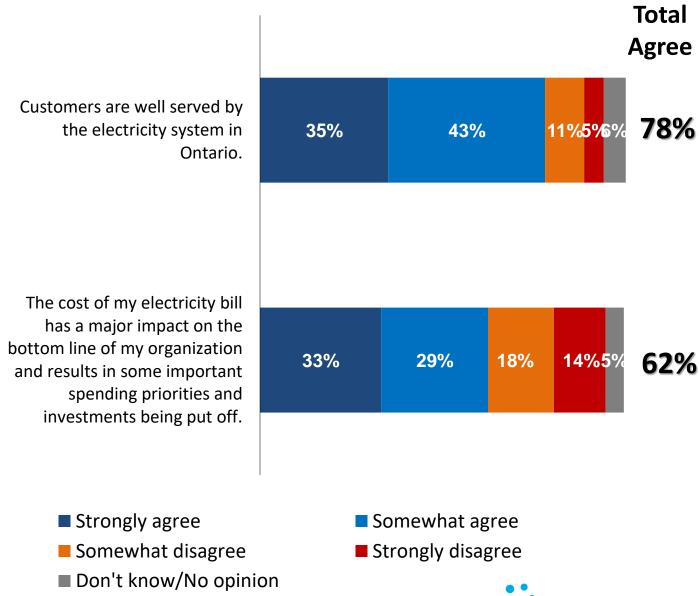
28

## Segmentation & Firmographics



For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

[asked all respondents, n=205]

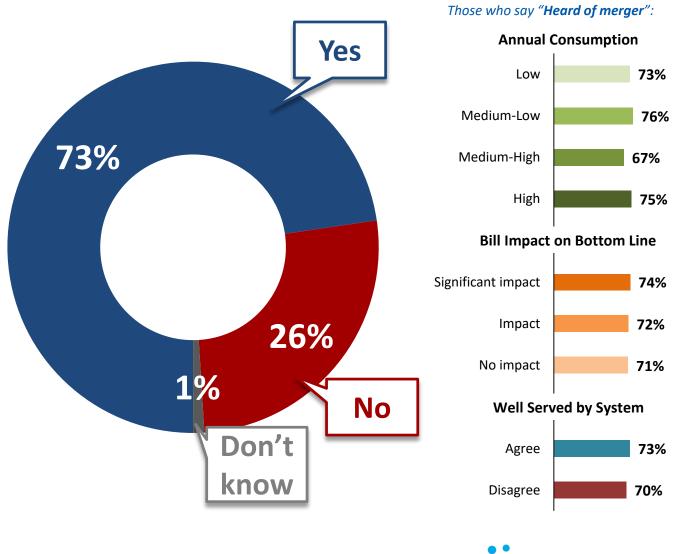


29

#### **Awareness of Merger**

You may have recently heard that PowerStream has merged with neighbouring electricity distributors to form a new company called Alectra Utilities.

Had you heard of the Alectra Utilities merger before this survey? [asked all respondents, n=205]



Segmentation **>>** 



#### Familiarity with PowerStream



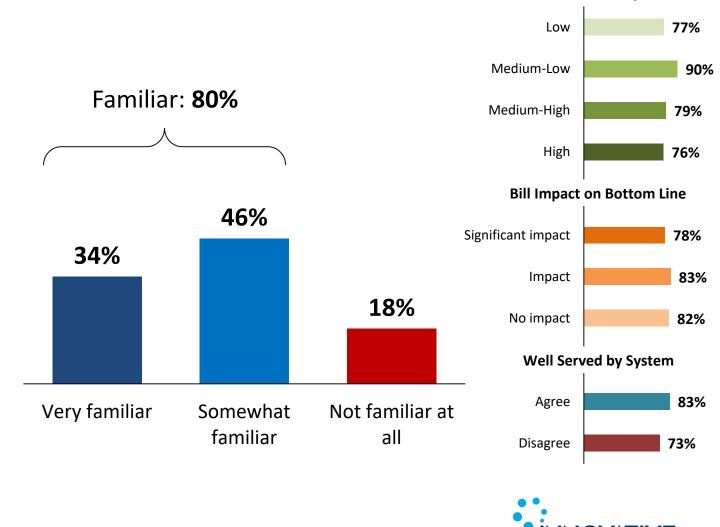
First, let's talk about your experience. As you may know, PowerStream operates and maintains the local electricity distribution system in this area. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by PowerStream.

How familiar are you with PowerStream? [asked all respondents, n=205]

#### Segmentation **>>**

Those who say "Familiar":

**Annual Consumption** 



#### Satisfaction with Services

In general, how satisfied or dissatisfied are you with the services your organization receives from PowerStream? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied? [asked all respondents, n=205]

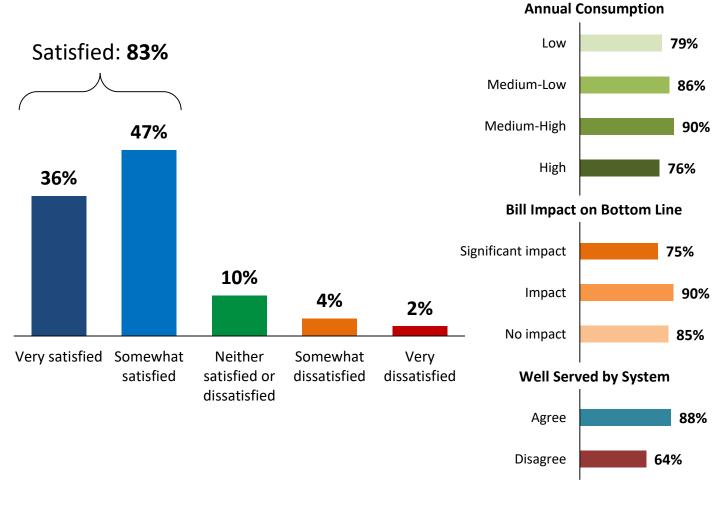


Those who say "Satisfied":

FEE

Small

**Business** 



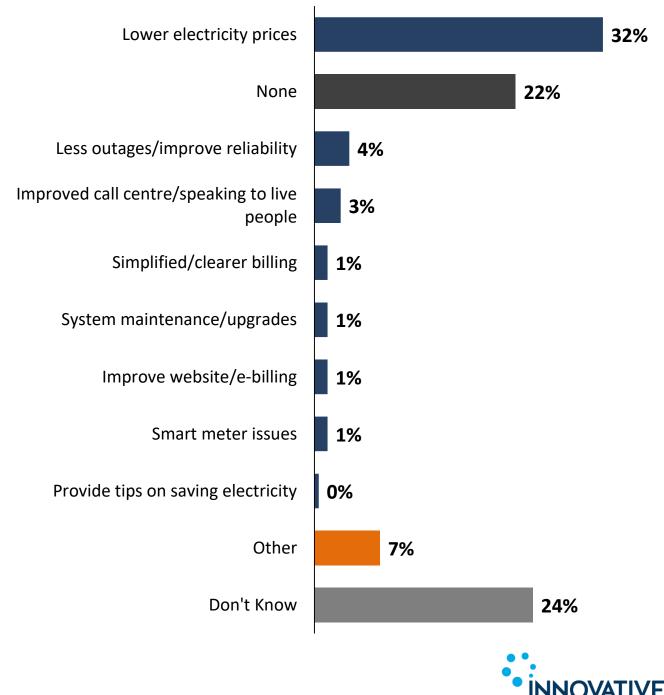


#### Suggestions for Improvements



## Is there anything in particular PowerStream can do to improve its service to your organization?

[asked all respondents, n=205]



33

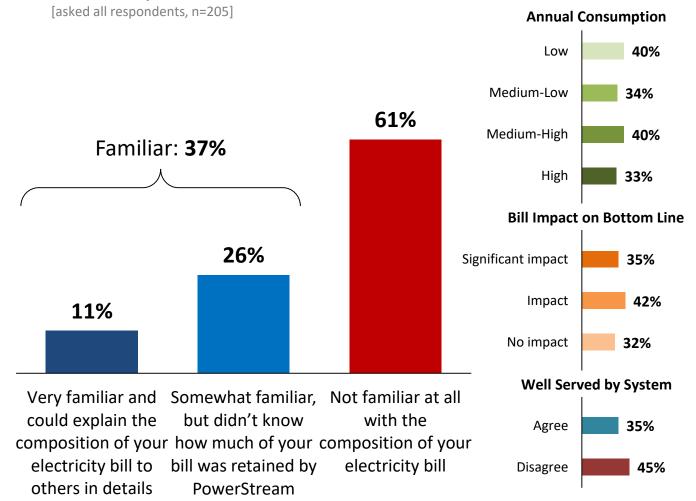
#### Familiarity with Amount of Electricity Bill Remitted



While Powerstream is responsible for collecting payment for the entire electricity bill, they retain about 23% of the typical small business customer's bill. This is about \$68.52 on an average \$292.71 monthly small business electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by PowerStream?

Segmentation ►► Those who say "Familiar":







#### **Customer Priorities**

Now lets talk about our second topic – outcomes. PowerStream regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for PowerStream.

Among the following PowerStream priorities, please tell me which one is most important to you.

[asked all respondents, n=205, percentages are calculated based on the full sample]

Top 3 Priority

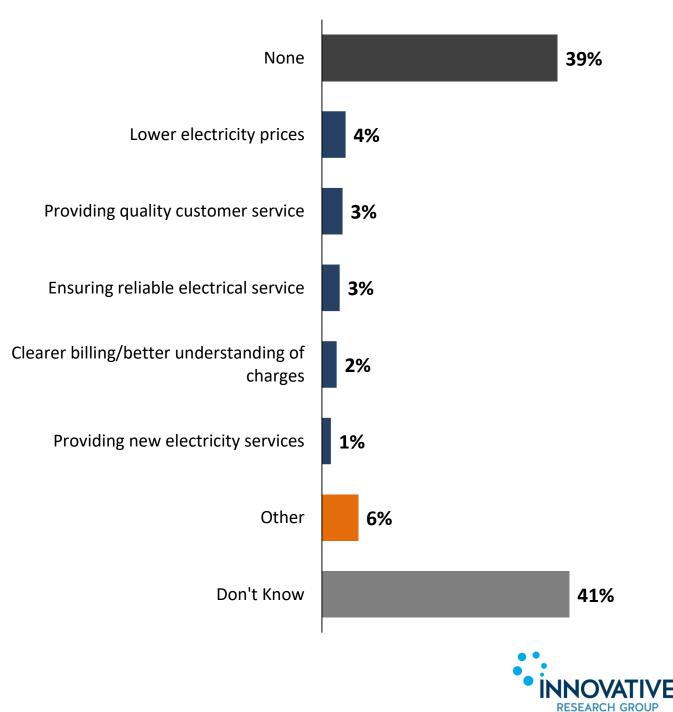
Delivering reasonable electricity distribution prices	42%	26%	10%	79%
Ensuring reliable electrical service	22% 19	% 12%		53%
Minimizing impact on the environment	<mark>7%</mark> 9% 17%			32%
Helping customers reduce and better manage their electricity consumption	<mark>8%</mark> 11% 13%			32%
Ensuring the safety of electricity infrastructure	<mark>6%</mark> 11% 15%			32%
Providing quality customer service	5 <mark>%</mark> 9% 15%			30%
Providing new electricity services	455% 7%			18%
Most important Second mos	t important	Third most	important NNOVAT	

# Small Business

#### **Additional Priorities**

Are there any other important priorities that PowerStream should be focusing on that weren't included in the previous list I read to you?

[asked all respondents, n=205]





## System Reliability

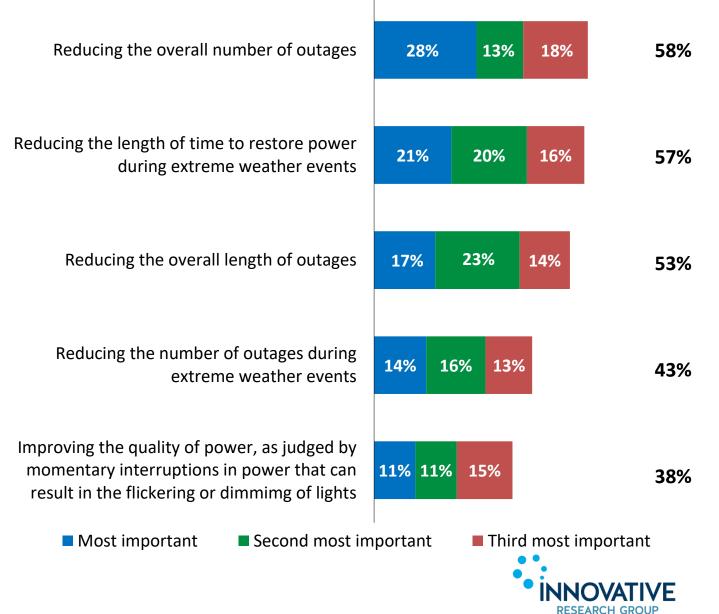
We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

[asked all respondents, n=205, percentages are calculated based on the full sample]

Top 3 Priority



#### Familiarity with how Electricity Rates are Set

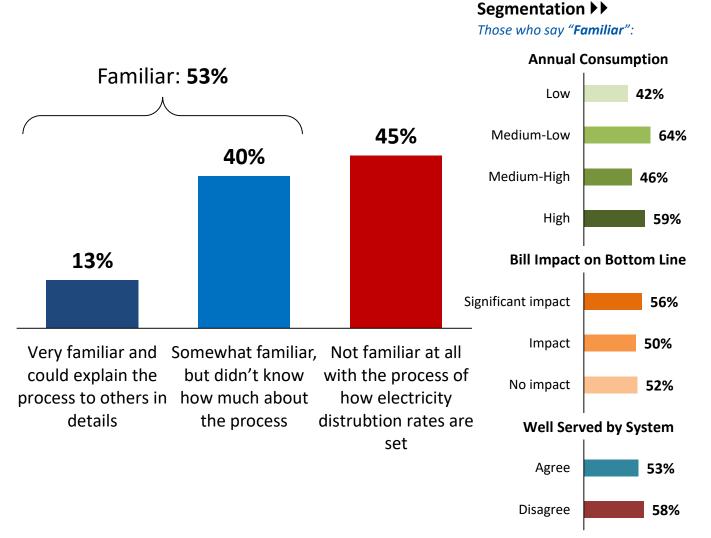


*Now, lets turn to our third topic, investment trade-offs.* The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distribution rates are set in Ontario? [asked all respondents, n=205]



Note: 'Don't know' (2%) not shown.



"Alectra Utilities is now starting to create its first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure."



#### Investments in Aging Infrastructure

Small **Business** 

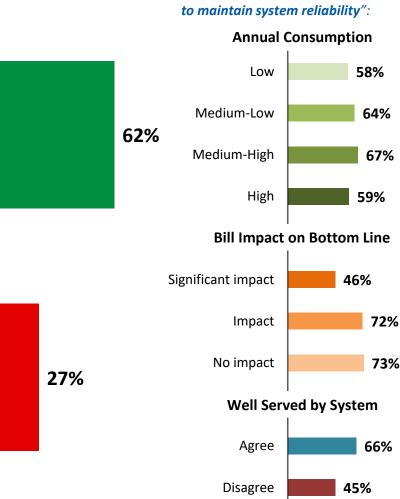
While PowerStream works hard to prolong the life of the assets that make up its distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.1 outages a year for an average of 57 minutes. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 42% of unscheduled outages are as a result of equipment failure in the PowerStream rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. PowerStream must decide the pace at which it replaces this aging equipment.

Which of the following statements best represents your point of view?

[asked all respondents, n=205]

PowerStream should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.

PowerStream should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.



#### Segmentation **>>**

Those who say "invest what it takes

# Fine Small Business

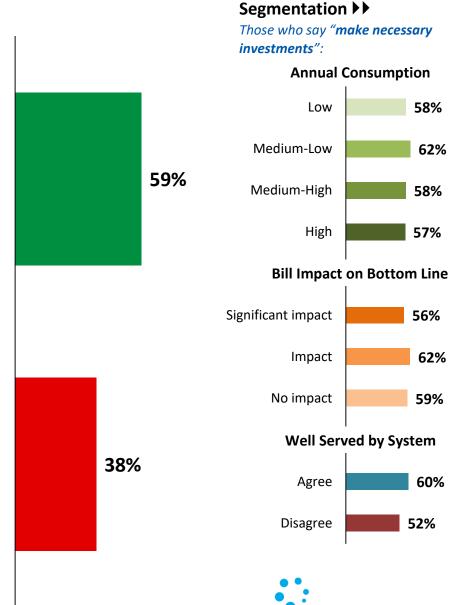
#### **General Plant Investments**

As a company, PowerStream needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [asked all respondents, n=205]

PowerStream should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.

PowerStream should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.



#### System Service Investments

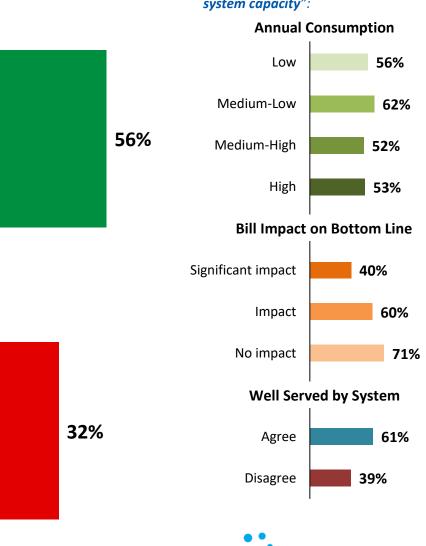
With growth in various parts of the PowerStream service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

[asked all respondents, n=205]

PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.

To help keep rate increases down, PowerStream should delay investments in system capacity needs until customers start to experience a decline in reliability.



Segmentation **>>** 

Those who say "proactively invest in system capacity":

Small

**Business** 

## Modernizing the Distribution System

There are new technologies that PowerStream can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliability or reduce the impact on the environment.

Segmentation **>>** 

Small

**Business** 

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent Those who say "invest in your point of view? modernization now": [asked all respondents, n=205] **Annual Consumption** Low 31% PowerStream should invest Medium-Low 46% in the benefits of modernization now, even if Medium-High 38% that means customers will 37% have to pay bit more on High 31% their distribution rates in **Bill Impact on Bottom Line** the near future. Significant impact 29% Impact 40% PowerStream should keep No impact 42% rate increases down by modernizing as part of the Well Served by System normal replacement of 57% Agree 40% aging equipment, even though that means delaying Disagree 21% the benefits of modernization.

Note: 'Don't know' (4%), 'Refused' (2%) not shown.

#### Familiarity with OEB "Cost Saving" Requirements



As we mentioned earlier, the rates you pay to PowerStream are set by the OEB through a public process. PowerStream's current rates were approved in a 2017 application and will be in place until 2027. Each year PowerStream is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires PowerStream to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for PowerStream to find savings every Segmentation **>>** Those who say "Familiar": vear? [asked all respondents, n=205] **Annual Consumption** 25% Low Medium-Low 30% 67% Medium-High 37% High 24% **Bill Impact on Bottom Line** Familiar: 29% Significant impact 31% Impact 32% 26% No impact 20% Well Served by System 8% Agree 28% Disagree 36% Very familiar Somewhat familiar Not familiar at all



Note: 'Don't know' (2%), 'Refused' (2%) not shown.



"Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for PowerStream to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, PowerStream has identified three projects that need more investment than the existing budget allows.

One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project."





"The third project involves relocating both overhead and underground wires and supporting equipment as part of the Bathurst Street road widening from Highway 7 to Teston road.

*Powerstream has two options for this project. It can [ROTATE]:* 

- move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, OR
- replace the overhead system with an underground system for better protection against weather and collisions from vehicles at a cost of between \$25 and \$35 million dollars."



#### Bathurst Street Road Widening

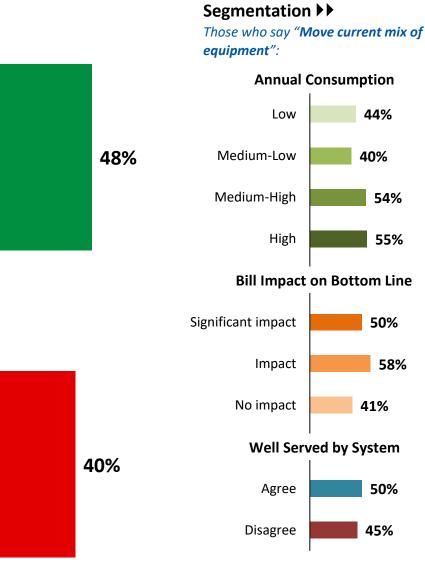


Given earlier customer feedback emphasizing the need to keep rate increases down, PowerStream is currently planning on taking the first option - to move the current mix of overhead and underground wires and equipment.

Which option do you prefer? [asked all respondents, n=205]

Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of 11 cents for the average small business customer.

Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between 51 cents and 72 cents for the average small business customer.





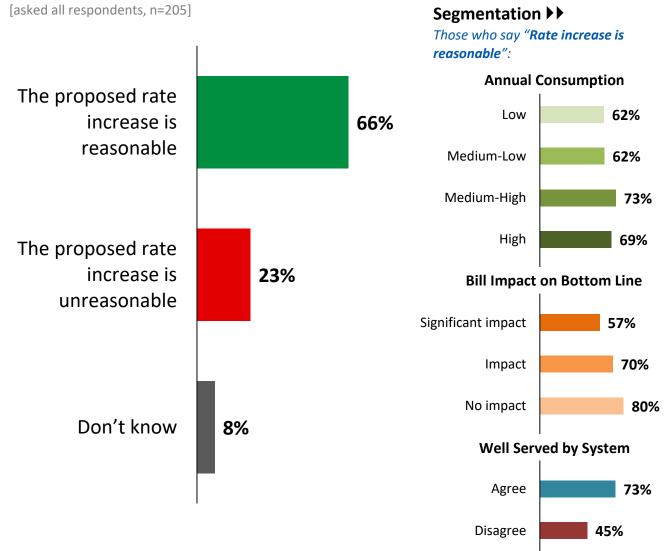
# **Opinion of Proposed ICM** Rate Impact



As I mentioned earlier, each year PowerStream is permitted to increase rates to reflect inflation minus a stretch factor which requires PowerStream to find savings to keep cost increases below inflation. In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, PowerStream would need to add a 43 cent charge to the typical small business customers monthly electricity bill, from 2019 to 2026.

That would result in an annual increase of \$5.16 each year over the course of the next eight years – *totalling \$41.28 over that period*.

What is your opinion on this proposed rate increase in 2019?





# Mid-Sized Business Rate Class





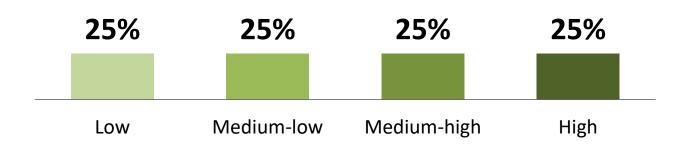
# Segmentation & Firmographics

Mid-Sized Business

▦

Sector **Hours of Operation** Manufacturing/ 44% Warehousing 19% We are open 24/7 11% Restaurant We operate several shifts each day, but are not 19% Commercial 10% open 24/7 We operate during regular 49% Retail 9% business hours only Multi-unit We operate outside of 7% residential 11% regular business hours, but do not have shifts 3% Hospitality 4% Other Other 17% 1% Don't know Don't know 1%

#### **Annual Consumption**



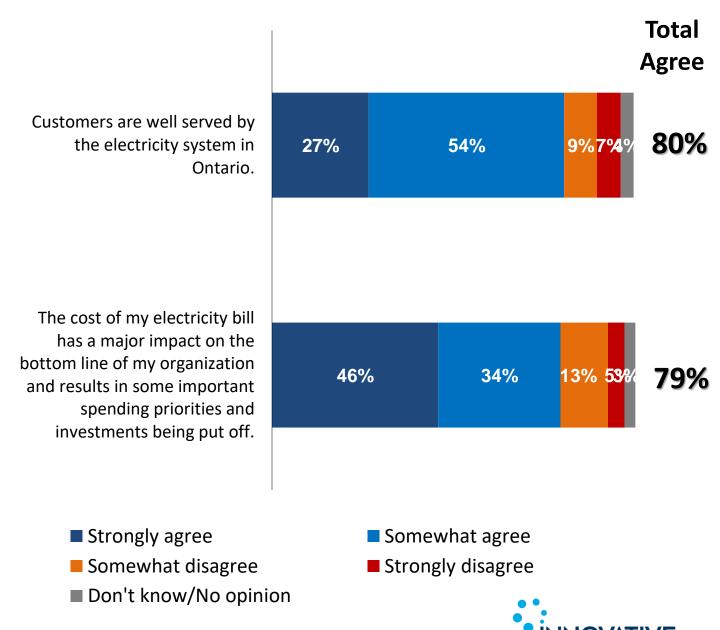
#### 50

# Segmentation & Firmographics



For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

[asked all respondents, n=200]

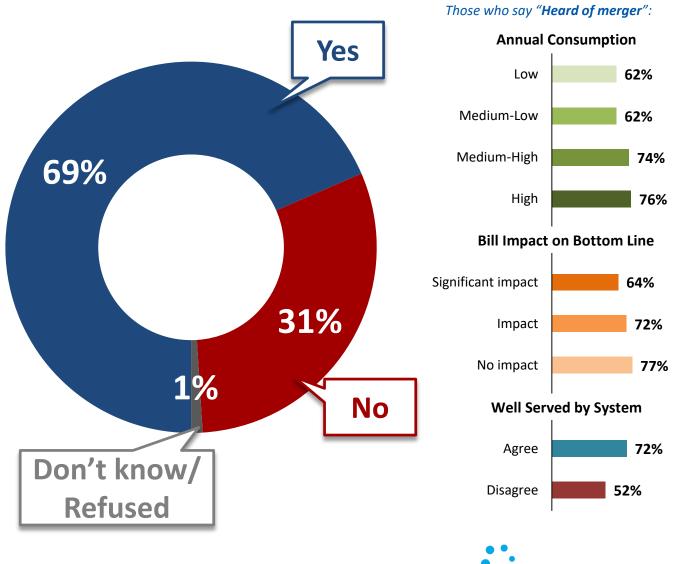


51

# **Awareness of Merger**

You may have recently heard that PowerStream has merged with neighbouring electricity distributors to form a new company called Alectra Utilities.

Had you heard of the Alectra Utilities merger before this survey? [asked all respondents, n=200]



Segmentation ▶▶

▦

**Mid-Sized** 

**Business** 

**RESEARCH GROUP** 

# Familiarity with PowerStream

First, let's talk about your experience. As you may know, PowerStream operates and maintains the local electricity distribution system in this area. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by PowerStream.

How familiar are you with PowerStream? [asked all respondents, n=200]

#### Segmentation **>>**

Those who say "Familiar":

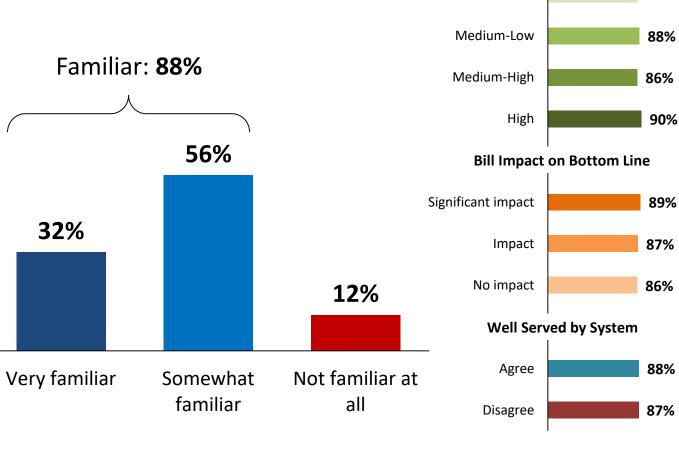
Low

**Annual Consumption** 

Mid-Sized

**Business** 

86%





# **Satisfaction with Services**

In general, how satisfied or dissatisfied are you with the services your organization receives from PowerStream? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied? [asked all respondents, n=200]

**Annual Consumption** Low 82% Satisfied: 80% Medium-Low 88% Medium-High 72% 44% High 78% 36% **Bill Impact on Bottom Line** Significant impact 77% 10% Impact 88% 5% 4% No impact 74% Very satisfied Somewhat Neither Somewhat Very satisfied satisfied or dissatisfied dissatisfied Well Served by System dissatisfied Agree 84% Disagree 61%

RESEARCH GROUP

# Mid-Sized Business

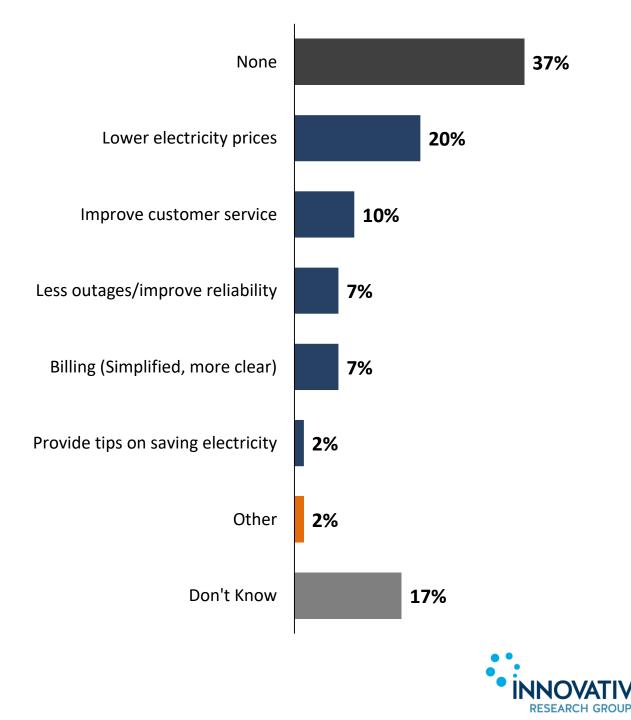
Segmentation ►► Those who say "Satisfied":

# Suggestions for Improvements



# Is there anything in particular PowerStream can do to improve its service to your organization?

[asked all respondents, n=200]



# Familiarity with Amount of Electricity Bill Remitted

Mid-Sized Business

While Powerstream is responsible for collecting payment for the entire electricity bill, they retain about 9% of the typical mid-sized business customer's bill. This is about \$1,231.50 on an average \$14,310 monthly mid-sized business electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by PowerStream? Segmentation ►►

Annual Consumption Low 34% 71% Medium-Low 28% Medium-High 16% Familiar: 28% High 34% **Bill Impact on Bottom Line** Significant impact 36% 23% 25% Impact 6% No impact 17% Well Served by System Very familiar and Somewhat familiar, Not familiar at all could explain the but didn't know with the Agree 28%

composition of your how much of your composition of your electricity bill to bill was retained by electricity bill others in details PowerStream

Those who say "Familiar":

39%

Disagree

[asked all respondents, n=200]



# **Customer Priorities**

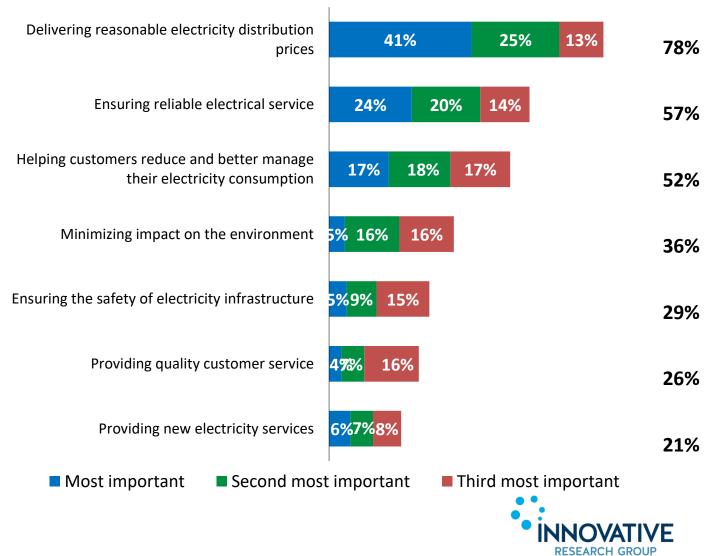
Now lets talk about our second topic – outcomes. PowerStream regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for PowerStream.

Among the following PowerStream priorities, please tell me which one is most important to you.

[asked all respondents, n=200, percentages are calculated based on the full sample]

Top 3 Priority



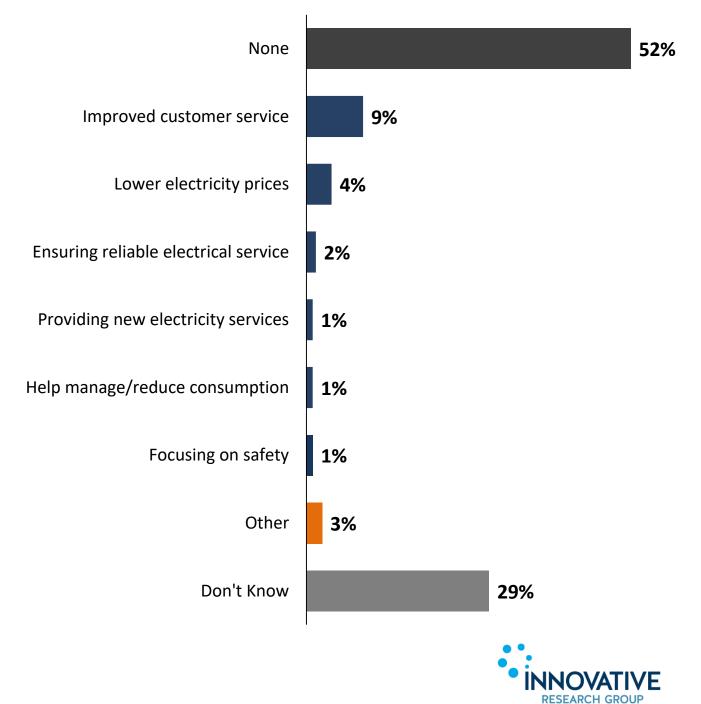
# **Additional Priorities**

Are there any other important priorities that PowerStream should be focusing on that weren't included in the previous list I read to you?

**Mid-Sized** 

**Business** 

[asked all respondents, n=200]



#### 58



# **System Reliability**

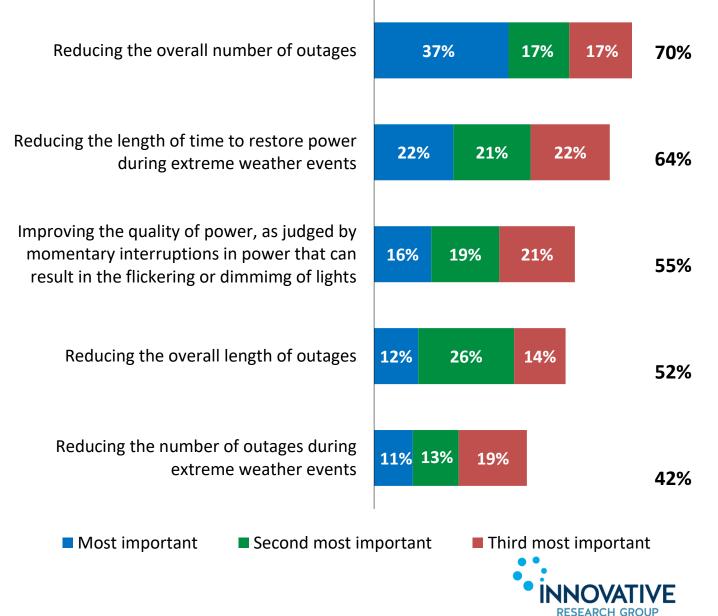
We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

[asked all respondents, n=200, percentages are calculated based on the full sample]

Top 3 Priority



# Familiarity with how Electricity Rates are Set



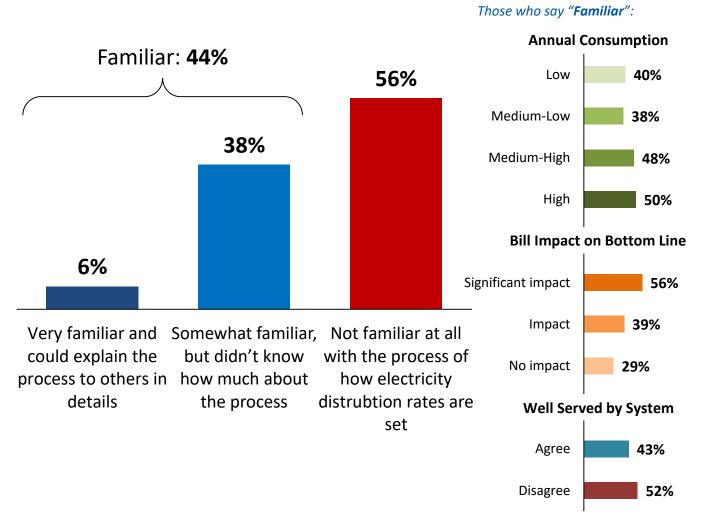
Q

*Now, lets turn to our third topic, investment trade-offs.* The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distribution rates are set in Ontario? [asked all respondents, n=200] Segmentation



Mid-Sized Business

"Alectra Utilities is now starting to create its first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure."



## Investments in Aging Infrastructure

While PowerStream works hard to prolong the life of the assets that make up its distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences **1.1 outages a year for an average of 57 minutes**. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 42% of unscheduled outages are as a result of equipment failure in the PowerStream rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. PowerStream must decide the pace at which it replaces this aging equipment.

Which of the following statements best represents your point of view?

PowerStream should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.

[asked all respondents, n=200]

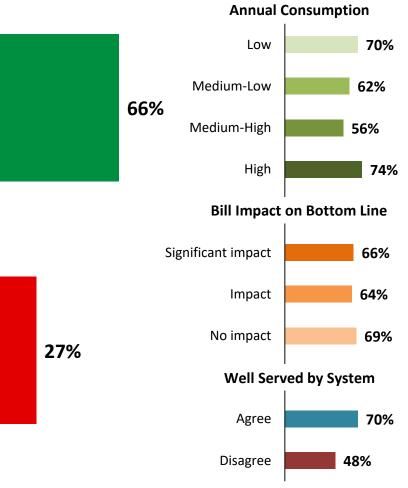
PowerStream should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.

#### Segmentation **>>**

Those who say "invest what it takes to maintain system reliability":

Mid-Sized

**Business** 



# **General Plant Investments**

As a company, PowerStream needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [asked all respondents, n=200]

PowerStream should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.

PowerStream should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.

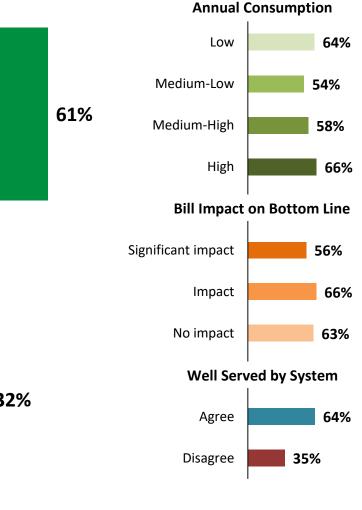
61% 32%

#### Segmentation **>>**

Those who say "make necessary investments":

Mid-Sized

**Business** 





Note: 'Don't know' (7%), 'Refused' (1%) not shown.

### **System Service Investments**

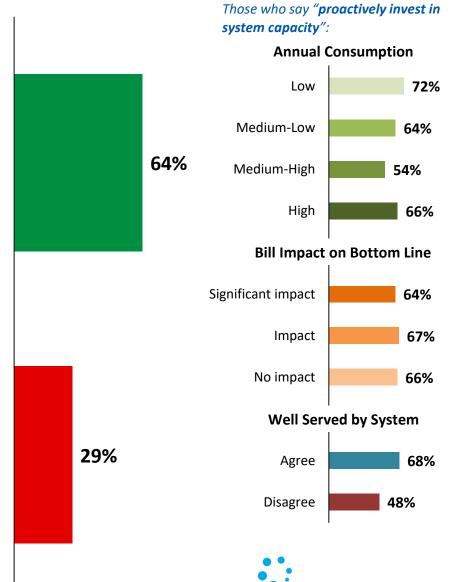
With growth in various parts of the PowerStream service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view? Segmentation >>

[asked all respondents, n=200]

PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.

To help keep rate increases down, PowerStream should delay investments in system capacity needs until customers start to experience a decline in reliability.



ESEARCH GROUP

Mid-Sized

**Business** 

# Modernizing the Distribution System

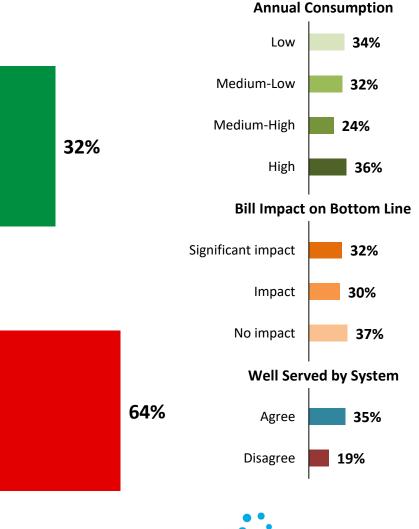
There are new technologies that PowerStream can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliability or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [asked all respondents, n=200]

PowerStream should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.

PowerStream should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.



Segmentation **>>** 

modernization now":

Those who say "invest in

Mid-Sized

**Business** 

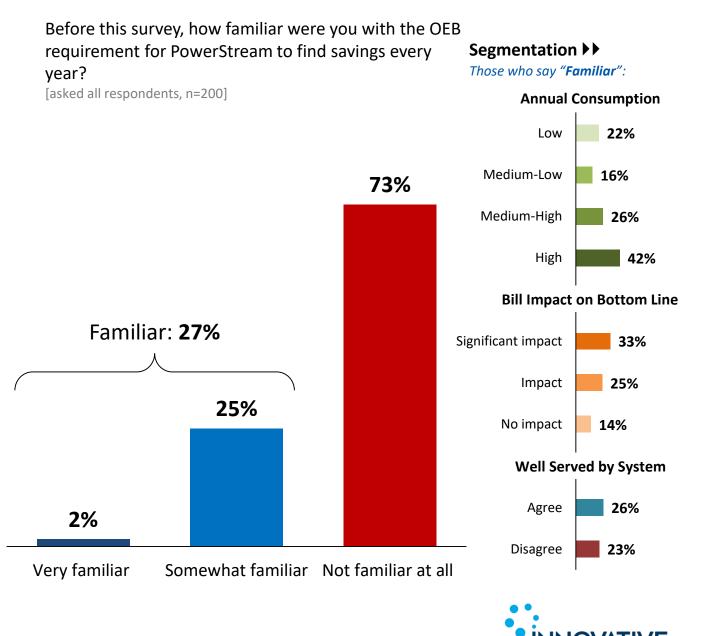
Note: 'Don't know' (3%), 'Refused' (2%) not shown.

ESEARCH GROUP

# Familiarity with OEB "Cost Saving" Requirements



As we mentioned earlier, the rates you pay to PowerStream are set by the OEB through a public process. PowerStream's current rates were approved in a 2017 application and will be in place until 2027. Each year PowerStream is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires PowerStream to keep cost increases below inflation.



Note: 'Don't know' (1%), 'Refused' (1%) not shown.

RESEARCH GROUP

"Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for PowerStream to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, PowerStream has identified three projects that need more investment than the existing budget allows.

One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project."



Mid-Sized

Business

Mid-Sized Business

"The third project involves relocating both overhead and underground wires and supporting equipment as part of the Bathurst Street road widening from Highway 7 to Teston road.

*Powerstream has two options for this project. It can [ROTATE]:* 

- move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, OR
- replace the overhead system with an underground system for better protection against weather and collisions from vehicles at a cost of between \$25 and \$35 million dollars."



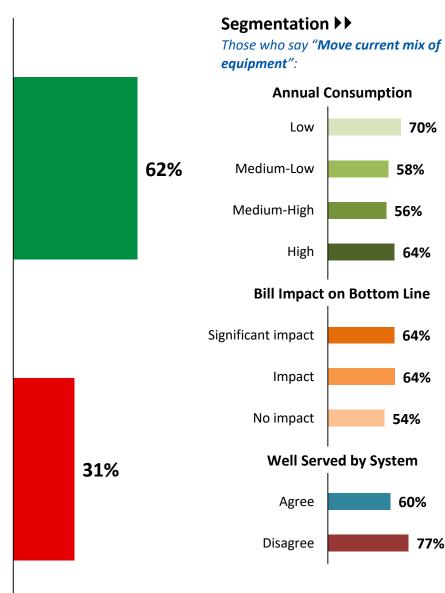
# Bathurst Street Road Widening

Given earlier customer feedback emphasizing the need to keep rate increases down, PowerStream is currently planning on taking the first option - to move the current mix of overhead and underground wires and equipment

Which option do you prefer? [asked all respondents, n=200]

Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of \$2.64 for the average mid-sized business customer.

Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between \$11.98 and \$16.78 for the average mid-sized business customer





Mid-Sized

**Business** 

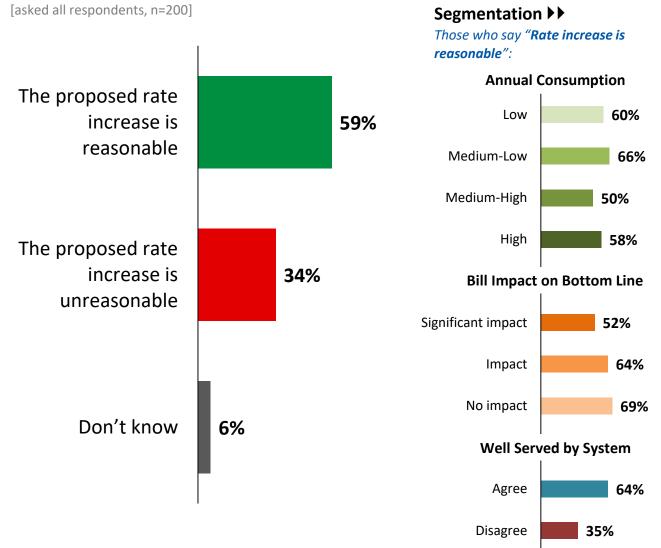
# **Opinion of Proposed ICM** Rate Impact



As I mentioned earlier, each year PowerStream is permitted to increase rates to reflect inflation minus a stretch factor which requires PowerStream to find savings to keep cost increases below inflation. In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, PowerStream would need to add a \$10.03 charge to the typical mid-sized business customers monthly electricity bill, from 2019 to 2026.

That would result in an annual increase of \$120.36 each year over the course of the next eight years – *totalling \$962.88 over that period.* 

What is your opinion on this proposed rate increase in 2019?





# Large Use Customers (2MW+)



# **Custom Online Survey:** *Methodology*



#### Survey Design

These are the findings of an **Innovative Research Group** (INNOVATIVE) online survey conducted among **Large Use customers** (2MW+) in the **PowerStream rate zone** between May 17 and 29, 2018.

The focus of these surveys was to collect feedback on expectation, needs and preference as well as trade-offs related to DSPs and specific projects brought forward for the purposes of the ICM applications. Each of surveys were customized to reflect the estimated rate impacts for individual Large Users related to specific capital projects in the Enersource rate zone.

Alectra Utilities provided INNOVATIVE with an email contact list consisting of the prime contact for each of its **47 Large Use customers** in the PowerStream rate zone. INNOVATIVE provided each key account contact with a unique URL via an email invitation so that only customers identified by Alectra Utilities were able to complete the survey and complete the survey only once.

Customers were sent <u>three reminder emails</u> to encourage survey participation. In addition, Alectra Utilities staff followed up with customers by telephone to encourage survey participation.

The analysis of this report is based on **13 of 47** Large Use customers in the Enersource rate zone (**a survey completion rate of 28%**).

Individual Large Use customers responses were anonymous and no identifiable respondent information was shared with Alectra Utilities. Responses were combined to protect the confidentiality of individual Large Users.

**Note**: Graphs and tables may not always total 100% due to rounding values rather than any error in data. Sums are added before rounding numbers. Caution interpreting results with small n-sizes.



# Segmentation & Firmographics



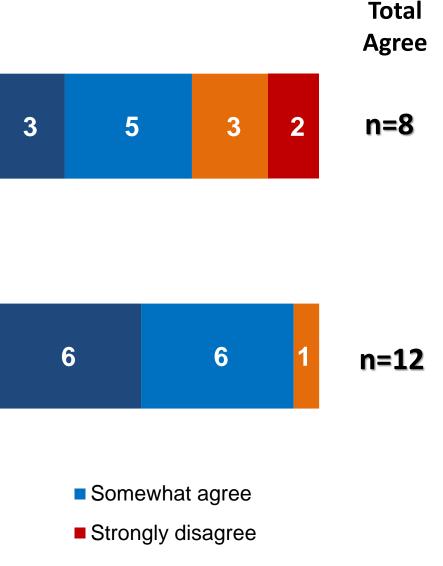
For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

[asked all respondents, n=13]

Customers are well served by the electricity system in Ontario.

The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off.

- Strongly agree
- Somewhat disagree
- Don't know/No opinion



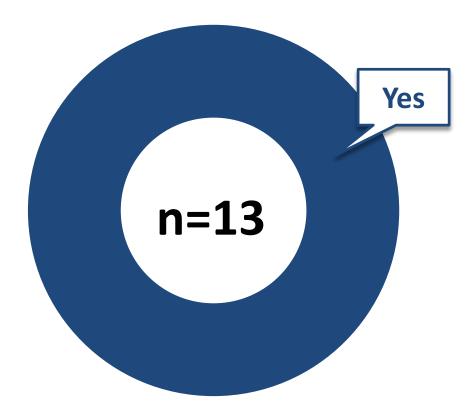


## **Awareness of Merger**



You may have recently heard that **PowerStream** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

Had you heard of the Alectra Utilities merger before this survey? [asked all respondents, n=13]



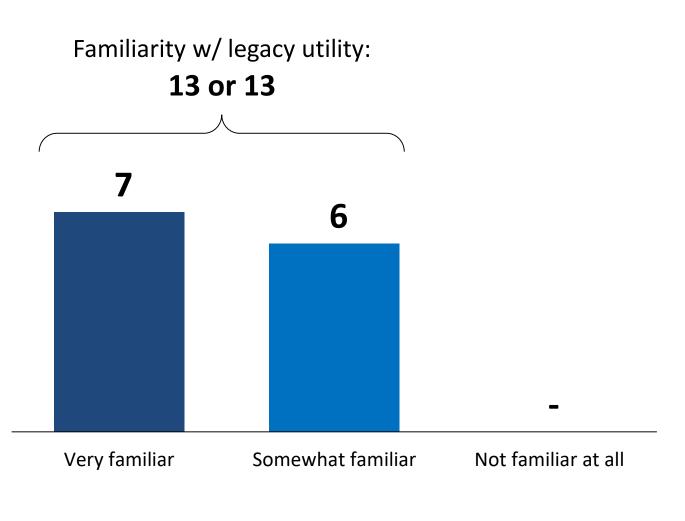


# Familiarity with PowerStream



First, let's talk about your experience. As you may know, **PowerStream** operates and maintains the local electricity distribution system in this area. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by **PowerStream**.

How familiar are you with **PowerStream**? [asked all respondents, n=13]

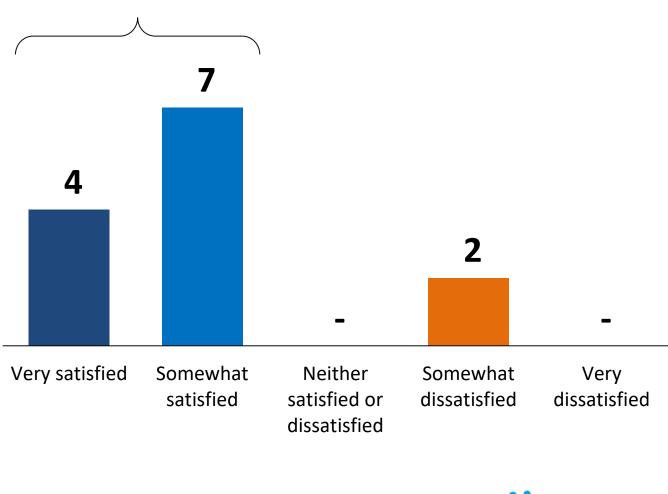




Note: 'Don't know' (0) not shown.

# Satisfaction with Services

In general, how satisfied or dissatisfied are you with the services your organization receives from **PowerStream**? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied? [asked all respondents, n=13]



### Satisfied: 11 of 13

Note: 'Don't know' (0) not shown.

76

Large Use

(2MW+)

# Suggestions for Improvements





Is there anything in particular **PowerStream** can do to improve its service to your organization?

[asked all respondents, n=13]

# 8 of 13 $\rightarrow$ Nothing/Don't know

### Verbatim:

#### **Respondent 1)**

- a) Keep our power on without any disruptions to our business
- b) Update the equipment to avoid disruptions
- c) More detailed information from control office during outages
- d) Reduce the cost of electricity

#### Respondent 2)

Provide notice in accordance with the operating agreement

#### **Respondent 3)**

Quicker response to power outage conditions. We had one local outage at our pole fuse that took to long to respond too, and we did address this with PowerStream representatives at that time. We never received what we thought was an adequate closure to this incident.

#### **Respondent 4)**

Simplify the monthly bill.

#### **Respondent 5)**

This improved recently with changes in our account manager. However, previous to this we did not feel Powerstream was responsive with information concerning outages - why it occurred and any corrective action being taken to prevent future recurrences.



# Familiarity with Amount of Electricity Bill Remitted



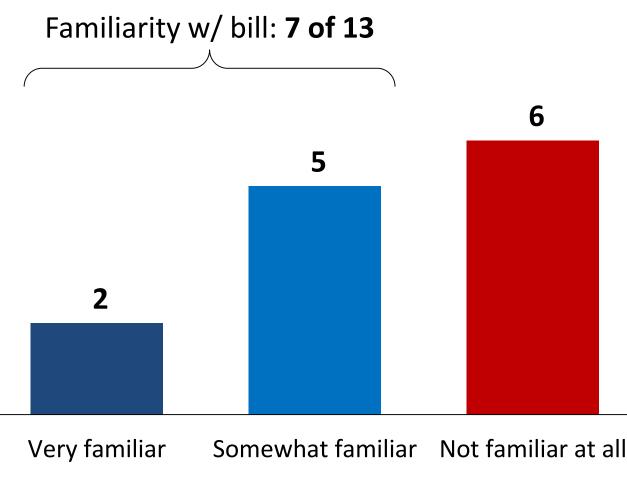
#### 0

The next question is specifically about [PIPE]'s electricity bill.

While **PowerStream** is responsible for collecting payment for the entire electricity bill, they retain about [**PIPE**] of your organization's bill. This is about [**PIPE**] on your average [**PIPE**] monthly electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by **PowerStream**?

[asked all respondents, n=13]





Note: 'Don't know' (0) not shown.

# Large Use (2MW+)

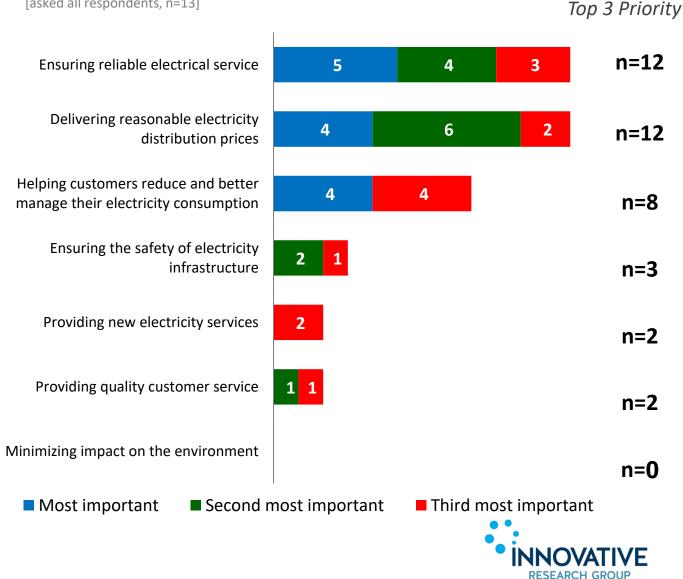
# **Customer Priorities**

Now lets turn to our second topic - outcomes. PowerStream regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for PowerStream.

#### Among the following PowerStream priorities, please tell me which one is most important to you.

[asked all respondents, n=13]



Note: 'Don't know' (0) not shown.

# **Additional Priorities**



Are there any other important priorities that PowerStream should be focusing on that weren't included in the previous list I read to you? [asked all respondents, n=12]

# 11 of 13 → No/Don't know

### Verbatim:

**Respondent 1)** Just help us reduce the global adjustment part of the bill.

**Respondent 2)** This is a very good and comprehensive list of priorities





# System Reliability

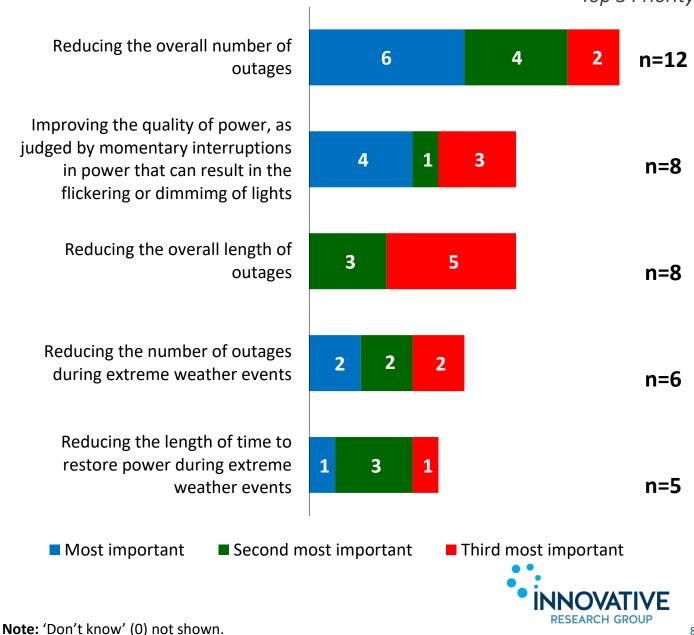
0

#### We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

[asked all respondents, n=13]



Top 3 Priority

# Familiarity with how Electricity Rates are Set

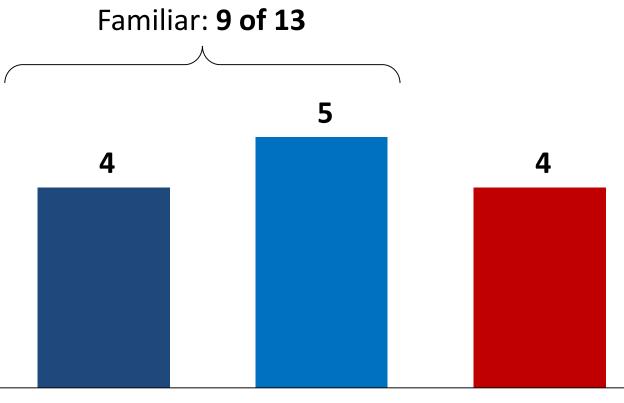


*Now, lets turn to our third topic: investment trade-offs*. The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the OEB. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distribution rates are set in Ontario? [asked all respondents, n=13]



Very familiar and could explain the process to others in details Somewhat familiar, but didn't know how much about the process Not familiar at all with the process of how electricity distrubtion rates are set

Note: 'Don't know' (0) not shown.



"Alectra Utilities is now starting to create its first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure."



## Investments in Aging Infrastructure



While PowerStream works hard to prolong the life of the assets that make up its distribution system, eventually these assets reach the end of their useful life and require replacement.

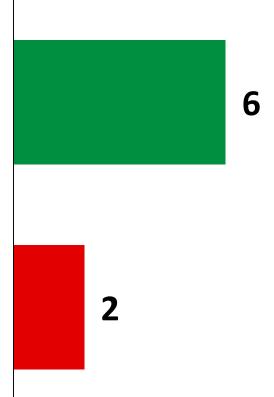
Currently the average customer experiences **1.1 outages a year for an average of 57 minutes**. When adjusted to remove outages due to loss of supply from the transmission system and major storms, **42%** of unscheduled outages are as a result of equipment failure in the PowerStream rate zone.

However, it is not possible to predict exactly when a specific piece of aging equipment will fail. PowerStream must decide the pace at which it replaces this aging equipment.

Which of the following statements best represents your point of view? [asked all respondents, n=13]

PowerStream should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.

PowerStream should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.



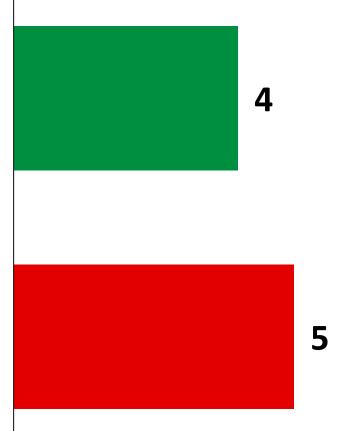
## **General Plant Investments**

As a company, PowerStream needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [asked all respondents, n=13]

PowerStream should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.

PowerStream should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.





Large Use

(2MW+)

## **System Service Investments**

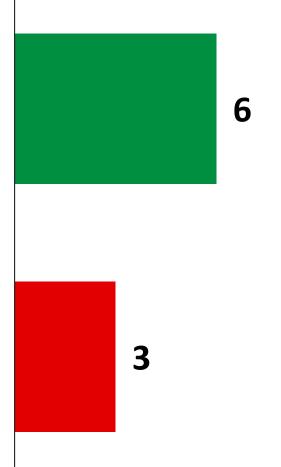
With growth in various parts of the PowerStream service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

[asked all respondents, n=13]

PowerStream should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.

To help keep rate increases down, PowerStream should delay investments in system capacity needs until customers start to experience a decline in reliability.





Large Use

(2MW+)

# Modernizing the Distribution System



Q

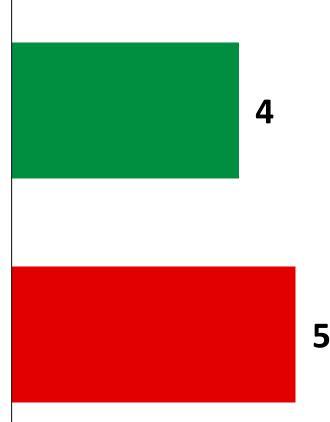
There are new technologies that PowerStream can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliability or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [asked all respondents, n=13]

PowerStream should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.

PowerStream should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.





## Familiarity with OEB "Cost Saving" Requirements



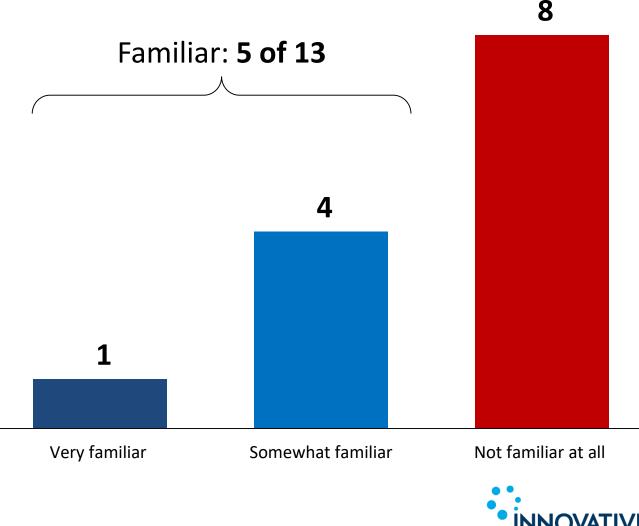
Q

As we mentioned earlier, the rates you pay to PowerStream are set by the OEB through a public process. PowerStream's current rates were approved in a 2017 application and will be in place until 2027.

Each year PowerStream is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires PowerStream to keep cost increases below inflation.

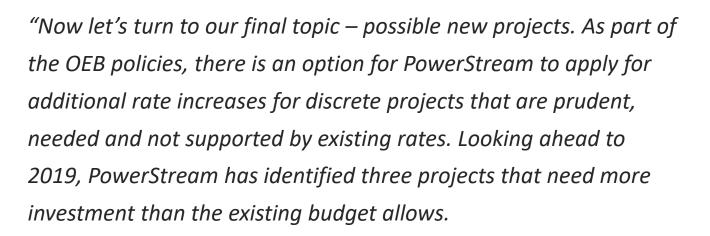
Before this survey, how familiar were you with the OEB requirement for PowerStream to find savings every year?

[asked all respondents, n=13]



Note: 'Don't know' (0) not shown.

ESEARCH GROUP



One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project."



Large Use

(2MW+)

"The third project involves relocating both overhead and underground wires and supporting equipment as part of the Bathurst Street road widening from Highway 7 to Teston road.

*Powerstream has two options for this project. It can [ROTATE]:* 

- move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, OR
- replace the overhead system with an underground system for better protection against weather and collisions from vehicles at a cost of between \$25 and \$35 million dollars."



Large Use

(2MW+)

## Bathurst Street Road Widening

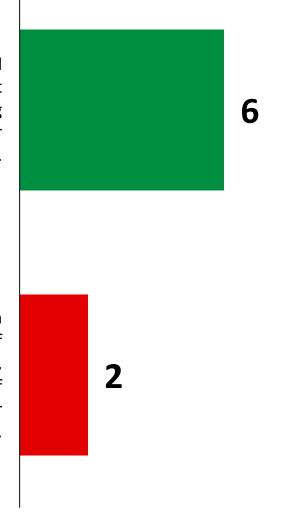


Given earlier customer feedback emphasizing the need to keep rate increases down, PowerStream is currently planning on taking the first option - to move the current mix of overhead and underground wires and equipment

Which option do you prefer? [asked all respondents, n=13]

Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of [PIPE] to your organization's electricity bill.

Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between [PIPE] and [PIPE] to your organization's electricity bill.





## **Opinion of Proposed ICM** Rate Impact

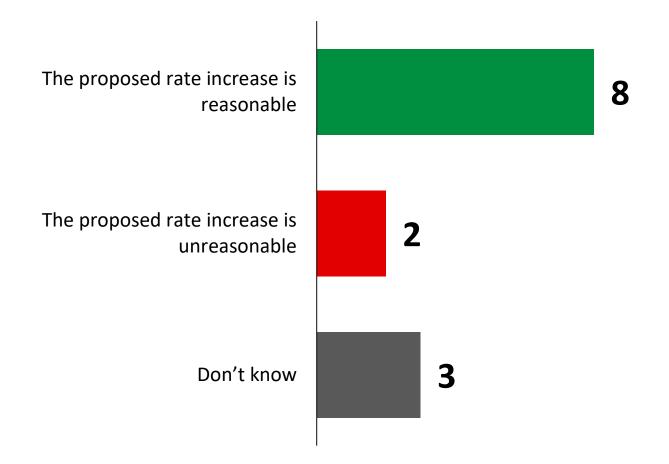


As I mentioned earlier, each year PowerStream is permitted to increase rates to reflect inflation minus a stretch factor which requires PowerStream to find savings to keep cost increases below inflation.

In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, PowerStream would need to add a [**PIPE**] charge to the typical mid-sized business customers monthly electricity bill, from 2019 to 2026.

That would result in an annual increase of [**PIPE**] each year over the course of the next eight years – *totalling* [**PIPE**] *over that period*.

What is your opinion on this proposed rate increase in 2019? [asked all respondents, n=13]



## **Final Thoughts**



Q

Before this survey concludes, do you have any additional comments or feedback you'd like to share with Alectra Utilities?

Note: all feedback is anonymous and you will <u>not</u> be identified to Alectra Utilities without your expressed permission.

## **10 of 13** $\rightarrow$ Nothing/Don't know

## Verbatim:

#### **Respondent 1)**

PowerStream has been a fantastic resource for energy efficiency ideas.

#### **Respondent 2)**

Unfortunately we have many comparable plants in the USA, running on much lower hydro rates. We are, at times, feeling the pinch of our higher rates.

#### **Respondent 3)**

When conducting switching operations which affect the redundancy to a site, please ensure the necessary notice - as outlined in the operating agreement - is adhered to. This has not been the case over the last 6 years, with the notice being insufficient.



## Building Understanding.

Personalized research to connect you and your audiences.

For more information, please contact:

## **Jason Lockhart**

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## **Julian Garas**

Senior Consultant (t) 416-640-4133 (e) jgaras@innovativeresearch.ca Appendix 3.1

## **Enersource** Residential Ratepayer Survey

### 2019 ICM Customer Engagement

Date: May 2018

Prepared by:

**Innovative Research Group, Inc.** www.innovativeresearch.ca

Vancouver 888 Dunsmuir Street, Suite 350 Vancouver BC | V6C 3K4

**Toronto** 56 The Esplanade, Suite 310 Toronto, Ontario | M5E 1A7



## **Residential Ratepayer Survey**

### **Internal Questionnaire Notes**

Method: Telephone, client provided list Questionnaire Length: TBD Language: English Sample Frame: Representative; n=500 residential customers Calling Times: Weekdays 4-9pm; Saturdays 12noon-9pm; Sundays 12noon-9pm

#### Sample Variables

- 1. Postal Code
- **2.** Total Annual Electricity Consumption (total consumption between 1-Jan-2017 and 31-Dec-2017)

**The survey will follow a stratified random sampling methodology**. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics (in this case, customer service area or electricity usage). A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the customer population. These subsets of the strata are then pooled to form a random sample.

In this survey, customers will be divided into quartiles based on annual electricity usage to ensure the sample has a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households/low-volume businesses.

The table below illustrates the strata divisions:

#### **Customer Sample Strata Divisions (Quotas):**

Customer Type	Total Sample	First	Second	Third	Fourth
	Target	Quartile	Quartile	Quartile	Quartile
Residential	500	125	125	125	125

No regional segmentation.

## A. SCREENING AND QUALIFICATIONS

#### Introduction

Hello, my name is \_\_\_\_\_\_ and I'm calling from **Innovative Research Group** on behalf of **Enersource**, your electricity distributor.

Innovative Research Group is a national public opinion research firm. We have been commissioned by **Enersource** to help them better understand the needs and preferences of customers who are responsible for paying their household's electricity bill.

**Enersource**- which distributes electricity to homes and businesses in your community – is preparing to submit its investment plan to the Ontario Energy Board for regulatory review. Since this plan will impact your bill, **Enersource** wants to hear from you, so your views can help shape its plan.

- A1. Would you mind if I had <u>10 minutes</u> of your time to ask you some questions? All your responses will be kept strictly confidential.
  - 1Yes[continue]2No NOT PRIMARY BILL PAYER[go to TRANSFER-1]
  - 3 No BAD TIME
  - 4 No HARD REFUSAL

#### MONIT

This call may be monitored or audio recorded for quality control and evaluation purposes. 1 PRESS TO CONTINUE

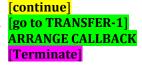
- A2. Have I reached you at your home phone number?
  - 1 Yes SPEAKING, CONTINUE
  - 2 No AT OFFICE or WORKPLACE
  - 3 No on cellular or mobile phone
  - 99 Refused LOG (THANK AND TERMINATE)
- **CELL**. Are you currently operating a car, truck or other motor vehicle?
  - 1 YES
  - 2 NO
  - 98 Refused LOG (THANK AND TERMINATE)
- A3. Are you the person primarily responsible for paying the electricity bill in your household?
  - 1 Yes I pay the bill
  - 2 Yes shared responsibility
  - 3 No
  - 98 Don't know (DO NOT READ)
- [continue to A4] [continue to A4] [go to TRANSFER-1] [Terminate]

[skip to <u>CELL]</u> [**Terminate]** le? ARRANGE CALLBAC

[continue to A3]

[continue to A3]

ARRANGE CALLBACK Continue to A3 Cerminate



#### **TRANSFER-1**

Can I speak with the person in your household who usually pays the electricity bill?

- 1 Yes
- 2 No – NOT AVAILABLE/BAD TIME
- 3 No – HARD REFUSAL 98

Don't know (DO NOT READ)

[BACK TO <u>INTRO</u>] [ARRANGE CALLBACK] [Terminate] [Terminate]

#### A4. And can you confirm that your household receives an electricity bill from **Enersource**?

- [continue] 1 Yes 2 [Terminate] No
- [Terminate] 98 Don't know (DO NOT READ)

GENDER		Note gender by observation:	
	1	Male	
	2	Female	

### **B. GENERAL SATISFACTION**

B5. You may have recently heard that **Enersource** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

01	Yes
02	No
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

Had you heard of the Alectra Utilities merger before this survey?

B6. Regardless of whether you've heard of the recent merger or not, today I'm going to use the old name "Enersource".

So, throughout this survey, references to "**Enersource**" simply refers to the distribution system in Mississauga, formerly served by **Enersource**, now being served by **Alectra Utilities.** 

Today we'd like to talk to you about four things. First, we will talk about your experience with Enersource. Second, we will talk about the outcomes that matter most to you. Third, we will talk about some trade-offs in planning future investments. And finally, we will talk about some projects that Enersource could undertake in the next year.

B7. First, let's talk about your experience. As you may know, **Enersource** operates and maintains the local electricity distribution system in Mississauga. This is the system that takes the electricity from provincial transmission lines and brings it to your home through a network of wires, poles and other equipment that is owned and operated by **Enersource**.

How familiar are you with **Enersource**? Would you say you are *very familiar, somewhat familiar*, or *not familiar at all*?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98 99	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B8. In general, how satisfied or dissatisfied are you with the services you receive from **Enersource**? Would you say you are *very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied*?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B9. Is there anything in particular **Enersource** can do to improve its service to you? [OPEN]

98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B10. I'd now like to talk with you about your electricity bill ...

While **Enersource** is responsible for collecting payment for the entire electricity bill, they retain about **23%** of the typical residential customer's bill. This is about **\$25.02** on an average **\$108.48** monthly residential electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your electricity bill that is retained by **Enersource**? Would you say... [**READ LIST**]

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know
99	Refused (DO NOT READ)

## **C. CUSTOMER PRIORITIES**

#### C11. READ PREAMBLE

*Now lets talk about our second topic – outcomes.* **Enersource** regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for **Enersource**.

C12. Among the following **Enersource** priorities, please tell me which one is most important to you.

#### [READ OPTIONS; RANDOMIZE LIST]

01	Delivering reasonable electricity distribution prices.
02	Ensuring reliable electrical service.
03	Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation).
04	Helping customers reduce and better manage their electricity consumption.
05	Minimizing impact on the environment.
06	Ensuring the safety of electricity infrastructure
07	Providing quality customer service
98	Don't Know [DO NOT READ]

## C13. What is the next most important priority you think Enersource should focus on? [If C12=98 Skip to C15]

[Remove answer from C11 if asked to read again]

C14. And what do you consider the third most important priority? [If C13=98 Skip to C15]

[Remove answer from C11 and C12 if asked to read again]

C15. Are there any other important priorities that **Enersource** should be focusing on that weren't included in the previous list I read to you? [**OPEN**]

98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

## **D.** System Reliability

D16. We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

01	Reducing the overall number of outages
02	Reducing the overall length of outages
03	Reducing the number of outages during extreme weather events
04	Reducing the length of time to restore power during extreme weather events
05	Improving the quality of power, as judged by momentary interruptions in power that can result in the flickering or dimming of lights
98	Don't Know [DO NOT READ]

D17. What is the next most important reliability outcome for you? [If D16=98 Skip to E19]

#### [Remove answer from D16 if asked to read again]

D18. And what do you consider the third most important reliability outcome? [If D17=98 Skip to E19]

[Remove answer from D16 and D17 if asked to read again]

## E. INVESTMENT TRADE-OFFS

#### How are electricity distribution rates set in Ontario?

#### E19. Now, lets turn to our third topic, investment trade-offs.

The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distrubtion rates are set in Ontario?

Would you say you are ... [**READ LIST**]

01	Very familiar and could explain the process to others in details
02	Somewhat familiar, but didn't know how much about the process
03	Not familiar at all with the process of how electricity distrubtion rates are set
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **ICM intro PREAMBLE**

E20. Alectra Utilities is now starting to create it's first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure

E21. **[PREAMBLE**] While **Enersource** works hard to prolong the life of the assets that make up **Mississauga's** distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.08 outages a year for an average of **35 minutes and 40 seconds**. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 56% of unscheduled outages are as a result of equipment failure in the Enersource rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. Enersource must decide the pace at which it replaces this aging equipment.

## E22. Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>Enersource</b> should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.
02	<b>Enersource</b> should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **General Plant**

E23. As a company, **Enersource** needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>Enersource</b> should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.
02	<b>Enersource</b> should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **System Service Questions**

E24. With growth in various parts of Mississauga comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

#### [Read and Rotate statements 1 and 2]

01	To help keep rate increases down, Enersource should delay investments in system capacity needs until customers start to experience a decline in reliability.
02	Enersource should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### Modernizing the Distribution System.

E25. **[PREAMBLE]** There are new technologies that **Enersource** can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliaiblity or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [**READ LIST; rotate 01 and 02**]

01	Enersource should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.
02	Enersource should keep rate increases down by modernizing as part of the normal
	replacement of aging equipment, even though that means delaying the benefits of
	modernization.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

E26. As we mentioned earlier, the rates you pay to Enersource are set by the OEB through a public process. Enersource's current rates were approved in a 2013 application and will be in place until 2027. Each year Enersource is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires Enersource to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for Enersource to find savings every year?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

Would you say you are ... [**READ LIST**]

#### **ICM rate impact**

E27. Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for Enersource to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, Enersource has identified two system renewal projects that need more investment than the existing budget allows. System renewal projects are a mix of replacing aging infrastructure and emergency repairs.

Would you like me to repeat the description of system renewal projects, or may I move on?

[**IF ASKED TO REPEAT**; "System renewal projects are a mix of replacing aging infrastructure and emergency repairs."]

01	Repeat	
02	Continue	
98	Don't know (DO NOT READ)	
99	Refused (DO NOT READ)	

#### **Leaky Transformers**

- E28. One of these projects deals with leaky transformers. Enersource has 25,000 tranformers which are used to reduce the voltage of electricity as it moves from major transmission lines to the lines going into homes and businesses. Earlier this decade, Enersource identified a backlog of almost 4,000 transformers that show signs of leaking. By the end of this year, over 3,000 of these transformers will have been replaced. However, that will still leave over 600 needing replacement.
- E29. Which of the following is closest to your point of view regarding Ensource's proposed transformer replacement program? [**READ LIST ; ROTATE 01 and 02**]

01	Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.
02	I am willing to have my bill increased by about 12 cents a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.
98	Don't know (DO NOT READ)

#### **Rometown Overhead**

- E30. Another proposed project addresses the Rometown area Overhead system. There are 198 poles in this particular system. 68 out of 198 have been flagged as *poor* while another 56 are seen to be in *fair condition*. A total of 78 have been flagged for urgent replacement. This network of poles uses older technologies that will be replaced when the system is eventually rebuilt, but any repairs done today will have to use the older technology. It is more efficient to replace all the poles at once than to replace them one at a time but it costs less in the short run only to replace the poles most in need of repair.
- E31. Which of the following is closest to your point of view regarding Ensource's proposed Rometown Overhead system rebuild program? [**READ LIST**]

01	Enersource should continue to operate the Rometown overhead system, and replace equipment reactively as it fails
02	Enersource should proceed now to replace 78 of the 198 poles in the most pressing need resulting in a monthly increase of <b>3 cents</b> for the average residential customer
03	Enersource should proceed now to replace all 198 poles at a cost of 3.2 million dollars, resulting in a monthly increase of <b>5 cents</b> for the average residential customer
04	Enersource should proceed now to replace the Rometown overhead system with an underground system at a cost of between \$12 and 18 million dollars, resulting in a monthly increase of between <b>19 cents</b> and <b>28 cents</b> for the average residential customer
98	Don't know

- E32. As I mentioned earlier, each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation. In order to reduce the backlog of leaking transformers and to replace the most high risk poles in the Rometown overhead system, Enersource would need to add a **15 cent charge** to the typical residential customers monthly electricity bill, from 2019 to 2026.
- E33. That would result in an annual increase of **\$1.76 each year** over the course of the next eight years *totalling \$14.11 over that period*.

What is your opinion on this proposed rate increase in 2019? Would you say ... [**READ LIST; ROTATE 1 and 2**]

01	The proposed rate increase is reasonable	
02	The proposed rate increase is unreasonable	
98	Don't know (DO NOT READ)	
99	Refused (DO NOT READ)	

## F. SEGMENTATION & DEMOGRAPHICS

Lastly, I'd like to ask you some general questions about the electricity system in Ontario. For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

01	Strongly agree
02	Somewhat agree
03	Somewhat disagree
04	Strongly disagree
98	Don't know/ No opinion (DO NOT READ)
99	Refused (DO NOT READ)

#### [<mark>ROTATE</mark>]

- F34. The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities.
- F35. Customers are well served by the electricity system in Ontario.

#### [<mark>END BATTERY</mark>]

## These last few questions are for statistical purposes only and I remind you again that all of your responses are completely confidential.

F36. Which of the following age group do you fall into? **READ LIST** 

97	Younger than 18
01	18 to 24
02	25 to 34
03	35 to 44
04	45 to 54
05	55 to 64
06	65 or older
99	Refused (DO NOT READ)

F37. Counting yourself, how many people live in your household? [DO NOT READ LIST]

01	1 person
02	2 people
03	3 people
04	4 people
05	5 people
06	6 people
07	7 people
08	8 or more people
99	Refused (DO NOT READ)

F38. To the best of your ability, please tell me which of the following categories best describes your household's AFTER TAX income. **READ LIST** 

01	Less than \$28,000
02	Just over \$28,000 to \$39,000
03	Just over \$39,000 to \$48,000
04	Just over \$48,000 to \$52,000
05	More than \$52,000
98	Not sure (DO NOT READ)
99	Refused (DO NOT READ)

#### **THANK and END SURVEY**

Thank you very much for taking the time to complete this survey.

Appendix 3.2

## **Enersource** Small Business Ratepayer Survey

### 2019 ICM Customer Engagement

Date: May 2018

Prepared by:

**Innovative Research Group, Inc.** www.innovativeresearch.ca

Vancouver 888 Dunsmuir Street, Suite 350 Vancouver BC | V6C 3K4

**Toronto** 56 The Esplanade, Suite 310 Toronto, Ontario | M5E 1A7



## **Small Business Ratepayer Survey**

### **Internal Questionnaire Notes**

Method: Telephone, client provided list Questionnaire Length: 10 minutes Language: English Sample Frame: Representative; n=200 small business (GS < 50 kW) customers Calling Times: Weekdays 9am-5pm

#### Sample Variables

- 1. Postal Code
- **2.** Total Annual Electricity Consumption (total consumption between 1-Jan-2016 and 31-Dec-2016)

**The survey will follow a stratified random sampling methodology**. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics (in this case, customer service area or electricity usage). A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the customer population. These subsets of the strata are then pooled to form a random sample.

In this survey, customers will be divided into quartiles based on annual electricity usage to ensure the sample has a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households/low-volume businesses.

The table below illustrates the strata divisions:

#### **Customer Sample Strata Divisions (Quotas):**

Customer Type	Total Sample	First	Second	Third	Fourth
	Target	Quartile	Quartile	Quartile	Quartile
GS<50 kW	200	50	50	50	50

No regional segmentation.

## A. SCREENING AND QUALIFICATIONS

#### Introduction

Hello, may I please speak to the person who is in charge of managing the electricity bill at your organization?

Yes < <b>speaking</b> >	[go to INTRO]
Yes <transferred contact="" to=""></transferred>	[go to INTRO]
No <b><not available=""></not></b> "When is a good time to callback?	[record callback time]
No <not in="" interested="" talking=""></not>	[THANK & TERMINATE]

#### <mark>INTRO.</mark>

A1. Hello, my name is \_\_\_\_\_\_ and I'm calling from Innovative Research Group on behalf of **Enersource**, your electricity distributor.

**Innovative Research Group** is a national public opinion research firm. **We need your input on choices that will affect the service you receive from Enersource and the price you pay for that service.** Your answers will be combined with others to protect your privacy.

The survey should take about 10 minutes.

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

1) Yes, speaking < <b>contact on the line</b> >	[skip to A2]
2) Yes <transferred contact="" to=""></transferred>	[skip to A2]
3) No <not contact="" person="" right="" the=""></not>	[GO to "NEW"]
4) No <b><busy></busy></b> "When is a good time to callback?"	[record callback time ]
5) Maybe < <b>may I ask who is calling?</b> >	[skip to GATE]

NEW. And ... can I have their ...

First Name \_\_\_\_\_ Last Name \_\_\_\_\_ Title/Position \_\_\_\_\_ Phone Number

#### ASK to be transferred ...

- if transferred  $\rightarrow$  go to A2
- if not transferred → Thank & Add to Callback List

**GATE**. Hello, my name is \_\_\_\_\_\_ and I'm calling on behalf of Enersource, your local electricity utility.

**INTERVIEWER NOTE: If gatekeeper asks the purpose of call**  $\rightarrow$  I'd like to ask the person incharge of managing the electricity bill at your organization a few questions concerning a **Enersource** customer consultation.

1) Yes <**transferred to contact**>

2) No **<not available>** *"When is a good time to callback?* 

#### 3) No <not interested in talking>

#### A1 QUAL PREAMBLE:

Read preamable again, if transferred to new person:

Hello, my name is \_\_\_\_\_\_ and I'm calling on behalf of Enersource, your local electricity utility.

**Innovative Research** is a national public opinion research firm. We have been hired by **Enersource** to help them better understand the needs and preferences of non-residential customers who are responsible for paying their organization's electricity bill.

A2. Can I have roughly **10 minutes** of your time to ask you some questions? All your responses will be kept strictly confidential.

Yes – I don't mind No – Not primary bill payer (i.e. not best person to speak to) No – BAD TIME No – HARD REFUSAL

1 [CONTINUE]

[skip to A2]

[record call-back time

[Thank & Terminate]

and go to "NEW"]

- 2 [go to TRANSFER]
- 3 [ARRANGE CALLBACK] 4 [THANK & TERMINATE]

#### **MONIT [INTERNAL]**

This call may be monitored or audio taped for quality control and evaluation purposes. PRESS TO CONTINUE 1

A3. Can you confirm that your organization receives an electricity or hydro bill from **Enersource or Alectra Utilities**?

YES	1	[CONTINUE]
NO	2	[THANK & TERMINATE]
DK (volunteered)	98	[ <mark>THANK &amp; TERMINATE</mark> ]

Only those in charge of managing/overseeing organizations electricity bill will be interviewed.

As part of your job, are you in charge of managing or overseeing your organization's A4. electricity or hydro bill?

YES	1	[CONTINUE]
NO	2 "Can I	speak to the person who manages your organization's
	electricity bill?	" [Return to <b>NEW</b> ]
DK	3 "Can I	speak to the person who manages your organization's
	electricity bill?	[Return to <b>NEW</b> ]

#### TRANSFER

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

Yes

Yes	1 [BACK TO <i>INTRO</i> ]
No – NOT AVAILABLE/BAD TIME – (ARRANGE CALLBACK)	2 [ARRANGE CALLBACK]
No – HARD REFUSAL	3 [THANK & TERMINATE]
Don't know ( <b>DNR</b> )	98 [THANK & TERMINATE]

### **B. GENERAL SATISFACTION**

B5. You may have recently heard that **Enersource** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

01	Yes
02	No
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

Had you heard of the Alectra Utilities merger before this survey?

B6. Regardless of whether you've heard of the recent merger or not, today I'm going to use the old name **"Enersource"**.

So, throughout this survey, references to "**Enersource**" simply refers to the distribution system in Mississauga, formerly served by **Enersource**, now being served by **Alectra Utilities.** 

Today we'd like to talk to you about four things. First, we will talk about your experience with Enersource. Second, we will talk about the outcomes that matter most to you. Third, we will talk about some trade-offs in planning future investments. And finally, we will talk about some projects that Enersource could undertake in the next year.

B7. First, let's talk about your experience. As you may know, **Enersource** operates and maintains the local electricity distribution system in Mississauga. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by **Enersource**.

How familiar are you with **Enersource**? Would you say you are *very familiar, somewhat familiar*, or *not familiar at all*?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B8. In general, how satisfied or dissatisfied are you with the services your organization receives from **Enersource**? Would you say you are *very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied*?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B9. Is there anything in particular **Enersource** can do to improve its service to your organization? [OPEN]

98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B10. I'd now like to talk with you about your electricity bill ...

While **Enersource** is responsible for collecting payment for the entire electricity bill, they retain about **24%** of the typical small business customer's bill. This is about **\$73.33** on an average **\$306.98** monthly small business electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by **Enersource**? Would you say... [**READ LIST**]

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

## **C. CUSTOMER PRIORITIES**

#### C11. READ PREAMBLE

*Now lets talk about our second topic – outcomes.* **Enersource** regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for **Enersource**.

C12. Among the following **Enersource** priorities, please tell me which one is most important to you.

#### [READ OPTIONS; RANDOMIZE LIST]

01	Delivering reasonable electricity distribution prices.
02	Ensuring reliable electrical service.
03	Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation).
04	Helping customers reduce and better manage their electricity consumption.
05	Minimizing impact on the environment.
06	Ensuring the safety of electricity infrastructure
07	Providing quality customer service
98	Don't Know [DO NOT READ]

#### C13. What is the next most important priority you think Enersource should focus on? If C12=98 Skip to C15

[Remove answer from C11 if asked to read again]

C14. And what do you consider the third most important priority? If C13=98 Skip to C15

#### [Remove answer from C11 and C12 if asked to read again]

C15. Are there any other important priorities that **Enersource** should be focusing on that weren't included in the previous list I read to you? [**OPEN**]

98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

## **D.** System Reliability

D16. We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

01	Reducing the overall number of outages
02	Reducing the overall length of outages
03	Reducing the number of outages during extreme weather events
04	Reducing the length of time to restore power during extreme weather events
05	Improving the quality of power, as judged by momentary interruptions in power that can result in the flickering or dimming of lights
98	Don't Know [DO NOT READ]

D17. What is the next most important reliability outcome for you? If D16=98 Skip to E19

#### [Remove answer from D16 if asked to read again]

D18. And what do you consider the third most important reliability outcome? If D17=98 Skip to E19

[Remove answer from D16 and D17 if asked to read again]

## E. INVESTMENT TRADE-OFFS

#### How are electricity distribution rates set in Ontario?

#### E19. Now, lets turn to our third topic, investment trade-offs.

The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distrubtion rates are set in Ontario?

Would you say you are ... [**READ LIST**]

01	Very familiar and could explain the process to others in details
02	Somewhat familiar, but didn't know how much about the process
03	Not familiar at all with the process of how electricity distrubtion rates are set
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **ICM intro PREAMBLE**

E20. Alectra Utilities is now starting to create it's first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure

E21. **[PREAMBLE**] While **Enersource** works hard to prolong the life of the assets that make up **Mississauga's** distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.08 outages a year for an average of **35 minutes and 40 seconds**. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 56% of unscheduled outages are as a result of equipment failure in the Enersource rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. Enersource must decide the pace at which it replaces this aging equipment.

## E22. Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>Enersource</b> should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.
02	<b>Enersource</b> should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **General Plant**

E23. As a company, **Enersource** needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>Enersource</b> should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.
02	<b>Enersource</b> should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **System Service Questions**

E24. With growth in various parts of Mississauga comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

#### [Read and Rotate statements 1 and 2]

01	To help keep rate increases down, Enersource should delay investments in system capacity needs until customers start to experience a decline in reliability.
02	Enersource should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### Modernizing the Distribution System.

E25. **[PREAMBLE]** There are new technologies that **Enersource** can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliaiblity or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [**READ LIST; rotate 01 and 02**]

01	Enersource should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.
02	Enersource should keep rate increases down by modernizing as part of the normal
	replacement of aging equipment, even though that means delaying the benefits of
	modernization.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

E26. As we mentioned earlier, the rates you pay to Enersource are set by the OEB through a public process. Enersource's current rates were approved in a 2013 application and will be in place until 2027. Each year Enersource is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires Enersource to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for Enersource to find savings every year?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

Would you say you are ... [**READ LIST**]

#### **ICM rate impact**

E27. Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for Enersource to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, Enersource has identified two system renewal projects that need more investment than the existing budget allows. System renewal projects are a mix of replacing aging infrastructure and emergency repairs.

Would you like me to repeat the description of system renewal projects, or may I move on?

[**IF ASKED TO REPEAT**; "System renewal projects are a mix of replacing aging infrastructure and emergency repairs."]

01	Repeat	
02	Continue	
98	Don't know (DO NOT READ)	
99	Refused (DO NOT READ)	

#### Leaky Transformers

- E28. One of these projects deals with leaky transformers. Enersource has 25,000 tranformers which are used to reduce the voltage of electricity as it moves from major transmission lines to the lines going into homes and businesses. Earlier this decade, Enersource identified a backlog of almost 4,000 transformers that show signs of leaking. By the end of this year, over 3,000 of these transformers will have been replaced. However, that will still leave over 600 needing replacement.
- E29. Which of the following is closest to your point of view regarding Ensource's proposed transformer replacement program? [**READ LIST ; ROTATE 01 and 02**]

01	Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.
02	I am willing to have my bill increased by about <b>39 cents</b> a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.
98	Don't know (DO NOT READ)

#### **Rometown Overhead**

- E30. Another proposed project addresses the Rometown area Overhead system. There are 198 poles in this particular system. 68 out of 198 have been flagged as *poor* while another 56 are seen to be in *fair condition*. A total of 78 have been flagged for urgent replacement. This network of poles uses older technologies that will be replaced when the system is eventually rebuilt, but any repairs done today will have to use the older technology. It is more efficient to replace all the poles at once than to replace them one at a time but it costs less in the short run only to replace the poles most in need of repair.
- E31. Which of the following is closest to your point of view regarding Ensource's proposed Rometown Overhead system rebuild program? [**READ LIST**]

01	Enersource should continue to operate the Rometown overhead system, and replace equipment reactively as it fails
02	Enersource should proceed now to replace 78 of the 198 poles in the most pressing need resulting in a monthly increase of <b>9 cents</b> for the average small business customer
03	Enersource should proceed now to replace all 198 poles at a cost of 3.2 million dollars, resulting in a monthly increase of <b>16 cents</b> for the average small business customer
04	Enersource should proceed now to replace the Rometown overhead system with an underground system at a cost of between \$12 and 18 million dollars, resulting in a monthly increase of between <b>61 cents</b> and <b>92 cents</b> for the average small business customer
98	Don't know (DO NOT READ)

- E32. As I mentioned earlier, each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation. In order to reduce the backlog of leaking transformers and to replace the most high risk poles in the Rometown overhead system, Enersource would need to add a **48 cent charge** to the typical small business customers monthly electricity bill, from 2019 to 2026.
- E33. That would result in an annual increase of **\$5.76 each year** over the course of the next eight years *totalling \$46.08 over that period*.

What is your opinion on this proposed rate increase in 2019? Would you say ... [**READ LIST; ROTATE 1 and 2**]

01	The proposed rate increase is reasonable	
02	The proposed rate increase is unreasonable	
98	Don't know (DO NOT READ)	
99	Refused (DO NOT READ)	

## F. SEGMENTATION & DEMOGRAPHICS

Lastly, I'd like to ask you some general questions about the electricity system in Ontario. For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

01	Strongly agree
02	Somewhat agree
03	Somewhat disagree
04	Strongly disagree
98	Don't know/ No opinion (DO NOT READ)
99	Refused (DO NOT READ)

#### [<mark>ROTATE</mark>]

- F34. The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off.
- F35. Customers are well served by the electricity system in Ontario.

#### [<mark>END BATTERY</mark>]

#### These last few questions are for statistical purposes only.

F36. Which of the following best describes the sector in which your organization operates?

Restaurant	1
Retail	2
Commercial	3
Multi-unit residential	4
Hospitality (i.e. catering, hotel operations)	5
Manufacturing/Warehousing	6
Other [Please specify: ]	88
Don't know / Refused ( <b>DNR</b> )	98

H38. Which of the following best describes the hours of operation of your organization? Would you say ... [READ LIST]

We are open 24/7	1
We operate several shifts each day, but are not open 24/7	2
We operate during regular business hours only	3
We operate outside of regular business hours, but do not have shifts	4
Other (please specify):	88
Don't know / Refused ( <b>DNR</b> )	98

#### THANK and END SURVEY

Thank you very much for taking the time to complete this survey.

Appendix 3.3

# **Enersource** Mid-Sized Business Ratepayer Survey

## 2019 ICM Customer Engagement

Date: May 2018

Prepared by:

**Innovative Research Group, Inc.** www.innovativeresearch.ca

Vancouver 888 Dunsmuir Street, Suite 350 Vancouver BC | V6C 3K4

**Toronto** 56 The Esplanade, Suite 310 Toronto, Ontario | M5E 1A7



## **Mid-Sized Business Ratepayer Survey**

### **Internal Questionnaire Notes**

Method: Telephone, client provided list Questionnaire Length: 10 minutes Language: English Sample Frame: Representative; n=200 small business (GS < 50 kW) customers Calling Times: Weekdays 9am-5pm

#### Sample Variables

- 1. Postal Code
- **2.** Total Annual Electricity Consumption (total consumption between 1-Jan-2016 and 31-Dec-2016)

**The survey will follow a stratified random sampling methodology**. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics (in this case, customer service area or electricity usage). A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the customer population. These subsets of the strata are then pooled to form a random sample.

In this survey, customers will be divided into quartiles based on annual electricity usage to ensure the sample has a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households/low-volume businesses.

The table below illustrates the strata divisions:

### **Customer Sample Strata Divisions (Quotas):**

Customer Type	Total Sample	First	Second	Third	Fourth
	Target	Quartile	Quartile	Quartile	Quartile
GS>50 kW	200	50	50	50	50

No regional segmentation.

## A. SCREENING AND QUALIFICATIONS

#### Introduction

Hello, may I please speak to the person who is in charge of managing the electricity bill at your organization?

Yes < <b>speaking</b> >	[go to INTRO]
Yes <transferred contact="" to=""></transferred>	[go to INTRO]
No <b><not available=""></not></b> "When is a good time to callback?	[record callback time]
No <not in="" interested="" talking=""></not>	[THANK & TERMINATE]

### INTRO.

A1. Hello, my name is \_\_\_\_\_\_ and I'm calling from Innovative Research Group on behalf of **Enersource**, your electricity distributor.

**Innovative Research Group** is a national public opinion research firm. **We need your input on choices that will affect the service you receive from Enersource and the price you pay for that service.** Your answers will be combined with others to protect your privacy.

The survey should take about 10 minutes.

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

1) Yes, speaking < <b>contact on the line</b> >	[skip to A2]
2) Yes <transferred contact="" to=""></transferred>	[skip to A2]
3) No <not contact="" person="" right="" the=""></not>	[GO to "NEW"]
4) No <b><busy></busy></b> "When is a good time to callback?"	[record callback time ]
5) Maybe < <b>may I ask who is calling?</b> >	[skip to GATE]

NEW. And ... can I have their ...

First Name \_\_\_\_\_ Last Name \_\_\_\_\_ Title/Position \_\_\_\_\_ Phone Number

#### ASK to be transferred ...

- if transferred → go to A2
- if not transferred → Thank & Add to Callback List

**GATE**. Hello, my name is \_\_\_\_\_\_ and I'm calling on behalf of Enersource, your local electricity utility.

**INTERVIEWER NOTE: If gatekeeper asks the purpose of call**  $\rightarrow$  I'd like to ask the person incharge of managing the electricity bill at your organization a few questions concerning a **Enersource** customer consultation.

1) Yes <transferred to contact>

2) No **<not available>** *"When is a good time to callback?* 

#### 3) No <not interested in talking>

#### A1 QUAL PREAMBLE:

Read preamable again, if transferred to new person:

Hello, my name is \_\_\_\_\_\_ and I'm calling on behalf of Enersource, your local electricity utility.

**Innovative Research** is a national public opinion research firm. We have been hired by **Enersource** to help them better understand the needs and preferences of non-residential customers who are responsible for paying their organization's electricity bill.

A2. Can I have roughly **10 minutes** of your time to ask you some questions? All your responses will be kept strictly confidential.

Yes – I don't mind No – Not primary bill payer (i.e. not best person to speak to) No – BAD TIME No – HARD REFUSAL

1 [CONTINUE]

[skip to A2]

[record call-back time

[Thank & Terminate]

and go to "NEW"]

- 2 [go to TRANSFER]
- 3 [ARRANGE CALLBACK] 4 [THANK & TERMINATE]

#### **MONIT [INTERNAL]**

This call may be monitored or audio taped for quality control and evaluation purposes. PRESS TO CONTINUE 1

A3. Can you confirm that your organization receives an electricity or hydro bill from **Enersource or Alectra Utilities**?

YES	1	[CONTINUE]
NO	2	[ <mark>THANK &amp; TERMINATE</mark> ]
DK (volunteered)	98	[THANK & TERMINATE]

Only those in charge of managing/overseeing organizations electricity bill will be interviewed.

As part of your job, are you in charge of managing or overseeing your organization's A4. electricity or hydro bill?

YES	1	[CONTINUE]
NO	2 "Can I speak to t	he person who manages your organization's
	electricity bill?"	[Return to <b>NEW</b> ]
DK	3 "Can I speak to t	he person who manages your organization's
	electricity bill?"	[Return to <b>NEW</b> ]

#### TRANSFER

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

Yes

Yes	1 [BACK TO <i>INTRO</i> ]
No – NOT AVAILABLE/BAD TIME – (ARRANGE CALLBACK)	2 [ARRANGE CALLBACK]
No – HARD REFUSAL	3 [THANK & TERMINATE]
Don't know ( <b>DNR</b> )	98 [THANK & TERMINATE]

## **B. GENERAL SATISFACTION**

B5. You may have recently heard that **Enersource** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

01	Yes
02	No
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

Had you heard of the Alectra Utilities merger before this survey?

B6. Regardless of whether you've heard of the recent merger or not, today I'm going to use the old name **"Enersource"**.

So, throughout this survey, references to "**Enersource**" simply refers to the distribution system in Mississauga, formerly served by **Enersource**, now being served by **Alectra Utilities.** 

Today we'd like to talk to you about four things. First, we will talk about your experience with Enersource. Second, we will talk about the outcomes that matter most to you. Third, we will talk about some trade-offs in planning future investments. And finally, we will talk about some projects that Enersource could undertake in the next year.

B7. First, let's talk about your experience. As you may know, **Enersource** operates and maintains the local electricity distribution system in Mississauga. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by **Enersource**.

How familiar are you with **Enersource**? Would you say you are *very familiar, somewhat familiar*, or *not familiar at all*?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98 99	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B8. In general, how satisfied or dissatisfied are you with the services your organization receives from **Enersource**? Would you say you are *very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied*?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B9. Is there anything in particular **Enersource** can do to improve its service to your organization? [OPEN]

98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

B10. I'd now like to talk with you about your electricity bill ...

While **Enersource** is responsible for collecting payment for the entire electricity bill, they retain about **8%** of the typical mid-sized business customer's bill. This is about **\$1,294.51** on an average **\$16,862.84** monthly mid-sized business electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by **Enersource**? Would you say... [**READ LIST**]

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

## **C. CUSTOMER PRIORITIES**

#### C11. READ PREAMBLE

*Now lets talk about our second topic – outcomes.* **Enersource** regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for **Enersource**.

C12. Among the following **Enersource** priorities, please tell me which one is most important to you.

#### [READ OPTIONS; RANDOMIZE LIST]

01	Delivering reasonable electricity distribution prices.
02	Ensuring reliable electrical service.
03	Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation).
04	Helping customers reduce and better manage their electricity consumption.
05	Minimizing impact on the environment.
06	Ensuring the safety of electricity infrastructure
07	Providing quality customer service
98	Don't Know [DO NOT READ]

#### C13. What is the next most important priority you think Enersource should focus on? If C12=98 Skip to C15

[Remove answer from C11 if asked to read again]

C14. And what do you consider the third most important priority? If C13=98 Skip to C15

#### [Remove answer from C11 and C12 if asked to read again]

C15. Are there any other important priorities that **Enersource** should be focusing on that weren't included in the previous list I read to you? [**OPEN**]

98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

## D. SYSTEM RELIABILITY

D16. We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

01	Reducing the overall number of outages
02	Reducing the overall length of outages
03	Reducing the number of outages during extreme weather events
04	Reducing the length of time to restore power during extreme weather events
05	Improving the quality of power, as judged by momentary interruptions in power that can result in the flickering or dimming of lights
98	Don't Know [DO NOT READ]

D17. What is the next most important reliability outcome for you? If D16=98 Skip to E19

#### [Remove answer from D16 if asked to read again]

D18. And what do you consider the third most important reliability outcome? If D17=98 Skip to E19

[Remove answer from D16 and D17 if asked to read again]

## E. INVESTMENT TRADE-OFFS

#### How are electricity distribution rates set in Ontario?

#### E19. Now, lets turn to our third topic, investment trade-offs.

The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distrubtion rates are set in Ontario?

Would you say you are ... [**READ LIST**]

01	Very familiar and could explain the process to others in details
02	Somewhat familiar, but didn't know how much about the process
03	Not familiar at all with the process of how electricity distrubtion rates are set
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **ICM intro PREAMBLE**

E20. Alectra Utilities is now starting to create it's first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure

E21. **[PREAMBLE**] While **Enersource** works hard to prolong the life of the assets that make up **Mississauga's** distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.08 outages a year for an average of **35 minutes and 40 seconds**. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 56% of unscheduled outages are as a result of equipment failure in the Enersource rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. Enersource must decide the pace at which it replaces this aging equipment.

## E22. Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>Enersource</b> should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.
02	<b>Enersource</b> should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **General Plant**

E23. As a company, **Enersource** needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>Enersource</b> should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.
02	<b>Enersource</b> should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### **System Service Questions**

E24. With growth in various parts of Mississauga comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

#### [Read and Rotate statements 1 and 2]

01	To help keep rate increases down, Enersource should delay investments in system capacity needs until customers start to experience a decline in reliability.
02	Enersource should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

#### Modernizing the Distribution System.

E25. **[PREAMBLE]** There are new technologies that **Enersource** can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliaiblity or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [**READ LIST; rotate 01 and 02**]

01	Enersource should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.
02	Enersource should keep rate increases down by modernizing as part of the normal
	replacement of aging equipment, even though that means delaying the benefits of
	modernization.
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

E26. As we mentioned earlier, the rates you pay to Enersource are set by the OEB through a public process. Enersource's current rates were approved in a 2013 application and will be in place until 2027. Each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for Enersource to find savings every year?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DO NOT READ)
99	Refused (DO NOT READ)

Would you say you are ... [**READ LIST**]

#### ICM rate impact

E27. Now let's turn to our final topic – possible new projects. As part of the OEB policies, there is an option for Enersource to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, Enersource has identified two system renewal projects that need more investment than the existing budget allows. System renewal projects are a mix of replacing aging infrastructure and emergency repairs.

Would you like me to repeat the description of system renewal projects, or may I move on?

[**IF ASKED TO REPEAT**; "System renewal projects are a mix of replacing aging infrastructure and emergency repairs."]

01	Repeat	
02	Continue	
98	Don't know (DO NOT READ)	
99	Refused (DO NOT READ)	

#### Leaky Transformers

- E28. One of these projects deals with leaky transformers. Enersource has 25,000 tranformers which are used to reduce the voltage of electricity as it moves from major transmission lines to the lines going into homes and businesses. Earlier this decade, Enersource identified a backlog of almost 4,000 transformers that show signs of leaking. By the end of this year, over 3,000 of these transformers will have been replaced. However, that will still leave over 600 needing replacement.
- E29. Which of the following is closest to your point of view regarding Ensource's proposed transformer replacement program? [**READ LIST ; ROTATE 01 and 02**]

01	Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.
02	I am willing to have my bill increased by about <b>\$6.21</b> a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.
98	Don't know (DO NOT READ)

#### **Rometown Overhead**

- E30. Another proposed project addresses the Rometown area Overhead system. There are 198 poles in this particular system. 68 out of 198 have been flagged as *poor* while another 56 are seen to be in *fair condition*. A total of 78 have been flagged for urgent replacement. This network of poles uses older technologies that will be replaced when the system is eventually rebuilt, but any repairs done today will have to use the older technology. It is more efficient to replace all the poles at once than to replace them one at a time but it costs less in the short run only to replace the poles most in need of repair.
- E31. Which of the following is closest to your point of view regarding Ensource's proposed Rometown Overhead system rebuild program? [**READ LIST**]

01	Enersource should continue to operate the Rometown overhead system, and replace equipment reactively as it fails
02	Enersource should proceed now to replace 78 of the 198 poles in the most pressing need resulting in a monthly increase of \$1.51 for the average mid-sized business customer
03	Enersource should proceed now to replace all 198 poles at a cost of 3.2 million dollars, resulting in a monthly increase of \$2.62 for the average mid-sized business customer
04	Enersource should proceed now to replace the Rometown overhead system with an underground system at a cost of between \$12 and 18 million dollars, resulting in a monthly increase of between \$9.81 and \$14.72 for the average mid-sized business customer
98	Don't know (DO NOT READ)

- E32. As I mentioned earlier, each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation. In order to reduce the backlog of leaking transformers and to replace the most high risk poles in the Rometown overhead system, Enersource would need to add a **\$7.72 charge** to the typical mid-sized business customers monthly electricity bill, from 2019 to 2026.
- E33. That would result in an annual increase of **\$92.64 each year** over the course of the next eight years *totalling \$741.12 over that period*.

What is your opinion on this proposed rate increase in 2019? Would you say ... [**READ LIST; ROTATE 1 and 2**]

01	The proposed rate increase is reasonable	
02	The proposed rate increase is unreasonable	
98	Don't know (DO NOT READ)	
99	Refused (DO NOT READ)	

## F. SEGMENTATION & DEMOGRAPHICS

Lastly, I'd like to ask you some general questions about the electricity system in Ontario. For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

01	Strongly agree
02	Somewhat agree
03	Somewhat disagree
04	Strongly disagree
98	Don't know/ No opinion (DO NOT READ)
99	Refused (DO NOT READ)

#### [<mark>ROTATE</mark>]

- F34. The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off.
- F35. Customers are well served by the electricity system in Ontario.

#### [END BATTERY]

#### These last few questions are for statistical purposes only.

F36. Which of the following best describes the sector in which your organization operates?

Restaurant	1
Retail	2
Commercial	3
Multi-unit residential	4
Hospitality (i.e. catering, hotel operations)	5
Manufacturing/Warehousing	6
Other [Please specify: ]	88
Don't know / Refused ( <b>DNR</b> )	98

H38. Which of the following best describes the hours of operation of your organization? Would you say ... [READ LIST]

We are open 24/7	1
We operate several shifts each day, but are not open 24/7	2
We operate during regular business hours only	3
We operate outside of regular business hours, but do not have shifts	4
Other (please specify):	88
Don't know / Refused ( <b>DNR</b> )	98

#### THANK and END SURVEY

Thank you very much for taking the time to complete this survey.

Appendix 3.4

# Enersource Key Accounts (2MW+ Customers) Online Survey

### 2019 ICM Customer Engagement

Date: May 2018

Prepared by:

Innovative Research Group, Inc. www.innovativeresearch.ca

Vancouver 888 Dunsmuir Street, Suite 350 Vancouver BC | V6C 3K4

**Toronto** 56 The Esplanade, Suite 310 Toronto, Ontario | M5E 1A7



## **Internal Questionnaire Notes**

Method: Online Questionnaire Length: approximately 10 minutes Language: English Sample Frame: Large User 2MW+ (client list provided) Sample Size: estimated 25% response rate Field Date: May 15-25, 2018

### **Sample Variables**

- Contact Name
- Contact Email
- Company
- Average Peak Demand (based on 2017 calendar year)
- Average Monthly Bill (based on 2017 calendar year)
- Sector (e.g. MURB, MASH, Commercial, Industrial or Institutional)

### **Email Introduction**

This email to come from INNOVATIVE. SUBJECT LINE: Alectra Utilities Customer Feedback Survey FROM: Innovative Research Group <survey@innovativeresearch.ca>

#### Dear [<mark>e\_PIPE\_CN</mark>],

Alectra Utilities has commissioned Innovative Research Group (<u>www.innovativeresearch.ca</u>) to conduct a survey of all its largest customers.

The purpose of this survey is to help Alectra Utilities align its business planning with customer preferences and needs. Your feedback will help guide how Alectra Utilities uses ratepayer dollars to make future investment and spending decisions.

Only one representative per customer is being asked to participate in this important survey, so your response is singularly important. If you choose to delegate the completion of this survey, please refrain from multiple assignments, and assign this survey to a single staff member who is well-informed about your organization's electricity consumption and operations management.

We hope that you have a few minutes to complete this important survey so we can incorporate your input into Alectra Utilities' business planning process.

Your responses will be completely anonymous and your organization will not be identified to Alectra Utilities. To ensure your anonymity, your survey answers will be combined with those of other key account respondents to this survey.

The online survey will take about **10 minutes** to complete. To participate in the online survey, please click on the URL below, or copy and paste it into the address bar in your browser: <unique URL>

We appreciate you taking the time to complete this survey.

#### Sincerely, Innovative Research Group

#### - on behalf of -

#### **Eileen Campbell** Vice President Customer Service Alectra Utilities Corporation E: Eileen.Campbell@alectrautilties.com T: 905-317-4736

If you have any problems accessing the site, please contact Innovative Research Group's online panel support team at <a href="mailto:survey@innovativeresearch.ca">survey@innovativeresearch.ca</a>.

### A. INTRODUCTION

Thank you for participating in this online survey.

**Innovative Research Group** is a national public opinion research and consultation firm. **Alectra Utilities** has hired us to help it better understand the needs and preferences of its largest customers – customers like you – as well as identify the priorities where you think they should focus their resources.

This survey should take you **approximately 10 minutes** to complete and your answers will be combined with others to protect your confidentiality. While we've been provided your name and email address, no information that could be used to identify you or your company will be shared with Alectra Utilities.

Please answer all questions to the best of your ability. When answering the questions, please provide us with the response that holds most true for you. If you're unsure of how to answer a question or feel you don't know, please use the "don't know" or equivalent option.

#### Again, all information provided will be treated confidentially.

**Note**: While you may be an Alectra Utilities residential customer, for the purposes of this survey, please answer the questions from the perspective of the <u>business or organization</u> that you represent.

Also, you may manage multiple facilities and receive multiple bills from Alectra Utilities. However, for this survey, please answer the questions with [**e\_PIPE1**]'s facility, located at **[e\_PIPE\_A],** in mind.

Thank you for your time,

Innovative Research Group

Click here for the Innovative Research Group Inc.'s privacy policy.

#### Page break.

A1.	PLACEHOLDER
A2.	PLACEHOLDER
A3.	PLACEHOLDER
A4.	PLACEHOLDER

### **B.** GENERAL SATISFACTION

B5. You may have recently heard that **Enersource** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

Had you heard of the Alectra Utilities merger before this survey?

01	Yes
02	No

B6. Regardless of whether you've heard of the recent merger or not, today I'm going to use the old name **"Enersource"**.

So, throughout this survey, references to "**Enersource**" simply refers to the distribution system in Mississauga, formerly served by **Enersource**, now being served by **Alectra Utilities.** 

This survey will review four topics:

- 1. Your experience with Enersource.
- 2. Outcomes that matter most to you.
- 3. Your preference on trade-offs in planning future investments
- 4. Your preferences on projects that Enersource could undertake in the next year.

#### Page break.

B7. Let's begin with our first topic: your customer experience.

As you may know, **Enersource** operates and maintains the local electricity distribution system in Mississauga. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by **Enersource**.

How familiar are you with **Enersource**?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know

# B8. In general, how satisfied or dissatisfied are you with the services your organization receives from **Enersource**?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know

# B9. Is there anything in particular **Enersource** can do to improve its service to your organization? [**OPEN**]

98	Don't know	
----	------------	--

#### Page break.

B10. The next question is specifically about [**e\_PIPE1**]'s electricity bill.

While **Enersource** is responsible for collecting payment for the entire electricity bill, they retain about [e\_PIPE2] of your organization's bill. This is about [e\_PIPE3] on your average [e\_PIPE4] monthly electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by **Enersource**?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know

#### Page break.

## **C. CUSTOMER PRIORITIES**

#### C11. Now lets turn to our second topic: outcomes.

**Enersource** regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for **Enersource**.

#### C12. Please rank your Top 3 priorities from the list below.

Drag and drop the priorities in order, starting with the priority most important to you, followed by the second most important, and ending with the third most important.

01	Delivering reasonable electricity distribution prices.
02	Ensuring reliable electrical service.
03	Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation).
04	Helping customers reduce and better manage their electricity consumption.
05	Minimizing impact on the environment.
06	Ensuring the safety of electricity infrastructure
07	Providing quality customer service

#### C13. Place holder.

C14. Place holder.

C15. Are there any other important priorities that **Enersource** should be focusing on that weren't included in the previous list? [**OPEN**]

98 Don't know

#### Page break.

## **D.** System Reliability

D16. We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please rank the <u>**3 most important**</u> from the list below.

Drag and drop the priorities in order, starting with the priority most important to you, followed by the second most important, and ending with the third most important.

01	Reducing the overall number of outages
02	Reducing the overall length of outages
03	Reducing the number of outages during extreme weather events
04	Reducing the length of time to restore power during extreme weather events
05	Improving the quality of power, as judged by momentary interruptions in power that can result in the flickering or dimming of lights

D17. Place holder. D18. Place holder.

## E. INVESTMENT TRADE-OFFS

#### How are electricity distribution rates set in Ontario?

#### E19. Now, lets turn to our third topic: investment trade-offs.

The electricity industry in Ontario is regulated by the Ontario Energy Board(OEB). The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distrubtion rates are set in Ontario?

01	Very familiar and could explain the process to others in details
02	Somewhat familiar, but didn't know how much about the process
03	Not familiar at all with the process of how electricity distrubtion rates are set
98	Don't know

#### Page break.

#### ICM intro PREAMBLE

E20. Alectra Utilities is now starting to create it's first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive.

The next few questions are about your preferences when it comes to finding the right balance between costs and other outcomes.

The first projects involve **system renewal**: these are the projects that replace aging electrical infrastructure.

E21. While **Enersource** works hard to prolong the life of the assets that make up **Mississauga's** distribution system, eventually these assets reach the end of their useful life and require replacement.

Currently the average customer experiences 1.08 outages a year for an average of **35 minutes and 40 seconds**. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 56% of unscheduled outages are as a result of equipment failure in the Enersource rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. Enersource must decide the pace at which it replaces this aging equipment.

# E22. With this in mind, which of the following statements best represents your point of view? [Rotate statements 1 and 2]

01	<b>Enersource</b> should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.
02	<b>Enersource</b> should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.
98	Don't know

#### Page break.

**General Plant** 

E23. As a company, **Enersource** needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

With this in mind, which of the following statements best represents your point of view? **[Rotate statements 1 and 2]** 

01	<b>Enersource</b> should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.
02	<b>Enersource</b> should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably.
98	Don't know

#### **System Service Questions**

E24. With growth in various parts of Mississauga comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

#### [Rotate 1 and 2]

01	To help keep rate increases down, Enersource should delay investments in system capacity needs until customers start to experience a decline in reliability.
02	Enersource should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.
98	Don't know

#### Modernizing the Distribution System.

E25. There are new technologies that **Enersource** can implement such as microgrids, electricity storage, and automatic switches that can give customers more choices, improve reliaiblity or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

With this in mind, which of the following statements best represent your point of view? [Rotate 01 and 02]

01	Enersource should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.
02	Enersource should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.
98	Don't know

#### Page break.

E26. As we mentioned earlier, the rates you pay to Enersource are set by the OEB through a public process. Enersource's current rates were approved in a 2013 application and will be in place until 2027.

Each year **Enersource** is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires **Enersource** to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for Enersource to find savings every year?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know

#### Page break.

### **ICM rate impact**

### E27. Now let's turn to our final topic – **possible new projects**.

As part of the OEB policies, there is an option for Enersource to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates.

Looking ahead to 2019, Enersource has identified **two system renewal projects** that need more investment than the existing budget allows. System renewal projects are a mix of replacing aging infrastructure and emergency repairs.

### Leaky Transformers

- E28. **One of these projects deals with leaky transformers**. Enersource has 25,000 tranformers which are used to reduce the voltage of electricity as it moves from major transmission lines to the lines going into homes and businesses. Earlier this decade, Enersource identified a backlog of almost 4,000 transformers that show signs of leaking. By the end of this year, over 3,000 of these transformers will have been replaced. However, that will still leave over 600 needing replacement.
- E29. Which of the following is closest to your point of view regarding Ensource's proposed transformer replacement program?

### ROTATE 01 and 02

01	Enersource should replace leaky transformers as part of its existing renewal plan, even the backlog, even if that means it will take several years before they are all replaced.
02	I am willing to have my bill increased by about [e_PIPE5] a month so Enersource can make an extra effort to clean up the backlog of leaky transformers.
98	Don't know

**Rometown Overhead** 

#### E30. Another proposed project addresses the Rometown area Overhead system.

There are 198 poles in this particular system. 68 out of 198 have been flagged as *poor* while another 56 are seen to be in *fair condition*. A total of 78 have been flagged for urgent replacement.

This network of poles uses older technologies that will be replaced when the system is eventually rebuilt, but any repairs done today will have to use the older technology. It is more efficient to replace all the poles at once than to replace them one at a time but it costs less in the short run only to replace the poles most in need of repair.

E31. Which of the following is closest to your point of view regarding Ensource's proposed Rometown Overhead system rebuild program?

01	Enersource should continue to operate the Rometown overhead system, and replace equipment reactively as it fails
02	Enersource should proceed now to replace 78 of the 198 poles in the most pressing need resulting in an estimated monthly increase of <b>[e_PIPE6]</b> for your organization
03	Enersource should proceed now to replace all 198 poles at a cost of 3.2 million dollars, resulting in a monthly increase of <b>[e_PIPE7]</b> for your organization
04	Enersource should proceed now to replace the Rometown overhead system with an underground system at a cost of between \$12 and 18 million dollars, resulting in a monthly increase of between <b>[e_PIPE8]</b> and <b>[e_PIPE9]</b> for your organization
98	Don't know

E32. As mentioned earlier, each year Enersource is permitted to increase rates to reflect inflation minus a stretch factor which requires Enersource to find savings to keep cost increases below inflation.

In order to reduce the backlog of **leaking transformers** and to replace the most high risk poles in the **Rometown overhead system**, Enersource would need to add an estimated **[e\_PIPE10] charge** to your organization's monthly electricity bill, from 2019 to 2026.

E33. That would result in an estimated annual increase of [**e\_PIPE11**] **each year** over the course of the next eight years – *totalling* [**e\_PIPE12**]*over that period*.

01	The proposed rate increase is reasonable	
02	The proposed rate increase is unreasonable	
98	Don't know	

What is your opinion on this proposed rate increase in 2019?

# F. SEGMENTATION & FIRMOGRAPHICS

The last few questions are about the broader electricity system in Ontario. For each statement please indicate if you agree or disagree.

01	Strongly agree
02	Somewhat agree
03	Somewhat disagree
04	Strongly disagree
98	Don't know/no opinion

### [ROTATE]

- F34. The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off.
- F35. Customers are well served by the electricity system in Ontario.

### [END BATTERY]

 F36. Before this survey concludes, do you have any additional comments or feedback you'd like to share with Alectra Utilities? Note: all feedback is anonymous and you will <u>not</u> be identified to Alectra Utilities without your expressed permission.
 [OPEN]

### **THANK and END SURVEY**

Thank you for taking the time to complete this survey.

If you have additional feedback you'd like to share with **Alectra Utilities**, please feel free to contact:

### Scott Miller

Director, Customer Care Alectra Utilities Corporation <u>Scott.Miller@alectrautilities.com</u> Appendix 3.5

# **Powerstream** Residential Ratepayer Survey

### 2019 ICM Customer Engagement

Date: May 2018

Prepared by:

**Innovative Research Group, Inc.** www.innovativeresearch.ca

Vancouver 888 Dunsmuir Street, Suite 350 Vancouver BC | V6C 3K4

**Toronto** 56 The Esplanade, Suite 310 Toronto, Ontario | M5E 1A7



# **Residential Ratepayer Survey**

### **Internal Questionnaire Notes**

Method: Telephone, client provided list Questionnaire Length: TBD Language: English Sample Frame: Representative; n=500 residential customers Calling Times: Weekdays 4-9pm; Saturdays 12noon-9pm; Sundays 12noon-9pm

### Sample Variables

- 1. Postal Code
- **2.** Total Annual Electricity Consumption (total consumption between 1-Jan-2017 and 31-Dec-2017)

**The survey will follow a stratified random sampling methodology**. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics (in this case, customer service area or electricity usage). A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the customer population. These subsets of the strata are then pooled to form a random sample.

In this survey, customers will be divided into quartiles based on annual electricity usage to ensure the sample has a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households/low-volume businesses.

<b>Residential Customers</b>	% Dist	Sample	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Aurora	5%	27	7	7	7	7
Barrie	15%	76	19	19	19	19
Bradford	3%	13	3	3	3	3
Markham	28%	140	35	35	35	35
Richmond Hill	1 <b>7</b> %	87	22	22	22	22
Vaughan	26%	131	33	33	33	33
Other	6%	28	7	7	7	7
Total	100%	500	125	125	125	125

The table below illustrates the strata divisions:

# A. SCREENING AND QUALIFICATIONS

### Introduction

Hello, my name is \_\_\_\_\_\_ and I'm calling from **Innovative Research Group** on behalf of **PowerStream**, your electricity distributor.

Innovative Research Group is a national public opinion research firm. We have been commissioned by **PowerStream** to help them better understand the needs and preferences of customers who are responsible for paying their household's electricity bill.

**PowerStream**– which distributes electricity to homes and businesses in your community – is preparing to submit its investment plan to the Ontario Energy Board for regulatory review. Since this plan will impact your bill, **PowerStream** wants to hear from you, so your views can help shape its plan.

- A1. Would you mind if I had **<u>10 minutes</u>** of your time to ask you some questions? All your responses will be kept strictly confidential.
  - 1Yes[continue]2No NOT PRIMARY BILL PAYER[go to TRANSFER-1]]
  - 3 No BAD TIME
  - 4 No HARD REFUSAL

### MONIT

This call may be monitored or audio recorded for quality control and evaluation purposes. 1 PRESS TO CONTINUE

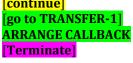
- A2. Have I reached you at your home phone number?
  - 1 Yes SPEAKING, CONTINUE
  - 2 No AT OFFICE or WORKPLACE
  - 3 No on cellular or mobile phone
  - 99 Refused LOG (THANK AND TERMINATE)
- **CELL**. Are you currently operating a car, truck or other motor vehicle?
  - 1 YES
  - 2 NO
  - 98 Refused LOG (THANK AND TERMINATE)
- A3. Are you the person primarily responsible for paying the electricity bill in your household?
  - 1 Yes I pay the bill
  - 2 Yes shared responsibility
  - 3 No
  - 98 Don't know (**DNR**)
- [continue to A4] [continue to A4] [go to TRANSFER-1] [Terminate]

[<mark>skip to <u>CELL</u>] **[Terminate]** :le? ARRANGE CALLBACI</mark>

[continue to A3]

[continue to A3]

ARRANGE CALLBACK [continue to A3] [Terminate]



### **TRANSFER-1**

Can I speak with the person in your household who usually pays the electricity bill?

- 1 Yes
- 2 No NOT AVAILABLE/BAD TIME
- 3 No HARD REFUSAL

98 Don't know (**DNR**)

[BACK TO <u>INTRO</u>] [ARRANGE CALLBACK] [Terminate] [Terminate]

### A4. And can you confirm that your household receives an electricity bill from **PowerStream**?

1	Yes	[continue]
2	No	[Terminate]
98	Don't know ( <b>DNR</b> )	[Terminate]

GENDER		Note gender by observation:	
	1	Male	
	2	Female	

# **B. GENERAL SATISFACTION**

B5. You may have recently heard that **Powerstream** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

01	Yes
02	No
98	Don't know ( <b>DNR</b> )
99	Refused (DNR)

Had you heard of the Alectra Utilities merger before this survey?

B6. Regardless of whether you've heard of the recent merger or not, today I'm going to use the old name, PowerStream.

So, throughout this survey, references to "**PowerStream**" simply refers to the distribution system, formerly served by **PowerStream**, now being served by **Alectra Utilities**.

Today we'd like to talk to you about four things. First, we will talk about your experience with PowerStream. Second, we will talk about the outcomes that matter most to you. Third, we will talk about some trade-offs in planning future investments. And finally, we will talk about some projects that PowerStream could undertake in the next year.

B7. First, let's talk about your experience. As you may know, **PowerStream** operates and maintains the local electricity distribution system in this area. This is the system that takes the electricity from provincial transmission lines and brings it to your home through a network of wires, poles and other equipment that is owned and operated by **PowerStream**.

How familiar are you with **PowerStream**? Would you say you are *very familiar*, *somewhat familiar*, or *not familiar at all*?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DNR)
99	Refused (DNR)

B8. In general, how satisfied or dissatisfied are you with the services you receive from **Powerstream**? Would you say you are *very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied*?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know (DNR)
99	Refused (DNR)

B9. Is there anything in particular **Powerstream** can do to improve its service to you? [**OPEN**]

98	Don't know (DNR)
99	Refused (DNR)

B10. I'd now like to talk with you about your electricity bill ...

While **Powerstream** is responsible for collecting payment for the entire electricity bill, they retain about **26%** of the typical residential customer's bill. This is about **\$28.48** on an average **\$108.81** monthly residential electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your electricity bill that is retained by **Powerstream**? Would you say... [**READ LIST**]

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't Know [DO NOT READ]
99	Refused (DO NOT READ)

# **C. CUSTOMER PRIORITIES**

### C11. READ PREAMBLE

*Now lets talk about our second topic – outcomes.* **Powerstream** regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for **Powerstream**.

C12. Among the following **Powerstream** priorities, please tell me which one is most important to you.

### [READ OPTIONS; RANDOMIZE LIST]

01	Delivering reasonable electricity distribution prices.
02	Ensuring reliable electrical service.
03	Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation).
04	Helping customers reduce and better manage their electricity consumption.
05	Minimizing impact on the environment.
06	Ensuring the safety of electricity infrastructure
07	Providing quality customer service
98	Don't Know [DO NOT READ]

# C13. What is the next most important priority you think Powerstream should focus on? [If C12=98 Skip to C15]

[Remove answer from C12 if asked to read again]

C14. And what do you consider the third most important priority? [If C13=98 Skip to C15]

[Remove answer from C12 and C13 if asked to read again]

C15. Are there any other important priorities that **Powerstream** should be focusing on that weren't included in the previous list I read to you? [**OPEN**]

# **D.** SYSTEM RELIABILITY

D16. We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

01	Reducing the overall number of outages
02	Reducing the overall length of outages
03	Reducing the number of outages during extreme weather events
04	Reducing the length of time to restore power during extreme weather events
05	Improving the quality of power, as judged by momentary interruptions in power that can result in the flickering or dimming of lights

D17. What is the next most important reliability outcome for you?

[Remove answer from D16 if asked to read again]

D18. And what do you consider the third most important reliability outcome?

[Remove answer from D16 and D17 if asked to read again]

# E. INVESTMENT TRADE-OFFS

### How are electricity distribution rates set in Ontario?

### E19. Now, lets turn to our third topic, investment trade-offs.

The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distrubtion rates are set in Ontario?

Would you say you are ... [**READ LIST**]

01	Very familiar and could explain the process to others in details	
02	Somewhat familiar, but didn't know how much about the process	
03	Not familiar at all with the process of how electricity distrubtion rates are set	
98	Don't know ( <b>DNR</b> )	
99	Refused (DNR)	

### **ICM intro PREAMBLE**

E20. Alectra Utilities is now starting to create it's first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure.

E21. **[PREAMBLE**] While **PowerStream** works hard to prolong the life of the assets that make up its distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.1 outages a year for an average of 57 minutes. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 42% of unscheduled outages are as a result of equipment failure in the PowerStream rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. PowerStream must decide the pace at which it replaces this aging equipment.

### E22. Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>PowerStream</b> should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.
02	<b>PowerStream</b> should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.
98	Don't know ( <b>DNR</b> )
99	Refused (DNR)

### **General Plant**

E23. As a company, **PowerStream** needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>PowerStream</b> should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.	
02	<b>PowerStream</b> should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably	
98	Don't know ( <b>DNR</b> )	
99	Refused (DNR)	

### **System Service Questions**

E24. With growth in various parts of the PowerStream service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

### [Read and Rotate statements 1 and 2]

01	To help keep rate increases down, <b>PowerStream</b> should delay investments in system capacity needs until customers start to experience a decline in reliability.	
02	<b>PowerStream</b> should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.	
98	Don't know ( <b>DNR</b> )	
99	Refused (DNR)	

### Modernizing the Distribution System.

E25. **[PREAMBLE]** There are new technoglogies that **PowerStream** can implement such as microgrids, electricity storage, and automatic swithces that can give customers more choices, improve reliaiblity or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [**READ LIST; rotate 01 and 02**]

01	<b>PowerStream</b> should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.
02	<b>PowerStream</b> should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.
98	Don't know [DNR]
99	Refused [DNR]

E26. As we mentioned earlier, the rates you pay to PowerStream are set by the OEB through a public process. PowerStream's current rates were approved in a 2017 application and will be in place until 2027. Each year PowerStream is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires PowerStream to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for PowerStream to find savings every year?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know ( <b>DNR</b> )
99	Refused ( <b>DNR</b> )

Would you say you are ... [**READ LIST**]

### **ICM rate impact**

E27. *Now let's turn to our final topic – possible new projects.* As part of the OEB policies, there is an option for PowerStream to apply for additional rate increases for discrete projects projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, PowerStream has identified three projects that need more investment than the existing budget allows.

One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project.

E28. Would you like me to repeat the description of these projects or may I move on to a third project?

**[IF ASKED TO REPEAT**; "One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project."

01	Repeat
02	Continue
98	Don't know [ <b>DNR</b> ]
99	Refused [DNR]

E29. The third project involves relocating both overhead and underground wires and supporting equipment as part of the Bathurst Street road widening from Highway 7 to Teston road.

Powerstream has two options for this project. It can (ROTATE)

- move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, OR
- replace the overhead system with an underground system for better protection against weather and collisions from vehicles at a cost of between \$25 and \$35 million dollars.

Given earlier customer feedback emphasing the need to keep rate increases down, PowerStream is currently planning on taking the first option - to move the current mix of overhead and underground wires and equipment

Which option do you prefer? [ROTATE 1 and 2]

01	Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of <b>6 cents</b> for the average residential customer.	
02	Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between <b>25 cents and 35 cents</b> for the average residential customer	
98	Don't know [ <b>DNR</b> ]	
99	Refused [ <b>DNR</b> ]	

- E30. As I mentioned earlier, each year PowerStream is permitted to increase rates to reflect inflation minus a stretch factor which requires PowerStream to find savings to keep cost increases below inflation. In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, PowerStream would need to add a **21 cent charge** to the typical residential customers monthly electricity bill, from 2019 to 2026.
- E31. That would result in an annual increase of **\$2.52 each year** over the course of the next eight years *totalling \$20.16 over that period*.

What is your opinion on this proposed rate increase in 2019? Would you say ... [**READ LIST; ROTATE 1 and 2**]

01	The proposed rate increase is reasonable	
02	The proposed rate increase is unreasonable	
98	Don't know [ <b>DNR</b> ]	
99	Refused [DNR]	

# F. SEGMENTATION & DEMOGRAPHICS

Lastly, I'd like to ask you some general questions about the electricity system in Ontario. For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

01	Strongly agree
02	Somewhat agree
03	Somewhat disagree
04	Strongly disagree
98	Don't know/ No opinion [DO NOT READ]
99	Refused [DNR]

### [<mark>ROTATE</mark>]

- F32. The cost of my electricity bill has a major impact on my finances and requires I do without some other important priorities.
- F33. Customers are well served by the electricity system in Ontario.

### [END BATTERY]

These last few questions are for statistical purposes only and I remind you again that all of your responses are completely confidential.

F34. Which of the following age group do you fall into? **READ LIST** 

01	Younger than 18
02	18 to 24
03	25 to 34
04	35 to 44
05	45 to 54
06	55 to 64
07	65 or older
99	Refused [DNR]

F35. Counting yourself, how many people live in your household? [DO NOT READ LIST]

01	1 person
02	2 people
03	3 people
04	4 people
05	5 people
06	6 people
07	7 people
08	8 or more people
99	Refused [DNR]

F36. To the best of your ability, please tell me which of the following categories best describes your household's AFTER TAX income. **READ LIST** 

01	Less than \$28,000
02	Just over \$28,000 to \$39,000
03	Just over \$39,000 to \$48,000
04	Just over \$48,000 to \$52,000
05	More than \$52,000
98	Not sure [DNR]
99	Refused [DNR]

### **THANK and END SURVEY**

Thank you very much for taking the time to complete this survey.

Appendix 3.6

# **Powerstream** Small Business Ratepayer Survey

### 2019 ICM Customer Engagement

Date: May 2018

Prepared by:

**Innovative Research Group, Inc.** www.innovativeresearch.ca

Vancouver 888 Dunsmuir Street, Suite 350 Vancouver BC | V6C 3K4

**Toronto** 56 The Esplanade, Suite 310 Toronto, Ontario | M5E 1A7



# **Small Business Ratepayer Survey**

### **Internal Questionnaire Notes**

Method: Telephone, client provided list Questionnaire Length: 10 minutes Language: English Sample Frame: Representative; n=200 small business customers (GS<50kW) Calling Times: Weekdays 9am to 5pm;

### Sample Variables

- 1. Postal Code
- **2. Total Annual Electricity Consumption** (*total consumption between 1-Jan-2016 and 31-Dec-*2016)

**The survey will follow a stratified random sampling methodology**. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics (in this case, customer service area or electricity usage). A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the customer population. These subsets of the strata are then pooled to form a random sample.

In this survey, customers will be divided into quartiles based on annual electricity usage to ensure the sample has a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households/low-volume businesses.

The table below illustrates the strata divisions:

GS<50kW Customers	% Dist	Sample	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Aurora	5%	11	3	3	3	3
Barrie	15%	30	8	8	8	8
Bradford	3%	5	1	1	1	1
Markham	28%	56	14	14	14	14
Richmond Hill	17%	35	9	9	9	9
Vaughan	26%	52	13	13	13	13
Other	6%	11	3	3	3	3
Total	100%	200	50	50	50	50

### **Customer Sample Strata Divisions (Quotas):**

# A. SCREENING AND QUALIFICATIONS

### Introduction

Hello, may I please speak to the person who is in charge of managing the electricity bill at your organization?

Yes < <b>speaking</b> >	[go to INTRO]
Yes <transferred contact="" to=""></transferred>	[go to INTRO]
No <b><not available=""></not></b> "When is a good time to callback?	[record callback time]
No <not in="" interested="" talking=""></not>	[THANK & TERMINATE]

### INTRO.

A1. Hello, my name is \_\_\_\_\_\_ and I'm calling from Innovative Research Group on behalf of **PowerStream**, your electricity distributor.

**Innovative Research Group** is a national public opinion research firm. **We need your input on choices that will affect the service you receive from PowerStream and the price you pay for that service.** Your answers will be combined with others to protect your privacy.

The survey should take about 10 minutes.

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

1) Yes, speaking <contact on the line>[skip to A2]2) Yes <transferred to contact>[skip to A2]3) No <not the right contact person>[GO to "NEW"]4) No <busy> "When is a good time to callback?"[record callback time]5) Maybe <may I ask who is calling?>[skip to GATE]

NEW. And ... can I have their ...

First Name \_\_\_\_\_ Last Name \_\_\_\_\_ Title/Position \_\_\_\_\_ Phone Number \_\_\_\_\_

### ASK to be transferred ...

if transferred → go to A2

• if not transferred → Thank & Add to Callback List

**INTERVIEWER NOTE: If gatekeeper asks the purpose of call**  $\rightarrow$  I'd like to ask the person incharge of managing the electricity bill at your organization a few questions concerning a **PowerStream** customer consultation.

- 1) Yes <transferred to contact>
- 2) No **<not available>** *"When is a good time to callback?*
- 3) No <not interested in talking>

### A1 QUAL PREAMBLE:

### Read preamable again, if transferred to new person:

Hello, my name is \_\_\_\_\_\_ and I'm calling on behalf of PowerStream, your local electricity utility.

**Innovative Research** is a national public opinion research firm. We have been hired by **PowerStream** to help them better understand the needs and preferences of non-residential customers who are responsible for paying their organization's electricity bill.

A2. Can I have roughly **10 minutes** of your time to ask you some questions? All your responses will be kept strictly confidential.

Yes – I don't mind No – Not primary bill payer (i.e. not best person to speak to) No – BAD TIME No – HARD REFUSAL

- 1 [CONTINUE]
- 2 [go to TRANSFER]
- 3 [ARRANGE CALLBACK]
- 4 [THANK & TERMINATE]

### MONIT [INTERNAL]

This call may be monitored or audio taped for quality control and evaluation purposes. PRESS TO CONTINUE 1

# A3. Can you confirm that your organization receives an electricity or hydro bill from **PowerStream or Alectra Utilities**?

YES	1	[CONTINUE]
NO	2	[THANK & TERMINATE]
DK (volunteered)	98	[THANK & TERMINATE]

[skip to A2] [record call-back time and go to "NEW"] [Thank & Terminate] Only those in charge of managing/overseeing organizations electricity bill will be interviewed.

As part of your job, are you in charge of managing or overseeing your organization's A4. electricity or hydro bill?

YES	1	[CONTINUE]
NO	2 "Can I	speak to the person who manages your organization's
	electricity bill?	" [Return to <b>NEW</b> ]
DK	3 "Can I	speak to the person who manages your organization's
	electricity bill?	[Return to <b>NEW</b> ]

### TRANSFER

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

Yes

Yes	1 [BACK TO <i>INTRO</i> ]
No – NOT AVAILABLE/BAD TIME – (ARRANGE CALLBACK)	2 [ARRANGE CALLBACK]
No – HARD REFUSAL	3 [THANK & TERMINATE]
Don't know ( <b>DNR</b> )	98 [THANK & TERMINATE]

# **B. GENERAL SATISFACTION**

B5. You may have recently heard that **Powerstream** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

01	Yes
02	No
98	Don't know ( <b>DNR</b> )
99	Refused (DNR)

Had you heard of the Alectra Utilities merger before this survey?

B6. Regardless of whether you've heard of the recent merger or not, today I'm going to use the old name, **PowerStream**.

So, throughout this survey, references to "**PowerStream**" simply refers to the distribution system, formerly served by **PowerStream**, now being served by **Alectra Utilities**.

Today we'd like to talk to you about four things. First, we will talk about your experience with PowerStream. Second, we will talk about the outcomes that matter most to you. Third, we will talk about some trade-offs in planning future investments. And finally, we will talk about some projects that PowerStream could undertake in the next year.

B7. First, let's talk about your experience. As you may know, **PowerStream** operates and maintains the local electricity distribution system in this area. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by **PowerStream**.

How familiar are you with **PowerStream**? Would you say you are *very familiar*, *somewhat familiar*, or *not familiar at all*?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DNR)
99	Refused (DNR)

B8. In general, how satisfied or dissatisfied are you with the services you receive from **Powerstream**? Would you say you are *very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied*?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know (DNR)
99	Refused (DNR)

B9. Is there anything in particular **Powerstream** can do to improve its service to you? [**OPEN**]

98	Don't know (DNR)
99	Refused (DNR)

B10. I'd now like to talk with you about your electricity bill ...

While **Powerstream** is responsible for collecting payment for the entire electricity bill, they retain about **23%** of the typical small business customer's bill. This is about **\$68.52** on an average **\$292.71** monthly small business electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by **Powerstream**? Would you say... [**READ LIST**]

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't Know [DO NOT READ]
99	Refused (DO NOT READ)

# **C. CUSTOMER PRIORITIES**

### C11. READ PREAMBLE

*Now lets talk about our second topic – outcomes.* **Powerstream** regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for **Powerstream**.

C12. Among the following **Powerstream** priorities, please tell me which one is most important to you.

### [READ OPTIONS; RANDOMIZE LIST]

01	Delivering reasonable electricity distribution prices.	
02	Ensuring reliable electrical service.	
03	Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation).	
04	Helping customers reduce and better manage their electricity consumption.	
05	Minimizing impact on the environment.	
06	Ensuring the safety of electricity infrastructure	
07	Providing quality customer service	
98	Don't Know [DO NOT READ]	

# C13. What is the next most important priority you think Powerstream should focus on? [If C12=98 Skip to C15]

[Remove answer from C12 if asked to read again]

C14. And what do you consider the third most important priority? [If C13=98 Skip to C15]

[Remove answer from C12 and C13 if asked to read again]

C15. Are there any other important priorities that **Powerstream** should be focusing on that weren't included in the previous list I read to you? [**OPEN**]

# **D.** SYSTEM RELIABILITY

D16. We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

01	Reducing the overall number of outages	
02	Reducing the overall length of outages	
03	Reducing the number of outages during extreme weather events	
04	Reducing the length of time to restore power during extreme weather events	
05	Improving the quality of power, as judged by momentary interruptions in power that can result in the flickering or dimming of lights	

D17. What is the next most important reliability outcome for you?

[Remove answer from D16 if asked to read again]

D18. And what do you consider the third most important reliability outcome?

[Remove answer from D16 and D17 if asked to read again]

# E. INVESTMENT TRADE-OFFS

### How are electricity distribution rates set in Ontario?

### E19. Now, lets turn to our third topic, investment trade-offs.

The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distrubtion rates are set in Ontario?

Would you say you are ... [**READ LIST**]

01	Very familiar and could explain the process to others in details	
02	Somewhat familiar, but didn't know how much about the process	
03	Not familiar at all with the process of how electricity distrubtion rates are set	
98	Don't know ( <b>DNR</b> )	
99	Refused (DNR)	

### **ICM intro PREAMBLE**

E20. Alectra Utilities is now starting to create it's first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure.

E21. [**PREAMBLE**] While **PowerStream** works hard to prolong the life of the assets that make up its distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.1 outages a year for an average of 57 minutes. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 42% of unscheduled outages are as a result of equipment failure in the PowerStream rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. PowerStream must decide the pace at which it replaces this aging equipment.

### E22. Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>PowerStream</b> should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.	
02	<b>PowerStream</b> should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.	
98	Don't know ( <b>DNR</b> )	
99	Refused (DNR)	

### **General Plant**

E23. As a company, **PowerStream** needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>PowerStream</b> should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.		
02	<b>PowerStream</b> should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably		
98	Don't know ( <b>DNR</b> )		
99	Refused (DNR)		

### **System Service Questions**

E24. With growth in various parts of the PowerStream service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

### [Read and Rotate statements 1 and 2]

01	To help keep rate increases down, <b>PowerStream</b> should delay investments in system capacity needs until customers start to experience a decline in reliability.	
02	<b>PowerStream</b> should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.	
98	Don't know ( <b>DNR</b> )	
99	Refused (DNR)	

### Modernizing the Distribution System.

E25. **[PREAMBLE]** There are new technoglogies that **PowerStream** can implement such as microgrids, electricity storage, and automatic swithces that can give customers more choices, improve reliaiblity or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [**READ LIST; rotate 01 and 02**]

01	<b>PowerStream</b> should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.	
02	<b>PowerStream</b> should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.	
98	Don't know [DNR]	
99	Refused [DNR]	

E26. As we mentioned earlier, the rates you pay to PowerStream are set by the OEB through a public process. PowerStream's current rates were approved in a 2017 application and will be in place until 2027. Each year PowerStream is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires PowerStream to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for PowerStream to find savings every year?

01	Very familiar	
02	Somewhat familiar	
03	Not familiar at all	
98	Don't know ( <b>DNR</b> )	
99	Refused ( <b>DNR</b> )	

Would you say you are ... [**READ LIST**]

### **ICM rate impact**

E27. *Now let's turn to our final topic – possible new projects.* As part of the OEB policies, there is an option for PowerStream to apply for additional rate increases for discrete projects projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, PowerStream has identified three projects that need more investment than the existing budget allows.

One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project.

E28. Would you like me to repeat the description of these projects or may I move on to a third project?

**[IF ASKED TO REPEAT**; "One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project."

01	Repeat	
02	Continue	
98	Don't know [ <b>DNR</b> ]	
99	Refused [DNR]	

E29. The third project involves relocating both overhead and underground wires and supporting equipment as part of the Bathurst Street road widening from Highway 7 to Teston road.

Powerstream has two options for this project. It can (ROTATE)

- move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, OR
- replace the overhead system with an underground system for better protection against weather and collisions from vehicles at a cost of between \$25 and \$35 million dollars.

Given earlier customer feedback emphasing the need to keep rate increases down, PowerStream is currently planning on taking the first option - to move the current mix of overhead and underground wires and equipment

Which option do you prefer? [ROTATE 1 and 2]

01	Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of <b>11 cents</b> for the average small business customer.	
02	Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between <b>51 cents and 72 cents</b> for the average small business customer	
98	Don't know [ <b>DNR</b> ]	
99	Refused [DNR]	

- E30. As I mentioned earlier, each year PowerStream is permitted to increase rates to reflect inflation minus a stretch factor which requires PowerStream to find savings to keep cost increases below inflation. In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, PowerStream would need to add a **43 cent charge** to the typical small business customers monthly electricity bill, from 2019 to 2016.
- E31. That would result in an annual increase of **\$5.16 each year** over the course of the next eight years *totalling \$41.28 over that period*.

What is your opinion on this proposed rate increase in 2019? Would you say ... [**READ LIST; ROTATE 1 and 2**]

01	The proposed rate increase is reasonable	
02	The proposed rate increase is unreasonable	
98	Don't know [ <b>DNR</b> ]	
99	Refused [ <b>DNR</b> ]	

# F. SEGMENTATION & DEMOGRAPHICS

Lastly, I'd like to ask you some general questions about the electricity system in Ontario. For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

01	Strongly agree
02	Somewhat agree
03	Somewhat disagree
04	Strongly disagree
98	Don't know/ No opinion (DO NOT READ)
99	Refused (DO NOT READ)

### [<mark>ROTATE</mark>]

- F32. The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off.
- F33. Customers are well served by the electricity system in Ontario.

### [END BATTERY]

### These last few questions are for statistical purposes only.

F34. Which of the following best describes the sector in which your organization operates?

Restaurant	1
Retail	2
Commercial	3
Multi-unit residential	4
Hospitality (i.e. catering, hotel operations)	5
Manufacturing/Warehousing	6
Other [Please specify: ]	88
Don't know / Refused ( <b>DNR</b> )	98

H38. Which of the following best describes the hours of operation of your organization? Would you say ... [READ LIST]

We are open 24/7	1
We operate several shifts each day, but are not open 24/7	
We operate during regular business hours only	
We operate outside of regular business hours, but do not have shifts	
Other (please specify):	
Don't know / Refused ( <b>DNR</b> )	98

### THANK and END SURVEY

Thank you very much for taking the time to complete this survey.

Appendix 3.7

# **Powerstream** Mid-Sized Business Ratepayer Survey

### 2019 ICM Customer Engagement

Date: May 2018

Prepared by:

**Innovative Research Group, Inc.** www.innovativeresearch.ca

Vancouver 888 Dunsmuir Street, Suite 350 Vancouver BC | V6C 3K4

**Toronto** 56 The Esplanade, Suite 310 Toronto, Ontario | M5E 1A7



# **Mid-Sized Business Ratepayer Survey**

### **Internal Questionnaire Notes**

Method: Telephone, client provided list Questionnaire Length: 10 minutes Language: English Sample Frame: Representative; n=200 GS>50kW customers Calling Times: Weekdays 9am-5pm

#### Sample Variables

- 1. Postal Code
- **2. Total Annual Electricity Consumption** (*total consumption between 1-Jan-2016 and 31-Dec-*2016)

**The survey will follow a stratified random sampling methodology**. This is a method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members' shared attributes or characteristics (in this case, customer service area or electricity usage). A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the customer population. These subsets of the strata are then pooled to form a random sample.

In this survey, customers will be divided into quartiles based on annual electricity usage to ensure the sample has a proportionate mix of customers from low, medium-low, medium-high, and high electricity usage households/low-volume businesses.

The table below illustrates the strata divisions:

GS>50kW Customers	% Dist	Sample	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Aurora	5%	11	3	3	3	3
Barrie	15%	30	8	8	8	8
Bradford	3%	5	1	1	1	1
Markham	28%	56	14	14	14	14
Richmond Hill	17%	35	9	9	9	9
Vaughan	26%	52	13	13	13	13
Other	6%	11	3	3	3	3
Total	100%	200	50	50	50	50

#### **Customer Sample Strata Divisions (Quotas):**

#### **SCREENING AND QUALIFICATIONS** Α.

#### Introduction

Hello, may I please speak to the person who is in charge of managing the electricity bill at your organization?

Yes < <b>speaking</b> >	[go to INTRO]
Yes <transferred contact="" to=""></transferred>	[go to INTRO]
No <b><not available=""></not></b> "When is a good time to callback?	[record callback time]
No <not in="" interested="" talking=""></not>	[THANK & TERMINATE]

#### **INTRO.**

A1. Hello, my name is \_\_\_\_\_\_ and I'm calling from Innovative Research Group on behalf of PowerStream, your electricity distributor.

Innovative Research Group is a national public opinion research firm. We need your input on choices that will affect the service you receive from PowerStream and the price you pay for that service. Your answers will be combined with others to protect your privacy.

The survey should take about 10 minutes.

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

[skip to A2] 1) Yes, speaking <contact on the line> 2) Yes <transferred to contact> [skip to A2] 3) No <not the right contact person> [GO to "NEW"] 4) No **<busy>** "When is a good time to callback?" [record callback time] 5) Maybe <may I ask who is calling?> [skip to GATE]

NEW. And ... can I have their ...

First Name \_\_\_\_\_ Last Name Title/Position Phone Number \_\_\_\_\_

#### ASK to be transferred ...

if transferred  $\rightarrow$  go to A2

if not transferred 

Thank & Add to Callback List

**INTERVIEWER NOTE: If gatekeeper asks the purpose of call**  $\rightarrow$  I'd like to ask the person incharge of managing the electricity bill at your organization a few questions concerning a **PowerStream** customer consultation.

- 1) Yes <transferred to contact>
- 2) No **<not available>** *"When is a good time to callback?*
- 3) No <not interested in talking>

#### A1 QUAL PREAMBLE:

#### Read preamable again, if transferred to new person:

Hello, my name is \_\_\_\_\_\_ and I'm calling on behalf of PowerStream, your local electricity utility.

**Innovative Research** is a national public opinion research firm. We have been hired by **PowerStream** to help them better understand the needs and preferences of non-residential customers who are responsible for paying their organization's electricity bill.

A2. Can I have roughly **10 minutes** of your time to ask you some questions? All your responses will be kept strictly confidential.

Yes – I don't mind No – Not primary bill payer (i.e. not best person to speak to) No – BAD TIME No – HARD REFUSAL 1 [CONTINUE]

[skip to A2]

[record call-back time

[Thank & Terminate]

and go to "NEW"]

- 2 [go to TRANSFER]
- 3 [ARRANGE CALLBACK]
- 4 [THANK & TERMINATE]

#### MONIT [INTERNAL]

This call may be monitored or audio taped for quality control and evaluation purposes. PRESS TO CONTINUE 1

# A3. Can you confirm that your organization receives an electricity or hydro bill from **PowerStream or Alectra Utilities**?

YES	1	[CONTINUE]
NO	2	[THANK & TERMINATE]
DK (volunteered)	98	[THANK & TERMINATE]

Only those in charge of managing/overseeing organizations electricity bill will be interviewed.

As part of your job, are you in charge of managing or overseeing your organization's A4. electricity or hydro bill?

YES	1	[CONTINUE]		
NO	2 "Can I	"Can I speak to the person who manages your organization's		
	electricity bill?	" [Return to <b>NEW</b> ]		
DK	3 "Can I	speak to the person who manages your organization's		
	electricity bill?	[Return to <b>NEW</b> ]		

#### TRANSFER

Can I please speak to the person who is in-charge of managing the electricity bill at your organization?

Yes

Yes	1 [BACK TO <i>INTRO</i> ]
No – NOT AVAILABLE/BAD TIME – (ARRANGE CALLBACK)	2 [ARRANGE CALLBACK]
No – HARD REFUSAL	3 [THANK & TERMINATE]
Don't know ( <b>DNR</b> )	98 [THANK & TERMINATE]

## **B.** GENERAL SATISFACTION

B5. You may have recently heard that **Powerstream** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

01	Yes
02	No
98	Don't know ( <b>DNR</b> )
99	Refused (DNR)

Had you heard of the Alectra Utilities merger before this survey?

B6. Regardless of whether you've heard of the recent merger or not, today I'm going to use the old name, **PowerStream**.

So, throughout this survey, references to "**PowerStream**" simply refers to the distribution system, formerly served by **PowerStream**, now being served by **Alectra Utilities**.

Today we'd like to talk to you about four things. First, we will talk about your experience with PowerStream. Second, we will talk about the outcomes that matter most to you. Third, we will talk about some trade-offs in planning future investments. And finally, we will talk about some projects that PowerStream could undertake in the next year.

B7. First, let's talk about your experience. As you may know, **PowerStream** operates and maintains the local electricity distribution system in this area. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by **PowerStream**.

How familiar are you with **PowerStream**? Would you say you are *very familiar*, *somewhat familiar*, or *not familiar at all*?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know (DNR)
99	Refused (DNR)

B8. In general, how satisfied or dissatisfied are you with the services you receive from **Powerstream**? Would you say you are *very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied*?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know (DNR)
99	Refused (DNR)

B9. Is there anything in particular **Powerstream** can do to improve its service to you? [**OPEN**]

98	Don't know (DNR)
99	Refused (DNR)

B10. I'd now like to talk with you about your electricity bill ...

While **Powerstream** is responsible for collecting payment for the entire electricity bill, they retain about **9%** of the typical mid-sized business customer's bill. This is about **\$1,231.50** on an average **\$14,310** monthly mid-sized business electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by **Powerstream**? Would you say... [**READ LIST**]

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't Know [DO NOT READ]
99	Refused (DO NOT READ)

# **C. CUSTOMER PRIORITIES**

#### C11. READ PREAMBLE

*Now lets talk about our second topic – outcomes.* **Powerstream** regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for **Powerstream**.

C12. Among the following **Powerstream** priorities, please tell me which one is most important to you.

#### [READ OPTIONS; RANDOMIZE LIST]

01	Delivering reasonable electricity distribution prices.
02	Ensuring reliable electrical service.
03	Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation).
04	Helping customers reduce and better manage their electricity consumption.
05	Minimizing impact on the environment.
06	Ensuring the safety of electricity infrastructure
07	Providing quality customer service
98	Don't Know [DO NOT READ]

# C13. What is the next most important priority you think Powerstream should focus on? [If C12=98 Skip to C15]

[Remove answer from C12 if asked to read again]

C14. And what do you consider the third most important priority? [If C13=98 Skip to C15]

[Remove answer from C12 and C13 if asked to read again]

C15. Are there any other important priorities that **Powerstream** should be focusing on that weren't included in the previous list I read to you? [**OPEN**]

# **D.** SYSTEM RELIABILITY

D16. We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please tell me which one is most important to you.

01	Reducing the overall number of outages
02	Reducing the overall length of outages
03	Reducing the number of outages during extreme weather events
04	Reducing the length of time to restore power during extreme weather events
05	Improving the quality of power, as judged by momentary interruptions in power that can result in the flickering or dimming of lights

D17. What is the next most important reliability outcome for you?

[Remove answer from D16 if asked to read again]

D18. And what do you consider the third most important reliability outcome?

[Remove answer from D16 and D17 if asked to read again]

# E. INVESTMENT TRADE-OFFS

#### How are electricity distribution rates set in Ontario?

#### E19. Now, lets turn to our third topic, investment trade-offs.

The electricity industry in Ontario is regulated by the Ontario Energy Board, otherwise known as the O-E-B. The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distrubtion rates are set in Ontario?

Would you say you are ... [**READ LIST**]

01	Very familiar and could explain the process to others in details	
02	Somewhat familiar, but didn't know how much about the process	
03	Not familiar at all with the process of how electricity distrubtion rates are set	
98	Don't know ( <b>DNR</b> )	
99	Refused (DNR)	

#### **ICM intro PREAMBLE**

E20. Alectra Utilities is now starting to create it's first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive. We would now like ask a few questions about your preferences when it comes to finding the right balance between costs and other outcomes.

I want to start by asking you about system renewal, that is the projects that replace aging electrical infrastructure.

E21. **[PREAMBLE**] While **PowerStream** works hard to prolong the life of the assets that make up its distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.1 outages a year for an average of 57 minutes. When adjusted to remove outages due to loss of supply from the transmission system and major storms, 42% of unscheduled outages are as a result of equipment failure in the PowerStream rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. PowerStream must decide the pace at which it replaces this aging equipment.

#### E22. Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>PowerStream</b> should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.
02	<b>PowerStream</b> should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.
98	Don't know ( <b>DNR</b> )
99	Refused ( <b>DNR</b> )

#### **General Plant**

E23. As a company, **PowerStream** needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

Which of the following statements best represents your point of view? [Read and Rotate statements 1 and 2]

01	<b>PowerStream</b> should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.
02	<b>PowerStream</b> should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably
98	Don't know ( <b>DNR</b> )
99	Refused (DNR)

#### **System Service Questions**

E24. With growth in various parts of the PowerStream service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

#### [Read and Rotate statements 1 and 2]

01	To help keep rate increases down, <b>PowerStream</b> should delay investments in system capacity needs until customers start to experience a decline in reliability.	
02	<b>PowerStream</b> should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.	
98	Don't know ( <b>DNR</b> )	
99	Refused (DNR)	

#### Modernizing the Distribution System.

E25. **[PREAMBLE]** There are new technoglogies that **PowerStream** can implement such as microgrids, electricity storage, and automatic swithces that can give customers more choices, improve reliaiblity or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

Which of the following statements best represent your point of view? [**READ LIST; rotate 01 and 02**]

01	<b>PowerStream</b> should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.
02	<b>PowerStream</b> should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.
98	Don't know [DNR]
99	Refused [DNR]

E26. As we mentioned earlier, the rates you pay to PowerStream are set by the OEB through a public process. PowerStream's current rates were approved in a 2017 application and will be in place until 2027. Each year PowerStream is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires PowerStream to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for PowerStream to find savings every year?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know ( <b>DNR</b> )
99	Refused (DNR)

Would you say you are ... [**READ LIST**]

#### **ICM rate impact**

E27. *Now let's turn to our final topic – possible new projects.* As part of the OEB policies, there is an option for PowerStream to apply for additional rate increases for discrete projects projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, PowerStream has identified three projects that need more investment than the existing budget allows.

One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project.

E28. Would you like me to repeat the description of these projects or may I move on to a third project?

**[IF ASKED TO REPEAT**; "One project involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

The second project involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project."

01	Repeat	
02	Continue	
98	Don't know [ <b>DNR</b> ]	
99	Refused [DNR]	

E29. The third project involves relocating both overhead and underground wires and supporting equipment as part of the Bathurst Street road widening from Highway 7 to Teston road.

Powerstream has two options for this project. It can (ROTATE)

- move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, OR
- replace the overhead system with an underground system for better protection against weather and collisions from vehicles at a cost of between \$25 and \$35 million dollars.

Given earlier customer feedback emphasing the need to keep rate increases down, PowerStream is currently planning on taking the first option - to move the current mix of overhead and underground wires and equipment

Which option do you prefer? [**ROTATE 1 and 2**]

01	Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of <b>\$2.64</b> for the average mid-sized business customer.	
02	Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between <b>\$11.98 and \$16.78</b> for the average mid-sized business customer	
98	Don't know [ <b>DNR</b> ]	
99	Refused [ <b>DNR</b> ]	

- E30. As I mentioned earlier, each year PowerStream is permitted to increase rates to reflect inflation minus a stretch factor which requires PowerStream to find savings to keep cost increases below inflation. In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, PowerStream would need to add a **\$10.03 charge** to the typical mid-sized business customers monthly electricity bill, from 2019 to 2026.
- E31. That would result in an annual increase of **\$120.36 each year** over the course of the next eight years *totalling \$962.88 over that period*.

What is your opinion on this proposed rate increase in 2019? Would you say ... [**READ LIST; ROTATE 1 and 2**]

01	The proposed rate increase is reasonable	
02	The proposed rate increase is unreasonable	
98	Don't know [ <b>DNR</b> ]	
99	Refused [ <b>DNR</b> ]	

# F. SEGMENTATION & DEMOGRAPHICS

Lastly, I'd like to ask you some general questions about the electricity system in Ontario. For each statement please tell me if you would strongly agree, somewhat agree, somewhat disagree or strongly disagree. If you don't know enough to say or don't have an opinion just let me know.

01	Strongly agree
02	Somewhat agree
03	Somewhat disagree
04	Strongly disagree
98	Don't know/ No opinion (DO NOT READ)
99	Refused (DO NOT READ)

#### [<mark>ROTATE</mark>]

- F32. The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off.
- F33. Customers are well served by the electricity system in Ontario.

#### [<mark>END BATTERY</mark>]

#### These last few questions are for statistical purposes only.

F34. Which of the following best describes the sector in which your organization operates?

Restaurant	1
Retail	2
Commercial	3
Multi-unit residential	4
Hospitality (i.e. catering, hotel operations)	5
Manufacturing/Warehousing	6
Other [Please specify: ]	88
Don't know / Refused ( <b>DNR</b> )	98

H38. Which of the following best describes the hours of operation of your organization? Would you say ... [**READ LIST**]

We are open 24/7	1
We operate several shifts each day, but are not open 24/7	2
We operate during regular business hours only	3
We operate outside of regular business hours, but do not have shifts	4
Other (please specify):	88
Don't know / Refused ( <b>DNR</b> )	98

#### THANK and END SURVEY

Thank you very much for taking the time to complete this survey.

Appendix 3.8

# **PowerStream** Key Accounts (2MW+ Customers) Online Survey

### 2019 ICM Customer Engagement

Date: May 2018

Prepared by:

**Innovative Research Group, Inc.** www.innovativeresearch.ca

Vancouver 888 Dunsmuir Street, Suite 350 Vancouver BC | V6C 3K4

**Toronto** 56 The Esplanade, Suite 310 Toronto, Ontario | M5E 1A7



# **Internal Questionnaire Notes**

Method: Online Questionnaire Length: approximately 10 minutes Language: English Sample Frame: Large User 2MW+ (client list provided) Sample Size: estimated 25% response rate Field Date: May 15-25, 2018

### **Sample Variables**

- Contact Name
- Contact Email
- Company
- Average Peak Demand (based on 2017 calendar year)
- Average Monthly Bill (based on 2017 calendar year)
- Sector (e.g. MURB, MASH, Commercial, Industrial or Institutional)

### **Email Introduction**

This email to come from INNOVATIVE. SUBJECT LINE: Alectra Utilities Customer Feedback Survey FROM: Innovative Research Group <survey@innovativeresearch.ca>

#### Dear [<mark>e\_PIPE\_CN</mark>],

Alectra Utilities has commissioned Innovative Research Group (<u>www.innovativeresearch.ca</u>) to conduct a survey of all its largest customers.

The purpose of this survey is to help Alectra Utilities align its business planning with customer preferences and needs. Your feedback will help guide how Alectra Utilities uses ratepayer dollars to make future investment and spending decisions.

Only one representative per customer is being asked to participate in this important survey, so your response is singularly important. If you choose to delegate the completion of this survey, please refrain from multiple assignments, and assign this survey to a single staff member who is well-informed about your organization's electricity consumption and operations management.

We hope that you have a few minutes to complete this important survey so we can incorporate your input into Alectra Utilities' business planning process.

Your responses will be completely anonymous and your organization will not be identified to Alectra Utilities. To ensure your anonymity, your survey answers will be combined with those of other key account respondents to this survey.

The online survey will take about **10 minutes** to complete. To participate in the online survey, please click on the URL below, or copy and paste it into the address bar in your browser: <unique URL>

We appreciate you taking the time to complete this survey.

#### Sincerely, Innovative Research Group

#### - on behalf of -

#### **Eileen Campbell** Vice President Customer Service Alectra Utilities Corporation E: Eileen.Campbell@alectrautilties.com

T: 905-317-4736

If you have any problems accessing the site, please contact Innovative Research Group's online panel support team at <a href="mailto:survey@innovativeresearch.ca">survey@innovativeresearch.ca</a>.

### A. INTRODUCTION

Thank you for participating in this online survey.

**Innovative Research Group** is a national public opinion research and consultation firm. **Alectra Utilities** has hired us to help it better understand the needs and preferences of its largest customers – customers like you – as well as identify the priorities where you think they should focus their resources.

This survey should take you **approximately 10 minutes** to complete and your answers will be combined with others to protect your confidentiality. While we've been provided your name and email address, no information that could be used to identify you or your company will be shared with Alectra Utilities.

Please answer all questions to the best of your ability. When answering the questions, please provide us with the response that holds most true for you. If you're unsure of how to answer a question or feel you don't know, please use the "don't know" or equivalent option.

#### Again, all information provided will be treated confidentially.

**Note**: While you may be an Alectra Utilities residential customer, for the purposes of this survey, please answer the questions from the perspective of the <u>business or organization</u> that you represent.

Also, you may manage multiple facilities and receive multiple bills from Alectra Utilities. However, for this survey, please answer the questions with [**p\_PIPE1**]'s facility, located at **[p\_PIPE\_A]**, in mind.

Thank you for your time,

Innovative Research Group

Click here for the Innovative Research Group Inc.'s privacy policy.

A1.	PLACEHOLDER
A2.	PLACEHOLDER
A3.	PLACEHOLDER
A4.	PLACEHOLDER

### **B. GENERAL SATISFACTION**

B5. You may have recently heard that **PowerStream** has merged with neighbouring electricity distributors to form a new company called **Alectra Utilities**.

Had you heard of the Alectra Utilities merger before this survey?

01	Yes
02	No

B6. Regardless of whether you've heard of the recent merger or not, today I'm going to use the old name **"PowerStream"**.

So, throughout this survey, references to "**PowerStream**" simply refers to the distribution system in the communities formerly served by **PowerStream**, now being served by **Alectra Utilities.** 

This survey will review four topics:

- 1. Your experience with PowerStream.
- 2. Outcomes that matter most to you.
- 3. Your preference on trade-offs in planning future investments
- 4. Your preferences on projects that PowerStream could undertake in the next year.

#### Page break.

B7. Let's begin with our first topic: **your customer experience**.

As you may know, **PowerStream** operates and maintains the local electricity distribution system in Mississauga. This is the system that takes the electricity from provincial transmission lines and brings it to your business through a network of wires, poles and other equipment that is owned and operated by **PowerStream**.

How familiar are you with PowerStream?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know

# B8. In general, how satisfied or dissatisfied are you with the services your organization receives from **PowerStream**?

01	Very satisfied
02	Somewhat satisfied
03	Neither satisfied or dissatisfied
04	Somewhat dissatisfied
05	Very dissatisfied
98	Don't know

# B9. Is there anything in particular **PowerStream** can do to improve its service to your organization? [**OPEN**]

98 Don't know

Page break.

B10. The next question is specifically about [**p\_PIPE1**]'s electricity bill.

While **PowerStream** is responsible for collecting payment for the entire electricity bill, they retain about [**p\_PIPE2**] of your organization's bill. This is about [**p\_PIPE3**] on your average [**p\_PIPE4**] monthly electricity bill. The rest of the bill goes to power generation companies, transmission companies, the provincial government and regulatory agencies.

Before this survey, how familiar were you with the percentage of your organization's electricity bill that is retained by **PowerStream**?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know

# **C. CUSTOMER PRIORITIES**

#### C11. Now lets turn to our second topic: outcomes.

**PowerStream** regularly holds discussions with its customers to better understand how it should set spending priorities with the money customers pay for service.

In recent conversations with customers, a number of company goals were identified as key priorities for **PowerStream**.

#### C12. Please rank your Top 3 priorities from the list below.

Drag and drop the priorities in order, starting with the priority most important to you, followed by the second most important, and ending with the third most important.

01	Delivering reasonable electricity distribution prices.
02	Ensuring reliable electrical service.
03	Providing new electricity services (for example: electricity storage and distributed generation such as solar panel installation).
04	Helping customers reduce and better manage their electricity consumption.
05	Minimizing impact on the environment.
06	Ensuring the safety of electricity infrastructure
07	Providing quality customer service

#### C13. Place holder.

C14. Place holder.

C15. Are there any other important priorities that **PowerStream** should be focusing on that weren't included in the previous list? [**OPEN**]

98 Don't know

## **D.** System Reliability

D16. We would like to understand your experience with reliability.

There are different outcomes when customers talk about power reliability.

Among the following reliability outcomes, please rank the <u>**3 most important**</u> from the list below.

Drag and drop the priorities in order, starting with the priority most important to you, followed by the second most important, and ending with the third most important.

01	Reducing the overall number of outages
02	Reducing the overall length of outages
03	Reducing the number of outages during extreme weather events
04	Reducing the length of time to restore power during extreme weather events
05	Improving the quality of power, as judged by momentary interruptions in power that can result in the flickering or dimming of lights

### D17. Place holder.

D18. Place holder.

## E. INVESTMENT TRADE-OFFS

#### How are electricity distribution rates set in Ontario?

#### E19. Now, lets turn to our third topic: investment trade-offs.

The electricity industry in Ontario is regulated by the Ontario Energy Board (OEB). The OEB sets electricity rates in Ontario.

The OEB requires electricity distributors, such as Alectra Utilities, to develop its business plan and distribution system plan, as well as make spending and investment decisions based on customer feedback.

Electricity distributors are funded by the distribution rates paid by their customers. Periodically, distributors are required to file rate applications with the OEB to justify the amount of funding they need to safely and reliably distribute electricity to their customers.

Before this survey, how familiar were you with how electricity distrubtion rates are set in Ontario?

01	Very familiar and could explain the process to others in details
02	Somewhat familiar, but didn't know how much about the process
03	Not familiar at all with the process of how electricity distrubtion rates are set
98	Don't know

#### ICM intro PREAMBLE

E20. Alectra Utilities is now starting to create it's first overall investment plan as a merged utility. The OEB divides electricity distributor investments into four categories. One category called system access includes investments that are mandatory under the distributor's licence to operate. These include reasonable costs to connect new customers and moving existing infrastructure to accommodate civic improvements.

The spending in the other three categories involves finding the right balance between the impact on your bill and the service you receive.

The next few questions are about your preferences when it comes to finding the right balance between costs and other outcomes.

The first projects involve **system renewal**: these are the projects that replace aging electrical infrastructure.

E21. While PowerStream works hard to prolong the life of the assets that make up its distribution system, eventually these assets reach the end of their useful life and require replacement. Currently the average customer experiences 1.1 outages a year for an average of 57 minutes.

When adjusted to remove outages due to loss of supply from the transmission system and major storms, 42% of unscheduled outages are as a result of equipment failure in the PowerStream rate zone. However, it is not possible to predict exactly when a specific piece of aging equipment will fail. **PowerStream** must decide the pace at which it replaces this aging equipment.

# E22. With this in mind, which of the following statements best represents your point of view? [Rotate statements 1 and 2]

01	<b>PowerStream</b> should invest what it takes to replace the system's aging infrastructure to maintain system reliability; even if that increases my monthly electricity bill by a few dollars over the next few years.
02	<b>PowerStream</b> should defer its estimated investment in replacing aging infrastructure to lessen the impact of any bill increase; even if this could eventually lead to more or longer power outages.
98	Don't know

**General Plant** 

E23. As a company, **PowerStream** needs facilities to house staff and equipment, vehicles and tools to service electrical infrastructure, and IT systems to manage the distribution system and customer information..

With this in mind, which of the following statements best represents your point of view? **[Rotate statements 1 and 2]** 

01	<b>PowerStream</b> should find ways to make do with the facilities, equipment, vehicles and IT systems it already has.
02	<b>PowerStream</b> should make the investments necessary to ensure its staff have the equipment and IT systems they need to manage the system efficiently and reliably
98	Don't know

#### **System Service Questions**

E24. With growth in various parts of the **PowerStream** service area comes greater demand for electricity. This increased demand for electricity puts increased pressure on the existing electrical infrastructure. Eventually, further infrastructure investments will be required to support increased demand for electricity.

With this in mind, which of the following statements best represents your point of view?

#### [Rotate statements 1 and 2]

01	To help keep rate increases down, <b>PowerStream</b> should delay investments in system capacity needs until customers start to experience a decline in reliability.
02	<b>PowerStream</b> should proactively invest in system capacity infrastructure to ensure customers in high growth areas do not experience a decrease in reliability, even if this adds a small increase to customer bills.
98	Don't know

#### Modernizing the Distribution System.

E25. There are new technoglogies that **PowerStream** can implement such as microgrids, electricity storage, and automatic swithces that can give customers more choices, improve reliaiblity or reduce the impact on the environment.

These investments would create a better grid, but are not required to maintain the reliability that you experience today.

With this in mind, which of the following statements best represents your point of view? **[Rotate statements 1 and 2]** 

01	<b>PowerStream</b> should invest in the benefits of modernization now, even if that means customers will have to pay bit more on their distribution rates in the near future.
02	<b>PowerStream</b> should keep rate increases down by modernizing as part of the normal replacement of aging equipment, even though that means delaying the benefits of modernization.
98	Don't know

E26. As we mentioned earlier, the rates you pay to PowerStream are set by the OEB through a public process. PowerStream's current rates were approved in a 2017 application and will be in place until 2027.

Each year PowerStream is permitted to increase rates to reflect inflation minus savings targets established by the OEB which requires PowerStream to keep cost increases below inflation.

Before this survey, how familiar were you with the OEB requirement for **PowerStream** to find savings every year?

01	Very familiar
02	Somewhat familiar
03	Not familiar at all
98	Don't know

**ICM rate impact** 

E27. Now let's turn to our final topic – **possible new projects**.

As part of the OEB policies, there is an option for PowerStream to apply for additional rate increases for discrete projects that are prudent, needed and not supported by existing rates. Looking ahead to 2019, PowerStream has identified <u>three projects</u> that need more investment than the existing budget allows.

**The first project** involves relocating six major feeder lines and the accompanying metering equipment to accommodate the rebuild of a major Transmission substation. PowerStream is using the lowest cost option to complete this project.

**The second project** involves relocating poles and wires as part of the York Region Rapid Transit VIVA bus projects. There are no major design choices in this project.

E28. **The third project** involves relocating both overhead and underground wires and supporting equipment as part of the Bathurst Street road widening from Highway 7 to Teston road.

Powerstream has two options for this project. It can: (ROTATE)

- move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, OR
- replace the overhead system with an underground system for better protection against weather and collisions from vehicles at a cost of between \$25 and \$35 million dollars.

Given earlier customer feedback emphasing the need to keep rate increases down, PowerStream is currently planning on taking the first option - to move the current mix of overhead and underground wires and equipment

Which option do you prefer? [**ROTATE 1 and 2**]

01	Move the current mix of overhead and underground wires and equipment at a cost of \$5.5 million dollars, resulting in a monthly increase of [ <b>p_PIPE5</b> ] to your organization's monthly electricity bill	
02	Replace the overhead system with an underground system at a cost of between \$25 and \$35 million dollars, resulting in a monthly increase of between [ <b>p_PIPE6</b> ] <b>and</b> [ <b>p_PIPE7</b> ] to your organization's monthly electricity bill	
98	Don't know	

E29. As mentioned earlier, each year **PowerStream** is permitted to increase rates to reflect inflation minus a stretch factor which requires PowerStream to find savings to keep cost increases below inflation.

In order to maintain the existing plan to replace aging infrastructure and complete the mandatory projects previously discussed, PowerStream would need to add a **[p\_PIPE8]** charge to your organization's monthly electricity bill, from 2019 to 2026.

E30. That would result in an annual increase of **[p\_PIPE9] each year** over the course of the next eight years – *totalling* **[p\_PIPE10]** *over that period*.

What is your opinion on this proposed rate increase in 2019? [ROTATE 1 and 2]

01	The proposed rate increase is reasonable	
02	The proposed rate increase is unreasonable	
98	Don't know	

# F. SEGMENTATION & FIRMOGRAPHICS

The last few questions are about the broader electricity system in Ontario. For each statement please indicate if you agree or disagree.

01	Strongly agree
02	Somewhat agree
03	Somewhat disagree
04	Strongly disagree
98	Don't know/no opinion

#### [ROTATE]

- F34. The cost of my electricity bill has a major impact on the bottom line of my organization and results in some important spending priorities and investments being put off.
- F35. Customers are well served by the electricity system in Ontario.

#### [END BATTERY]

F36. Before this survey concludes, do you have any additional comments or feedback you'd like to share with Alectra Utilities? Note: all feedback is anonymous and you will <u>not</u> be identified to Alectra Utilities without your expressed permission.
[OPEN]

#### **THANK and END SURVEY**

Thank you for taking the time to complete this survey.

If you have additional feedback you'd like to share with **Alectra Utilities**, please feel free to contact:

#### Scott Miller

Director, Customer Care Alectra Utilities Corporation <u>Scott.Miller@alectrautilities.com</u>