

## Yukon Electrical Company Limited 2016-17 General Rate Application

### Yukon Utilities Board (YUB) Information Request Round 1 to Yukon Electrical Company Limited (YECL)

#### YUB-YECL-1

**Reference:** YECL 2016-17 General Rate Application (Application), Section 2, Sales and Revenue

**Issue/sub-issue:** 2015 Actual sales and 2016 to 2017 Forecast sales

**Quote:**

	Actual			Test Period	
	2013	2014	2015	2016	2017
Residential	148,780	147,253	148,605	147,111	151,617
Commercial	159,322	154,709	155,346	152,187	153,336
Street Lights	3,719	3,765	3,886	3,944	4,008
Private Lights	551	544	519	492	472
<b>Total Retail Primary</b>	<b>312,372</b>	<b>306,272</b>	<b>308,356</b>	<b>303,735</b>	<b>309,433</b>
Secondary Sales	3,959	5,415	7,030	9,429	9,429
Wholesale Sales	356	495	430	427	427
<b>Total Company</b>	<b>316,687</b>	<b>312,182</b>	<b>315,816</b>	<b>313,592</b>	<b>319,289</b>

Source: Application, Table 1, page 2-1

“ATCO Electric Yukon forecasts its total primary non-industrial sales in 2016 to decrease 1.5% and increase 1.9% in 2017.”<sup>1</sup>

“Table 3 shows the 2015 annual average customer numbers and the associated energy sales by community and for residential and commercial classes in order of community customer’s share.”<sup>2</sup>

#### Request:

- (a) Please explain why the Total AEY Energy (MWh), residential (149,653) and commercial (156,294), shown in Table 3<sup>3</sup> of the application, does not coincide with the totals shown in Schedule 2.1 of YECL’s GRA schedules workbook — respectively 148,605 and 155,346 for residential and commercial customers.
- (b) Please explain why the total number of YECL customers (residential and commercial) shown in Table 3 does match the number of customers (average during the year) shown in Schedule 2.1; and the 2015 actual residential and commercial shown above do not match those shown in Table 3 of the application.
- (c) Please explain the factors contributing to the forecast decrease in sales in 2016 and the subsequent increase in sales for 2017. In the explanation, please provide details as to
  - a. What is contributing to the decrease in Commercial sales, which make up 68 percent of the decrease in total retail primary sales (4,622 MWh) in 2016.

<sup>1</sup> Application, page 2-1, lines 6 to 7.

<sup>2</sup> Application, page 2-4, lines 9 to 12.

<sup>3</sup> Application, page 2-4.

- b. What is contributing to the increase in Residential sales, which make up 79 percent of the increase in total retail primary sales (5,699 MWh) in 2017.
- (d) Please explain why YECL’s secondary and wholesale sales, respectively 9,429 and 427 MWh, are forecast to remain constant during the test period.

## YUB-YECL-2

### Reference:

**Application, Introduction, pages 1-4 to 1-5.**

### Issue/sub-issue:

**Proposed “Board Orders or Legislative Provisions” deferral account**

### Quote:

“ATCO Electric Yukon seeks the ability to flow-through (dollar for dollar) costs related to Board Orders or legislative provisions resulting in changes to the rules or parameters that ATCO Electric Yukon operates under, or that bear on the nature and extent of ATCO Electric Yukon’s obligations as a regulated utility and which impact its 2016-2017 revenues or revenue requirement.

“ATCO Electric Yukon submits that this deferral account is required in light of the various initiatives currently being considered and implemented throughout the Yukon (for example – IPP Policy for Standard Offer Price). In addition, this deferral account would address any future Board orders or legislative provisions that impact ATCO Electric Yukon’s ability to recover [its] prudently incurred costs and opportunity to earn a reasonable return (for example – any future tax or levy to address environmental emissions).”

### Request:

- (a) Please provide the purpose of and a full description of what the IPP Policy for Standard Offer Price is. Please indicate and give examples of how this policy has and will impact YECL and its rate payers during the test period.
- (b) Please describe how the deferral account would work. Specifically address whether YECL, would come before the Board for permission to address certain shortfalls which may arise in future because of Board orders or legislative provisions?
- (c) Have Board orders impacted YECL’s revenue requirement set for a test year without a new subsequent proceeding? If so, please indicate which order(s) and describe how YECL was impacted.
- (d) Have any legislative provisions impacted YECL’s revenue requirement set for a test year without a new subsequent proceeding? If so, please indicate which legislative provision(s) and describe how YECL was impacted.

### YUB-YECL-3

**Reference:** Application, Section 1, Introduction, page 1-6.

**Issue/sub-issue:** Staff Positions

**Quote:** “The following table provides the 2015 FTE’s approved in the 2013-2015 GRA to the actual FTEs at the end of 2015 as well as the forecast FTEs at the end of the 2017 test period. As shown, ATCO Electric Yukon is forecasting no increase over the approved 2015 FTE’s.”

**Preamble:** The Board notes that YECL is proposing a new Engineering Technologist position for 2016.

#### **Request:**

- (a) Please explain why there is a need for the new Engineering Technologist position for 2016.
- (b) Please indicate which of the approved positions were vacant over the previous 2013-15 test period and why.

### YUB-YECL-4

**Reference:** Application, Section 2, Sales and Revenue, pages 2-1 to 2-2.

**Issue/sub-issue:** Weather-normalized actuals

**Quote:** “Table 1 below summarizes ATCO Electric Yukon’s energy sales forecast for 2016 and 2017 by customer class, along with the corresponding actuals for 2013, 2014 and 2015 and 2015 updated weather-normalized actuals.”

...

“Table 2 below provides ATCO Electric Yukon’s total primary energy sales forecasts filed as part of the 2008-2009 GRA and the 2013-2015 GRA, along with the Board approved forecasts and compares them to the total actual weather-normalized sales.”

#### **Request:**

- (a) Table 1 does not provide 2015 updated weather-normalized actuals as suggested in line 5, page 2-1. Please provide the updated weather-normalized actuals.
- (b) Please explain the difference between “actual weather-normalized sales” and “updated weather-normalized actuals.” Please provide example calculations underpinning the data in Table 1 (updated weather-normalized actuals) and Table 2 (actual weather-normalized sales), for residential customers in 2015. Provide the calculations in an Excel workbook with formula intact.
- (c) Please provide an explanation regarding the process that YECL uses to calculate the weather-normalized actual loads for 2015. Please provide accompanying calculations in a spreadsheet with formulae intact that aligns with the explanation.

**YUB-YECL-5**

**Reference:**

**Application, Section 2, Sales and Revenue, page 2-5, lines 2-11.**

**Issue/sub-issue:**

**Weather-normalized use per customer (UPC) methodology**

**Quote:**

“For the purpose of the 2016-2017 sales forecast, ATCO Electric Yukon reviewed its two-step approach for determining weather-normalized use per customer (UPC). In the first step, the historical average monthly UPC is regressed on actual monthly Heating Degree Days (HDD), and in the second step, the coefficient of HDD from the regression in the first step is multiplied by the difference between the actual HDD and the ‘Normal’ HDD. Upon review of this two-step approach, ATCO Electric Yukon has updated the time frames used in determining weather-normalized UPC as follows:

	<b>Regression data for UPC (step 1)</b>	<b>“Normal” HDD (Step 2)</b>
<b>Prior Methodology</b>	15 years	20 year average
<b>Current Methodology</b>	3 years	3 year average

“In addition to the updated time frames used for determining weather-normalized UPC, ATCO Electric Yukon has also applied the growth rates experienced over the period of 2013 to 2015 to derive the forecast UPC for the 2016 and 2017 test years.”

**Request:**

- (a) With respect to weather-normalizing UPC data, please indicate why a shorter time period (three years) is superior to using 15-year regression and 20-year normal HDD data.
- (b) For the last 20 years, please provide actual annual average monthly UPC rates for each of the customer classes (residential and commercial) in the various communities of YECL’s service territory.
- (c) Please explain why different periods were used in steps one and two of the prior methodology; why wasn’t historical average monthly UPC regressed on 20 years of actual monthly HDD, or alternatively why in the second step wasn’t the coefficient of HDD determined in step one not multiplied by the difference from the actual HDD and the normal HDD for a period of 15 years?

## YUB-YECL-6

**Reference:** Application, Section 2, Sales and Revenue, page 2-3, lines 23 - 27;  
page 2-5, lines 12 - 19.

**Issue/sub-issue:** Effects of initiatives on electricity sales

**Quote:** “Additionally, ATCO Electric Yukon’s Demand Side Management (DSM) program, as well as Yukon Government energy initiatives, such as the Commercial Energy Incentive Program and Micro-generation were introduced in the Yukon over the last few years and have all contributed to lower electricity sales in 2013, 2014, and 2015.”

...  
“It is ATCO Electric Yukon’s view that using the 2013 to 2015 time frame for weather normalizing and forecasting UPC is more appropriate as it encompasses recent trends occurring in the Yukon over the last few years. For example, over the past few years, in addition to changes in electric heating, there has been an increase in energy efficiency programs in the Yukon such as Demand Side Management and the Commercial Energy Incentive program. These trends, combined with a decline in economic activity and increasing effects of global warming have contributed to an overall downward trend in UPC over the 2013-2015 time period.”

**Preamble:** The Board requires further information.

### Request:

- (a) Please provide a description of the following Yukon government energy initiatives:
- a. Commercial Energy Incentive program – please provide an in-depth description of this program and an analysis regarding how it has affected electricity usage in the past and the effects on YECL’s test period sales forecast.
  - b. Micro generation – please provide an in-depth description of this program and examples of micro generation that have arisen as a result of the program and its effects on YECL sales. Additionally, please provide analysis which illustrates how micro generation is expected to impact YECL over the test period, i.e. the quantum of new micro generation and the resultant loss of sales?
- (b) Describe the changes in electric heating over the past decade that are affecting YECL’s forecast load for the test period. Are the changes in electric heating affecting new developments only?
- (c) Please provide an explanation and analysis as to how the demand side management (DSM) in the Yukon has influenced YECL’s load since its last GRA and clarify YEC’s projections regarding the 2016 to 2017 test period.
- (d) YECL states that load increases are driven by load densification and the move towards electric heat in new buildings.<sup>4</sup> With the expectation of increased load due to electric heating, is there any potential for load decreases due to programs/initiatives to offset by the increased heating loads in the test period? Please explain.

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<sup>4</sup> Appendix #9, page 1.

- (e) Please provide an analysis of how the effects of global warming have contributed to an overall downward trend in UPC (use per customer) throughout the Yukon over the 2013 to 2015 time period and whether the effects are expected to continue during the test period.
- (f) Please provide UPCs for residential and commercial UPC for YECL communities throughout the Yukon for the period from 1995 to 2015 (20 years).

**YUB-YECL-7**

**Reference:** Application, Section 2, Sales and Revenue, page 2-6, lines 5 to 12.

**Issue/sub-issue:** Residential customer average UPC methodology

**Quote:** “The residential average UPC for the test period for all communities, with the exception of Keno City, Stewart Crossing and Swift River, is forecast by using the weather-normalized UPC of the previous year as a base and applying the 2013 to 2015 growth in weather-normalized UPC, as discussed above. The UPC for Keno City, Stewart Crossing and Swift River is forecast by using the actual UPC of the previous year as a base and applying the 2013 to 2015 growth in actual UPC. Actual UPC for these 3 communities is used because there are very few customers in these communities and there is poor correlation between their average UPC and temperature.”

**Preamble:** The Board notes the following from YECL’s 2013-15 GRA:  
“The residential average UPC for the test period for all communities, with the exception of Keno City, Stewart Crossing, Swift River and Whitehorse is forecast by using the most recent three-year average (2010-2012) weather-normalized UPC. The UPC for Keno City, Stewart Crossing and Swift River is forecast by the most recent three-year average actual UPC because there are very few customers in these communities and a poor correlation between their average UPC and temperature.”

...  
“... in forecasting Whitehorse UPC in 2013, Yukon Electrical used the 2012 weather-normalized UPC, which already reflects the consumption increases due to space heating, as a base and raising it by the most recent three-year average growth in weather-normalized UPC. The increase in UPC relating to electric space heating, however, is not expected to be extended beyond 2013, as it is expected to be offset by a reduction in consumption due to the demand side management program.”<sup>5</sup>

**Request:**

- (a) Please clarify which year YECL is referring to as being “the previous year” when stating the UPC “is forecast by using the weather-normalized UPC of the previous year as a base.”
- (b) With respect to residential customers in the communities of Keno City, Stewart Crossing and Swift River,

<sup>5</sup> YECL 2013- 2015 General Rate Application, Part 1, page 2-5, lines 3 to 16.

- a. Please explain why YECL is proposing to use “the actual UPC of the previous year as a base” and applying a three-year (2013 to 2015) UPC growth rate rather than using the three-year average actual UPC as a base that was used in its previous application.
- b. For each of the three communities,
  - i. Please provide calculations underlying the detailed information provided by YECL,<sup>6</sup> in an Excel workbook with all formulas intact.
  - ii. Please provide a residential UPC calculation using the most recent three-year average actual UPC (2013-2015) in an Excel workbook with all formulas intact.
- (c) With respect to residential customers in all communities, with the exception of Keno City, Stewart Crossing, and Swift River,
  - a. Please explain why YECL is not using a weather-normalized three-year average actual UPC (2013 to 2015) as was done in its last GRA.
  - b. For each of these communities,
    - i. Please provide the calculations underlying the detailed information provided by YECL,<sup>7</sup> in an Excel workbook with all formulas intact.
    - ii. Please provide an alternate residential average UPC calculation using the most recent three-year average (2013 to 2015) weather-normalized UPC as was done in YECL’s previous GRA.

**YUB-YECL-8**

**Reference:**

**Application, Section 2, Sales and Revenue, pages 2-6 to 2-7**

**Issue/sub-issue:**

**Commercial customer average UPC methodology**

**Quote:**

“The commercial UPC for the test period for Whitehorse is forecast by using the weather-normalized UPC of the previous year as a base and applying the 2013 to 2015 growth in weather-normalized UPC.”

...

The commercial UPC forecast for the remaining communities (outside of Whitehorse), is determined by using the actual UPC of the previous year as a base and applying the 2013 to 2015 growth in actual UPC.”

**Request:**

- (a) Please explain why YECL is not using a weather-normalized three-year average actual UPC (2013 to 2015) to determine the commercial UPC forecast for all communities as was done in its last GRA application.
- (b) For each of the communities,
  - i. Please provide the calculations underlying, detailed information provided by YECL,<sup>8</sup> in an Excel workbook with all formulas intact.
  - ii. Please provide alternate calculations using a weather-normalized three-year average actual UPC (2013 to 2015).

<sup>6</sup> Application, Section 2, Attachments 16 to 18.

<sup>7</sup> Application, Section 2, Attachments 1 to 15.

<sup>8</sup> Application, Section 2, Attachments 20 to 37.

#### **YUB-YECL-9**

**Reference:** Application, Section 3, Purchase Power, pages 3-1 to 3-2.

**Issue/sub-issue:** Fish Lake hydro generation

**Quote:** “The forecast Fish Lake hydro generation in the test period outlined in Schedule 3.2 is based on the average output for Fish Lake Unit #2 from 1960-2015 plus the two year average for the new Fish Lake Unit #1 adjusted for planned decrease in generation for capital builds.”

**Request:**

- (a) Please describe the capital builds for which generation is decreasing.
- (b) If the capital builds do not take place, please provide the Fish Lake generation totals for the test period.

#### **YUB-YECL-10**

**Reference:** Application, Section 9, Capital Additions, page 9-3, lines 18 to 28.

**Issue/sub-issue:** Streetlight conversion

**Quote:** “ATCO Electric Yukon has been in discussions with its customers/municipalities regarding recent developments surrounding converting existing streetlight to Light-Emitting Diode (LED) lamps. Considering there is significant capital outlay associated with the conversion of existing streetlights to LED and in order to understand the rate implications of LED streetlight conversion, ATCO Electric Yukon is seeking Board direction as to the appropriate method of accounting for the capital costs associated with customers requesting conversions of existing streetlights to LED. ATCO Electric Yukon considers there to be two available options:  
1) A full customer contribution required for all associated capital costs; or  
2) All capital costs associated with requested conversions would be a system cost, not subject to a customer contribution.”

**Request:**

- (a) Please provide a history of the discussions that YECL has had with its customer/municipalities with respect to the conversion of existing street lights to LED lamps. Who initiated the discussions and why?
- (b) Please provide the total costs of the project and a cost/benefit analysis if the streetlight conversion project were to go ahead.
- (c) Please provide the rationale or justification for the project being a system cost.
- (d) With respect to the installation of new streetlights, what types of lights does YECL install? Considering the discussions that YECL has had with its customers/municipalities regarding LED lamps, are there any plans for installing LED lamps when installing new street lights? If not, why not?



#### YUB-YECL-11

**Reference:** Application, Section 9, Capital Additions, Attachment 9.1, page 2

**Issue/sub-issue:** Project costs

**Quote:** “DISTRIBUTION NEW EXTENSIONS \$2,160,000  
(Gross of Customer Contribution)”

#### Request:

- (a) Please explain what is meant when YECL states, in the above quote, that the costs associated with distribution new extensions are “Gross of customer contribution.”
- (b) For all projects, approved and deemed as capital projects, in the period from 2013 to 2015 (YECL’s 2013-2015 Application, pages 9-44 to 9-67), please provide a comparison of forecast and actual costs, accompanied with an explanation for projects with variances of 10 percent and greater than \$50,000.

#### YUB-YECL-12

**Reference:** Application, Section 9, Capital Additions

**Issue/sub-issue:** Reasons for capital additions

#### Request:

- (a) With respect to YECL’s proposed Fish Lake Unit 2 (1958 Gilkes hydro turbine) assessment, YECL indicates that the assessment will determine the overall operating condition of the power plant and related infrastructure, and will identify life extension, major refurbishment and/or replacement options.<sup>9</sup>
  - a. Considering the age of the unit, have previous assessments been performed? If so, please provide the reports. If not, why not? Assuming that YECL performs regular (annual) operation and maintenance assessments, other than age of the unit has anything else led to the need for the assessment in the test years?
  - b. Is YECL asking to capitalize the assessment, rather than assume under O&M?
- (b) Schedule 9.2 indicates an expenditure of \$28,000 related to the Watson Lake Unit #4 replacement. Please provide details on whether this related to the \$1.1 million expensed in 2013.
- (c) Please indicate the section(s) in the *Canadian Environmental Protection Act, 1999*, which informs YECL and underpins the \$150,000 and \$51,000 expenditures (2016 and 2017, respectively) related to polychlorinated biphenyl (PCB) identification and transformer change outs.<sup>10</sup> YECL proposes to replace Transformer T2 at the Watson Lake Substation. Please provide the rating of the replacement transformer.

<sup>9</sup> Section 9, Attachment 9.1, page 1.

<sup>10</sup> Section 9, Attachment 9.1, page 3.

**YUB-YECL-13**

**Reference:** Application, Appendices – Business Cases, Appendix 3  
**Issue/sub-issue:** Watson Lake bi-fuel project  
**Preamble:** Further information is required.

**Request:**

- (a) When does YECL expect to capitalize the \$494,000, shown in Table 1,<sup>11</sup> expended in the period from 2012-15?
- (b) YECL proposes to purchase the LNG vaporization skid and LNG storage tank from ATCO Gas for \$1,470,000. Please explain why YECL chose not to competitively tender for the equipment purchased from ATCO Gas.
- (c) YECL submits that “the addition of another LNG storage tank will ensure there is sufficient onsite storage of fuel during operations in Phase 2 and an offload pump will be necessary to increase the speed of transfer of the LNG from the shipper to the storage tanks.”<sup>12</sup> Are these costs included in Table 1?
- (d) YECL has constructed a process heating skid that allows for waste heat from the generating units to be utilized as the heat source in the LNG vaporizer. Are the costs for the process heating skid included in Table 1? Please explain in detail, the complementary uses of the LNG vaporization skid and the process heating skid.
- (e) Does the estimated \$50,000/year incremental operation and maintenance (O&M) cost include periodic maintenance? Are incremental training costs required for YECL plant personnel? If so, are these costs included in the estimated annual incremental O&M costs.
- (f) Please provide a chart/graph which shows the monthly fluctuations in price for LNG and diesel during the period from 2012 to the present.

**YUB-YECL-14**

**Reference:** Application, Appendices - Business Cases, Appendix 1 and Appendix 2  
**Issue/sub-issue:** Fish Lake projects

**Request:**

- (a) Please provide the 2014 Dam Safety Report and water licence HY12-065, referred to on page 1 of Appendix #2.

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<sup>11</sup> Appendix #3, page 4.

<sup>12</sup> Appendix #3, Page 2.

### YUB-YECL-15

**Reference:** Application, Appendices – Business Cases, Appendix 5

**Issue/sub-issue:** Old Crow Unit #3 replacement

**Quote:** “The original budget for this project as per the 2013-2015 GRA was \$500,000. The primary drivers for this cost increase are:

- Realization of actual costs based on previous projects in regards to construction and logistics of work completed within the isolated, fly-in only community;
- Understanding of construction and engineering requirements of installations carried out within the new facility; and
- Increase in physical size of unit, and associated costs in respect to transportation and installation as unit has to be disassemble for transport and reassembled on site.”

**Preamble:** The total cost for this project is forecast to be \$1,262,000 compared to the \$500,000 that was originally forecast in YECL’s 2013-2015 GRA. YECL submitted that “The cost differential between a typical 285kW (based on a bids received for the Beaver Creek #2 Replacement) and 600kW unit is approximately \$60,000.” Further information is required.

### Request:

(a) Please provide further clarification and assign the relative cost increases for each of the bulleted items in the quote above.

### YUB-YECL-16

**Reference:** Application, Appendices – Business Cases, Appendix 8

**Issue/sub-issue:** McIntyre Subdivision replacement project update

**Preamble:** The Board requires further information.

### Request:

- (a) Table 1,<sup>13</sup> included in the project post completion summary, indicates that the installation of a main underground feed to the subdivision, at a cost of \$379,000, (greater than one-half of the \$728,000 total variance) was not included in the original business case scope. In the updated project scope, YECL indicated that the final portion of the main underground feed to the subdivision was installed. Please explain why the main underground feed to the subdivision was not included in the original business case scope.
- (b) Please explain how the cost of the temporary overhead shadow electrical system (line, transformers, low voltage pedestals, etc.) is being expensed. Specifically address whether, once the system is not required and has been removed, the costs or a portion thereof are to be credited back to customers? Please provide an estimate of the shadow electric system equipment, other than line, that has been used on the project to date.
- (c) Please explain what is meant by low voltage service lines to residences. In the original project description (2013-1015 GRA), YECL submitted that the majority of the low voltage service lines to residences would not be replaced. Is this still the case?

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<sup>13</sup> Application, Section 11, Attachment 11.4, McIntyre Subdivision Stage 1, page 2.

- (d) In the original project description, YECL also stated that the electrical infrastructure in the undeveloped areas of the subdivision would not be replaced until an agreement was put in place to replace the infrastructure when the area was developed. Please provide an explanation if anything has changed regarding this assumption per the new business case.
- (e) Does the replacement of streetlights to the roadway lighting standard include LED lamps?
- (f) Do the updated total project costs include the costs to remove the temporary overhead shadow electrical system? If not, please provide a forecast for dismantling the temporary system.

**YUB-YECL-17**

**Reference:**

**Issue/sub-issue:**

**Quote:**

**Application, Appendices – Business Cases, Appendix 9**

**Downtown Whitehorse capacity upgrade**

“Load growth in downtown Whitehorse related to increasing population and new construction is causing load restoration during contingency to become inadequate. Without immediate action the system will not be able to serve the needs of existing and future customers, longer power outages are likely to occur as contingency plans become inadequate, key equipment life expectancy will be reduced, and system operation may become hazardous.

“To proactively mitigate these issues, ATCO Electric Yukon is recommending the following work be completed in 2016 & 2017:

- Install a new 34.5kV to 12.5kV Selkirk Substation in Riverdale to increase capacity in downtown Whitehorse and provide contingency options to mitigate the duration of power outages;
- Replace the existing river crossing with larger wire and underground cable; and
- Install new switching points to allow for effective system operation.”

...

“Several specific issues have been identified as requiring immediate attention to avoid compromising the safety and reliability of the power system. The work completed in 2014 and 2015 aligns with the updated scope of the project. An overview of the system configuration is also presented below. Further detail is available in the technical appendix.”

**Preamble:** In its 2103-2015 GRA,<sup>14</sup> YECL submitted that since 2010, load growth in the downtown core of Whitehorse had increased significantly. As a result, loading on the 12.5kV system was at or near capacity in a number of areas in the downtown core. YECL also stated that the conversion of the Whitehorse downtown core to 25kV had been identified in YECL’s long-term system plan since 1996. As a result, all new transformers installed in the downtown core as well as all electrical equipment in the Shipyard substation were of a dual-voltage configuration (12.5kV/25kV). Moreover, the conversion to 25kV would allow the existing conductors that are near capacity limits to safely handle increased loading.

**Request:**

- (a) Please indicate where in its last GRA, YECL identified that the first phase of the Downtown Whitehorse 25kV Conversion business case was to install an underground loop to allow easier shifting of load on downtown infrastructure.
- (b) Please indicate where in Appendix #9, the technical appendix referred to in the above quote can be found.
- (c) Please detail the “...work completed in 2014 and 2015 [that] aligns with the updated scope of the project.”<sup>15</sup>
- (d) YECL describes three stages of construction in the project scope section on page 4.
  - a. With respect to the Selkirk Substation installation, will the electrical equipment in this substation be of a dual-voltage configuration to allow for future conversion to 25kV?<sup>16</sup> If not, please explain and provide the additional costs for dual-voltage electrical equipment.
  - b. With respect to reconductoring the south river crossing, would the conversion to 25kV, alleviate the need for reconductoring? Please explain the reasons underpinning the change out of the conductor. Does the current river crossing have overhead conductor and underground cabling?
- (e) With respect to alternatives 2(a) and 2(b) presented on page 6, YECL submits that the alternative 2(b) has been rejected “at this time” as it adds more capacity over what is currently required, and is at a significantly higher cost than other alternatives. When future capacity is required in the area, will the increase in future costs be over and above the differential in costs between the alternatives 2(a) and (b)? Why has future expansion not been considered at this time?
- (f) Is it correct that, in addition to the new 25kV substation in Riverdale on Selkirk Street, either of the two alternatives presented on page 6, are to be considered in respect of the 25kV conversion of downtown?

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<sup>14</sup> Business Case #24, Downtown Whitehorse 25kV Conversion business case

<sup>15</sup> Application, Appendix #9, page 2.

<sup>16</sup> Application, Appendix #8, McIntyre Subdivision Replacement, page 1; “25kV equipment is standard in Whitehorse’s distribution system and provides improved electrical performance for residential customers due to proper regulation of the electrical system.”

(g) YECL submitted a system performance optimization alternative (page 7). Other than the installation of additional switches, will any other optimization options be considered as part of YECL’s preferred option? Please explain.

**YUB-YECL-18**

**Reference:** Application, Section 6, Taxes Other Than Income, Schedules, S1.1,  
**Issue/sub-issue:** Taxes other than income tax

**Request:**

Please provide explanations for the variance between approved and actual taxes other than income tax (property tax) for the years 2013, 2014 and 2015 as illustrated in the following table:

(\$000)	2013	2014	2015
Approved – property taxes	257	265	273
Actual – property taxes	273	251	256
Actual (under) over approved	(16)	14	17

Source: Exhibit 2016-17 GRA Schedule S1.1, line 10.

**YUB-YECL-19**

**Reference:** Application, Section 7, Depreciation, page 7-1  
**Issue/sub-issue:** Depreciation expense

**Request:**

Please provide explanations for the variance between approved and actual general provision for depreciation expense for the years 2013, 2014 and 2015 as illustrated in the following table:

(\$000)	2013	2014	2015
Approved – depreciation expense	4,997	5,736	6,267
Actual – depreciation expense	4,877	5,367	5,915
Actual (under) over approved	(120)	(369)	(352)

Source: Exhibit 2016-17 GRA Schedule S7.1, line 1.

**YUB-YECL-20**

**Reference:** Application, Section 10, Income Tax, Schedules, S1.1  
**Issue/sub-issue:** Income taxes

**Request:**

Please provide explanations for the variance between approved and actual income taxes for the years 2013, 2014 and 2015 as illustrated in the following table:

(\$000)	2013	2014	2015
Approved – income taxes	(416)	160	313
Actual – income taxes	(714)	(120)	74
Actual (under) over approved	(1,130)	(280)	(239)

Source: Exhibit 2016-17 GRA Schedule S1.1, line 15.

#### **YUB-YECL-21**

**Reference:** Application, Section 10, Income Tax, page 10-1

**Issue/sub-issue:** Income tax rate deferral

**Quote:** “Beginning in 2016, ATCO Electric Yukon requests an Income Taxes deferral on the enacted Federal and Territorial Statutory Rates of 15% and 15% respectively.”

**Request:**

- (a) Has YECL previously requested deferral treatment for income tax rates? If confirmed, please indicate the application(s) in which deferral treatment was requested. If not confirmed, please provide the reasons for not requesting deferral treatment for income tax rates prior to the year 2016.
- (b) Please provide the reasons in support of YECL requesting in 2016, the implementation of an income tax deferral on the enacted Federal and Territorial Statutory Rates of 15 per cent and 15 per cent, respectively.

#### **YUB-YECL-22**

**Reference:** Application, Section 11 – Prior Board Directions

**Issue/sub-issue:** Board Order 2014-06, Appendix A, Direction No. 12, page 62.

**Quote:** Direction No. 12, Reference: Page 62

“The Board understands that YECL needs to explore alternatives respecting the use of wind to generate power in the area of Burwash and Destruction Bay, which interveners have been promoting. Accordingly, the Board finds the study costs warranted and reasonable. In addition, the Board directs YECL in its next GRA to provide results of the feasibility study.”

**Preamble:**

YECL advised in its response to prior Board Direction No. 12 that “ATCO Electric Yukon contributed funds (\$20,000) towards this initiative in 2013 and received a report titled ‘Burwash Landing and Destruction Bay Wind-Diesel Prefeasibility Update’. ATCO Electric Yukon filed this report in response to Undertaking #17 during the 2013-2015 GRA hearing. Since that time ATCO Electric Yukon has received one further update in early 2014 but ATCO Electric Yukon is no longer engaged in this project and no further contributions have been made to this project, as such, ATCO Electric Yukon is not expecting to receive any further reports arising from this initiative.”

**Request:**

- (a) Please file the “one further update” YECL received in 2014.
- (b) Please explain why YECL is no longer engaged in this project or pursuing any recommendations that may be contained within the report?

**YUB-YECL-23**

**Reference:** Application, Section 12, Diesel Displacement, pages 12-1 to 12-6,

**Issue/sub-issue:** Diesel Displacement

**Request:**

- (a) Is YECL’s Renewable and Alternative Energy Study expected to include consideration of natural gas or LNG as an alternative energy source? Please explain why or why not.
- (b) Is YECL’s Renewable and Alternative Energy Study expected to include consideration of wind generation as an alternative energy source? Please explain why or why not.
- (c) On what basis, or under what program does YECL expect it would qualify for funding from the federal or Yukon governments?
- (d) Will YECL incur any feasibility study costs which would qualify for funding from the federal or Yukon governments?
- (e) Does YECL have any completed, in-progress or proposed projects that will qualify for funding from the federal or Yukon governments?
- (f) Will the YECL Renewable and Alternative Energy Study to be completed by the end of 2017? If not, please identify the anticipated completion date of the study and any additional costs over and above the \$500,000 requested for the 2016-17 test period.
- (g) Will YECL ultimately capitalize the study costs, if approved, or expense them?

**YUB-YECL-24**

**Reference:** Application, Appendices – Business Cases, Appendix #3

**Issue/sub-issue:** Watson Lake Bi-Fuel Project

**Request:**

- (a) Will YECL seek any additional funding from the federal and Yukon governments to fund the Watson Lake Bi-Fuel project costs? Please clarify if the additional funding is distinct and separate from the funding identified in the following quote in the Application in Section 12, page 12-2, item 2, lines 13-16, PDF page 225 of 292:

“2. A portion of ATCO Electric Yukon project execution costs for projects identified in this study to be viable so that the entire financial burden of introducing renewable and alternative energy in the Yukon’s diesel communities is not put on Yukon electric ratepayers.”
- (b) How will replacing reliance on diesel with reliance on LNG meet the governmental objective of introducing renewable energy such that some level of project funding is ensured?
- (c) Please explain why YECL no longer proposes that ATCO Gas be involved in the Watson Lake Bi-Fuel project.
- (d) Does YECL consider there is any legislative or regulatory impediment(s) to owning “all of the assets required” or providing any of the services stemming from this project?
- (e) Of the costs disclosed on Table 1: Watson Lake Bi-Fuel Project Phase 1 and 2 Capital Cost, please identify all costs that will be paid to ATCO Gas.



- (f) Of the costs disclosed on Table 1: Watson Lake Bi-Fuel Project Phase 1 and 2 Capital Cost, please provide the amount of Watson Lake bi-fuel project study costs that are held in WIP at the end of each year 2013 through 2017.
- (g) Please provide the original historical cost and accumulated depreciation related to the assets being purchased from ATCO Gas.
- (h) Why would YECL choose a new unit which requires field modifications to burn both diesel and natural gas versus purchasing a new unit that is factory capable of burning both fuels with name plate performance ratings?

**YUB-YECL-25**

**Reference:** Application, Appendix #10

**Issue/sub-issue:** Paint Mountain

**Quote:** “This project will replace cable that is approximately 50 years old serving four customers on Paint Mountain. The cable is at the end of its life, is in poor condition, and is difficult to access. Any sort of failure to this cable would lead to an extended outage for the customers served by this electrical cable.”

**Request:**

- (a) Was this line originally installed by YECL? Please explain.
- (b) If not originally installed by YECL, when did YECL acquire this line?
- (c) For the replacement or upgrade of this line, will there be any contributions from customers? Please explain.

**YUB-YECL-26**

**Reference:** Application, Attachment 9.2 – Generation Plants

**Issue/sub-issue:** Destruction Bay PLC, Teslin PLC, Watson Lake Plant Fire Alarm System, Teslin Plant Assessment and Old Crow Plant Rebuild

**Preamble:** The Board would like more information on each of the listed projects.

**Request:**

- (a) For each of the listed project please provide a further breakdown of the costs, such as design, engineering, materials, and construction.
- (b) For each of the listed sites, please provide a summary of previous capital projects undertaken at those sites over the last 10 years.

### YUB-YECL-27

**Reference:** Application, page 1-5

**Issue/sub-issue:** Key assumptions

<b>Quote:</b>	<b>2016</b>	<b>2017</b>
Labour Inflation	3.25%	3.00%
Other Inflation	2.20%	2.20%
Vacancy Rate	4.00%	4.00%
Long Term Debt Rate	4.35%	4.85%

And

“For the 2017 test period, in-scope and out-of-scope labour has been escalated by 3.0%. This escalation rate is consistent with the inflationary increases being applied for and approved in Alberta for 2017.”

### Request:

- (a) In 2015, did ATCO Electric reduce the number of its FTEs? If so, what impact did this have on YECL? During the period 2014 to 2016, were any wage freezes implemented for out-of-scope employees of ATCO Electric? Please explain and provide any details. If wage freezes were implemented, please explain and provide any details on any impact to YECL.
- (b) Please provide the Alberta decision references where inflation rates of 3 percent for out-of-scope positions for 2017 have been approved. Please provide any Alberta examples where inflation rates other than 3 percent have been approved for out-of-scope positions for the years 2016 and 2017.
- (c) Please provide the actual (unadjusted) vacancy rates for YECL for the years 2011-2015 inclusive. For each of those years, please provide the approved number of FTEs and the actual number of FTEs.
- (d) Please provide the data and calculations used to determine the vacancy rates for 2016 and 2017.
- (e) Please provide the data and calculations and provide the actual vacancy rates for 2013 to 2015 inclusive.

### YUB-YECL-28

**Reference:** Application, page 1-6

**Issue/sub-issue:** Staff positions

**Preamble:** The Board would like further information on the possible FTE reductions undertaken by ATCO Electric and the impact on YECL.

### Request:

- (a) Please provide the number of positions (FTEs) reduced by the ATCO Electric, to date, from the number of positions (FTEs) ATCO Electric had January 1, 2015. Please explain any impacts on YECL.
- (b) If ATCO Electric undertook staff reductions in 2015, and YECL did not, please explain how YECL was able to avoid those reductions.

**YUB-YECL-29**

**Reference:** Application, Organizational Chart, Attachment 1.1

**Issue/sub-issue:** Changes in complement

**Request:**

- (a) Please provide an organization chart (to the same detail as Attachment 1.1) of all approved positions for YECL, from the 2015 test year.

**YUB-YECL-30**

**Reference:** Application, page 1-5

**Issue/sub-issue:** Key Assumptions

**Quote:** “For non-labour costs, an inflation rate of 2.2% has been applied for 2016 based on the Yukon Economic Outlook issued by the Yukon Economic Development in October 2015. For 2017, no public forecast of Yukon inflation is available, therefore the 2.2% inflation rates has also been used for 2017.”

**Request:**

- (a) Has Yukon Economic Development provided a more recent Economic Outlook? If so, please provide the updated Economic Outlook.
- (b) If there has been a more recent Economic Outlook, please provide what the forecast for Whitehorse CPI is expected to be for 2016 and 2017.

**YUB-YECL-31**

**Reference:** Application, Organizational Chart, Section 1, Attachment 1.1; YECL 2013-15 GRA, Organizational Chart, Section 1, Attachment 1; Appendix A to Board Order 2014-06, page 23.

**Issue/sub-issue:** Accounting positions

**Quote:** From Appendix A to Board Order 2014-06, page 23 the Board stated: “Accordingly, the Board orders YECL to reduce its FTE complement in the test years by 3.0 FTEs, one of which must be from accounting and finance, and to provide an explanation in the compliance filing on how it plans to meet this reduction. More specifically, the Board approves a 2015 forecast ending complement of 70.39 (not including the two DSM-related FTEs YECL inadvertently excluded from its Application). The compliance filing should also provide a schedule demonstrating how these reductions will affect labour costs.”

**Request:**

- (a) Please confirm that in the YECL’s 2013-15 GRA, YECL applied for 7.17 FTEs (page 2 of Attachment 1 – 4.17 positions, and page 1 of Attachment 1 – 3 positions) for accounting and admin-related positions (Accounting and admin related are defined as head office personnel plus the financial analyst and financial assistants). If not confirmed, please provide the correct amount and list each position with its FTE.
- (b) Please confirm that the total number of accounting and admin related positions approved by the Board was 6.17.

- (c) Please confirm that the total number of accounting and admin positions (Accounting and admin related are defined as head office personnel plus the operational accountant, the financial assistants and the Supervisor, Business Support Services) applied for in the current application is 8.42. If not confirmed, please provide the correct amount and list each position with its FTE.
- (d) Please explain the difference in the “Other Head Office” total of 2.67 FTEs in the current application versus 1.67 FTEs in the 2013-15 GRA.
- (e) Please explain whether AE has or plans to contract any if the “Other Head Office” functions listed on page 2 of Attachment 1.1 to an outside party.
- (f) If part (e) is confirmed, please explain the impact on YECL.
- (g) Please confirm that the costs associated with the employment of either the Supervisor, Financial Services or the Corporate Accountant only relate to work for YECL and have not or do not perform any duties for other affiliates, corporate office or the parent ATCO Electric.
- (h) Please explain why 50 percent of the time for the VP Northern Development, Manager, Financial Reporting & Accounting North of 60 is charged to YECL? Please explain why YECL receives a larger share of the costs than Northlands (Yellowknife) and Northlands (NWT).
- (i) Regarding the issues and regulatory proceeding concerning the Hay River franchise in the NWT, please explain the impact of that process on the time allocations of the VP Northern Development, the Manager, Financial Reporting & Accounting North of 60 and any of the Head Office allocations.

**YUB-YECL-32**

**Reference:** Application, page 1-6, Attachment 1.1, page 2.

**Issue/sub-issue:** Supervisor, Business Support Services

**Quote:** “This 0.25 FTE position was added to oversee the Financial Assistants as well as perform accounts payable and accounts receivable duties previously done by the Financial Analyst. This position will also perform general business support services.”

**Request:**

- (a) The organization chart shows Accounts Payable as a Head Office function. Please explain the need for further supervision of a head office support function.
- (b) YECL is seeking approval of 8.42 accounting and admin positions. Of those requested positions, one is for a Manager, Financial Reporting, one is for a Supervisor, Financial Services, and 0.25 is for a Supervisor, Business Support Services. This results in a ratio of 2.25 supervisors to 6.17 non-supervisor FTEs. Please explain the need for 2.25 supervisors for 6.17 employees. Further please explain the need for a 36-percent increase in accounting and admin resources.

**YUB-YECL-33**

**Reference:** Application, Organizational Chart, Attachment 1.1; YECL 2013-15  
GRA Application, Organizational Chart, Attachment 1  
**Issue/sub-issue:** Supervisor, Customer Accounting & Administration, Customer  
Service Advisors

**Request:**

- (a) Please explain how the FTE amounts for the Supervisor, Customer Accounting and Administration (0.93) and the Customer Service Advisors (4.93) were determined.

**YUB-YECL-34**

**Reference:** Application, Organizational Chart, Attachment 1.1  
**Issue/sub-issue:** Head Office Personnel

**Request:**

- (a) Are each of the Supervisor, Customer Accounting & Administration, Customer Service Advisors, Supervisor, Business Support Services and the VP Northern Development positions located in the YECL offices in Yukon or are they located in Head Office in Alberta?
- (b) If any of the above noted positions, or any other position, are not located in the YECL offices in Yukon, please explain why they are not included as part of Head Office personnel.

**YUB-YECL-35**

**Issue/sub-issue:** Trade name of ATCO Electric Yukon

**Request:**

- (a) Please provide the date that YECL started using the trade name ATCO Electric Yukon (AEY).
- (b) When YECL made the change to AEY, did it make any corresponding changes to stationery, signage, websites, logos on vehicles, etc.? Please itemize any related changes.
- (c) If the answer to part (b) is affirmative, please indicate what the costs were for any trade name related changes, when those costs were incurred, and to what accounts those costs were charged.

**YUB-YECL-36**

**Reference:** Application, pages 5-2 to 5-3  
**Issue/sub-issue:** Pension Costs  
**Preamble:** On page 5-3, YECL shows actual and forecast defined benefit pension costs.

**Request:**

- (a) For each of the actual and forecast years 2013 to 2017 inclusive, please indicate the number of employees to which the defined benefit pension costs relate.

- (b) For defined contribution pension costs, please indicate the number of employees the costs are attributed to for the years 2013-17 inclusive.
- (c) YECL has asked to be tied to the outcome of the upcoming ATCO Utilities 2016 Pension Application to be heard before the Alberta Utilities Commission. Please describe, in general terms, how final costs from that proceeding will be attributed to YECL. Can YECL separate itself from any unique or special charges that may apply only to other ATCO entities? Please explain.
- (d) YECL is seeking continuation of the defined benefit pension cost deferral account. Please describe how YECL expects this deferral account to work. Please provide a continuity table of the current and forecast balance in that deferral account.
- (e) Please indicate whether YECL's regulated affiliates in other Canadian jurisdictions have a deferral account for their defined benefit pension plans and how it was established? If yes, please indicate the current status of those deferral accounts. Do any of the ATCO regulated affiliates operate without a DB pension deferral account?
- (f) What is the date of the last actuarial review regarding YECL's DB pension plan? What year did it cover? If there has been an update since the filing of this application, please provide that update.

**YUB-YECL-37**

**Reference:** Application, page 5-3

**Issue/sub-issue:** Non-labour costs - IT

**Request:**

- (a) Please provide a table showing IT costs, and the source of those costs for the years 2013-17 inclusive.

**YUB-YECL-38**

**Reference:** Application, page 5-4, Schedule 5.3

**Issue/sub-issue:** Affiliate Costs

**Request:**

- (a) In table 5.3 under Affiliate Costs, line 7 shows IT costs. Line 15 also refers Use of Systems and IT. Please explain the difference between the two lines.
- (b) For any of the line items referred to in Schedule 5.3, are there any corresponding costs that occur within YECL? Please explain.

**YUB-YECL-39**

**Reference:** Account 72700 – Relocation, Application, Schedules 5.1 and 5.2.

**Issue/sub-issue:** Relocation

**Preamble:** The Board requires more information regarding the cost increases in Account 72700 – Relocation

**Request:**

- (a) Please indicate the average cost of relocating an employee to the Yukon or how YECL forecasts how much it will cost to relocate an employee.
- (b) Please provide a table showing the number of employees relocated and the related costs for each of the years 2013 to 2017 inclusive.
- (c) Please confirm whether relocation costs only apply to employees moving to or within Yukon.

**YUB-YECL-40**

**Reference:** Application, page 5-2 and Schedule 5.1

**Issue/sub-issue:** Production costs

**Preamble:** Schedule 5.1 shows production costs consistently increasing for 2016 over 2015. The increases are illustrated as follows (\$000s):

Production Accounts	2015 Actual	2016 Forecast	% Change
62600 – Hydro Generation	261	273	4.6
64000 – Supervision and Engineering Diesel	66	72	9.0
64600 – Diesel Generation	445	494	11.0
82600 – Hydro Maintenance	62	68	9.7
84600 – Diesel Maintenance	1,148	1,188	3.5

**Request:**

- (a) Please explain why the increases in each of these accounts exceed YECL’s inflation assumptions.

**YUB-YECL-41**

**Reference:** Application, page 5-2 and Schedules 5.1 and 5.2

**Issue/sub-issue:** Distribution costs

**Preamble:** The Table on page 5-2 shows distribution costs increasing for 2016 over 2015 for the listed accounts. The increases are illustrated as follows (\$000s):

Distribution Accounts	2015 Actual	2016 Forecast	% Change
87300 – Maintenance	1,927	2,084	8.2
87400 – Underground Line Maintenance	143	150	4.9
87700 – Transformer Repair and Replacement	42	53	26.2
87800 – Street Light Maintenance	203	249	22.7

**Request:**

- (a) Please explain why the increases in each of these accounts exceed YECL’s inflation assumptions.
- (b) Please explain the historical average used to calculate the increase in street light maintenance (Account 87800).

**YUB-YECL-42**

**Reference:** Application, page 5-2 and Schedule 5.1

**Issue/sub-issue:** General costs

**Preamble:** The Table on page 5-2 shows General costs increasing for 2016 over 2015 for the listed accounts. The increases are illustrated as follows (\$000s):

General Accounts	2015 Actual	2016 Forecast	% Change
88800 – Maintenance Company-Owned Houses	46	61	32.6
88900 – Maintenance Warehouse and Office	145	162	11.7

**Request:**

(a) Please explain why the increases in each of these accounts exceed YECL’s inflation assumptions.

**YUB-YECL-43**

**Reference:** Application, page 5-2 and Schedule 5.1

**Issue/sub-issue:** Public Information costs

**Preamble:** The Table on page 5-2 shows Public Information costs increasing for 2016 over 2015 for the listed accounts. The increases are illustrated as follows (\$000s):

Public Information Accounts	2015 Actual	2016 Forecast	% Change
70100 – Public Information Administration	9	15	66.7
70200 – General Public Information	108	123	13.9

**Request:**

(a) Please explain why the increases in each of these accounts exceed YECL’s inflation assumptions.

(b) Please list and describe what types of charges are contained in General Public Information.

**YUB-YECL-44**

**Reference:** Application, page 5-2 and Schedule 5.1

**Issue/sub-issue:** Customer Accounting costs

**Preamble:** The Table on page 5-2 shows Customer Accounting costs increasing for 2016 over 2015 for the listed accounts. The increases are illustrated as follows (\$000s):

Customer Accounting Accounts	2015 Actual	2016 Forecast	% Change
71000 – Supervision	44	46	4.6
71100 – Customer Applications and Service Orders	468	491	4.9
71400 – Revenue Collections	166	174	4.8
71500 – Collection of Delinquent Accounts	125	130	4.0
71800 – Provision for Uncollectible Accounts	65	87	33.8



**Request:**

- (a) Please explain why the increases in each of these accounts exceed YECL’s inflation assumptions.
- (b) What is the historical average used to calculate the increase in the Provision for Uncollectible Accounts (Account 71800)? Please explain the forecast increase of 33.8 percent.

**YUB-YECL-45**

**Reference:** Application, page 5-2 and Schedules 5.1 and 5.2.

**Issue/sub-issue:** Administration and General costs

**Preamble:** The Table on page 5-2 shows Administration and General costs increasing for 2016 over 2015 for the listed accounts. The increases are illustrated as follows (\$000s):

Administration and General Accounts	2015 Actual	2016 Forecast	% Change
72100 – Administrative	1,963	2,309	17.6
72200 – Administrative Corporate	131	143	9.2
72300 – Insurance	90	100	11.1
72500 – Employee Expenses	299	337	12.7
72600 – Training and Safety	464	504	8.6
72900 – Audit/Legal Fees & Special Studies	139	184	32.4

**Request:**

- (a) Please explain why the increases in each of these accounts exceed YECL’s inflation assumptions.
- (b) Please explain the types of charges in Administrative Corporate (Account 72200).
- (c) Please explain the types of charges referred to as Special Studies, and give examples, in Account 72900. Please explain the reason for the increase in forecast costs.
- (d) Please provide separately the employee retirement and employee recognition costs included in Account 72500 for each of the years 2013 to 2017 inclusive.
- (e) For Account 72500, for the cost increases in 2014 over 2013, please provide the amount for the absence with pay and the reason rate payers should cover such costs.

**YUB-YECL-46**

**Reference:** Application, page 1-4; Appendix A to Board Order 2014-06, page 103.

**Issue/sub-issue:** Deferral Accounts

**Quote:** “The Board notes that legislative and regulatory changes can have an impact on utilities. However, on most occasions that the Board has witnessed, legislative change involves extensive stakeholder input and significant lead time before the change is implemented. The Board notes the YECL submission that no costs have been incurred to date that YECL would be seeking to incur in this deferral account. The Board finds that YECL would have sufficient time to incorporate any such changes at the time of any subsequent GRA filing. Therefore, the Board rejects YECL’s request for this deferral account.” [footnote omitted]

**Request:**

- (a) Please confirm that the Board has previously ruled on the same YECL request for a legislative and regulatory change deferral account.
- (b) In an earlier IR, the Board asked YECL to explain its understanding of the IPP Policy for Standard Offer Price. In terms on understanding the lead time related to a legislative or regulatory change, when does YECL expect this policy to be implemented?

**YUB-YECL-47**

**Reference:**

**Application, pages 1-4, 3-2 and 3-3; Appendix A to Board Order 2015-01, page 30.**

**Issue/sub-issue:**

**Deferral Accounts – Purchase Power Flow Through**

**Quote:**

“The Board is of the view that for sales in excess of the forecast, the risks lie with the regulated utility. That is, the utility assumes the forecast risk for those revenues and related costs in excess of forecast and for those periods where there is no forecast — non-test years.

“However, for the current proceeding, issues regarding the ERA had not been determined. The Board had to consider between divergent proposals regarding purchase power costs — ERA — and the Board is of the view that as these issues were not determined it would have been difficult for YECL to include ERA amounts in its forecasts. The Board considers it would be unfair for YECL to assume this risk of these ERA costs during the intervening period, or include such costs in its last GRA, until the Board made its determinations on the ERA issue. Therefore, the Board will allow YECL to use the PPFTDA for the period 2012-2015, and only if it incurs any ERA charges. Outside of the specified period, YECL will be required to apply for and justify the need for a PPFTDA.” [Footnote omitted, underlining added]

**Request:**

- (a) Please explain how a PPFTDA would operate and provide a numerical example.
- (b) Please comment on whether, under a PPFTDA, YECL would be guaranteed a fixed margin (the margin would be incremental sales revenues less purchase power costs as set in YEC’s last GRA; ERA costs would be part of the PPFTDA) on sales in excess of forecast amounts. Is there any application before the Board in which YEC has requested a change to its wholesale energy rates for 2016? 2017?
- (c) Please comment on how an ERA charge should be calculated? If so, please provide an example.
- (d) What is the amount of the last approved level of YEC wholesales to YECL?
- (e) For 2016, please confirm that YECL has filed a forecast of Wholesale purchases obtained from YEC and indicate the amount.
- (f) Are YECL and YEC able provide a consensus forecast of Wholesale quantities for energy for any given period? Please explain.

**YUB-YECL-48**

**Reference:** Application, pages 1-4 and 4-3.

**Issue/sub-issue:** LNG Fuel Deferral Account

**Quote:** “Similarly to the Diesel Fuel Deferral Account, the LNG Fuel Deferral Account will use the GRA-approved community-based plant efficiencies and the plant’s monthly gross generation to determine the volume of litres of diesel equivalent for the monthly fuel deferral calculation. Actual diesel volumes used for the diesel fuel deferral account calculation will be subtracted from this volume, with remaining allowable litres of diesel equivalent for use in the calculation of the LNG fuel deferral.”

**Request:**

- (a) How has YECL determined the community-based efficiency for the bi-fuel units. Please provide any calculations.
- (b) Can actual efficiency vary from rated efficiency? How will YECL account for this? Can this rating change depending on the fuel mix?
- (c) Please provide a numerical example of how the equivalencies will be determined, how the account will work, in Excel format with formulae intact.

**YUB-YECL-49**

**Reference:** Application, pages 1-4, 10-1 and Appendix A to Board Order 2009-2, page 42.

**Issue/sub-issue:** Income Tax Rate Deferral Account

**Quote:** “The Board is not persuaded by YECL's contention that notices of changes in tax rates are not received in sufficient time to be reasonably included in YECL's forecast. Therefore, the Board does not accept YECL’s request for an income tax deferral account and directs that YECL not use such an account in its refiling.”

**Request:**

- (a) Please explain what has changed since the above-noted finding?
- (b) Is YECL aware of any proposed changes to income tax rates that either have not been enacted or have been announced but have not been enacted?
- (c) How has YECL accounted for changes in tax rates (either federally or territorially) during the years 1997 to 2015?

**YUB-YECL-50**

**Reference:**

**Application, page 8-2**

**Issue/sub-issue:**

**Return on equity**

**Quote:**

“The BCUC currently has before it a GCOC proceeding (Stage 1 proceeding) to determine the appropriate benchmark ROE which is currently set at 8.75%. The hearing has concluded and it is expected that a decision related to the BCUC generic ROE will be released either in the second or third quarter of this year. Therefore, ATCO Electric Yukon is proposing to use this benchmark ROE (once released) for the 2016 and 2017 test years and is also seeking approval of a risk premium of 60 basis points.”

**Request:**

- (a) Please provide the BCUC decision that has set the benchmark ROE at 8.75 percent.
- (b) IF the BCUC GCOC proceeding does not release its decision before the close of record of this proceeding, what does YECL propose for its ROE?

**YUB-YECL-51**

**Reference:**

**Application, page 8-2.**

**Issue/sub-issue:**

**Return on equity**

**Quote:**

“ATCO Electric Yukon submits that the determination of whether a ROE premium is appropriate with respect to ATCO Electric Yukon should address the relative business risks of ATCO Electric Yukon compared to the BCUC benchmark utility and other similar type utilities across Canada, taking into account the stand-alone principle.”

**Request:**

- (a) Should YEC be considered as one of the comparable utilities?
- (b) In terms of relative comparability, would YEC be the most comparable utility to YECL?
- (c) If YEC is the most comparable utility, please provide the last ROE approved for YEC.

**YUB-YECL-52**

**Reference:**

**Application, page 8-3 and Schedule 2.1.; 2013-15 Application – Schedule 2.1**

**Issue/sub-issue:**

**Return on equity**

**Quote:**

“Market demand risks relate to the volatility of sales and their impact on return on equity. Realization of sales forecasts in ATCO Electric Yukon’s service territory is subject to many variables including the weather and the economic health of the community. ATCO Electric Yukon’s sales are more sensitive to weather than other electric utilities due to the extreme range of temperatures experienced in northern Canada.”

**Preamble:** The following table is derived from Schedules 2.1 from the current Application and YECL’s 2013-15 GRA:

Year:	2011A	2012A	2013A	2014A	2015A	2016F	2017F
Company Sales (MW.h)	297,445	316,575	316,692	312,181	315,816	313,592	319,289
YOY Change (%)		6.4	0.0	-1.4	1.2	-0.7	1.8

**Request:**

- (a) Please explain why YECL’s sales are more sensitive to weather than other electric utilities.
- (b) Please provide examples where other utilities are not affected by extreme weather conditions such as heat, wind, ice, etc.
- (c) Please provide an example of any electric utilities which are not impacted by the economic health of the community.
- (d) In light of the table above which shows that, other than the high growth in 2012, annual sales are consistently within 2 percent of the previous year’s levels, please explain how YECL’s annual sales are volatile.

**YUB-YECL-53**

**Reference:** Application, page 8-3.

**Issue/sub-issue:** Business Risk Analysis

**Quote:** “ATCO Electric Yukon also serves a relatively small market with considerably less economic strength and diversity than the service areas of other utilities. Its residential and commercial sales are primarily affected by the general economic activity within the communities served.”

**Request:**

- (a) Would the above statement similarly apply to any other electric utility with a rural base? If not, please explain why not?

**YUB-YECL-54**

**Reference:** Application, pages 8-3 to 8-4.

**Issue/sub-issue:** Business Risk Analysis

**Quote:** “Operational cost risks exist due to the potential to under-estimate various cost items including: capital expenditures, financing costs and operating and maintenance expenses. The remote locations served by ATCO Electric Yukon can result in higher than anticipated repair costs for unplanned maintenance of facilities. Also, due to the severe weather conditions that can occur in northern Canada, repair costs can deviate substantially from those forecast in operating budgets which are based on normal weather conditions. The length of the winter period increases the probability that these severe weather conditions may be experienced.”

**Request:**

(a) Can YECL’s experience mitigate some of those operational risks? Please explain.

**YUB-YECL-55**

**Reference:** Application, Attachment 8.1, Concentric report, Figure 1, report page 4.

**Issue/sub-issue:** Comparables

**Preamble:** Figure 1 lists utilities compared to YECL.

**Request:**

- (a) Why should any gas utilities be used in the comparison to YECL? Please explain.
- (b) Would other electric utilities be a stronger comparator to YECL? Please explain.
- (c) Why was YEC not included in the list of comparators?
- (d) For the column “Risk Compared to AEY” how were those ratings made? Were those relative risk assessments determined by Concentric? If those relative risk assessments were not made by Concentric, then please provide the source of those relative risk assessments. Please provide any quantitative evidence used to assess those ratings.
- (e) For each of the utilities cited, please provide the year the ROE was determined and the corresponding decision reference from the governing regulatory authority.

**YUB-YECL-56**

**Reference:** Application, Attachment 8.1, Concentric report, pages 4-5.

**Issue/sub-issue:** Generation risk

**Quote:** “As discussed in more detail later in the report, investors and credit rating agencies view companies that own generation as higher risk than pure transmission and/or distribution utilities.”

**Request:**

(a) Does the above quote apply to any generation level contained in a utility or significant levels of generation?

- (b) Would a utility whose self-supply of load requirements consist of five-percent generation be considered a lower risk than a utility whose self-supply of load requirements consists of 45-percent generation? Please explain.

**YUB-YECL-57**

**Reference:** Application, Attachment 8.1, Concentric report, page 5.

**Issue/sub-issue:** Customer Growth/Declining Volume

**Quote:** “AEY has not experienced these issues related to customer growth or declining volume to the same magnitude as PNG-West; however, use per customer has been variable over the past decade.”

And

“FortisBC Electric was awarded an ROE risk premium of 40 basis points above the benchmark utility by the BCUC in the GCOC Stage 2 proceeding.”

**Request:**

- (a) Which factor is given more weight when assessing risk, usage per customer or overall sales by the utility? Please explain.
- (b) For what year was FortisBC Electric awarded a risk premium of 40 basis points above the benchmark utility?
- (c) If part (b) does not relate to the current GCOC proceeding before the BCUC, is the previously awarded risk premium applicable? Please explain.

**YUB-YECL-58**

**Reference:** Application, Attachment 8.1, Concentric report, page 5.

**Issue/sub-issue:** Usage per Customer

**Quote:** “The majority of Newfoundland Power’s residential customers use electricity for space heating purposes, which increases variability in usage per customer depending on weather conditions.”

**Request:**

- (a) When a utility prepares its sales forecast, does it use normalization procedures to adjust its forecast? If yes, does the use of normalization procedures reduce the variability and any related risk in the forecast?

**YUB-YECL-59**

**Reference:** Application, Attachment 8.1, Concentric report, page 6.

**Issue/sub-issue:** Maritime Electric

**Quote:** “Maritime Electric is also similar to AEY in that it supplies about 24 percent of its load requirements through company-owned regulated generation and serves primarily residential and commercial customers. Maritime Electric has 4X more retail customers than AEY, and its rate base is also about 4X larger than AEY’s. Maritime Electric has a deemed equity ratio of 40.9 percent in 2016, and its allowed ROE in the most recent settlement agreement approved in February 2016 was 9.35 percent,

or 60 basis points higher than FortisBC Energy's. Maritime Electric was recently allowed to implement a weather normalization variance account, while AEY has no protection against volumetric risk."

**Request:**

- (a) Please confirm that YECL produces 9 percent of its load requirements? Is the supply of 24 percent of its load requirements through its own generation considered to be a quantum higher than the 9 percent? The ROE for Maritime Electric was determined through a negotiated settlement. Is it probable that the settlement agreement was the result of various trade-offs between the negotiating parties? Does Concentric have any particular knowledge with respect to that settlement agreement?
- (b) Regarding volumetric risk, is Concentric aware of any reason that YECL did not ask for a deferral account similar to the one described in the above-quote?
- (c) Is there a benefit to YECL in taking the volumetric risk?

**YUB-YECL-60**

**Reference:**

**Application, Attachment 8.1, Concentric report, page 6.**

**Issue/sub-issue:**

**DSM**

**Quote:**

"Alberta does not have DSM/energy efficiency programs, unlike Yukon which approved DSM programs for AEY several years ago. For that reason, AEY has more volumetric risk associated with energy efficiency and conservation programs than does ATCO Electric Distribution."

**Request:**

- (a) What, if any, impediments are faced by YECL in terms of forecasting volumes due to the DSM programs?
- (b) Does the DSM program represent a significant level of risk? Please explain.

**YUB-YECL-61**

**Reference:**

**Application, Attachment 8.1, Concentric report, page 18.**

**Issue/sub-issue:**

**Comparison Group Criteria**

**Preamble:**

Concentric utilized three criteria when determining its comparators. The Board wishes to understand how the comparison criteria were selected.

**Request:**

- (a) Why were the three criteria listed on page 18 of the report selected?
- (b) What other criteria could have been selected? Please explain.



**YUB-YECL-62**

**Reference:** Application, Attachment 8.1, Concentric report, page 18.

**Issue/sub-issue:** Business Risk

**Quote:** “In particular, as discussed in the following section, the risk factor that most distinguishes AEY from FortisBC Energy and other investor-owned electric and gas distribution utilities in Canada is its small size.”

**Request:**

- (a) Is it standard when choosing comparators to utilities to use size as the dominant criteria for assessing a risk premium for business risk? Please explain.

**YUB-YECL-63**

**Reference:** Application, Attachment 8.1, Concentric report, page 20.

**Issue/sub-issue:** Unpredictable Returns

**Quote:** “Size is an important consideration for investors in setting their return requirements. According to Morningstar, investors in smaller companies typically require a higher return because returns for smaller companies are more unpredictable.”

**Request:**

- (a) Please file any information that shows that the returns (ROE) for small regulated electric utilities are more unpredictable.
- (b) Please provide examples showing that YECL’s returns (ROE) have been unpredictable. Provide YECL’s returns in the last five years.

**YUB-YECL-64**

**Reference:** Application, Attachment 8.1, Concentric report, page 20.

**Issue/sub-issue:** Utility Size

**Quote:** “For example, adverse economic conditions in the territory may result in reduced customer demand for electricity. Under those circumstances, the small size of AEY means that the Company’s fixed costs are spread across a very small customer and revenue base, making it more likely that AEY will fail to earn its authorized ROE.”

**Request:**

- (a) The above example describes a volumetric risk. Can this risk be compensated by frequent regulatory filings or by special applications such as the YEC/YECL application when the Faro mine closed?

**YUB-YECL-65**

**Reference:** Application, Attachment 8.1, Concentric report, page 21.

**Issue/sub-issue:** Generation Risk

**Quote:** “FortisBC Electric purchases approximately 55 percent of its electricity supply and generates the other 45 percent of its supply requirements through company-owned facilities.”

**Request:**

- (a) FortisBC Electric generates 45 percent of its supply requirements. Does Concentric consider this a significant increase in generation relative to YECL?
- (b) Please comment on whether FortisBC Electric would be considered to have higher generation risk than YECL?

**YUB-YECL-66**

**Reference:** Application, Attachment 8.1, Concentric report, page 22.

**Issue/sub-issue:** Fuel and Purchased Power Cost Risk

**Request:**

- (a) In terms of overall business risk assessment, does fuel and purchase power cost risk have a lower weighting than size and generation risk? Please explain.
- (b) In regards to this risk, is YECL only exposed to purchase power requirements in excess of its forecast amounts? Please explain.

**YUB-YECL-67**

**Reference:** Application, Attachment 8.1, Concentric report, pages 23-24.

**Issue/sub-issue:** Volume/Demand Risk

**Quote:** “AEY does not have any regulatory protection against changes in volume/demand due to weather conditions or demand side management and energy efficiency programs. By comparison, all but one of the electric and gas distribution companies in the proxy group has some form of revenue protection against volumetric risk. The following companies have weather normalization clauses that help to stabilize their revenues if weather conditions are abnormal: FortisBC Energy; FortisBC Electric; Newfoundland Power; and Maritime Electric.”

And

“In Yukon, electric space heating has become much more common in new residential housing developments...”

**Request:**

- (a) Please provide and describe in detail the weather normalization clauses for FortisBC Electric.
- (b) Please explain how FortisBC Electric was awarded this clause and any concerns/conditions expressed by the BCUC regarding the awarding of such a clause.
- (c) In terms of determining overall business risk, please provide the relative weighting of this risk versus the risks of size, generation fuel and purchased power risk and the other business risks evaluated in the report.
- (d) Does increased use of electric space heating increase the average use per customer and therefore support growth in electricity consumption?

**YUB-YECL-68**

**Reference:**

**Application, Attachment 8.1, Concentric report, pages 24-25.**

**Issue/sub-issue:**

**Residential use per customer**

**Quote:**

“The Company believes that the increased variability in residential use per customer is due in part to customers responding to changes in prices for alternative fuels. For example, when heating oil and propane prices were high, more customers chose to use electricity for space heating. As heating oil and propane prices have decreased in the past year, more customers are deciding to use those alternative fuels for space heating rather than electricity.”

**Request:**

- (a) Has the company filed any studies to support the statement that customers are responding to changes in prices for alternative fuels. If so, please provide those studies. If not, what is the basis for the statement?
- (b) In terms of alternative fuel sources, does this mean that most homes will have duplicate sources for heat such as an oil burning furnace and electric space heating? Please comment.
- (c) When heating oil prices were high, the choice of customers was to use electric heating, does this refer to new customers entering the system or existing customers retrofitting their homes? Please explain.

**YUB-YECL-69**

**Reference:**

**Application, Attachment 8.1, Concentric report, page 27.**

**Issue/sub-issue:**

**Business Risk**

**Quote:**

“In summary, AEY’s residential customers respond to price signals as the relative cost of heating with electricity changes. However, this risk is difficult to quantify and likely does not have a material effect on the risk profile of AEY. It does, however, make it more difficult for AEY to accurately forecast sales, which in turn increases the variability in AEY’s cash flows and earnings.”

**Request:**

- (a) If the risk of alternative fuels is not material, why is the risk considered?

**YUB-YECL-70**

**Reference:**

**Application, Attachment 8.1, Concentric report, page 25**

**Issue/sub-issue:**

**Regulatory Environment**

**Quote:**

“Traditional cost of service regulation is generally considered to be less risky than incentive regulation by credit rating agencies, although the degree of risk depends on the length of the incentive regulation plan and the ability for the utility to adjust certain costs during the term of the plan.”

**Request:**

- (a) Please describe in detail the PBR plan for FortisBC Electric.

**YUB-YECL-71**

**Reference:**

**Application, Attachment 8.1, Concentric report, pages 29-31**

**Issue/sub-issue:**

**Changes to Business Risk**

**Preamble:**

Concentric lists four items with respect to changes in business risk.

**Request:**

- (a) Are the items with respect to changes in business risk listed in order of priority? Please explain.
- (b) The author concludes that business risks have not materially changed since 2009. If the business risks have not materially changed, please explain why the Board should deviate from its 2009 decision and award a risk premium?

**YUB-YECL-72**

**Reference:**

**Application, Attachment 8.1, Concentric report, page 30**

**Issue/sub-issue:**

**Micro generation**

**Quote:**

“The Yukon provincial government has been pursuing a policy that encourages micro generation. In October 2015, new legislation was passed that requires AEY to provide a Standard Offer Price to independent power producers by October 2016. For AEY, this new requirement has the greatest impact in the community of Watson Lake, which represents approximately 10 percent of AEY’s total sales. The move toward micro generation has the potential to increase the risk associated with customers using less electricity from AEY and increasing self-generation through use of solar panels. Since the policy has just been implemented, it is not possible to quantify the risk at this time.”

**Request:**

- (a) Please provide a copy of the legislation.
- (b) Please explain and provide a definition of the “Standing Offer Price”.
- (c) Please provide the amount of micro generation that has been supplied to the grid for each of the years 2013-15 and the forecast amounts for 2016 and 2017. Also, for each of the years, how much energy from micro generation has displaced generation from YECL?
- (d) Please provide the price that YECL pays for micro-generated power.
- (e) For micro generators, are any standby rates in place? Please explain. What should a standby rate be based on?

**YUB-YECL-73**

**Reference:**

**Application, pages 8-4 to 8-5.**

**Issue/sub-issue:**

**Long-term debt**

**Quote:**

“ATCO Electric Yukon used an average Long Canada Bond Rate and applied a spread to determine the forecast debenture rate. The forecast for Long Canada Bonds and credit spreads were based on discussions with ATCO’s Treasury Department at the time of the filing.”

**Request:**

- (a) Please provide a table showing the forecast issues and spreads (long-term Canada bond rates and spreads) and then the actual issues and spreads for the years 2010 to 2015 inclusive. Include in that table the amounts dates and final rates for the acquired long-term debt.
- (b) Please provide the sources for the Long Canada Bond Rate and spreads.
- (c) Please provide any updates to the forecast Long Canada Bond Rates and Spreads, and the date of that update.
- (d) Please provide details of the amounts of long-term debt YECL intends to issue during each of the years 2016 and 2017.

**YUB-YECL-74**

**Reference:**

**Application, pages 8-5 to 8-6, Attachments 8.2 and 8.3**

**Issue/sub-issue:**

**RFID**

**Preamble:**

YECL has included to attachments with respect to RFID claims.

**Request:**

- (a) Please explain why the Beaver Creek or Fish Lake events qualify as an RID claim?
- (b) Please provide the history of RFID claims for the period 2010 to 2015.
- (c) YECL has forecast annual charges for RFID of \$100,000. Please explain how that number was derived.

**YUB-YECL-75**

**Reference:** Application, page 8-8; Appendix A to Board Order 2014-06, page 61.

**Issue/sub-issue:** Deferred Charges and Credits – Watson Lake Bi-Fuel Project

**Quote:** “ATCO Electric Yukon has included these study costs in its deferred charges accounts for recovery over the test period.”

**Request:**

(a) In Appendix #3, YECL discusses the Watson Lake Bi-Fuel Project. If the project is approved, should the study costs be capitalized along with the project costs? Please explain.

**YUB-YECL-76**

**Reference:** Application, page 8-8

**Issue/sub-issue:** Smart Grid Study

**Request:**

(a) Please explain what the Smart Grid study is to entail and the reasons for such a study.

(b) Please list the benefits of a smart grid on an isolated system and provide the probability of each of those listed benefits being achieved.

(c) Can time of use metering be automated without automated meter reading?

(d) Does a smart grid imply that control of home appliances is surrendered to the utility? Please explain.

**YUB-YECL-77**

**Reference:** Application, page 8-9

**Issue/sub-issue:** Working Capital

**Request:**

(a) Please provide a copy of the updated lead/lag study.

(b) Please state what the updated payment dates are in the new study and what the previous payments dates were.

(c) Please state what the updated O&M lag days are and what the previous O&M lag days were.

**YUB-YECL-78**

**Reference:** Application, page 8-8

**Issue/sub-issue:** Approved DSM Costs

**Quote:** “ATCO Electric Yukon is proposing to move the costs related to the approved Demand Side Management (DSM) program out of the deferred account into capital and recover these costs over a 5-year term. This treatment is consistent with the findings in Section 12.1 of Board Order 2014-06, which approved the collection of previous DSM costs over the 2014-2018 timeframe.”

**Request:**

- (a) Please provide further explanation on how the utilities have demonstrated the benefits of the DSM program.
  
- (b) Please explain how DSM sales reductions can be directly quantified.