

Columbia Water & Light Electric Line Extension & Electric Connection Policy

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Line Extension Objectives

- Stabilize effect on line extensions expenditures of CWL (Current method requires CWL to make all investments with no charge to customers)
- Simplify implementation process
- Separately identify the connection fee portion charged to new customers
- Help ensure investments made by CWL will not result in higher rates for existing ratepayers

Summary of Contribution Margin

- Determine value of customer to other ratepayers:
 - All electric rates include a recovery for fixed costs
- Value is reduced by long term impacts on the backbone infrastructure (transmission and substation facilities, Connection Fees)
- The difference is the maximum investments CWL can contribute toward extension of service to a new customer
- This helps ensure new adding a new customer will not result in higher rates for existing ratepayers.

Summary of Residential Line Extension Analysis

- Residential customers value is \$952.
- Customer long-term impact on backbone system is \$182.
- In review of 197 extensions to residential customers the average cost was \$1,771
- **To simplify the line extension policy a residential customer will be charged \$1,000**
- Currently CWL pay all of the line extension costs

New Residential Charges (Not in Development)

	Residential Homeowner
Estimated Cost to Extend Service	\$ 1,771
Contribution by CWL	
Contribution Margin from Residential Customer	\$ 952
Less: Connection Fee (Impacts on Backbone Facilities)	\$ 182
Maximum CWL Investment	\$ 771
Net charge to homeowner	\$ 1,000

Summary of Policy in Subdivisions

- CWL will construct extension up to but not within the subdivision
- Developers will be charged for cost to extend services within the subdivision
 - All costs for extension within the subdivision will be charged to developer (Excluding service drops into the homes)
 - Costs are reduced by CWL's maximum contribution of \$569 times the number of lots
 - Difference are charged to developer
- Homeowner will be charged \$200 for the service drop into the home

Residential/Developer Charges

Contribution Margin for homes in Development	\$	551
Plus homeowner Charges		200
Total Contribution Margin	\$	751
Less Connection Charges		182
Net Maximum Contribution by CWL	\$	569

- \$551 is the contribution margin for home in a subdivision plus \$200 charged to homeowner
- The contribution is reduced by a connection fee of \$182 for backbone facilities
- Difference between cost and \$569 (maximum investment by CWL) is charged to developer of subdivision

Summary of Policy

- Small General Service (Commercial)
 - Customer will be charged the greater of the cost of the extension less \$110 per kVa of installed transformer capacity or the minimum of \$50 times the installed transformer capacity
- Large General Service
 - Customer will be charged the greater of the cost of the extension less \$50 per kVa of installed transformer capacity or the minimum of \$50 times the installed transformer capacity
- Mixed Use
 - Customer will be charged the greater of the cost of the extension less \$96 per kVa of installed transformer capacity or the minimum of \$50 times the installed transformer capacity

Small General Service

Determination of Maximum Investment

Contribution Margin per kVa	\$	160.00
Less Connection Fee per kVa		50.00
Maximum CWL Investment per kVa		110.00

- Customer will be charged the **greater** of the cost of the extension less \$110 per kVa of installed transformer capacity or the minimum of \$50 times the installed transformer capacity

Small GS Example

Example One Extension charge greater than minimum charge

Example				
Line Extension Cost			\$	5,000
CWL Maximum Investment				
kVA transformer	25	\$	110.00	\$ 2,750
Difference			\$	2,250
Minimum Charge	25	50	\$	1,250
Customer Charge Greater of difference or minimum			\$	2,250

Example Two Extension charge less than minimum

Example				
Line Extension Cost			\$	2,000
CWL Maximum Investment				
kVA transformer	25	\$	110.00	\$ 2,750
Difference			\$	(750)
Minimum Charge	25	50	\$	1,250
Customer Charge Greater of difference or minimum			\$	1,250

Large General Service Commercial/Industrial

Determination of Maximum Investment

Contribution Margin per kVa	\$	100.00
Less Connection Fee per kVa		50.00
Maximum CWL Investment per kVa		50.00

- Customer will be charged the greater of the cost of the extension less \$50 per kVa of installed transformer capacity or the minimum of \$50 times the installed transformer capacity

Large GS Example

Example One

Example Two

Example					Example				
Line Extension Cost					Line Extension Cost				
\$ 125,000					\$ 75,000				
CWL Maximum Investment					CWL Maximum Investment				
kVA transformer	1000	\$	50.00	\$ 50,000	kVA transformer	1000	\$	50.00	\$ 50,000
Difference					Difference				
\$ 75,000					\$ 25,000				
Minimum Charge					Minimum Charge				
1000 \$ 50.00 \$ 50,000					1000 \$ 50.00 \$ 50,000				
Customer Charge Greater of difference or minimum					Customer Charge Greater of difference or minimum				
\$ 75,000					\$ 50,000				

Mixed Use

- Certain extension have anticipated mixed use of residential and general service
- Or a single extension serving multiple residential customers (Apartments)
- For customers with mixed customer charged the greater of:
 - Cost of extension less \$96/kVa of installed transformer capacity
 - Or minimum charge of \$50/kVa of installed transformer capacity

Mixed Use

Determination of Maximum Investment

Contribution Margin per kVa	\$	146.00
Less Connection Fee per kVa		50.00
Maximum CWL Investment per kVa		96.00

- Customer will be charged the greater of the cost of the extension less \$96 per kVa of installed transformer capacity or the minimum of \$50 times the installed transformer capacity

Mixed Use Example

Example One

Example				
Line Extension Cost				\$ 25,000
CWL Maximum Investment				
kVA transformer	200	\$	96.00	\$ 19,200
Difference				\$ 5,800
Minimum Charge	200	\$	50.00	\$ 10,000
Customer Charge Greater of difference or minimum				\$ 5,800

Example Two

Example				
Line Extension Cost				\$ 15,000
CWL Maximum Investment				
kVA transformer	200	\$	96.00	\$ 19,200
Difference				\$ (4,200)
Minimum Charge	200	\$	50.00	\$ 10,000
Customer Charge Greater of difference or minimum				\$ 10,000