



**YUKON ENERGY
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July 18, 2013

Mr. Bruce McLennan, Chair
Yukon Utilities Board
Box 31728
Whitehorse, Yukon Y1A 6L3

Dear Mr. McLennan:

**Re: Yukon Electrical Company Limited 2013-2015 General Rate Application –
Interrogatories**

Enclosed please find copies of interrogatories from Yukon Energy Corporation (“YEC”) to Yukon Electrical Company Limited (“YECL”) with respect to YECL’s 2013-2015 General Rate Application.

The Yukon Utilities Board in correspondence dated July 16, 2013 has directed that a revised DCF application be submitted to the Board by no later than September 30, 2013. As this matter is expected to be before the Board for review this fall, Yukon Energy has not included any information requests on the Diesel Contingency Fund (“DCF”) or the Energy Reconciliation Adjustment (“ERA”).

Please direct any questions on this communication to the undersigned.

Yours truly,

A handwritten signature in black ink, appearing to read 'Ed Mollard'.

Ed Mollard, CGA
Chief Financial Officer

Yukon Energy Corporation (YEC)
Information Requests to Yukon Electrical Company Limited (YECL)
YECL's 2013-2015 General Rate Application (GRA)

Overall Revenue Requirement

YEC-YECL-1 Requested Rate Increases and Revenue Requirement

- a) Please confirm that the requested year-over-year rate increase is 6.1% for 2013, 3.2% for 2014 and 2.0% for 2015.
- b) If a) is not confirmed, please provide details of the requested year-over-year rate increase calculations for 2013, 2014 and 2015.
- c) Please provide Schedule 8.1 for 2008-2015 without 2013-2015 GRA, i.e. forecast Return on Equity (ROE), equity ratios and Rate Base forecast for 2013-2015 years without GRA application.

Section 2 – Sales and Revenue

YEC-YECL-2 Sales Forecast

- a) Please provide a table with comparison of YECL's forecast (YECL internal and GRA) and actual sales by rate class and by rate zone (Hydro, Large Diesel, Small Diesel and Old Crow) for 2008, 2009, 2010, 2011 and 2012.
- b) Please provide Table 2 on page 2-2 by comparing 2008 - 2009 GRA forecasts to the actual sales, instead of actual normalized sales.
- c) Is the sales forecast method proposed in this application the same as used in YECL's 2008/09 General Rate Application? If not, please enumerate any differences and provide an explanation for why the forecasting method was changed.

YEC-YECL-3 Residential Sales Forecast

- a) Please provide details of residential customer forecast for 2013, 2014 and 2015. Please include list of "all known residential property developments" (page 2-5, line 1) included in forecast as well as the estimated additional number of customers for each development area.

- b) Does the residential customer forecast also consider population growth forecasts? If so please provide the source of the population growth forecasts. If not, please explain why population growth forecasts are not considered.
- c) Please provide the impact for each forecast year of using the three-year average usage per customer (UPC) for Whitehorse. Please provide calculations in an excel file.
- d) Given the poor R2 correlation factor for residential customer UPC using single variable regression did YECL consider multiple variable regression analysis for UPC? If not, why not.
- e) Please provide any assessments as to sensitivity of such regressions as between different months or seasons
- f) Please confirm that YECL used a twenty year rolling average of Heating Degree Days (HDD) [page 2-5, line 22].
- g) If f) above is confirmed please explain why attachments 1 through 21 show data only for 1998-2012. Please provide calculations in an excel file.
- h) Please provide actual (2008-2012) and forecast (2013-2015) sales by month for each test year and rate zone (Hydro, Large Diesel, Small Diesel and Old Crow) in excel file.

YEC-YECL-4

Commercial Sales Forecast

- a) Please provide details of commercial customer forecast for 2013, 2014 and 2015. Please include a list of the twelve new large commercial customers with the forecast load for each customer for all test years. Provide for each year included in the GRA (2010-2015) the number of new commercial customers in Whitehorse and the average UPC each year for these new customers.
- b) Please confirm that for Watson Lake the most recent three-year average actual UPC was used.
- c) Please discuss why weather normalized UPC is not used for commercial sales forecast.
- d) Please provide the impact for each forecast year of using the three-year average UPC for Whitehorse. Please provide calculations in an excel file.
- e) Please provide the 2012 actual loads for the "several secondary commercial customers" who converted to primary service as referenced (page 2-12, lines 13-15).
- f) Please provide actual (2008-2012) and forecast (2013-2015) sales by month for each test year and rate zone (Hydro, Large Diesel, Small Diesel and Old Crow) in an excel file.

YEC-YECL-5 Lighting Sales Forecast

- a) Please provide forecast method for streetlight sales, including average usage per light for each lighting type (kW.h/year/light type) and number of lights by lighting type and by community.
- b) Please provide actual (2008-2012) and forecast (2013-2015) sales by month for each test year and rate zone (Hydro, Large Diesel, Small Diesel and Old Crow) in excel file.

YEC-YECL-6 Industrial Sales Forecast

- a) Please provide details of the industrial load forecast, including the forecast provided by Whitehorse Copper Tailings (WHCT).
- b) Please provide monthly sales and demand forecasts.
- c) Please discuss winter load requirements for WHCT, if any.
- d) Please provide details of the proposed deferral account relating to WHCT sales uncertainty, including trigger points when the difference between forecast and actual will be refunded to or collected from customers, and how YECL proposes to collect/refund the difference. Please provide examples by assuming WHCT actual sales for the test years are higher than forecast and lower than forecast.
- e) Please confirm that such a deferral account reduces YECL's regulatory risk and transfers this to the ratepayer. If so, why is it necessary to do so? If not, why not.
- f) Please provide examples of other similar deferral accounts used by other regulated utilities in Canada.

YEC-YECL-7 YECL/YEC Retail Revenue

- a) Please provide details of the YECL revenue forecast calculation by rate class for each test year, including assumed average rate per kW.h, assumed sales and revenue by rate blocks for each rate class and assumed sales and revenue by government and non-government customer type for each rate class.
- b) Please provide details of YEC revenue forecast calculation for test year as shown in Schedule 2.1.

Section 3 – Purchase Power

YEC-YECL-8 Generation and Purchased Power forecast

- a) Please provide details of requested Purchase Power Flow Through deferral account, including:
 - i. Please confirm the balance of this account is zero.
 - ii. Please confirm that the Purchase Power Flow Through deferral account requires a collection mechanism to be implemented and approval by the YUB prior to collecting or refunding any balances.
 - iii. Please provide any updates regarding the status of any future collection mechanism to be proposed by YECL.

Section 4 – Fuel Cost

YEC-YECL-9 Fuel Price Flow Through deferral account

- a) Please provide details of any consultation with YEC and other stakeholders regarding the Fuel Price Flow Through deferral account. If no consultations have taken place, please explain why?
- b) Please provide details of the Fuel Price Flow Through deferral account by providing examples for next five years:
 - i. assuming diesel/LNG fuel prices are higher than GRA approved; and
 - ii. assuming diesel/LNG fuel prices are lower than GRA approved

YEC-YECL-10 Defined Benefit Deferral Account

- a) Please confirm that such a deferral account reduces YECL's regulatory risk and transfers this to the ratepayer. If so, why is it necessary to do so? If not, why not.
- b) Please provide examples of other similar deferral accounts used by other regulated utilities in Canada.

Section 7 – Depreciation

YEC-YECL-11

Depreciation Expense

- a) Please reconcile the depreciation rates on schedules 7.2 -7.4 to the Depreciation Study results performed by Gannett Fleming. Please explain if any difference.
- b) Please provide a comparison by account of the proposed depreciation rates to the last approved depreciation rates.
- c) Please provide schedules using YECL's last approved depreciation rates similar to schedules 7.2-7.4.
- d) Please identify the amounts included as expense in the 2013-15 GRA revenue requirements with respect to net salvage costs. Indicate under which account or category these forecast expenses are included.

YEC-YECL-12

Depreciation Study

- a) The YUB ruled in decision 2009-02 that YECL was not entitled to collect a provision for salvage. Please explain what has changed in Yukon that justifies YECL requesting this large increase in depreciation expense.
- b) Please provide a continuity schedule of the reserve for site restoration for each year 2008-2012. For each year, please provide a schedule of individual charges to the Fund and, for each charge, provide the justification for each charge to the fund.
- c) Please provide further detailed explanation regarding how the proposed deferral account to allow the ability to file future applications, as necessary, to change its depreciation parameters within the 2013-2015 test period, and flow through the impact of any such change to customers within the test period would operate. Please provide any illustrative examples.
- d) Please provide examples of other similar deferral accounts used by other regulated utilities in Canada.

Section 8 – Return on Rate Base

YEC-YECL-13

Cost of Capital

- a) Please provide a copy of BCUC Order G-75-13.
- b) Please provide details and discuss YECL's proposal of using Automatic Adjustment Mechanism (AAM) and ROE Deferral Account, including:
 - i. if YECL proposing that the AAM method for YECL will be the same as for the utilities in British Columbia affected by British Columbia

- Utilities Commission (BCUC) Order G-75-13 and any future changes to BCUC Order G-75-13 will affect YECL ROE;
- ii. how and when (beginning of the year, when Canada Bond yield changes or other) YECL is proposing to calculate AAM;
 - iii. what would be basis for calculating of difference in ROE, including Rate Base (timing and amount, i.e. YUB approved Rate Base for test year or actual Rate Base at the time of adjustment), common equity ratio (timing and ratio);
 - iv. by providing examples and impacts to the test years by assuming 10% higher and 10% lower long-term Canada Bond yield compared to the yield rate used for calculation of 9.21% ROE.
- c) Please confirm that per paragraph 3 of British Columbia Utilities Commission Order G-75-13 "[t]he implementation of the model [AAM] will be subject to conditions outlined in the Decision."
 - d) Please provide details of the conditions outlined in the BCUC Order G-75-13 as per c) above.
 - e) Please confirm that the proposed AAM and ROE deferral account does not go beyond 2013-2015 test years. If not confirmed please explain why?
 - c) Please confirm that such a deferral account reduces YECL's regulatory risk and transfers this to the ratepayer. If so, why is it necessary to do so? If not, why not.
 - d) Please provide examples of other similar deferral accounts used by other regulated utilities in Canada.

YEC-YECL-14

Common Equity Ratio

- a) Please confirm that forecast common equity ratio is 43.61% for 2013, 43.66% for 2014 and 43.70% for 2015.
- b) Please explain the reason for increase in common equity ratio from 40.65% in 2012 to 43.61% in 2013.
- c) Please confirm that based on Schedule 8.1 the mid-year balance of common equity forecast to increase from \$25.740 million in 2012 actual to \$42.860 million in 2015, i.e. increase of \$17.120 million over three years. Please provide forecast sources for this additional equity amount (parent company equity injections, retained earnings or other).
- d) Please update Schedule 8.1 by using 40% equity ratio and discuss impacts to the YECL to provide services to its customers.
- e) Please outline and explain in detail any changes in YECL's risk profile since the 2008/2009 GRA that would warrant an increase in equity ratio from 40%.

- f) Please explain the impact that the number of deferral accounts (Whitehorse Copper Tailings Sales Uncertainty, Purchased Power Flow Through, Depreciation Parameters, ROE and Defined Benefit Pension Plan proposed in the current application would have on YECL's risk profile.

Section 9 – Capital Additions

YEC-YECL-15

Capital Additions General

- a) Describe the system planning criteria (i.e. decision making process for diesel plant replacement, distribution upgrades and other projects included in this GRA) used to develop YECL's capital plans.
- b) Please describe the age and condition assessments which lead to YECL's conclusion that distributions assets need to be upgraded.
- c) Please provide a copy of YECL's capitalization policy.
- d) Please confirm that under International Financial Reporting Standards (IFRS) entities are not permitted to charge projects for equity returns and use debt only rate for AFUDC. If this is confirmed please explain why YECL is proposing to use both an equity and debt components for AFUDC rate.
- e) Does YECL have deferred cost or deferral account accounting policies? If so please provide copies of the policies. Please explain how the deferred accounting policy works, including:
 - i. which type of cost to be deferred;
 - ii. who has the authority for decision to defer, close and amortize YECL deferred costs
 - iii. how the amortization period is determined
- f) Please provide a continuity schedule for each category of deferred cost for YECL for the years 2010 to 2015 showing additions, close-outs, work in progress and amortizations.
- g) Identify which capital projects included in GRA application, both actual and forecast, are improving reliability and provide an explanation for how they improve reliability.
- h) Please provide a continuity schedule for YECL of Contributions in Aid of Construction or customer contributions for the years 2010 to 2015 by project segregating additions, amortizations and other adjustments.

YEC-YECL-16

Fish Lake

- a) Please provide a table that shows capital expenditures for each unit of Fish Lake hydro-electric generating plant for actual and forecast years included in GRA application.
- b) Please explain expenditures with the amount more than \$0.5 million.
- c) Please provide a continuity schedule for Fish Lake hydro-electric generating plant for 2010-2015 years by showing the following:
 - i. Total plant year-end cost
 - ii. Total plant capital additions for the year
 - iii. Total plant amortization expense for the year
 - iv. Total plant year-end accumulated amortization
 - v. Total plant year-end net-book-value
 - vi. Total plant net cost mid-year balance (based on iv above)
 - vii. Total hydro generation for the year
- d) For c) above please combine all Fish Lake hydro-electric generating related costs.

YEC-YECL-17

Fish Lake Unit #1 Turbine and Building Replacement

- a) Please provide details of the failure of Fish Lake Unit #1, including details of insurance proceeds received or expected to be received related to this failure.
- b) Please confirm the proposed date Fish Lake Unit #1 in-service date after rebuilding.
- c) Fish Lake Unit #1 Turbine and Building Replacement Business Case notes the following (page 6 of 8) as the reason for replacing the existing unit with modern equipment:
 - i. Modern hydro turbine will be more efficient.
 - ii. Modern hydro turbine will have lower operating costs.
 - iii. Economic analysis indicates incremental cost of new equipment will be paid back in a reasonable time frame.

Please provide details of impact of each above reasons to Yukon Ratepayers (does the current GRA includes any benefits from increased efficiency, lower operating cost, etc.)

- d) What is the new updated average generation output from Fish Lake Unit #1?
- e) What is the annual average hydro generation for each unit? Does YECL propose to update the average Fish Lake generation from 8.73 GW.h as approved in YUB Order 2009-02 to reflect increased efficiency? If yes, please provide updated average generation forecast for each unit; if not, please provide reasons.

- f) Please provide rationale for separating Fish Lake Dyke Upgrade (Business Case #7) and Fish Lake Ditch #3 Diversion Structure (Business Case #9) from Fish Lake Unit #1 Turbine and Building Replacement projects.
- g) The economic case is based on replacing the unit and building only. As evidenced by capital expenditures related to this facility and renewing its water licence, considerable additional capital and operating expenditures were and are required during the test years in order to continue to operate this facility as well as Unit #2. Please provide an updated business case considering the life cycle cost analysis of the total expenditures over the future expected life of the facility (capital and future operating expenditures)
- h) Please provide a copy of 2012 Dam Safety Report (Fish Lake Ditch #3 Diversion Structure - Business Case #9, page 2 of 3).

YEC-YECL-18 Fish Lake Unit #2 Penstock Replacement

- a) Explain why (with numerical support) the life cycle cost of this life extension work is economically preferable to abandonment of the facility (i.e. replace with purchase of wholesale power).

YEC-YECL-19 500kW Mobile Generator

- a) Please provide list of YECL diesel units with unit size and expected retirement dates as of December 31, 2012 and as of December 31, 2015 by community.
- b) Please identify location of mobile units and communities they serve.

YEC-YECL-20 Carcross 2MVA Standby Diesel Unit

- a) Please compare Carcross 2MVA Standby Diesel Unit cost to the cost of Carcross new 1.5 MW Power Plant as proposed in YECL's 2008/09 GRA. Please explain any differences.
- b) Project business case does not include capital cost and/or operating cost estimates for alternatives. This will not allow assess the economic benefit to ratepayers. Please provide business case for the projects with an economic analysis, including rate impacts.
- c) Please explain and provide rationale for YECL's "...threshold minimum load of 1.0 MWHs and 300 customers to enact the N-1 planning criteria."

YEC-YECL-21 Whistle Bend

- a) Please provide a summary table that combines costs by year for the business cases 16, 17, 19, 20 and 26.

- b) Please include forecast customer contributions to the summary table in a) above.
- c) Please provide number of customers forecast to be included in test years, including forecast additional electricity required to supply energy to the subdivision.
- d) Please provide source of electricity to the Whistle Bend subdivision.