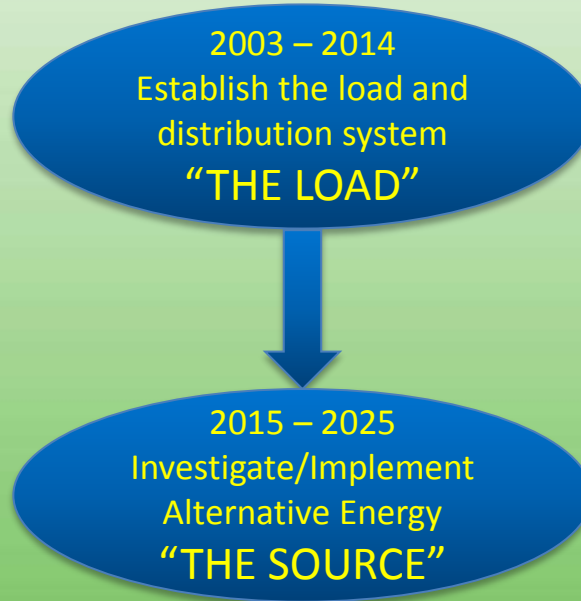


Rate Adjustment Application

December 4, 2017

Progress to date and long-term goals

Past, Present & Future



- Stop the use of electric baseboards
- Standardize & combine energy needs of the community
- Maximize the use of the distribution system's flexibility
- Diversify & use the most appropriate source of energy at all times

LEC 2003 – 2017

- 70 connections/customers totaling 5.3 million sq. ft. including 4,545 residential suites
- 4 heat sources: natural gas, solar, geo-exchange, heat recovery
- 3 service areas: Lower Lonsdale, Central Lonsdale, Marine Drive / Harbourside
- Almost 10 km (trench pipe) of distribution system

Cooling Cycle Heat Recovery Projects

- School District 44 - 2011
- Tap and Barrel - 2016
- Polygon Gallery - 2017
- Pipe Shop Building - 2018
- Lot 5 including future ice rink - 2018

Future Energy Source Opportunities

- Metro Vancouver wastewater treatment plant in 2020
- Waste energy recovery
- Biomass
- Synergies and waste energy from businesses (ICBC, Lions Gate Hospital)

Major Projects in 2018

- Expansion of Heat Recovery / Cooling Mini Plant 5
- Connection of Moodyville
- Interconnection of Service Areas (allow use of alternative energy sources throughout the system)

Financial Position

2016 Financial Results

- 2016 Net income: \$18,673
- 2016 Interest paid to City: \$296,870
- New rates implemented in November 2016
- Revision to practice of funding projects with operating revenue is expected to increase 2017 cash availability to increase debt reimbursement
- Debt reimbursement targeted for 2035

**Lonsdale Energy Corp. - Status of Outstanding Loans
as of Oct 31, 2017**

Date Authorized by Council	Amount Authorized by Council	Amount Disbursed to LEC	Available Balance	Amount Reimbursed by LEC	Amount Outstanding	Loan Purpose
19-Jun-12	\$2,000,000	\$2,000,000	\$0	\$902,261	\$1,097,739	FCM GMI \$2million Loan through the City
16-Dec-13	\$12,000,000	\$12,000,000	\$0	\$0	\$12,000,000	Distribution system construction & working capital
13-Jul-15	\$2,000,000	\$2,000,000	\$0	\$0	\$2,000,000	Corix Agreement Expiration Settlement
2-Nov-15	\$611,966	\$611,966	\$0	\$0	\$611,966	Corix Agreement Expiration Settlement
25-Jan-16	\$1,600,000	\$1,205,000	\$395,000	\$0	\$1,205,000	Construction of mini-plant 8
4-Apr-16	\$2,300,000	\$0	\$2,300,000	\$0	\$0	Connection of Moodyville
4-Apr-16	\$600,000	\$350,000	\$250,000	\$0	\$350,000	Connection of 160 East 6th
12-Sep-16	\$3,250,000	\$2,175,000	\$1,075,000	\$0	\$2,175,000	UWMA Interim Financing
12-Jun-17	\$2,300,000	\$300,000	\$2,000,000	\$0	\$300,000	2017-2018 LEC Construction Program Financing
24-Jul-17	\$3,600,000	\$0	\$3,600,000	\$0	\$0	Heat Recovery from the NSWWTP
18-Sep-17	\$1,200,000	\$0	\$1,200,000	\$0	\$0	Cooling Services Lot 5
	\$31,461,966	\$20,641,966	\$10,820,000	\$902,261	\$19,739,705	

Rate Adjustment

Rate Adjustment Rationale

- Last increase was in November 2016
- Proposed increase is based on 12 month inflation
- Implementation delayed until ratification of wastewater treatment plant agreement with Metro Vancouver
- Equipment, construction and maintenance costs are increasing

Rate Adjustment Rationale (cont'd)

- Commodity Charge follows FortisBC gas pricing => No adjustment
- Meter and Capacity Charges to follow inflation
- Higher cost of alternative energy sources => additional increase of 5% of Capacity Charge
- Translates into an average increase of 3.7%

Proposed Rate Adjustment

Rate Schedule 1 (Consumption up to 300 MWh per year)

Charge	Current Rate	CPI Rate of Inflation	Rate Adj. for the CPI Rate of Inflation	5% Increase to Capacity	2017 Rates
Meter Charge (per month)	\$ 30.00	1.4%	\$ 30.42	n/a	\$ 30.42
Capacity Charge (per kW)	\$ 3.5541	1.4%	\$ 3.6039	5.0%	\$ 3.7841
Commodity Charge (per kW.h)	\$ 0.03398	n/a	\$ 0.03398	n/a	\$ 0.03398

Proposed Rate Adjustment

Rate Schedule 2 (Consumption over 300 MWh per year)

Charge	Current Rate	CPI Rate of Inflation	Adjusted for the CPI Rate of Inflation	5% Increase to Capacity	2017 Rates
Meter Charge (per month)	\$ 161.55	1.4%	\$ 163.81	n/a	\$ 163.81
Capacity Charge (per kW)	\$ 3.5541	1.4%	\$ 3.6039	5.0%	\$ 3.7841
Commodity Charge (per kW.h)	\$ 0.02871	n/a	\$ 0.02871	n/a	\$ 0.02871

Charges to Developers

- Connection fee of \$79.85 per kW of nominated capacity (proposed increase from \$75/kW)
- Aims at encouraging building efficiency
- Builders are saving the cost of boilers and room

Competitiveness of LEC

Table - Comparison of LEC rate with other providers

Energy Provider	Type of Service	Year of rate	Rate (\$ / MW.hr)	Difference with LEC
LEC	Hot Water	2016	\$74	-
BC Hydro	Electricity	2017	\$113	53%
Fortis BC	Stand-alone NG Boiler	2016	\$86	17%
River District Energy (East Fraserlands)	Hot Water	2016	\$108	47%
South East False Creek (SEFC)	Hot Water	2017	\$106	44%
SFU UniverCity Energy	Hot Water	2017	\$117	59%
Richmond Oval Village District Energy	Hot Water	2016	\$86	17%
Surrey City Energy	Hot Water	2016	\$105	43%

Notes:

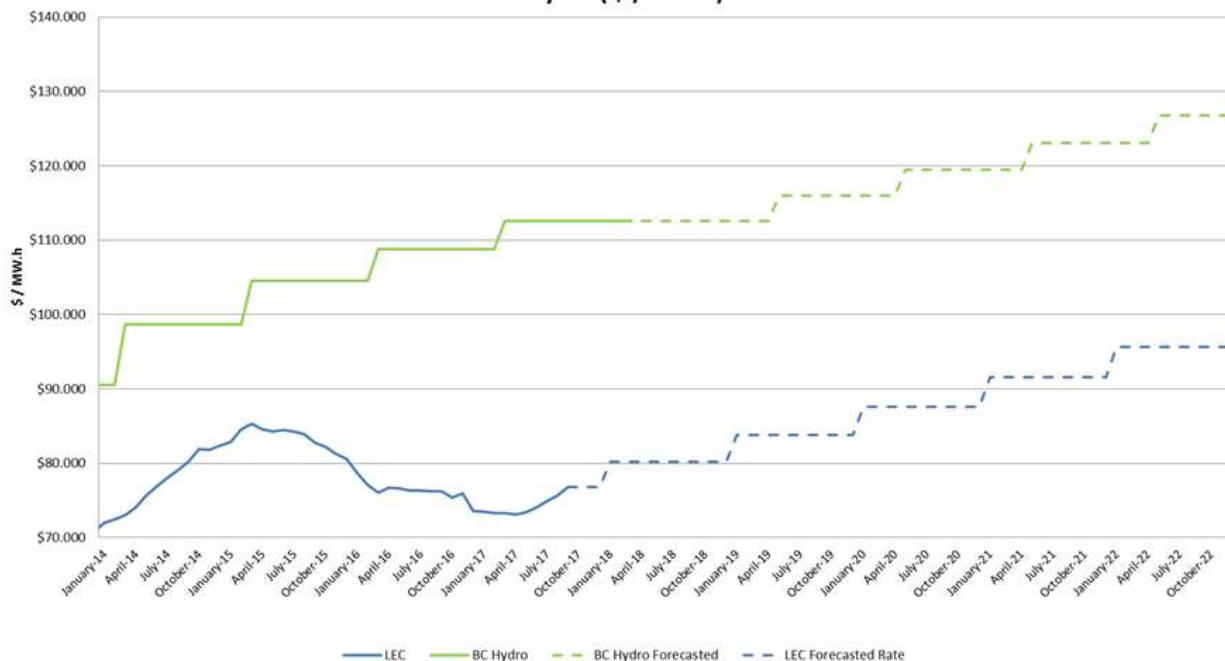
- LEC cost based on 2016 revenue and heat deliveries.

- BC Hydro cost based on purchase of 50% residential step 1 and 50% residential step 2 electricity price as of April 1, 2017 and a 5% rate rider. Based on the same assumptions, the 2017 electric cost would be \$113 / MW.hr. (3.5% increase)

- Cost of Fortis BC, River District Energy, SEFC, SFU UniverCity, Richmond Oval and Surrey City Energy taken from City of Vancouver report dated November 4, 2016.

- Creative Energy Ltd. and UBC have been omitted due to the fact that their systems are steam based.

**Lonsdale Energy Corp.
Average 12 Month LEC Heating Rate
vs. BC Hydro (\$ / MW.h)**



Thank you

