



bcuc
British Columbia
Utilities Commission

Patrick Wruck
Commission Secretary

Commission.Secretary@bcuc.com
bcuc.com

Suite 410, 900 Howe Street
Vancouver, BC Canada V6Z 2N3
P: 604.660.4700
TF: 1.800.663.1385
F: 604.660.1102

August 8, 2017

Sent via eFile

Mr. Alex Love
General Manager
Nelson Hydro
Suite 101, 310 Ward Street
Nelson, BC V1L 5S4
alove@nelson.ca

Re: Nelson Hydro – 2017 Rate Application – Project No. 3698904 – Final Order with Reasons for Decision

Dear Mr. Love:

Further to your February 10, 2017 filing of the above noted application, please find enclosed British Columbia Utilities Commission Order G-119-17 with reasons for decision.

Sincerely,

Original signed by Ian Jarvis on behalf of:

Patrick Wruck
Commission Secretary

SW/kn
Enclosure

cc: Ms. Marg Craig
Office Administrator
Nelson Hydro
mcraig@nelson.ca



ORDER NUMBER

G-119-17

IN THE MATTER OF

the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

Nelson Hydro
2017 Rate Application

BEFORE:

D. A. Cote, Commissioner / Panel Chair
B. A. Magnan, Commissioner
M. Kresivo, QC, Commissioner

on August 8, 2017

ORDER

WHEREAS:

- A. On February 10, 2017, Nelson Hydro filed an application with the British Columbia Utilities Commission (Commission) for approval of a general rate increase of 4.28 percent, effective April 1, 2017 (Application). The requested rate change is effectively a 2.96 percent rate impact to customers for the 2017 calendar year;
- B. Nelson Hydro is owned and operated by the City of Nelson and is exempt from regulation under the *Utilities Commission Act* (UCA) to the extent it is serving customers within its municipal boundaries, as it does not meet the UCA's definition of a public utility. Accordingly, while the requested rate increase will be applied uniformly to all Nelson Hydro ratepayers receiving service both inside and outside of the City of Nelson's municipal boundaries, the Commission's review of the Application pertains solely to Nelson Hydro's non-municipal ratepayers;
- C. By Order G-27-17 dated March 1, 2017, the Commission approved Nelson Hydro's requested rate increase of 4.28 percent on an interim and refundable basis, effective April 1, 2017. The Commission also directed Nelson Hydro to file supplementary information related to the Application and established a deadline for intervener registration;
- D. By Order G-47-17 dated March 23, 2017, the Commission established a regulatory timetable which included two rounds of Commission and intervener information requests followed by written final and reply arguments;
- E. One intervener registered and actively participated in the proceeding. Additionally, the Commission received four requests for interested party status and received a number of letters of comment from both interested parties and other individuals; and

- F. The Commission has reviewed the evidence and submissions and finds that approval of the 4.28 percent rate increase on a permanent basis is just and reasonable.

NOW THEREFORE pursuant to sections 59 to 61 of the *Utilities Commission Act* and for the reasons attached as Appendix A to this order, the British Columbia Utilities Commission orders as follows:

1. Nelson Hydro's application for a general rate increase of 4.28 percent is approved on a permanent basis, effective April 1, 2017.
2. Nelson Hydro's 2017 budgeted revenue requirements, as outlined in the reasons for decision attached as Appendix A to this order, are approved.
3. Nelson Hydro is directed to file its 2018 rate application, and all future rate applications, at least 30 days in advance of January 1st.
4. Nelson Hydro is directed to apply all future variances in budget versus actual net operating income, as these variances pertain to non-municipal ratepayers, to the Capital Reserve Fund only unless otherwise specifically approved by the Commission.
5. Nelson Hydro is directed to comply with all reporting directives outlined in the reasons for decision attached as Appendix A to this order.

DATED at the City of Vancouver, in the Province of British Columbia, this 8th day of August 2017.

BY ORDER

Original signed by:

D. A. Cote
Commissioner

Attachment



bcuc
British Columbia
Utilities Commission

Suite 410, 900 Howe Street
Vancouver, BC Canada V6Z 2N3
bcuc.com

P: 604.660.4700
TF: 1.800.663.1385
F: 604.660.1102

IN THE MATTER OF

Nelson Hydro
2017 Rate Application

REASONS FOR DECISION

August 8, 2017

Before:

D. A. Cote, Commissioner / Panel Chair

B. A. Magnan, Commissioner

M. Kresivo, QC, Commissioner

TABLE OF CONTENTS

	Page no.
1.0 Introduction	3
1.1 Background.....	3
1.2 Jurisdiction.....	3
1.3 Review of the Application and regulatory process	3
1.4 Approach to the decision	4
2.0 Key issues	5
2.1 Transfers to City General.....	5
2.1.1 Classification of the components of the Transfers to City General	5
2.1.2 Contribution to the Community Complex.....	6
2.1.3 City of Nelson dividend and water license reserve payment.....	7
2.1.4 Regulatory approach to determining the allowed return on assets	7
2.1.5 Applicability of an allowed return on assets approach to Nelson Hydro’s dividend payment	8
2.1.6 Appropriateness of the water license reserve payment.....	11
2.2 Transfers to the capital reserve fund	13
3.0 Revenue requirements.....	15
3.1 Operating expenses.....	16
3.2 Power purchase expenses.....	17
3.3 Other expenses and revenues.....	19
4.0 Future rate applications and recommendations going forward.....	21

1.0 Introduction

1.1 Background

On January 13, 2017, Nelson Hydro filed a rate application with the British Columbia Utilities Commission (Commission) for approval of Electrical Utility Amendment Bylaw No. 3364, 2017 as it applies to its non-municipal customers. This bylaw proposes to amend Nelson Hydro's electric rate schedules to implement a general rate increase of 4.28 percent effective April 1, 2017, resulting in what Nelson Hydro describes as an effective rate increase of 2.96 percent for the calendar year.

By letter dated February 10, 2017, Nelson Hydro applied to withdraw the original application and replace it with a revised version dated February 9, 2017 (Application) stating it, "would provide more clarification in the review process."¹ The rate increase applied for remains unchanged from the original application.

This is the first time in over two decades that a public proceeding has been held with a designated panel to review Nelson Hydro's non-municipal customer rates. Public concerns have been raised with respect to the increase in rates and other issues which are further articulated in the letters of comment received during the course of this proceeding. These concerns, and the desire for a more transparent review process allowing for greater public participation, led to the Commission proceeding with a public process for review of the Nelson Hydro 2017 Rate Application.

1.2 Jurisdiction

The Commission reviews applications for changes to rates and rate schedules in accordance with sections 58 to 61 of the *Utilities Commission Act* (UCA). However, Nelson Hydro is in part exempt from regulation under the UCA as it is owned and operated by the City of Nelson (City) and therefore any services provided within the City's boundaries do not fall within the UCA's definition of a public utility. Therefore, the Commission's review of the Application pertains solely to Nelson Hydro's non-municipal ratepayers.

1.3 Review of the Application and regulatory process

By Order G-27-17 dated March 1, 2017, the Commission established a preliminary regulatory timetable for review of the Application which included a deadline for Nelson Hydro to file supplementary information to assist in the review of the Application and a deadline for intervener registration. Order G-27-17 also approved the applied for 4.28 percent general rate increase on an interim and refundable basis pending the outcome of the proceeding. The interim rate increase was approved effective April 1, 2017. The Commission indicated that it had commenced review of the Application, noting that Nelson Hydro intended the rate increase to be applied uniformly to all Nelson Hydro ratepayers receiving service both inside and outside the City's municipal boundaries but any Commission approvals would pertain to Nelson Hydro's non-municipal customers only. Therefore, while the Application is filed with revenues and costs for Nelson Hydro as a whole and the Panel will make determinations on these total revenues and expenditures, as noted in Section 1.2, it is understood that our determinations have effect on the non-municipal ratepayers only.

¹ Exhibit B-1, cover letter to Application.

On March 16, 2017, Nelson Hydro filed the supplementary information requested by the Commission in Order G-27-17. By Order G-47-17 dated March 23, 2017, the Commission established a regulatory timetable for the remaining process in the review of the Application. The timetable called for a written proceeding with two rounds of information requests (IRs), a deadline for letters of comment, and set dates for final utility and intervener arguments and utility reply argument.

The only intervener in this proceeding is Ms. Ramona Faust, the Director of the Regional District of Central Kootenay Area E. In addition to Ms. Faust's active participation in the proceeding, four individuals registered as interested parties and the Commission received numerous letters of comment.

1.4 Approach to the decision

An important consideration for this proceeding is that the residential rates charged by Nelson Hydro are relatively close to those of the British Columbia Hydro and Power Authority (BC Hydro) and significantly less than those of FortisBC Inc. (FBC) for consumption levels between 750 and 1,250 kilowatt hours (kWh) per month (the service use range for homes in the Nelson Hydro service area).² This indicates that relative to other electrical utilities within British Columbia, the proposed residential rates for Nelson Hydro's municipal and non-municipal ratepayers are favourable.

Based on its filing, Nelson Hydro's Application most closely resembles a traditional cost of service approach where the utility recovers the prudently incurred costs it incurs in providing its services and has the opportunity to earn a fair and reasonable return. However, while Nelson Hydro's approach may have similarities to other BC utilities, there are areas where there are differences. To address this, the Panel, in addition to providing a decision on rates, will also provide some context and explanation as to how Nelson Hydro differs from other regulated utilities within British Columbia with regard to how it arrives at and applies rates, and we will discuss whether this is a reasonable approach. The Panel will also provide some clarity on what we believe to be the issues at play in this proceeding and provide some guidance as to what is reasonable to expect with regard to a regulated utility.

There are two major components of Nelson Hydro's annual budget proposal which differ from a more traditional regulated utility – the "Transfers to City General" and the "Transfers to Capital Reserve" expenses. The Transfers to City General expense is an annual transfer of revenue to the City made up of three components: (i) a dividend payment; (ii) a water license reserve payment; and (iii) a contribution to the Community Complex.³ The Transfers to Capital Reserve expense is an amount collected annually from ratepayers to fund capital expenditures. Nelson Hydro finances capital expenditures primarily through accumulating funds through rates into what it refers to as a Capital Reserve fund rather than placing primary reliance on debt for financing. Because both the Transfers to City General and Transfers to Capital Reserve expenses have a significant impact on rates and reflect on other parts of this decision, the Panel will deal with these issues in some detail first in Section 2.0. The Panel will address these issues from a cost of service model perspective but would like to point out that there may be alternative options which may be considered in future applications. In Section 3.0 we will

² Exhibit B-3, BCUC IR 1.5.

³ Exhibit B-2, Supplementary Information Filing, Question 10.1.

review the basis for the components of the annual revenue requirement budgeted by the utility, including operating expenses, power purchases, other revenue, debt service costs, and other minor expenses related to district energy services (DES) and the solar garden. Finally, in Section 4.0 we will provide some guidance as to the requirements and considerations for next year's revenue requirements application (RRA) and offer suggestions as to how Nelson Hydro may wish to approach next year's application to ensure a fair result for all parties with a higher level of involvement from ratepayers.

2.0 Key issues

2.1 Transfers to City General

As previously noted, Nelson Hydro collects an annual amount from ratepayers which it characterizes as "Transfers to City General." The issue the Panel must address first is whether the individual items making up the Transfers to City General are reasonable and whether Nelson Hydro is collecting an appropriate earned return. Complicating matters is the fact that only rates for non-municipal areas are regulated by the Commission, while municipal areas are unregulated. Therefore, any decision by the Commission affecting rates could create a variance between municipal and non-municipal rates.

2.1.1 Classification of the components of the Transfers to City General

Nelson Hydro proposes a budget of \$3,448,266 for Transfers to City General in 2017.⁴ This represents an increase of 2.7 percent over the reported transfer of \$3,358,867 in 2016.⁵ Nelson Hydro submits that this budgeted transfer to the City for 2017 is made up of three components which will be briefly discussed:

- \$2.7 million dividend payment to the City;
- \$658,266 for the water license reserve payment to the City; and
- \$90,000 contribution to the Community Complex.⁶

Additionally, Nelson Hydro explained that in 2016 "for the first time in recent history" it "implemented a new mechanism" as a result of its operating expenses being approximately \$320,000 under budget. Through this new mechanism, Nelson Hydro increased the dividend to the City by \$160,000 and transferred the remaining \$160,000 to the capital reserve.⁷

With reference to the \$2.7 million dividend, Nelson Hydro states that the City has owned the electric utility since 1897 and has always earned a return on its assets and points out this has only recently been referred to as a dividend for ease of explanation during the budget preparation and presentations. Nelson Hydro provides no explanation as to how this amount is arrived at each year but notes that its accounting presentation and

⁴ Exhibit B-2, Question 9.1, Table 2.

⁵ Exhibit B-3, Attachment to BCUC IR 2.1.

⁶ Exhibit B-2, Question 10.1.

⁷ Exhibit B-3, BCUC IR 2.6; Exhibit B-4, BCUC IR 25.5.

practices differ from those of “strict electric utilities” but are in accordance with PSAB (Public Sector Accounting Board) standards.⁸

The water license reserve payment is connected to a 1989 agreement between BC Hydro and the City of Nelson (the Water Rights Agreement) whereby BC Hydro is obligated to provide the City of Nelson with an additional 265 cfs (cubic feet per second) of water annually. Nelson Hydro states that in accordance with the City of Nelson bylaw enacted at the time the Water Rights Agreement was reached, Nelson Hydro pays the value of this additional power generation to the City’s Water License Reserve Fund. Thus, the City of Nelson is compensated for negotiating the additional water rights from BC Hydro and is collecting this compensation from Nelson Hydro. Nelson Hydro pays the same price to the City as it would cost to purchase this additional power from FBC. Therefore, Nelson Hydro submits that its ratepayers are kept “whole” and there is neither a positive nor a negative impact on ratepayers, as rates reflect the same cost as if the power had been purchased from an outside source.⁹

The dividend and the water license reserve payments are revenue sources the City of Nelson relies upon from Nelson Hydro. Nelson Hydro appears to consider the dividend to be a return on assets while the water license reserve payment appears to be compensation collected by the City for negotiating the additional annual water rights from BC Hydro. These are discussed in more detail following the Panel’s review of Nelson Hydro’s \$90,000 contribution to the Community Complex.

2.1.2 Contribution to the Community Complex

Nelson Hydro states that the \$90,000 contribution to the Community Complex refers to a payment made to the Regional District of Central Kootenay (RDCK) as part of an agreement with the RDCK and the RDCK bylaw for the Nelson and District Community Complex (NDCC) service.¹⁰ Nelson Hydro provides the following explanation in response to the Commission’s IR as to why this amount is being collected from Nelson Hydro ratepayers as opposed to being collected directly by the City of Nelson from taxpayers:

At the time this service was expanded to include a new arena complex, the city’s budgeting practice was to allocate the Nelson Hydro dividend to all of city services. City Council agreed to the request of the rural directors that part of the Nelson Hydro dividend that had been historically allocated to the city operated ice arena (Civic Centre) would now be allocated to the NDCC service. The City also provides an additional \$94,000 for a total contribution of \$184,000 to the NDCC service in addition to the taxation for this service.¹¹

Nelson Hydro submits that the \$90,000 payment to the RDCK is part of a larger payment of \$184,000 made by the City of Nelson to support community services. These funds had been directed to a community project based in the City but more recently the funds have been directed to the NDCC. Nelson Hydro states that the NDCC is a “combined arena, pool and fitness facility that is available to all” and is funded by the City, RDCK Area F and a defined portion of RDCK Area E through the RDCK Rec Commission servicing agreement.¹²

⁸ Exhibit B-3, BCUC IR 5.1, 5.2 and 5.3.

⁹ Exhibit B-3, BCUC IR 6.1, 6.2, and 6.3.

¹⁰ Exhibit B-3, BCUC IR 7.1 and 7.2.

¹¹ Exhibit B-4, BCUC IR 23.2.

¹² Exhibit B-4, BCUC IR 23.1, 23.2.

Panel discussion

Based on the description provided by Nelson Hydro, it appears to the Panel that the \$90,000 payment can best be described as a contribution made to the community to promote goodwill among its ratepayers. This is not unique as a similar approach has been undertaken by FBC and by FortisBC Energy Inc. (FEI), both of which are regulated utilities in the province of BC. FEI refers to these types of expenses as “Community Involvement Spending” while FBC uses the term “Community Investment.” Irrespective of the name assigned to these expenses, FEI and FBC use them as a means to promote themselves within their respective communities. In recent decisions for both of these utilities, the Commission acknowledged the importance of such contributions and approved the allocation of 50 percent of such costs to the ratepayer with the balance being borne by the shareholder.¹³ Based on the evidence provided, it appears the City of Nelson has taken a similar approach, with Nelson Hydro collecting \$90,000 from ratepayers to be allocated to the Community Complex and the City collecting the remaining \$94,000 directly. The Panel finds this approach reasonable as a means of promoting the utility as a good corporate citizen in the community.

2.1.3 City of Nelson dividend and water license reserve payment

As previously stated, the dividend and the water license reserve payment are the two other revenue sources the City of Nelson relies upon for the transfer of funds from Nelson Hydro.

In the Panel’s view, the City is well within its rights to expect to earn a return on its assets. The question the Panel must consider is whether the amount of the dividend, and the methodology for determining the amount of the dividend, is reasonable from a regulatory perspective.

With regard to the water license reserve payment, the Panel must consider whether it is fair and reasonable for the City to be compensated by Nelson Hydro for the Water Rights Agreement it negotiated with BC Hydro.

Prior to dealing with these issues, the Panel provides a general discussion of the cost of service regulatory model approach to calculating a utility’s allowed return. The Panel notes that this approach, while not utilized in all cases, is a reasonable approach to consider given that Nelson Hydro’s method for calculating rates resembles a cost of service approach.

2.1.4 Regulatory approach to determining the allowed return on assets

For utilities operating under a traditional cost of service regulatory model the calculation of an allowed return is typically based on the following components: (i) a fair return on equity (ROE); (ii) an appropriate capital structure; and (iii) the rate base. The ROE is the allowable return on net assets. The capital structure is the ratio of debt to equity and the rate base is the current depreciated value of the assets. A simple formula for this is as follows:

$$\text{Equity Percentage} \times \text{Rate Base} \times \text{ROE} = \text{Allowed Return}$$

¹³ FortisBC Energy Utilities 2012-2013 Revenue Requirements and Rates Decision dated April 12, 2012, pp. 71-73 and accompanying Order G-44-12; FBC 2012-2013 Revenue Requirements and Review of the 2012 Integrated System Plan Decision dated August 15, 2012, pp. 66-69 and accompanying Order G110-12.

For regulatory purposes, the determination of an allowed return is governed by the fair return standard which has three requirements or tests:

- The comparable investment requirement – an investor must be allowed to earn a return similar to a comparable investment;
- The financial integrity requirement – the return must allow the utility to maintain its financial integrity; and
- The capital attraction requirement – the return must allow the utility to attract capital on reasonable terms.

Setting a fair ROE and common equity component within a Canadian regulatory context is typically determined by examining the evidence presented by expert witnesses representing the various parties. Each of these experts takes a formulaic approach usually relying upon either or both the capital asset pricing model (CAPM) and the Discounted Cash Flow (DCF) model to estimate a fair level of return based on components such as risk, growth estimates, economic conditions and market factors. Typically there are significant variances in how these models are applied and the form of adjustments each expert makes to their version of the model, which invariably leads to a wide range of estimates which a Panel must sift through and assess in making its cost of capital decision.

A utility's actual debt to equity ratio is a matter of fact. However, in some jurisdictions (mostly in Canada) regulators have chosen to rely on a deemed capital structure. The selection of an appropriate deemed capital structure is for the most part a function of the assessed stand-alone business risks of an operation and the financial metrics (allowing for access to capital markets) which result from them. In BC, there has been a longstanding reliance on deemed capital structure. The Commission typically reviews the individual risks of a benchmark utility (currently FEI is the benchmark utility), assesses any change from previous reviews and deems what it considers to be an appropriate capital structure. Other utilities are then measured against this benchmark and differences in risk are reflected in the capital structure, the ROE or both.

It is important to understand that there is no universal "right way" to approach the cost of capital. The processes described are generally applied in BC and to some extent, other Canadian jurisdictions. In the United States of America and around the world, processes and approaches differ greatly and there is greater reliance on the actual capital structure. What is most important is that a utility receives a rate of return that allows it to continue to exist as well as attract capital and investors while treating ratepayers reasonably.

2.1.5 Applicability of an allowed return on assets approach to Nelson Hydro's dividend payment

During the IR process, the Commission estimated the weighted average cost of capital (WACC) as it would be applied to Nelson Hydro using FBC as a proxy. Utilizing FBC's deemed debt to equity structure of 60 percent debt and 40 percent equity and FBC's allowed ROE of 9.15 percent, the Commission estimated an allowed return for Nelson Hydro.

When asked about the reasonableness of using FBC's WACC as a proxy, Nelson Hydro argued that FBC was not a reasonable proxy, citing the following reasons:

- Nelson Hydro is a municipal government operation. As a department of the City of Nelson, Nelson Hydro is regulated by and must comply with the Municipal Liabilities Regulation under the Community Charter. This means that financing is not determined specifically for the utility, but as a component of overall municipal operations. It is not practical to think of Nelson Hydro in terms of an ideal target debt: equity structure in the same way as a utility corporation.
- Nelson Hydro does not pay income tax. This means that the risk profile from variations in financial performance is more acute, as there is no income tax buffer to absorb some of the swings (i.e., higher income tax in larger earning years, lower in lower earnings years).
- Nelson Hydro is not regulated in respect of its rates within the municipal limits. For practical purposes, it is important to consider how the assets are financed for each of the within-City assets and the outside-of-City assets. FBC is understood to have a single regulated operation that is financed on a consolidated basis. This is a matter still under review in refinement of Nelson's Cost of Service analysis. Among the considerations is that Nelson is not required to achieve a given ROE to secure equity from investors, but instead is seeking a fair and reasonable contribution towards the City's ownership from the regulated customers.
- Nelson Hydro's regulated operations are considerably smaller than FBC.¹⁴

Nelson Hydro's response raises a number of issues the Panel needs to consider in assessing the appropriateness of Nelson Hydro's allowed return or dividend payment:

- The municipal legislative requirements distinguishing the City (and thus Nelson Hydro) from a private company; and
- The definition of a public utility only having application to Nelson Hydro in the context of its activities outside the City's limits.

Issue #1 - Legislative requirements for a municipality

The question the Panel must consider is whether consideration should be given to Nelson Hydro with respect to the equity component of its capital structure because of municipal legislative limitations on the amount of debt that can be incurred.

As stated by Nelson Hydro, an important difference between private and public entities relates to legislative requirements on a municipality incurring debt. As outlined in the Municipal Liabilities Regulation, there are limits to the amount of liabilities or borrowing that a municipality is able to incur. Put simply, a municipality is unable to incur a new liability if the cost of servicing the aggregate liabilities of the municipality for the year exceeds 25 percent of the annual revenue calculation of the municipality for the previous year.¹⁵ Thus, due to legislative requirements Nelson Hydro would have limited ability to meet a deemed debt level similar to other utilities. In the Panel's view, imposing a deemed debt to equity ratio on Nelson Hydro which is similar to other regulated utilities when such a capital structure cannot be achieved would have the potential to unfairly restrict the utility from earning a fair return on its assets. Therefore, the Panel concludes that the application of a debt to equity ratio in accordance with what actually exists is a more fair and reasonable approach than that of reliance on a deemed capital structure.

¹⁴ Exhibit B-4, BCUC IR 16.1, 16.2 and 16.3.

¹⁵ Exhibit B-4, Attachment to BCUC IR 18.1, Community Charter Municipal Liabilities Regulation.

The impact of reliance on the actual equity level is significant. Nelson Hydro states that its investment in assets exceeded \$36 million at the end of 2015 and, of this amount, only \$6.5 million or approximately 18 percent is funded by debt with the balance being funded by the City's own equity.¹⁶ The net capital asset base was further updated to \$36.442 million at the end of 2016 with the expectation that this would increase to \$38.212 million by the end of 2017, yielding an average net capital asset base of \$37.327 million for 2017.¹⁷ If the debt to equity ratio remained consistent at 18 percent debt to 82 percent equity, it would yield a 2017 debt estimate of approximately \$6.7 million and equity of \$30.6 million.

If, as an example, the actual capital structure of 18 percent debt and 82 percent equity were applied against the estimated average 2017 net capital asset base and the FBC proxy ROE rate of 9.15 percent (after taxes) was used it would yield the following return:

$$\$30.6 \text{ million} \times 9.15 \text{ percent} = \$2.8 \text{ million}$$

The Panel notes that this is only an illustration and is not determinative. While somewhat higher than the \$2.7 million dividend that Nelson Hydro has proposed, the Panel notes there are additional factors that could justify it being even higher. These include the following:

- Potential differences in risk between the FBC proxy and Nelson Hydro. If Nelson Hydro was to make a case for having higher risk than FBC the result could be a higher awarded ROE; and
- A provision for working capital in the rate base. It is common for utilities to include a provision for working capital in its rate base. Nelson Hydro has made no such inclusion.

While these factors could impact Nelson Hydro's allowed return, an even greater impact on determining a fair return potentially comes from Issue #2 - Nelson Hydro's status as a public utility - a discussion of which follows.

Issue #2 - Nelson Hydro's status as a public utility

As noted in Section 1.2, Nelson Hydro, in as much as it operates within the City's limits and is owned by the City, does not fall within the UCA definition of a public utility and is therefore not subject to Commission regulation. However, unique in this instance is that Nelson Hydro also operates outside the City's boundaries and thus, a portion of Nelson Hydro's service area falls under Commission regulation.

Nelson Hydro has submitted that it is important to consider how the assets are financed for each of the within-City assets and the outside-of-City assets. Nelson Hydro has also submitted that it is in the process of completing a Cost of Service Analysis (COSA) and among other things, expects the information coming from this analysis to "outline the rural versus urban split of costs, the utility return on equity, and the revenue: cost ratios."¹⁸ Nelson Hydro expects to file this study and associated recommendations, if any, in late 2017 and asserts that it will functionalize, classify and allocate the cost structure to the various customer classes. The COSA will distinguish the revenue and costs associated with municipal from non-municipal customers as well as the various rate

¹⁶ Exhibit B-3, Cover letter.

¹⁷ Exhibit B-4, BCUC IR 15.2.

¹⁸ Exhibit B-3, Cover Letter.

classes, such as residential and general service.¹⁹ In Nelson Hydro's view splitting the assets, revenues and expenses will allow for improved assessment of whether rates charged to non-municipal customers are appropriate.²⁰

Of concern to the Panel for 2017 is the lack of a method to reasonably allocate the determined return between the City and the regulated rural areas in this proceeding. Currently, there is no allocation of assets to municipal or to non-municipal customers nor is there any definitive data as to how this would be done. The COSA is currently underway but has not been completed and therefore cannot be relied upon to provide any guidance.

Given these circumstances, the Panel is unable to make a finding on the actual rate base differences that exist between municipal and non-municipal customers or whether any weight should be given to any differences that do exist. Nonetheless, the Panel considers this issue to be an important factor affecting a fair return and the determination of rates. While the actual results are still outstanding, Nelson Hydro offers that a utility cost analysis has been performed in the past and non-municipal zones have been consistently "below 100% revenue: cost coverage, while urban [municipal] zones are above 100%." It goes on to state that this is not surprising as much of the highest cost components are related to the non-municipal service with little or no rate differential reflecting this higher cost.²¹ The relative compact size of the municipal area as opposed to the relative expanse of the non-municipal area and the need for additional equipment to service this larger area would seem to support this assertion. The Panel accepts that the existing revenue to cost ratios likely favour non-municipal customers and if rate re-balancing were to occur, the rates charged to non-municipal customers would likely increase compared to municipal customers. Complicating matters further are issues related to the province's usual position with respect to postage stamp rates and whether a departure from postage stamp rates would be applicable in this instance.

2.1.6 Appropriateness of the water license reserve payment

Currently, Nelson Hydro is paying a form of compensation to the City through the water license reserve payment, which is collected by Nelson Hydro through rates charged to its customers.

Nelson Hydro explains that the City receives the benefit of the 1989 Water Rights Agreement and collects this benefit by charging Nelson Hydro the same price for the additional power generated under the agreement as FBC would charge Nelson Hydro. Thus, as the Panel understands it, ratepayers pay the same cost for power as they would if it had been purchased from FBC at its Commission approved rate.²²

Based on information contained in the 1989 Water Rights Agreement, it appears that the City holds two other water licenses for amounts of 1,428 cfs and 714 cfs of water.²³ Thus, the incremental water rights of 265 cfs with which the water license reserve payment is based on represents approximately 11 percent of the City's overall water rights. When considering the evidence provided by Nelson Hydro in this proceeding regarding its total

¹⁹ Exhibit B-3, BCUC IR 13.1-13.3.

²⁰ Exhibit B-4, BCUC IR 17.1.

²¹ Exhibit B-3, Cover letter.

²² Exhibit B-3, BCUC IR 6.1.

²³ Exhibit B-3, BCUC IR 6.3.

costs to generate electricity, it appears that the City is only receiving additional compensation from Nelson Hydro for the power generated by the 265 cfs of water.

Commission determination

The Panel approves the budgeted 2017 Transfers to City General amount of \$3,448,266 (as it pertains to the non-municipal areas). In consideration of the evidence provided in this proceeding, the unique circumstances faced by Nelson Hydro and the challenges with the availability of information specifically related to non-municipal ratepayers, the Panel concludes that for the single year of 2017, the Transfers to City General amount falls within a reasonable range.

As pointed out in Section 1.4 of these reasons for decision, residential rates charged by Nelson Hydro are relatively close to those of BC Hydro and significantly less than those of FBC. The Panel considers this important in reaching a determination and gives considerable weight to the fact that on average, Nelson Hydro residential ratepayers receive considerably fair and reasonable rates when compared to other BC residents. This indicates the rates charged to Nelson Hydro's non-municipal customers fall in the reasonable range and do not warrant the Commission taking immediate action.

Troubling issues faced by the Panel in this proceeding are the lack of supporting information for how the \$2.7 million dividend payment was arrived at by Nelson Hydro and why it is appropriate for the City, in addition to receiving the dividend payment, to receive \$658,266 in revenue in the form of the water license reserve payment.

As an approach to address the dividend issue, the Panel, for illustrative purposes, provided a scenario for calculating the ROE for Nelson Hydro which results in a total allowed return of approximately \$2.8 million and takes into account the impact of legislative requirements on the City's allowable level of debt. In the Panel's view, restrictions imposed by the Municipal Liabilities Regulation provide some justification for a higher debt to equity structure than might be deemed with a non-municipally owned utility. The Panel also notes that certain factors were not considered in the \$2.8 million calculation and that these factors, if quantified, may further impact the return calculation. Most important of these are the issues related to municipal versus non-municipal assets, which are being explored in the COSA due later this year and could have a significant impact on what is considered a fair return for Nelson Hydro. While the Commission in past decisions has approved the implementation or continuation of postage stamp rates, no determination on this matter can be made with regard to Nelson Hydro's rates prior to completion of the COSA, which will detail differences that exist between municipal and non-municipal areas, and until the parties are afforded the opportunity to make their case on any such differences. To make a significant change in 2017 with these issues unresolved, in our view, would be premature and serve neither the needs of the City, Nelson Hydro nor its customers.

An additional consideration is that unlike a private utility, Nelson Hydro is not taxed on its earnings. This goes to the benefit of ratepayers overall as a public utility has the right to recover the taxes it will be required to pay on its return in addition to the ROE itself which is reflected in the rates paid. This provides further support for the view that the Transfers to City General fall within a reasonable range.

The Panel's view is that Nelson Hydro needs to more fully explain in its next rate application why the City should receive an additional compensation (i.e. the water license reserve payment) on an agreement it made on behalf of Nelson Hydro. Moreover, Nelson Hydro needs to provide a full explanation as to why such a benefit should not be to the benefit of ratepayers rather than the City. The Panel is not fully persuaded by Nelson Hydro's statement that ratepayers are kept "whole" or are neutrally impacted simply because the power generated is priced at a value consistent with FBC rates. However, the Panel also recognizes that Nelson Hydro, as part of its upcoming COSA analysis filing, is converting its system of accounts and data recorded in municipal accounting formats to a reporting format more consistent with regulatory standards. Nelson Hydro has stated that this conversion includes the water license reserve payment.²⁴

The Panel acknowledges there are uncertainties and factors concerning the rates charged to Nelson Hydro customers that are not yet fully resolved. Nonetheless, the Panel is satisfied that the total amount of Transfers to City General remains in the reasonable range and is appropriate to approve for 2017. However, we expect that the concerns raised in these reasons for decision will be fully addressed by Nelson Hydro as part of the COSA analysis project and in its 2018 rate application. The 2018 rate application is further addressed in Section 4.0.

2.2 Transfers to the capital reserve fund

The methodology employed by Nelson Hydro to handle capital expenditures differs greatly from what is typically done in a non-municipally owned utility. A non-municipally owned utility is more likely to rely on debt as a means of financing required capital expenditures and therefore there is no requirement to establish a capital reserve fund. However, the City of Nelson, as outlined in Section 2.1.5, faces significant restrictions on the amount of debt it is allowed to take on and thus maintains a capital reserve fund from which it draws upon to finance the cost of Nelson Hydro's capital requirements. The issue the Panel must address is the appropriateness of Nelson Hydro's use of this fund in the context of regulatory accounting principles.

Nelson Hydro budgets an amount for transfer to the Capital Reserve Fund each year to fund current and future capital expenditures and notes that in the past ten years it has made significant upgrades to its entire system at the power plant, operations, transmission and distribution through its capital projects.²⁵ In addition, it also transfers net operating income (revenue less expenses) to the Capital Reserve Fund.²⁶ Included in these expenses are annual variances between actual and forecast power purchases which, depending upon the year, can have a significant impact on the funds which are transferred. However, where total expenses are higher than budget the contribution to the capital reserve is lower than budget placing additional pressure on rates in future years. The effect of this methodology is that ratepayers are charged in advance of capital expenditures.

Nelson Hydro reports that due to a number of factors, 2016 was a very strong year with revenues exceeding expenses by \$1.101 million. Of this, \$0.941 million went to the Capital Reserve Fund and the remaining \$160,000 was allocated as an additional dividend to the City.²⁷ Since the surplus funds were not identified until after

²⁴ Exhibit B-3, BCUC IR 13.3.

²⁵ Exhibit B-2, Question 8.1.

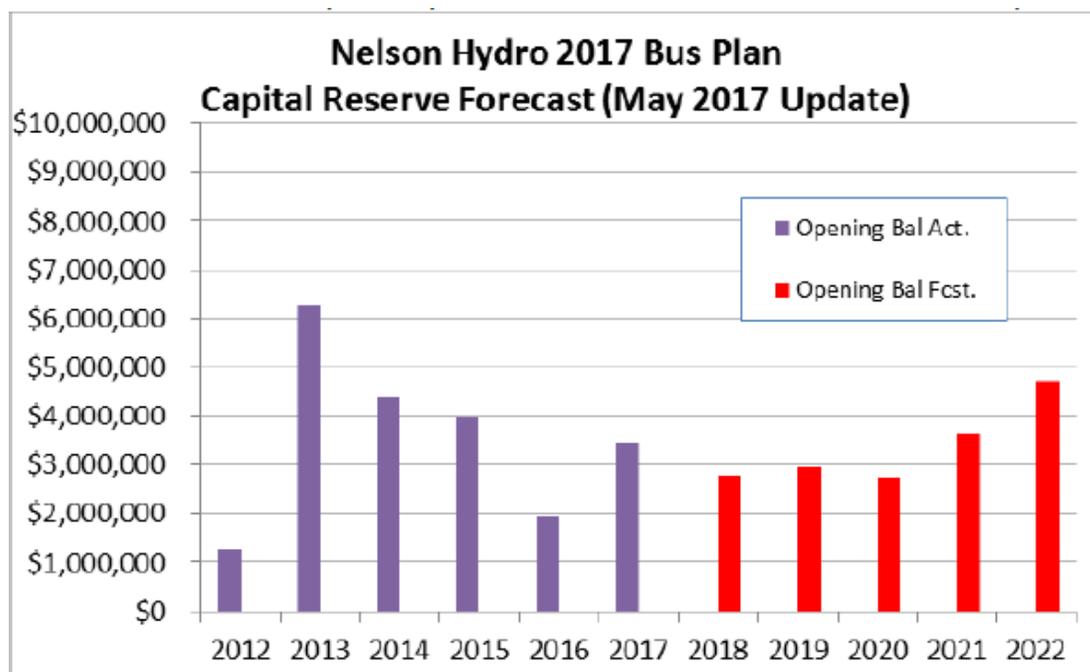
²⁶ Exhibit B-2, Question 9.1.

²⁷ Exhibit B-3, BCUC IR 2.6.

developing the 2017 budget, it will have no immediate impact on rates but the balance in the capital reserve at the start of the current year will be higher than expected. Any impact of this surplus will be applied to future rates as there will be less need for capital reserve contributions from rates and thus, rate pressure is reduced.²⁸

Nelson Hydro plans and forecasts its capital purchases for a period of 5 years. The current five-year planning period is 2017 through 2021. These are outlined by project in the Attachment to BCUC IR 10.8 which also includes a listing of capital expenditures over the 2011 through 2016 periods. Projects are identified and prioritized with consideration of reliability, safety, efficiency and customer service with scheduling driven by the urgency and benefit of the project in addition to the opportunity to synchronize with other projects.²⁹ Table 1 depicts Nelson Hydro’s forecast opening Capital Reserve balance for 2018 through 2022.

Table 1 – Nelson Hydro Capital Reserve Opening Balance Forecast for 2018-2022



Nelson Hydro explains that this table illustrates how the borrowing it undertook in 2011 and 2012 built the capital reserve in advance of an anticipated capital expenditure drawdown over the next few years. It also shows how the capital reserve will be built up from 2020 onward as a result of lower capital expenditures over this period and increased transfers to the capital reserve.³⁰

Commission determination

The Panel approves Nelson Hydro’s 2017 Transfers to Capital Reserve budget of \$2,293,194 (as it pertains to the non-municipal ratepayers) and accepts its practice of financing its capital expenditures primarily through the use and management of a Capital Reserve Fund. The methodology differs significantly from that employed

²⁸ Exhibit B-4, BCUC IR 25.1, 25.1.1 and 25.1.2.

²⁹ Exhibit B-3, BCUC IR 10.8.

³⁰ Exhibit B-4, BCUC IR 25.3.

by other utilities regulated by the Commission but given the restriction on the amount of debt that can be incurred and the fact that Nelson Hydro follows municipal accounting standards which allow for the use of a capital reserve fund, the Panel considers the use of the capital reserve fund as providing orderly ongoing management of needed capital purchases while also providing a reasonable degree of rate stability.

The Panel notes that Nelson Hydro has prepared and manages a five-year capital expenditure plan which allows it to plan both purchases and the cash flows necessary to make these purchases. The Panel considers this process to be very important and expects future rate applications to provide an update on future expenditures and requirements needed to replenish the Capital Reserve Fund on an ongoing basis.

In addition to planning an annual transfer from rates to the Capital Reserve Fund, Nelson Hydro has established a practice of returning any variances in net operating income whether positive or negative to this fund. Given the circumstances, the Panel considers this to be a reasonable approach as it eliminates the potential need for deferral accounts and puts less pressure on the need for forecasting accuracy which reduces risk for both the ratepayer and the utility.

However, of concern to the Panel is the practice undertaken in 2016 of allocating 50 percent of excess positive variances in net operating income to the City of Nelson, the shareholder. Nelson Hydro has an established protocol of transferring net operating income variances, both positive and negative, to the Capital Reserve Fund. Thus, the impact of the variances, positive or negative, is borne by the ratepayer through increased or decreased pressure on rates in the future. The Panel accepts this practice as being reasonable but only if it is implemented in this manner on a consistent basis. Redirecting such variances to the account of the shareholder is inconsistent with the principles that have been established. **The Panel directs Nelson Hydro to apply all future variances in budget versus actual net operating income, as these variances pertain to non-municipal ratepayers, to the Capital Reserve Fund only unless otherwise specifically approved by the Commission.** Further, if significant surpluses in operations continue to be experienced similar to what was experienced in 2016, the Panel expects that Nelson Hydro will adjust its future operational forecasts to more closely reflect actual operational results.

3.0 Revenue requirements

Nelson Hydro's revenue requirement has the following components: operating expenses, power purchase expenses, transfers to City general, transfers to the capital reserve, debt service expenses, other revenue (i.e. revenue not collected through rates), and a small amount of revenue and expenses related to the DES.

Nelson Hydro budgeted total expenses for 2017 of \$17,628,050.³¹ The budgeted expenses are 0.5 percent higher than what was budgeted in 2016 and 1.9 percent higher than actual expenses incurred in that year.³² As noted in Section 2.2, with the exception of 2016, all annual variances between forecast and actual expenses and revenues are added to (or subtracted from) the capital reserve.

³¹ Exhibit B-2, Question 9.1, Table 2.

³² Exhibit B-3, Attachment to BCUC IR 2.1.

The following sections address Nelson Hydro's budgeted expenses and revenues for 2017, with the exception of the Transfers to City General and Transfers to Capital Reserve expenses, which were previously discussed in Section 2.0 of these reasons for decision.

While the Panel discusses and makes determinations on Nelson Hydro's total revenue requirement in the following sections, we note that our determinations pertain only to the non-municipal ratepayers and on how the rates resulting from the revenue requirement are applied to the non-municipal ratepayers.

3.1 Operating expenses

Nelson Hydro budgeted \$4,622,552 for operating expenses in 2017, which is 0.14 percent less than was budgeted in 2016 but is 7 percent higher than actual 2016 operating expenses. The majority of the increase in budgeted 2017 operating expenses compared to actual 2016 expenses is due to certain expenses being delayed in 2016 and thus re-budgeted for 2017. For instance, substations expenses were approximately \$95,000 below budget due to the planned decommissioning of a substation being postponed, and electrical transmission expenses were approximately \$100,000 below budget as a result of a delay in acquiring a right of way (ROW) for a section of transmission line.³³

Nelson Hydro's 2017 operating expenses budget includes \$117,857 for "Share of General Administration" expenses, which is an increase of 3.5 percent over the previous year's budget.³⁴ This expense is based on a 10 percent allocation of the City's administration expenses, which includes reception, CAO and HR (human resources) salaries. Nelson Hydro stated that the increase of 3.5 percent for 2017 is due to the fact that both excluded staff and CUPE employees did not have a raise in 2016; thus, Nelson Hydro anticipates a retroactive increase in 2017.³⁵

Nelson Hydro explained the rationale behind the 10 percent allocation of the City's general administration expenses as follows:

These percentage allocations have been in place for a long period of time and were based on the complexity and demands on City administrative staff to provide the required support for each of the funds allocated a portion of City administrative staff time.³⁶

Nelson Hydro further explained that the allocations of City administrative expenses are as follows: 82 percent is allocated to the General City fund; 4 percent is allocated to the Water fund; 4 percent is allocated to the Sewer fund; and 10 percent is allocated to Nelson Hydro.³⁷

The higher percentage allocation of City administrative expenses to Nelson Hydro compared to the water and sewer divisions was explained as follows:

- Nelson Hydro has more customers;

³³ Exhibit B-3, Attachment to BCUC IR 2.1.

³⁴ Exhibit B-2, Question 9.1, Table 2.

³⁵ Exhibit B-3, BCUC IR 4.1-4.3.

³⁶ Exhibit B-4, BCUC IR 22.1.

³⁷ Ibid., BCUC IR 22.2.

- Billing is done monthly for commercial customers and bi-monthly for residential customers compared to annual billing for water and sewer;
- All Nelson Hydro customers are on meters versus only 6 customers for water;
- Greater complexity due to Nelson Hydro being partially regulated by the Commission and due to its agreements with other parties such as BC Hydro and FBC; and
- Nelson Hydro serves a much larger geographical area.³⁸

Commission determination

The Panel considers Nelson Hydro’s 2017 operating expense budget to be reasonable based on the evidence provided in the proceeding and accordingly approves the 2017 budgeted operating expenses. While the 2017 budget is approximately 7 percent higher than the actual 2016 results, the Panel accepts that a primary factor behind this variance is that certain expenditures planned for 2016 were delayed until the current year. Further, the Panel notes that the 2017 budgeted operating expenses are slightly less than what was budgeted in 2016 and are less than both the 2014 and 2015 actual operating expenses.

3.2 Power purchase expenses

Power purchase expenses, which are the costs to purchase power from FBC, are the largest component of Nelson Hydro’s annual expenses.³⁹ Nelson Hydro purchases power from FBC based on its Commission-approved wholesale Rate Schedule 41.⁴⁰ The amount of power purchased from FBC varies each year based on weather and on spring freshet conditions, which impact Nelson Hydro’s own generation.⁴¹

While the wholesale rate charged by FBC increased by 2.76 percent effective January 1, 2017, Nelson Hydro forecasts a slight decrease in power purchase expenses for 2017 compared to the 2016 budgeted amount due to a lower forecast volume.⁴² Nelson Hydro’s forecast is based on the average of the previous four years for energy forecasting and the maximum of the previous three years for capacity forecasting.⁴³

Based on Nelson Hydro’s actual versus budgeted results for the past three years, it has over-forecast power purchase expenses by an average amount of 10 percent.⁴⁴ When asked whether it may be appropriate to reduce the 2017 power purchase expense forecast to reflect the past three years’ results, Nelson Hydro submitted “it would not be prudent to under-forecast the power purchase expense” for the following reasons:

- Power purchase is not a deferrable expense – there is little opportunity to implement a short term management of this cost;
- When power purchase is under-budget due to mild weather, the revenues are also under-budget. The two somewhat offset each other; and

³⁸ Ibid.

³⁹ Exhibit B-2, Question 9.1, Table 2.

⁴⁰ Exhibit B-3, BCUC IR 2.2.

⁴¹ Ibid., BCUC IR 2.4.

⁴² Ibid., Attachment to BCUC IR 2.1.

⁴³ Exhibit B-4, BCUC IR 20.3.

⁴⁴ Exhibit B-2, Question 9.1, Table 2.

- Underspending in a cost category results in a stronger transfer to capital reserves, which then reduces rate pressure in the following years. This is much easier to smooth than a significant shortfall which would result in immediate rate pressure.⁴⁵

Nelson Hydro submitted that on occasion it needs to “force a manual reset on the forecasting algorithm” which is done after a “reasonableness check to see if something looks amiss.”⁴⁶ Nelson Hydro explained that such a reset occurred for the 2016 forecast since “after exceptional years in 2013, 2014 and 2015 for Nelson Hydro self-generation the averaging algorithm was overly optimistic on self-generation for 2016 – thus we had reset the forecast to a more reasonable level.”⁴⁷ However, despite Nelson Hydro’s resetting of the 2016 forecast, actual 2016 power purchase expenses were \$939,399 less than forecast.⁴⁸

Commission determination

The Panel approves the 2017 budgeted power purchase expense. We accept Nelson Hydro’s explanation that there is a certain degree of uncertainty in forecasting power purchase expenses due to the uncontrollable impacts on customer usage resulting from weather variations and the unpredictability of spring freshet conditions, which impacts Nelson Hydro’s generation capabilities. We also accept Nelson Hydro’s explanation that power purchases are not a deferrable expense; thus, there is limited ability for the utility to implement a short term cost management strategy should the actual cost exceed the budgeted amount. Given the challenges of managing budget shortfalls as described by Nelson Hydro and the fact that power purchase expenses are a significant component of the annual budget, the Panel considers it reasonable for Nelson Hydro to employ a somewhat conservative approach to forecasting power purchase expenses.

However, while the Panel accepts that the trend in actual versus forecast power purchase expenses is likely to reflect some level of over-forecasting as opposed to under forecasting, we remain concerned about Nelson Hydro’s most recent three-year history of over-forecasting power purchase expense, particularly given the quantum by which the expense was over-forecast in each year. Nelson Hydro noted in its response to BCUC IR 20.3 that it reset its forecast in 2016 due to the averaging algorithm appearing “overly optimistic” regarding self-generation. However, based on actual power purchase expenses for 2016 it appears that the revised forecast is still high, as actual power purchase expenses were approximately \$936,000 below forecast. While the impact to ratepayers associated with over-forecasting power purchase expense is mitigated by the fact that the cost variances are captured in the capital reserve, this mechanism does not address potential inter-generational equity issues. Existing ratepayers are paying more in rates as a result of the over-forecasting of power purchase expenses, while future ratepayers benefit from the reduced rate pressures resulting from additional funds being transferred to the capital reserve. Depending on the lag between when these funds are collected and when they are used for capital expenditures, there may be issues of inter-generational inequity if current ratepayers are not the ones who experience the benefit of the reduced rate pressure in the future.

Accordingly, the Panel directs Nelson Hydro to provide more details regarding its power purchase forecasting methodology as part of its 2018 rate application, and, if similar variances exist for 2017 power purchase

⁴⁵ Exhibit B-4, BCUC IR 20.3.

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Ibid., BCUC IR 20.1.

expenses as have occurred for years 2014 through 2016, the Panel expects Nelson Hydro to consider revising its forecasting method for 2018 and in the future.

3.3 Other expenses and revenues

This section briefly outlines the remaining expenses and revenues not previously discussed, as these remaining items are relatively minor components of the overall revenue requirement.

Debt service expense

The annual debt service expense recovered from ratepayers is \$499,364. This amount remains unchanged from the previous three years.⁴⁹ The City of Nelson borrowed \$1.5 million and \$6 million in 2009 and 2012, respectively, to fund the capital reserve as part of an accelerated capital program undertaken by Nelson Hydro to renew its generation, transmission and distribution infrastructure. The annual debt service expense represents interest and principal loan payments made to the Municipal Finance Authority (MFA) from which it is mandated to borrow.⁵⁰

Revenue – Other

The budgeted 2017 amount for other revenue is \$468,475, which is an increase of 5.1 percent over the previous year's budget but is significantly lower than the actual other revenue received for 2016.⁵¹ The following items are included in other revenue:

- Communications company contributions for pole sharing;
- Revenues from consulting provided to the Grand Forks Electric Utility;
- Standard charges such as late payment charges, disconnect and reconnect charges and new service connection charges;
- Interest from On Bill finance loans made as part of the EcoSave Energy Efficiency program; and
- Energy sales to FBC and BC Hydro.⁵²

Nelson Hydro stated that many of the components of other revenues are hard to estimate and fluctuate heavily from year to year. For instance, Nelson Hydro does not know how many customers are going to request new service work or meter connection in any particularly year; thus, it is difficult to forecast the amount of revenue expected to be collected for these services.⁵³

Another revenue source which fluctuates significantly from year to year is the revenue from sales to BC Hydro and FBC. In response to BCUC IR 24.1, Nelson Hydro provided the actual export sales for the past three years, which were as follows: \$99,816 for 2014, \$18,068 for 2015 and \$143,640 for 2016. Nelson Hydro stated that export sales are highly dependent on weather conditions; in particular, snowpack and spring melt.⁵⁴

⁴⁹ Exhibit B-2, Question 9.1, Table 2.

⁵⁰ Exhibit B-4, BCUC IR 18.1.

⁵¹ Exhibit B-2, Question 9.1, Table 2; Exhibit B-3, Attachment to BCUC IR 2.1.

⁵² Exhibit B-3, BCUC IR 9.1.

⁵³ Ibid., BCUC IR 9.2.

⁵⁴ Exhibit B-4, BCUC IR 24.1.

DES revenues and expenses and the Solar Garden

Nelson Hydro's 2017 budget includes \$7,959 for "operating expenses – DES" and \$9,020 for "revenue – DES." This results in a budgeted operating surplus for "DES" of \$1,061. Nelson Hydro does not provide further information as to the nature of the DES expenses or revenues; however, these amounts are only approximately 0.5 percent of Nelson Hydro's total budgeted expenses and revenues.⁵⁵

In response to Ms. Faust's IR 5, Nelson Hydro stated that capital construction expenditures for the District Energy System were shown in the "Capital Budget" for long term planning purposes but no funds were collected from ratepayers to support the District Energy System. Nelson Hydro further stated that funding for the District Energy System is mostly in place and is being received in two forms: (i) financing through a lender in the form of a loan to the City (no draw has been made on this financing); and (ii) grant funding (no draw has been made on this grant). Nelson Hydro submitted that if the District Energy System is built, it would be a municipal project with both the costs and profits staying within the City.⁵⁶

Nelson Hydro was also asked by Ms. Faust in the second round of IRs about the accounting of the costs for the Community Solar Garden, both in terms of installation of the solar panels and future costs for site securement and component replacement. The Community Solar Garden is a solar array that was built at the Bonnington Generation Station. Participation in the Solar Garden is optional and was made available to all Nelson Hydro customers, with participation in the Solar Garden based on full cost recovery from participants. Nelson Hydro confirmed that the forecast for the Solar Garden is for a full cost recovery based on a 25-year term, and the costs are recovered through funding agreements, contributions and investors. Nelson Hydro stated that it has committed to contribute \$2,000 per year for the 25-year contract for maintenance.⁵⁷

Commission determination

The Panel approves the 2017 forecast expenses and revenues for Revenue-other items. The Panel considers the evidence provided in Nelson Hydro's IR responses to adequately support the 2017 forecasts. The Panel notes that the revenue – other forecast may be somewhat conservative in light of the actual results for the past three years; however we acknowledge that this revenue is quite variable as it is dependent on factors such as spring freshet conditions and the amount of customer-driven service work during the year. The Panel also considers the use of the capital reserve to capture variances between forecast and actual results as a mitigating factor towards the risk of forecast variances.

With regard to the District Energy System and Community Solar Garden projects, the Panel is uncertain as to which of these projects, if either, are accounted for in Nelson Hydro's 2017 budget under the headings "operating expenses – DES" and "revenue – DES." **The Panel directs Nelson Hydro in its 2018 rate application to clarify what these operating and revenue budget items relate to and whether they have any relation to either the District Energy System project or the Community Solar Garden project.** In addition, the Panel requests Nelson Hydro to provide an explanation as to where it is accounting for the \$2,000 annual maintenance expense for the Community Solar Garden and why recovery of this expense from all ratepayers is appropriate. Given the

⁵⁵ Exhibit B-2, Question 9.1, Table 2.

⁵⁶ Exhibit B-3, Faust IR 5.

⁵⁷ Exhibit B-3, Ramona Faust IR 4.

immateriality of the DES expense and revenue line items, particularly on a net basis, the Panel accepts these items for the purposes of the 2017 budget.

In consideration of the Panel’s determinations on Nelson Hydro’s revenue requirements, as described in Sections 2.0 and 3.0 of these reasons for decision, the Panel approves Nelson Hydro’s applied for rate increase of 4.28 percent on a permanent basis, effective April 1, 2017.

4.0 Future rate applications and recommendations going forward

Nelson Hydro has expressed the difficulties it experienced in responding to some of the Commission’s IRs due to the fact that its “accounts are maintained consistent with principles appropriate for municipal accounting, but in a manner that differs from the typical regulatory utility accounting.” Nelson Hydro further submitted that it has been working to prepare a “utility focused Cost of Service study, which includes the need to organize the Nelson Hydro accounts into a more traditional utility accounting format.”⁵⁸

Nelson Hydro explained that the COSA analysis performed as part of the study involves two major activities:

- Converting Nelson Hydro’s system of accounts and the data recorded in municipal accounting formats to a reporting format more consistent with regulatory standards. This includes such items as amortization, capital reserves and water license transfers, and will also involve generating regulatory standard calculations to report ROE and shareholder payments.
- Functionalizing, classifying and allocating costs to the various customer classes, distinguishing between Urban and Rural customers, as well as Residential and General Service customers.⁵⁹

Nelson Hydro stated that it expects to be able to file the COSA study along with the proposals to deal with the study implications, if any, in late 2017, and that the proposals may include rate rebalancing between the various customer classes, including municipal versus non-municipal differences.⁶⁰

Panel discussion

Future reporting and calculation of revenue requirement components

As noted, a challenge in this proceeding has been assessing the reasonableness of many of the components of Nelson Hydro’s revenue requirements, particularly with regard to the Transfers to City General and the Transfers to the Capital Reserve. The Panel acknowledges that Nelson Hydro is in the process of re-designing its reporting format so as to better reflect standard regulatory accounting principles and practices. However, this does not necessarily address all of the challenges faced by the Panel in the current rate application.

When viewed as a whole, Nelson Hydro’s 2017 rate increase appears reasonable and has thus been approved. Nonetheless, there are a number of issues which the Panel expects Nelson Hydro to address in a detailed and well-reasoned manner as part of its next rate application. These issues are summarized as follows:

⁵⁸ Exhibit B-3, Cover letter.

⁵⁹ Exhibit B-3, BCUC IR 13.3.

⁶⁰ Ibid.

- A fully reasoned calculation and approach to determining the City’s “allowed return”.
- The Panel has raised a number of issues with regard to the Water License Reserve payment and its appropriateness. If Nelson Hydro wishes to collect this amount from ratepayers in the future, the Panel expects a fully reasoned justification taking into account the issues raised in Section 2.1 of these reasons for decision. In particular, the Panel expects Nelson Hydro to address the following points:
 - Why is it appropriate for the City to earn a benefit on the Water Rights Agreement?
 - How is the incremental power generated in accordance with the Water Rights Agreement distinguishable from the other power generated by Nelson Hydro, and why should the cost of this generation be priced at FBC’s rate given that the actual cost to generate this power is less than the FBC rate?
- A fully reasoned justification for the annual amount collected from ratepayers to be transferred to the Capital Reserve Fund (notwithstanding the additional transfer of net operating income which is also transferred to the Capital Reserve Fund at the end of the year based on actual results).
- As described in Section 3.2 of these reasons for decision, the appropriateness of Nelson Hydro’s power purchase forecasting method and whether adjustments should be made to the forecast going forward.
- As described in Section 3.3 of these reasons for decision, details regarding the “DES – operating expense” and “DES – revenue” line items, how these items relate to the District Energy project and the Solar Garden project (if at all), and the appropriateness of the \$2,000 annual maintenance cost being recovered from all ratepayers.

COSA results and implications to non-municipal ratepayers

Nelson Hydro indicated that based on the results of the COSA, it may propose rate rebalancing amongst the customer classes, and in particular, rate rebalancing between the municipal and non-municipal customers. Given the concerns raised by the intervener and other interested parties in the non-municipal areas, the Panel considers there to be some benefits to Nelson Hydro undergoing the COSA, as it is important for all parties to understand the drivers of costs amongst customer classes. However, the Panel cautions Nelson Hydro to carefully consider any potential proposals for rate rebalancing, particularly with regard to any adverse impacts to certain customer classes which may result from this rate rebalancing. In addition, as referenced in previous sections, Nelson Hydro should consider the province’s usual practice of supporting postage stamp rates and whether this has implications or relevance to Nelson Hydro’s proposals around rate rebalancing.

Timing and approach to the 2018 rate application

In recent years, Nelson Hydro has been filing its rate applications around mid-January to early February with the objective of implementing the requested rate changes effective April 1st of each year. **Going forward, the Panel directs Nelson Hydro to file its rate applications at least 30 days in advance of the start of the applicable calendar year in accordance with normal regulatory practice, thereby allowing the Commission to approve rates (whether interim or permanent) effecting the full calendar year. Accordingly, Nelson Hydro is to file its 2018 rate application at least 30 days in advance of January 1, 2018.**

It is evident to the Panel based on the numerous letters of comment and the issues raised by Ms. Faust in IRs that there is a need for improved stakeholder consultation, both during and in advance of Nelson Hydro filing its rate application. The Panel recommends that Nelson Hydro, with the assistance/support of Commission staff,

hold some form of in-person stakeholder consultation either prior to the application being filed or immediately after the application is filed. The goals of the consultation would be to educate participants on rates and the regulatory process and to allow the public to voice issues and concerns and to ask questions related to rate setting, the Commission's role as the regulator, and any other matters deemed relevant. The Panel recommends that Nelson Hydro and Commission staff work together to plan and initiate this consultation process.