

YUKON UTILITIES BOARD		
EXHIBIT		A-9
DAY	ENTERED BY	DATE
	YUB	July 16/08

**YUKON ELECTRICAL COMPANY LIMITED (YECL)  
2008 GENERAL RATE APPLICATION**

**BOARD INFORMATION REQUEST (YUB) NO. 1 TO YECL  
July 16, 2008**

**YUB-YECL-1**

**Reference:** Overview, Application, page 1-2 – Background

**Issue/Sub-Issue:** Performance Metrics

**Quote:** Although Yukon Electrical has not been before the Yukon Utilities Board with a General Rate Application since the test years 1996-1997, Yukon Electrical has continued to provide safe reliable and cost effective service to our customers. However there have been significant cost pressures in recent years that require Yukon Electrical to come forward to the Board to ensure that it is possible to continue to deliver the same...

**Preamble:** The Board wishes further information regarding reliability measures.

**Request:**

- (a) Please provide a table showing reliability performance measures on a calendar year basis with respect YECL's service area. The table should include such indices as:
- the System Average Interruption Duration Index (SAIDI),
  - the System Average Interruption Frequency Index (SAIFI),
  - the Customer Average Interruption Duration Index (CAIDI), for the period 2002 to 2007,
- Annual averages must be derived from raw data, not by averaging monthly averages.
- (b) Please identify any formalized evaluation process that YECL has in place in order to identify worst-performing circuits in its service area. For the period 2003 through 2007, please identify the top 5% of the worst performing circuits on YECL's system and identify reasons for the poor performance.
- (c) Please provide a table that shows YECL's performance in respect of the Canadian Electricity Association's (CEA) All Injury/Illness Frequency Rate (AIIFR) performance index for the period 2003 through 2007.
- (d) Please provide a table that illustrates YECL's performance in relation to the Canadian Electricity Association's (CEA) Motor Vehicle Accident Frequency Rate (MVAR) performance index for the period 2003 through 2007.

- (e) In regard to call answer performance measures, please indicate if YECL has such a metric. If YECL has such a performance measure, please provide the metrics, the minimum performance standards that YECL has dictated for itself, and performance measure results for the last 5 years. If not, please explain why YECL does not monitor such metrics.
- (f) Please provide an Excel spreadsheet containing data regarding YECL's annual operational and financial results for the period 2003 through 2007. Please use the attached Excel spreadsheet "YUB-YECL-1 Operational Financial Reporting attachment.xls" as a template.
- (g) Please provide a comparison of actual 1996-97 results versus the latest Board Decision relating to those years.

### **YUB-YECL-2**

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

**Issue/Sub-Issue:** Deferral Accounts

**Quote:** The above noted ongoing and new deferral accounts meet the typical criteria for the establishment of a deferral account and are required as the costs related to these deferral accounts are:

- 1) Not under the control of the company and are not reasonably forecastable; or
- 2) An error in forecasting could produce a loss or gain of a substantial magnitude.

### **Request:**

- (a) Please define what YECL would describe as being a loss or gain of a substantial magnitude.
- (b) Please provide an update to the forecast in respect of the connection of Pelly Crossing to the WAF grid effective November 1, 2008.

### **YUB-YECL-3**

**Reference:** Overview; Attachment 1

**Issue/Sub-Issue:** Manpower requirements

### **Request:**

- (a) Please explain and provide details regarding the changes that have necessitated the need for an additional Field Service Representative for 2009
- (b) Please provide YECL's vacancy rates for the period 2003 through 2007

#### **YUB-YECL-4**

**Reference:** Forecast Process; Application, page 2-2

**Issue/Sub-Issue:** Derivation of the Forecast

**Quote:** The forecast process involves the review of historic sales data by customer class and takes into account the most recent information available at the time the forecast is prepared.

...

The normalization calculations are provided in Attachments 1 to 28.

**Preamble:** The Board wishes to understand fully the normalization calculations

#### **Request:**

- (a) Please provide the spreadsheets that underpin the "Normalized UPC (kWh)" numbers illustrated in Attachments 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, and 25; Please ensure that all spreadsheets are complete with formulae and linkages that clearly show all the calculations in order to arrive at the numbers in the above referenced Attachments.
- (b) Please provide the spreadsheets that underpin the "Normalized UPC (kWh)" numbers illustrated in Attachments 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, and 26; Please ensure that all spreadsheets are complete with formulae and linkages that clearly show all the calculations in order to arrive at the numbers in the above referenced Attachments.

#### **YUB-YECL-5**

**Reference:** Purchase Power; Application, page 3-1

**Issue/Sub-Issue:** Fish Lake Hydro generation rebuilds

**Quote:** The Fish Lake hydro generation in the test period outlined in Schedule 3.2, is based on the average generation over the last 10 years at Fish Lake adjusted for estimated downtime in the test period, for required rebuilds.

**Preamble:** The Board wishes to understand the necessity of required rebuilds

#### **Request:**

For the period 2003 through 2007, please provide on an annual basis the generation output, type of and length of maintenance outages, and rebuilds and reasons for the rebuilds if any.

## YUB-YECL-6

**Reference:** **Deferral Account; Application, page 3-2**

**Quote:** These rates do not include any adjustment to the rates equal to the approved run out rate for non-governmental residential service for the hydro zone.

...

Overall line losses are determined based on a five year historical average of 6.2%

**Preamble:** The Board wishes further information

### **Request:**

- (a) Please provide a detailed explanation and example as to what is meant by the above quote, in particular the part of the phrase that refers to "run out rate".
- (b) Please provide a detailed explanation and a spreadsheet analysis complete with formulae and linkages that illustrate the determination of the five-year historical average of 6.2% line loss percentage shown on page 3-2.
- (c) Please provide explanation and a spreadsheet analysis complete with formulae and linkages that determines the line loss percentages for each of the five years that make up the five-year historical average referred to in the above quote.

## YUB-YECL-7

**Reference:** **Diesel Fuel Costs; Application, page 4-2**

**Issue/Sub-Issue:** **Forecasting Fuel Costs**

**Quote:** Diesel fuel costs are a function of forecast sales, line losses, plant efficiencies. and delivered fuel prices.

**Preamble:** The Board wishes to understand the forecasting fuel costs process

### **Request:**

- (a) Please provide process documentation as to how the fuel providers are chosen and contracts are awarded.
- (b) Please provide the list of vendors who have supplied fuel to YECL for the period 1998 through 2007.
- (c) With respect to YECL's diesel plants, please provide by community the size, type and make of diesel plant, as well as the age/vintage of the plant.
- (d) Please confirm that, in regard to Schedule 4.2, the values shown in Line No. 17 through 23, are calculated by dividing the Generation (MWh) per respective plant by the Litres Consumed (000s).
- (e) It appears that for the forecast test period, the heat rates associated with YECL's generation plant are flat or worsening slightly. Please provide details as to the upgrades that YECL has planned, if any, in order to improve the efficiencies of its plant and at the same time lessen the impact of the costs associated with diesel generation on its customers.

- (f) Please provide an explanation as to what “Hydro grid standby diesel generation” is as well as an explanation for the significant increase in Hydro grid standby diesel generation that was experienced in 2007 and is illustrated in Schedule 3.2, line No. 8.
- (g) In light of current fuel economics that have been developing for some time, it appears that because of higher fuel costs, heating with electricity may be more economical. Does YECL wish to update the diesel generation forecast illustrated in Schedule 3.2? Please provide an explanation in regard to the assumptions that underlie YECL diesel generation forecast wherein diesel generation is forecast to decrease by 1.5% and 6.6% in 2008 and 2009 respectively.
- (h) Does YECL envision putting in place or has YECL put in place demand-side management programs that benefit its customers? If programs have been implemented, please describe the types of programs and successes that have arisen through their implementation.
- (i) Has YECL considered other sources of power or the implementation of efficiency increases in respect of its generation plant and/or loss reductions in its delivery of power?
- (j) With respect to increased fuel costs associated with Pelly Crossing, the information shown on page 4-3 of the Application indicates a heat rate of 3.62 kWh per liter whereas Schedule 4.2 shows a heat rate of 3.71 kWh/liter; please reconcile the differences.

#### **YUB-YECL-8**

**Reference:** Labour Costs; Application, Section 5 – Operations and Maintenance Expenses

**Issue/Sub-Issue:** Labour Costs

#### **Request:**

- (a) For the period 2003 through 2007, please provide a table, showing wage increases year-on-year for the YECL employee association groups compared to similar groups in its counterpart ATCO Electric.
- (b) For the period 2003 through 2007, please provide a table illustrating labour inflation in respect of YECL, that compares YECL with Yukon, British Columbia and Alberta labour inflation indices.
- (c) Please provide details in regard to the additional travel benefits due to commence in 2009 that YECL employees will be entitled to.
- (d) Please provide a table illustrating YECL vacancy rates for the period 2003 through 2007.
- (e) In consideration of the tight labour market “south of 60”, please explain why a vacancy rate of 1 FTE is reasonable and attainable.
- (f) Please provide a table illustrating non-labour inflation for the provinces of Alberta and British Columbia, as well as Yukon for the period 2002 to 2007.
- (g) Please provide a schedule of retirements from 2005 to 2009 inclusive.

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

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 62600 – Hydro Generation

**Quote:** Cost increase from 2005 to 2006 mainly due to a one-time catch-up of 1998 – 2006 water license fees. (Schedule 5.2, Line No. 5)

**Preamble:** The Board would like more detail.

#### **Request:**

- (a) Please explain in respect of the cost increase from 2006 to 2007, what is meant by “This increase is offset by a one-time catch-up in 2006 of 1998 to 2006 water license fees to the government (\$27)” (Schedule 5.2, Line No. 8-9.)
- (b) Please explain in respect of the cost increase from 2008 to 2009, what the additional inspections and type of inspections are to meet the requirements of the new water license.

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

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 84600 – Diesel Generation

**Quote:** Costs increase from 2007 to 2008 mainly due to scheduled diesel overhaul costs (\$167). (Schedule 5.2, Line No. 48.)

**Preamble:** The Board would like more detail to understand the genesis of the diesel maintenance expenses that are illustrated in Schedule 5.2.

#### **Request:**

- (a) Please provide greater detail such as vintage, operational hours, and size of the generation plant as well as generator manufacturer.
- (b) Please explain the sustained increases for diesel maintenance costs for the test period.

## YUB-YECL-11

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 87100 – Brushing

**Quote:** Costs increase from 2005 to 2006 due to additional brushing activity (\$56) and labour cost increases due to increased brushing activity (\$19). (Line No. 66-67.)

...

Costs increase from 2006 to 2007 mainly due to an enhanced brushing program (\$40), labour cost increase due to increased brushing activity (\$11) (Line No. 69-70.)

...

Costs increase from 2007 to 2008 due to increases to the labour compliment... (Line No. 73.)

**Preamble:** the Board would like to have a greater understanding of YECL's brushing program.

### Request:

- (a) Please provide an in-depth description of YECL's brushing program.
- (b) Was the 2005 to 2006 increase due to brushing that was scheduled but not performed in the previous year?
- (c) Please explain the difference between additional brushing activity (Schedule 5.2, Line No. 66) vs increased brushing activity (Schedule 5.2, Line No. 70).
- (d) What is the enhanced brushing program that YECL is referring to? Please describe the enhancements.
- (e) Were there increases to the brushing labour compliment for 2008 permanent?

## YUB-YECL-12

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 87300 – Maintenance

**Quote:** Costs increase from 2005 to 2006 mainly due to filling vacancies in 2006 and labour allocation to 71100 in 2005. (Line No. 80.)

...

Costs increase from 2007 to 2008 due mainly to additional labour as a result of new hires (\$136), vacancy reductions (\$120) (Line No. 82.)

...

These programs relate to Core certification and environmental requirements. Many of these programs are mandated by outside agencies or are a result of changes to industry standard. The increases also relate to enhanced patrols of lines and the introduction of planned maintenance programs designed to support system performance. (Line No. 84-87.)

**Preamble:** The Board would like to have a greater understanding regarding YECL's maintenance costs.

**Request:**

- (a) Please provide vacancy rates for the period 2002 to 2007 for Account #87300.
- (b) Please provide detailed explanation regarding in regard the \$600 (60%) increase in maintenance costs when comparing 2009 to 2007.
- (c) What is Core certification?
- (d) Please explain what is meant by "enhanced patrol of lines".
- (e) Please provide further detail and explanation regarding the need for expenditures relating to "the introduction of planned maintenance programs designed to support system performance".
- (f) Did previous programs not support system performance? Please explain.

**YUB-YECL-13**

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 87700 – Transformer Repair and Replacement

**Quote:** Costs increase from 2005 to 2006 mainly due to higher unplanned repairs... (Line No. 114.)

...

Costs increase from 2006 to 2007 mainly due to higher unplanned repairs... (Line No. 116.)

**Preamble:** The Board would like more detail regarding this account.

**Request:**

- (a) Please explain sustained transformer repair and replacement costs for the period 2006 to 2009 when compared to 2005.
- (b) As part of the explanation for (a), YECL, if it chooses, may provide detail in regard to transformer repair and replacement costs for the period 1997 through 2004.

#### **YUB-YECL-14**

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 87800 – Street Light Maintenance

**Quote:** Costs increase from 2006 to 2007 mainly due to increases in number of lights and age of street light infrastructure as well as maintenance of new types of lights such as waterfront decorative lighting (\$31). (Line No. 122-123.)

**Preamble:** The Board would like a better understanding regarding the various types of lights, i.e. street lights and decorative lighting, available in YECL's service territory.

#### **Request:**

- (a) Please provide detailed explanation as to the various types of street lighting and affiliated maintenance and ownership contracts that are available to customers in YECL's service territory.
- (b) Please provide detailed explanation as to the various types of decorative lighting and affiliated maintenance and ownership contracts that are available to customers in YECL's service territory.

#### **YUB-YECL-15**

**Reference:** Application, Schedule 5.2

**Issue:** 87500 – Meter and Meter Testing

**Quote:** Costs decrease from 2006 to 2007 mainly due to less one-time costs related to Automated Metering Reading (AMR) feasibility study (\$19) and less miscellaneous material issues and payables (\$18). (Line No. 106-107.)

Costs decrease from 2008 to 2009 due to savings from AMR. (Line No. 111.)

**Preamble:** The Board would like to gain a better understanding regarding meters and meter testing.

#### **Request:**

- (a) Please provide the business case/drivers that led YECL to perform an AMR feasibility study in 2006.
- (b) Who performed the study and what were the study parameters?
- (c) Please provide the results of the AMR feasibility study and the resultant analysis performed by YECL that led to the decision by YECL to incorporate AMR.
- (d) Please provide details in regard to what YECL has implemented and plans to implement in the future in respect of AMR as a result of the feasibility study.
- (e) Please explain the savings from AMR that are forecast in 2009.

- (f) Please provide an explanation as to what is meant by “less miscellaneous material issues and payables”. (Schedule 5.2, Line No. 107.)

**YUB-YECL-16**

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 71300 – Customer Billing & Accounting

**Quote:** Costs increase from 2007 to 2008 due to implementing the new ATCO-CIS billing system. The new system conversion is planned to be completed by July 2008. (Line No. 191-192.)

Costs increase from 2008 to 2009 due to full year impact of the new ATCO-CIS billing system costs. (Line No. 194.)

**Preamble:** The Board would like to gain a better understanding of the new ATCO-CIS billing system.

**Request:**

- (a) Please explain what is meant by “due to full year impact of the new ATCO-CIS billing system costs”.
- (b) Please provide a detailed explanation and analysis as to the benefits that YECL customers can expect to accrue as a result of YECL implementing the new ATCO-CIS billing system when the previous and new systems are compared?
- (c) Has YECL considered looking at other vendor billing systems? If not, why not? If so, what were the results of the comparison shopping?
- (d) Please provide any studies or supporting evidence that show ATCO-CIS as the least-cost alternative.
- (e) On an annual basis, excluding the capital component, what is the cost/customer of operating the ATCO-CIS system? In similar terms, does YECL know the annual cost/customer for billing at YEC?
- (f) Please explain the benefits accruing to YECL customers from the implementation of the ACTO-CIS system.

### **YUB-YECL-17**

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 71400 – Revenue Collection, 72100 – Administrative and 72300 – Insurance

**Quote:** ...offset by decreased payment agent costs from closure of payment agents in some communities outside Whitehorse (\$9) (Line No. 199-120.)

...

Costs increase from 2008 to 2009 due to the commencement of accepting credit cards for customer payments. (Line No. 205.)

**Preamble:** The Board would like to gain a better understanding of the YECL's revenue collection.

### **Request:**

- (a) Please provide position descriptions and the functions performed by YECL payment agents.
- (b) Please provide the drivers and/or study upon which YECL based its decision to not use payment agents in some communities outside of Whitehorse.
- (c) Please provide a more detailed explanation as to the \$96 increase from 2008 to 2009 because of the commencement of accepting credit cards for customer payments. (Line No. 196.)
- (d) Please detail the increased financial reporting requirements and account for the \$80 increase. (Line No. 218.)
- (e) Are the increased financial reporting requirements in (d) for internal purposes?
- (f) Please provide the model of the CGL corporate allocation methodology and describe in detail any changes to previous allocations of CGL. (Line No. 234.)

### **YUB-YECL-18**

**Reference:** Application, Schedule 5.2

**Issue/Sub-Issue:** 72600 – Training & Safety

**Quote:** Costs increase from 2007 to 2008 mainly due to increased labour for HS&E management position and other staff labour (\$102). (Line No. 250-251.)

### **Request:**

- (a) Has the HS&E management position, alluded to in Schedule 5.2, Line No. 250, been filled?
- (b) Was this a new or vacant position?
- (c) If the position has been filled, was it filled internally or externally?
- (d) Explain the new national transport safety compliance-training program and the need for such training by YECL personnel.

### YUB-YECL-19

**Reference:** Taxes Other Than Income; Application, page 6-1

**Issue:** 2008 Increase over 2007

**Quote:** Property tax increases...are primarily due to inflation. (Line No. 6-7)

#### Request:

What other factors have caused property taxes to increase? Please provide actual property taxes for 2005.

### YUB-YECL-20

**Reference:** Depreciation; Application, page 7-1

**Issue:** Reduction in Forecast Depreciation Costs

**Quote:** The impact of the depreciation study is a reduction in forecast depreciation expense of \$270,000. (Line No. 10-11.)

#### Request:

Please prepare a table similar to Schedule 7.2 comparing the previous depreciation method with the current method showing the savings of \$270,000.

### YUB-YECL-21

**Reference:** Depreciation – Schedule 7.1

**Issue:** Depreciation Expense

**Preamble:** Annual increases in depreciation expense are as follows:

Depreciation Expense Increase Over 2005	4.7%
Depreciation Expense Increase Over 2006	6.9%
Depreciation Expense Increase Over 2007	4.7%
Depreciation Expense Increase Over 2008	10.8%

#### Request:

- (a) Please explain the variation in the increases to depreciation expense. For example, why is rate of increase in depreciation expense for 2009 more that double that for 2008?
- (b) Explain Line No. 3 of Schedule 7.1.

### YUB-YECL-22

**Reference:** Depreciation – Schedule 7.4

**Issue:** YFR/Curve

#### Request:

Please explain the YFR curve and further describe what the amortization of differences entails? How are the amounts for each line item for the amortization of differences determined?

### YUB-YECL-23

**Reference:** Depreciation – Gannett Fleming Study, Section 7, Attachment 1, pg. 2

**Quote:** The depreciation rates are based on the straight-line whole life method using the equal life group procedure.

**Request:**

Please explain the whole life method and the equal life group procedure. Why was this particular estimation technique chosen? Under what conditions is a change in estimation technique warranted?

### YUB-YECL-24

**Reference:** Depreciation – Gannett Fleming Study, Section 7, Attachment, pg. 7

**Quote:** The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived.

...

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through contact with Company personnel.

**Request:**

- (a) For each asset type was there a significant difference between the historical trend and the estimated future trend? If so, why would such a difference occur?
- (b) Were the reasons for past retirements and the expected future causes of retirement consistent? If not please provide details where the reasons were not consistent.
- (c) What statistical analysis was used to determine the appropriateness of the curve selected? For each of the graphs in the study provide the  $R^2$  for the graph selected.
- (d) For each of the graphs in the study was the curve with the best  $R^2$  selected? If not which graphs did not use the curve with the best  $R^2$ ?

### YUB-YECL-25

**Reference:** Depreciation – Gannett Fleming Study, Section 7, Attachment 1, pg. 7

**Quote:** The net salvage estimates were based on judgment that incorporated analyses of historical data, a review of policies and outlook with Company management, a general knowledge of the electric industry, and comparisons of the net salvage estimates from studies of other electric utilities.

**Request:**

- (a) Upon your review of the company policies, in your opinion, could any changes in policy occur which would extend the life of the assets?
- (b) Within your comparison with other electric utilities, where any other northern electric utilities included in the comparison?

**YUB-YECL-26**

**Reference:** **Depreciation – Gannett Fleming Study, Section 7, Attachment 1, pg. 32**

**Issue:** **Underground Conduit**

**Quote:** The previously approved estimate for this account was the IOWA 54-R3, has been slightly adjusted to the IOWA 50-R4 to better fit industry retirement trends.

**Request:**

- (a) Statistically, how strong is the correlation between the YECL experience and the industry retirement trend? Would another curve provide a better  $R^2$ ?
- (b) How does the new curve conform to the expectation of the company's engineering staff?
- (c) Which component provides the greatest influence to the survivor curve estimate, historical trend, industry trend, or company expectations? How is the weighting for each component decided?

**YUB-YECL-27**

**Reference:** **Gannett Fleming Study, Section 7, Attachment 1, pg. 43**

**Issue:** **Meters**

**Request:**

- (a) Please explain why there is no estimated survivor curve for meters.
- (b) Explain how a 10-year amortization period for meters was deemed appropriate.

**YUB-YECL-28**

**Reference:** **Return on Rate Base, Application, page 8-2 and schedule 8.4**

**Issue:** **Other Post Employment Benefit Plans (OPEB)**

**Quote:** For these benefits, Yukon Electrical is assessed a percentage of its payroll at a rate calculated for the plan as a whole.

...

Prior to 2008 only the pension plan was on the cash basis. (Line No. 20-23.)

**Request:**

- (a) Please provide 10 years history of actual OPEB paid and the corresponding percentage of payroll.
- (b) For the current application, what percentage of payroll is calculated as OPEB?
- (c) In Schedule 8.4, are the line 13 charges the payroll assessment for OPEB? Describe what the cash payments represent.
- (d) Please explain the dramatic increase in charges from 2006 to 2007 for line 20 in schedule 8.4.

**YUB-YECL-29**

**Reference:** Return on Rate Base, Application, page 8-3

**Issue:** Capital Additions

**Request:**

Please explain and account for the difference between Capital Additions and Expenditures.

**YUB-YECL-30**

**Reference:** Return on Rate Base, Application, page 8-5, 8-6

**Issue:** Working Capital

**Request:**

Please explain and quantify the increase in inventory from 2006 to 2007. Show inventory values for the years 2005 to 2007 inclusive and for each of the test years 2008 and 2009.

**YUB-YECL-31**

**Reference:** Prepared Testimony of Foster Associates Inc., page 13

**Issue:** Cost of Debt

**Quote:** The 2007-2008Q1 average masks the widening spreads over the period. As investors have become more risk-averse, and the outlook for the economy has deteriorated, credit spreads have widened considerably since the end of 2006. (Line No. 350-352.)

**Request:**

- (a) The spreads discussed are over similar term Government of Canada bonds. Please provide the change in the bond rate over the same period.
- (b) Earlier on page 13, it was indicated that "...CU Inc. has been able to raise new 30-year debt on average at approximately 120 basis points over a similar term Government of Canada bond during 2007 and the first quarter of 2008." How does that reconcile to the 157 basis point spread at the end of March 2008?
- (c) Would the U.S. mortgage crisis have any effect on these spreads?

### YUB-YECL-32

**Reference:** Prepared Testimony of Foster Associates Inc., page 13

**Issue:** Cost of Debt

**Preamble:** The recent differential between the TransAlta Corporation cost of long-term debt and the CU Inc. cost of long-term debt of approximately 233 basis points provides a perspective on the potential magnitude of the benefits to ratepayers of Yukon Electrical's affiliation with CU Inc. (Line No. 367-370.)

**Request:**

- (a) Would you describe TransAlta's core operations as that of a regulated utility?
- (b) Would a fully regulated utility present less risk than a non-regulated company?

### YUB-YECL-33

**Reference:** Prepared Testimony of Foster Associates Inc., page 14

**Issue:** Cost of Debt

**Quote:** As a true stand-alone entity, Yukon Electrical would not be able to obtain investment grade debt ratings given its small size. (Line No. 370-372.)

**Request:**

- (a) Does CU Inc. raise investment grade debt for ATCO Gas, ATCO Electric Ltd., ATCO Pipelines and other affiliates as well as for YECL?
- (b) If CU Inc. did not include ATCO GAS and ATCO Pipelines in its portfolio (that is if it was substantially smaller), would it maintain the same investment grade rating?
- (c) Incrementally, does YECL contribute to the size CU Inc. and therefore CU Inc.'s ratings benefit from having YECL as part of the portfolio?

### YUB-YECL-34

**Reference:** Prepared Testimony of Foster Associates Inc., page 14

**Issue:** Compatibility of Capital Structure with Business Risks

**Quote:** The business risks to which investors in a utility are exposed are those that reflect the basic characteristics of the operating environment and regulatory framework that can lead to the failure to recover a compensatory return on, and/or the return of, the capital investment itself. (Line No. 380-383.)

**Request:**

- (a) For the last 20 years, how many times has YECL or its parent (ATCO Electric Ltd.) not made its regulatory return?
- (b) For the past 20 years, how many times has YECL or its parent (ATCO Electric Ltd.) exceeded its regulatory return?
- (c) If a company consistently meets or exceeds its regulatory return, does this imply a lower business risk?

- (d) If a company consistently meets or exceeds its regulatory return, does this imply a lower regulatory risk?
- (e) If a company consistently meets or exceeds its regulatory return, does this imply a lower financial risk?

**YUB-YECL-35**

**Reference:** Prepared Testimony of Foster Associates Inc., page 2

**Issue:** Benchmark ROE

**Quote:** However, the benchmark ROE is viewed as below the level consistent with a fair and reasonable return. (Line No. 49-50.)

**Request:**

- (a) Please provide any regulatory decision supporting that view.
- (b) Please provide other sources that support that view.

**YUB-YECL-36**

**Reference:** Prepared Testimony of Foster Associates Inc., page 15

**Issue:** Maintenance of Creditworthiness/Financial Integrity

**Quote:** While NRG is somewhat smaller (assets of approximately \$9 million) than Yukon Electrical, it would be of reasonably similar business risk to Yukon Electrical. (Line No. 413-414.)

**Request:**

Compare and contrast the business risks between YECL and NRG.

**YUB-YECL-37**

**Reference:** Prepared Testimony of Foster Associates Inc., page 16

**Issue:** Business Risk

**Quote:** Second, no regulator can bind his successors and thus guarantee that investors will be compensated for longer-term risks in the event they are incurred in the future. (Line No. 437-439.)

**Request:**

- (a) Is it common for utilities such as YECL to request deferral accounts to mitigate some of the business risks faced by the utility?
- (b) In the event of future risk, does anything prevent a utility from making an application before its regulator to cover those risks?
- (c) If such risks are just and prudent, would a utility include compensation for those risks in its revenue requirement?

### YUB-YECL-38

**Reference:** Prepared Testimony of Foster Associates Inc., pages 16 to 22

**Issue:** Regulatory Risk

**Quote:** The regulatory framework in which a utility operates is, next to the basic demand risks, the most significant aspect of risk to which shareholders in a regulated firm are exposed. The financial community is very conscious of the regulatory environment, as highlighted in reports of both bond rating agencies and investment analysts. (Line No. 456-459.)

**Request:**

- (a) Does YECL face a higher regulatory risk than the typical electricity distribution utility in Canada?
- (b) From a regulatory perspective, is an integrated utility considered more risky than one that is not integrated?
- (c) In general, does an integrated utility face more business risk than one that is not integrated? If so, provide third party references.
- (d) What was the last capital structure, return on debt and return on equity approved for Northland Utilities (Yellowknife) Limited?
- (e) What was the last capital structure, return on debt and return on equity approved for Northland Utilities (NWT) Limited?
- (f) Do FortisBC, FortisAlberta, or ATCO Electric serve any communities with populations that range from 10 to 300?
- (g) Do EPCOR Utilities and ENMAX in Alberta only serve one community?

### YUB-YECL-39

**Reference:** Prepared Testimony of Foster Associates Inc., page 23

**Issue:** Common Equity Ratio

**Preamble:** Table 3 shows common equity ratios for Canadian electric utilities. The evidence shows that for those utilities (transmission and distribution) with rated debt (2006) common equity ratio of between 43.4% and 44.5% was evident. The same table showed for utilities with rated debt that were integrated, the common equity ratio was 40.5%.

**Request:**

- (a) Does this table indicate that integrated utilities present less business risk than non-integrated utilities?
- (b) Would the fact that YECL is an integrated utility offset or mitigate some of the business risk?

**YUB-YECL-40**

**Reference:** Prepared Testimony of Foster Associates Inc., page 24

**Issue:** Business Risk of NTPC

**Request:**

- (a) Quantify the higher business risks faced by NTPC versus those of YECL?
- (b) Please reconcile the approved equity ratio of NTPC of 48.86% with the opinion that the equity ratio should be approximately 56-57%

**YUB-YECL-41**

**Reference:** Prepared Testimony of Foster Associates Inc., page 25

**Issue:** Business Risk

**Quote:** ...Yukon Electrical would be viewed as facing higher business risks than the typical Canadian utility. (Line No. 658-659.)

**Request:**

How would the business environment faced by YECL compare with that of the maritime utilities? Please compare and contrast the business risks.

**YUB-YECL-42**

**Reference:** Prepared Testimony of Foster Associates Inc., page 26

**Issue:** Incremental Equity Risk Premiums

**Quote:** If the capital structure for each of the utilities in Table 4 above were adjusted to eliminate the incremental equity risk premiums, the allowed equity ratios would be approximately 46-47%. (Line No. 687-689.)

**Request:**

- (a) In the case of FortisBC, does this imply that the 0.40% risk premium would equate to a 6-7% incremental equity thickness?
- (b) In the case of Newfoundland Power, does this imply that the 0.15% risk premium would equate to a 1.5-2.5% incremental equity thickness?
- (c) With respect to U.S. utilities and the rates charged to their customers, is the higher equity thickness somewhat mitigated by the lower income tax rates?

**YUB-YECL-43**

**Reference:** Prepared Testimony of Foster Associates Inc., page 29-32

**Issue:** Coverage Ratios

**Request:**

Please confirm that the FFO Interest Coverage, the FFO/Total Debt and the EBIT interest coverage ratios for YECL (at a common equity ratio of 47.5%) is higher than those for Canadian utilities as indicated in Table 8 and higher than those compared in Table 4. If confirmation cannot be made, explain and indicate those Canadian utilities which have higher ratios based on the most recent decisions affecting those utilities.

**YUB-YECL-44**

**Reference:** Prepared Testimony of Foster Associates Inc., page 33-35

**Issue:** Debt Rating Agency Commentary

**Request:**

Comments were submitted regarding the lower return and thinner equities experienced by Canadian utilities in contrast to U.S. and global peers. Is this a reflection of the higher business risk of the U.S. electric utilities?

**YUB-YECL-45**

**Reference:** Capital Additions; Application, page 9-1, 9-2

**Issue/Sub-Issue:** Expenditures

**Quote:** System Performance Projects (Line No. 17.)

...

Life Extension Projects (Line No. 1.)

...

System Replacement Projects (Line No. 4.)

...

Forced Projects (Line No. 8.)

...

**Preamble:** The Board wishes to better understand the basic principles underlying YECL's distribution improvement project categorization.

**Request:**

- (a) How are the acceptable levels determined in respect of System Performance Projects?
- (b) Please offer a detailed explanation as to how new feeder increase the life cycle of the distribution system.

#### **YUB-YECL-46**

**Reference:** Capital Additions; Application, page 9-5  
**Issue/Sub-Issue:** 2006 Capital Expenditures

#### **Request:**

- (a) When were the current Canadian mandatory standards and codes, that are referred to in the 2006 Capital Expenditures related to Generation plants, and upon which the work is justified, last updated? (page 9-5)
- (b) Please provide a more in-depth explanation in regard to the greater than \$1.2 million that was spent in Distribution New Extensions category of 2006 capital expenditures. What types of projects are in this amount, which makes up more than half of the \$2,433,000 dollars that are shown? (page 9-6)
- (c) In respect of the older YECL underground system (30 years) that is in place, i.e. Tummel Road to Vanier Rebuild (Phase I), is this system still a radial feed type of system? If so, why has YECL not taken steps to construct an alternate feed? Over the intervening 30 years and in consideration of current standards, has YECL considered replacement of the live-front transformers, considering the risk to linemen working on the apparatus? (page 9-8)
- (d) Considering the make up the Whitehorse O/H system (Justice Centre to Whitehorse Star), i.e. the pre-1969 vintage of certain poles, and the fact that the system was in violation of current electric codes, what were the key driver to correct the failings when installing u/g versus correcting an already deficient O/H system? Why was this not corrected sooner? (page 9-9)

#### **YUB-YECL-47**

**Reference:** Capital Additions; Application, page 9-11  
**Issue/Sub-Issue:** 2007 Capital Expenditures

#### **Request:**

- (a) Please provide more detail respecting Other Projects that totaled almost \$360 thousand or greater than 75% of the monies spent on 2007 capital expenditures related to generation plant. (page 9-11)
- (b) Please provide the detailed search and evaluation YECL undertook relating to various billing solutions that led to the decision to proceed with ATCO-CIS. Provide the cost-benefit analysis that was done prior to YECL's decision to proceed with ATCO-CIS. Please provide details including costs of alternatives considered. (page 9-11)
- (c) Please provide more detail concerning the Other Projects totaling \$1.6 million or greater than half of the Distribution New Extension total for 2007. (page 9-12)

**YUB-YECL-48**

**Reference: Capital Additions; Application, page 9-16**

**Issue/Sub-Issue: 2008 Capital Expenditures**

**Request:**

- (a) Please provide a description of the projects that make up other projects valued at \$677.5 thousand, or greater than half of the \$1-million forecast total. (page 9-16)
- (b) Please provide greater detail in how the other project total of almost \$1 million was arrived at in respect of Distribution New Extensions. (page 9-17)
- (c) In respect of the Distribution Improvements for 2008, is the work to be completed by YECL or is the work to be contracted out? Please provide a detailed explanation and delineation on a project-by-project basis. (page 9-18)
- (d) With respect to the work that is necessary to connect Pelly Crossing with the WAF, was the engineering and design work completed by YECL? If not, please describe the process to undertake bids for engineering, design and handover of the completed intertie project. (page 9-18)
- (e) Please provide details regarding how energized line poles become anchored to trees as an accepted practice. Please provide a copy of YECL's heavy loading standards and compare these standards with those of northern Alberta and British Columbia. Is the heavy loading in relation to customer load or northern snow loads, or a combination of both? (page 9-18)
- (f) When were the Yukon Electrical heavy loading standards, referred in the Marsh Lake 9L Reliability Fix Phase 1 Squanga Distribution Improvement, last updated? (page 9-19)
- (g) Do the lines contained in the Yukon Electrical Tie between First Avenue and Sixth Avenue present a risk to YECL personnel or contradictions to current electrical codes? (page 9-19)
- (h) Please provide further detail into the other projects (distribution Improvements) that total \$1 million. (page 9-20)
- (i) Is the Pine Street Whitehorse Street and Sentinel Lighting project to be done in conjunction with other city public works projects? Has the City of Whitehorse asked that the lighting be undertaken and built to the newer standards? (page 9-20)
- (j) Please provide details in regard to the operational efficiencies attendant with the implementation of AMR. What are the "other features and benefits of this AMR technology" referred to in Meters? Please provide a cost-benefit analysis that was done prior to YECL's decision to proceed with the implementation of AMR. Quantify the operational efficiencies in terms of reduced costs to YECL customers. (page 9-21)
- (k) Please provide the details for the North 60 New Billing System, the business case and cost benefit analysis. (page 9-17)

**YUB-YECL-49**

**Reference:** Capital Additions; Application, page 9-22  
**Issue/Sub-Issue:** 2009 Capital Expenditures

**Request:**

- (a) When did the YUB approve the Yukon Energy 20-Year Resource Plan? With respect to the community of Carcross, please provide a table illustrating electrical load for the period 2003 through 2007. Please provide evidence that YECL either agreed to or endorsed the YEC 20-Year Resource Plan. (page 9-23)
- (b) How many YECL communities remain to be converted or upgraded to GE Fanuc standard? (page 9-23)
- (c) How long has the standard been in place whereby an isolated community requires a 110% back-up if the largest unit is out of service? Please provide detail regarding total project costs that would see a 500 kW modular unit installed and when would the total project be completed. (page 9-23)
- (d) Please confirm that the dollars spent on upgrading Old Crow's PLC would incorporate future generator expansion alluded to in (c). (page 9-24)
- (e) Please provide detail regarding the \$1.7 million of other projects forecast for 2009. (page 9-24)
- (f) Please provide a detailed explanation regarding the process that YECL uses in order to determine the magnitude of its miscellaneous pole replacement forecast? (page 9-25)
- (g) What is meant by miscellaneous pole replacements? (page 9-25)
- (h) Approximately what percentage, using numbers of street lights as a reference point, use wire in conduit in lieu of direct buried U/G cabling? (page 9-26)
- (i) Please describe the difference between miscellaneous street light projects and other projects. (page 9-26)
- (j) Please describe the logistics and the time that it will take to convert 13,200 conventional meters to AMR, considering that it took YECL's sister company (ATCO Electric) 12 years to convert approximately 178,000 meters to AMR in Alberta. How much of the \$3.9 million is forecast to be spent in 2009? (page 9-27)
- (k) Please provide greater detail in respect of the \$150 thousand that is projected to be spent on the new Old Crow Bunkhouse. Please provide detail in respect of the upgrading to meet current legislation. Please show a cost-benefit analysis reflecting the difference between replacement and repair. (page 9-28)

**YUB-YECL-50**

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

**Request:**

- (a) Please provide income tax expense for the years 2003-2005 inclusive.
- (b) Does YECL have any knowledge that territorial or federal tax rates may change during the forecast period? If so, please provide such knowledge.
- (c) How has YECL accounted for changes in tax rates (either federally or territorially) during the years 1997 to 2007?