CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date:	June 26, 2015
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Meeting Date:	July 7, 2015

TO: Vancouver City Council

FROM: Director of Finance and General Manager of Engineering Services

SUBJECT: Southeast False Creek Neighbourhood Energy Utility ("SEFC NEU") – Five-Year Review

RECOMMENDATION

A. THAT Council adopt the key performance indicators ("KPIs") and targets as set out in this report to guide future rate setting for the SEFC NEU under the commercial utility rate model.

B. THAT Council authorize an increase to the previously approved internal financing from $8 million to $15 million to finance the accelerated loan amortization, to be repaid from future SEFC NEU revenues; source of funding to be the Capital Financing Fund.

REPORT SUMMARY

The purpose of this report is to present to Council the result of the comprehensive review of the SEFC NEU under the commercial utility rate model after five years of operation. The focus of the review was to determine i) the long-term financial viability of the NEU; ii) rate stability and competitiveness; iii) potential future expansion of sewage heat recovery capacity to optimize environmental and economic performance; and iv) City internal financing structure.

Based on the review, staff and the Neighbourhood Energy Expert Panel ("Expert Panel") have concluded that the SEFC NEU is financially viable, and the forecast rates are stable and competitive within the Council-approved rate setting framework. To provide greater clarity for future rate setting, staff recommend that a set of KPIs and targets be adopted as outlined in the report.

The review has also confirmed that the sewage heat recovery expansion is economically viable. Sewage heat recovery expansion will continue to be considered along with other potential low carbon energy sources to optimize the environmental and economic performance of the SEFC NEU as part of the City's overall Neighbourhood Energy Strategy.

When the SEFC NEU became operational, the financial model reflected financing of capital infrastructure costs through longer-term debt to match the useful life of assets (25-40 years). However, as longer-term debt is not always available for municipal debt issuers, the City issues primarily 10-year debt, and includes the SEFC NEU as part of the annual capital borrowing program. Shorter-term debt will result in significantly lower overall interest costs for the City (approximately $26 million) over the life of this project. As shorter-term debt requires higher principal payments upfront, staff recommend that Council authorize an increase to the previously approved internal financing from $8 million to $15 million to finance this accelerated loan amortization, to be repaid from future SEFC NEU revenues.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

In December 2006, Council approved a set of governance and rate-setting principles for the SEFC NEU, including direction that the merits of continued ownership be reviewed before any significant expansion of the NEU, and, in any event, within three years of the commencement of commercial operations (Appendix B).

In March 2009, Council instructed staff to report back to Council annually on adjustments to the SEFC NEU rates, and to bring a comprehensive rate review to Council every five years.

In July 2010, Council approved the establishment of a third-party Expert Panel (referred to as the "Expert Panel" in this report) to advise staff and Council on future SEFC NEU rate adjustments. At this time, Council also approved the establishment of separate customer rate classes and rate formulas for residential and mixed-use residential buildings located outside SEFC, and for non-residential buildings both within and outside SEFC.

In July 2011, Council adopted the Greenest City Action Plan, which targets a 33% (1.1 million tonnes per year) City-wide reduction in carbon pollution by 2020 from 2007 levels. Low carbon neighbourhood energy systems represent 11%, or 120,000 tonnes per year, of this target.

In June 2012, Council approved the amendment of the Energy Utility System By-law to expand the SEFC NEU service area to include the Great Northern Way Campus Lands and adjacent lands in the False Creek Flats South Area.

In October 2012, Council approved the Vancouver Neighbourhood Energy Strategy and Energy Centre Guidelines, to address the Greenest City 2020 Action Plan objective of reducing 120,000 tonnes carbon dioxide per year through the conversion of existing steam heat systems to low carbon energy sources and the deployment of sustainable energy systems for high-density neighbourhoods.

In April 2014, Council approved a transition strategy to adjust the SEFC NEU rate structure to strengthen the energy conservation price signal while maintaining energy rates at the same level as projected under the commercial utility rate model.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager recommends approval of foregoing.

REPORT

Background/Context

The fundamental goal of the SEFC NEU is to reduce greenhouse gas ("GHG") emissions via a financially self-sustaining, commercially operated utility that delivers competitively priced low-carbon energy services. Through system efficiencies and the use of sewage heat recovery as its primary low carbon energy source, the NEU achieves substantial GHG reductions relative to traditional methods of providing heat and hot water. Upon system build-out, the NEU is expected to achieve a 60% GHG reduction, or 10,400 tonnes CO_2 per year, over a 25 year period.

Appendices A and B provide additional details on the SEFC NEU's services, technology, and its ownership, operating and governance model.

Strategic Analysis

Levelized Rate Structure

SEFC NEU rates are comprised of two components: a fixed Capacity Levy (related to the fixed capital and operating costs associated with the NEU) and a variable Energy Use Charge (related to customers' actual energy consumption).

To provide competitive and stable rates for the SEFC NEU customers, rates are established based on a levelized rate approach. As illustrated in Figure 1 below, rates are set to *under-recover* annual costs in the early years of the NEU's operation when the customer base is small, and to gradually recover past costs and a modest return on investment when the customer base is fully established. This approach ensures that infrastructure costs are more equitably distributed between the initial customers and those who connect in later years. If the levelized rate approach were not taken, customer rates would have to be set much higher in the early years of operation.

The levelized rate approach is commonly used by privately owned utilities regulated by the BC Utilities Commission ("BCUC"), including the SFU's UniverCity Energy system, the River District Energy system and the new UBC neighbourhood system.

Figure 1: Levelized Rate Approach

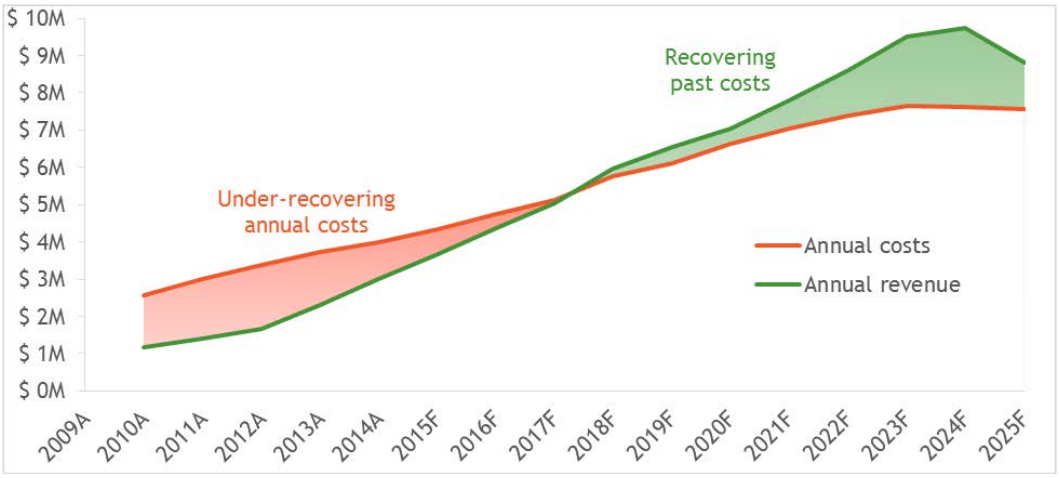
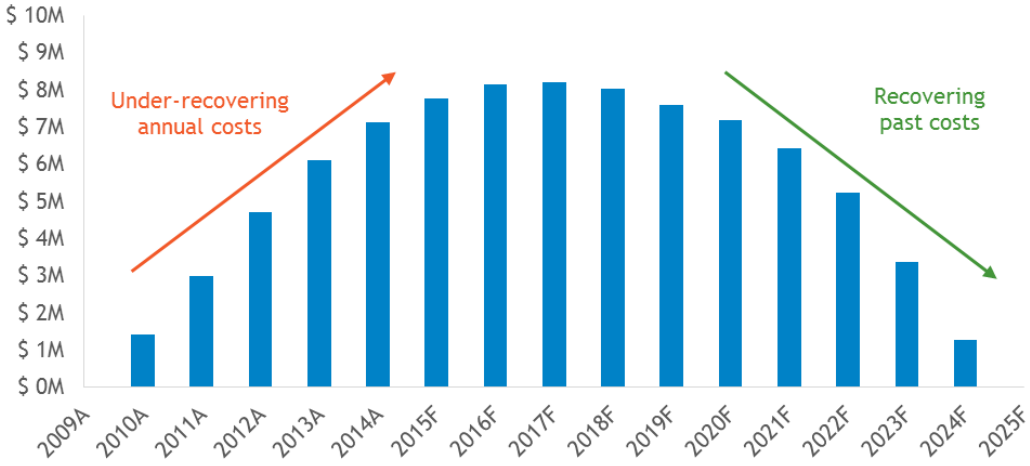


Figure 2: Cumulative Balance of Under-recovered Costs Under Levelized Rate Approach



To ensure that the cumulative balance of under-recovered costs (Figure 2) can be recovered within a reasonable timeframe without impacting the stability and competitiveness of the customer rates, the levelized rate approach contemplates annual rate increases that include two components: an inflationary increase and a Rate Escalation Factor.

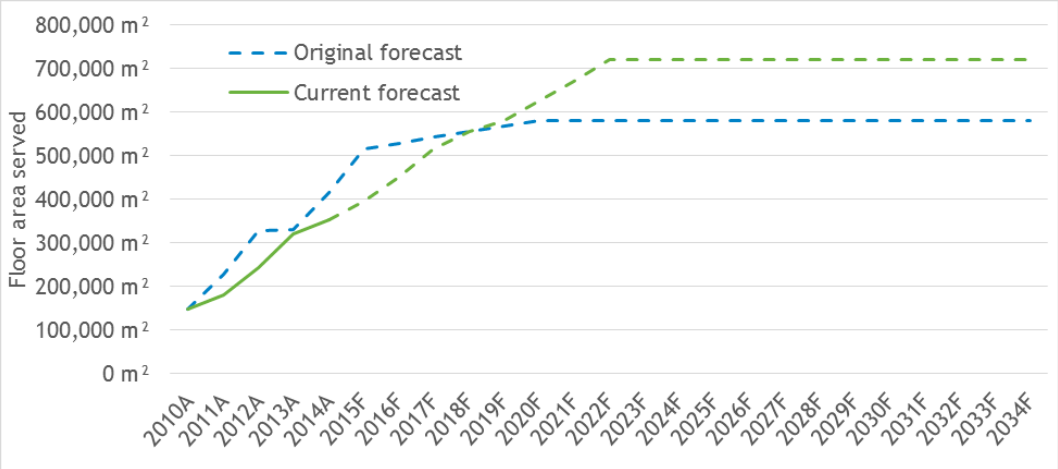
The Rate Escalation Factor is applied to customer rates above annual inflation to gradually increase rates over time to ensure all of the NEU's revenue requirements are met over the long-term. Using this approach enables the NEU to maintain rates that are stable, affordable and appropriate for new utilities with large upfront capital investments.

Long-term Financial Performance of SEFC NEU

Since beginning operation in 2010, the SEFC NEU has expanded to serve 358,000 square meters (3,850,000 square feet) of residential, commercial and institutional floor area as at the end of 2014. This is roughly 15% below the original business case projection, and is primarily due to the slow-down in the real estate market resulting from the 2008 economic downturn, which delayed private land developments in the SEFC service area.

Although development has been slower than the original forecast, the NEU will continue to expand over time to serve additional development density in SEFC and new service areas including the Great Northern Way Campus Lands. As illustrated in Figure 3 below, total build-out is currently forecast at 722,000 square metres (7,770,000 square feet) of floor area, which is about 25% higher than the original business case projection.

Figure 3: Floor Area Served



Given the slower pace of development and delayed occupancy for some buildings, energy sales in the first five years were 33% below the original forecast. As shown in Table 1 below, the impact of lower energy sales was partially offset by lower fuel costs and other operating cost savings.

Table 1: Five-year Review - Cumulative Results (2010-2014)

$ million	**Original forecast**	**Actual results**	**Change ($)**	**Change (%)**
Energy sales revenue	$14.4	$ 9.6	$ 4.8	(33%)
Recoverable costs	19.9	16.7	(3.2)	(16%)
Under-recovered costs	**5.5**	**7.1**	**1.6**	**29%**

Under the original forecast in 2009, the balance of under-recovered costs was projected to peak at $7.3 million and be fully repaid in 22 years. It also assumed that annual rate increases would include the Rate Escalation Factor over a 25-year period to ensure the NEU's revenue requirements be met under the levelized rate approach.

As illustrated in Figure 4 below, based on current projections, the balance of under-recovered costs is expected to peak in 2017 at $8.2 million, which is $0.9 million higher than the original forecast. As a result of the anticipated growth in future customer base as well as operating cost savings, the balance of under-recovered costs is expected to be fully repaid within 16 years, which is six years ahead of the original forecast. As well, the Rate Escalation Factor will no longer be required starting in 2019, when annual revenues are forecast to exceed annual costs.

Figure 4: Cumulative Balance of Under-recovered Costs
Original Forecast vs. Current Forecast

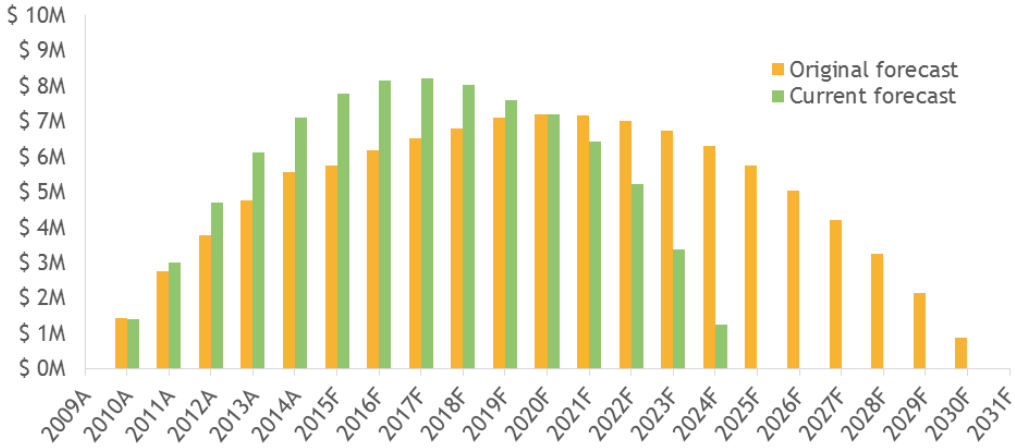


Table 2 below compares the key metrics associated with the levelized rate approach under the original forecast included in the 2010 rate report, the last forecast published as part of the 2014 rate report, and the current forecast.

Table 2: Five-year Review – Key Metrics

	Original forecast Feb '09	Last forecast Dec '13	Current forecast May '15
Maximum balance of unrecovered costs	$ 7.3 M	$ 8.0 M	$ 8.2 M
Recovery timeline (repaid in)	22 years (2031)	17 years (2026)	16 years (2025)
Escalated rate increases[1]	3.2% thru 2021[2]	3.2% thru 2015	3.2% thru 2018

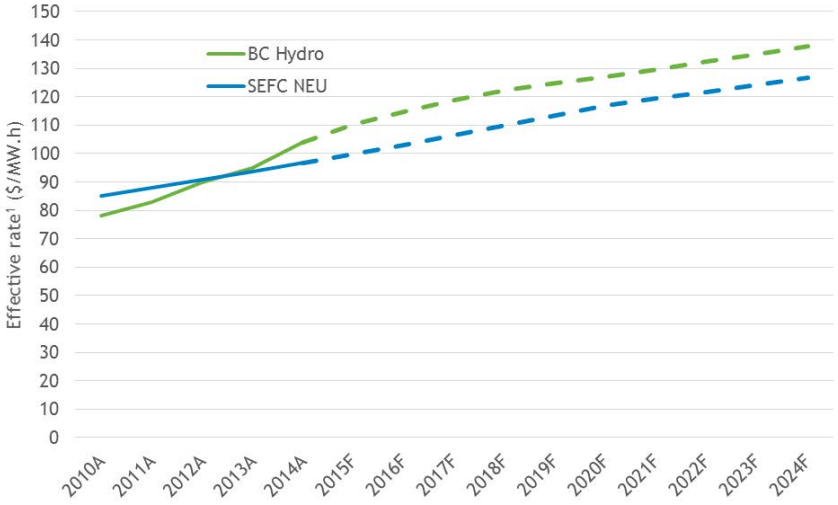
Notes to table

1- Includes projected 2% CPI

2- Original forecast maintained escalated rate increase over entire timeline, for comparative purposes 2021 is the year annual revenues exceed annual costs in original forecast

Figure 5 below shows the forecast NEU rates relative to the forecast effective electricity rates. Current projections indicate that NEU rates are expected to be lower than BC Hydro rates over the remainder of the levelized rate period.

Figure 5: Forecast Effective Rates ($/MW.h)



Note to figure:

1. Effective rate is based on a reference building with an annual energy demand of 109 KW.hr per m^2 of floor area. Actual effective rates for customers will vary due to differences in energy consumption
2. BC Hydro rates are projected to increase consistent with the increases published in BC Hydro's 10-year Rate Plan and at CPI thereafter

Key Performance Indicators & Targets (Recommendation A)

To provide greater clarity for future rate setting under the levelized rate approach, staff recommend that the following KPIs and targets be adopted:

KPI #1: Maximum balance of under-recovered costs – Staff recommend that the target for the maximum balance of under-recovered costs not exceed $9 million which allows for variation in the timing of development coming on stream. The current projection indicates that the balance would peak at $8.2 million in 2018, and gradually come down as annual revenues start to exceed annual costs.

KPI#2: Maximum timeline for recovery of all costs – Staff recommend that the target for recovery of all costs be within 25 years (2034) to match the original term of the levelized rate approach. The current projection indicates that all costs would be recovered in 2025, which is within 16 years from the start of NEU operations in 2010.

KPI#3: Application of Rate Escalation Factor – Staff recommend that the Rate Escalation Factor be applied until the year that annual revenues exceed annual costs. The current projection indicates that the Rate Escalation Factor will no longer be required starting 2019.

KPI#4: Competitive rates – Council policy requires that the NEU "*strives to establish and maintain customer rates that are competitive with the long-term capital and operating costs of other heating options available to customers.*" When the NEU started operation in 2010, a target was set to limit its rates to no greater than a 10% premium above the BC Hydro rate. Staff recommend no change to the target. The current NEU rate is 8% lower than the BC Hydro effective electricity rate.

Sensitivity Analysis

To understand risks to the long-term financial viability of the SEFC NEU under the levelized rate approach, staff have modelled the impact of a number of scenarios focusing on two key variables in the NEU proforma: fuels costs and customer energy consumption.

Table 3 below summarizes the impact of ±30% of fuel costs and customer energy consumption.

Table 3: Sensitivity Analysis

Sensitivity scenarios[1]	Max. balance of under-recovered costs	Timeline for recovery of all costs
(a) 30% lower fuel costs	$ 7.8 M	14 years (2023)
(b) 30% higher energy consumption	$ 8.0 M	16 years (2025)
(c) Combined a & b	$ 7.8 M	13 years (2022)
Base case (current forecast)	**$ 8.2 M**	**16 years (2025)**
(d) 30% lower energy consumption	$ 8.5 M	18 years (2027)
(e) 30% higher fuel costs	$ 9.6 M	19 years (2028)
(f) Combined d & e	$10.0 M	20 years (2029)

Note to table:

1- Scenarios model impact of an ongoing change in prices starting in 2015 without any adjustments to the current forecast SEFC NEU rates

Assuming a combination of high fuel costs and low energy consumption (Scenario F - worst case scenario), or a combination of low fuel costs and high energy consumption (Scenario C - best case scenario), the maximum balance of under-recovered costs would be in the range of $7.8-$10 million (recommended KPI#1 is a maximum balance of $9 million) while the timeline to recover all costs would range from 13-20 years (recommended KPI #2 is a maximum of 25 years).

Should fuel costs increase significantly from the current projections and additional cost saving measures cannot be identified, Council could consider one or more of the following approaches:

- passing on all or part of the fuel cost increase to customers
- adjusting the target for the maximum balance of under-recovered costs (KPI#1)
- adjusting the target for the maximum timeline to recover all costs (KPI#2)

NEU Expert Panel (Panel) Input

Staff conducted the five-year comprehensive review in consultation with the Expert Panel. Specifically, pursuant to the mandate of the Panel, input is sought for the following aspects that could have an impact on the SEFC NEU business case and current and future customers:

- long-term financial viability of the NEU
- rate stability and competitiveness
- potential future expansion of sewage heat recovery capacity to optimize environmental and economic performance.

The Expert Panel has provided a letter of endorsement for the recommended approach on these items (Appendix C).

Implications/Related Issues/Risk (if applicable)

Financial

City Internal Capital Financing Structure for SEFC NEU

NEU Operations - When the NEU became operational in 2010, Council approved a Rate Stabilization Reserve of up to $8 million to finance:

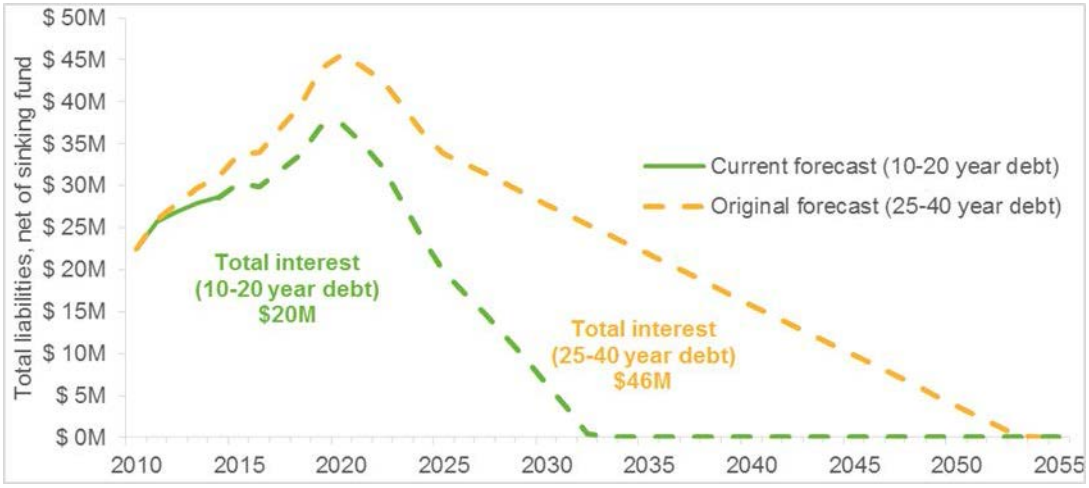
- the operating shortfall in the early years of operation resulting from the levelized rate approach; and
- small year-over-year fluctuations in revenues due to uncontrollable circumstances (e.g. weather) to ensure rate stability for customers.

The Rate Stabilization Reserve was financed through the Capital Financing Fund ("CFF") and the balance as of 2014 year end was just under $5 million.

NEU Capital Infrastructure - When the NEU became operational in 2010, it was contemplated that the capital infrastructure costs would be financed through longer term debt over a 25-40 year amortization to match the useful life of assets. This is a standard approach used by private utilities that are regulated by the BCUC. Subsequently, the City received a $5 million, 20-year low interest loan from the Federation of Canadian Municipalities. The remainder was financed through the City's regular capital borrowing program approved by Council as part of the Capital Plan and Budget process.

To reduce overall financing costs and align with the City's standard issuing term, the City has issued mostly 10-year debt. Shorter-term debt results in significantly lower overall interest costs. However, accelerating the loan amortization requires higher upfront annual principal payments.

Figure 6: Total Liabilities (net of Sinking Fund)



As illustrated in Figure 6 above, with shorter loan amortization, the City will benefit from long-term interest savings of approximately $26 million, and a lower long-term debt profile which is positive for credit rating agencies.

Incorporating the accelerated loan amortization, the current projection indicates that funding required would exceed the $8 million limit in 2018 and peak at $13 million in 2021. Staff therefore recommend that Council authorize an increase to the previously approved internal financing from $8 million to $15 million to finance the accelerated loan amortization, to be repaid from future SEFC NEU revenues; source of funding to be the Capital Financing Fund (Recommendation B).

Any changes to the future operating costs, timing of capital expansion and future debt financing costs may impact the maximum internal financing requirement and timing for full repayment. Staff will continue to monitor and update the SEFC NEU proforma as part of the annual rate setting process.

Environmental

GHG Reductions

The SEFC NEU derives most of its thermal energy production from a process that recovers waste heat from sewage, with the remaining energy supplied by high-efficiency natural gas boilers. It seeks to achieve a 60% GHG reduction compared to conventional heating systems. This target is based on 70% of the annual energy supply coming from the sewage heat recovery process. While the system has consistently achieved this target, for the years 2015 through 2018, it is anticipated that GHG emission reductions will be below this target.

This below-target performance has always been expected in the SEFC NEU business plan. This is a short-term situation which is the result of new customers being added to the system before expansion of the sewage heat recovery system is economical. Beginning in 2019, through growth in the customer base, revenues are expected to be sufficient to finance the expansion of the sewage heat recovery capacity at the False Creek Energy Centre, which will enable the NEU to achieve its long-term GHG reduction targets.

At the time of SEFC build-out, when the NEU is forecast to serve 720,000 square metres (7,770,000 square feet) of residential, commercial and institutional floor area, GHG emissions are forecast to be reduced by 10,400 tonnes CO_2 annually compared to Business-as-Usual[1]. This is a 37% improvement over the 2011 long-term forecast reduction of 7,600 tonnes CO_2 annually, and is due to expansion of the NEU service area, increases to SEFC floor area, and long-term capacity to source a greater proportion of energy from sewage heat recovery than was anticipated in prior years.

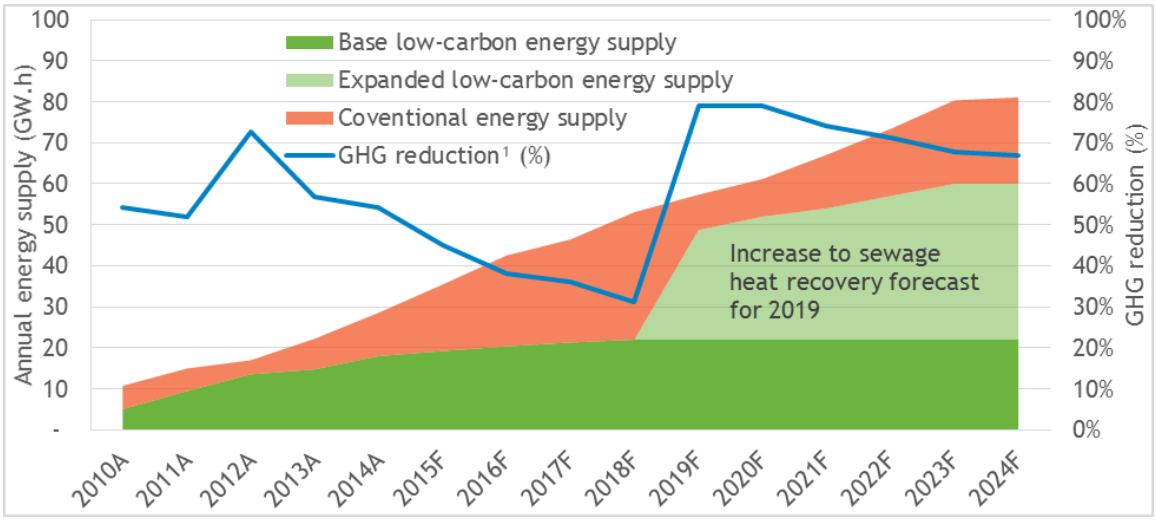
Future Expansion of Sewage Heat Recovery Capacity

The original forecast in 2009 projected that an expansion of the sewage heat recovery capacity would be required in 2015. As a result of the delay in development in the service area, the current projection indicates that additional sewage heat capacity will be required in 2019.

[1] Business-as-Usual is defined as the type of heating and domestic hot water system that would be installed in typical local construction in the absence of the NEU. It assumes electric baseboard heat for residential units and natural gas for ventilation air, domestic hot water and commercial/institutional spaces

Figure 7 below illustrates the forecast sources of energy supplied to meet customer loads and the projected annual GHG reduction.

Figure 7: SEFC NEU Energy Supply & GHG Reduction Forecast



[1] Represents CO2 reduction as compared to conventional heating approach

Staff have reviewed the timing of sewage heat expansion and have concluded that expansion could potentially be accelerated by one year to come online in 2018 without impacting customer rates. While sewage heat recovery expansion has been determined to be economically viable, staff will continue to monitor the timing for the expansion and evaluate other potential low carbon energy sources for the SEFC NEU to optimize its environmental and economic performance as part of the City's overall Neighbourhood Energy Strategy.

CONCLUSION

Based on the five-year comprehensive review, staff and the Expert Panel have concluded that the SEFC NEU is financially viable, and the forecast rates are stable and competitive within the Council-approved rate setting framework. Staff will continue to assess the timing and approach to future expansion of the sewage heat recovery capacity to optimize the environmental and economic performance of the SEFC NEU within the context of the City's Neighbourhood Energy Strategy.

* * * * *

Approved Ownership and Operating Model

On December 14, 2006, Council assessed various ownership and operating options for the NEU, and approved the continued ownership and operation of the NEU by the City, with the following conditions:

- That the NEU be integrated into the Engineering Services Department.
- That the ongoing governance, operational and financial responsibilities related to the NEU be shared by the General Manager of Engineering Services and the Director of Finance.
- That the merits of continued ownership be reviewed before any significant expansion of the NEU, and, in any event, within three years of the commencement of commercial operations.

Approved Governance Principles

At that same time, Council approved the following governance principles for the NEU:

1. That the NEU will seek to minimise greenhouse gas emissions, consistent with the directions established in the Community Climate Change Action Plan.
2. That the NEU will be operated to ensure long-term financial viability based on a commercial model.
3. That the NEU will strive to establish and maintain customer rates that are competitive with the long-term capital and operating costs of other heating options available to customers.
4. That the City, where feasible, will support the development and demonstration of flexible, innovative and local technologies through the NEU.
5. That the City will consider and evaluate the potential to expand the NEU to other neighbourhoods and developments, with the merits and feasibility of each expansion phase to be determined separately.

Approved Rate-Setting Principles

Council also adopted the following eight principles, to be applied to setting rates and terms of service for NEU customer:

1. That NEU rates are structured so as to recover the following costs incurred by the City, based on forecasted costs:
    i. all direct operating costs associated with the NEU,
    ii. all debt service and repayment costs associated with the NEU,

iii. the share of City administrative overheads that are attributable to the NEU,

iv. property taxes and/or payments-in-lieu of property taxes, as appropriate,

v. a reserve fund for NEU rate stabilization,

vi. an appropriate level of compensation for the risks and liabilities assumed by the City associated with the ownership and operation of the NEU, and

vii. credits for any benefits provided by the NEU to City taxpayers (e.g., contribution to corporate GHG reductions goals), as determined by Council.

2. That NEU rates fairly apportion the aforementioned costs among customers of the NEU.

3. That NEU rates be understandable to customers, practical and cost-effective to implement.

4. That at least two separate rate classes (commercial and residential) be established to distinguish different types of NEU customers, with rates reflecting each class's proportional contribution to total costs.

5. That, where feasible, NEU rates provide price signals that encourage energy conservation by NEU customers.

6. That the methodology for calculating NEU rates provide year-to-year rate stability for NEU customers to the greatest extent possible.

7. That the methodology for calculating NEU rates provide year-to-year revenue stability for the City to the greatest extent possible, and include the use of a rate stabilization reserve similar to that used by the City for other utility operations.

8. That rates be updated by Council annually based on forecasted costs, and adjusted to reflect any deviation from target levels of reserves, with annual rate changes requiring review and approval by Council followed by enactment of the necessary amendments to the NEU by-law.

On March 2, 2006, Council approved in principle the creation of the NEU to provide space heating and domestic hot water services to Southeast False Creek (SEFC) buildings. Council's decision was based on a business case that was developed with consulting support from experts in district energy and utility economics.

NEU Technology

The primary energy source for the NEU is sewage waste heat recovery, in which sewage waste heat is captured and used to heat water at the False Creek Energy Centre (referred to in this appendix as the Energy Centre). This facility, located under the south end of the Cambie Street Bridge, at 1890 Spyglass Place, also includes an integrated sewage pump station. While the Energy Centre derives most of its energy from sewage heat recovery, natural gas boilers are used for back-up purposes, and to provide supplemental energy on the coldest days of the year.

From the Energy Centre, a network of underground pipes delivers the heated water to SEFC buildings (termed the "Distribution Pipe System," or DPS). Energy Transfer Stations (ETS) located within each connected building control space heating and domestic hot water for distribution by the (customer owned) building mechanical system.

Metering is incorporated in the ETS's for energy measurement and billing purposes. Three of the ETS's also enable customer-generated solar thermal energy to be distributed to the wider neighbourhood.

In summary, there are four components to the NEU's infrastructure, illustrated in Figure 1 below.

- *False Creek Energy Centre*: Generates hot water through sewer waste heat recovery and natural gas boilers. Owned and operated by the NEU.

- *Distribution Pipe System* (DPS): A set of underground pipes that deliver hot water to connected buildings. Owned and operated by the NEU.

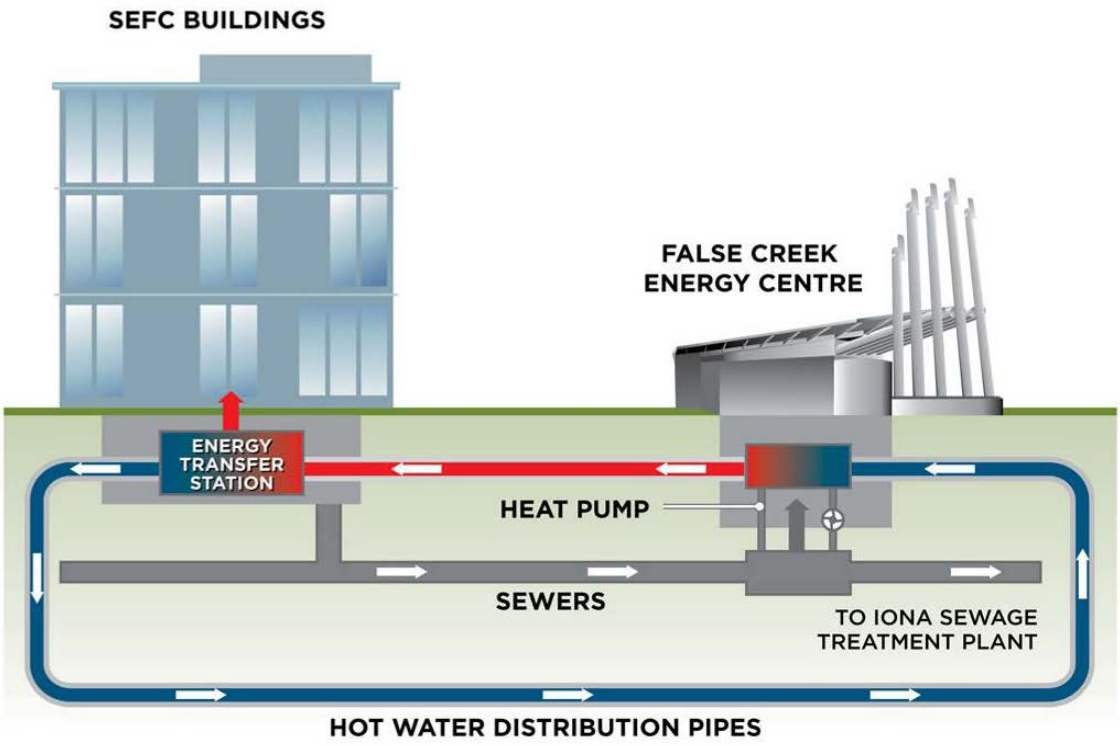
- *Energy Transfer Stations (ETS):* Heat exchangers within each connected building that use hot water delivered to the building via the DPS to generate heat and domestic hot water for individual consumers and building common spaces. Owned and operated by the NEU.

- *Building Mechanical Systems:* All infrastructures within a building (except for the ETS) that comprises the system that delivers heat and hot water to individual consumers and building common spaces. Owned and operated by the building owner(s).

It is noted that, for market residential buildings, the NEU bills strata corporations, and they in turn are responsible for allocating NEU costs among individual unit owners. It is up to each strata corporation to determine the basis for these allocations. Some buildings connected to the NEU have sub-metering systems installed that measure energy consumed by each unit.

NEU rates do not include any costs associated with sub-metering systems owned by strata corporations.

FIGURE 1. NEU CONCEPT DIAGRAM



Legislative Authority & Governance

The Province of British Columbia amended the Vancouver Charter in the spring of 2007 to provide the City with authority to provide energy utility services. Subsequent to this, the City enacted the *Energy Utility System By-law* ("By-law"). Beyond basic provisions required to regulate energy services, the By-law makes connection to the NEU mandatory for all new buildings within the SEFC Official Development Plan area (which is generally bounded by Cambie Street, Main Street, 2nd Avenue and the False Creek waterfront). In June 2012 this service area was expanded to also include the Great Northern Way Campus and Adjacent Lands in the False Creek Flats South area.

As with the City's water, sanitary sewer and solid waste utilities, City Council is the regulatory body for the NEU; municipal utilities are not regulated by the BCUC.

Energy Utility System By-law

On November 15, 2007, Council enacted the Energy Utility System Bylaw No. 9552. On March 5, 2009, Council approved amendments to the Bylaw, including the establishment of 2009 rates and fees for the NEU.

In June 2012, Council approved the amendment to the Bylaw to expand the SEFC NEU service area to include the Great Northern Way Campus Lands and adjacent lands in the False Creek Flats South Area.

Expansion in Southeast False Creek

Southeast False Creek is well suited to implementation of the NEU, because the size and density of the neighbourhood development provides an adequate customer base to make the system economically feasible.

The NEU's service area extends to all of the SEFC Official Development Plan area, the Great Northern Way Campus and adjacent lands in the False Creek Flats South area. At build-out, the system is forecast to serve 722,000 square metres (7,770,000 square feet) of floor area.

As with the Telus World of Science and Great Northern Way Campus, the City may extend the NEU system to serve properties outside of SEFC in cases where the new customer rate revenues are sufficient to fund the associated capital and operating costs

Mayor and Council
City of Vancouver
453 West 12th Avenue
Vancouver, B.C. V5Y 1V4

June 26, 2015

Re: Southeast False Creek Neighbourhood Energy Utility
Five Year Review
Expert Rate Review Panel Comments

Dear Mayor Robertson and Councilors,

The purpose of this letter is to advise Council of the Expert Rate Review Panel's views concerning the Five Year Review of the Southeast False Creek Neighbourhood Energy Utility (SEFC NEU) and recommendations flowing therefrom.

The Expert Review Panel met with City staff in April and June of 2015 to discuss the Five Year Review of the NEU's operations and its projections and recommendations to Council.

The Expert Review Panel's comments are restricted to matters relating to the rate structure and rates to be charged by the NEU, in accordance with its mandate. The Panel has not considered extraneous matters for Council's consideration, such as internal financing decisions.

The Panel concurs with staff's conclusions that the SEFC NEU is financially viable and that proposed rates going forward are relatively stable and appropriate for a new utility with a significant upfront capital investment.

The Panel approves of the levelized rate approach and considers this to be appropriate for a young utility. The Panel also approves the projected rate escalation, but assumes this will be considered each year in the context of actual inflation. The Panel also assumes that staff will continue to keep abreast of rates being charged by other neighbourhood energy utilities as well as those being charged by BC Hydro.

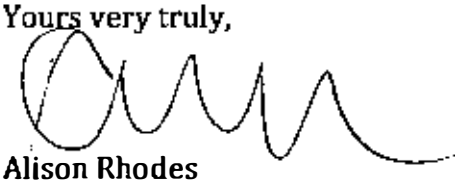
The Panel has reviewed and discussed the forecasted cost inputs, including the cost of capital, with City staff and is satisfied that these projections are well thought out and reasonable.

The Panel agrees with the Key Performance Indicators and Targets set out in Recommendation A. The Panel is of the view that the requested increased limits for the cumulative balance of Under-Recovered Costs and the 25 year time horizon for cost recovery will provide a reasonable degree of flexibility and yet serve as appropriate constraints.

The Panel appreciates the additional work of staff in terms of its Sensitivity Analysis and finds that this exercise provides additional assurance that the NEU is on track and financially viable.

The Panel encourages staff to continue to monitor factors relevant to the timing for potential expansion of the NEU.

Yours very truly,



Alison Rhodes
Chair,
NEU Expert Rate Review Panel