



VIA EFILE

April 10, 2017

NELSON HYDRO 2017 RATE APPLICATION
EXHIBIT A-4

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

Dear Mr. Love:

Re: Nelson Hydro
Project No. 3698904 / G-27-17
2017 Rate Application

Further to British Columbia Utilities Commission Order G-47-17 establishing the regulatory timetable with respect to the above noted application, enclosed please find the Commission's Information Request No. 1. In accordance with the regulatory timetable, please file your responses with the Commission on or before Thursday, April 27, 2017.

Yours truly,

Original signed by:

Patrick Wruck

SW/dg
Enclosure

**Nelson Hydro
 2017 Rate Application**

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A. ELECTRICITY USAGE

- 1.0 **Reference: ELECTRICITY USAGE**
Exhibit B-2, Supplementary Information Filing, Questions 1.1, 2.1
Rural and urban energy consumption

Nelson Hydro states in response to Question 1.1 of the Supplementary Information Filing that as of March 15, 2017 it has total customers of 10,376, of which 4,404 customers are Rural (non-municipal).

Nelson Hydro also provides the following breakdown of customers:

E1 Municipal Accounts	86
F2 Commercial Flat Rural	65
F3 Commercial Flat Urban	35
C4 Large Commercial Rural	37
C1 Large Commercial Urban	111
A3 Residential Rural	4074
A1 Residential Urban	4960
B4 Small Commercial Rural	208
B1 Small Commercial Urban	741
G4 Outdoor Lighting Rural	20
G3 Outdoor Lighting Urban	39

In response to Question 2.1 of the Supplementary Information Filing, Nelson Hydro provides the following revenue and sales information for 2016:

Domestic Electricity Sales – 2016

	Customers	Revenue (\$)	Sales (KwH)
		Actual	Actual
City of Nelson (urban)	6,095	10,168,662	92,480,404.59
City of Nelson (rural)	4,176	6,679,968.15	63,249,040.21

- 1.1 Please further breakdown the above table showing the domestic electricity sales for 2016 for each of the urban and rural customer classes. Please provide both the revenue (\$) and sales (kWh) for each urban and rural customer class.

On the Nelson Hydro website, there is a memorandum titled “Electric Utility Rate Comparisons” dated February 1, 2017. This memorandum is provided as Attachment 1 to the Commission’s Information

Request (IR) No. 1 for ease of reference. Page 3 of the memorandum shows the average energy consumption for rural and urban residential customers.

- 1.2 Please confirm, or explain otherwise, that based on the chart on page 3 of the memorandum, the average consumption for rural residential customers in 2016 was almost 400 kWh/month higher than for urban residential customers.
 - 1.2.1 If confirmed, please explain the likely causes of the rural residential customers' higher electrical consumption.
- 1.3 Has Nelson Hydro ever conducted a Residential End Use survey for rural customers? Please discuss the costs and benefits of obtaining this information.

On page 2 of the memorandum, Nelson Hydro provides a chart comparing the "electric bills across BC" for 2016.

- 1.4 Please confirm, or explain otherwise, that the chart on page 2 refers to residential customers' monthly bills only.
- 1.5 Please recreate the chart on page 2 of the memorandum using only rural residential customer bill information. Please also include the bill amounts in numerical form to accompany the information depicted in the revised chart.
- 1.6 What percentage of rural residential customers is not captured in the monthly consumption range of 500 through 1500 kWh/month? Please separately identify the percentage of rural residential customers whose average consumption is less than 500 kWh/month and whose average consumption is more than 1500 kWh/month.

B. REVENUE REQUIREMENTS

2.0 Reference: REVENUE REQUIREMENTS Exhibit B-1, Application, p. 2; Exhibit B-2, Question 9.1, Table 2 Historical budget versus actual information

- 2.1 Please re-create Table 2 in Question 9.1 of the Supplementary Information Filing to show both the budget/forecast and actual results for each of the years 2014, 2015 and 2016. Please provide explanations for any variances between budget/forecast and actual results for each year.

On page 2 of the Application, Nelson Hydro states: "Power Purchase costs are expected to decrease slightly compared to 2016 even though there are wholesale rate increases by FortisBC of 2.76% effective Jan 01. This is because we forecast a lower volume of energy purchase and demand charges from FortisBC in the 2017 budget."

- 2.2 Please confirm, or explain otherwise, that the cost of power purchased from FortisBC annually is determined based on FortisBC's Commission-approved rates for the rate schedule applicable to Nelson Hydro.
- 2.3 In addition to the historical budget/forecast versus actual power purchase expenses provided in response to BCUC IR 2.1 above for the years 2014 through 2016, please provide the variance in the budget versus actual volume of energy purchased and in the unit cost of energy purchased in each year.

- 2.4 In Nelson Hydro’s experience over the past ten years, has there been a high degree of variability in the amount of actual power purchased from FortisBC compared to the budgeted amount? Please discuss.
- 2.5 How would Nelson Hydro characterize the level of uncertainty regarding its annual forecast of power purchase expense from FortisBC? Please explain.
- 2.6 How are annual variances between forecast and actual power purchase expenses treated/accounted for? Please explain.

3.0 **Reference: OPERATING EXPENSES**
Exhibit B-2, Question 9.1
Metering and Operation expenses

- 3.1 Please provide a more detailed description of the “Metering” expense of \$97,454 and the “Operation” expense of \$500,450.
- 3.2 Please explain why the Metering and Operation expenses have increased by 9.56 percent and 8.13 percent, respectively, for 2017.

4.0 **Reference: OPERATING EXPENSES**
Exhibit B-2, Question 9.1
Share of General Administration expenses

- 4.1 Please explain how the allocation of “General Administration” expenses is calculated by the City of Nelson and how this allocation is applied to Nelson Hydro.
- 4.2 Please provide a description of the types of expenses included within “General Administration.”
- 4.3 Please explain why the General Administration expenses have increased by 3.5 percent in 2017. Is the increase primarily a result of an increase in the allocation percentage to Nelson Hydro or in an overall increase to the pool of General Administration costs? Please discuss.

5.0 **Reference: TRANSFERS TO CITY GENERAL**
Exhibit B-2, Question 10.1
Dividend payment to the City of Nelson

In response to Question 10.1 of the Supplementary Information Filing, Nelson Hydro states that the Transfers to City General expense, which totals \$3,448,266 for 2017, is in part composed of a \$2,700,000 dividend payment to the City of Nelson. Nelson Hydro further states that the dividend payment is approximately 16 percent of Nelson Hydro’s sales.

- 5.1 How is the amount of the dividend payment determined? For instance, is it always a percentage of sales or is it based on some other calculation? Please explain.
- 5.2 Please explain why Nelson Hydro is required to pay a dividend to the City of Nelson annually.
- 5.3 Please explain how the dividend payment benefits Nelson Hydro’s non-municipal customers and why Nelson Hydro considers it appropriate to recover this dividend payment from non-municipal customers.

6.0 **Reference: TRANSFERS TO CITY GENERAL**
Exhibit B-2, Question 10.1
Water License reserve payment

Nelson Hydro states in response to Question 10.1 of the Supplementary Information Filing that included

in the Transfers to City General expense for 2017 is an amount of \$658,266 for the “Water License reserve payment.” Nelson Hydro further states that this payment “recognizes the benefit of a water license agreement with BC Hydro to the City of Nelson.”

6.1 Please provide more information on the water license agreement, including the following:

- Who are the parties to the water license agreement? Is the agreement between British Columbia Hydro and Power Authority (BC Hydro) and the City of Nelson, or BC Hydro and Nelson Hydro, and are there other parties involved?
- The terms of the water license agreement, including each party’s obligations and benefits.
- The nature of the benefit accruing to the City of Nelson and how the annual amount of the payment from Nelson Hydro to the City of Nelson is determined.

6.2 Please clarify why a benefit to the City of Nelson resulting from a water license agreement with BC Hydro results in a payment from Nelson Hydro to the City of Nelson.

6.3 Given Nelson Hydro’s statement that the benefit of the water license agreement is between BC Hydro and the City of Nelson, how is this benefit being realized by and/or shared with non-municipal customers?

7.0 **Reference: TRANSFERS TO CITY GENERAL**
Exhibit B-2, Question 10.1
Contribution to the Community Complex

7.1 Please provide further details on the \$90,000 contribution to the Community Complex paid by Nelson Hydro to the City of Nelson, including what the purpose of the payment is and how the funds are being used.

7.2 Please explain why it is appropriate for Nelson Hydro to recover this \$90,000 contribution from non-municipal ratepayers.

8.0 **Reference: OPERATING EXPENSES**
Exhibit B-2, Questions 9.1, 10.1
Payments/transfers/contributions to the City of Nelson

8.1 Please clarify if there are any other payments, contributions or transfers of funds being provided to the City of Nelson from Nelson Hydro beyond the items identified in the Transfers to City General amount of \$3,448,266 and Nelson Hydro’s share of General Administration expenses in the amount of \$117,857.

9.0 **Reference: REVENUE**
Exhibit B-2, Question 9.1
Revenue - Other

9.1 Please describe the types of revenue included within the “Revenue – Other” line item.

9.2 Please explain why “Revenue – Other” is forecast to increase by 5.10 percent in 2017.

10.0 **Reference: TRANSFER TO CAPITAL RESERVE
Exhibit B-2, Questions 7.1, 11.1
Depreciation expense**

In response to Question 7.1 of the Supplementary Information Filing, Nelson Hydro states the following:

Depreciation is expensed in the year on a straight-line basis over the estimated useful life of the asset, commencing in the year the asset is put into use. Amortization is recovered from electrical customers through transfers to the electrical capital reserve, which in turn funds the replacement of capital assets which have reached the end of their useful life (ie fully amortized).

- 10.1 Please confirm, or explain otherwise, that Nelson Hydro is using the terms “depreciation” and “amortization” interchangeably in this response.
- 10.2 Please provide the 2017 depreciation expense amount.

In response to Question 11.1 of the Supplementary Information Filing, Nelson Hydro states the following: “Each year Nelson Hydro transfers net operating income (revenue – expenses) to the Capital reserve. The reserve is then used to fund current and future capital projects. Nelson Hydro has gone through several capital intensive years and is working to rebuild its capital reserve to sustainable levels.”

- 10.3 Please confirm, or explain otherwise, that the “capital reserve” referred to in Nelson Hydro’s responses to Questions 7.1 and 11.1 are the same reserve.
- 10.3.1 If confirmed, please clarify why the responses provided in Questions 7.1 and 11.1 appear to describe different methods for calculating the amount transferred to the capital reserve.
- 10.4 If the depreciation expense in a particular year is greater than Nelson Hydro’s net operating income, please explain whether the full depreciation expense would be recovered from customers in that year and thus transferred to the capital reserve.
- 10.5 Given Nelson Hydro’s description of the “Transfers to Capital Reserve” provided in response to Question 11.1, have there been years in which the amount transferred to the Capital Reserve has been greater than the depreciation expense for that year?
- 10.5.1 If yes, please provide the number of times this situation has occurred in the past five years and the amounts by which the transfers have exceeded the annual depreciation expense.
- 10.6 Please explain why Nelson Hydro considers it appropriate to collect funds from customers in advance of specifically planned capital projects (i.e. to accumulate funds in a capital reserve) as opposed to raising funds for capital projects through debt/equity financing.
- 10.6.1 Is Nelson Hydro aware of other electrical utilities in BC that utilize a capital reserve to fund future capital projects? Please explain.
- 10.7 Please explain what Nelson Hydro and/or the City of Nelson is doing with the funds collected in the capital reserve annually and whether or not the use of these funds is benefiting both municipal and non-municipal ratepayers.
- 10.8 Please explain how Nelson Hydro prioritizes capital project spending. As part of this response, please describe the capital projects undertaken/completed by Nelson Hydro in the past five years and why these projects were selected.

- 10.8.1 Of the capital projects undertaken and completed in the past five years, how many directly benefit both municipal and non-municipal ratepayers?
- 10.9 Please describe the capital projects in the past five years, if any, which were planned to be undertaken but were deferred. For each deferred project, please explain why it was deferred.
- 10.10 Please discuss Nelson Hydro's capital spending plans for the next three years. Are there any major projects planned to be undertaken? If yes, please describe these projects and what the drivers are for these projects.

C. RATE STRUCTURE

- 11.0 **Reference: RATE STRUCTURE
Exhibit B-2, Question 9.1, Table 2
Fixed versus variable costs**

- 11.1 What percentage of Nelson Hydro's costs is fixed compared to variable? Please support this response by classifying each expense contained in Table 2 in Question 9.1 of the Supplementary Information Filing as either fixed or variable.
- 11.2 What percentage of the Residential Rural Rates (i.e. Rate A-3) is fixed versus variable based on the basic, demand and energy charge amounts?

- 12.0 **Reference: RATE STRUCTURE
Exhibit B-1, Schedule B, Service Descriptions and Rates
Rate A-3 – Residential Service Rates – Rural**

- 12.1 Please explain the rationale underlying the inclusion of both a Basic Charge and a Demand Charge as part of the Residential customers' rate structure.
- 12.2 Please explain the meaning of the "demand charge" as it is applied to residential customers. In particular, what types of costs is this charge meant to recover from residential customers?
- 12.3 What percentage of Rural Residential customers in 2016 exceeded the 20 kW threshold and therefore were charged the Demand Charge?

- 13.0 **Reference: RATE STRUCTURE
Exhibit B-2, Questions 4.1, 5.1
Cost of service analysis**

In response to Questions 4.1 and 5.1 of the Supplementary Information Filing, Nelson Hydro states that it is "in the midst of working on a COSA (cost of service analysis) which has not yet been finalized as of yet."

- 13.1 Please provide more details on the COSA, including what is being included in this analysis and if, as part of this analysis, Nelson Hydro will be analyzing the rate design for its various customer classes, including municipal and non-municipal customers.
- 13.2 Does Nelson Hydro intend to file a rate design application with the Commission? If yes, please discuss when this application may be filed. If no, please explain why not.
- 13.3 What potential outcomes does Nelson Hydro anticipate from the COSA? Please discuss.



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MEMORANDUM

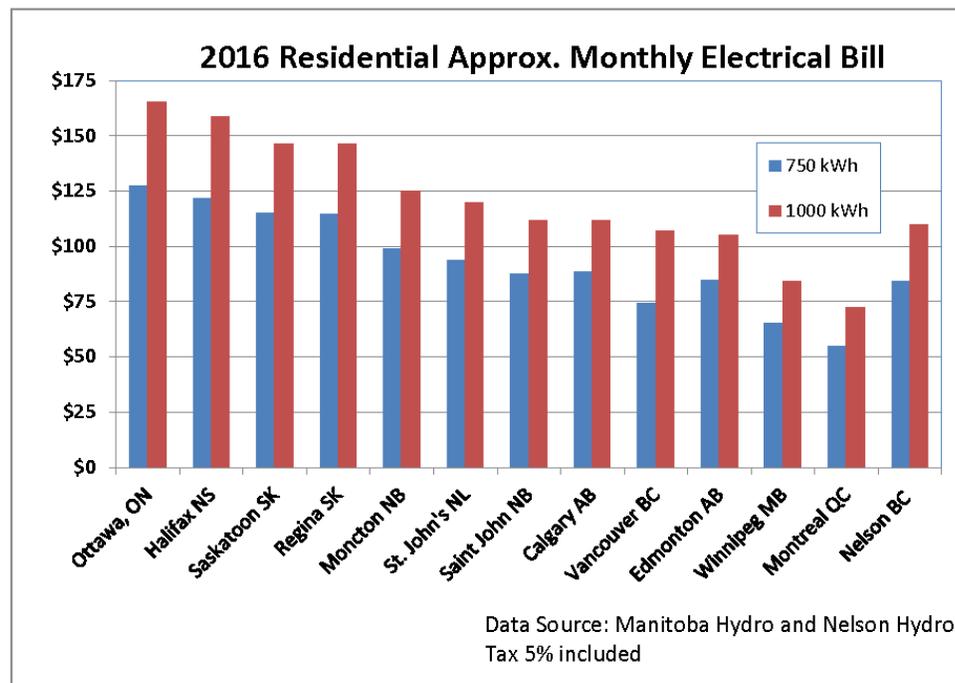
DATE: Feb 01, 2017

SUBJECT: Electric Utility Rate Comparisons

How do Nelson Hydro Rates compare to other areas?

Chart comparing electric bills across Canada.

- Chart show monthly average for comparison, however, many utilities including Nelson Hydro bill on a bi-monthly basis.
- It can be difficult to compare electric rates directly due to differing basic charge and flat vs inclining block rate structures. The chart compares what the bill would be for a consumption level of 750 and 1000 kWh.
- Homes in Nelson Hydro service use in the range of 700 = 1,100 kWh / month

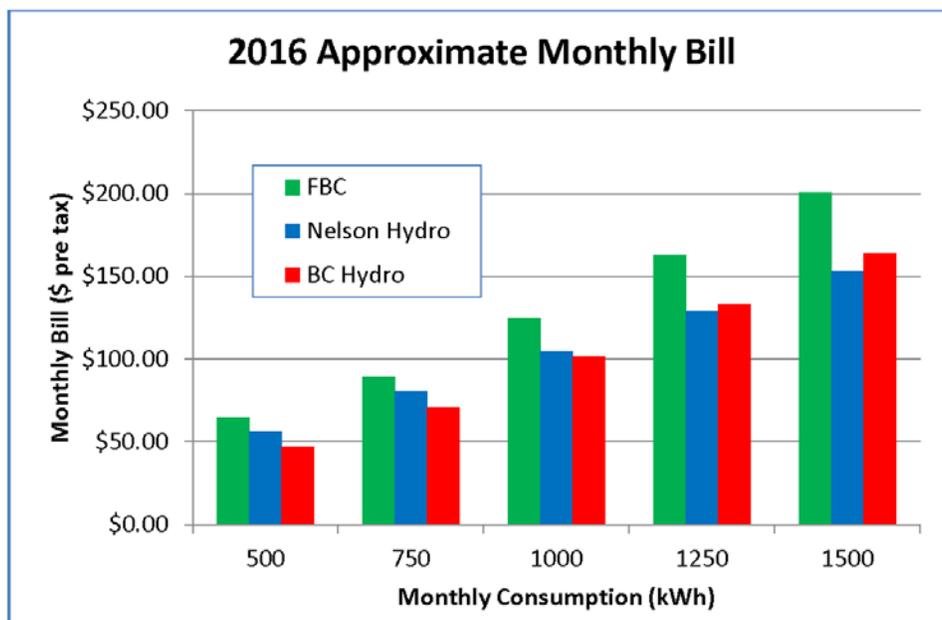




MEMORANDUM

Chart comparing electric bills across BC

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- Chart compares what the bill would be for monthly consumption of 500 through to 1500 kWh / month.



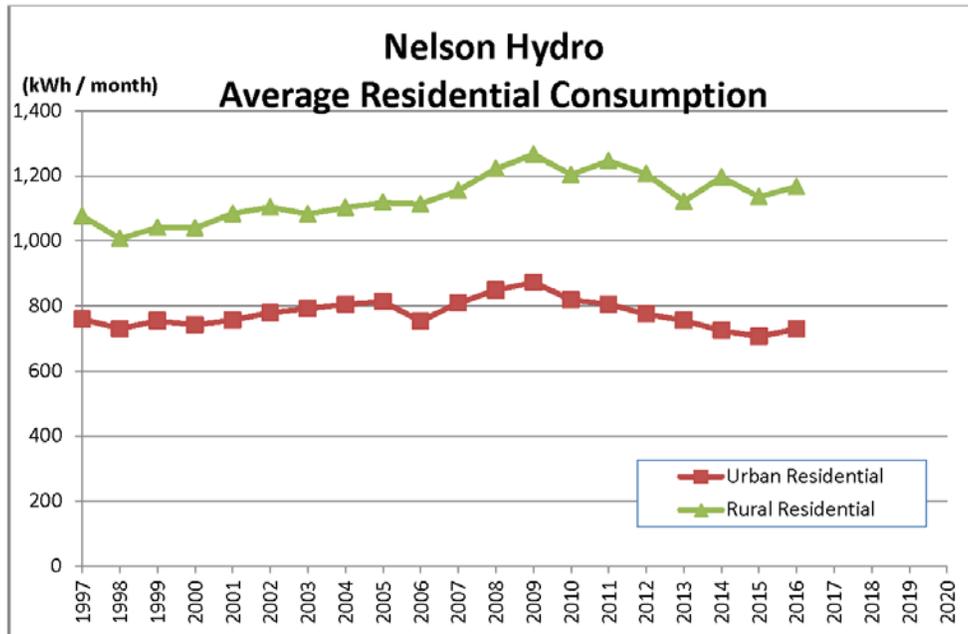


MEMORANDUM

Residential Energy Consumption Trends

Average consumption has been trending downward due to more efficient appliances, greater awareness of energy conservation, Eco Save Energy efficiency program, and milder winters.

Many Electric Utilities are reporting declining energy use per customer.



Customers who are interested in reducing their energy consumption (electricity and / or natural gas) should contact Nelson Hydro's energy efficiency program. The program is called EcoSave and can be accessed through the phone and e-mail links on the Nelson Hydro webpage.