



THE YUKON ELECTRICAL COMPANY LIMITED
An **ATCO** Company

**YUKON ENERGY CORPORATION (YEC)
2012-2013 General Rate Application**

**Information Requests No. 1
The Yukon Electrical Company Limited (YECL)
Submitted: June 21, 2012**

YECL-YEC-1

Topic: OIC 2012/68

Reference: YEC April 2012 Phase I, Introduction to Application, Page 1

Preamble: Pursuant to the OIC 2012/68 direction, the Board must ensure until the end of 2013.

Request: Please discuss YEC's view of Board Order 2010-13 and the requirement to produce a joint YECL / YEC Phase II Cost of Service Study within 6 months of the expiry of OIC 2008/149 and what impact OIC 2012/68 has on Board Order 2010-13 and OIC 2008/149.

YECL-YEC-2

Topic: Table 2.1 Summary of Customers, Energy Sales and Revenues

Reference: YEC April, 2012 Phase I, Section 2, Page 2-17, Table 2.1

Preamble: Yukon Electrical wishes to further understand the Sales Forecast contained in Table 2.1.

Request: Please provide an updated Table 2.1 with the 2011 Actual values.

YECL-YEC-3

Topic: Wholesale Sales Forecast

Reference: Footnote 7, Page 2-4, "Unit #1 failed in March 2010..., this unit expected to be back in service January 2013".

Footnote 8 Page 2-4, "Variations in the annual generation at Yukon Electrical's Fish Lake hydro plant can have an impact on Yukon Energy's wholesale sales. In 2011, the actual wholesales to Yukon Electrical were 290.5 GW.h, 5.14% higher than 2010 actual wholesales because of (a) unavailability of hydro generation from Unit 1 of Fish Lake hydro generation plant (added 4.35 GW.h to the 2011 sales) and (b) colder than normal weather (HDD analysis showed that the temperature in Whitehorse was colder in 2011 than the 10-year average and that the estimated impact added 1 GW.h to the 2011 sales). The average annual growth rate of 2.26% was applied to the adjusted 2011 wholesales of 285.1 GW.h (290.5 GW.h - 4.35 GW.h - 1 GW.h = 285.1 GW.h) and 4.35 GW.h for Unit 1 of Fish Lake plant added back to wholesales forecast in 2012 as commencing of this unit is now expected to be in the beginning of 2013."

Preamble: Yukon Electrical is seeking more information on Wholesale forecast calculation.

Requests:

- a) Please explain and provide all backup (in Excel format) for the calculation of normalized values which result in the decrease of 1 GWh HDD for 2011 sales.
- b) Footnote 7, Page 2-4 of the Application indicates that Unit # 1 (Fish Lake) failed in March 2010 and is expected back in service 2013. Please explain how Fish Lake # 1 impacts the Wholesales forecast. In particular, please explain why the annual load growth rate applied to the 2011 Wholesale load forecast is net of Fish Lake (supply).

YECL-YEC-4

Topic: Wholesale Sales Forecast

Reference: Footnote 9 Page 2-4, "The average annual increase of 2.26% was determined based on an average of the WAF average growth rate (2.18%) and 2.34% (reflecting Whitehorse residual use growth). The WAF average growth rate of 2.18% per year for 2001-2010 was calculated by excluding Pelly Crossing sales starting late 2008 (0.275 GW.h in 2008, 2.584 GW.h in 2009 and 2.691 GW.h in 2010) and including Faro site dewatering sales after Faro mine closure charged as "Industrial" prior to 2005. The Whitehorse residential use growth rate of 2.34% per year was calculated based on City of Whitehorse population for the 2001-2010 period (averaging 1.8% per year based on Yukon Bureau of Statistics, Annual Reports - 2001-2008, Monthly Reports of Dec. 2009 and 2010) and the weather normalized average annual increase in residential usage per customer (0.52% per year based on Weather normalized UPC data for 2001-2007 as filed in Yukon Electrical 2008-2009 GRA; 2008-2010 data as provided by Yukon Electrical)."

Preamble: Yukon Electrical is seeking more information on forecasting calculations.

Requests:

- a) Footnote 9 Page 2-4 of the Application indicates, "...WAF average growth rate (2.18%) and 2.34% (reflecting Whitehorse residual use growth...". Please explain what is meant by residual growth.
- b) Regarding the average annual increase, please explain why an average growth rate was used instead of a weighted average growth rate, considering that Whitehorse comprises a substantial proportion of the usage on the Yukon grid.
- c) Please provide detailed calculations (in Excel format) for Grid growth.
- d) To calculate average growth on the Grid, please explain why the period 2001 to 2010 was used instead of the period 2002 to 2011 and what the average growth would have been had the 2002 to 2011 period been used.

YECL-YEC-5

Topic: Table 2.2 Summary of Energy Balance, Losses, Peak and Load Factor

Reference: YEC April 2012 Phase I, Section 2, Page 2-18, Table 2.2

Preamble: Yukon Electrical wishes to further understand the Losses contained in Table 2.2.

Requests:

- a) Please provide the actual system losses for 2011.
- b) Please provide information on the change in system losses after the addition of the new generation capacity (Mayo B hydro generation and Aishihik Third turbine) and the WAF/MD systems integration. Please provide the increase/decrease in system losses due to this change.
- c) If losses are expected to be lower (Section 2.3, Page 2-10, footnote 24), why were the expected system efficiencies not accounted for in forecasting the losses for 2012 and 2013?
- d) Please provide the proportion of system energy losses in 2012 and 2013 that are due to the addition of station services in the hydro units and transmission lines.

YECL-YEC-6

Topic: Table 2.2 Summary of Energy Balance, Losses, Peak and Load Factor

Reference: YEC April 2012 Phase I, Section 2, Page 2-18, Table 2.2

Preamble: Yukon Electrical wishes to further understand the Load Factors associated with Table 2.2.

Request: Please reproduce Table 2.2 to include Load Factor values with respect to Sales volumes.

YECL-YEC-7

Topic: Table 2.1 and Table 2.2 Energy Sales

Reference: YEC April 2012 Phase I, Section 2, Pages 2-17 and 2-18, Tables 2.1 and 2.2

Preamble: Yukon Electrical wishes to further understand the Energy Sales associated with Tables 2.1 and 2.2.

Request: Did YEC use the billed or earned method for determining the Energy Sales Forecast for residential, general service, industrial and wholesale customer classes. Please explain the rationale for using the method YEC chose.

**Yukon Electrical Company Limited
Information Requests to Yukon Energy Corporation
Submitted: June 21, 2012**

YECL-YEC-8

Topic: Increased baseload diesel generation to meet load growth

Reference: Table 2.1 (with additional calculations, below)

| | | 2009 Actual | 2010 Actual | Prelim 2011 | Forecast 2012 | Forecast 2013 |
|-----------|-------------------------------|----------------|----------------|----------------|------------------|------------------|
| | <u>Total Company</u> | | | | | |
| 1 | Sales in MWh | 345,838 | 351,491 | 368,664 | 382,621 | 395,914 |
| 2 | MWh Growth Over Previous Year | | 5,653 | 17,173 | 13,957 | 13,293 |
| | <u>Industrial</u> | | | | | |
| 3 | Sales in MWh | 29,355 | 30,255 | 43,259 | 52,309 | 62,364 |
| | % growth over previous year | | 103% | 143% | 121% | 119% |
| 4 | MWh Growth Over Previous Year | | 900 | 13,004 | 9,050 | 10,055 |
| 5 = 4 / 2 | % of Total Growth | | 16% | 76% | 65% | 76% |
| | <u>Non-Industrial</u> | | | | | |
| 6 = 1 - 3 | Sales in MWh | 316,483 | 321,236 | 325,405 | 330,312 | 333,550 |
| | % growth over previous year | | 102% | 101% | 102% | 101% |
| 7 | MWh Growth Over Previous Year | | 4,753 | 4,169 | 4,907 | 3,238 |
| 8 = 7 / 2 | % of Total Growth | | 84% | 24% | 35% | 24% |

Lines 16-17 page 1-6: "Industrial load growth to date continues to bring higher revenues that tend to more than offset any related incremental costs."

Lines 4-5 page 2-2: "Industrial load growth to date has continued to bring higher revenues that tend to more than offset any related incremental costs."

Preamble: Yukon Electrical wishes to further understand the impact of the growth in Industrial load on other Retail customers.

(YECL-YEC-8 continued)

Requests:

- a) Please explain what costs are included in the incremental costs which the industrial load growth tends to offset? Please provide the corresponding analysis which supports the findings that revenues from industrial load growth is offsetting the incremental costs associated with such growth.
- b) From line 5 in the Table above, Industrial load growth accounts for the majority of forecast load growth in the test years. Please provide what proportion of increased diesel costs is caused by industrial customers.
- c) Please provide how YEC interprets its obligation to serve Industrial customers, given the increased diesel costs associated with such customers. Please discuss any capacity or energy restrictions which YEC adheres to regarding oncoming Industrial customers, relative to existing hydro energy and capacity.
- d) If YEC does not adhere to any capacity or energy restrictions, please explain why it does not.

YECL-YEC-9

Topic: Yukon Energy Firm Retail Sales

Reference: Section 2.2.3.2: General Service Sales and Table 2.1

Preamble: The 2013 forecast indicates a 3.15% average annual increase in Yukon Energy's general service sales.

Requests:

- a) Please confirm that that the average annual increase in Yukon Energy's general service sales should be 3.55%, instead of 3.15% as stated above.
- b) Please explain what the impacts of this error are on the other aspects of YEC's Application.

YECL-YEC-10

Topic: Yukon Energy Firm Retail Sales

Reference: Section 2.2.3.1: Residential Sales and Table 2.1

Preamble: Firm residential retail sales have grown from 11,676 MW.h in 2009 (actual) to 12,325 MW.h in 2012 (forecast) and 12,408 MW.h in 2013 (forecast). The average annual growth rate is 1.5% in 2013 (forecast) compared to 2009 (actual). This reflects ongoing modest growth in the number of customers and the average use per customer over the previous three years.

Requests:

- a) Per Table 2.1 of the Application, please confirm that while the number of Residential customers has somewhat increased, the average annual consumption of such customers dropped from 8.0 MWh/customer in 2009 actual to 7.7 MWh/customer in 2010 actual. Please elaborate as to whether this would be considered as modest growth.
- b) Please provide whether actual sales were normalized (i.e. weather-adjusted). If not, please provide the normalized sales and explain how they compare.
- c) Please comment on the appropriateness of using 3 years of history as a trend predictor for forecasting purposes.

YECL-YEC-11

Topic: Yukon Energy Firm Retail Sales

Reference: Section 2.3.1: Integrated Grid Hydro Generation, Page 2-11

Preamble: The new integrated grid, including the new Mayo Hydro Enhancement Project (Mayo B) and Aishihik Third Turbine hydro unit, has 92 MW of installed YEC hydro generation, of which approximately 72 MW can be relied upon for the winter peak. The Integrated System typically operates with Whitehorse Hydro as first-on generation (outside of wind and Fish Lake) as a largely run-of-river plant. Mayo and Aishihik are used to supplement this run-of-river generation to achieve the required output.

Requests:

- a) Please provide the monthly capacity of the hydro generating units used in the reliability and capacity requirement model, Loss of Load Expectation (LOLE).
- b) Please provide the monthly energy generation produced by the hydro generating units for the last 3 years, 2009-2011, and forecast for the test years 2012 and 2013.
- c) Please provide the monthly energy generation produced by the diesel generating units for the last 3 years, 2009-2011, and forecast for the test years, 2012 and 2013.

YECL-YEC-12

Topic: Reliable Capacity Requirement and Generation Key Performance Indicators (KPIs)

Reference: Section 2.4 and Appendix 6.1

Preamble: Yukon Electric wishes to further understand the reliable capacity requirement and generation KPIs in Appendix 6.1.

Requests:

- a) Section 2.4 discusses the adequacy of meeting the capacity requirement based on the LOLE criterion. Please provide the system reserve margin and how it compares to the actual operating system reserve observed in the past 3 years, prior to the test years, 2009-2011.
- b) Respecting the generation KPIs in Appendix 6.1, please provide the operational performance indicators for such KPIs (Capacity Factor, Unit Availability, Operating Factor, & Forced Outage) broken down by each generating unit.
- c) In addition to the generation KPIs provided in Appendix 6.1, please include the installed or commissioned year, maximum capacity rating (MCR) and emergency capacity rating (ECR). ECR is defined as the capacity above the MCR.
- d) Please discuss and quantify in terms of load (demand and energy) if any of these generating units were operated in an ECR situation in the last 3 years, prior to the test years, 2009-2011.

YECL-YEC-13

Topic: Table 2.2 Summary of Energy Balance, Losses, Peak and Load Factor

Reference: YEC April 2012 Phase I, Section 2, Page 2-18, Table 2.2

Preamble: Yukon Electric seeks better understanding of the numbers presented in Table 2.2.

Requests:

- a) Please provide a numerical analysis (in Excel format) as well as reasons for the increase of the loss percentage from 8.1% to 8.8% from 2009 actual to 2010 actual.
- b) Please explain the reason for the 85 MWh drop in wind generation in 2010 actual from the 238 MWh produced in 2009 actual.

YECL-YEC-14

Topic: Diesel Contingency Fund (DCF)

Reference: Appendix 3.2.

Preamble: Yukon Electrical wishes to further understand the mechanics of the DCF.

Requests:

- a) Please explain how changes in YEC Diesel fuel volumes that result from changes in YEC customer load, as opposed to water availability, impact the Diesel Contingency Fund (DCF). If there is no impact to the DCF, please explain what happens with these changes in diesel volumes.
- b) Please explain how the Diesel Contingency Fund (DCF) impacts, or is impacted by, the Energy Reconciliation Adjustment in Rate Schedule 42.
- c) Please explain if the mechanics of the DCF have changed from the previous methodology. Please itemize all changes.

YECL-YEC-15

Topic: Rate Schedule 42 - Energy Reconciliation Adjustment (ERA)

Reference: Lines 1-4 Page 4-12, "To the extent that actual wholesale purchases fall short or exceed forecast wholesale purchases, an adjustment to the YECL bills will be made at a rate equal to the Hydro zone incremental cost of diesel of 32.74 cents per kW.h as approved by the Board in Order 2010-13."

Line 1-10s Page 4-13, "Charges to YECL will be adjusted on a monthly basis to reconcile actual wholesale purchases to Yukon Energy's most recent test year forecast purchases during the months when Yukon Energy diesel generation cost is modified by such variances in wholesale purchases. To the extent that actual wholesale purchases fall short or exceed Yukon Energy's most recent test year forecast wholesale purchases, an adjustment to the YECL bills will be made based on the variance in diesel generation costs incurred by Yukon Energy as a direct result of actual wholesale purchases falling short or exceeding forecast wholesale purchases. Such adjustments for shortfalls in actual wholesale purchases will be limited to minus 10% of the forecast wholesale purchases in any period."

Preamble: Yukon Electrical wishes to further understand the charges associated with the ERA.

Requests:

- a) Please explain the calculations that will be used to determine diesel generation costs incurred by Yukon Energy as a direct result of actual wholesale sales to YECL.
- b) Please provide detailed sample calculations (in Excel format) of the mechanism described in b) above. Please include any assumptions made for this calculation.
- c) Please provide a monthly breakdown of Wholesale sales forecasted in 2012 and 2013 in Table 2.1 of the Application.
- d) Please explain how YEC derived the monthly forecast amounts (in Excel format).

**Yukon Electrical Company Limited
Information Requests to Yukon Energy Corporation
Submitted: June 21, 2012**

YECL-YEC-16

Topic: DCF & ERA

Reference: Appendix 3.2, Rate Schedule 42, Table 3.2-1 and Table 3.2-1

Preamble: YECL wishes to better understand the mechanics with the proposed DCF and ERA.

Request: The table below shows 6 possible scenarios that may arise as a result of the variations in hydro generation availability and Wholesale sales to YECL. For each scenario, please calculate the impact on the Diesel Contingency Fund (DCF) and the Energy Reconciliation Adjustment (ERA). Please provide (in Excel format) formulas and all supporting details and assumptions for the calculations.

| Scenario | Hydro Generation (GWh) ¹ | Hydro Generation Increase/(Decrease) (GWh) | Actual versus Forecast variance in YECL Wholesale Sales (GWh) |
|-----------------|--|---|--|
| 1 | 419.4 | +5 | +2 |
| 2 | 419.4 | +5 | -2 |
| 3 | 419.4 | -5 | +2 |
| 4 | 419.4 | -5 | -2 |
| 5 | 419.4 | 0 | +2 |
| 6 | 419.4 | 0 | -2 |

1) Hydro Generation (GWh) is the 2013 forecast amount per Line 8, Table 2.2 of the Application.

YECL-YEC-17

Topic: Fuel and Purchased Power

Reference: Table 2.2 page 2-18, Table 3.2 page 3-5

Preamble: Yukon Electrical wishes to understand amounts arrived at for Fuel and Purchased Power.

Requests:

- a) Please supply all data (in Excel format), actual 2009 to forecast 2013, to support the amounts used for Total Diesel MWh, Line 14 in Table 2.2.
- b) Please provide diesel fuel prices, actual 2009 to forecast 2013, to support fuel cost calculations in Table 3.2. Additionally, please provide the source of the diesel price forecasts for the 2012 and 2013 test years.
- c) Please provide fuel efficiency rates, actual 2009 to forecast 2013, to support the cost calculations in Table 3.2. Please provide the source of the forecasts for the 2012 and 2013 test years.

YECL-YEC-18

Topic: 2.0 YUKON ENERGY SYSTEM SALES AND GENERATION

Reference: Lines 20-24 Page 2-1, "For example, 2011 resource planning forecast grid non-industrial growth at 2.26%/year, which was higher than the 1.85%/year forecast in the 2006 Resource Plan; furthermore, growth is presently tending to exceed the 2011 resource planning forecast. This growth reflects overall Yukon economic expansion plus other factors such as an apparent increase in reliance on electric heat."

Preamble: Yukon Electrical is interested to know about the latest resource plan.

Request: Has the resource plan been updated? If so, please provide the resource plan. If not, please advise when the next resource plan is forecasted to be prepared.

YECL-YEC-19

Topic: 2.0 YUKON ENERGY SYSTEM SALES AND GENERATION

Reference: Footnote 10 Page 2-5, "Based on forecast consumption at rates of 34 GW.h/year for Q1 2012, 37 GW.h/year for Q2, and 43 GW.h/year for Q3 onwards."

Footnote 12 Page 2-5, "Pursuant to the Minto PPA [Section 4.5], Minto is required to provide written notice of the specified amount of the requested increase and YEC will have to determine if the facilities have transmission capacity to maintain that increased demand, as well as any potential requirement for an increase to the mine firm rate related such increase."

Lines 16-29 Page 2-5, "It is currently assumed Minto will remain at this level until late 2019. This increase in firm electricity requirement was subject to YEC upgrading substation equipment to accommodate the increased load, and Minto's payment of all of YEC's actual and reasonably incurred costs associated with the upgrade¹³."

Footnote 13 Page 2-5, "Costs estimated at \$25,000 at time of agreement."

Preamble: Yukon Electrical is seeking clarification regarding service to Minto.

Requests:

- a) Please discuss what is meant by "YEC will have to determine if the facilities have transmission capacity to maintain that increased demand." Is "diesel on the margin" considered as part of such a determination?
- b) Please provide details of what upgrades are needed to substation equipment in order to accommodate the Minto forecast consumption and an updated cost estimate.
- c) Please discuss what is meant by "actual and reasonably incurred costs". How are reasonable costs determined?
- d) Please explain the impact to YEC due to higher or lower than forecast amounts. How are gains/losses treated?

YECL-YEC-20

Topic: 2.0 YUKON ENERGY SYSTEM SALES AND GENERATION

Reference: Lines 19-21 Page 2-6, "It is expected that Whitehorse Copper Tailings would commence service in Q3 of 2013 as an industrial customer of Yukon Energy and that a PPA will be negotiated in 2012 in order to facilitate delivery of power to the mine site."

Preamble: Yukon Electrical seeks clarification regarding service to Whitehorse Copper Tailings.

Requests:

- a) Please confirm that this customer is located within YECL's Whitehorse franchise area.
- b) Please confirm that YECL has historically provided service to a customer located at the site Whitehorse Copper Tailings is proposing to operate at.
- c) Please confirm that YECL has existing distribution facilities available for use at Whitehorse Copper Tailing's site.
- d) Please explain on what basis YEC considers itself eligible to provide service to a customer within YECL's exclusive franchise area.

YECL-YEC-21

Topic: 2.0 YUKON ENERGY SYSTEM SALES AND GENERATION

Reference: Lines 1-4 Page 2-14, "Yukon Energy forecasts average efficiency for diesel generation of 3.77 kW.h/litre in Whitehorse, 3.8 kW.h/litre in Faro and 3.72 kW.h/litre in Dawson and 3.37 kW.h/litre in Mayo, based on 2011 averages³¹. The overall grid average efficiency (3.67 kW.h/litre) is an increase from the 2009 GRA Application efficiency, where the approved forecast simple average efficiency was set at 3.6 kW.h/litre."

Preamble: YECL is seeking further support for these quanta.

Requests:

- a) Please explain how the above-referenced heat rates were determined.
- b) Please provide detailed calculations (in Excel format) for forecast heat rates, including any historical heat rates relied upon to arrive at the forecast heat rates.
- c) Please explain why the heat rate for Mayo is considerably lower than the other plants.

YECL-YEC-22

Topic: 2.0 YUKON ENERGY SYSTEM SALES AND GENERATION

Reference: Lines 17-18 Page 2-14, “The LOLE criterion also recognizes the role of transmission reliability, where relevant³³.”

Footnote 33 Page 2-14, “The WAF system has substantial hydro generation availability that is directly affected by certain transmission; the WAF system also has been trending to an increasing probability of longer outages as it expands (particularly with expansion of residential and commercial loads and major reductions in industrial load). Yukon Energy has therefore now incorporated the LOLE approach, with recognition of transmission reliability where relevant, into its system planning criteria to better protect all of its firm customers from generation-related outages.”

Preamble: YECL is seeking more information regarding reliability.

Requests:

- a) Please explain the rationale for the increasing probability of longer outages and please provide calculations that support this increasing probability.
- b) Please provide what measures have been put in place to mitigate the longer outages.
- c) Please quantify “major reductions in industrial load” and explain how these reductions have reduced the probability of longer outages.

YECL-YEC-23

Topic: 2.0 YUKON ENERGY SYSTEM SALES AND GENERATION

Reference: Lines 14-21 Page 2-14, “Loss of Load Expectation (LOLE) – In 2006, Yukon Energy incorporated into its capacity planning criteria a probability based measure to evaluate the maximum loads that the WAF system can safely carry by identifying the potential interruption of service for any customer (forecast of the average number of system outages per year). The LOLE criterion also recognizes the role of transmission reliability, where relevant³³. In 2006, the system-wide capacity planning criteria for WAF and MD provided that each system would be planned not to exceed a Loss of Load Expectation of 2 hours/year. The LOLE criterion includes industrial loads as part of the assessment.”

Preamble: YECL is seeking clarification of LOLE criteria.

Request: Please explain if LOLE includes planned outages? If yes, does LOLE include all planned outages, or just those for either planned maintenance or capital improvements?

YECL-YEC-24

Topic: 2.4 PEAK DEMAND FORECAST AND RELIABLE CAPACITY REQUIREMENT

Reference: Lines 9-12 Page 2-15, "WAF and MD Community Criteria – Grid-served communities over about 300 people, other than Whitehorse (and, due to the earlier mine, the community of Faro), typically have local diesel generation installed to serve a dual purpose: overall grid support similar to major diesel installations at Whitehorse or Faro, as well as local supply during transmission outages."

Preamble: YECL is seeking further information regarding local diesel generation.

Requests:

- a) For each of these communities over 300 people (other than Whitehorse), please provide (i) the forecasted diesel consumption; (ii) unplanned outage support; (iii) peaking support; and (iv) planned outage support.
- b) Please explain if YEC believes these local generators should be able to supply 100% of the local load during grid supply outages.
- c) Please elaborate on whether YEC foresees YECL's grid-connected diesel standby plants, such as Haines Junction, being a Peaking plant.

YECL-YEC-25

Topic: 2.0 YUKON ENERGY SYSTEM SALES AND GENERATION

Reference: Lines 14-17 Page 2-16, “The reliable capacity is reduced to 77.5 MW for the N-1 event (in addition to removing 0.4 MW for Fish Lake hydro, assumes 37.0 MW at Aishihik and 1.75 MW at Haines Junction are not available at Whitehorse because of an interruption to the Aishihik transmission line).”

Preamble: YECL is seeking clarification.

Request: Please explain why Fish Lake Hydro is deemed unavailable due to an interruption to the Aishihik transmission line.

YECL-YEC-26

Topic: Historical Actual & Forecast Industrial Loads

Reference: Section 2.2.2 Major Industrial (Entire section)

Rate Schedule 39, "Base Load Energy: A Base Load Energy amount per month may be established for a customer at 90% of forecast use when YEC expects to require diesel fuel generation to service use in excess of such a Base Load Energy amount. At such time, Rate Schedule 39 will be submitted to the Yukon Utilities Board for amendment to adjust the energy rate as required for a two part rate that yields the same overall energy charge at forecast energy use, with all energy consumed in excess of the Base Load being charged at a rate reflecting the incremental cost of service using diesel fuel generation and all other energy being charged at the reduced rate required to yield the same overall energy charge at forecast energy use."

Preamble: YECL is interested in more information in respect of Industrial Sales Forecasting.

Requests:

- a) For each major industrial service, please provide (in Excel format):
 - (i) Historical Forecasts,
 - (ii) Historical Actuals, and
 - (iii) Current Forecasts.
- b) For each major industrial service, please provide (in Excel format):
 - (i) Method for calculating industrial forecasts, and
 - (ii) Calculations of current forecasts.
- c) Considering "diesel-on-the-margin" and the referenced section of Rate 39, does YEC expect to establish base load energy amounts at "90% of forecast use" for any of the industrial customers during the test years?
- d) Please discuss the consequences of over/under forecasting industrial sales with respect to the DCF and Rate Schedule 39.

YECL-YEC-27

Topic: 3.0 REVENUE REQUIREMENT

Reference: Footnote 2 Page 3-4, "Fuel cost forecasts in Table 3.2 for 2012 and 2013 include cost of required diesel fuel for maintenance of diesel units."

Footnote 3 Page 3-4, "In 2010 diesel generation of 0.85 GW.h is resulted from the construction activities due to capital projects. In 2011 Aishihik plant construction is estimated to have resulted in 3.18 GW.h [\$0.8 million] of diesel generation in 2011 due to shut downs required of the Aishihik generation plant, and Mayo B plant construction (extended Mayo A shut down for tunnel tie in work) is estimated to have resulted in 1.5 GW.h [\$0.4 million] of diesel generation, and 0.7 GW.h due to other capital projects. The costs for such diesel generation was charged to the capital costs for each respective project."

Preamble: During YEC's Aishihik and CSTP capital projects, YECL was forced to:

- (i) burn additional diesel in Pelly to avoid an outage during construction of CSTP stage 2, and
- (ii) construct a temporary bypass substation to avoid burning diesel throughout peak summer holiday season in Haines Junction, which supplied YEC and YECL customers.

YECL is interested to know more about associated cost requirements for capital projects.

Request: Please provide if budgeted amounts within YEC's capital projects include diesel generation and other associated cost requirements of YEC and YECL's plants. If not, please explain why?

YECL-YEC-28

Topic: 3.0 REVENUE REQUIREMENT

Reference: 3.3.3 Distribution Table 3.7 Page 3-9

Preamble: YECL is interested in a further breakdown of distribution brushing costs.

Request: Please provide a breakdown of YEC's brushing costs per kilometer.

YECL-YEC-29

Topic: 3.0 REVENUE REQUIREMENT

Reference: 3.3.4 General Operation and Maintenance, Table 3.8 Page 3-10

Preamble: YECL is interested in further detail.

Request: Please provide a breakdown of transportation costs (descriptions and amounts) and please provide the average costs on a per unit basis.

YECL-YEC-30

Topic: 5.0 CAPITAL PROJECTS

Reference: 5.2 CAPITAL WORKS Lines 16-18 Page 5-2, "This section reviews (a) major capital works projects (projects over \$1 million) undertaken by Yukon Energy since the 2008/2009 GRA hearing and planned for 2012 and 2013, and (b) ongoing capital projects costing between \$100,000 and \$1 million forecast to occur in the 2012 and 2013 period."

Preamble: YECL is interested in variances associated with YEC's major capital projects.

Requests:

- a) Please provide the original forecast budget, actual costs and variances for all major capital projects over \$1 million that YEC has undertaken since its 2008/2009 GRA.
- b) Please explain which recommendations from the Mayo-Dawson City Transmission System Project auditor general report that YEC has implemented.

YECL-YEC-31

Topic: 5.0 CAPITAL PROJECTS

Reference: 5.2.1 Major Projects Over \$1 Million, Lines 5-7 Page 5-4, "Whistle Bend Subdivision Supply (forecast total spending of \$5.23 million in the end of 2013, this project will not be in service before 2014 and therefore will not impact rates in the test years)."

Preamble: YECL would like more information in respect of the Whistle Bend Subdivision Supply project.

Request: Please provide the business case for the Whistle Bend Subdivision Supply project.

YECL-YEC-32

Topic: 5.0 CAPITAL PROJECTS

Reference: Lines 18-21 Page 5-9, “At the revised forecast net capital cost and a wide range of grid loads (i.e., 450 GW.h/year and higher) the levelized cost of energy (LCOE) for the project on its own approximates 9 to 11 cents/kW.h over an assumed 65 year economic life⁵.”

Footnote 5, Page 5-9, “Assumed net capital cost of \$8.8 million, and average cost of capital of 6.51%/year, with 8.77% cost of equity and 5.0% cost of debt; assumed O&M cost of \$6/MW.h. Diesel displacement under long term average hydro availability exceed 4 GW.h/year over this range with no Mayo B (i.e., the Aishihik Project was committed prior to Mayo B being committed).”

Preamble: YECL is interested in more information regarding the Aishihik Project.

Requests:

- a) Please provide how many kWh per year this unit would be required to operate in order to achieve the LCOE.
- b) Please provide the percentage of time this unit is forecast to operate while the other two units are not operating per year.
- c) Please provide how long the license/water system (upstream and downstream) can continuously handle maximum output of all three units.
- d) Please provide when the grid is expected to reach 450 GW.h/year.
- e) Please provide what the LCOE was previous to the year determined in d) above.
- f) Please provide detailed calculations for d) & e) above.
- g) Please indicate if Mayo B is included in the LCOE. If not, what is the levelized cost of energy including Mayo B?
- h) Please provide the annual diesel displacement with Mayo B in operation.

YECL-YEC-33

Topic: 5.2.1.4 Mayo Hydro – Substation Enhancements

Reference: Lines 6-10 Page 5-10, “Added to the requirement to refurbish the substation, many ongoing external changes on the Yukon grid required material re-investment be done to the Mayo substation to ensure that it is equipped and fully capable of addressing the fundamental changes to the grid system at this time, including: Interconnection of the Whitehorse-Aishihik-Faro grid and the Mayo Dawson grid through the completion of the Carmacks Stewart Transmission Project - Stage 2.”

Preamble: YECL is interested in more information in respect of the Mayo Hydro Substation Enhancements project.

Request: Please provide if these costs are included in the Mayo B costs per kWh comparisons? If not, please explain.

YECL-YEC-34

Topic: CAPITAL PROJECTS

Reference: 5.2.1.4 Mayo Hydro – Substation Enhancements Lines 12-13 Page 5-10, “Additional new industrial loads in 2010 (i.e., Alexco mine) and anticipated potential future loads (e.g., Victoria Gold).”

Lines 16-29 Page 2-5, “This increase in firm electricity requirement was subject to YEC upgrading substation equipment to accommodate the increased load, and Minto’s payment of all of YEC’s actual and reasonably incurred costs associated with the upgrade¹³.”

Preamble: YECL is interested to know the breakdown of charges to the customers associated with the above-referenced substation enhancements.

Requests:

- a) Please provide detailed charges for the Mayo Hydro enhancements including a breakdown of expenses for the industrial customer class.
- b) Are these charges being invoiced to these industrial customers? If not, please explain.

YECL-YEC-35

- Topic:** CAPITAL PROJECTS, 5.2.1.8 Whistle Bend Subdivision Supply
- Reference:** Lines 23-25 Page 5-18, "Although more refined estimates will be available after the 2012 review is completed, spending on this project is forecast at \$50,000 in 2012 and \$5 million in 2013."
- Preamble:** YECL is interested in more information in respect of the Whistle Bend Subdivision Supply project.
- Request:** Please provide a breakdown of the \$5 M forecast to be spent in 2013 for the Whistle Bend Subdivision Supply Capital Project.

YECL-YEC-36

Topic: CAPITAL PROJECTS, 5.2.2 Projects \$100,000 to \$1 Million

Reference: Lines 14-15 Page 5-23, "Approximately \$1.215 million of total forecast spending in 2012 is required for reliability purposes while approximately \$2.387 million of total forecast spending in 2013 is required for reliability purposes."

Preamble: YECL is interested in more information in respect of the bulk generation system reliability.

Request: Please provide how the reliability of the bulk generation system differs from the reliability experienced by other utilities.

YECL-YEC-37

Topic: CAPITAL PROJECTS

Reference: Tab 5, 5.2.2 Projects \$100,000 to \$1 Million

“Distribution projects in the test years also include the Faro mine connection (for the site abandonment plan, with costs expected to be offset by customer contribution), a new three phase distribution line at Dawson Dome, ongoing work to secure easements for distribution lines, and requirements for new customer extensions.”

Preamble: YECL is interested in more information in respect of easements.

Request: Please explain what YEC’s process is for securing easements on existing power lines.

YECL-YEC-38

Topic: CAPITAL PROJECTS

Reference: Tab 5, 5.3.1.1 Marsh Lake Storage – Total Deferred Costs of \$4.830 Million to end of 2013 “The forecast cost to complete the project is currently estimated at \$10.5 million with mitigation design (shoreline erosion and surface water) expected to comprise about one-half of this total cost.”

“Marsh Lake Storage is assumed to provide 1 MW of added reliable peak winter capacity.”

Preamble: YECL is seeking clarification in respect of the Marsh Lake Storage project.

Requests:

- a) Please indicate whether the \$10.5 M of capital expense is in addition to the \$4.8 M of deferred costs.
- b) If the answer to a) is yes, please discuss whether this is representative of a typical proportion of feasibility study-to-project build costs.
- c) Please provide if this project require additional generation upgrades to realize this additional capacity (i.e. new turbine/generator)? If so, are the upgrades included in the project cost estimate?

YECL-YEC-39

Topic: CAPITAL PROJECTS

Reference: Tab 5, 5.3.1.4 Mayo Lake Enhanced Storage – Total Deferred Costs of \$2.1 Million

“Yukon Energy subsequently completed a Project Agreement with the local First Nation (Nacho Nyak Dun First Nation) regarding the Mayo B and Mayo Lake projects.”

Preamble: YECL is interested in more information in respect to the Mayo Lake Enhanced Storage project.

Request: Please provide a copy of the Project Agreement entered into with Nacho Nyak Dun First Nation.

YECL-YEC-40

Topic: CAPITAL PROJECTS

Reference: Tab 5, 5.3.1.9 Geothermal – Total Deferred Costs of \$2.633 Million

“In this regard, 2012 work will follow the recommendations of the Borealis report (i.e., confirm temperature gradient and water quality and potentially some geophysical survey work).”

Preamble: YECL is interested in more information in respect of the Geothermal Deferred Costs.

Requests:

- a) Please provide the temperature gradient requirement for power generation.
- b) Please provide the nearest existing generation plant that uses technology similar to that recommended in the Borealis report.
- c) Please provide what is the LCOE of the generation plant in b).
- d) Please provide how close the investigated site is to an existing 3-phase line.
- e) Please provide how far the furthest investigated site is to an existing 3-phase line.

YECL-YEC-41

Topic: CAPITAL PROJECTS

Reference: Tab 5, 5.3.2 Projects between \$100,000 and \$1 Million

“Diesel Overhauls – DD-2, DD-3 and DD-5 will each require a total engine overhaul in the test years to maintain the unit’s availability without decreasing engine life and reliability.”

Preamble: YECL is interested in more information in respect of the Diesel Overhauls project.

Request: Please provide overhaul details including unit size, age, and engine hours for each of DD-2, DD-3 and DD-5.

Yukon Electrical Company Limited
Information Requests to Yukon Energy Corporation
Submitted: June 21, 2012

YECL-YEC-42

Topic: GRA 2012-13 Application

Reference: All relevant schedules

Preamble: YECL is interested in Forecast and Actual quanta for 2011.

Request: Please update FYF 2011 and Preliminary Actual 2011 with 2011 actual numbers in all schedules and prepare updated variance analyses.

YECL-YEC-43

Topic: Deferred Costs

Reference: 3.0 Revenue Requirement, Page 3-2, Lines 8-10

Preamble: YECL wishes to gain an understanding of the prior planning study cost policy versus the revised policy.

Request: Please provide the previous 2008-2009 GRA approved planning study cost policy and outline the changes made and why these changes to the policy are required.

YECL-YEC-44

Topic: Use of LNG

Reference: Fuel and Purchased Power, Lines 1-2 Page 3-5, "These test year forecasts are adopted to address the transition to annual long-term average levels and potential future use of LNG at a materially lower cost than diesel."

Preamble: YECL is interested in more information in respect of LNG.

Requests:

- (a) Please provide details of plans for use of LNG.
- (b) Please provide the calculation of net impact on fuel costs LNG versus diesel.
- (c) Please provide the basis for projecting LNG and diesel prices.

YECL-YEC-45

Topic: Transmission and Distribution Costs

Reference: Table 3.3 Non-Fuel O&M Expenses, Page 3-6

Preamble: Additional information is required in order to understand the nature of the costs.

Requests:

For each of Transmission and Distribution, please provide details of costs for 2009-2013 by activity as follows:

- (i) Supervision and Engineering
- (ii) Overhead line maintenance
- (iii) Underground line maintenance
- (iv) Substation maintenance
- (v) Brushing
- (vi) Meter and meter testing
- (vii) Service to outside parties
- (viii) Transformer repair and maintenance; and
- (ix) Street light maintenance

YECL-YEC-46

Topic: Employee Complement

Reference: Table 3.4, Page 3-7

Preamble: YECL seeks additional information with respect to employee complement.

Requests:

- (a) Please provide complete organizational chart(s) for all employees of YEC for the years 2009 to 2013.
- (b) Please expand Table 3.4 of the Application to identify the employee complement separately charged to O&M and Capital.
- (c) For the years 2009 to 2013, please provide the annual vacancy rate by department as well as the overall corporate vacancy rate.

YECL-YEC-47

Topic: Non-Fuel Operating and Maintenance Expenses

Reference: Table 3.3, Page 3-6

Preamble: YECL seeks further information with respect to costs by activity and costs for contractor services.

Requests:

- (a) For each of Production, Transmission, Distribution, General O&M and Administration, please provide costs by activity for the years 2009 to 2013 by the following components:
 - (i) labour
 - (ii) fringe
 - (iii) contractor services
 - (iv) other

- (b) For costs included in contractor services, please provide:
 - (i) details and costs of each of the services being provided
 - (ii) a business case justifying the use of a contractor

YECL-YEC-48

Topic: Non-Fuel Operating and Maintenance Expenses

Reference: Table 3.3, Page 3-6

Preamble: YECL requires an understanding of inflationary versus non-inflationary changes to approved levels of non-fuel O&M expense.

Requests:

- (a) Please provide the inflation rate used for in-scope versus out-of-scope Labour costs for test year 2012 and 2013 and the relevant support of those rates.
- (b) Please provide the non-labour inflation rate used to determine the forecasts for 2012 and 2013 test years.
- (c) For Production, Transmission, Distribution, and General O&M lines in Table 3.3 of the Application, please separate the inflationary versus non-inflationary cost increases from the 2009 GRA approved level of expenditures compared to the 2012 test year forecast.
- (d) For the non-inflationary cost increases identified in part (c) above, please provide details to support the 2012 test year forecast.
- (e) For Production, Transmission, Distribution, and General O&M lines in Table 3.3 of the Application, please separate the inflationary versus non-inflationary cost increases from the 2012 test year forecast compared to the 2013 test year forecast.
- (f) For the non-inflationary cost increases identified in part (e) above, please provide details to support the 2013 test year forecast.

YECL-YEC-49

Topic: Administration Expenses

Reference: Communications expenses: Page 3-11 Lines 11-12 and Page 3-12 Lines 1-2

Preamble: YECL requires details of increases to Communications expenses.

Requests:

- (a) Please provide details of the benefits provided by the \$201,000 increase (191%) in forecast expenditures in 2012 versus the 2009 approved level of expenditures.
- (b) Please justify why this level of O&M is needed in 2013.

YECL-YEC-50

Topic: Administration Expenses

Reference: General expenses: Page 3-12 Lines 13-14

Preamble: “General (forecast increase of \$0.176 million by 2012 over 2009. Approved expense, increase of \$0.189 million in 2013 over 2012 forecast and \$0.365 million over 2009 GRA approved forecast).”

Request: Please provide a detailed breakdown of General expenses and justification for non-inflationary increases from the 2009 approved level of expenditures to \$910,000 in 2012 and a further increase of \$190,000 to \$1.1 M in 2013.

YECL-YEC-51

Topic: Reserve for Injuries and Damages (RFID)

Reference: Appendix 3.1

Preamble: “A recent study commissioned by the Corporation has concluded that an annual appropriation of \$195,000 per year is appropriate; however, this annual appropriation has not yet been approved by the Board.”

Requests:

- (a) Please provide details of the process that is followed when charging items to the RFID account, including an outline of all approvals required prior to charging items to the RFID account.
- (b) Please provide continuity schedules for the period 2009 to 2011 of the RFID account showing:
 - (i) Opening balance;
 - (ii) Claims (itemize all claims to reserve);
 - (iii) Provision charged to O&M;
 - (iv) Other (itemize all transfers, etc.);
 - (v) Closing RFID account balance.
- (c) For all claims itemized above, please provide:
 - (i) Description of claim;
 - (ii) Date when incident happened;
 - (iii) Explanation of why it qualified to be charged to the RFID account;
 - (iv) Evidence of appropriate sign offs and approvals for incident to be charged to the reserve.

YECL-YEC-52

Topic: Transition to IFRS

Reference: Costs, Appendix 6.2, Lines 5-8 Page 6.2-4, "Additional costs are, and will, continue to be incurred with respect to the conversion to IFRS due to increased internal and external consulting time, IT system costs and additional audit and other compliance costs. Costs for this extensive conversion process are expected to total \$667,076 by the end of 2012."

Preamble: YECL is interested in more information in respect of the Transition to IFRS.

Requests:

- (a) Please provide a detailed breakdown of costs incurred to date by year.
- (b) Please provide a detailed breakdown of forecasted cost for 2012 and 2013.
- (c) Please explain, specifically, what the current financial system limitations are that require investment in IT system hardware and/or software to change the accounting policy to IFRS from GAAP?

YECL-YEC-53

Topic: Planning and Study Costs

Reference: Appendix 5.1 – Planning Accounting Policy, Page 5.1-1, “2.3 Planning costs incurred in relation to major projects that do not meet Reasonable Assurance will promptly be closed out in annual stages, and amortized over 5 years.”

Preamble: YECL is interested in more information in respect of YEC’s Planning Accounting Policy.

Requests:

- (a) Please confirm that project costs that do not meet “Reasonable Assurance” and are deferred over 5 years would not be added to future Revenue Requirement.
- (b) Please provide details of all projects including dollar values, and from 2008 to 2012 that have not passed the “Reasonable Assurance “test” which have been expensed and/or deferred and amortized into future years. Please confirm these costs are not included in Revenue Requirement for the 2012 and 2013 test years.

YECL-YEC-54

Topic: Planning and Study Costs

Reference: Appendix 5.1 – Planning Accounting Policy Page 5.1-2, “A one-time special transition approach for costs presently in WIP is to be implemented over 2012 and 2013 test years. Transition measures are intended to mitigate rate impacts from 5-year amortization of existing WIP costs incurred prior to Reasonable Assurance and that have climbed to over \$1 million in the past few years.”

Preamble: YECL is interested in more information in respect of YEC’s Planning Accounting Policy.

Requests:

- (a) Please provide details of all projects in WIP that are subject to this one-time special transition approach.
- (b) Please confirm these projects have not resulted in fixed asset additions as per Canadian Generally Accepted Accounting Principles.
- (c) Please provide the Board Approval reference or justification as to why these costs should be included in revenue requirement.

YECL-YEC-55

Topic: Depreciation

Reference: Tab 10 – Depreciation Study March 1, 2012 KPMG letter to Mr. Ed Mollard, “While this preliminary document sets forth our conclusions, please note that it is not intended to be considered a complete narrative report. This document will be supplemented by a complete narrative report fully outlining our assumptions and methodologies which will be delivered at a future date.”

Preamble: YECL is interested in further information in respect of the KPMG Depreciation Study report.

Request: Please provide the “complete narrative report fully outlining [KPMG’s] assumptions and methodologies” and why it was not provided as part of YEC’s application.

YECL-YEC-56

Topic: Depreciation

Reference: Tab 10 – Depreciation Study

Preamble: Experience and background of KPMG's depreciation personnel.

Requests: Please provide for each person who prepared the depreciation study:

- (a) Their curriculum vitae.
- (b) Previous depreciation studies they have prepared and defended and in front of what courts or administration tribunals.
- (c) Whether they are members of the Society of Depreciation Professionals (SDP).
- (d) Whether they have attended any of the SDP Depreciation Courses or any other non-SDP Depreciation courses. Please provide the courses and content covered.
- (e) Whether they are Certified Depreciation Professionals certified by the SDP.

YECL-YEC-57

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Scope of Work, “Analysis of historical data, including; Review of prior depreciation study results and other information available for in-scope assets to understand the nature of the assets, historical acquisition or construction dates, current depreciation rates, planned usage requirements and risk factors affecting useful lives and salvage values; Interview engineers and other interested parties”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Request: Please provide all the notes and/or summaries of the “interviews with engineers and other interested parties”.

YECL-YEC-58

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Net Salvage Estimates Page 10-7, “In our analysis, we have reviewed the current net salvage estimates applied by Yukon. As these estimates are highly subjective, we have based our review upon our prior experience conducting similar analyses. Estimates of net salvage have been made on a percentage basis by class and are applicable to the historical cost basis of the assets.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Requests:

- (a) Please provide the “subjective” analysis that was used in determining the net salvage estimates for each Fixed Asset account.
- (b) Please provide a complete listing of the “prior experience conducting similar analyses.”
- (c) Please provide the historical actual net salvage data (i.e. retirements, net salvage or gross salvage and cost of retirement by year by account) for each of YEC’s Fixed Asset accounts.

YECL-YEC-59

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Evaluation of Statistical Data Page 10-8, “Indicators of goodness-of-fit, a review of recorded accounting data, knowledge of the type of property involved, and the experience of others with similar property, including the depreciation parameters of the previous depreciation study, are used as aids in these determinations.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Request: Please provide the “indicators of goodness-of-fit” for each fixed asset account, how the indicators of “goodness-of-fit” are calculated and how they are used in the Depreciation Study.

YECL-YEC-60

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Statistical Analysis Page 10-8, “Through the utilization of survivor curves, it is possible to estimate the average service life, average remaining life, and probable life of an asset group. In our analysis, we analyzed historical retirement patterns for each asset class and conducted quantitative procedures to best fit the historical data to the most applicable Iowa Curves. While this was our primary quantitative method, it should be noted that certain adjustments and iterative processes were conducted to ensure that the most appropriate Iowa Curve was selected. When conducting the statistical analysis, there were certain asset classes whose quantitative data presented limitations and required adjustments.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Requests:

- (a) Please provide the “quantitative procedures to best fit the historical data to the most applicable Iowa Curve”.
- (b) Please provide a complete list of these “certain asset classes whose quantitative data presented limitations” and detail what these limitations were and what was done in respect of these assets to address the limitations in quantitative data.
- (c) Please provide the “adjustments and iterative processes” that “were conducted to ensure that the most appropriate Iowa Curve was selected”.
- (d) Please provide the detailed calculations (in Excel format) derived from the statistical analysis that was conducted. Please provide detailed computer printouts in support of the same.

YECL-YEC-61

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Information Gathering and Processing, Page 10-9, “The accounting history of additions, retirements, and balances is used to study service life experience and trends for various regulated power generation plant accounts. When the dates of the installation and retirements are known and appropriately compiled, study procedures known as actuarial methods can be used. When such data are not available in a reliable form, techniques are available to simulate actual vintages of retired property. In this instance we were provided with information from a previous depreciation study as well as the additions and deletions from 2003 through year-end 2010 by management and were used as the basis of our depreciation study.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Requests:

- (a) Please provide the “history of additions, retirements, and balances” that were used to study the service life expectations and trends for each fixed asset account or specific property. For the historical data provided, please indicate whether the data is a gross addition, a retirement, a transfer, an adjustment, a beginning plant balance or an ending plant balance. If this information is different from the historical fixed asset sub-ledger, please provide a comparison between YEC’s Fixed Asset Sub-ledger and the “history of additions, retirements, and balances.”
- (b) Please provide the “previous depreciation study” referenced and the Method, Procedure and Technique that was used in that depreciation study. If the Method, Procedure and/or Technique has changed from the previous depreciation study to KPMG’s filed depreciation study, please describe the change and reasons for change to KPMG’s filed depreciation study.
- (c) If the Method, Procedure and/or Technique has changed in KPMG’s filed depreciation study, please provide a revised Depreciation study using the previous Method, Procedure and Technique.

YECL-YEC-62

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Determination of Average Service Life
Page 10-9, “The average service life of the facilities were developed using the retirement rate method as well as the comparable company method.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Request: Please provide the detailed calculations used to determine the “average service life of the facilities” that “were developed using the retirement rate method.” Please provide all supporting computer printouts and logic utilized in the computer printouts.

YECL-YEC-63

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Extrapolation Methods Page 10-9, “When limited data was available, methods of extrapolation were applied to derive an estimate of future retirement patterns, which were then utilized in the curve fitting process to identify the Iowa Curve the most appropriately reflected the survivor patterns of the subject asset group.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Requests:

- (a) Please provide the “methods of extrapolations” that were used for each applicable fixed asset account.
- (b) Please provide all authoritative sources that prescribe the “method of extrapolation” described.
- (c) Please provide a listing of other regulated companies who have used a similar methodology.

YECL-YEC-64

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Comparable Curve Fitting, Page 10-9, “In the event that ample data was unavailable to conduct curve fitting procedures, average service lives derived based on comparable asset grouping.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Request: Please list all fixed asset accounts where “ample data was unavailable to conduct curve fitting procedures” and reasons for the insufficient data.

YECL-YEC-65

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Qualitative Approach Page 10-10, “A similar occurrence arises when an asset group experiences a material change that is not directly related to the retirement of assets.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Request: Please provide and describe in detail those asset groups which experienced “a material change that is not directly related to the retirement of assets.” Please provide what the material change is and why it is not considered reliable for curve fitting or average service life determination.

YECL-YEC-66

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Comparable Companies Page 10-10, “The primary qualitative method utilized to measure average service life is the comparable company method. In applying this method, the average service lives applied for similar asset groups by other companies is relied upon.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Requests:

- (a) Please provide for each of the comparable companies identified, a comparison by fixed asset account of the selected Iowa Curve, Average Service Life, Net Salvage (or Gross Salvage and Cost of Retirement) to YEC.
- (b) Please provide for each of the comparable companies identified, the Depreciation Method, Procedure and Technique used by each company for their current Depreciation study.

YECL-YEC-67

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Accumulated Depreciation Page 10-14, “To calculate accumulated depreciation, the surviving cost basis as at the Testing Date was apportioned over the age of each asset group on a straight-line basis.”

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Request: Please provide the detailed calculations used to apportion accumulated depreciation over the age of each asset group.

YECL-YEC-68

Topic: Depreciation

Reference: Tab 10 – Depreciation Study – Results by Account, Table on Page 10-16

Preamble: YECL is interested in more information in respect of the Depreciation Study report.

Requests:

- (a) Please provide the detailed calculations and/or computer printouts by “Number” supporting the development of the “Annual Accrual Amount”, “Rate (%)”, and “Calculated Accrued Depreciation” as provided on the table provided on Page 10-16.
- (b) Please provide the formulae used for each column of the table provided on Page 10-16.
- (c) Please provide what “A/D” refers to and the calculations to derive an “A/D Difference” as shown on the table provided on Page 10-16.
- (d) Please provide the calculations to derive an “Accumulated Depreciation of A/D Difference” as shown on the table provided on Page 10-16.
- (e) Please provide the calculations to derive the “Calculated Accrued Depreciation” as shown on the table provided on Page 10-16.
- (f) Please provide the calculations to derive the “Annual Accrual Amount ” as shown on the table provided on Page 10-16.
- (g) Please provide the detailed calculations to derive the “KPMG Probable Remaining Life” as shown on the table provided on Page 10-16.
- (h) Please provide the detailed calculations to derive the “Accounting Effective Age” as shown on the table provided on Page 10-16. Please provide a definition of the “Accounting Effective Age”.
- (i) Please provide the detailed calculations to derive the “KPMG Concluded Effective Age” as shown on the table provided on Page 10-16. Please provide a definition of the “KPMG Concluded Effective Age”.
- (j) Please provide for all “Numbers” where “n/a” is shown (KPMG’s Note [2] stated that n/a values reflect asset classes which KPMG reviewed, however a change was deemed unnecessary), the reasons why “no change was deemed necessary” and the applicable original date for such asset classes.