

## Utility Commission Meeting Agenda

Tuesday, March 21, 2023, 1:30 p.m.

Meeting held electronically and in Committee Room 2

City Hall

We recognize and respect that New Westminster is on the unceded and unsurrendered land of the Halkomelem speaking peoples. We acknowledge that colonialism has made invisible their histories and connections to the land. As a City, we are learning and building relationships with the people whose lands we are on.

**Pages** 

#### 1. CALL TO ORDER AND LAND ACKNOWLEDGEMENT

The Chair will open the meeting and provide a land acknowledgement.

#### 2. INTRODUCTIONS

2.1 Welcome to new Councillor Paul Minhas

#### 3. CHAIRPERSON APPOINTMENT

3.1 Appointment of a new Chairperson (External Member)

#### 4. CHANGES TO THE AGENDA

Additions or deletion of items.

#### 5. MOTION TO MOVE INTO CLOSED MEETING

THAT the Utility Commission will now go into a meeting which is closed to the public in accordance with Section 90 of the Community Charter, on the basis that the subject matter for all agenda items relate to matters listed under sections:

- (1)(a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee, or agent of the municipality or another person appointed by the municipality;
- (1)(c) labour relations or other employee relations;
- (1)(k) negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of

the council, could reasonably be expected to harm the interests of the municipality if they were held in public.

## 6. ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

6.1 Minutes of October 18, 2022

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#### 7. CONSENT AGENDA

## 7.1 BridgeNet Dark Fibre Utility

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Information Only

Commissioners: Please take the opportunity to view the BridgeNet webpage at bridgenetnw.ca.

Be sure to click the Learn More button, scroll down on this page and view the Youtube video. At the top of the page, click on MAP to see the dashboard information.

### 7.2 Purchasing and Sales Report

15

7.3 Financial Report

19

7.4 2023 Utility Commission Meeting Schedule

26

7.5 Next Meeting

#### 8. NEW BUSINESS

Items added to the agenda at the beginning of the meeting.

#### 9. END OF MEETING

#### 10. UPCOMING MEETINGS

Remaining scheduled meetings for 2023, which take place at 2:00 p.m. unless otherwise noted:

- May 9
- June 20
- July 11
- September 19
- November 21



## Utility Commission MINUTES

Tuesday, October 18, 2022 Committee Room 2 City Hall

**PRESENT** 

Mayor Jonathan Cote Commissioner

Len Kelsey Commissioner, Chair

Sally Bhullar-Gill

Maya Chorobik

Commissioner

Councillor Patrick Johnstone

Lino Siracusa

Lisa Spitale

Commissioner

Commissioner

Commissioner

**STAFF** 

Ron Au Senior Financial Services Analyst

Leya Behra Manager, Climate Action

Rod Carle General Manager, Electrical Operations

Steven Faltas Business Process Manager, Electrical Operations
Harii Varn Chief Financial Officer and Director of Finance

Katie Stobbart Committee Clerk

1. CALL TO ORDER AND LAND ACKNOWLEDGEMENT

Len Kelsey opened the meeting at 2:40 p.m. Rod Carle recognized with respect that New Westminster is on the unceded and unsurrendered land of the Halkomelem speaking peoples. He acknowledged that colonialism has made invisible their histories and connections to the land. He recognized that, as a City, we are learning and building relationships with the people whose lands we are on.

#### 2. CHANGES TO THE AGENDA

There were no changes to the agenda.

#### 3. MOTION TO MOVE INTO CLOSED MEETING

MOVED and SECONDED

THAT the Utility Commission will now go into a meeting which is closed to the public in accordance with Section 90 of the Community Charter, on the basis that the subject matter for all agenda items relate to matters listed under sections:

- (1)(a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee, or agent of the municipality or another position appointed by the municipality;
- (1)(c) labour relations or other employee relations;
- (1)(k) negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public.

Carried.

All Commissioners present voted in favour of the motion.

#### 4. <u>ADOPTION OF MINUTES FROM PREVIOUS MEETINGS</u>

#### 4.1 Minutes of September 20, 2022

MOVED and SECONDED

THAT the Minutes of the September 20, 2022 Utility Commission meeting be adopted.

Carried.

All Commissioners present voted in favour of the motion.

#### 5. CONSENT AGENDA

#### 5.1 Financial Statements

MOVED and SECONDED

THAT the Utility Commission adopt item 5.1 except Bridgenet on consent.

Carried.

All Commissioners present voted in favour of the motion.

In response to questions from the Commission, Rod Carle, General Manager, Electrical Operations, advised that the Utility has recruited a specialist to work on Bridgenet.

MOVED and SECONDED

THAT the Bridgenet item be adopted.

Carried.

All Commissioners present voted in favour of the motion.

#### 6. <u>NEW BUSINESS</u>

There were no items.

#### 7. **END OF MEETING**

The meeting ended at 3:20 p.m.

## 8. <u>UPCOMING MEETINGS</u>

The next meeting is to be determined.





### BridgeNet: New Westminster's Dark Fibre Utility

For Developers, Property Managers, and Strata Operators

Just like water or electrical services, BridgeNet is a City utility. It provides fibre optic cable connections as a service. Your property becomes more valuable to you and your tenants or owners because BridgeNet enables faster access to advanced telecommunications services, consumer choice, and lower prices.

#### How it Works

A building allows BridgeNet to place a fibre optic cable into your main telephone room. What's required is a small space on the wall for a fibre patch panel. It does not require power.

BridgeNet then provides businesses, network integrators and Internet Service Providers (ISPs) quick and low-cost access to fibre optic strands within these cables. You choose which ISP to allow access to your businesses or residents.

Check out the Service Providers already using the network: www.bridgenetnw.ca/isps.

#### Learn More

http://www.bridgenetnw.ca/map info@bridgenet.ca 604 521-3711



## REPORT Electrical Utility

**To**: Mayor Johnstone and Members of

Council, Date: February 27, 2023

From: Rod Carle File: 2234665

General Manager, Electrical Utility

Item #: Report Number

Subject: BridgeNet Dark Fibre Utility

#### **RECOMMENDATION**

**THAT** Council receives this report for information only

#### **PURPOSE**

To update Council on the BridgeNet Dark Fibre Utility

#### **BACKGROUND**

The BridgeNet Fiber Network evolved from the City IT Fiber Network into a commercial venture approved by the City of New Westminster in 2015 and initiated in late 2016. Having a reliable and robust fibre network infrastructure is critical to facilitating economic development and attracting new talents and industries to New Westminster.

The network is being built to support the local economy, residential ISP connectivity and City Facility IT connections as per the city' Intelligent City Initiative. The city fiber network connects 19 city facilities and saves the city IT department approximately \$270,000.00 a year in 3<sup>rd</sup> party connectivity based on 1GE connections to each building at today's commercial rates

BridgeNet's open-access to dark fibre network means more choice for New Westminster residents and businesses for their digital services. BridgeNet offers access

to lightning fast internet at competitive prices and creates increased employment and investment opportunities in the city's knowledge sector.

BridgeNet provides New Westminster residents and businesses greater access to reliable, affordable high-speed internet services and improves choices by enabling more Internet Service Providers who can offer digital services in the community.

BridgeNet leases unused capacity in the City's carrier-grade fibre optic network to Internet Service Providers (ISPs) and telecommunication companies who in turn offer high speed internet, phone, TV/video services to local business and multi-family residential customers at some of the best rates in the country. With affordable and readily available high-speed broadband services, the City is equipped to attract more innovative companies and knowledge workers to the community, helping businesses of all sizes to compete in today's global digital economy.

Fibre can easily carry digital information over long distances, and is much faster than traditional copper wire services. With fibre, downloads and uploads occur simultaneously with no reduction in speed, creating the ideal environment for cloud access, big data, real-time applications, and heavy file transfers.

#### **FINANCIAL ANALYSIS**

#### 2015 Estimates:

Financials to support the network build were based on revenues from ISP's selling services over the dark fiber network to:

- 1. MDU residential buildings of 50+ units
- Local businesses
- 3. Government agencies
- 4. Telco's to support wireless networks
- 5. The local school district and other educational institutions in New Westminster

**Capital Infrastructure**: cost estimate to build out the network was set at \$10.9M with an added contingency of \$2.2M.

**Operating Cost Estimates:** ISP's were estimated at \$300.00 per month per building connected or via a revenue sharing formula (20% to 25% of building generated service revenue).

#### 2022 Estimates:

**Capital Infrastructure**: spend to date to build out the network is \$9.4M; with \$7.9M from Debt Financing and the balance from Electrical Reserves.

<u>Table 1-1 - Capital Budget vs Actual Cost to date</u>

PROJECT COST COMPONENT	Budget	Cost To Date
Consultation	\$506K	\$416K
Utility Setup Cost	\$154K	\$260K
Engineering	\$1.7M	\$1,3M
Materials + Construction	\$7.8M	\$6,9M
Contingency	\$2.2M (unused)	\$0M
Colocation Facility	\$777K	\$493K
Total Project Cost (excl unused Contingency)	\$10.9M	\$9.4M

The following is the 5-year 2023-2027 Capital Plan for BridgeNet. Additional details can be found in Appendix 1.

Table 1-2 - BridgeNet 5-Year 2023-2027 Capital Plan

Projects	2023 Forecas	2024 Forecas	2025 Forecas	2026 Forecas	2027 Foreca
BridgeNet Fibre Fund					
11041 BridgeNet Infrastructure	526,817	-	-	-	-
12343 Pattullo Bridge Fibre	150,000	-	-	-	-
12407 Aff Housing Fibre Infrastruc	30,000	30,000	30,000	30,000	-
A0343 BridgeNet Regional Fibre Hub 2.0	-	2,000,000	-	-	-
Total BridgeNet Infrastructure	706,817	2,030,000	30,000	30,000	0

**Operating Net Revenue Estimates:** To date we have connected 86 residential MDU's, 16 local business and 5 Educational Institutions of which 17 residential MDU locations were added in 2022. To date from inception, total net estimated revenue received is \$0.85M.

**2022 Operating Budget Service Enhancement**: In 2022 the Utility Commission approved the investment of a Business Manager to accelerate the Revenue Growth as the infrastructure was being under-utilized; staff redirected efforts away from the infrastructure growth to focus on the revenue growth.

### Progress in 2022/2023

- Total Buildings with SO's (non-city facilities) = 106
- Total new in 2022 = 17 (all residential MDUs)
- In Progress 2023 = 12
- New daycare connected at Portside development in Queensborough
- Colocation expansion is planned in 2023
- Working on updates to the BridgeNet website based on feedback and consultation with ISP's
- First 5 Gig business connection to local tech firm
- Completion of BridgeNet Construction Supplementary Guide (our version of an MMCD)

## Challenges, Risks and Mitigation

- Early construction, with a well-planned out micro-trenching scheme, did not have a solid quality control plan which has resulted in rework of existing infrastructure and a move from a single sourced (unit priced) contractor to a competitive job based tender process. This has added minor project delays and costs to the project.
- 2. 2018 and 2019 civil construction costs skyrocketed due to the development construction boom in lower mainland this put pressure on our timeline and construction costs
- Initial micro-trenching construction specifications were designed to a minimum 12" (100mm) depth conduit installation. However, we have moved to a minimum 18" (150mm) deep narrow trenching installation for a number or reasons:
  - a. Utility construction saw cutters are now using first pass 12" depth blades which can cut our cables before passing through our coloured warning grout.
  - b. Technical Safety BC is pushing for a minimum depth of any utility installation which will likely have an impact on future micro-trenching installations.
  - c. Higher Tier telecommunications providers, like Zayo or Bell, are hesitant to utilize shallow built 3<sup>rd</sup> party fiber networks and the extra depth will create better market confidence.
  - d. Construction costs for deeper trenches are approximately 15% higher, but the overall product is much better and easier to market to telecom industry.
- 4. Revenue forecasts from wireless companies and the school district are non-generating factors at this point in our business cycle. The local School District has a long term agreement with Telus to provide its network data/communication needs and that will likely not change without political support.
- 5. Planned building inventory of 125 units may not be met due to:
  - a. Lack of ISP inroads marketing to rental only buildings.

- b. Difficult to access existing communications infrastructure in townhome complexes.
- c. Lack of city direction from development department to support open access communications infrastructure design criteria which would support competitive ISP's
- d. High costs to re-wire in-building communication systems to accommodate use by competitive ISP's.
- Joint construction projects with other departments in the city are not consistent in cost and a challenge to manage. There is good value in these joint projects, nonetheless.
- 7. Developer driven construction costs for offsite utility works are not always being borne by the developer. This is due to inconsistent internal messaging between planning and engineering groups regarding city communication installation per the city's development bylaw for offsite utility requirements.

#### **COVID** impacts:

- a. City Capital budget restrictions delayed build out to new neighborhoods and made it difficult to take advantage of joint builds with other city utility projects.
- b. Service orders for residential building connections have slowed as our ISP's utilize 'on-site' marketing programs which are impacted by COVID concerns.
- c. We may possibly see more residential MDU connections with more people working from home.
- d. Shaw and Telus have a rigorous upgrade program in place for people working from home, but sticker shock once promotional offers expire and higher costs kick in should provide a renewed appetite for a competitive ISP market alternative.
- e. There has been an impact to business connections due to the economic impact of COVID as companies move to have more of their staff work remotely.
- f. 2 new 'business focused' ISP's have delayed scheduling of equipment installation at our colocation facility due to the economic downturn impacts of COVID

## **Opportunities**

#### **Wireless Providers**

Wireless providers in BC are TELUS, Rogers and Shaw who have plans to upgrade their fiber networks for wireless 5G deployment. These are all large providers with specific criteria to utilize other 3<sup>rd</sup> party last mile networks.

TELUS is the incumbent carrier (ILEC) in BC and has advised us that they have no interest in using BridgeNet fiber assets, while Shaw and Rogers have both had discussions with BridgeNet for their future requirements.

With pending upgrades to wireless networks (5G), Shaw and Rogers are good candidates to utilize our last mile fiber network. Bell Mobility has indicated they will keep their shared network partnership in place with TELUS Mobility for future wireless network deployments

#### **Wireline Providers**

Tier 1 wireline providers (Bell/Rogers/Shaw) who deliver traditional fiber based business connections have certain quality and operational requirements – we should look at a different fee schedule than we have for smaller providers (capital cost recovery and non-revenue share model)

To provide services to Tier 1 wireline providers we may need to negotiate upfront Access Agreements (BLA's) with building managers, developers and property managers. This will add up front and recurring costs and require outside firms to negotiate those agreements, but those firms are readily available.

#### **Support Structure Agreements (SSA's)**

Support Structure Agreements (SSA's) for pole attachments and spare capacity in underground fiber conduits and poles has good potential for future revenues.

Third party communications access to the city's poles and underground would also bring more competition to the city's telecommunications wireless market and have a positive impact on the local economy.

Typical SSA Pole and underground fee structures:

Distribution Fiber Urban pole attachments of less than 10km:

- a. \$1.61 per pole attachment and \$0.43 per 30 meters per month of messenger strand
- b. Maximum outside diameter of cable is 30.5mm
- c. All engineering and make ready costs paid by applicant
- d. \$2.25 per 30 Meters per month for underground conduit (\$0.90/meter/year)

Joint build and asset swap opportunities:

- a. Rogers and Shaw are looking to build out wireless network fiber backbones quickly and efficiently
- There will be opportunities to do joint builds in these situations which would save capital costs and upgrade the quality of the underground network we are building

- c. Swap and conduit/pole attachment criteria should be in place to take advantage of those opportunities
- d. These carriers will be looking for quick turnaround approval times to meet their planning and scheduling needs
- e. Governance on 'deals' should have weighting criteria in place for the Fiber and Electrical department to review and provide a streamlined approval process

## **BridgeNet 2.0**

Our Chief Information Officer (CIO) prior to retiring promoted the BridgeNet 2.0 idea to have New Westminster be part of a lower mainland hub connecting surrounding cities and municipalities to the BridgeNet fiber network and connectivity to the Vancouver Internet Exchange (VANIX) at Harbour Centre.

This is a good opportunity for surrounding city and municipal IT networks to create a meshed fiber based redundant network with peer to peer opportunities. This would result in better network performance and a more robust network to better withstand catastrophic events like earthquakes and flooding.

It also opens up more revenue possibilities with connections between entities like Qnet in Coquitlam and BridgeNet in New Westminster. As well, there is wide spread support in the competitive fiber market to build relationships and goodwill with governmental organizations and city IT departments.

This requires fiber connectivity to be built between adjacent cities and municipalities. We have just completed our first dark fiber connection to the Qnet and the City of Coquitlam. We are in close talks with the City of Burnaby IT department to create an interconnection point over the next 12 months.

We have a conduit connection to the border of the City of Richmond, a possible connection to the Corporation of Delta via MOT ducts in Queensborough, and the Patullo Bridge will provide MOT conduit capacity between the City of Surrey and New Westminster. We have allocated funds to have a conduit connection installed between the Patullo conduit system and our BridgeNet infrastructure.

#### INTERDEPARTMENTAL LIAISON

The Electrical Department has been in regular consultation with the Finance Department staff.

## **OPTIONS**

- 1. THAT Council receives this report for information only
- 2. That Council provide alternative direction.

Staff recommend Option 1

#### **ATTACHMENTS**

Attachment 1: 5-Year 2023-2027 BridgeNet Capital Plan

## **APPROVALS**

This report was prepared by:

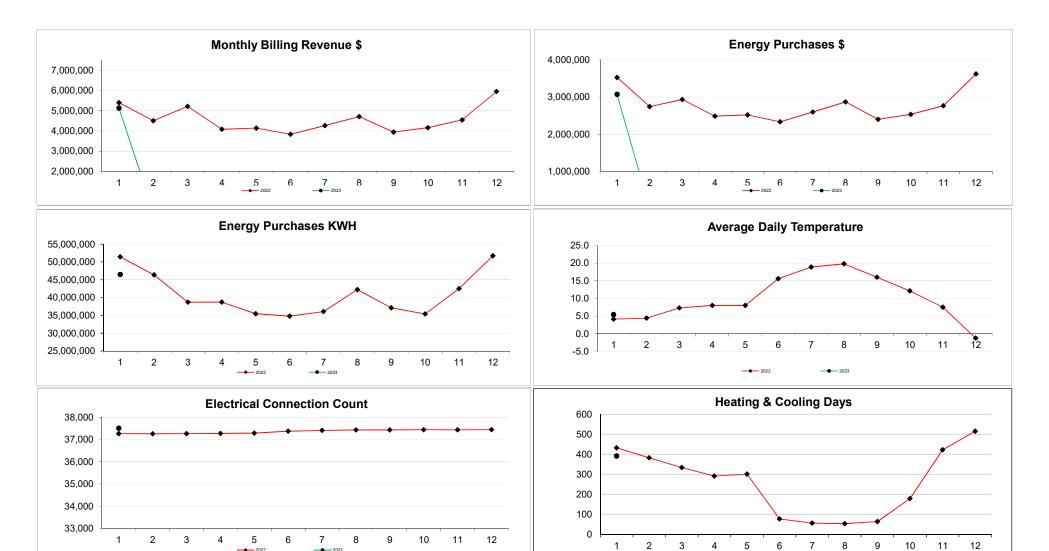
Rod Carle, General Manager, Electrical

This report was approved by:

Lisa Spitale, Chief Administrative Officer

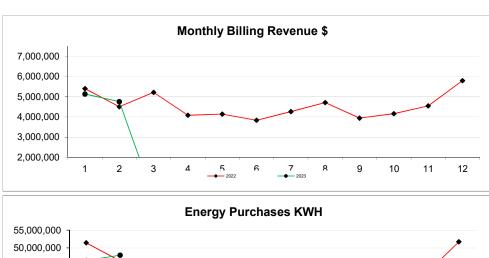
## SUMMARY OF ELECTRICAL ENERGY PURCHASES AND SALES 2023

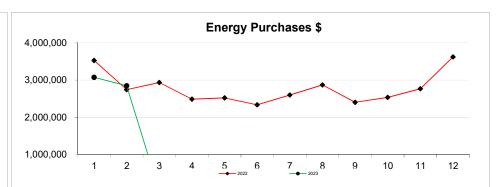
MONTH BILLING PERIOD		Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Jul 7	Aug 8	Sep 9	Oct 10	Nov 11	Dec 12	GRAND TOTAL
NUMBER OF CONNECTIONS		37,507												37,507
BILLING REVENUE Residential (RES) RES: ADJs Commercial (COMM) COMM: ADJs	<b>GL CODING</b> 9300.3704 9300.3706 9300.3706 _	2,812,770 (851,105) 2,872,135 (1,139,240) 3,694,559												2,812,770 (851,105) 2,872,135 (1,139,240) 3,694,559
Monthly Accruals RES: Rev Prior Month Accrual COMM: Rev Prior Month Accrual RES: Rec Current Month Accrual COMM: Rec Current Month Accrual Net Accrual Adjustment	9300.3704 9300.3706 9300.3704 9300.3706	(1,115,922) (1,115,922) 1,835,922 1,835,922 1,440,001	-	-	-	-	-	-	-	-	-	-	-	(1,115,922) (1,115,922) 1,835,922 1,835,922 1,440,001
TOTAL BILLING REVENUE EARNED	=	5,134,560	0	0		0	0	0 0	0	0	0	0		5,134,560
BC HYDRO - PURCHASE OF POWER Billed Demand (kVA) Billed Energy (kWh) Reverse Prior Month Accrual Record Current Month Accrual TOTAL PURCHASE OF POWER	9300.6805 9300.6805 9300.6805 9300.6805	715,810 2,337,813 (508,937) 527,043 <b>3,071,728</b>	<u>-</u>							<u>-</u>				715,810 2,337,813 (508,937) 527,043 3,071,728
GROSS MARGIN GROSS MARGIN %		2,062,831 40%	0	0	(	0	0	0 0	0	0	0	0		2,062,831 40%
PURCHASE OF POWER DETAILS Demand (kVA) Metered Peak Demand LLH Metered Peak Demand HLH 50% Contract Demand 75% of Previous High Demand Billing Demand Energy (kWh)		84,239 85,898 53,500 79,782 85,898												
Total Metered Energy Billing Period Energy Billed Period Energy - % Change Billed Demand Rate per kVA Billed Energy Rate per kWh		46,486,891 46,486,891 -10% 8.3333 0.05029												46,486,891
INTERNAL ENERGY SALES St Lights and Traf Signals Internal City Utility Charges Climate Action Levy	9300.3708 9300.3899 9300.3710	24,250 64,689 126,156												24,250 64,689 126,156
Mean Temperature (Celsius) Heating + Cooling Degree Days		5.4 391.0												
									1	GL RECONCILIATION RES RES: Rec Current M RES Subtotal COMM COMM: Rec Curre	Month Accrual	_ 	845,742 1,835,922 616,972 1,835,922	2,681,665
									-	COMM Subtotal FOTAL CHECK			_	2,452,895 5,134,560

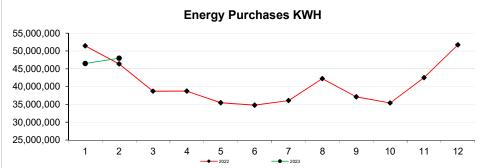


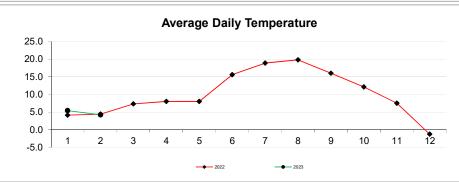
## SUMMARY OF ELECTRICAL ENERGY PURCHASES AND SALES 2023

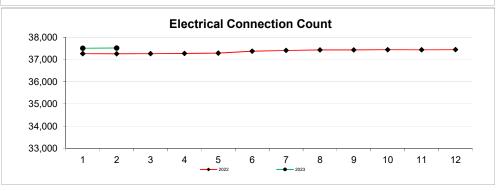
MONTH BILLING PERIOD		Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Jul 7	Aug 8	Sep 9	Oct 10	Nov 11	Dec 12	GRAND TOTAL
NUMBER OF CONNECTIONS		37,507	37,516											37,507
BILLING REVENUE Residential (RES) RES: ADJs Commercial (COMM) COMM: ADJs	<b>GL CODING</b> 9300.3704 9300.3706 9300.3706	2,812,770 (851,105) 2,872,135 (1,139,240)	4,354,524 (10,321) 2,097,091 (29,965)											7,167,294 (861,427) 4,969,226 (1,169,205)
Monthly Accruals RES: Rev Prior Month Accrual	9300.3704	3,694,559 (1,115,922)	6,411,328 (1,835,922)	-	-	-	-	-	-	-	-	-	-	10,105,887 (1,115,922)
COMM: Rev Prior Month Accrual RES: Rec Current Month Accrual COMM: Rec Current Month Accrual	9300.3706 9300.3704 9300.3706	(1,115,922) (1,115,922) 1,835,922 1,835,922	(1,835,922) (1,835,922) 1,008,908 1,008,908											(1,115,922) (1,115,922) 1,008,908 1,008,908
Net Accrual Adjustment	_	1,440,001	(1,654,030)	-	-	-	-	-	-	-	=	-	-	(214,029)
TOTAL BILLING REVENUE EARNED	=	5,134,560	4,757,299	0	(	0	0	0	0	0	0	0		9,891,860
BC HYDRO - PURCHASE OF POWER Billed Demand (kVA) Billed Energy (kWh) Reverse Prior Month Accrual Record Current Month Accrual TOTAL PURCHASE OF POWER	9300.6805 9300.6805 9300.6805 9300.6805	715,810 2,337,813 (508,937) 527,043 <b>3,071,728</b>	749,546 2,412,714 (527,043) 210,817 <b>2,846,034</b>	-	-	-	-	-	-	-	-	<u>-</u>		1,465,356 4,750,526 (508,937) 210,817 5,917,762
GROSS MARGIN GROSS MARGIN %		2,062,831 40%	1,911,265 40%	0	C	0	0	0	0	0	0	0		3,974,098 40%
PURCHASE OF POWER DETAILS Demand (kVA) Metered Peak Demand LLH Metered Peak Demand HLH 50% Contract Demand 75% of Previous High Demand Billing Demand		84,239 85,898 53,500 79,782 85,898	83,134 89,905 53,500 79,782 89,905											
Energy (kWh) Total Metered Energy Billing Period Energy Billed Period Energy - % Change Billed Demand Rate per kVA Billed Energy Rate per kWh		46,486,891 46,486,891 -10% 8.3333 0.05029	47,978,444 47,978,444 3% 8.3371 0.05029											94,465,335
INTERNAL ENERGY SALES St Lights and Traf Signals Internal City Utility Charges Climate Action Levy	9300.3708 9300.3899 9300.3710	24,250 64,689 126,156	24,250 113,880 218,925											48,500 178,569 345,081
Mean Temperature (Celsius) Heating + Cooling Degree Days		5.4 391.0	4.2 387.2											
									R R	L RECONCILIATION RES ES: Rec Current N ES Subtotal		_	5,189,945 1,008,908	6,198,852
									Ci Ci Ti	OMM OMM: Rec Curre OMM Subtotal OTAL HECK	nt Month Accrua	ıl	2,684,098 1,008,908	3,693,006 9,891,858 (1)

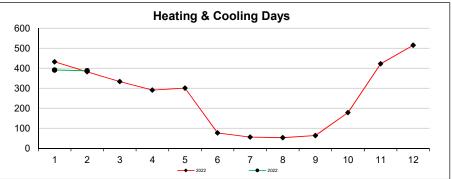














## New Westminster Electric Utility Commission

Financial Report for the period ended December 31, 2022

March 21, 2023

#### **Electric Utility - Operating Budget**

The Electric Utility provides electrical distribution services to residential and commercial customers in New Westminster. Electricity is purchased from BC Hydro and resold by the Electric Utility to its customers. Revenues generated through the sale of electricity are used to operate and maintain the electrical distribution system.

The 2022 Total Revenue Budget (excluding climate levy and non-operating contributions) of \$52.56M is primarily comprised of utility revenue generated from billing residential and commercial customers. At year end, to date \$55.08M, or 105%, of the utility revenue target has been generated, which is \$2.52 M ahead of 2022 expectations. Y/Y variance of \$4.22 M is mainly due to higher consumption (13.0 M kWh higher Y/Y) due to lower mean temperatures, growth in electrical demand and 2.8% annual rate increase.

The 2022 Expenditure Budget of \$41.12M is largely comprised of purchase of power from BC Hydro and similar to the utility revenue, purchase of power is ahead of target by \$1.57 M. 2022 purchase of power is \$1.23 M more than 2021, due to a higher volume of purchases (16.6 M kWh higher Y/Y) which are offset by a 1.4% annual rate decrease in the purchase of power from BC Hydro.

In summary, the annual Net Operating Budgets planned surplus to cover city-wide capital works and debt financing fees is ahead of target by \$0.79 M due to the better than planned revenue and staff vacancies.

## CORPORATION OF THE CITY OF NEW WESTMINSTER PRELIMINARY STATEMENT OF OPERATIONS - ELECTRIC UTILITY YTD PERIOD ENDING DECEMBER 31, 2022

	2022	2022	Budget	2021	Y/Y
(in millions)	Budget	Actuals	Variance	Actuals	Variance
REVENUE	<u>-</u>				
Utility Revenue	\$ 52.29	\$ 54.84	\$ 2.56	\$ 50.43	\$ 4.41
Sales of Service	0.05	0.02	(0.03)	0.15	(0.13)
Contributions	-	0	0.00	0.01	(0.01)
Other Revenue	0.22	0.22	(0.0014)	0.27	(0.05)
TOTAL REVENUE <sup>‡</sup>	\$ 52.56	\$ 55.08	\$ 2.52	\$ 50.87	\$ 4.22
EXPENSES					
Utility Purchases & Levies	\$ 31.74	\$ 33.32	\$ (1.57)	\$ 32.09	\$ (1.23)
Salaries, Benefits & Training	3.30	2.77	0.53	2.61	(0.16)
Contracted Services	1.17	1.47	(0.30)	1.24	(0.23)
Supplies & Materials	0.48	0.88	(0.40)	0.46	(0.42)
Interest & Bank Charges	1.03	0.98	-	0.69	(0.29)
Amortization	3.41	3.41	-	2.13	(1.27)
TOTAL EXPENSES	\$ 41.12	\$ 42.82	\$ (1.74)	\$ 39.22	\$ (3.60)
NET	\$ 11.44	\$ 12.27	\$ 0.79	\$ 11.65	\$ 0.61

#### **Electric Utility – Capital Budget**

QB Substation is in its construction phase and is re-scheduled to complete in Q2 2023 due to GE circuit breaker delivery delays. The capital plan estimated the total project value of \$30.0M which includes 10% for project contingency (to be spent but not identified initially) and 10% project reserve (not anticipated be spent but available if needed); the project is expected to be funded fully from debt financing and a borrowing by-law is approved at \$30.0M. The project is on track to close below the \$30M budget.

The Advanced Meter Project team is in the midst of detailed planning and implementation alongside selected vendors to the project such as KTI Limited, Harris and Northstar. The team is collectively working towards a master schedule. Implementation workstreams have been created and are underway. The team has also kicked-off the Meter Data Management (MDM) software implementation. The MDM is a critical software program that collects metering data and connects the new meters to the City's existing NorthStar Billing system.

Another major project in the Approved Capital Plan is the District Energy Project. Although the 5 Year Capital Plan has an estimated \$52M for this project, the full-size and expenditure for the project is projected to be \$112.1M and is subject to the receipt of agreements around grant funding and agreements with FHA & Sapperton Green development. Without additional grants/support the project is not financially viable and therefore no budget increase will be established until such funding has been secured. City staff and their engineering consultant had identified 3 potential grant streams and had submitted 3 applications for review. Staff have recently been notified that 2 of the applications were unsuccessful and the third application is requesting additional information.

Finally, significant planning and strategic work is advancing with the Climate Action team around EV infrastructure and transition to Electrical fleet for the Electrical Utility fleet and equipment.

Description	Ap	ulti-Year oproved Budget	Annual Spend Target	al Actual cpenses	Va	ariance
Substation Upgrades	\$	25.91	\$ 22.31	\$ 14.56	\$	7.75
Advanced Meters Infrastructure		10.79	10.19	0.93		9.25
Electrical New Services		15.62	7.52	4.88		2.63
Sapperton District Energy Syst		52.60	2.00	0.26		1.74
Electrical Vehicles		1.73	0.49	0.51		(0.02)
QB Substation Land Acquisition		-	-	-		-
Distribution Planning		1.72	0.50	-		0.50
Electric Vehicle Infrastructur		1.25	0.25	-		0.25
Electrical Utility Equipment		0.02	0.01	-		0.01
EV Chargers		-	-	-		-
Electrical Capital	\$	109.63	\$ 43.25	\$ 21.14	\$	22.11

#### **BridgeNet – Operating Budget**

BridgeNet was launched in 2016 as part of the City's Intelligent City initiative to provide New Westminster residents and businesses greater access to reliable, affordable high-speed internet services and relies on its partner Internet Service Providers (ISPs) to sell internet and broadband services to multi-dwelling unit residents, businesses and institutions.

The first few years were focussed on building the infrastructure and as we reach substantial completion for the build out, staff are working on the next phase of the project to advance the connections to reach the intelligent City goals and revenue targets required for full cost recovery.

For 2022, or Year 6 of the Business Plan, we have collected \$0.24M, or 116% of our utility revenue target. This is flat or comparable to 2021.

The Expenditure Budget of \$0.98M is largely related staff time, debt financing and amortization of the new infrastructure. Although the planned expenditures are on track per what was budgeted, the current revenues are unable to cover the cost to maintain the new system. Staff has obtained a Business Manager that will work on achieving revenue goals, prospect for leased line revenue with large carriers, developing the ISP partner ecosystem, and revising the original business plan strategy as necessary. Staff are also working on developing short-term and long-term performance targets for BridgeNet which will form objectives for the resource.

## CORPORATION OF THE CITY OF NEW WESTMINSTER PRELIMINARY STATEMENT OF OPERATIONS - BRIDGENET YTD PERIOD ENDING DECEMBER 31, 2022

(in millions)	2022 Budget	2022 Actuals	Budget Variance	2021 Actuals	Y/Y Variance
REVENUE	_				
Utility Revenue	\$ 0.19	\$ 0.23	\$ 0.03	\$ 0.22	\$ 0.00
Other Revenue	0.02	0.02	1	0.01	-
TOTAL REVENUE	\$ 0.21	\$ 0.24	\$ 0.03	\$ 0.23	\$ 0.00
EXPENSES	<b># 0.40</b>	<b># 0.40</b>	Ф 0 00	<b># 0.40</b>	¢ (0,00)
Salaries, Benefits & Training	\$ 0.19	\$ 0.16	\$ 0.03	·	\$ (0.00)
Contracted Services	0.08	-	0.07	0.00	(0.00)
Supplies & Materials	0.05	0.02	0.03	0.00	-
Interest & Bank Charges	0.20	0.16	-	0.15	(0.02)
Amortization	0.47	0.47	-	0.43	(0.04)
TOTAL EXPENSES	\$ 0.98	\$ 0.82	\$ 0.13	\$ 0.75	\$ (0.05)
NET	\$ (0.78)	\$ (0.58)	\$ 0.16	\$ (0.51)	\$ (0.05)

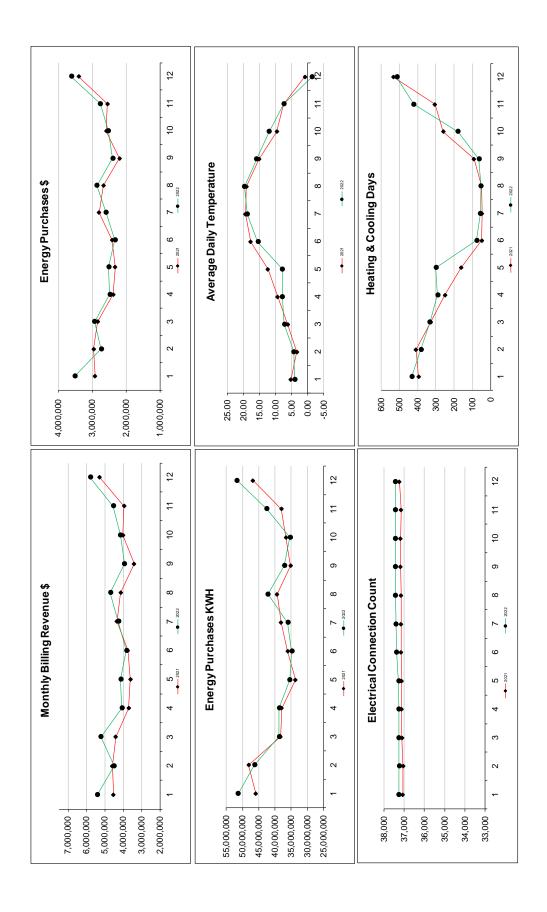
## **BridgeNet – Capital Budget**

Total capital spent to date is \$9.4M, which includes the \$0.61M spent in 2022 to date. The table below represents the current 2022 Approved Capital Budget and primarily includes major investment for installation on the remaining Phase 3 for the BridgeNet dark fibre network.

Description	Ap	Ilti-Year proved Budget	Annual Spend Target	l Actual penses	Va	riance
Total BridgeNet Fund	\$	3.45	\$ 0.95	\$ 0.61	\$	0.35

APPENDIX 1
Electrical Purchases & Sales Report (EDMS Doc# 836632)

MONTH BILLING PERIOD		Jan 1	Feb 2	Mar 3	Apr 4	May 5	ung 9	Jul 7	Aug 8	Sep 9	0ct 10	Nov 11	Dec 12	GRAND
N UMBER OF CONNECTIONS		37,260	37,258	37,263	37,272	37,286	37,376	37,407	37,431	37,431	37,441	37,435	37,443	37,443
BILLING REVENUE Residential (RES) RES: ADJs Commercial (COMM) COMM: ADJs	GL CODING 9300.3704 9300.3704 9300.3706	1,556,589 (97,823) 1,396,111 (4,567)	4,962,009 (4,604) 3,036,850 (35,889)	1,889,354 (15,023) 1,792,623 (2,947)	3,740,423 (14,032) 2,563,862 (24,863) 6,565,390	2,133,582 (8,878) 1,972,320 (23,717)	2,353,721 (12,846) 1,999,561 (20,072)	1,261,986 (8,986) 1,754,378 (10,269)	2,943,659 (9,471) 3,422,519 (26,811)	1,700,568 (9,522) 1,960,162 (330,833)	2,609,347 (10,222) 2,477,766 (113,151) 4 963,740	1,400,710 (6,422) 1,928,930 (2,028)	3,874,235 (88,360) 2,988,353 (129,632) 6,644,596	30,426,183 (286,188) 27,293,433 (724,779)
Monthly Accruals RES: Rev Prior Month Accrual COMMA: Rev Prior Month Accrual RES: Rec Current Month Accrual COMM: Rec Current Month Accrual Net Accrual Adjustment	9300.3704 9300.3706 9300.3704 9300.3706	(2,166,177) (2,166,177) (2,166,177) (2,144,147) (2,549,941)	(3,441,147) (3,441,147) 1,714,473 1,714,473 (3,453,348)	(1,714,473) (1,714,473) (2,489,629 (2,489,629 (1,550,311	(2,489,629) (2,489,629) (2,489,629) 1,399,557 1,399,557 (2,180,143)	(1,399,557) (1,399,557) 1,432,496 1,432,496 65,876	(1,432,496) (1,432,496) 1,190,049 1,190,049 (484,894)	(1,190,049) (1,190,049) (1,824,316 1,824,316 1,268,534	(1,824,316) (1,824,316) 1,015,310 1,015,310 (1,618,011)	(1,015,310) (1,015,310) 1,328,349 1,328,349 626,078	(1,328,349) (1,328,349) 927,194 927,194 (802,311)	(927,194) (927,194) (927,194) 1,539,511 1,539,511 1,224,635	(1,539,511) (1,539,511) (1,1539,511) 1,115,922 (847,179)	(2,166,177) (2,166,177) (2,166,177) 1,115,922 (2,100,509)
TOTAL BILLING REVENUE EARNED		5,400,251	4,505,019	5,214,319	4,085,247	4,139,184	3,835,470	4,265,642	4,711,885	3,946,452	4,161,430	4,545,826	5,797,417	54,608,142
BC HYDRO - PURCHASE OF POWER Billed Demand (WA) Billed felregy (What) Reverse Prior Month Accrual Record Current Month Accrual	9300.6805 9300.6805 9300.6805 9300.6805	919,310 2,605,292 (587,434) 587,434 <b>3,524,602</b>	771,869 2,348,524 (587,434) 208,026 <b>2,740,986</b>	689,476 1,961,283 (208,026) 490,881 <b>2,933,614</b>	670,626 1,950,382 (490,881) 355,458 2,485,584	668,772 1,782,461 (355,458) 422,626 2,518,401	669,113 1,748,640 (422,626) 338,485 2,333,612	690,158 1,813,657 (338,485) 431,692 <b>2,597,021</b>	704,170 2,123,150 (431,692) 471,220 <b>2,866,849</b>	667,923 1,866,510 (471,220) 337,924 <b>2,401,137</b>	668,806 1,779,015 (337,924) 422,038 <b>2,531,936</b>	675,491 2,137,319 (422,038) 375,041 2,765,814	883,810 2,601,610 (375,041) 508,937 3,619,316	8,679,525 24,717,844 (587,434) 508,937 33,318,872
GROSS MARGIN GROSS MARGIN %		1,875,649 35%	1,764,033 39%	2,280,705 44%	1,599,663 39%	1,620,783 39%	1,501,857 39%	1,668,621 39%	1,845,036 39%	1,545,315 39%	1,629,494 39%	1,780,012 39%	2,178,101 38%	21,289,270 39%
PURCHASE OF POWER DETAILS Dem and (kVA) Metered Peak Demand LLH Metered Peak Demand HLH 50% Contract Demand 75% of Previous High Demand Billing Demand		93,059 106,377 53,500 65,409	80,880 89,316 53,500 65,409 89,316	75,341 78,750 53,500 79,782	70,084 70,901 53,500 79,782	61,894 66,005 53,500 79,782 79,782	66,997 77,562 53,500 79,782	71,769 82,303 53,500 79,782 82,303	75,197 84,294 53,500 79,782 84,294	65,836 77,104 53,500 79,782 79,782	65,211 72,463 53,500 79,782 79,782	79,133 80,979 53,500 79,782 80,979	94,874 105,724 53,500 79,782	
Energy (kWh) Total Metered Energy Billing Period Energy Billing Period Energy -% Change Billed Period Energy -% Change Billed Demand Rate per kVA Billed Energy Rate per kWh		51,437,157 51,437,157 10% 8.6420 0.05065	46,367,704 46,367,704 -10% 8.6420 0.05065	38,722,262 38,722,262 -16% 8.6420 0.05065	38,750,647 38,750,647 0% 8.4057 0.05033	35,468,478 35,468,478 -8% 8.3825 0.05025	34,798,092 34,798,092 -2% 8.3868 0.05025	36,091,168 36,091,168 4% 8.3856 0.05025	42,229,212 42,229,212 17% 8.3537 0.05028	37,134,456 37,134,456 -12% 8.3718 0.05026	35,400,182 35,400,182 -5% 8.3829 0.05025	42,504,347 42,504,347 20% 8.3416 0.05028	51,749,912 51,749,912 22% 8.3596 0.05027	490,653,617
INTERNAL ENERGY SALES St Lights and Traf Signals Internal City Utility Charges Climate Action Levy	9300.3708	24,250 115,018 97,331	24,250 101,456 271,749	24,250 99,589 125,312	24,250 125,613 213,940	24,250 89,367 139,196	24,250 134,864 147,431	24,250 47,639 102,435	24,250 131,756 216,141	24,250 83,335 113,379	24,250 115,449 170,746	24,250 102,939 113,407	116,695	266,750 1,263,719 1,870,851
Mean Temperature (Celsius) Heating + Cooling Degree Days		4.1	4.4	7.3	8.0	300.7	15.6	18.9	19.8	16.0	12.1 178.6	7.5	-1.3	



# REPORT UTILITY COMMISSION

**To**: Utility Commission **Date**: December 19, 2022

From: Roderick Carle, General Manager File: 1959561

**Utility Commission** 

Subject: PROPOSED 2023 NOTICE OF UTILITY COMMISSION MEETINGS

#### **RECOMMENDATION**

THAT the following Utility Commission Schedule of meetings for January to December 2023 be approved.

March 21	May 9	June 20
July 11	September 19	November 21

<u>Closed Meetings</u> will take place from 2:00 pm - 3:30 p.m., <u>Open Public Meetings</u> will take place at 3:30 pm to 4:00 pm. Meetings take place in Committee Room #2 and/or via Team Meeting

Rod Carle, General Manager

**Utility Commission**