



**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

Nelson Hydro

2021 General Rate Increase Application

---

Decision  
and Order G-225-21

July 27, 2021

Before:

R. I. Mason, Panel Chair  
A. K. Fung, QC, Commissioner  
T. A. Loski, Commissioner

## TABLE OF CONTENTS

Page no.

<b>Executive Summary</b> .....	<b>i</b>
<b>1.0 Introduction</b> .....	<b>1</b>
1.1 Approval Sought, Background and Jurisdiction.....	1
1.2 Regulatory Process .....	1
<b>2.0 Key Issues</b> .....	<b>1</b>
2.1 General Rate Increase for 2021.....	2
2.2 Service Reliability.....	8
2.2.1 Vegetation Management Issues .....	11
2.2.2 Capital Projects to Improve Reliability .....	13
2.3 Customer Service Software Upgrade .....	19
2.4 Bylaw No. 3196.....	19
2.5 Timing of Future Rate Applications .....	20
<b>BCUC ORDER G-225-21</b>	
<b>APPENDIX A Exhibit List</b>	

## Executive Summary

On November 30, 2020, Nelson Hydro filed an application with the British Columbia Utilities Commission (BCUC) for approval of a general annual rate increase of 2.3 percent for Nelson Hydro's non-municipal (Rural) service area for the 2021 calendar year (Application). Specifically, Nelson Hydro sought the general annual rate increase to become effective on April 1, 2021, which results in a compounded rate increase of 3.32 percent. Nelson Hydro did not increase its rates for Rural customers in 2020.

Nelson Hydro is in part excepted from regulation under the *Utilities Commission Act* (UCA) as it is owned and operated by the City of Nelson and therefore any services provided within the City's boundaries do not fall with the UCA's definition of a public utility. Thus, the BCUC's review of the Application pertains solely to Nelson Hydro's Rural ratepayers. The regulatory review of the Application included two rounds of information requests to Nelson Hydro followed by Nelson Hydro's written argument. The BCUC received 88 letters of comment with respect to the Application and 25 parties registered as interested parties.

The Panel approves the permanent rate increase of 3.32 percent for Nelson Hydro's Rural service area, effective April 1, 2021. The Panel finds that the requested rate increase is required to generate sufficient revenue for the utility to provide reliable service, and notes that further increases may be necessary in the future to improve service.

The Panel considers that it is preferable for Nelson Hydro's rates for Rural customers to increase at the same rate in 2021 as its rates for Urban customers, namely 3.32 percent effective April 1, 2021. To do otherwise would require duplicating the examination of cost allocation issues already underway in Nelson Hydro's Cost of Service (COSA) and Rate Design application.

The Panel notes that Nelson Hydro's index of service reliability has deteriorated in recent years, and finds that Nelson Hydro's current level of service reliability to its Rural customers is not adequate. The causes appear to relate to supply issues from FortisBC Inc., Nelson Hydro's vegetation management approach, and its limited level of investment in system upgrades.

Accordingly, the Panel directs Nelson Hydro to escalate its reliability concerns to FortisBC's senior management and to file a five-year vegetation management plan to address how and when it will improve service levels through the adoption of improved vegetation management practices and, if necessary, through increased spending levels on vegetation management.

The Panel is particularly concerned about Nelson Hydro's approach to capital investments to maintain service reliability. While the Panel agrees that additional capital expenditures would allow the utility to offer more reliable service to Rural customers, we disagree that the utility "cannot" invest in capital projects to improve service unless the BCUC approves its COSA and Rate Design application. Regardless of the outcome of that proceeding, Nelson Hydro is a public utility regulated by the BCUC pursuant to the UCA with respect to service to its Rural customers and must provide adequate service, something it is not presently doing.

The Panel directs Nelson Hydro to file, in its next revenue requirement application (RRA) or in a compliance filing by December 31, 2021 if no RRA is filed by that date, an explanation of how and when it will achieve the service improvements which are anticipated from the Taghum-Voltage Conversion and the New North Shore Substation projects, whether or not Nelson Hydro intends to proceed with these two projects, and if not, what alternatives Nelson Hydro will pursue.

The Panel directs that Nelson Hydro file with the BCUC a financial analysis of the customer service software upgrade, including the full cost analysis, cost savings to date and expected future cost savings, by June 30, 2022.

The Panel confirms Nelson Hydro's understanding that the BCUC has approved the utility's terms and conditions and rate schedules in Order G-6-13 and in subsequent amendments. The BCUC must approve Nelson Hydro's terms, conditions and rates for Rural customers under sections 59 to 61 of the UCA. In Order G-6-13 the BCUC approved Nelson Hydro's terms, conditions and rates for Rural customers, which were embedded in Bylaw No. 3196.

The Panel supports Nelson Hydro's approach of filing future revenue requirement applications for implementation on January 1. As long as such an application is filed with sufficient lead time before January 1, the BCUC may approve interim rates for implementation on January 1, and then approve permanent rates some time thereafter.

## **1.0 Introduction**

### **1.1 Approval Sought, Background and Jurisdiction**

On November 30, 2020, Nelson Hydro filed a rate application (Application) with the British Columbia Utilities Commission (BCUC) for approval of a general annual rate increase of 2.3 percent for Nelson Hydro's non-municipal (Rural) service area for the 2021 calendar year, pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA). Nelson Hydro proposes the general annual rate increase to become effective on April 1, 2021, which results in a compounded rate increase of 3.32 percent.<sup>1</sup> Further, Nelson Hydro requests an interim rate approval of 3.32 percent if the BCUC's determination on final rates cannot be granted in sufficient time prior to April 1, 2021.<sup>2</sup>

Nelson Hydro's rates for Rural customers were last changed on April 1, 2019.<sup>3</sup>

The BCUC reviews applications for changes to rates and rate schedules in accordance with sections 59 to 61 of the UCA. However, Nelson Hydro is in part excluded from the definition of a public utility under the UCA. By the definition in section 1(1) of the UCA, a public utility does not include "a municipality or regional district in respect of services provided by the municipality or regional district within its own boundaries." Nelson Hydro is owned and operated by the City of Nelson (City) and serves customers within the City's boundaries (Urban) as well as Rural customers. The BCUC's review of the Application pertains solely to Nelson Hydro's Rural ratepayers as the BCUC only has jurisdiction to regulate Nelson Hydro's public utility operations outside the City's boundaries.

### **1.2 Regulatory Process**

By Orders G-347-20, G-75-21, and G-125-21 dated December 22, 2020, March 15, 2021, and April 28, 2021 respectively, the BCUC established the regulatory timetable, which included two rounds of BCUC information requests (IR). Order G-75-21 also approved the applied-for 3.32 percent general rate increase to become effective on April 1, 2021 on an interim and refundable/recoverable basis, pending the outcome of the proceeding.

25 parties registered as interested parties, and the BCUC received 88 letters of comment from the public. On March 11, 2021, Nelson Hydro provided a reply to the comments and, on May 19, 2021, Nelson Hydro filed its final argument.

## **2.0 Key Issues**

The Panel explored in this proceeding the following issues: justification for the general rate increase for 2021, Nelson Hydro's service reliability, certain specific capital projects, the validity of City of Nelson Bylaw 3196, and the timing of the next revenue requirement application.

---

<sup>1</sup> Exhibit B-1, Application, p. 2.

<sup>2</sup> Exhibit B-1, Application, p. 2.

<sup>3</sup> Nelson Hydro 2019 Rural Rate Application, Order G-274-19.

## 2.1 General Rate Increase for 2021

Nelson Hydro provides the following revenue requirement for 2021:

**Table 1: Nelson Hydro 2021 Revenue Requirement<sup>4</sup>**

<b><u>2021 Budget Forecast</u></b>			
Operating Expenses			
Power Purchases (with 0% increase in Fortis rates)	(a)	6,711,933	
Operating Expenses		5,514,200	
Debt Servicing		459,614	
		<u>12,685,747</u>	
Transfers			
Dividend		2,885,600	
Water License Reserve		693,835	
Capital Reserve		3,254,278	
		<u>6,833,713</u>	
Less: Other revenue		(712,100)	
<b>Revenue required from rates</b>	(b)	<b>18,807,360</b>	
2021 Revenue forecast (with 0% increase)	(c)	18,670,000	
Increase required	(b)-(c)	137,360	0.74%
Effect of 4.36% increase in power purchase costs	(a) x 4.36%	292,640	1.57%
<b>Annual increase required</b>		<b>430,000</b>	<b>2.30%</b>
<b><u>Rate increase required as of April 1, 2021</u></b>			<b>3.32%</b>

Nelson Hydro's requested annual rate change of 2.3 percent, or required rate increase as of April 1, 2021 of 3.32 percent, is intended to address a \$430,000 shortfall based on revenues generated at current rates.<sup>5</sup> Nelson Hydro states that the requested rate change is necessary for the utility to maintain its current service levels, while continuing to make necessary upgrades to sustain and improve the utility.<sup>6</sup>

Nelson Hydro states that with mainly inflationary increases expected for 2021 in its internal costs, with some budget reallocation, general rate pressure from Nelson Hydro's own costs is forecast to be largely flat. Nelson Hydro submits that the primary factor necessitating Nelson Hydro's requested rate increase is the 4.36 percent general rate increase requested by Nelson Hydro's power supplier, FortisBC Inc. (FortisBC), and that without the impact of the FortisBC rate increase on power purchase costs, only a 0.74<sup>7</sup> percent rate increase for 2021 would be required.<sup>8</sup>

<sup>4</sup> Exhibit B-1, Application, Table 6-1, p. 18.

<sup>5</sup> Exhibit B-1, Application, p. 18.

<sup>6</sup> Exhibit B-1, Application, p. 19.

<sup>7</sup> This figure is erroneously presented as 0.73 percent on page 18 of Exhibit B-1.

<sup>8</sup> Exhibit B-1, Application, p. 18.

Nelson Hydro's proposed revenue requirement for 2021 includes a proposed dividend of \$2.885 million, which it states is about 1.7 percent higher than the approved dividend for 2019 of \$2.836 million, an average annual increase of 0.87 percent between 2019 and 2021. Nelson Hydro adds that the proposed dividend of \$2.855 million included in the 2021 revenue requirement is much lower than the proposed return on equity of \$3.429 million included in its Cost of Service Analysis (COSA) and Rate Design Application (RDA).<sup>9</sup>

Nelson Hydro's proposed 2021 capital budget is presented in the following table:

**Table 2: Nelson Hydro 2021 Capital Budget<sup>10</sup>**

<b>Nelson Hydro 2021 Capital Budget</b>		
		<b>2021 Budget</b>
Rebuilds/Pole Placement-City	Pole Replacement - City	50,000
Rebuilds Pole Placement-N Shore	Cutouts - replace porcelain	82,000
	Pole Replacement - North Shore	649,000
Rebuilds Pole Placement-S Shore	Pole Replacement - South Shore	51,300
New Services	New Services - Flat Rate - Cit	140,400
	New Services - Flat Rate - SS	70,100
	New Services - Flat Rate NS	113,300
Power Plant Capital	Power Plant backup generator	130,000
	G5 Turbine Major Overhaul	500,000
	Bonnington Sub - 25 kV Conversion	350,000
	INOG5 Refurbishment	50,000
	G5 Intake Operating Gate Ovehaul	50,000
SCADA Capital	SCADA Upgrade	100,000
District Energy System	District Heating System	80,000
Elect Vehicle charging stn	Elec Vehicle charging stn	30,000
Hydro Meters	Hydro Meter Replacement	15,400
Hydro Software	CIS Software V4 Upgrade	20,000
Small Hydro Generation	Small hydro generation	10,300
Submarine Cable	Lakeside Submarine Cable F51/5	11,500
Other Projects	FBC Crossings	50,000
	CYME	150,000
	CMMS Asset Management	150,000
	25F71 Re-Closer	60,000
<b>Grand Total</b>		<b>2,913,300</b>

<sup>9</sup> Exhibit B-1, Application, pp. 13–14.

<sup>10</sup> Exhibit B-1, Application, Table 5-4, p. 16.

Nelson Hydro states that its capital budget “funds programs that allow the electric utility to effectively manage, maintain, and invest in its assets to ensure it can continue operating sustainability while improving service reliability and minimizing outages.” Three significant projects included in the capital budget are:<sup>11</sup>

- North Shore Pole Replacement (budgeting \$649,000). Following the “test and treat” pole work that is currently being undertaken in the Harrop Procter area of the North Shore (Rural service area), the utility expects that it will need to replace a minimum of 60 poles;
- Significant work at the Bonnington Falls Power Plant including the installation of a backup generator for Generating Unit 5 (budgeting \$130,000) and Major Turbine Overhaul for Generating Unit 5 (budgeting \$500,000) due to the detection of chronic leaking in water course; and
- 25 kV conversion at the Bonnington Substation (budgeting \$350,000) to allow portions of the Rural service area (Taghum and Blewett) where the load is growing to be served from other Substations.

Nelson Hydro projects that the balance in its capital reserve will increase in 2021, followed by a four-year decline, keeping the balance in the target band of \$5 million to \$10 million, as shown below:<sup>12</sup>

**Figure 1: Capital Reserve Projection<sup>13</sup>**



Nelson Hydro provides the figures supporting the above graph in the following table:

**Table 3: Capital Reserve Projection Figures<sup>14</sup>**

	<u>2019 (act)</u>	<u>2020 (proj)</u>	<u>2021 (budg)</u>	<u>2022 (budg)</u>	<u>2023 (budg)</u>	<u>2024 (budg)</u>	<u>2025 (budg)</u>
Contributions from Operating	3,699,021	3,237,129	3,254,278	3,023,583	3,113,739	3,157,879	3,198,845
Capital	3,264,599	2,786,498	2,913,300	3,820,300	3,538,200	3,296,400	3,163,200
Reserve balance	6,950,074	7,680,705	8,171,683	7,534,966	7,260,504	7,271,983	7,457,628

<sup>11</sup> Exhibit B-1, Application, p. 15.

<sup>12</sup> Exhibit B-1, Application, pp. 16–17.

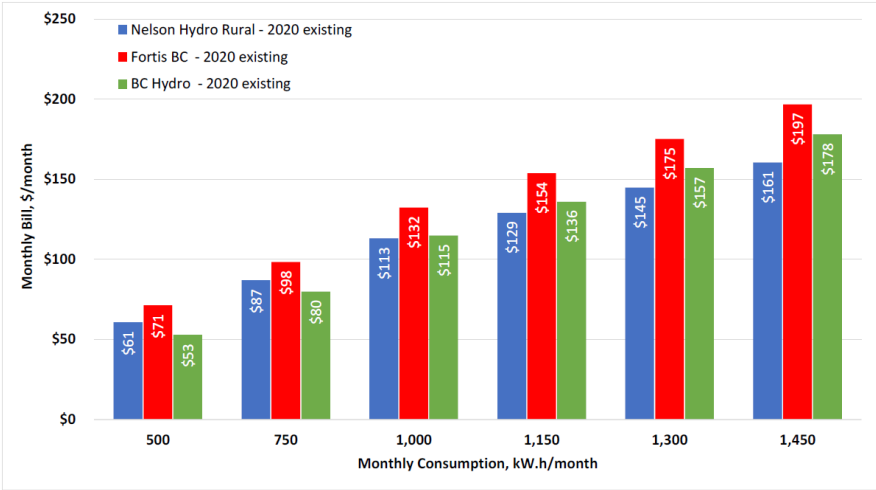
<sup>13</sup> Exhibit B-1, Application, Figure 5-1, p. 17.

<sup>14</sup> Exhibit B-3, BCUC IR 10.1.



Nelson Hydro provides the following comparison of its rates with those of other utilities, stating its rates continue to be competitive:

**Figure 2: Residential Monthly Bill Comparison – Existing Rates<sup>15</sup>**



In a separate application to the BCUC, on November 27, 2020, Nelson Hydro filed a COSA and RDA, requesting approval for, among other things, a COSA and proposed rate changes with regard to the Rural residential rates. The COSA and RDA present detailed information regarding Nelson Hydro’s proposed cost allocations between service areas and the rate of return with regard to the Rural portion of the utility, notably resulting in a rate differential between the Rural residential and Urban residential customer classes.

In this Application, Nelson Hydro is proposing a percentage rate increase based on forecast costs for the utility as a whole, and submits that exploration of the COSA and RDA issues is not necessary for this Application as no rate differential between the Urban and Rural service areas is being proposed as part of this Application.<sup>16</sup>

On March 9, 2021, the City adopted a 3.32 percent rate increase to Urban customers, effective April 1, 2021.<sup>17</sup>

The majority of letters of comments on the Application from Rural residents oppose a rate increase. The issue of affordability stemming from a rate increase was raised multiple times. Rural residents, especially those on fixed incomes, submit that they are negatively impacted by the pandemic and economic downturn.<sup>18</sup> Further, many residents discussed having moved to Rural areas outside of the City of Nelson in order to be able to afford

<sup>15</sup> Exhibit B-1, Application, Figure 6-1, p. 20.

<sup>16</sup> Exhibit B-1, Application, p. 3.

<sup>17</sup> City of Nelson Regular Council meeting, available at <https://www.nelson.ca/Calendar.aspx?EID=313&month=3&year=2021&day=9&calType=0>

<sup>18</sup> For example, Exhibit E-2, Whalley Letter of Comment, p. 1; Exhibit E-24, Haggar Letter of Comment, p. 1; Exhibit E-31, LePape Letter of Comment, p. 1; Exhibit E-42, Vishloff Letter of Comment, p. 1; Exhibit E-57, Malone Letter of Comment, p. 1.

housing and are now facing rising energy costs.<sup>19</sup> While some letters of comment acknowledged Nelson Hydro's reasoning for a rate increase, they note a large financial burden on its Rural customers.<sup>20</sup>

### *Nelson Hydro Position*

Nelson Hydro submits that the requested rate should be approved as it is just and reasonable as required under sections 59 and 60 of the UCA.<sup>21</sup>

Nelson Hydro submits that its proposed rate increase for 2021 is a result of increased operating costs and is necessary for it to continue to provide "safe and reliable services in a sustainable manner." The proposed rate increase is primarily attributable to the 4.36 percent rate increase implemented by FortisBC on January 1, 2021, which affects approximately 50 percent of Nelson Hydro's power supply. Nelson Hydro adds that the remainder of the requested rate increase is driven by increases in the costs of labour, regulation, materials and services. Nelson Hydro notes that it did not increase its rates in 2020 despite inflationary increases in operational costs.<sup>22</sup>

Nelson Hydro further submits that the requested rate increase does not seek to increase its rate of return or dividend, which is currently "well below what is considered to be a fair return," having decreased from 9.08 percent in 2016 to 6.94 percent in 2020. Nelson Hydro submits that the "modest rate increase" being requested is not designed or intended to address the "return on equity shortfall."<sup>23</sup>

In Nelson Hydro's view, it is also relevant that its proposed rates continue to be competitive with other utilities regulated by the BCUC.<sup>24</sup>

Nelson Hydro notes that, if the BCUC approves the requested rate increase for Rural customers, then the same increase will have been applied to rates for both Rural and Urban customers. As a result, the issue of a rate differential between Rural and Urban residential customers does not need to be explored in this proceeding.<sup>25</sup>

Nelson Hydro submits that, as would be expected by any utility proposing to raise its rates, the letters of comment received were generally in opposition to the rate increase proposed in the Application. While Nelson Hydro is sympathetic to the concerns raised by its ratepayers regarding the cost of living in the region and the difficulty that rate increases may cause for certain individuals living on fixed incomes, the utility argues that the rate application is for a modest rate increase that is necessary for the utility to meet its 2021 revenue requirement and operate sustainably. Further, Nelson Hydro must ensure that its rates are fair and just for ratepayers while also allowing the utility to maintain a sustainable operation and enable the continued provision of safe and reliable service while also supporting efforts to improve service.<sup>26</sup>

---

<sup>19</sup> For example, Exhibit E-29, Gulayets Letter of Comment, p. 2; Exhibit E-30, Nishio Letter of Comment, p. 1.

<sup>20</sup> For example, Exhibit D-25-1, Snively Letter of Comment, p. 1.

<sup>21</sup> Nelson Hydro Final Argument, p. 3.

<sup>22</sup> Nelson Hydro Final Argument, pp. 1–2

<sup>23</sup> Nelson Hydro Final Argument, p. 2.

<sup>24</sup> Nelson Hydro Final Argument, p. 2.

<sup>25</sup> Nelson Hydro Final Argument, p. 3.

<sup>26</sup> Exhibit B-4, pp. 1–2.

Nelson Hydro submits that many of the comments received, such as those expressing a desire for the utility to further increase service reliability, reduce outages, and conduct more vegetation management, actually support the requested rate increase given that such improvements come at an operational cost that must be reflected in the utility's rates.<sup>27</sup>

### *Panel Determination*

**The Panel approves a permanent rate increase of 3.32 percent for Nelson Hydro's Rural customer classes, effective April 1, 2021. Nelson Hydro is directed to file, within 30 days of the date of this Decision, tariff pages reflecting permanent 2021 rates for all Rural customer classes.**

The requested rate increase, equivalent to 2.3 percent in a full calendar year, is reasonable. Nelson Hydro did not increase its rates in 2020, so the requested rate increase is in fact a 2.3 percent increase over two years. Further, approximately one third of Nelson Hydro's revenue requirement consists of power purchases from FortisBC,<sup>28</sup> whose rates increased by 4.36 percent on January 1, 2021. Without the increase in Nelson Hydro's cost of purchasing power from FortisBC, its rate increase required would only have been 0.73 percent over two years.

While the requested increase in rates for 2021 is reasonable, the Panel is concerned that Nelson Hydro may not be spending enough on vegetation management to ensure the reliability of its service, especially to customers on the North Shore. In future years, Nelson Hydro may have to increase rates to a larger degree merely to arrest the decline in its service reliability. For the same reason, while the Panel is satisfied with Nelson Hydro's 2021 capital plan, capital spending may have to increase in future years, which may also require an increase in rates. The Panel addresses service reliability in Section 2.2 below.

The requested rate increase includes a dividend for the City, effectively Nelson Hydro's shareholder, which is an annual average increase of 0.87 percent from 2019 to 2021. The Panel considers this increase is reasonable as it is in line with the 0.73 percent increase in costs other than power purchase costs from FortisBC. The Panel takes no position on Nelson Hydro's submission that the dividend is "well below what is considered to be a fair return" as this is a matter for Nelson Hydro's COSA and RDA proceeding.

Nelson Hydro includes a transfer to the capital reserve of \$3.3 million in its proposed 2021 revenue requirement, and a proposed capital budget for 2021 of \$2.9 million. The Panel is satisfied that the transfer to the Capital Reserve is reasonable, as it is sufficient to cover the proposed capital budget for 2021 and adds a small surplus to the Capital Reserve. The Panel acknowledges there will likely be increased capital spending in 2022 and 2023, and that a small increase in the Capital Reserve in 2021 is prudent to keep the balance in the Capital Reserve between \$5 million and \$10 million.

In addition to the requested rate increase being reasonable, the Panel also considers that it is preferable for Nelson Hydro's rates for Rural customers to increase at the same rate in 2021 as its rates for Urban customers; namely, 3.32 percent effective April 1, 2021. Nelson Hydro has submitted a COSA and RDA application to the BCUC, in which the issues of cost allocation between Urban and Rural customer classes will be examined. For the Panel to consider a rate increase for Nelson Hydro's Rural customers in 2021 other than 3.32 percent would

---

<sup>27</sup> Nelson Hydro Final Argument, p. 7.

<sup>28</sup> From Table 1 above (from B-1, table 6-1),  $\$6,711,933/\$18,807,630 = 0.36$ .

require examination of many of the same issues being addressed in the COSA and RDA application, which would be duplicative and inefficient.

As the BCUC noted in the 2018 Decision,<sup>29</sup> keeping the rates consistent between Rural and Urban customers ensures that any surplus or deficit incurred in 2021 will be proportionately applied to the Capital Reserve. The BCUC directive to 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”<sup>30</sup> continues to apply until the BCUC orders otherwise.

The Panel notes that the letters of comment regarding the Application were generally in opposition to the proposed increase. The Panel agrees with Nelson Hydro that the requested rate increase is required to provide sufficient revenue for the utility to provide reliable service, and notes that in fact greater increases may be necessary in future to improve service, as we discuss in Section 2.2 below. While the Panel also sympathizes with those for whom the cost of energy is a concern, the BCUC has no legislative mandate to make rates affordable, either for all customers or for specific groups of customers. The Panel notes that Nelson Hydro’s rates compare favourably with the rates charged by FortisBC and are similar to the rates charged by BC Hydro.

## **2.2 Service Reliability**

Nelson Hydro states that it has faced challenging circumstances over the past three years that have resulted in a decline in reliability from 2017 through the third quarter of 2020. Nelson Hydro states that the causes primarily include: loss of supply from FortisBC, tree-related outages, and wind-related outages. Nelson Hydro also states that the decline in reliability is not limited to Nelson Hydro, but appears to be consistent with declining reliability from other regulated utilities operating in the region.<sup>31</sup>

Nelson Hydro provides its index of reliability over the past decade:

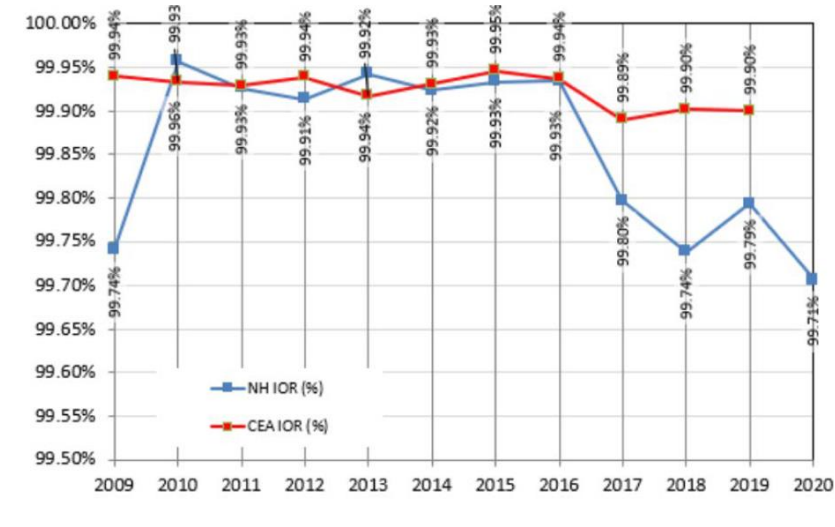
---

<sup>29</sup> Nelson Hydro 2019 Rural Rate Application, Order G-274-19, p. 15.

<sup>30</sup> Nelson Hydro 2017 Rate Application, Order G-119-17, directive 4

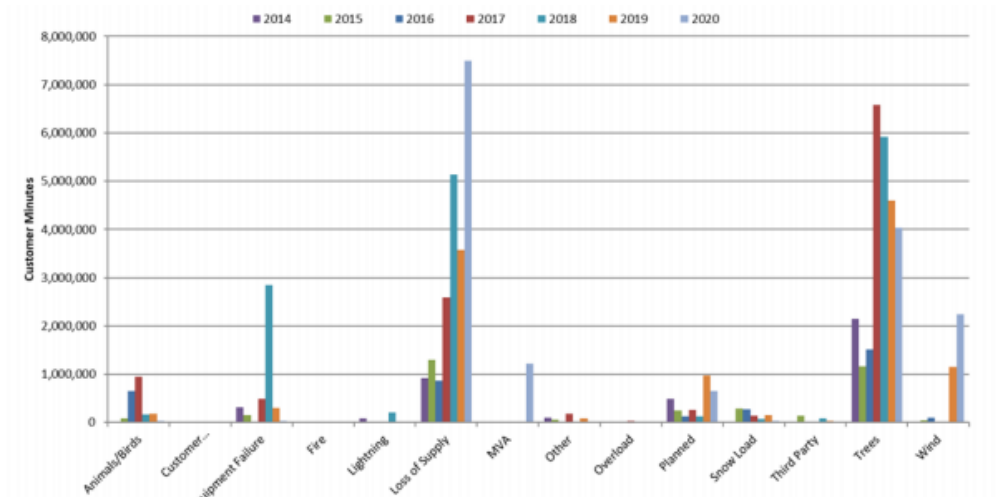
<sup>31</sup> Exhibit B-1, Application, p. 6.

Figure 3: Nelson Hydro Index of Reliability<sup>32</sup>



Nelson Hydro also provides an analysis of its service outage minutes by cause:<sup>33</sup>

Figure 4: 2014-2020 Outage Minutes Grouped by Type<sup>34</sup>



Nelson Hydro states that it relies on FortisBC for a significant portion of its power supply,<sup>35</sup> that in 2020, 48 percent of Nelson Hydro's outages were caused by loss of supply from FortisBC, and that 95 percent of those outages were caused by trees and wind impacting FortisBC's lines.<sup>36</sup> The primary point of failure causing loss of

<sup>32</sup> Exhibit B-3, BCUC IR 4.2.

<sup>33</sup> Exhibit B-1, Application, p. 7.

<sup>34</sup> Exhibit B-3, Updated Figure 4-3, IR 4.3

<sup>35</sup> Exhibit B-1, Application, p. 6.

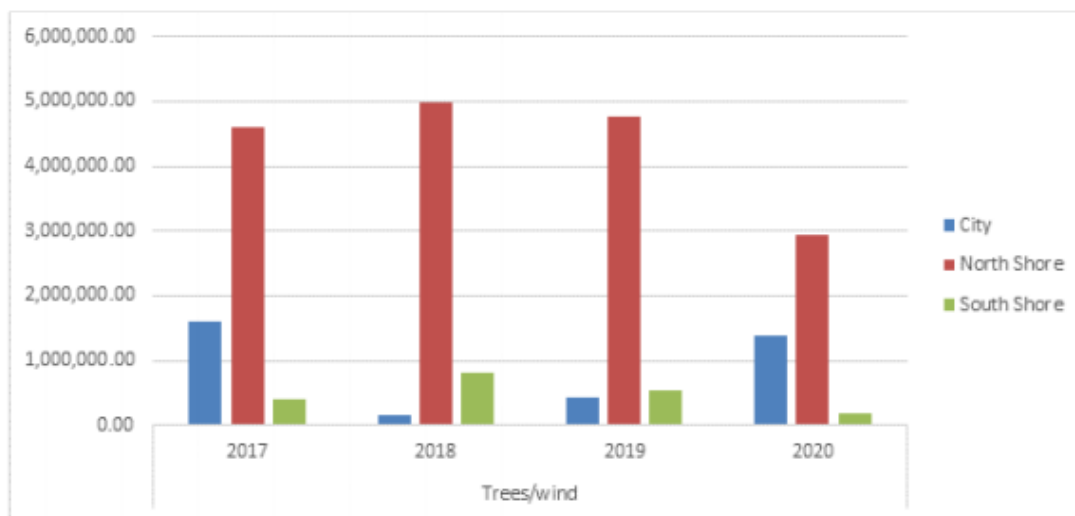
<sup>36</sup> Exhibit B-3, IR 5.9.2

supply from FortisBC is the Coffee Creek substation, which is fed by long, exposed and vulnerable transmission lines.<sup>37</sup> Nelson Hydro adds that vegetation management in the area of the transmission line supplying the Coffee Creek substation is the responsibility of FortisBC.<sup>38</sup>

Nelson Hydro states it communicates regularly with FortisBC with regard to the power supply and reliability challenges, and FortisBC has performed substantial vegetation management on the transmission line supplying the Coffee Creek substation. Nelson Hydro states it has not taken any additional action to address the reliability challenges with FortisBC,<sup>39</sup> and has not filed any formal complaints against FortisBC with regard to reliability.<sup>40</sup>

Nelson Hydro states that, in addition to loss of supply from FortisBC, the other primary factor impacting its service reliability is interruption because of trees and wind on its own system. Nelson Hydro presents the following analysis of customer outages due to trees and wind by area:

**Figure 5: Customer Outages in Minutes due to Tree/Wind by Area<sup>41</sup>**



Nelson Hydro states that weather events impacting reliability are experienced disproportionately on the North Shore, a part of the Rural service area that is particularly challenging due to its large area and high density of vegetation that can disrupt service.<sup>42</sup>

The issue of reliability was raised multiple times in the letters of comment on the Application. Rural residents wrote about the frequency of outages, which they assert are increasing due to wind and snow affecting many aging or weak trees on Nelson Hydro's rights of way, and the duration of outages which included incidents lasting as long as 58 hours.<sup>43</sup> Further, residents submitted letters of comment stating they need to purchase or

<sup>37</sup> Exhibit B-1, Application, p. 8.

<sup>38</sup> Exhibit B-3, IR 5.8.1.

<sup>39</sup> Exhibit B-5, BCUC IR 15.1.

<sup>40</sup> Exhibit B-5, BCUC IR 15.3.

<sup>41</sup> Exhibit B-1, Application, Figure 4-4, p. 8.

<sup>42</sup> Exhibit B-1, Application, p. 8.

<sup>43</sup> Exhibit E-36, Erickson Letter of Comment, p. 1; Exhibit E-18, Burton Letter of Comment, p. 1.

rent generators in addition to expressing their concerns about the inconvenience, lack of heat, and loss of perishable goods stemming from reliability issues.<sup>44</sup>

In response, Nelson Hydro acknowledges the frustration with regard to the reliability of service and frequency of power outages expressed in the letters of comment.<sup>45</sup> Nelson Hydro states that it is continuously working to improve system reliability through capital projects as well as by adopting more effective and efficient vegetation management practices.<sup>46</sup> Further, Nelson Hydro states its five-year capital plan includes a number of projects that would further advance reliability and it recognizes that an efficient and effective vegetation management program is crucial to improving the utility's reliability.<sup>47</sup>

### **2.2.1 Vegetation Management Issues**

Nelson Hydro's practice is to conduct vegetation management on a three-year cycle by service area (Urban, North Shore, South Shore), but necessary vegetation management is completed as needed in other areas. Nelson Hydro states that this normally results in significant vegetation management on the North Shore even in years where this area is not the focus.<sup>48</sup> Nelson Hydro states that this approach "is the most efficient and cost-effective option given the geography of the different service areas as well as staffing and budget considerations,"<sup>49</sup> and that "allocating more budget to vegetation management creates additional rate pressure."<sup>50</sup> Nelson Hydro summarizes:<sup>51</sup>

In its annual operations plans, Nelson Hydro endeavors to maintain a balance between reliability and the costs to rate payers for vegetation management and asset maintenance. More could be done to improve reliability, however this would have an impact on rates.

Nelson Hydro provides the following vegetation management expenses by service area:

---

<sup>44</sup> Exhibit E-62, Roos Letter of Comment, p. 1; Exhibit E-64, Krolak Letter of Comment, p. 2.

<sup>45</sup> Exhibit B-4, Response on Letters of Comment, p. 2.

<sup>46</sup> Nelson Hydro Final Argument, p. 3.

<sup>47</sup> Nelson Hydro Final Argument, p. 4.

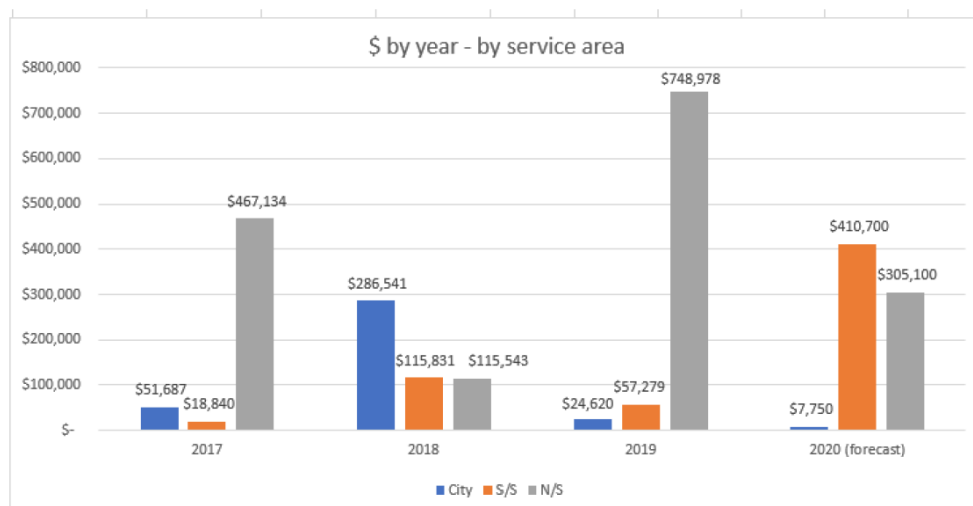
<sup>48</sup> Exhibit B-1, Application, pp. 8–9.

<sup>49</sup> Exhibit B-3, BCUC IR 5.1.2.

<sup>50</sup> Exhibit B-3, BCUC IR 5.6.

<sup>51</sup> Exhibit B-5, BCUC IR 16.6.1.

**Figure 6 – Vegetation Management Expenses by Service Area<sup>52</sup>**



Nelson Hydro also states it has engaged Cathro Consulting to assist in reviewing its vegetation management program, and to recommend opportunities for improvement.<sup>53</sup> Nelson Hydro states that the key aspects to the Vegetation Best Management Practices document developed by Cathro Consulting are as follows:<sup>54</sup>

- Pre-treatment identification of values and hazards
- Direction to Employees and Contractors for Role Requirements
- Trimming Specifications
- Trimming Options
- Disposal of Debris
- Use of Herbicide
- Monitoring Results and Continuous Learning
- Economic Considerations
- Public Engagement Framework
- Nesting Bird Best Management Practices

Nelson Hydro states that it faces a significant challenge in the Rural service area because many trees are outside the utility's statutory right of way (SROW) or it lacks the necessary SROW due to "long-standing historical oversights."<sup>55</sup> Diligence to secure legal rights of way for new construction was inconsistent in the early days of the utility's growth, and agreements at that time often did not contain legal rights sufficient for current use and

<sup>52</sup> Exhibit B-1, Application, Figure 4-5, p. 9.

<sup>53</sup> Exhibit B-3, BCUC IR 5.1.1.

<sup>54</sup> Exhibit B-5, BCUC IR 16.1.

<sup>55</sup> Exhibit B-3, BCUC IR 5.1.1.



access requirements. Nelson Hydro adds that the Assistant Deputy Ministry for Electricity and Alternative Energy Division of the Government of BC understands that utility land rights are outside of the BCUC’s jurisdiction.<sup>56</sup>

Nelson Hydro states it has limited options to address trees on private property where an SROW is lacking, although its new vegetation management best practices provide tools for the utility to “engage private landowners in responsible vegetation management around powerlines.”<sup>57</sup> This engagement includes advising private landowners that, in the event they refuse to allow Nelson Hydro to mitigate the risk to its infrastructure from vegetation on their property, they will be liable for any damage and subsequent repair costs resulting from the trees in question.<sup>58</sup>

Nelson Hydro adds that it does enforce utility clearance requirements from vegetation on Rural customer properties where it holds the appropriate rights of way, and the utility has made improved efforts in this regard in recent years.<sup>59</sup>

**2.2.2 Capital Projects to Improve Reliability**

Nelson Hydro states it has been performing system upgrades on the North Shore of the Rural service area to improve reliability.<sup>60</sup> Examples of capital work in recent years include:<sup>61</sup>

- installing a marine cable at Lakeside Crossing in 2019 to provide additional supply from the Mill Street substation, mitigating some of the power outages resulting from loss of supply at the Coffee Creek substation,
- rearranging feeder conductors to reduce the potential of contact among conductors which has caused system faults, and
- providing feeder protection which limits the customer impacts of outages.

Nelson Hydro projects a “significant ramp up” in capital spending in 2022–2025,<sup>62</sup> including the following projects:

**Table 4: Expected Capital Expenditures in 2022 and 2025<sup>63</sup>**

<sup>56</sup> Exhibit B-5, BCUC IR 16.2.

<sup>57</sup> Exhibit B-3, BCUC IR 5.1.1.

<sup>58</sup> Exhibit B-5, BCUC IR 16.10.

<sup>59</sup> Exhibit B-3, BCUC IR 5.9.3.1.

<sup>60</sup> Exhibit B-1, Application, p. 8.

<sup>61</sup> Exhibit B-1, Application, p. 15.

<sup>62</sup> Exhibit B-1, Application, p. 15.

<sup>63</sup> Exhibit B-3, BCUC IR 9.2.1.

Project Name	Projected Date	Projected Cost	Primary Area of Benefit (if any)
Advanced Metering Infrastructure (AMI) Meter Upgrade	2022-2025	\$3,500,000	All
Coffee Creek Transformer	2022	\$1,500,00	North Shore
Granite Tie Breaker	2022	\$350,000	Urban
Mill St. Substation Upgrade	2023-2024	\$2,500,000	Urban and North Shore
60L1 Rebuild	2023	\$275,000	Urban
Power Plant Intake Repairs	2022-2023	\$700,000	Urban
G3 and G4 Excitation Replacement	2022	\$240,000	Urban
Taghum-Voltage Conversion	TBD Pending COSA&RDA Outcome	\$4,300,000	South Shore
New North Shore Substation	TBD Pending COSA&RDA Outcome	\$3,500,000	North Shore

Two of these planned capital projects are the Taghum-Voltage Conversion and the New North Shore Substation.<sup>64</sup>

Nelson Hydro explains that for the Taghum-Voltage Conversion an alternative is to simply replace the existing transformer with a higher capacity unit. Nelson Hydro states this is less costly, but sub-optimal compared to the full voltage conversion that would improve reliability and meet load forecasts for this area. Another option is to accept the risk of a transformer failure and do nothing, which creates a potential for an extended power outage. Nelson Hydro submits that postponing or delaying these projects increases the risk as the transformer ages and loads increase.<sup>65</sup>

With regards to the New North Shore Substation, the Ministry of Transportation and Infrastructure (MOTI) has requested that Nelson Hydro relocate the Six Mile Substation since it is adjacent to the highway with no SROW, which presents an opportunity to enhance the substation to improve reliability on the North Shore. An alternative is to increase the transformer capacity of the Coffee Creek Substation. Nelson Hydro states that this is a less optimal solution as it relies on feeding the North Shore from either end with less flexibility and redundancy. Delay of this project will maintain status quo and also puts Nelson Hydro in conflict with the MOTI and could result in capital spending to relocate the Six Mile Substation with no benefit to reliability, redundancy, or operational flexibility.<sup>66</sup>

Nelson Hydro identifies some significant capital projects that it states would primarily benefit the Rural service area, and states that if it cannot recover its costs and earn a fair return in the Rural service area as set out in the COSA and RDA, these projects would not be viable. Thus, Nelson Hydro states it would be forced to consider all of its options with regard to the Rural portion of the utility, adding:<sup>67</sup>

Accordingly, in the short term, the failure to achieve an acceptable rate design as set out in the COSA & RDA Application will result in a delay of planned capital spending that is primarily to the benefit of the Rural service area.

<sup>64</sup> Exhibit B-3, BCUC IR 9.2.1.

<sup>65</sup> Exhibit B-3, BCUC IR 12.3

<sup>66</sup> Exhibit B-3, BCUC IR 12.3.

<sup>67</sup> Exhibit B-3, BCUC IR 9.1.

## *Nelson Hydro Position*

Nelson Hydro submits it is continuously working to improve system reliability through capital projects and by adopting more effective and efficient vegetation management practices, and seeks to provide “safe and reliable service while maintaining reasonable rates.” Nelson Hydro adds that it faces operational challenges in its Rural service area, with high-density vegetation in an interior rain forest zone with increasingly severe storm cycles.<sup>68</sup> Nelson Hydro submits its challenges “appear to be compounding as a result of a changing climate.”<sup>69</sup>

In the short term, Nelson Hydro submits its capital plan for 2021 contains initiatives to improve and enhance system reliability, for example the pole replacement work being completed in all service areas. In the long term, Nelson Hydro submits that it plans additional projects to advance reliability, including the Coffee Creek transformer and 6 Mile substation replacement projects.<sup>70</sup>

Nelson Hydro also submits that two further projects, the Taghum-Voltage Conversion and the New North Shore Substation, would result in reliability gains in the Rural areas, but that there is “simply no business case for the utility to undergo these projects unless it is assured that it will be able to justify its investment through an acceptable rate structure.”<sup>71</sup>

Nelson Hydro submits that it “fully understands its obligation as a public utility to maintain its property and equipment to enable it to provide safe and adequate service.” However, it adds that certain expenditures, specifically the Taghum-Voltage Conversion and the New North Shore Substation projects, would “allow the utility to offer more reliable service – above and beyond the basic service level,” and that these expenditures are dependent on the outcome of the COSA and RDA. Nelson Hydro submits that this information is “not offered in any malicious manner,” but to provide transparency and to communicate that Nelson Hydro needs a higher return on its assets in the Rural service area in order to undertake these types of projects, especially the Taghum-Voltage Conversion and the New North Shore Substation projects. Nelson Hydro adds:<sup>72</sup>

Ultimately Nelson Hydro values its Rural customers and desires to offer them the best service possible – which would involve making certain capital upgrades while earning a fair return – but it cannot do so with the present rate structure in place.

Nelson Hydro further submits that the Taghum-Voltage Conversion and the New North Shore Substation projects would require a significant contribution from the capital reserve, which would put the utility in a weaker position to respond to unexpected expenses; the reserve fund must be maintained at healthy levels given the constraints on the utility’s ability to borrow funds.<sup>73</sup>

In addition to capital projects, Nelson Hydro submits it conducts a robust vegetation management program throughout all service areas, maintaining a three-year focus area cycle to engage in long-term preventative vegetation management. Nelson Hydro adds that the Rural service area, in particular the North Shore,

---

<sup>68</sup> Nelson Hydro Final Argument, p. 3.

<sup>69</sup> Nelson Hydro Final Argument, p. 5.

<sup>70</sup> Nelson Hydro Final Argument, pp. 3–4.

<sup>71</sup> Nelson Hydro Final Argument, p. 5.

<sup>72</sup> Nelson Hydro Final Argument, pp. 5–6.

<sup>73</sup> Nelson Hydro Final Argument, p. 6.

experiences reliability issues due to vegetation impacts more frequently than other service areas of the utility as it contains the majority of the utility's infrastructure and is more densely surrounded by "problematic vegetation."<sup>74</sup>

Nelson Hydro submits it is now implementing "Vegetation Best Management Practices," developed based on recommendations from Cathro Consulting, Nelson Hydro's "experienced consultant." These practices provide "efficient and effective procedures to protect the public, infrastructure, and values adjacent to the utility's transmission and distribution lines, and to minimize conflict and reduce liability exposure to the utility."<sup>75</sup>

In summary, Nelson Hydro submits that it is continuously seeking to improve its service reliability through capital improvements and a proactive approach to vegetation management. However, it also submits that many factors are outside its control, including the nature of the Rural service area and Nelson Hydro's reliance on FortisBC for a significant portion of its power supply.<sup>76</sup>

### *Panel Determination*

Nelson Hydro's service performance, measured by its index of reliability, has deteriorated every year since 2016 except for a slight improvement in 2019, which was followed by further decline in 2020 to the lowest level in the last decade. The Panel acknowledges Nelson Hydro's reasons for why it is challenging to provide high-reliability service in the Rural area, but Nelson Hydro was providing a more reliable service, comparable to the Canadian Electricity Association (CEA) average, between 2010 and 2016. For these reasons, the Panel finds that Nelson Hydro's current level of service reliability to its Rural customers is not adequate.

The decline in performance since 2016 does not appear to be due to an isolated event, or to align with Nelson Hydro's three-year vegetation management cycle. Rather, the Panel is concerned that the cause or causes of the deterioration in reliability are systemic, and appear to relate to supply issues from FortisBC, Nelson Hydro's vegetation management approach, and its limited level of investment in system upgrades.

The Panel acknowledges that Nelson Hydro is taking some steps to improve its service quality. However, the trend is not encouraging. Nelson Hydro acknowledges, with respect to vegetation management, that "[m]ore could be done to improve reliability, however this would have an impact on rates." The Panel agrees, and views that Nelson Hydro must do more, including but not limited to making improvements to its vegetation management approach, even though this may increase rates.

The reliability of the FortisBC service to Nelson Hydro appears to be a significant cause of the latter's system reliability issues, accounting for 48 percent of the outages in 2020. However, this does not relieve Nelson Hydro of its responsibilities as a public utility. Nelson Hydro, like any other public utility in BC, is responsible under the UCA for the reliability of the service it provides to its customers. In the longer term, if FortisBC cannot provide power reliably to Nelson Hydro, then Nelson Hydro must find another way to serve its customers.

The Panel considers that Nelson Hydro has not yet exhausted its options to receive improved service from FortisBC. **The Panel directs Nelson Hydro to escalate its reliability concerns to FortisBC's senior management,**

---

<sup>74</sup> Nelson Hydro Final Argument, p. 4.

<sup>75</sup> Nelson Hydro Final Argument, p. 4.

<sup>76</sup> Nelson Hydro Final Argument, p. 4.

**and, in the absence of prompt and credible action, to make a formal complaint to the BCUC. Nelson Hydro is directed to file with the BCUC its escalation correspondence with FortisBC's senior management as a compliance filing within 30 days of the date of this decision.**

With respect to vegetation management, the Panel does not take issue in principle with Nelson Hydro's approach of a three-year cycle, focusing alternately on each of its three service areas. However, the "balance between reliability and the costs to ratepayers"<sup>77</sup> that Nelson Hydro endeavors to maintain is not currently achieving an adequate level of service reliability.

According to Nelson Hydro, the vegetation "best management practices" which it is implementing "provide efficient and effective procedures in order to protect the public, infrastructure, and values adjacent to Nelson Hydro transmission distribution lines, minimize conflict and reduce Nelson Hydro liability."<sup>78</sup> While these goals are laudable, it is not clear to the Panel how or when these practices will actually improve service levels, or at what cost. Addressing Nelson Hydro's historical lack of sufficient rights of way appears to be beneficial, but the utility's reliability issues appear to have developed since 2016, rather than slowly over decades. **The Panel directs Nelson Hydro to file with the BCUC within 120 days of the date of this Decision a five-year vegetation management plan to address how and when the utility will improve service levels through the adoption of improved vegetation management practices and, if necessary, through increased spending levels on vegetation management.**

The Panel is particularly concerned about Nelson Hydro's approach to capital investments to maintain service reliability. Nelson Hydro submits it "always has and continues to be" committed to providing "safe and adequate service."<sup>79</sup> However, Nelson Hydro also submits that it "cannot" invest in capital projects to improve service reliability on the North Shore unless the BCUC approves its COSA and RDA. While noting Nelson Hydro's submission that its submission is not made "in any malicious manner," the Panel nonetheless finds its position to be unacceptable.<sup>80</sup>

The evidence of customer outages related to trees and wind demonstrates that the inadequacy of Nelson Hydro's service reliability cannot be addressed without improving the reliability of its service to customers on the North Shore, part of the Rural service area. The Panel agrees with Nelson Hydro's submission that the Taghum-Voltage Conversion and the New North Shore Substation projects would allow the utility to offer more reliable service to Rural customers.

The Panel does not agree, however, that Nelson Hydro "cannot" invest in capital projects to improve service reliability on the North Shore unless the BCUC approves its COSA and RDA. Nelson Hydro states that "the failure to achieve an acceptable rate design as set out in the COSA & RDA Application will result in a delay of planned capital spending that is primarily to the benefit of the Rural service area."<sup>81</sup> What Nelson Hydro is saying, in effect, is that it intends to continue to provide inadequate service to Rural customers unless and until the BCUC approves its application to charge Rural customers a different, and higher, rate than its Urban customers. The

---

<sup>77</sup> Exhibit B-5, BCUC IR 16.6.1.

<sup>78</sup> Nelson Hydro Final Argument, p. 4.

<sup>79</sup> Nelson Hydro Final Argument, p. 5.

<sup>80</sup> Nelson Hydro Final Argument, p. 5.

<sup>81</sup> Exhibit B-3, BCUC IR 9.1.

BCUC will not be coerced into approving the COSA and RDA by the threat of Nelson Hydro providing inadequate service to its Rural customers.

Regardless of the outcome of Nelson Hydro's COSA and Rate Design proceeding, Nelson Hydro, to the extent that it serves customers outside the boundaries of the City of Nelson (i.e. Rural customers), is a public utility regulated by the BCUC pursuant to the UCA and must provide adequate service to its Rural customers, something it is not presently doing. If additional capital investments are required, whether or not the benefit of the investments accrues equally to the Rural or Urban ratepayers, Nelson Hydro may seek to recover the cost of the investments through rates.

We agree with Nelson Hydro that investing in these projects would significantly reduce the balance in the capital reserve, but in the Panel's view, one purpose of the Capital Reserve is to allow Nelson Hydro to make capital expenditures in advance of receiving the funds from ratepayers, which can reduce volatility in customer rates despite irregular levels of capital expenditures from time to time. Therefore, the Panel considers it appropriate for Nelson Hydro to fund these reliability-related capital expenditures from the capital reserve.

That said, the Capital Reserve also provides a contingency fund for unexpected capital expenditures, and Nelson Hydro has, since the 2018 revenue requirement application (RRA), taken the position that the balance in the capital reserve should be between \$5 million and \$10 million, which it explained in that proceeding allows for an unexpected but foreseeable capital expenditure of up to \$3 million.<sup>82</sup> The combined cost of the Taghum-Voltage Conversion and the New North Shore Substation projects is projected to be \$7,800,000,<sup>83</sup> which would, if incurred in one year, almost entirely deplete the projected balance in the Capital Reserve at the end of 2021 of \$8,171,683. The Panel would be very concerned if the balance in the capital reserve were to fall below \$3 million. Hence, to fund the two projects, Nelson Hydro's rates would need to increase to make additional contributions to keep the Capital Reserve in the range of \$5 million to \$10 million.

The Panel notes that the Taghum-Voltage Conversion and the New North Shore Substation projects are only part of the possible solution to Nelson Hydro's service reliability issues, and that there may be alternatives to these projects with different cost, reliability and other characteristics. Therefore, **the Panel directs that Nelson Hydro file, in its next RRA or in a compliance filing by December 31, 2021 if no RRA is filed by that date, an explanation of how and when it will achieve the service improvements which are anticipated from the Taghum-Voltage Conversion and the New North Shore Substation projects, whether or not Nelson Hydro intends to proceed with these two projects, and if not, what alternatives Nelson Hydro will pursue.**

The Panel recommends that the BCUC monitor Nelson Hydro's progress towards restoring adequate service reliability levels to Rural customers, including Nelson Hydro's vegetation management plan and filing with respect to the Taghum-Voltage Conversion and the New North Shore Substation projects as directed above. If the BCUC is not satisfied that Nelson Hydro is making adequate progress, the Panel recommends the BCUC initiate a hearing under section 25 of the UCA, whereby the BCUC, if it finds the service of a public utility to be "unreasonable, unsafe, inadequate or unreasonably discriminatory," must determine what is "reasonable, safe, adequate and fair service" and order a utility to provide improved service.

---

<sup>82</sup> Nelson Hydro 2018 Rate Application, Order G-124-18, p. 7.

<sup>83</sup> \$4,300,000 plus \$3,500,000; from Exhibit B-3, BCUC IR 9.2.1.

## 2.3 Customer Service Software Upgrade

Nelson Hydro states it has implemented a software upgrade that allows for improved accounting reports and improved meter inventory, and will also allow Nelson Hydro to offer e-billing and an online account payment portal.<sup>84</sup> Nelson Hydro also states that a full cost analysis is yet to be completed, but it is expected that significant savings will be realized.<sup>85</sup> Nelson Hydro adds that the net incremental cost/net savings are not available at this time, and expects to conduct a full cost analysis following completion and reconciliation of the utility's current fiscal year in Spring 2022.<sup>86</sup>

### *Panel Determination*

**The Panel directs that Nelson Hydro file with the BCUC a financial analysis of the customer service software upgrade, including the full cost analysis, cost savings to date and expected future cost savings, by June 30, 2022.**

## 2.4 Bylaw No. 3196

Nelson Hydro states that Bylaw No. 3196 was reviewed and approved by the BCUC pursuant to Order G-6-13, and that given that the BCUC does not regulate the Urban service area this approval could only be with regard to the Rural service area.<sup>87</sup>

BCUC Order G-6-13 states that, pursuant to sections 59, 60 and 61 of the UCA:

1. The Commission approves for the City of Nelson Bylaw 3196, 2012 and Schedule G of Bylaw 3420, 2012.
2. The Commission accepts for filing Electric Utility Amendment Bylaw 3196, 2012 and Schedule G of Bylaw 3420, 2012.

City of Nelson Bylaw 3196 contains, among other things, Nelson Hydro's conditions of service and rates for Nelson Hydro's Rural customers.<sup>88</sup>

In a letter of comment dated April 14, 2021, from Joe Lojpur (Lojpur), a concern was raised whether Bylaw No. 3196 applies to Rural customers. Lojpur submits that the BCUC has inappropriately assumed the Bylaw as applicable across multiple areas of jurisdiction and governance, and that the BCUC approval does not mean the Bylaw is lawful. Lojpur states the BCUC approval has not considered the legislative process towards the Regional District of Central Kootenay (RDCK) Board of Directors must first take into adopting and legally approving any such bylaw. As a result, Lojpur states that the Bylaw is unlawful for Rural customers, and the Application should be rejected.<sup>89</sup>

---

<sup>84</sup> Exhibit B-1, Application, p. 9.

<sup>85</sup> Exhibit B-3, BCUC IR 2.3.

<sup>86</sup> Exhibit B-5, BCUC IR 14.3.

<sup>87</sup> Exhibit B-5, BCUC IR 16.8

<sup>88</sup> Bylaw 3196 2012 is available on the City of Nelson's web site.

<sup>89</sup> Exhibit D-6-2, Lojpur Additional Letter of Comment.



## Nelson Hydro Position

Nelson Hydro submits its terms and conditions of service and customer rate schedules are included in Bylaw No. 3196 because, as a municipally-owned utility, Nelson Hydro's fees and charges may only be established by a bylaw adopted by the City Council, and this is true whether the fees and charges are for a service offered within the municipality or outside of it. Nelson Hydro states that this is a legislative requirement of municipalities set out in section 194 of the *Community Charter*.<sup>90</sup>

Nelson Hydro further submits that it is and always has been operating lawfully in the Rural service area, pursuant to section 13 of the *Community Charter* and the authority of the BCUC. The BCUC properly approved the City's terms and condition and rate schedules in Order G-6-13, and in subsequent adjustments.<sup>91</sup>

## Panel Discussion

The Panel confirms Nelson Hydro's understanding that the BCUC has approved the utility's terms and conditions and rate schedules in Order G-6-13 and in subsequent amendments.

Nelson Hydro, to the extent that it serves customers outside the boundaries of the City of Nelson (i.e. Rural customers), is a public utility regulated by the BCUC pursuant to the UCA. For this reason, the BCUC must approve Nelson Hydro's terms, conditions and rates for Rural customers under sections 59 to 61 of the UCA. In Order G-6-13 the BCUC approved Nelson Hydro's terms, conditions and rates for Rural customers, which were embedded in Bylaw No. 3196.

For clarity, despite the BCUC stating in Order G-6-13 that it approved Bylaw No. 3196, the BCUC does not in fact have jurisdiction to approve municipal bylaws. The BCUC in Order G-6-13 was referring to the terms, conditions and rates for service in Bylaw No. 3196, rather than purporting to approve the bylaw itself.

## 2.5 Timing of Future Rate Applications

Nelson Hydro is requesting in its Application a rate increase of 3.32 percent to be implemented on April 1, 2021 for the remainder of the 2021 calendar year. Nelson Hydro states that this date is consistent with past practice, and results in implementation of the rate increase following the winter season, during which ratepayers are generally incurring higher consumption levels as compared to the remainder of the calendar year.<sup>92</sup>

Nelson Hydro states it appears unlikely that the utility would over-recover revenue if the 3.32 percent rate increase were to continue beyond January 1, 2022. Nelson Hydro notes that, as with previous years, the impact of the previous year's increase will be considered in the preparation of any annual general rate increase for the following year.<sup>93</sup> Nelson Hydro further clarifies that the starting point is to determine what revenues would be generated based on the current rate in effect, multiplied by the projected consumption volumes. Rates would then be adjusted to generate the additional revenues required to cover the projected costs for the fiscal year.<sup>94</sup>

---

<sup>90</sup> Nelson Hydro Final Argument, p. 8.

<sup>91</sup> Nelson Hydro Final Argument, p. 9.

<sup>92</sup> Exhibit B-1, Application, p. 2.

<sup>93</sup> Exhibit B-3, BCUC IR 1.2.

<sup>94</sup> Exhibit B-5, BCUC IR 13.2.



Nelson Hydro also states it is able to set rates based on a 12-month period, and if it were doing so, it would prefer to do from January 1 to December 31 as this would be consistent with the budgeting process used by all other City of Nelson departments. Other benefits include Nelson Hydro being less at risk when incurring costs prior to a rate being approved by the BCUC and avoiding the confusion of referring to two rate increases, one for the annual increase and the other for the 9-month period from April 1 to December 31.<sup>95</sup>

In Nelson Hydro's view, the advantages of the April 1 implementation date for rate changes are that ratepayers experience any rate increase after the winter season when their consumption levels are generally higher, the utility is able to reflect accurately in its budget any requested rate increase by FortisBC for the power purchased by Nelson Hydro, and the financial results of the previous financial year may be more accurately forecasted.<sup>96</sup>

### *Nelson Hydro Position*

Nelson Hydro submits that its preferred implementation date for future rates increases is January 1 rather than April 1, allowing it to align its budgeting process with that of other City departments. Nelson Hydro adds that challenges associated with this approach are manageable and that the approach would prove beneficial in the long term. Nelson Hydro notes that the utility's practice has been to implement Urban and Rural rate changes at the same time, and it expects this practice will continue, although the City Council could in future decide to implement rate changes for Urban customers on a different schedule.<sup>97</sup>

Nelson Hydro anticipates filing a general rate increase application for the 2022 calendar year, owing to anticipated increases in costs from FortisBC and Nelson Hydro significantly under recovering its 2021 operating budget.<sup>98</sup>

### *Panel Discussion*

The Panel supports Nelson Hydro's approach of filing future revenue requirement applications for implementation on January 1. As long as such an application is filed with sufficient lead time before January 1, the BCUC may approve interim rates for implementation on January 1, and then approve permanent rates some time thereafter.

The Panel agrees with Nelson Hydro that implementing a rate change on January 1, with the percentage change applying for the entire calendar year, is less confusing for ratepayers. Further, it aligns the requested rate change with the test period; given that the test period is a year, it is appropriate to apply an annual percentage change rather than a compounded percentage change for a nine-month period as has been Nelson Hydro's practice to date.

---

<sup>95</sup> Exhibit B-3, BCUC IR 1.5.

<sup>96</sup> Exhibit B-3, BCUC IR 1.5.

<sup>97</sup> Nelson Hydro Final Argument, p. 6.

<sup>98</sup> Nelson Hydro Final Argument, p. 7.

**DATED** at the City of Vancouver, in the Province of British Columbia, this

27<sup>th</sup>

day of July 2021.

*Original signed by:*

---

R. I. Mason  
Panel Chair / Commissioner

*Original signed by:*

---

A. K. Fung, QC  
Commissioner

*Original signed by:*

---

T. A. Loski  
Commissioner



**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

**ORDER NUMBER  
G-225-21**

IN THE MATTER OF  
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

Nelson Hydro  
2021 General Rate Increase Application

**BEFORE:**

R. I. Mason, Panel Chair  
A. K. Fung, QC, Commissioner  
T. A. Loski, Commissioner

on July 27, 2021

**ORDER**

**WHEREAS:**

- A. On November 30, 2020, Nelson Hydro filed an application (Application) with the British Columbia Utilities Commission (BCUC) for approval of a general annual rate increase of 2.3 percent for the Rural service area for the 2021 calendar year, pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA). Nelson Hydro proposes the general annual rate increase to become effective on April 1, 2021, which results in a compounded rate increase of 3.32 percent;
- B. Nelson Hydro is owned and operated by the City of Nelson and is excepted from regulation under the *Utilities Commission Act* to the extent it is serving customers within its municipal boundaries. Accordingly, the BCUC's review of the Application pertains solely to Nelson Hydro's non-municipal, or rural, ratepayers;
- C. In the Application, Nelson Hydro requests that the 3.32 percent general rate increase be approved on an interim and refundable basis, effective as of April 1, 2021, pending the outcome of the proceeding;
- D. By Order G-75-21 dated March 15, 2021, the BCUC approved the requested general rate increase of 3.32 percent to become effective on April 1, 2021 on an interim and refundable/recoverable basis;
- E. By Orders G-347-20, G-75-21 and G-125-21 dated December 22, 2020, March 15, 2021 and April 28, 2021 respectively, the BCUC established a regulatory timetable for the review of the Application, which included two rounds of BCUC information requests (IR) and Nelson Hydro's final argument;
- F. The public was invited to participate in the proceeding by submitting a letter of comment or by registering as an interested party. The BCUC received 88 letters of comments from the public and 25 individuals and organizations registered as interested parties; and

- G. The Panel has considered the Application, evidence, and submissions filed in the proceeding and makes the following determinations.

**NOW THEREFORE** pursuant to sections 59 to 61 of the UCA, and for the reasons outlined in the decision issued concurrently with this order, the BCUC orders as follows:

1. Nelson Hydro is approved to increase rates by 3.32 percent for Nelson Hydro's rural customer classes on a permanent basis, effective April 1, 2021.
2. Nelson Hydro is directed to file, within 30 days of the date of this order, the tariff pages reflecting permanent 2021 rates for all Nelson Hydro rural customer classes.
3. Nelson Hydro is directed to escalate its reliability concerns to the senior management of its supplier, FortisBC Inc. (FortisBC), and in the absence of prompt and credible action, to make a formal complaint to the BCUC.
4. Nelson Hydro is directed to file with the BCUC its escalation correspondence with FortisBC's senior management as a compliance filing within 30 days of the date of this order.
5. Nelson Hydro is directed to file with the BCUC within 120 days of the date of this order a five-year vegetation management plan to address how and when the utility will improve service levels through the adoption of improved vegetation management practices and, if necessary, through increased spending levels on vegetation management.
6. Nelson Hydro is directed to file, in its next revenue requirements application (RRA) or in a compliance filing by December 31, 2021 if no RRA is filed by that date, an explanation of how it will achieve the service improvements which are anticipated from the Taghum-Voltage Conversion and the New North Shore Substation projects, and whether or not Nelson Hydro intends to proceed with these projects and if not, what alternatives Nelson Hydro will pursue to achieve service improvements to its rural customers.
7. Nelson Hydro is directed to file with the BCUC a financial analysis of the customer service software upgrade, including the full cost analysis, cost savings to date and expected future cost savings, by June 30, 2022.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 27<sup>th</sup> day of July 2021.

BY ORDER

*Original signed by:*

R. I. Mason  
Commissioner

IN THE MATTER OF  
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

Nelson Hydro  
2021 General Rate Increase

**EXHIBIT LIST**

<b>Exhibit No.</b>	<b>Description</b>
<i>COMMISSION DOCUMENTS</i>	
A-1	Letter dated December 22, 2020 – Appointing the Panel for the review of Nelson Hydro 2021 General Rate Increase Application
A-2	Letter dated December 22, 2020 – BCUC Order G-347-20 establishing a regulatory timetable
A-3	Letter dated January 19, 2021 – BCUC request to Nelson Hydro for Financial Model Spreadsheet
A-4	Letter dated February 4, 2021 – BCUC Information Request No. 1 to Nelson Hydro
A-5	Letter dated March 15, 2021 – BCUC Order G-75-21 approving interim rate and establishing a further regulatory timetable
A-6	Letter dated March 30, 2021 – BCUC Information Request No. 2 to Nelson Hydro
A-7	Letter dated April 28, 2021 – BCUC Order G-125-21 establishing a further regulatory timetable

## **COMMISSION STAFF DOCUMENTS**

- A2-1 Letter dated February 4, 2021 – BCUC Staff submitting Nelson Hydro 2020 Virtual Open House Presentation dated December 10, 2020

## **APPLICANT DOCUMENTS**

- B-1 **NELSON HYDRO** - 2021 General Rate Increase dated November 30, 2020
- B-2 Letter dated January 25, 2021 - Nelson Hydro submitting Financial Model Spreadsheets - Attached
- B-3 Letter dated February 23, 2021 – Nelson Hydro submitting response to BCUC Information Request No. 1
- B-4 Letter dated March 11, 2021 – Nelson Hydro submitting response on Letters of Comment
- B-5 Letter dated April 13, 2021 – Nelson Hydro submitting responses to BCUC Information Request No. 2

## **INTERESTED PARTY DOCUMENTS**

- D-1 **ZINKAN, CHARLIE (ZINKAN)** – Submission dated December 29, 2020 Request for Interested Party Status
- D-1-1 Zinkan - Letter of Comment dated February 27, 2021
- D-2 **GAGNON, PHILIP (GAGNON)** – Submission dated January 12, 2021 Request for Interested Party Status
- D-3 **IRVINE, ROBYN (IRVINE)** – Submission dated January 15, 2021 Request for Interested Party Status
- D-3-1 Irvine - Letter of Comment dated January 18, 2021
- D-4 **BALFOUR & DISTRICT BUSINESS & HISTORIC ASSOCIATION (BALFOUR DISTRICT)** – Submission dated January 18, 2021 Request for Interested Party Status by Janice Cooper

- D-5        **RESIDENTIAL CONSUMER INTERVENOR GROUP (RCIG)** – Submission dated January 25, 2021  
Request for Interested Party Status by Sam Mason, Midgard Consulting
- D-5-1      RCIG - Letter of Comment dated March 4, 2021
- D-6        **LOJPUR, J. (LOJPUR)** – Submission dated January 25, 2021 Request for Interested Party Status
- D-6-1      Lojpur - Letter of Comment dated March 4, 2021
- D-6-2      Lojpur – Additional Letter of Comment dated April 14, 2021
- D-7        **GREEN, A. (GREEN)** – Submission dated January 25, 2021 Request for Interested Party Status
- D-8        **YANKE, M. (YANKE)** - Submission dated January 28, 2021 Request for Interested Party Status
- D-8-1      YANKE - Letter of Comment dated February 23, 2021
- D-8-2      YANKE – Additional Letter of Comment dated May 4, 2021
- D-9        **MACPHERSON, W. (MACPHERSON)** - Submission dated January 28, 2021 Request for Interested  
Party Status
- D-10       **LAIRD, M. (LAIRD)** - Submission dated January 28, 2021 Request for Interested Party Status
- D-10-1     Laird - Letter of Comment dated January 25, 2021
- D-11       **McCULLOCH, D. (McCULLOCH)** - Submission dated February 8, 2021 Request for Interested  
Party Status
- D-11-1     McCulloch – Letter of Comment dated February 5, 2021
- D-12       **BEERBOWER, J. (BEERBOWER)** - Submission dated February 14, 2021 Request for Interested  
Party Status
- D-13       **YASEK, T. (YASEK)** - Submission dated February 14, 2021 Request for Interested Party Status
- D-13-1     Yasek– Letter of Comment dated February 9, 2021
- D-14       **REGIONAL DISTRICT OF CENTRAL KOOTENAY (RDCK)** - Submission dated February 22, 2021  
Request for Interested Party Status by S. Horn
- D-15       **MUNROE, R. (MUNROE)** - Submission dated February 22, 2021 Request for Interested Party  
Status
- D-15-1     Munroe, R. – Letter of Comment dated March 4, 2021
- D-16       **REIHL, B. (RIEHL)** - Submission dated February 22, 2021 Request for Interested Party Status
- D-16-1     Riehl - Letter of Comment dated February 27, 2021

- D-17      **TENNANT, S. (TENNANT)** - Submission dated February 25, 2021 Request for Interested Party Status
- D-18      **KLEIN, S. (KLEIN)** - Submission dated February 25, 2021 Request for Interested Party Status
- D-18-1    Klein, S. - Letter of Comment dated February 25, 2021
- D-19      **CHESHIRE, B.** - Submission dated February 28, 2021 Request for Interested Party Status
- D-19-1    Cheshire, B. - Letter of Comment dated February 28, 2021
- D-20      **CHESHIRE, L.** - Submission dated February 28, 2021 Request for Interested Party Status
- D-20-1    Cheshire - Letter of Comment dated February 28, 2021
- D-21      **DAWN** - Submission dated March 2, 2021 Request for Interested Party Status
- D-22      **SHARPE, D. (SHARPE)** - Submission dated March 2, 2021 Request for Interested Party Status
- D-22-1    Sharpe – Letter of Comment Dated March 2, 2021
- D-23      **TAYLOR, J. (TAYLOR)** - Submission dated March 2, 2021 Request for Interested Party Status
- D-23-1    Taylor, J. – Letter of Comment dated March 1, 2021
- D-24      **KOZAK, D. (KOZAK)** - Submission dated March 3, 2021 Request for Interested Party Status
- D-24-1    Kozak – Letter of Comment dated March 3, 2021
- D-25      **SNIVELY, J. (SNIVELY)** - Submission dated March 2, 2021 Request for Interested Party Status
- D-25-1    Snively – Letter of Comment dated March 2, 2021
- D-26      **BRITISH COLUMBIA OLD AGE PENSIONERS’ ORGANIZATION, ACTIVE SUPPORT AGAINST POVERTY, COUNCIL OF SENIOR CITIZENS’ ORGANIZATIONS OF BC, AND THE TENANT RESOURCE AND ADVISORY CENTRE (BCOAPO)** - Submission dated March 3, 2021 Request for Interested Party Status by Leigha Worth and Irina Mis



## LETTERS OF COMMENT

- E-1 Postnikoff, C.– Letter of Comment dated January 19, 2021
- E-1-1 Postnikoff, C.– Additional Letter of Comment dated February 3, 2021
- E-1-2 Postnikoff, C.– Additional Letter of Comment dated March 12, 2021
- E-1-3 Postnikoff, C.– Additional Letter of Comment dated May 5, 2021
- E-2 Whalley, M. – Letter of Comment dated January 21, 2021
- E-3 McGillvrey, M. – Letter of Comment dated January 21, 2021
- E-4 Green, A. – Letter of Comment dated January 21, 2021
- E-5 Reese, T. – Letter of Comment dated January 20, 2021
- E-6 Haynes, K. – Letter of Comment dated January 21, 2021
- E-7 Removed now Exhibit D-10-1
- E-8 REMOVED
- E-9 McLeod, B. – Letter of Comment dated January 31, 2021
- E-10 Hale, J. – Letter of Comment dated January 28, 2021
- E-11 Haynes, S. – Letter of Comment dated February 1, 2021
- E-12 O’Dowd-Kuhn – Letter of Comment dated February 1, 2021
- E-13 Ellison, S. – Letter of Comment dated January 26, 2021
- E-14 Sowiak, D. – Letter of Comment dated February 3, 2021
- E-15 White, D. – Letter of Comment dated January 25, 2021
- E-16 Removed now Exhibit D-11-1
- E-17 Chapman, M. - Letter of Comment dated February 8, 2021
- E-18 Burton, C. – Letter of Comment dated January 29, 2021
- E-19 Doyle, J. – Letter of Comment dated February 10, 2021
- E-19-1 Doyle, J. – Additional Letter of Comment dated February 12, 2021
- E-20 Frye, R. and Porter, E. – Letter of Comment dated February 16, 2021

- E-21 Murphy, J. – Letter of Comment dated February 8, 2021
- E-21-1 Murphy, J. – Additional Letter of Comment dated February 22, 2021
- E-22 Wiseman, R. and Lino, M. – Letter of Comment dated February 16, 2021
- E-23 Howard, R. – Letter of Comment dated February 16, 2021
- E-24 Haggard, W. and R. – Letter of Comment dated February 11, 2021
- E-25 Geary, W. – Letter of Comment dated January 31, 2021
- E-26 Gehr, H. and Wright, A. – Letter of Comment dated February 18, 2021
- E-27 Smienk, J. – Letter of Comment dated February 22, 2021
- E-28 Thorley, J. – Letter of Comment dated February 22, 2021
- E-29 Gulayets, J. – Letter of Comment dated February 22, 2021
- E-30 Nishio, M. – Letter of Comment dated February 22, 2021
- E-31 LePape, K. – Letter of Comment dated February 22, 2021
- E-32 Reid, P. – Letter of Comment dated February 24, 2021
- E-33 Lawrence, J. – Letter of Comment dated February 24, 2021
- E-34 Belli-Bivar, C. - Letter of Comment dated February 25, 2021
- E-35 Weese, G. - Letter of Comment dated February 17, 2021
- E-35-1 Weese, G. – Additional Letter of Comment dated February 24, 2021
- E-36 Erickson, E. - Letter of Comment dated February 22, 2021
- E-37 Crichton, D. - Letter of Comment dated February 25, 2021
- E-38 Iwanik, L. - Letter of Comment dated February 26, 2021
- E-39 Demers, J. - Letter of Comment dated February 25, 2021
- E-40 McMullen, D. - Letter of Comment dated February 28, 2021
- E-41 Schlichting, D. – Letter of Comment dated March 1, 2021
- E-42 Vishloff, B. – Letter of Comment dated February 27, 2021
- E-43 LeFebour, S. – Letter of Comment dated February 27, 2021

- E-44 Etelamaki, A. – Letter of Comment dated March 1, 2021
- E-45 Ranks, D. – Letter of Comment dated March 1, 2021
- E-46 Neufeld, V. – Letter of Comment dated March 1, 2021
- E-47 Seeger, H. – Letter of Comment dated February 27, 2021
- E-48 Demers, M. – Letter of Comment dated February 27, 2021
- E-49 Morley, R. – Letter of Comment dated February 26, 2021
- E-50 McIntyre, C. – Letter of Comment dated March 1, 2021
- E-51 Price, H. – Letter of Comment dated March 1, 2021
- E-52 Morrison, S. – Letter of Comment dated March 2, 2021
- E-53 Morrison, I. – Letter of Comment dated March 2, 2021
- E-54 Kane, K. – Letter of Comment dated March 2, 2021
- E-55 Paradis, R. - Letter of Comment dated March 2, 2021
- E-56 Annunziello, B. – Letter of Comment Dated March 2, 2021
- E-57 Malone, A. – Letter of Comment Dated February 25, 2021
- E-58 Demers, C. – Letter of Comment Dated March 2, 2021
- E-59 Boalch, - Letter of Comment Dated March 3, 2021
- E-60 Demers, James – Letter of Comment dated March 2, 2021
- E-61 Held, T. – Letter of Comment dated March 3, 2021
- E-62 Roos, J. – Letter of Comment dated March 4, 2021
- E-63 Clare, C.– Letter of Comment dated March 4, 2021
- E-64 Krolak, J. – Letter of Comment dated March 4, 2021
- E-65 Jonker, D. – Letter of Comment dated March 4, 2021
- E-66 Shepherd, K. – Letter of Comment received March 9, 2021
- E-67 Miller, V. – Letter of Comment received March 12, 2021
- E-68 Hawkins, C. – Letter of Comment dated March 24, 2021