



**PUBLIC INTEREST ADVOCACY CENTRE**

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July 18, 2013

Yukon Utilities Board  
Box 31728  
Whitehorse, Yukon Y1A 6L3

Attention: Mr. Bruce McLennan, Chair

**Re: Yukon Electrical Company Limited 2013-2015 General Rates Application  
UCG Information Requests to YECL**

Dear Mr. McLennan:

Our client, the Utilities Consumers' Group ("UCG"), hereby submits its information requests to Yukon Electrical Company Limited ("YECL") pursuant to Board Order 2013-02.

UCG asks that YECL provide responses and attachments in word-searchable PDF and/or Word format. Where responses take the form of tables with underlying calculations, UCG asks that YECL provide the related Excel file as well.

If the Board or YECL requires any clarification with respect to UCG's IRs, please direct all inquiries to me by email at [mjanigan@piac.ca](mailto:mjanigan@piac.ca) or by phone at (613) 562-4002 ext 26.

Yours truly,

Michael Janigan  
Counsel for UCG

cc: YECL and Registered Parties (via email)

**YUKON ELECTRICAL COMPANY LIMITED  
2013-2015 GENERAL RATE APPLICATION**

**Utilities Consumers' Group  
Information Request No. 1**

- 1) *Reference:* May 27, 2013 Application, page 1-1

*Request:*

- (a) Please provide a full explanation of how an application filed May 27, 2013 requesting approval of a revenue requirement effective January 1, 2013 should not be treated as an application requesting / endorsing rate retroactivity.
- (b) Please provide examples of decisions by regulators in other jurisdictions which allow utilities to fully recover a full test year revenue requirement despite applying for that recovery during the test year.
- (c) Please provide examples of decisions by regulators in other jurisdictions which denied utilities from recovering the full test year revenue requirement in a late filing situation similar to what has happened with YECL's current application.

- 2) *Reference:* May 27, 2013 Application

*Request:*

- (a) Please provide details of all stakeholder consultations conducted by YECL during development of this application prior to submitting it to the YUB.
- (b) Please provide documentation related to issues discussed during these consultations and a list of all parties involved.
- (c) Please confirm how and when the leadership / owners of YECL approved the General Rate Application as provided to the YUB. Please identify the dates on which these approvals were provided.

- 3) *Reference:* Board Order 2013-03, Appendix A, paragraph 13

*"The Board agrees with UCG's comments regarding the filing of electronic spreadsheets such as Excel with formulae intact. The filing of the electronic version of schedules and tables allows for more efficient testing of the provided information. As a result, the Board directs that, in future, YEC will include Excel versions, with formulae intact of all schedules and tables used to support its filings."*

*Request:*

Please provide Excel versions, with formulae intact, of all schedules and tables that have been submitted as part of this Application.

- 4) *Reference: May 27, 2013 Application Cover Letter, page 2*  
 YECL states *“In Section 12 of this Application, Yukon Electrical has requested approval of a 6.5% interim refundable rate rider (Rider R) for electrical consumption on or after July 1 2013. By implementing the rate on July 1, 2013, Rider R will recover approximately 50% of Yukon Electrical’s forecast shortfall in 2013.”*
- Request:*  
 Please provide details of all expected recoveries through Rider R by month for the period July 2013 through December 2014.
- 5) *Reference: May 27, 2013 Application, page 1-3*  
 YECL states *“Yukon Electrical was last before the Yukon Utilities Board (“Board”) for the test years 2008-2009. Since then, Yukon Electrical has operated on 2009 primary rates with the exception of flowing through the impact of changes in fuel prices in accordance with Rider F and the Fuel Price Flow Through Deferral mechanism, as well as flowing through the impact of changes in the wholesale energy tariff from the Yukon Energy Corporation in accordance with the Purchased Power Flow Through Deferral mechanism.”*
- Request:*
- (a) Please confirm that the bills of Yukon ratepayers have continued to change since 2008 due to the reliance by YEC and YECL on across-the-board percentage rate riders (e.g., Riders F, J and R) to recover approved rate revenue requirements and changes to fuel costs beyond what was provided by base rates.
  - (b) Please provide detailed calculations of the total bill (including all riders, rate relief, and taxes) for a residential customer living in Whitehorse using 1000 kWh, 1200 kWh and 1400 kWh per month in January 2008, January 2009, January 2010, January 2011, January 2012, January 2013, January 2014 and January 2015 assuming that the 2013, 2014 and 2015 rate adjustments proposed by YECL are approved. Please provide details of the bill calculations and indicate overall percentage changes in the total bill for each year.
  - (c) Please provide details of YECL’s understanding of mitigation efforts in other jurisdictions if rate adjustments result in bill impacts in excess of a specific threshold.
  - (d) Please provide details of YECL’s position regarding mitigation efforts that should be imposed if rate adjustments in the Yukon result in bill impacts in excess of 10%.
- 6) *Reference: May 27, 2013 Application, page 1-4*  
 YECL states *“Further to the above, the Board directed in Board Order 2010-13 that a joint Cost of Service Study was to be filed within six months of the expiry of OIC 2008/149. Given that OIC 2008/149 was superseded by OIC 2012/68 with the effect of no rate rebalancing until after December 31, 2013, Yukon Electrical is now forecasting a joint Phase II GRA with Yukon Energy will be filed in 2014 that will include a Cost of Service Study, Rate Design, Rate Schedules and Terms and Conditions based on Yukon Electrical’s and Yukon Energy’s most recently approved revenue requirements.”*

*Request:*

- (a) Please provide details of the steps that YECL expects to take to compile and submit a joint Phase II GRA as well as the amount of time needed to finish these steps.
- (b) Please provide details on what work has been completed to date on the next Phase II GRA and/or when this work is to commence.

7) *Reference:* May 27, 2013 Application, page 1-13

YECL states “*On February 13, 2008, the Canadian Accounting Standards Board confirmed that IFRS will replace Canadian Generally Accepted Accounting Principles (GAAP) for annual financial statements relating to fiscal years beginning on or after January 1, 2011. IFRS uses a conceptual framework similar to GAAP, but there are significant differences in recognition, measurement and disclosures. The most significant difference from GAAP is the absence of the recognition of regulatory assets / liabilities and related deferral accounts. Beginning in 2011, Yukon Electrical, consistent with its parent company, no longer recognizes regulatory assets and liabilities in its IFRS Financial Statements but continues to do so for utility earnings purposes.*”

*Request:*

- (a) Please confirm YECL’s understanding that the International Accounting Standards Board has announced deferrals to the adoption of IFRS and that it announced IFRS adoption deferrals to January 1, 2013, January 1, 2014 and January 1, 2015 in March 2012, September 2012 and February 2013 respectively and that these deferrals are available to rate-regulated entities (i.e., YECL).
- (b) Please identify the additional costs that YECL has and will incur by not deferring the adoption of International Financial Reporting Standards until January 1, 2015 to allow issues associated with rate-regulated accounting under IFRS to be resolved.
- (c) Please confirm YECL’s understanding that it will not be able to adopt changes that may be made to rate-regulated accounting policies as a result of the current ongoing review by the IASB.
- (d) Please identify where these additional costs are included within YECL’s revenue requirements for 2010, 2011 and 2012 as well as the proposed revenue requirements for 2013, 2014 and 2015.

8) *Reference:* May 27, 2013 Application, pages 2-1 – 2-2

YECL states “*Yukon Electrical forecasts the total primary non-industrial sales in 2013 to increase 2.3% (on a weather-normalized basis) and 1.9% in each of 2014 and 2015. The 2.3% growth in sales in 2013 is consistent with the recently applied for and Board approved Yukon Energy 2013 forecast growth in wholesale sales to Yukon Electrical of 2.26%. Including the sales to the Yukon Electrical industrial customer, Whitehorse Copper Tailings, the growth in total sales in 2013 to 2015 would be 2.6%, 3.1% and 1.9%, respectively.*”

*Request:*

- (a) Please confirm whether the electrical sales by customer class shown at the top of page 2-2 for the 2013-2015 test period are weather normalized.
- (b) Please confirm the 2013 forecast wholesale sales approved by the YUB for Yukon Energy Corporation in its Order 2013-03 issued on June 17, 2013.

- (c) Please provide details on when YECL's current sales forecasts for 2013-2015 were determined for this rates application.
- (d) Please identify the impact that demand side management is expected to have on sales levels in 2013, 2014 and 2015. Explain how this impact has been incorporated into the sales forecast and provide a revised version of Schedule 2.1 showing the sales forecast for 2013 – 2015 with DSM impacts isolated.
- (e) Please provide monthly details of Whitehorse Copper's forecasted electricity use, demand and bill component totals for 2013, 2014 and 2015.

- 9) *Reference: May 27, 2013 Application, page 2-5*  
 YECL states *"Weather-normalized UPC is obtained based on a two-step approach where, in the first step, the historical average monthly UPC is regressed on reported monthly Heating Degree Days (HDD), and in the second step, the coefficient of HDD from the regression in first step is multiplied by the difference between the actual HDD and the "Normal" HDD. "Normal" HDD is defined as a twenty-year rolling average of HDD."*

*Reference: July 27, 2012 YEC 2012-2013 GRA, YECL-YEC-1-3*  
 YEC states *"Heating Degree Days (HDD) analysis showed that the temperature in Whitehorse was colder in 2011 than the 10-year average. HDD for 7 winter months (Jan-Apr, Oct-Dec) showed approximately 66 higher HDD in 2011 compared to 10-year average (columns B and C in Table 1 of Attachment 1).*

*Request:*

- (a) Please provide the source documents for the monthly heating degree days provided in the Application at Section 2, Attachment 20.
  - (b) Please provide details of when the YUB approved the use of the 20 year rolling average Heating Degree Days as a method of normalizing YECL's temperature-sensitive sales.
  - (c) Please explain the difference between the 2011 heating degree days for Whitehorse identified by YEC as "actual" and the 2011 "actual" heating degree days provided in YECL's Application at Section 2, Attachment 20.
- 10) *Reference: May 27, 2013 Application, page 2-8*  
 YECL states *"As WHCT is a single industrial customer that could contribute materially higher or lower than 1.4% of Yukon Electrical's total forecast sales and the exact timing of its start-up and eventual load are not within the control of Yukon Electrical, Yukon Electrical is requesting a deferral account relating to WHCT sales uncertainty. This deferral account is proposed to capture the difference between WHCT net revenue on existing Rate 39 less forecast purchase power price applied to forecast sales, and WHCT net revenue on existing Rate 39 less forecast purchased power price applied to actual sales. The net revenue will be defined using Rate 39 effective January 1, 2013, that was used to generate the revenue on existing rates in Schedule 2.1, less the forecast price of purchase power stated in Schedule 3.1 assumed in the revenue requirement. Differences between forecast and actual will be refunded to or collected from customers."*

*Request:*

- (a) Please provide examples where the YUB has allowed the creation of a deferral account related to the sales forecast of a utility.
- (b) Please explain how the requested deferral account lessens the risk faced by YECL.

11) *Reference: May 27, 2013 Application, page 3-1*

*YECL states “Yukon Electrical was directed in Board Order 2009-2 to capitalize the incremental purchased power costs incurred due to Fish Lake rebuilds in 2008/2009. Consistent with this Order, Yukon Electrical has capitalized the incremental purchase power costs incurred for the period in which Fish Lake Unit #1 was out of service after the catastrophic failure in March 2010.”*

*Request:*

- (a) Please provide details of the incremental purchased power costs incurred when Fish Lake was out of service following the March 2010 failure including if any of these costs are being incurred during the 2013-2015 test period.
- (b) Please provide details of when the YUB specifically approved the capitalization of the incremental purchased power costs incurred when Fish Lake was out of service following the March 2010 failure.

12) *Reference: May 27, 2013 Application, page 3-2*

*YECL states “The cost of purchase power in this Application is based on Yukon Energy’s rates that are currently in place for primary energy and secondary sales and are outlined on Schedule 3.1, lines 6 and 7. These rates do not include any adjustment to the rates associated with Yukon Energy’s applied for but not yet approved Energy Reconciliation Adjustment (ERA). Any increases or decreases to these rates for 2013 and thereafter will be flowed through to Yukon Electrical’s customers.”*

*Request:*

- (a) Please confirm YECL’s understanding that the steps that YEC included in its 2012-2013 General Rates Application to update the Energy Reconciliation Adjustment and reactivate it effective January 1, 2012 were not approved by the YUB in its Order 2013-01 issued March 25, 2013.
- (b) Please identify YEC’s current application for the Energy Reconciliation Adjustment that has not yet been addressed by the YUB.
- (c) Please explain how “any increases or decreases to these rates for 2013 and thereafter will be flowed through to Yukon Electrical’s customers”.

13) *Reference: May 27, 2013 Application, page 3-3*

*YECL states “Total forecast purchases are determined by applying a forecast line loss percentage to Yukon Electrical’s sales load forecast that was discussed in Section 2. Overall, line losses are determined by using a five-year historical average of 6.2%. This is consistent with the approach approved in Board Order 2009-2.”*

*Request:*

- (a) Please provide details of the line loss analysis that confirms that the most recent 5-year average of line losses on YECL's various systems is 6.2%.
- (b) Please describe the work that YECL has undertaken to reduce the level of line losses on its various systems since 2008 and provide the analysis that shows how line losses have been reduced.

- 14) *Reference:* May 27, 2013 Application, page 4-1

*YECL states "The forecast fuel cost increase of \$974,000 in 2013 is mainly due to the inclusion of the Rider F fuel rider in base rates for the test period. Prior to 2013, Yukon Electrical recovered the difference between the forecast 2009 fuel rates and the current fuel rate using Rider F."*

*Reference:* May 27, 2013 Application, page 12-2

*YECL states "The Fuel Adjustment Rider, Rider F, will remain in place, to recover diesel fuel cost variances. It will be adjusted as required by the current Rider F fuel cost recovery process."*

*Request:*

- (a) Please explain what YECL is doing with respect to "the inclusion of the Rider F fuel rider in base rates for the test period" if the Rider F is supposed to be continued as a rate rider.
- (b) Please provide details of the YUB order that allows YECL to include the Rider F fuel rider in base rates.

- 15) *Reference:* May 27, 2013 Application, page 4-1

*YECL states "Fuel is purchased on an ongoing basis for each of the five isolated diesel plants operated by Yukon Electrical. Yukon Electrical conducts a diesel fuel tendering process in which a vendor is selected to be the provider of diesel fuel to Yukon Electrical. The current diesel fuel arrangements are due to be retendered early in 2014."*

*Request:*

- (a) Please explain when the new tender for diesel fuel purchases will be effective.
- (b) Please confirm that any new diesel fuel prices will be reflected in fuel costs paid by Yukon ratepayers through the Rider F.

- 16) *Reference:* May 27, 2013 Application, page 4-1 - 4-2

*YECL states "Beginning in 2013, a supply of Liquid Natural Gas (LNG) for the Watson Lake power plant will be sourced from FortisBC. Please refer to Business Case #6, Watson Lake Bi-Fuel Project, for further information regarding the Watson Lake power plant generating electricity with LNG as well as diesel fuel beginning in 2013."*

*Request:*

- a) Please confirm that the 3 page business case provided in this Application is all that was required to gain management approval of the Watson Lake Bi-Fuel Project expenditures of \$1,047,000 during the 2012-2014 period. If not, please provide all

documentation used to gain management approval. Please provide all related regulatory and net present value analysis on Excel format.

- b) Please confirm the total capital and operating cost of the Watson Lake Bi-Fuel Project.
- c) Since the Watson Lake Bi-Fuel Project has related expenditures over \$1 million, please explain when YECL will be taking steps to have this project reviewed pursuant to Section 3 of the *Public Utilities Act*.

17) *Reference: May 27, 2013 Application, page 4-2*

YECL states “*Plant efficiencies are based on the average efficiencies of the previous five years adjusted for any changes due to the replacement of units. This is consistent with the approach approved in Board Order 2009-2.*”

*Request:*

- a) Please provide details of the diesel fuel efficiencies assumed for 2013-2015 as well as details of the previous 5 years efficiencies which were used to support the forecast including how they were measured. Please provide all detailed schedules in Excel format.
- b) Please explain work that YECL has undertaken to improve diesel fuel efficiencies on its various systems since 2008.

18) *Reference: May 27, 2013 Application, page 4-2*

Regarding diesel fuel costs, YECL states “*Price forecasts for each community are based on the current prices in place for diesel fuel at February 2013.*”

*Request:*

- a) Please provide details of the source for these diesel fuel prices.
- b) Please update Schedule 4.2 with the most recent diesel fuel prices and provide details of the sources for these prices.

19) *Reference: May 27, 2013 Application, page 4-2*

YECL states “*Yukon Electrical is proposing to continue the deferral for fuel prices for the 2013-2015 test period but is requesting a change in the methodology for calculating the deferral for fuel used in Watson Lake. As a result of the conversion of the diesel units in Watson Lake to bi-fuel (diesel and LNG) beginning in the fall of 2013, generation will be based on a variable mix of diesel and LNG. This means that the forecast plant efficiency cannot be determined at this time. In order to address this issue, Yukon Electrical is requesting to use the actual equivalent diesel litres used as opposed to derived litres that are based on a forecast plant efficiency to arrive at the fuel deferral amount for Watson Lake. For all other locations, the calculation of the fuel price deferral would remain unchanged from that previously approved.*”

*Request:*

- a) Please confirm YECL’s understanding that the Fuel Adjustment Rider & Deferred Fuel Price Variance policy (Rider F - most recently approved by the YUB in February 2012) is related to “deferring, monitoring, collecting and remitting fuel price variance amounts for diesel fuel consumed to generate electricity”.



- b) Please provide details of YECL's application to the YUB regarding changing the Fuel Adjustment Rider & Deferred Fuel Price Variance policy to account for fuel prices that are not associated with diesel fuel.
- c) Please provide details of efforts by YECL to get the Yukon government to change Section 8 of the Rate Policy Directive Order in Council 1995/90 that provides for fuel price adjustments and sets out that the Board must permit YEC and YECL to adjust their rates to retail customers, major industrial customers, and isolated industrial customers to reflect fluctuations in the prices for diesel fuel, without the requirement for specific application to and approval of the Board.
- d) Please confirm the identity and qualifications of the expert witness that YECL will put forward to speak to the industry standard conversion factors for LNG that YECL has included in its Application.
- e) Please describe details of the analysis of renewable energy alternatives that were considered in lieu of the LNG option.
- f) Has YECL had any discussions with the Yukon government regarding the development and use of natural gas deposits in the Yukon for electricity generation?

20) *Reference: May 27, 2013 Application, page 4-2*

*YECL states "Yukon Electrical's variances between actual operations and maintenance expenses and the amounts as filed were -1.9% for 2008 and 1.7% for 2009, with a total variance over the two-year test period of 0.0%. The variances between actual operations and maintenance expenses and the Board-approved amounts were -0.6% for 2008 and 7.3% for 2009, with a total variance over the two-year test period of 3.4%."*

*Request:*

- a) Please confirm that YECL's 2008 and 2009 allowed O&M amounts were approved by the Board on May 21, 2009 in Order 2009-5.
- b) Please explain how the \$648,000 over expenditure in 2009 was recovered / accounted for by YECL.
- c) Please provide a table showing non-fuel operating and maintenance costs per customer for 2008, 2009, 2010, 2011, 2012, 2013 (forecast), 2014 (forecast) and 2015 (forecast).
- d) Please explain the changes in labour costs and the amount of labour costs that have been transferred to capital and deferred cost projects for 2008, 2009, 2010, 2011, 2012, 2013 (forecast), 2014 (forecast) and 2015 (forecast).
- e) Please provide position titles and total compensation amounts for all positions that were compensated at more than \$100,000 annually in 2008, 2009, 2010, 2011, 2012, 2013 (forecast), 2014 (forecast) and 2015 (forecast).
- f) Please confirm that the last YUB-approved revenue requirement was for 2009 and that there were no YUB-approved revenue requirements for YECL for 2010, 2011 and 2012.
- g) Please provide a table comparing the 2009 allowed O&M amounts to the actual O&M amounts in 2010, 2011 and 2012 similar to the table on page 5-2 of the Application.
- h) Please provide a table showing employee complement history by function for 2009 (Allowed), 2010 Actual, 2011 Actual, 2012 Actual, 2013 Forecast, 2014 Forecast and 2015 Forecast.

- 21) *Reference:* May 27, 2013 Application, Schedule 5-3  
 YECL indicates that Governance, HR, and Health & Safety costs significantly reduced in 2012 from 2011 (\$68,000) and Meter Services increased by \$20,000 in 2012 over 2011.

*Request:*

- a) Please explain what Governance, HR, and Health & Safety services were reduced and the associated costs and explain why those cost reductions have not continued for the 2013-2015 test period.
  - b) Please explain why Meter Services costs suddenly increased in 2012, the year prior to this Application's test period.
  - c) Are there additional affiliate charges that are capitalized and do not show up on the O&M schedule 5-3? Please provide details of these charges for 2009 through 2015.
  - d) Are there any outbound affiliate services? If yes, where are they identified?
  - e) Please provide a table similar to Schedule 5-3 which includes 2009 Allowed for affiliate charges included in O&M.
  - f) Please explain the differences between 2009 Allowed and the forecast amounts for 2013 through 2015.
  - g) Please provide copies of service level agreements for all affiliate services provided to and by YECL in 2012 and forecast to be provided to and by YECL over the 2013-2015 test period.
  - h) Please provide evidence demonstrating that it is more cost-effective to procure the services forecast for 2013-2015 from affiliates than from other sources.
- 22) *Reference:* May 27, 2013 Application, page 6-1  
 YECL states "*Property taxes are paid to the communities annually for Yukon Electrical's office building, generation facilities, substation properties and power lines. The increases forecast during the test period are primarily due to planned capital work on the downtown office building in Whitehorse and the Fish Lake Unit #1 building, as well as inflation.*"
- Request:*
- a) Please explain how often YECL's facilities within municipalities are reassessed such that planned capital work would need to be included so quickly in a property tax budget.
  - b) Please explain how property taxes are affected by inflation.
  - c) Please provide the actual property taxes paid or expected to be paid in 2013 based on municipal budget deliberations.
- 23) *Reference:* May 27, 2013 Application, page 7-1  
 YECL states "*The impact of the depreciation study is a significant increase in forecast depreciation expense primarily due to the request for reinstatement of a provision for future removal and site restoration in depreciation rates.*"
- Request:*
- a) Please provide a table that compares YECL's current and proposed depreciation rates with the depreciation rates allowed for Yukon Energy Corporation for similar assets. Include an analysis of the impact that any differences have on the depreciation expense forecast by YECL for the 2013-2015 test period.

- b) Please explain how YECL treated the difference between the depreciation expense allowed to be recovered in rates in 2009 and the depreciation expense identified as incurred in 2010, 2011 and 2012.
- c) Please explain the significant change in amortization of differences between 2009 allowed and the forecast for 2013-2015.
- d) Please provide schedules 7.2, 7.3 and 7.4 showing depreciation expense at existing rates.
- e) Please provide details on the impact of the proposed change in depreciation expense on the overall revenue requirement for 2013, 2014 and 2015 including the change in rate base and return.

24) *Reference: May 27, 2013 Application, Section 7, Attachment 2*

Mr. Kennedy states that *“many depreciation studies completed by Gannett Fleming have developed separate provisions relating to the recovery of original cost of investment and for the recovery of costs of removal.”*

*Request:*

- a) Please identify utilities comparable to YECL that have been allowed to include net salvage estimates within their current depreciation rates.
- b) Please provide details of regulator decisions related to the Gannett Fleming’s proposed provisions relating to the recovery of costs of removal.
- c) Mr. Kennedy notes that Gannett Fleming developed separate provisions relating to the recovery of original cost of investment and for the recovery of costs of removal for Enbridge Consumers Gas in a 2012 Application to the Ontario Energy Board. How does this compare to Enbridge’s application filed in June 2013 (EB-2012-0459) to change depreciation rates to reduce the annual amount for future site restoration costs and to implement a rate rider to return to ratepayers over a 5 year period more than \$250 million previously over-collected in depreciation rates for site restoration costs and explain why Gannett’s previously recommended depreciation rates were too high?
- d) Other than Enbridge, is Mr. Kennedy aware of any other utility that has had to refund over-collections of site recovery costs to ratepayers?

25) *Reference: May 27, 2013 Application, Section 7, Attachment 2, page 18*

Mr. Kennedy states that *“investor-owned utilities generally all seek to incorporate the recovery of costs of removal in their revenue requirements through depreciation expense.”*

*Request:*

Please provide details of any utilities that either do not recover costs of removal through depreciation rates or use another mechanism to recover these costs.

26) *Reference: May 27, 2013 Application, Section 7, Attachment 2, page 18*

Mr. Kennedy states that *“While investor-owned utilities will often attempt to avoid differences in the regulated ledgers versus the financial disclosure ledgers, I have noted that there is a greater tolerance to reconcile these differences.”*

*Request:*

Please provide details of any utilities that do have differences in the regulated ledgers versus the financial disclosure ledgers.

- 27) *Reference:* May 27, 2013 Application, Section 7, Attachment 2, page 19  
Mr. Kennedy states that “*it is my experience that ownership does make a difference in the regulatory and depreciation principles as applied by regulatory authorities throughout Canada.*”

*Reference:* May 27, 2013 Application, Section 7, Attachment 2, page 20

Mr. Kennedy states that “*Canadian regulatory practice over the period since the issuance of YUB Order 2009-2 demonstrates an increased tolerance of allowing crown-owned utilities to follow differing practices with regard to net salvage than investor-owned utilities within the same jurisdiction.*”

*Request:*

- a) Please identify when the Yukon Utilities Board has applied regulatory and depreciation principles differently to YECL and YEC.
  - b) Other than in Newfoundland, has any Canadian regulator allowed a differing practice regarding collection of net salvage estimates by a crown-owned utility as compared to an investor-owned utility that deal with the same form of energy?
  - c) Does Mr. Kennedy consider Ontario’s crown-owned Ontario Power Generation comparable to the gas distribution utilities in Ontario?
  - d) Please provide details of where Canadian regulatory practice over the period since the issuance of YUB Order 2009-2 demonstrates an increased tolerance of allowing crown-owned utilities to follow differing practices with regard to net salvage than investor-owned utilities within the same jurisdiction.
  - e) Please identify where YECL’s circumstances have changed since the February 2009 issuance of Order 2009-2 that would require the reinstatement of negative salvage amounts in depreciation rates.
- 28) *Reference:* May 27, 2013 Application, page 8-4  
YECL states “*Yukon Electrical, as detailed in the expert evidence prepared by Kathy McShane for the 2008-2009 GRA, shares similar business risk to its affiliate, Northland Utilities (Yellowknife) Limited.*”

*Reference:* May 27, 2013 Application, page 8-5

YECL states “*Yukon Electrical continues to face greater business risk than the average Canadian or British Columbia utility.*”

*Request:*

- a) Please provide the evidence upon which the statement on page 8-5 is based and the qualifications of the individual that undertook this analysis.
- b) With respect to the comparison of YECL relative to the Northland utilities, what evidence exists that Northland is comparable to YECL’s current operations and operating environment?

- 29) *Reference: YUB Order 2013-01 - Reasons for Decision, March 25, 2013 Application, The YUB states on page 50 “In summary, the Board has determined that the simplified approach is the approach to be used in determining the ROE for utilities under its jurisdiction. The simplified approach was based on the precedence of the BCUC formulaic model. In this proceeding, since recent results of the BCUC model are not available, YEC can use the benchmark results from the AUC model. Therefore, the Board directs YEC in its compliance filing to use an ROE of 8.25 percent.”*

*Reference: May 27, 2013 Application, page 8-3*

YECL states that on May 10, 2013, the BCUC issued Order G-75-13 addressing a number of matters including (1) a generic benchmark ROE of 8.75% effective January 1, 2013; (2) a benchmark common equity ratio of 38.5% effective January 1, 2013; and (3) an Automatic Adjustment Mechanism formula for annually setting the ROE starting January 1, 2014. YECL also notes that a second phase of the BCUC GCOC proceeding is now underway which will determine an appropriate risk premium and deemed capital structure for British Columbia utilities that differ in risk from the benchmark utility.

*Reference: O.I.C. 1995/090*

*Normal return on equity*

*2.(1) Subject to subsection (2), the Board must include in the rates of Yukon Energy Corporation and the Yukon Electrical Company Limited provision to recover a fair return on their equity used to finance their rate base.*

*(2) The Board must include in the rates of the Yukon Energy Corporation provision to recover a fair return on the Corporation’s equity, less one-half of one per cent (.5%).*

*Request:*

- a) Please confirm YECL’s understanding that OIC 1995/90 requires that there only be 0.5% difference between the return on equity allowed to be recovered in rates charged by YECL and YEC.
  - b) Please confirm YECL’s understanding that the YUB has allowed YEC to incorporate a return on equity of 8.25% into its 2013 rates.
- 30) *Reference: May 27, 2013 Application, page 8-6*  
 YECL states “Given Yukon Electrical shares similar business risks as compared to its affiliates in the Northwest Territories as well as the increase to the common equity ratio benchmark in British Columbia, Yukon Electrical is requesting to increase its common equity ratio from the current level of 40% to 44% for each of 2013, 2014 and 2015.”

*Request:*

- a) Please provide the evidence upon which the statement on page 8-6 is based and the qualifications of the individual that undertook this analysis.
- b) Please explain why YECL is applying to increase its equity ratio to 44% when the generic benchmark ROE of 8.75% was established by the BCUC for a utility having a 38% equity ratio.

- c) Please indicate all cases in the last 5 years where YECL has had to defer or abandon expenditures needed to provide service due to an inability to raise the necessary capital under reasonable terms and conditions. Please provide details.
- d) Is YECL planning to raise any capital to finance investment growth in the 2013-2015 test period?
- e) Please indicate whether YECL's ability to earn its allowed ROE will differ at the current 40% common equity ratio as compared to proposed 44% common equity ratio.
- f) Please confirm YECL's understanding that reviews of capital structure and associated returns are typically only undertaken when there is a significant change in financial, business or corporate fundamentals. Please provide an exhaustive list of the significant changes in financial, business or corporate fundamentals that is driving YECL's proposed change in the equity component of rate base.
- g) Please provide all available Canadian comparables to YECL showing equity thickness, investment ratings, financial risk indicators and financial ratios (especially interest coverage).
- h) Please provide a table that reflects the actual annual ROE earned by YECL for 2009 through 2012.
- i) Please provide a table that reflects normalized actual annual ROE earned by YECL that is based on normalized volumes for 2009 through 2012.
- j) Please provide details of the change in revenue requirement for 2013, 2014 and 2015 by keeping the equity ratio at 40% and allowing a return on equity of 8.75%.

31) *Reference:* May 27, 2013 Application, page 8-6

*Request:*

- a) Please provide details of the long term debt YECL intends to issue during the 2013-2015 test period.
- b) Please provide details of the rates associated with any long, medium or short term debt issued by YECL over the last 10 years.
- c) Please compare the rates from part (b) with the Long Canada Bond Rates for that same period.
- d) Since YECL has proposed a deferral mechanism related to the return on equity, please provide your opinion on whether this same concept should apply to the issuance of debt which is largely not in the control of YECL.

32) *Reference:* May 27, 2013 Application, page 8-7

*Request:*

Please provide a copy of the table that appears at the top of page 8-7 with actual data from 2008 through 2012. Please provide all related source documents for the updated table.

33) *Reference:* May 27, 2013 Application, page 8-7

YECL states that "*The no cost capital included in this Application relates to the balances for deferred pensions including other post employment benefit plans ("OPEB") as well as the reserve for injuries and damages.*"

*Request:*

- a) Please provide an explanation of the proposal being made by YECL regarding the section of the Application related to no cost capital.
- b) Please confirm whether YECL is earning any return on no cost capital and where this return is identified in the Application.

- 34) *Reference:* May 27, 2013 Application, page 8-10, Schedule 8.8  
 YECL states that it *“is using a deferral account to flow through to customers the costs associated with filing its GRAs. See Schedule 8.9 for a breakdown of the Phase I and Phase II costs forecast for 2013-2015. No rate case write-off is required from 2013-2015 to bring the overall deferred rate case balance to zero by the end of the test period.”*

*Request:*

- a) Please confirm that the balance in the rate case costs deferral account was in a credit position (i.e., there had been an over-collection of costs) at the end of every year since 2008.
- b) Please confirm that YECL has already recovered the costs that it has forecast will be incurred in the current general rates application proceeding as well as the Phase II proceeding anticipated to be conducted in 2014.
- c) Please explain where YECL has provided the YUB and intervenors an opportunity to test the prudence of all costs expected to be incurred by YECL in respect the current rates proceeding and a future rates proceeding prior to having them recovered in rates.

- 35) *Reference:* May 27, 2013 Application, page 8-10, Schedule 8.8  
 Watson Lake Bi-Fuel Project Study Costs

*Request:*

Please explain where YECL has provided the YUB and intervenors an opportunity to test the prudence of all costs incurred or to be incurred by YECL in respect to the deferred study costs related to the Watson Lake Bi-Fuel Project prior to having them recovered in rates.

- 36) *Reference:* May 27, 2013 Application, page 8-10, Schedule 8.8  
 YECL states *“As part of its 2008-2009 GRA, Yukon Electrical forecast generation in the test period assuming the connection of Pelly Crossing to the main grid effective November 1, 2008. As the timing of commencement of the service was uncertain and the costs associated a change in the assumed connection date were material, Yukon Electrical received approval in Board Order 2009-2 for a deferral account for the incremental costs associated with any changes that resulted from reliance on the assumption. Pelly Crossing was connected to the grid on November 27, 2008, resulting in incremental costs of \$33,000 which are included on Schedule 8.8. Yukon Electrical is proposing to collect \$11,000 each year over the period 2013-2015 resulting in a zero balance of the end of the test period.”*

*Request:*

Given the YUB's rejection of YEC's proposed planning cost accounting policy in its Order 2013-01 (page 83), please explain where YECL has provided the YUB and intervenors an opportunity to test the prudence of all costs incurred by YECL in respect to the deferred costs related to Pelly Crossing prior to having them recovered in rates.

- 37) *Reference:* May 27, 2013 Application, page 8-11

*YECL states "Yukon Electrical will incur \$20,000 worth of consulting costs to study the feasibility of using wind to generate power in the Burwash and Destruction Bay area. Yukon Electrical is proposing to collect this amount from customers over the period 2013-2015, resulting in a zero balance of the end of the test period."*

*Request:*

Given the YUB's rejection of YEC's proposed planning cost accounting policy in its Order 2013-01 (page 83), please explain where YECL has provided the YUB and intervenors an opportunity to test the prudence of all costs incurred by YECL in respect to the proposed feasibility study costs prior to having them recovered in rates.

- 38) *Reference:* May 27, 2013 Application, page 8-12

*YECL states "To determine the working capital for the 2013-2015 test period, Yukon Electrical completed a review of the components of each of the items in necessary working capital to ensure that the nature of the revenue/expenses included in each category had not changed materially since the 2008 lead/lag study was conducted and filed in Yukon Electrical's 2008-2009 GRA. Based on this review, the only component in the lead lag study that required an update was salary and wages lead/lag days as a result of Yukon Electrical moving to standard industry practice of bi-weekly payroll processing on January 1, 2010 with a one week payment lag."*

*Request:*

Please provide all details of the lead/lag study review that verifies that only one component needed to be changed. Please provide all schedules in Excel format.

- 39) *Reference:* May 27, 2013 Application, Schedule 8.5

*Request:*

- a) Please confirm that YECL's actual rate base for 2008 and 2009 was lower in each year than was approved in the last general rates application review.
- b) Since rates for 2008 through 2012 were based in part on a return on rate base that was in excess of what would have been earned on actual rate base, please provide a calculation of the excess return incorporated in rates for 2008 through 2012.



- 40) *Reference: May 27, 2013 Application, page 9-2*  
 YECL states that it *“tracks distribution system performance on an ongoing basis and the performance is reviewed when preparing the capital forecast. Additionally, Yukon Electrical reviews outages that may be attributed to system deficiencies.”*

*Request:*

- a) Please provide all reports prepared since 2008 related to YECL’s ongoing tracking of distribution system performance and outages.
- b) Please identify the specific distribution system performance improvements and the related impact on revenue requirement that have resulted from capital expenditures since 2008.

- 41) *Reference: May 27, 2013 Application, page 9-4*  
 YECL states *“A listing of the capital expenditures for 2008-2015 is provided in the following pages. For significant projects greater than \$100,000, a description of the project is included. Business cases for all major capital projects (\$500,000 or greater) are being filed with this Application as directed in Board Order 2009-2.”*

*Reference: Board Order 2009-2, page 37*

*“The Board directs YECL in future to provide business cases for all major capital expenditures at the time YECL files its rate applications to give the Board and Intervenors better opportunity to examine the business cases and time to allow for written information requests. Further, the Board directs that YECL provide an annual update on its capital plans and expenditures. The Board further directs YECL in future rate applications to provide an itemized list of miscellaneous capital expenditures.”*

*Request:*

- a) Please confirm that YECL considers “major capital projects” to only be those projects costing \$500,000 or greater.
- b) Please provide references to YUB Orders in which Board defines what it believes to be the spending threshold for a major project for YECL.
- c) Does YECL believe that a utility with a \$60 million rate base (such as YECL) should have the same expenditures threshold to define a major project as a utility with a \$226 million rate base (such as YEC)?

- 42) *Reference: May 27, 2013 Application, page 9-5*  
 YECL provides a listing of 5 projects plus 1 “Other Projects” which make up \$853,000 in **2008 capital expenditures on generation plant projects.**

*Reference: Board Order 2009-8, page 37*

*“Further, in future GRA applications, the Board directs YEC to include business cases for major capital items, including electronic models. Business cases will include:*

- *descriptions of the project*
- *economic analysis including preliminary engineering estimates*
- *discussion of alternatives and how the chosen option was determined*
- *discussion of the risks of proceeding with the chosen alternative*
- *discussion of risks of not proceeding with the chosen alternative; and*

- *discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.”*

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in all of the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #1 Generator End of Life Rebuild	\$463,000
Haines Junction Plant Upgrades	\$100,000
Pelly Crossing Tie into Transmission Grid	\$ 92,500
Watson Lake Generator Upgrades and Fresh Air Intakes	\$ 76,500
Destruction Bay Compton Protection Relay Replacement / Battery Charger Upgrade	\$ 65,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #1 Generator End of Life Rebuild	\$463,000
Haines Junction Plant Upgrades	\$100,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2008 capital expenditures on generation plant projects approved by the YUB in YECL’s last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on generation plant projects for the period 2003-2007?

- 43) *Reference:* May 27, 2013 Application, pages 9-5 to 9-7  
YECL provides a listing of 18 projects plus 1 “Other Projects less than \$20,000” which make up \$3,244,000 in **2008 capital expenditures on distribution new extensions projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in all of the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$1,304,000
Mountain Air Subdivision	\$ 317,000
Hamilton Boulevard Main Infrastructure Extension	\$ 266,000
Yukon Government Whitehorse Copper Phase II	\$ 262,000
Little Atlin Feeder Tap	\$ 178,000
Stan McCowan Subdivision	\$ 126,000
Land Rights	\$ 100,000
Miscellaneous New U/G Services	\$ 95,000
4th Ave and Strickland Condominiums	\$ 92,000
Arkel Subdivision Infill	\$ 78,000
Skookum Asphalt Plant	\$ 61,000
Lot 16 Marwell Subdivision	\$ 53,000
Connection of Minto Landing into Yukon Interconnected System	\$ 47,000
General Drafting and Mapping	\$ 46,000
New Customer Connection at Minto Crossing	\$ 40,000
Whitehorse Cadet Camp Three Phase Service	\$ 40,000
Carcross Tagish First Nation Carcross Line Rerouting	\$ 32,000
Lot 10 Centennial Street	\$ 28,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$1,304,000
Mountain Air Subdivision	\$ 317,000
Hamilton Boulevard Main Infrastructure Extension	\$ 266,000
Yukon Government Whitehorse Copper Phase II	\$ 262,000
Little Atlin Feeder Tap	\$ 178,000
Stan McCowan Subdivision	\$ 126,000
Land Rights	\$ 100,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2008 capital expenditures on distribution new extensions projects approved by the YUB in YECL’s last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on distribution new extensions projects for the period 2003-2007?

- 44) *Reference:* May 27, 2013 Application, pages 9-8 to 9-10  
 YECL provides a listing of 30 projects plus 1 “Other Projects less than \$20,000” which make up \$3,395,000 in **2008 capital expenditures on distribution improvement projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

4L311 Upgrade Distribution Lines Between 1 <sup>st</sup> and 6 <sup>th</sup> Avenue, Whitehorse	\$439,000
Connect Pelly Crossing into Yukon Interconnected System	\$435,000
Ketza Court Live Front Transformers Replacement	\$346,000
5L628 Squanga Road Rebuild	\$290,000
Right of Way Widening	\$268,000
9L - Km 129 to Km 132 South Klondike Highway - Distribution Line Rebuild	\$189,000
Hillcrest Subdivision Conversion	\$ 93,000
System Upgrades Lot 1378/79 Range Road	\$ 93,000
Miscellaneous Pole Replacements	\$ 92,000
Cadet Camp Three Phase Service System Improvement	\$ 83,000
9L Reliability Upgrade Squanga Lake Area	\$ 77,000
Test and Treat Pole Program	\$ 72,000
Tagish Bridge Conduit Replacement	\$ 60,000
Little Atlin Lake Area 3 Phase Pole Upgrades	\$ 60,000
Echo Lake Road Upgrade	\$ 52,000
McIntyre Subdivision 34.5kV Upgrade	\$ 47,000
Morley Bay Line Upgrade	\$ 46,000
Birch Alley Upgrade	\$ 45,000
Campbell Highway Relocation	\$ 43,000
Carmacks Upper Bench Rerouting	\$ 31,000
Paddlewheel Line Relocation	\$ 30,000
Carmacks Planned Pole Replacements	\$ 28,000
Porter Creek Regulator Upgrade	\$ 26,000
Beaver Creek Planned Pole Replacements	\$ 25,000
North Star Clearance Upgrade	\$ 24,000
McIntyre Creek Pumphouse Upgrade	\$ 23,000
McDonald Road to Centennial Road Upgrade	\$ 23,000
Convert Spirit Lake to 14.4kV	\$ 22,000
Marwell Subdivision Improvements	\$ 21,000
Arkeil Subdivision Upgrade	\$ 21,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

4L311 Upgrade Distribution Lines Between 1 <sup>st</sup> and 6 <sup>th</sup> Avenue, Whitehorse	\$439,000
Connect Pelly Crossing into Yukon Interconnected System	\$435,000
Ketza Court Live Front Transformers Replacement	\$346,000
5L628 Squanga Road Rebuild	\$290,000
Right of Way Widening	\$268,000

9L - Km 129 to Km 132 South Klondike Highway - Distribution Line Rebuild \$189,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2008 capital expenditures on distribution improvement projects approved by the YUB in YECL’s last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on distribution improvement projects for the period 2003-2007?

- 45) *Reference:* May 27, 2013 Application, page 9-10  
 YECL provides a listing of 7 projects plus 1 “Other Projects” which make up \$839,000 in **2008 capital expenditures on street and sentinel lighting projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Hamilton Boulevard Extension	\$435,000
Whitehorse Copper Light Additions	\$131,000
Foxhaven Street Lights Relocation	\$ 82,000
4th Ave & Strickland Street Light Upgrade	\$ 41,000
Pine Street Light Replacement	\$ 25,000
Quartz Road Street Lights Relocation	\$ 21,000
Carmacks High Pressure Sodium Light Upgrade	\$ 20,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Hamilton Boulevard Extension	\$435,000
Whitehorse Copper Light Additions	\$131,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- e) Please provide a comparative chart by project of the 2008 capital expenditures on street and sentinel lighting projects approved by the YUB in YECL's last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on street and sentinel lighting projects for the period 2003-2007?

46) *Reference:* May 27, 2013 Application, page 9-11  
YECL lists a \$31,000 project titled "**Meters**" in 2008 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in this project, when these costs were incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) If this project was identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide a comparative chart by project of the 2008 capital expenditures on meters projects approved by the YUB in YECL's last general rates application proceeding versus actual.
- d) What were the average annual capital expenditures on meters for the period 2003-2007?

47) *Reference:* May 27, 2013 Application, page 9-11  
YECL provides a listing of 5 projects plus 1 "Other Projects" which make up \$509,000 in **2008 capital expenditures on general property and equipment projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Transportation Equipment	\$139,000
Oracle HRxcellence Human Resource (HR) Management	\$138,000
Communication Equipment	\$ 57,000
Whitehorse Service Complex Pole Relocation	\$ 51,000
Miscellaneous Tools and Instruments	\$ 45,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Transportation Equipment	\$139,000
Oracle HRxcellence Human Resource (HR) Management	\$138,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2008 capital expenditures on general property and equipment projects approved by the YUB in YECL’s last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on general property and equipment projects for the period 2003-2007?

48) *Reference:* May 27, 2013 Application, page 9-11  
 YECL lists a \$1,035,000 project titled “CIS Billing System Conversion” in 2008 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in this project, when these costs were incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) If this project was identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecasts costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for this project per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet.
- d) Please provide a comparative chart of the 2008 capital expenditures on the CIS Billing System Conversion project approved by the YUB in YECL’s last general rates application proceeding versus actual.
- e) Please provide details of any discussions that YECL has had with YEC to establish a common billing system or to outsource the billing and customer information system in order to avoid ongoing duplication of costs within the Yukon.

49) *Reference:* May 27, 2013 Application, page 9-12  
 YECL provides a listing of 6 projects plus 1 “Other Projects” which make up \$779,000 in **2009 capital expenditures on generation plants projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Haines Junction Plant Controls Upgrade	\$324,000
Fish Lake Unit #2 New Wheel, Shaft and Bearing Pedestal	\$153,000
Fish Lake Unit #1 Replacement Wheel	\$ 80,000

Fish Lake Incremental Purchase Power	\$ 69,000
Fish Lake Control Room Monitor Upgrade	\$ 52,000
Swift River Unit #1 Replacement	\$ 32,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Haines Junction Plant Controls Upgrade	\$324,000
Fish Lake Unit #2 New Wheel, Shaft and Bearing Pedestal	\$153,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2009 capital expenditures on generation plant projects approved by the YUB in YECL's last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on generation projects for the period 2004-2008?

- 50) *Reference:* May 27, 2013 Application, pages 9-13 – 9-15  
 YECL provides a listing of 27 projects plus 1 "Other Projects less than \$20,000" which make up \$3,437,000 in **2009 capital expenditures on distribution new extensions projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$969,000
Ingram Subdivision	\$717,000
Takhini North Infill	\$341,000
Two City Water Wells in Riverdale	\$107,000
Hamilton Boulevard Main Infrastructure Extension	\$100,000
New Whitehorse Correctional Centre	\$ 90,000
Yukon Housing 8-Plex	\$ 88,000
Burns Road Lot Development	\$ 86,000
General Drafting and Mapping	\$ 75,000
City of Whitehorse Public Safety Building	\$ 61,000
Ta'an Kwach'an Council Subdivision – Klondike Highway North	\$ 60,000
Yukon Government New Airport Parking Area	\$ 58,000



Land Rights	\$ 56,000
35 Unit Condominium Wann Road	\$ 53,000
Yukon Government Army Beach Sewage Lagoon	\$ 47,000
Whitehorse Lot 1097	\$ 46,000
Lot 1095 Gentain Lane	\$ 41,000
Teslin Seniors 8-Plex	\$ 40,000
Selkirk First Nation Child Care Center	\$ 36,000
Miscellaneous New U/G Services	\$ 36,000
Champagne Aishihik First Nation Subdivision	\$ 36,000
Yukon Government Carcross Water Front Place	\$ 35,000
Watson Lake Line Move	\$ 35,000
Takhini Lot 1371	\$ 33,000
Yukon Government Carmacks Sewer Treatment Plant	\$ 32,000
Whitehorse General Hospital Staff Residence	\$ 32,000
Northwestel Communication Tower Hotsprings Road	\$ 27,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$969,000
Ingram Subdivision	\$717,000
Takhini North Infill	\$341,000
Two City Water Wells in Riverdale	\$107,000
Hamilton Boulevard Main Infrastructure Extension	\$100,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects less than \$20,000" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2009 capital expenditures on distribution new extensions projects approved by the YUB in YECL's last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on distribution new extensions projects for the period 2004-2008?
- 51) *Reference:* May 27, 2013 Application, pages 9-15 – 9-16  
 YECL provides a listing of 15 projects plus 1 "Other Projects less than \$20,000" which make up \$1,203,000 in **2009 capital expenditures on distribution improvements projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are

proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Right of Way Widening	\$240,000
Arkell Substation Upgrades	\$197,000
Hillcrest Subdivision Conversion	\$152,000
Wickstrom Road Line Relocation for Whitehorse General Hospital	\$ 83,000
Echo Lake Road Upgrade	\$ 75,000
9L Reliability Upgrade Squanga Lake Area	\$ 51,000
Robinson Substation Upgrade	\$ 39,000
Birch Alley Upgrade	\$ 32,000
Liard River Crossing	\$ 29,000
Whitehorse Airport Conversion	\$ 29,000
McDonald Road to Centennial Road Upgrade	\$ 24,000
Miscellaneous Pole Replacements	\$ 22,000
System Upgrade on Hotsprings River Road	\$ 22,000
Watson Lake Hotel Upgrade	\$ 20,000
Teslin and Klondike Road Upgrade	\$ 20,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Right of Way Widening	\$240,000
Arkell Substation Upgrades	\$197,000
Hillcrest Subdivision Conversion	\$152,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects less than \$20,000" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2009 capital expenditures on distribution improvements projects approved by the YUB in YECL's last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on distribution improvements projects for the period 2004-2008?

- 52) *Reference:* May 27, 2013 Application, page 9-16  
 YECL provides a listing of 4 projects plus 1 "Other Projects" which make up \$354,000 in **2009 capital expenditures on street and sentinel lighting projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are

proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Yukon Government Ingram Subdivision Street Lights	\$113,000
Takhini North Subdivision	\$ 86,000
Ta'an Kwach'an Council Subdivision	\$ 54,000
Hamilton Boulevard Extension	\$ 41,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for the following project per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Yukon Government Ingram Subdivision Street Lights	\$113,000
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- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2009 capital expenditures on street and sentinel lighting projects approved by the YUB in YECL's last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on street and sentinel lighting projects for the period 2004-2008?

- 53) *Reference:* May 27, 2013 Application, page 9-16  
YECL lists an \$80,000 project titled "**Transformers & Regulators**" in 2009 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in this project, when these costs were incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) If this project was identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide a comparative chart of the 2009 capital expenditures on transformers & regulators projects approved by the YUB in YECL's last general rates application proceeding versus actual.
- d) What were the average annual capital expenditures on transformers & regulators projects for the period 2004-2008?

- 54) *Reference:* May 27, 2013 Application, pages 9-16 – 9-17  
 YECL provides a listing of 4 projects plus 1 “Other Projects” which make up \$400,000 in **2009 capital expenditures on general property and equipment projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Oracle HRxcellence HR Management Software	\$117,000
Transportation Equipment	\$100,000
Communication Equipment	\$ 47,000
Miscellaneous Tools and Instruments	\$ 37,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Oracle HRxcellence HR Management Software	\$117,000
Transportation Equipment	\$100,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) Please provide a comparative chart by project of the 2009 capital expenditures on general property and equipment projects approved by the YUB in YECL’s last general rates application proceeding versus actual.
- f) What were the average annual capital expenditures on general property and equipment projects for the period 2004-2008?

- 55) *Reference:* May 27, 2013 Application, pages 9-18 – 9-19  
 YECL provides a listing of 10 projects plus 1 “Other Projects” which make up \$1,810,000 in **2010 capital expenditures on generation plants projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #2 Penstock Replacement	\$486,000
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Fish Lake Unit #2 New Wheel, Shaft and Bearing Pedestal	\$294,000
Destruction Bay Unit #1 Replacement	\$275,000
Watson Lake Unit #5 Replacement	\$232,000
Fish Lake Unit #1 Spillway	\$212,000
Purchase Unit for Pelly Crossing Power Plant	\$101,000
Fish Lake Unit #1 Wheel Replacement	\$ 45,000
Fish Lake Ditch #3 Drop Box Concrete Upgrade	\$ 32,000
Swift River Unit #1 Replacement	\$ 25,000
Pelly Crossing Plant Automation	\$ 25,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #2 Penstock Replacement	\$486,000
Fish Lake Unit #2 New Wheel, Shaft and Bearing Pedestal	\$294,000
Destruction Bay Unit #1 Replacement	\$275,000
Watson Lake Unit #5 Replacement	\$232,000
Fish Lake Unit #1 Spillway	\$212,000
Purchase Unit for Pelly Crossing Power Plant	\$101,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on generation plants projects for the period 2005-2009?

- 56) *Reference:* May 27, 2013 Application, pages 9-19 – 9-21  
YECL provides a listing of 27 projects plus 1 "Other Projects less than \$20,000" which make up \$3,397,000 in **2010 capital expenditures on distribution new extensions projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$1,022,000
Lower Post Health Center 3 Phase Line	\$ 733,000
Takhini North Infill	\$ 312,000
New Country Residential Subdivision in Haines Junction	\$ 105,000
Miscellaneous New U/G Services	\$ 86,000
Haines Junction Cultural Centre	\$ 74,000
Whitehorse Water Front Place Line Relocation	\$ 73,000

Land Rights	\$ 66,000
Marsh Lake Landfill	\$ 64,000
Yukon Government Core Library	\$ 59,000
Yukon Gardens Subdivision	\$ 59,000
Stan McGowan 12-Plex	\$ 59,000
Yukon College	\$ 57,000
35 Unit Condominium Near Mountain Air Subdivision	\$ 50,000
10 Units on Range Road	\$ 46,000
Main Street Condominium	\$ 45,000
Yukon Housing Seniors Housing – Jeckell Street	\$ 44,000
Yukon Government - Yukon River Crossing Study and Design	\$ 43,000
Lot 1018 Main Street	\$ 42,000
Yukon Government Haines Junction Willow Acres Residential Infill	\$ 37,000
Grove Street New Lots	\$ 35,000
Carcross Landfill	\$ 33,000
Whitehorse General Hospital Staff Residence	\$ 30,000
Crestview Booster Station	\$ 29,000
Lot 1100 Tagish	\$ 29,000
Lot 40 Mount Sima	\$ 22,000
Little Salmon Carmacks First Nation Healing Centre	\$ 21,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$1,022,000
Lower Post Health Center 3 Phase Line	\$ 733,000
Takhini North Infill	\$ 312,000
New Country Residential Subdivision in Haines Junction	\$ 105,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on distribution new extensions projects for the period 2005-2009?

57) *Reference:* May 27, 2013 Application, pages 9-21 – 9-23  
 YECL provides a listing of 23 projects plus 1 “Other Projects less than \$20,000” which make up \$2,251,000 in **2010 capital expenditures on distribution improvements projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are

proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend 34.5kV Substation Distribution Lines	\$492,000
Right of Way Widening	\$304,000
Hillcrest Subdivision Conversion	\$226,000
Takhini North Upgrade	\$134,000
Watson Lake 3-Phase System Protection Upgrade	\$100,000
Main Steel Alley 4th – 7th Avenue Upgrade	\$ 98,000
Test and Treat Program	\$ 57,000
Porter Creek Breaker Replacement	\$ 54,000
Destruction Bay Distribution Breaker Addition	\$ 54,000
Haines Junction Distribution Breaker Addition	\$ 51,000
Old Crow Pole Change Outs	\$ 46,000
Main Street Alley Upgrade	\$ 44,000
Destruction Bay Main Feeder	\$ 42,000
North Klondike Grounding Improvements	\$ 42,000
Mount Sima Subdivision	\$ 42,000
Nordenskiold River Bridge Rerouting	\$ 42,000
System Frequency Upgrades at S150 Substation	\$ 39,000
4L316 Two Mile Hill Conductor Upgrade	\$ 38,000
Klondike Road Improvements	\$ 30,000
Whitehorse Copper Rebuild	\$ 27,000
Miscellaneous Pole Replacements	\$ 26,000
Pole Removal Wickstrom Road	\$ 25,000
McIntyre Subdivision Prebuilding Work	\$ 22,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend 34.5kV Substation Distribution Lines	\$492,000
Right of Way Widening	\$304,000
Hillcrest Subdivision Conversion	\$226,000
Takhini North Upgrade	\$134,000
Watson Lake 3-Phase System Protection Upgrade	\$100,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on distribution improvements projects for the period 2005-2009?

- 58) *Reference:* May 27, 2013 Application, page 9-23  
 YECL provides a listing of 5 projects plus 1 “Other Projects less than \$20,000” which make up \$486,000 in **2010 capital expenditures on street and sentinel lighting projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Pine Street Light Replacements	\$161,000
Whistle Bend Way Light Additions	\$ 62,000
Takhini North Subdivision	\$ 56,000
Ingram Subdivision Street Lights	\$ 50,000
Takhini River Lights	\$ 24,000
Street Light Identification	\$ 24,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for the following project per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Pine Street Light Replacements	\$161,000
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- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on street and sentinel lighting projects for the period 2005-2009?

- 59) *Reference:* May 27, 2013 Application, page 9-24  
 YECL lists a \$460,000 project titled “**Meters**” in 2010 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in this project, when these costs were incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) If this project was identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) What were the average annual capital expenditures on meters projects for the period 2005-2009?



- 60) *Reference:* May 27, 2013 Application, pages 9-24 – 9-25  
YECL provides a listing of 6 projects plus 1 “Other Projects” which make up \$985,000 in **2010 capital expenditures on general property and equipment projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Transportation Equipment	\$358,000
Miscellaneous Tools and Instruments	\$176,000
Distribution SCADA Equipment	\$138,000
Oracle HRxcellence HR Management Software	\$103,000
Service Complex Engineering Department Renovations	\$ 86,000
Credit Card Pre-Authorized Payment Plan System	\$ 67,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Transportation Equipment	\$358,000
Miscellaneous Tools and Instruments	\$176,000
Distribution SCADA Equipment	\$138,000
Oracle HRxcellence HR Management Software	\$103,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on general property and equipment projects for the period 2005-2009?

- 61) *Reference:* May 27, 2013 Application, pages 9-26 – 9-27  
YECL provides a listing of 21 projects plus 1 “other projects” which make up \$1,652,000 in **2011 capital expenditures on generation plants projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #1 Turbine and Building Replacement	\$717,000
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Fish Lake Unit #1 Tailrace Reconstruction	\$173,000
Fish Lake Penstock #2 Replacement	\$ 70,000
Louise Lake Control Structure Gate Replacement	\$ 68,000
Fish Lake Ditch #3 Concrete Upgrade at Drop Box and Bypass	\$ 57,000
Fish Lake Dyke Widening	\$ 52,000
Ross River Substation Improvements	\$ 52,000
Purchase of Used Spare Generator	\$ 50,000
Watson Lake Protection Upgrade	\$ 48,000
Hobo for Franklin Lake Water Monitoring	\$ 36,000
Teslin Programmable Logic Controller (PLC) Replacement	\$ 33,000
Watson Lake Unit #5 Replacement	\$ 32,000
Stewart Crossing Radio Replacement / Programmable Logic Controller Upgrade	\$ 30,000
Fish Lake Unit #1 Spillway	\$ 26,000
Hobo Water Monitor for Fish Lake at Range Road	\$ 22,000
High Voltage Switching Cubicle and Terminations for Old Crow Plant	\$ 20,000
Teslin Plant Combustible Air Intake and Louver Improvements	\$ 19,000
Fish Lake Unit #2 Wheel, Shaft, and Bearing Improvements	\$ 18,000
Haines Junction Plant Relocation on to Foundation	\$ 14,000
Ross River Unit Protection Relay	\$ 11,000
Pelly Crossing Plant Automation	\$ 10,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #1 Turbine and Building Replacement	\$717,000
Fish Lake Unit #1 Tailrace Reconstruction	\$173,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on generation plants projects for the period 2006-2010?

- 62) *Reference:* May 27, 2013 Application, pages 9-27 – 9-29  
 YECL provides a listing of 29 projects plus 1 "Other Projects less than \$20,000" which make up \$6,078,000 in **2011 capital expenditures on distribution new extensions projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$1,274,000
Whistle Bend Subdivision Stage 1 & 2	\$1,242,000
Grizzly Valley New Extension Out of Subdivision	\$ 415,000
Water Front Place Line Relocation	\$ 385,000
25 Wann Road – 65 Units	\$ 343,000
Falcon Ridge Development Stage 4	\$ 271,000
New Underground Line Extensions	\$ 216,000
Grizzly Valley New Extension In Subdivision	\$ 193,000
Ingram 6-Plex Subdivision	\$ 165,000
Diamond Ranch Extension	\$ 130,000
Yukon Government Haines Junction Willow Acres Residential Infill	\$ 124,000
Watson Lake Hospital Upgrade	\$ 104,000
Mount Sima T-Bar	\$ 86,000
River’s Edge Development	\$ 81,000
Lot 1368 Mayo Road	\$ 80,000
F.H. Collins Secondary School Transformer	\$ 72,000
Land Rights	\$ 72,000
Carcross Retail Shops	\$ 51,000
Yukon Housing Abbeyfield Senior’s Residence	\$ 48,000
Eagle Eye Subdivision	\$ 45,000
6-Plex 1204 Centennial	\$ 44,000
Lot 1084 Grizzly Valley	\$ 37,000
8-Plex Lot 1127 Hillcrest	\$ 35,000
Kulan Area Line Improvements	\$ 34,000
Yukon Government Water Treatment Plant	\$ 34,000
14th Ave Whitehorse	\$ 34,000
Condominium – 602 Main Street	\$ 33,000
Lot 1309 Ibex	\$ 33,000
Kwanlin Dun First Nation Cultural Centre	\$ 31,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$1,274,000
Whistle Bend Subdivision Stage 1 & 2	\$1,242,000
Grizzly Valley New Extension Out of Subdivision	\$ 415,000
Water Front Place Line Relocation	\$ 385,000
25 Wann Road – 65 Units	\$ 343,000
Falcon Ridge Development Stage 4	\$ 271,000
New Underground Line Extensions	\$ 216,000
Grizzly Valley New Extension In Subdivision	\$ 193,000
Ingram 6-Plex Subdivision	\$ 165,000
Diamond Ranch Extension	\$ 130,000
Yukon Government Haines Junction Willow Acres Residential Infill	\$ 124,000
Watson Lake Hospital Upgrade	\$ 104,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- e) What were the average annual capital expenditures on distribution new extensions projects for the period 2006-2010?

- 63) *Reference:* May 27, 2013 Application, pages 9-29 – 9-31  
YECL provides a listing of 20 projects plus 1 “Other Projects less than \$20,000” which make up \$4,626,000 in **2011 capital expenditures on distribution improvements projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend Substation	\$1,690,000
System Upgrade, Extension of 5L628 to Grizzly Valley	\$ 454,000
Laberge Substation Distribution Upgrades	\$ 416,000
Right of Way Widening	\$ 331,000
PCB Identification and Transformer Change Outs	\$ 239,000
5L626 Double Circuit Line to Whistle Bend Substation	\$ 200,000
Hotsprings Road Upgrade	\$ 190,000
Upgrade Laberge Substation Transformer to 10 MVA	\$ 189,000
Whistle Bend 34.5kV Substation Distribution Lines	\$ 156,000
Whistle Bend Substation Transformer	\$ 127,000
Line Upgrade and Relocation Army Beach	\$ 92,000
Miscellaneous Pole Replacements	\$ 70,000
Line Upgrade and Relocation Lot 56 Paint Mountain	\$ 69,000
System Upgrade 113 Copper Road	\$ 53,000
System Frequency Upgrades at S150	\$ 37,000
Line Relocation Eagle Way	\$ 30,000
Carcross Town Pole Replacements	\$ 27,000
Configure Pelly Substation to Yukon Interconnected System	\$ 23,000
Centennial Street Upgrades	\$ 20,000
Hillcrest Subdivision Conversion	\$ 2,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend Substation	\$1,690,000
System Upgrade, Extension of 5L628 to Grizzly Valley	\$ 454,000
Laberge Substation Distribution Upgrades	\$ 416,000
Right of Way Widening	\$ 331,000
PCB Identification and Transformer Change Outs	\$ 239,000
5L626 Double Circuit Line to Whistle Bend Substation	\$ 200,000
Hotsprings Road Upgrade	\$ 190,000
Upgrade Laberge Substation Transformer to 10 MVA	\$ 189,000
Whistle Bend 34.5kV Substation Distribution Lines	\$ 156,000

Whistle Bend Substation Transformer

\$ 127,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on distribution improvements projects for the period 2006-2010?

- 64) *Reference:* May 27, 2013 Application, pages 9-31 – 9-32  
YECL provides a listing of 8 projects plus 1 “Other Projects less than \$20,000” which make up \$1,045,000 in **2011 capital expenditures on street and sentinel lighting projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend Stage 1 & 2 Street Lights	\$257,000
Morley and Peel Street Light Replacement	\$150,000
Wharf Lighting 1st Ave. Whitehorse	\$147,000
Whistle Bend Way Light Additions	\$143,000
Trail Lighting along Whitehorse Waterfront to Shipyards Park	\$100,000
Boxwood Light Upgrade	\$ 44,000
Grizzly Valley Street Lights	\$ 27,000
Black Street Additions and Rebuild	\$ 20,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend Stage 1 & 2 Street Lights	\$257,000
Morley and Peel Street Light Replacement	\$150,000
Wharf Lighting 1st Ave. Whitehorse	\$147,000
Whistle Bend Way Light Additions	\$143,000
Trail Lighting along Whitehorse Waterfront to Shipyards Park	\$100,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- e) What were the average annual capital expenditures on street and sentinel lighting projects for the period 2006-2010?

- 65) *Reference:* May 27, 2013 Application, page 9-32  
YECL lists a \$199,000 project titled “**Meters**” in 2011 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in this project, when these costs were incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) If this project was identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) What were the average annual capital expenditures on meters projects for the period 2006-2010?

- 66) *Reference:* May 27, 2013 Application, page 9-33  
YECL lists a \$9,000 project titled “**Transformers & Regulators**” in 2011 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in this project, when these costs were incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) If this project was identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) What were the average annual capital expenditures on transformers & regulators projects for the period 2006-2010?

- 67) *Reference:* May 27, 2013 Application, page 9-33  
YECL provides a listing of 8 projects plus 1 “Other Projects less than \$20,000” which make up \$1,330,000 in **2011 capital expenditures on general property and equipment projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Water Licence Renewal	\$491,000
Transportation Equipment	\$257,000
Demand Side Management Costs	\$204,000
Office Furniture	\$ 72,000
Miscellaneous Tools and Instruments	\$ 67,000
Communication Equipment	\$ 49,000
New Cashier System	\$ 33,000

Service Complex Construction Department Renovations \$ 31,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Water Licence Renewal	\$491,000
Transportation Equipment	\$257,000
Demand Side Management Costs	\$204,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects less than \$20,000" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on general property and equipment projects for the period 2006-2010?

- 68) *Reference:* May 27, 2013 Application, pages 9-34 – 9-35  
YECL provides a listing of 18 projects plus 1 "Other Projects less than \$20,000" which make up \$3,115,000 in **2012 capital expenditures on generation plants projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #1 Turbine and Building Replacement	\$1,024,000
Watson Lake Unit #4 Replacement	\$ 354,000
Watson Lake Unit #3 Major Overhaul	\$ 247,000
Beaver Creek Programmable Logic Control (PLC) Upgrade	\$ 206,000
Fish Lake Unit #2 Step-up Transformer	\$ 172,000
Fish Lake Unit #2 Turbine Inlet Valve (TIV) Replacement	\$ 171,000
Beaver Creek Control Room Separation from Plant	\$ 137,000
Carmacks Fuel System Upgrade	\$ 100,000
Old Crow Generator Change Out	\$ 90,000
Watson Lake Bi-Fuel Project	\$ 90,000
Swift River Unit #2 Replacement	\$ 53,000
Pelly Crossing Plant New Governors for Automation	\$ 53,000
Teslin Fuel System Upgrade	\$ 41,000
Ross River Fuel System Upgrade	\$ 37,000
Water Pressure Monitor (Hobo) for Louise Lake	\$ 37,000
Teslin Programmable Logic Controller (PLC) Replacement	\$ 31,000
Destruction Bay Fuel System Upgrade	\$ 21,000
Haines Junction Fuel System Upgrade	\$ 20,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #1 Turbine and Building Replacement	\$1,024,000
Watson Lake Unit #4 Replacement	\$ 354,000
Watson Lake Unit #3 Major Overhaul	\$ 247,000
Beaver Creek Programmable Logic Control (PLC) Upgrade	\$ 206,000
Fish Lake Unit #2 Step-up Transformer	\$ 172,000
Fish Lake Unit #2 Turbine Inlet Valve (TIV) Replacement	\$ 171,000
Beaver Creek Control Room Separation from Plant	\$ 137,000
Carmacks Fuel System Upgrade	\$ 100,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects less than \$20,000" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on generation plants projects for the period 2007-2011?

- 69) *Reference:* May 27, 2013 Application, pages 9-35 – 9-38  
 YECL provides a listing of 35 projects plus 1 "Other Projects less than \$20,000" which make up \$4,919,000 in **2012 capital expenditures on distribution new extensions projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$992,000
Whistle Bend Subdivision Stage 1 & 2	\$683,000
Northwestel Fox Point	\$308,000
Northwestel Minto	\$308,000
Grizzly Valley New Extension In Subdivision	\$272,000
Grey Wolf 1583 Wann Road	\$198,000
Lot 1146 Crestview Development	\$161,000
Mah's Point Condominiums	\$193,000
New Underground Line Extensions	\$144,000
Lot 405 Takhini	\$130,000
Yukon Government Ross River Pole Relocation	\$122,000
Yukon Government Tagish Landfill	\$104,000
Water Front Place Line Relocation	\$100,000
Carcross Tagish First Nation C82B Subdivision	\$ 86,000
Hidden Haven	\$ 78,000
Daylu Dena 10 Lots Lower Post	\$ 74,000



Yukon Government Teslin Pole Moves	\$ 67,000
Betty's Haven Shelter Lot 6	\$ 65,000
Yukon Government Yukon River Crossing	\$ 62,000
Yukon Government Civil Excavations in Watson Lake	\$ 62,000
Ingram Subdivision 15 Units	\$ 60,000
City of Whitehorse Selkirk Street Pump House #6	\$ 58,000
Liard First Nation Lots 123 and 134 2 Mile Subdivision	\$ 55,000
New Hangar Condor Road	\$ 51,000
F.H. Collins Secondary School Transformer	\$ 48,000
Lot 1395 North Klondike Highway	\$ 47,000
Kulan Area Line Improvements	\$ 41,000
Lot 1014 Alaska Highway South	\$ 39,000
Lot 105 Otter Road	\$ 35,000
City of Whitehorse Ponderosa Communication Tower	\$ 34,000
Falcon Ridge Development Stage 4	\$ 34,000
Lots 1095/1096 Grizzly Subdivision	\$ 32,000
City of Whitehorse Marwell Reroute	\$ 28,000
Yukon Government Mt. Lorne Land Fill	\$ 27,000
20 Laberge Road Service Upgrade	\$ 26,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$992,000
Whistle Bend Subdivision Stage 1 & 2	\$683,000
Northwestel Fox Point	\$308,000
Northwestel Minto	\$308,000
Grizzly Valley New Extension In Subdivision	\$272,000
Grey Wolf 1583 Wann Road	\$198,000
Lot 1146 Crestview Development	\$161,000
Mah's Point Condominiums	\$193,000
New Underground Line Extensions	\$144,000
Lot 405 Takhini	\$130,000
Yukon Government Ross River Pole Relocation	\$122,000
Yukon Government Tagish Landfill	\$104,000
Water Front Place Line Relocation	\$100,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects less than \$20,000" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on distribution new extensions projects for the period 2007-2011?

- 70) *Reference:* May 27, 2013 Application, pages 9-39 – 9-41  
 YECL provides a listing of 24 projects plus 1 “Other Projects less than \$20,000” which make up \$4,018,000 in **2012 capital expenditures on distribution improvements projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

5L628 Crestview to Mayo Road Corner Double Circuit	\$628,000
Shipyards Substation Transformer Failure and Upgrades	\$473,000
Whistle Bend Substation	\$423,000
PCB Identification and Transformer Change Outs	\$401,000
Right of Way Widening	\$377,000
Hillcrest Conversion	\$252,000
Regulator to North Klondike Highway	\$154,000
Test and Treat Program	\$153,000
Laberge Substation 34.5kV Conductor Upgrade	\$103,000
Whitehorse Elementary School Transformer Upgrade	\$ 94,000
Breaker Replacement in Services Substation	\$ 84,000
Old Crow 3rd Distribution Breaker	\$ 78,000
97 Lewes Boulevard Transformer Upgrade	\$ 70,000
Miscellaneous Pole Replacements	\$ 60,000
Laberge Substation Upgrade	\$ 57,000
Range Road Line Rerouting	\$ 56,000
Marsh Lake Substation Upgrade	\$ 45,000
Ponderosa Road Vault Addition and Service Upgrade	\$ 35,000
Ross River Recloser for S7580	\$ 30,000
CRE Breaker Replacement in Lewes Boulevard	\$ 30,000
Porter Creek Underground Vaults Replacement	\$ 28,000
Whitehorse Service Area Line Clearance Upgrades	\$ 25,000
System Improvements Lowe Street	\$ 21,000
Marsh Lake Structure Upgrade	\$ 21,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

5L628 Crestview to Mayo Road Corner Double Circuit	\$628,000
Shipyards Substation Transformer Failure and Upgrades	\$473,000
Whistle Bend Substation	\$423,000
PCB Identification and Transformer Change Outs	\$401,000
Right of Way Widening	\$377,000
Hillcrest Conversion	\$252,000
Regulator to North Klondike Highway	\$154,000
Test and Treat Program	\$153,000
Laberge Substation 34.5kV Conductor Upgrade	\$103,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on distribution improvements projects for the period 2007-2011?

71) *Reference:* May 27, 2013 Application, page 9-41  
 YECL provides a listing of 4 projects plus 1 “Other Projects” which make up \$456,000 in **2012 capital expenditures on street and sentinel lighting projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend Stage 1 & 2 Street Lights	\$150,000
Yukon Government Lights on 8th Street Watson Lake	\$143,000
Black Street – 6th Avenue Escarpment	\$ 37,000
Yukon Government Grizzly Valley Street Lights	\$ 33,000

- b) For all of these projects that were identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend Stage 1 & 2 Street Lights	\$150,000
Yukon Government Lights on 8th Street Watson Lake	\$143,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on street and sentinel lighting projects for the period 2007-2011?

- 72) *Reference:* May 27, 2013 Application, page 9-42  
YECL lists a \$283,000 project titled “**Meters**” in 2012 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in this project, when these costs were incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) If this project was identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) What were the average annual capital expenditures on meters projects for the period 2007-2011?

- 73) *Reference:* May 27, 2013 Application, page 9-42  
YECL lists a \$34,000 project titled “**Transformers & Regulators**” in 2012 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in this project, when these costs were incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) If this project was identified in YECL’s 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) What were the average annual capital expenditures on transformers & regulators projects for the period 2007-2011?

- 74) *Reference:* May 27, 2013 Application, pages 9-42 – 9-43  
YECL provides a listing of 9 projects plus 1 “Other Projects” which make up \$1,766,000 in **2012 capital expenditures on general property and equipment projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs incurred in the following projects, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Water Licence Renewal	\$688,000
Transportation Equipment	\$421,000
Miscellaneous Tools and Instruments	\$166,000
Demand Side Management Costs	\$143,000
Downtown Office Interior Renovations	\$ 62,000
Windows 7 Upgrades	\$ 61,000
Whitehorse Service Complex HVAC Replacement	\$ 59,000
Communication Equipment	\$ 57,000
Office Furniture	\$ 24,000

- b) For all of these projects that were identified in YECL's 2008-2009 General Rates Application, please compile a comparison of forecast costs versus actual using the breakdown provided in response to part (a).
- c) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Water Licence Renewal	\$688,000
Transportation Equipment	\$421,000
Miscellaneous Tools and Instruments	\$166,000
Demand Side Management Costs	\$143,000

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as "Other Projects" as well as a detailed description and detailed breakdown of the total costs incurred for each project, when these costs were incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on general property and equipment projects for the period 2007-2011?

- 75) *Reference:* May 27, 2013 Application, pages 9-44 – 9-45  
YECL provides a listing of 20 projects plus 1 "Other Projects" which make up \$6,696,000 in **2013 capital expenditures on generation plants projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #1 Turbine and Building Replacement	\$2,167,000
Watson Lake Unit #4 Replacement	\$1,120,000
500kW Mobile Generator	\$ 750,000
Beaver Creek Unit #2 Replacement	\$ 600,000
Watson Lake Bi-Fuel Project	\$ 363,000
Fish Lake Dyke Upgrade	\$ 300,000
Old Crow Plant Expansion	\$ 300,000
Watson Lake Unit # 6 Major Overhaul	\$ 250,000
Beaver Creek Programmable Logic Control (PLC) Upgrade	\$ 180,000
New 250kW Mobile Generator	\$ 175,000
Destruction Bay Plant Foundation Refurbishment	\$ 150,000
Fish Lake Unit #2 SCADA	\$ 50,000
Fish Lake Unit #2 Penstock Improvements	\$ 40,000
Fish Lake Unit #2 Siding Replacement	\$ 35,000
Fish Lake Head Pond #2 Spillway Upgrade	\$ 30,000
Swift River Unit #2 Replacement	\$ 30,000
Fish Lake Unit #2 Vibration Monitoring	\$ 20,000
Fish Lake Unit #1 Fiber Communication from Head Pond to Unit	\$ 20,000
Fish Lake Unit #2 Building Improvements	\$ 20,000
Fish Lake Unit #1 Spillway Diversion Structure	\$ 20,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Unit #1 Turbine and Building Replacement	\$2,167,000
Watson Lake Unit #4 Replacement	\$1,120,000
500kW Mobile Generator	\$ 750,000
Beaver Creek Unit #2 Replacement	\$ 600,000
Watson Lake Bi-Fuel Project	\$ 363,000
Fish Lake Dyke Upgrade	\$ 300,000
Old Crow Plant Expansion	\$ 300,000
Watson Lake Unit # 6 Major Overhaul	\$ 250,000
Beaver Creek Programmable Logic Control (PLC) Upgrade	\$ 180,000
New 250kW Mobile Generator	\$ 175,000
Destruction Bay Plant Foundation Refurbishment	\$ 150,000

- c) Please confirm whether any of the projects listed in part (b) have been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.
- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on generation plants projects for the period 2008-2012?

- 76) *Reference:* May 27, 2013 Application, pages 9-46 – 9-47  
 YECL provides a listing of 8 projects plus 1 “Other Projects less than \$20,000” which make up \$5,149,000 in **2013 capital expenditures on distribution new extensions projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$3,625,000
New Underground Line Extensions	\$ 600,000
Service to proposed City of Whitehorse Municipal Services Building	\$ 420,000
Land Rights	\$ 190,000
General Drafting and Mapping	\$ 80,000
Yukon Government Teslin Sawmill Subdivision	\$ 75,000
Lot 11 Marion Crescent	\$ 53,000
Lot 1000 Airport Road	\$ 53,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$3,625,000
New Underground Line Extensions	\$ 600,000
Service to proposed City of Whitehorse Municipal Services Building	\$ 420,000
Land Rights	\$ 190,000

- c) Please confirm whether any of the projects listed in part (b) have been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.
- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on distribution new extensions projects for the period 2008-2012?

- 77) *Reference:* May 27, 2013 Application, pages 9-47 – 9-49  
 YECL provides a listing of 21 projects plus 1 “Other Projects less than \$20,000” which make up \$4,137,000 in **2013 capital expenditures on distribution improvements projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

McIntyre Subdivision Replacement Stage 1	\$475,000
Downtown Whitehorse 4L313 Lambert Street to Elliot Street – Replace with UG	\$424,000
Right of Way Widening	\$374,000
Tagish 5L600 Rebuild	\$300,000
Hillcrest Conversion	\$275,000
Miscellaneous Distribution Pole Replacement	\$260,000
Downtown Whitehorse 4L316 6th Avenue 266 Reconductor	\$250,000
Crestview to Mayo Road 5L628 Upgrade to 266 MCM	\$250,000
Old Alaska Highway Bypass	\$248,000
PCB Identification and Transformer Change Outs	\$175,000
Hotsprings Road Main Line Relocation and Upgrade	\$325,000
Test and Treat Program	\$110,000
Jack Hulland School Upgrades	\$100,000
Carmacks North Main Line Rebuild	\$100,000
Pelly Crossing Substation Fence	\$100,000
Whitehorse Asset Management – Create a Pole Database	\$ 75,000
Whitehorse Area Line Clearance Upgrades	\$ 65,000
Teslin Area Pole Upgrades	\$ 53,000
Teslin Sawmill Road Upgrade for New Subdivision	\$ 38,000

Lot 1037 Range Road Line Upgrade	\$ 34,000
Whitehorse Safety Code Corrections	\$ 30,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

McIntyre Subdivision Replacement Stage 1	\$475,000
Downtown Whitehorse 4L313 Lambert Street to Elliot Street – Replace with UG	\$424,000
Right of Way Widening	\$374,000
Tagish 5L600 Rebuild	\$300,000
Hillcrest Conversion	\$275,000
Miscellaneous Distribution Pole Replacement	\$260,000
Downtown Whitehorse 4L316 6th Avenue 266 Reconductor	\$250,000
Crestview to Mayo Road 5L628 Upgrade to 266 MCM	\$250,000
Old Alaska Highway Bypass	\$248,000
PCB Identification and Transformer Change Outs	\$175,000
Hotsprings Road Main Line Relocation and Upgrade	\$325,000
Test and Treat Program	\$110,000
Jack Hulland School Upgrades	\$100,000
Carmacks North Main Line Rebuild	\$100,000
Pelly Crossing Substation Fence	\$100,000

- c) Please confirm whether any of the projects listed in part (b) have been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.
- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- e) What were the average annual capital expenditures on distribution improvements projects for the period 2008-2012?

- 78) *Reference:* May 27, 2013 Application, page 9-50  
 YECL provides a listing of 2 projects plus 1 “Other Projects” which make up \$420,000 in **2013 capital expenditures on street and sentinel lighting projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous Street Light Replacements	\$330,000
Whistle Bend Stage 1 & 2 & 3 Street Lights	\$ 75,000

- b) Please provide the business case for the following project per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:



Miscellaneous Street Light Replacements \$330,000

- c) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- d) What were the average annual capital expenditures on street and sentinel lighting projects for the period 2008-2012?

79) *Reference:* May 27, 2013 Application, page 9-50  
YECL lists a \$600,000 project titled “**Meters**” in 2013 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in this project, when these costs will be incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) What were the average annual capital expenditures on meters projects for the period 2008-2012?

80) *Reference:* May 27, 2013 Application, page 9-50  
YECL lists a \$10,000 project titled “**Transformers & Regulators**” in 2013 capital expenditures.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in this project, when these costs will be incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- b) What were the average annual capital expenditures on transformers & regulators projects for the period 2008-2012?

81) *Reference:* May 27, 2013 Application, pages 9-51 – 9-53  
YECL provides a listing of 19 projects plus 1 “Other Projects” which make up \$3,270,000 in **2013 capital expenditures on general property and equipment projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Water Licence Renewal \$650,000  
Downtown Office Building Envelope Upgrades \$600,000

Transportation Equipment	\$424,000
Display Change to Yukon Electrical Billing Statements	\$259,000
Windows 7 Upgrades	\$146,000
Whitehorse Service Complex Pole Storage	\$150,000
Demand Side Management Costs	\$135,000
E-Post Billing	\$125,000
Miscellaneous Tools and Instruments	\$117,000
Whitehorse Service Complex Parking Lot Expansion and Improvements	\$100,000
Downtown Office Interior Renovations	\$100,000
Whitehorse Service Complex Operations Department & Mtg Room Renovations	\$ 80,000
Whitehorse Service Complex – Roof/Insulation, Reception Area, etc.	\$ 70,000
Field Collection System	\$ 55,000
Office Furniture	\$ 44,000
Field Collection System – Report Development (ITBS)	\$ 43,000
Yukon Electric Website Improvements	\$ 35,000
New Cashier System	\$ 25,000
Whitehorse Service Complex – Fence Extension	\$ 20,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Fish Lake Water Licence Renewal	\$650,000
Downtown Office Building Envelope Upgrades	\$600,000
Transportation Equipment	\$424,000
Display Change to Yukon Electrical Billing Statements	\$259,000
Windows 7 Upgrades	\$146,000
Whitehorse Service Complex Pole Storage	\$150,000
Demand Side Management Costs	\$135,000
E-Post Billing	\$125,000
Miscellaneous Tools and Instruments	\$117,000
Whitehorse Service Complex Parking Lot Expansion and Improvements	\$100,000
Downtown Office Interior Renovations	\$100,000

- c) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.
- d) What were the average annual capital expenditures on general property and equipment projects for the period 2008-2012?

- 82) *Reference:* May 27, 2013 Application, pages 9-54 – 9-55  
 YECL provides a listing of 15 projects plus 1 “Other Projects” which make up \$7,759,000 in **2014 capital expenditures on generation plants projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Old Crow Plant Expansion	\$1,650,000
Fish Lake Ditch #3 Diversion Structure Replacement	\$1,640,000
Fish Lake Dyke Upgrade	\$1,420,000
Destruction Bay Unit #2 Replacement	\$ 600,000
Old Crow Unit #4 Addition	\$ 500,000
Watson Lake Bi-Fuel Project	\$ 372,000
Destruction Bay Unit #3 Replacement	\$ 450,000
Destruction Bay Programmable Logic Controller Upgrade	\$ 300,000
Watson Lake Unit #5 Major Overhaul	\$ 200,000
Watson Lake Replace ABB 5HK Breakers	\$ 180,000
Stewart Crossing Plant Improvements	\$ 120,000
Fish Lake Unit #1 Spillway Diversion Structure	\$ 100,000
Stewart Crossing Plant Building Insulation	\$ 60,000
Ross River Replace ABB 5HK Breakers	\$ 45,000
Fish Lake Unit #2 Head Pond Low Level Outlet Pipe	\$ 30,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Old Crow Plant Expansion	\$1,650,000
Fish Lake Ditch #3 Diversion Structure Replacement	\$1,640,000
Fish Lake Dyke Upgrade	\$1,420,000
Destruction Bay Unit #2 Replacement	\$ 600,000
Old Crow Unit #4 Addition	\$ 500,000
Watson Lake Bi-Fuel Project	\$ 372,000
Destruction Bay Unit #3 Replacement	\$ 450,000
Destruction Bay Programmable Logic Controller Upgrade	\$ 300,000
Watson Lake Unit #5 Major Overhaul	\$ 200,000
Watson Lake Replace ABB 5HK Breakers	\$ 180,000
Stewart Crossing Plant Improvements	\$ 120,000
Fish Lake Unit #1 Spillway Diversion Structure	\$ 100,000

- c) Please confirm whether any of the projects listed in part (b) have been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.
- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 83) *Reference:* May 27, 2013 Application, pages 9-55 – 9-56  
 YECL provides a listing of 4 projects plus 1 “Other Projects less than \$20,000” which make up \$5,370,000 in **2014 capital expenditures on distribution new extensions projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$2,900,000
Whistle Bend Stage 3	\$1,200,000
New Underground Line Extensions	\$1,000,000
Land Rights	\$ 190,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$2,900,000
Whistle Bend Stage 3	\$1,200,000
New Underground Line Extensions	\$1,000,000

- c) Please confirm whether any of the projects listed in part (b) have been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.
- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 84) *Reference:* May 27, 2013 Application, pages 9-56 – 9-58  
 YECL provides a listing of 14 projects plus 1 “Other Projects less than \$20,000” which make up \$4,638,000 in **2014 capital expenditures on distribution improvements projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Whitehorse 5L628 and New 34.5kV Build	\$1,890,000
Downtown Whitehorse 25kV Conversion	\$ 450,000
Right of Way Widening	\$ 389,000
Downtown Whitehorse 4L316 6th Avenue 266 Reconductor	\$ 300,000
Miscellaneous Distribution Pole Replacement	\$ 260,000
McIntyre Subdivision Replacement Stage 1	\$ 250,000
Hillcrest Conversion	\$ 250,000
Takhini/Marwell 4L315 Upgrade to 266 ACSR	\$ 250,000
Test and Treat Program	\$ 120,000
Marwell Lot 14 Transformer Upgrade	\$ 100,000
Riverdale Lewes Substation 25kV Transformer	\$ 100,000
PCB Identification and Transformer Change Outs	\$ 100,000
Whitehorse Asset Management – Create a Pole Database	\$ 75,000
Whitehorse Area Line Clearance Upgrades	\$ 70,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Whitehorse 5L628 and New 34.5kV Build	\$1,890,000
Downtown Whitehorse 25kV Conversion	\$ 450,000
Right of Way Widening	\$ 389,000
Downtown Whitehorse 4L316 6th Avenue 266 Reconductor	\$ 300,000
Miscellaneous Distribution Pole Replacement	\$ 260,000
McIntyre Subdivision Replacement Stage 1	\$ 250,000
Hillcrest Conversion	\$ 250,000
Takhini/Marwell 4L315 Upgrade to 266 ACSR	\$ 250,000
Test and Treat Program	\$ 120,000
Marwell Lot 14 Transformer Upgrade	\$ 100,000
Riverdale Lewes Substation 25kV Transformer	\$ 100,000
PCB Identification and Transformer Change Outs	\$ 100,000

- c) Please confirm whether any of the projects listed in part (b) have been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.
- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 85) *Reference:* May 27, 2013 Application, pages 9-58 – 9-59  
YECL provides a listing of 2 projects plus 1 “Other Projects” which make up \$945,000 in **2014 capital expenditures on street and sentinel lighting projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend Stage 1 & 2 & 3 Street Lights	\$450,000
Miscellaneous Street Light Replacements	\$450,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Whistle Bend Stage 1 & 2 & 3 Street Lights	\$450,000
Miscellaneous Street Light Replacements	\$450,000

- c) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs

will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 86) *Reference:* May 27, 2013 Application, page 9-59  
YECL provides a listing of 2 projects which make up \$1,630,000 in **2014 capital expenditures on meters projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Automated Meter Reading (AMR)	\$1,580,000
Replacement Meters	\$ 50,000

- b) Please provide the business case for the following project per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Automated Meter Reading (AMR)	\$1,580,000
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- c) Please confirm whether the project listed in part (b) has been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.

- 87) *Reference:* May 27, 2013 Application, page 9-59  
YECL lists a \$10,000 project titled “**Transformers & Regulators**” in 2014 capital expenditures.

*Request:*

Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in this project, when these costs will be incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 88) *Reference:* May 27, 2013 Application, pages 9-59 – 9-60  
YECL provides a listing of 7 projects plus 1 “Other Projects” which make up \$2,066,000 in **2014 capital expenditures on general property & equipment projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Transportation Equipment	\$995,000
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Demand Side Management Costs	\$522,000
Old Crow Staff Accommodations	\$100,000
Watson Lake Power Plant Connection to Town Water Supply	\$100,000
Whitehorse Various Service Complex Renovations	\$100,000
Miscellaneous Tools and Instruments	\$167,000
Communication Equipment	\$ 11,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Transportation Equipment	\$995,000
Demand Side Management Costs	\$522,000
Old Crow Staff Accommodations	\$100,000
Watson Lake Power Plant Connection to Town Water Supply	\$100,000
Whitehorse Various Service Complex Renovations	\$100,000
Miscellaneous Tools and Instruments	\$167,000

- c) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 89) *Reference:* May 27, 2013 Application, page 9-61  
 YECL provides a listing of 6 projects which make up \$5,900,000 in **2015 capital expenditures on generation plants projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Carcross 2MVA Generation Standby Unit	\$3,000,000
Watson Lake Unit #2 Replacement	\$1,350,000
Beaver Creek Unit #1 Replacement	\$ 600,000
Old Crow Unit #3 Replacement	\$ 500,000
Watson Lake Unit #1 Major Overhaul	\$ 250,000
Watson Lake Replace ABB 5HK Breakers	\$ 200,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Carcross 2MVA Generation Standby Unit	\$3,000,000
Watson Lake Unit #2 Replacement	\$1,350,000
Beaver Creek Unit #1 Replacement	\$ 600,000
Old Crow Unit #3 Replacement	\$ 500,000
Watson Lake Unit #1 Major Overhaul	\$ 250,000
Watson Lake Replace ABB 5HK Breakers	\$ 200,000

- c) Please confirm whether any of the projects listed in part (b) have been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.

90) *Reference:* May 27, 2013 Application, page 9-62

YECL provides a listing of 3 projects plus 1 “Other Projects less than \$20,000” which make up \$5,570,000 in **2015 capital expenditures on distribution new extensions projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$4,300,000
New Underground Line Extensions	\$1,000,000
Land Rights	\$ 190,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Miscellaneous O/H Services – Various Subdivisions	\$4,300,000
New Underground Line Extensions	\$1,000,000
Land Rights	\$ 190,000

- c) Please confirm whether any of the projects listed in part (b) have been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.

- d) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

91) *Reference:* May 27, 2013 Application, pages 9-62 – 9-65

YECL provides a listing of 21 projects plus 1 “Other Projects less than \$20,000” which make up \$4,084,000 in **2015 capital expenditures on distribution improvements projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Downtown Whitehorse 25kV Conversion	\$450,000
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Right of Way Widening	\$405,000
Whitehorse Hotsprings Road 3 Phase Conversion	\$363,000
Takhini/Marwell 4L315 Upgrade to 266 ACSR	\$350,000
Takhini/Marwell Completion of Mountain Air Subdivision	\$300,000
Tagish 5L600 Rebuild	\$276,000
Miscellaneous Distribution Pole Replacement	\$260,000
MacDonald Road Pole Change	\$250,000
Riverdale Line 4L317 Tagish Road	\$250,000
Lewes Lake Substation Conversion	\$146,000
Whitehorse Airport Hanger D Area Rebuild	\$140,000
Test and Treat Program	\$130,000
Upper Liard – Replace Liard River Crossing	\$100,000
Watson Lake Underground Subdivision Replacement	\$100,000
PCB Identification and Transformer Change Outs	\$100,000
McLintock Substation Upgrade	\$ 90,000
Spirit Lake Substation Upgrade	\$ 88,000
Grey Mountain 4L320 Tie Upgrade	\$ 65,000
Deep Creek Subdivision Connection to Whitehorse Distribution	\$ 60,000
Stewart Crossing West Town Conversion	\$ 60,000
Upgrade of S2278	\$ 45,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Downtown Whitehorse 25kV Conversion	\$450,000
Right of Way Widening	\$405,000
Whitehorse Hotsprings Road 3 Phase Conversion	\$363,000
Takhini/Marwell 4L315 Upgrade to 266 ACSR	\$350,000
Takhini/Marwell Completion of Mountain Air Subdivision	\$300,000
Tagish 5L600 Rebuild	\$276,000
Miscellaneous Distribution Pole Replacement	\$260,000
MacDonald Road Pole Change	\$250,000
Riverdale Line 4L317 Tagish Road	\$250,000
Lewes Lake Substation Conversion	\$146,000
Whitehorse Airport Hanger D Area Rebuild	\$140,000
Test and Treat Program	\$130,000
Upper Liard – Replace Liard River Crossing	\$100,000
Watson Lake Underground Subdivision Replacement	\$100,000
PCB Identification and Transformer Change Outs	\$100,000

- c) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects less than \$20,000” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 92) *Reference:* May 27, 2013 Application, page 9-66  
 YECL provides a listing of 2 projects which make up \$813,000 in **2015 capital expenditures on street and sentinel lighting projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when

these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

New Street Light Installations	\$483,000
Street Light Replacements	\$330,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

New Street Light Installations	\$483,000
Street Light Replacements	\$330,000

- 93) *Reference:* May 27, 2013 Application, page 9-66  
YECL provides a listing of 2 projects which make up \$2,333,000 in **2015 capital expenditures on meters projects**.

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Automated Meter Reading (AMR)	\$2,283,000
Replacement of Meters and New Installations	\$ 50,000

- b) Please provide the business case for the following project per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Automated Meter Reading (AMR)	\$2,283,000
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- c) Please confirm whether the project listed in part (b) has been submitted to the Yukon government or the YUB to review under Part 3 of the *Public Utilities Act*. If not, please explain why not.

- 94) *Reference:* May 27, 2013 Application, page 9-66  
YECL lists a \$10,000 project titled “**Transformers & Regulators**” in 2015 capital expenditures.

*Request:*

Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in this project, when these costs will be incurred and when this project is proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 95) *Reference:* May 27, 2013 Application, pages 9-66 – 9-67  
 YECL provides a listing of 7 projects plus 1 “Other Projects” which make up \$2,110,000 in **2015 capital expenditures on general property & equipment projects.**

*Request:*

- a) Please provide a detailed description and detailed breakdown of the total costs forecast to be incurred in the following projects, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet:

Demand Side Management Costs	\$730,000
Replacement of Unit 989 – 1995 Hot Line Bucket Truck	\$450,000
Transportation Equipment	\$400,000
Whitehorse Service Complex Yard Extension	\$300,000
Miscellaneous Tools and Instruments	\$115,000
Office Furniture	\$ 34,000
Communication Equipment	\$ 12,000

- b) Please provide the business case for each of the following projects per the expectations of business cases as outlined in Board Order 2009-8. Please provide the supporting analyses in an Excel spreadsheet:

Demand Side Management Costs	\$730,000
Replacement of Unit 989 – 1995 Hot Line Bucket Truck	\$450,000
Transportation Equipment	\$400,000
Whitehorse Service Complex Yard Extension	\$300,000
Miscellaneous Tools and Instruments	\$115,000

- c) Pursuant to Board Order 2009-2, please provide an itemized list of miscellaneous capital expenditures listed as “Other Projects” as well as a detailed description and detailed breakdown of the total costs to be incurred for each project, when these costs will be incurred and when these projects are proposed to be added to rate base. Please provide the supporting analyses in an Excel spreadsheet.

- 96) *Reference:* May 27, 2013 Application, Schedule 10.1  
 YECL is anticipating that its Utility Earnings Before Tax will increase by 45% in 2013 (over 2012), by another 32% in 2014 (over 2013) and by another 13% in 2015 (over 2014). By the time 2015 is ended, YECL is expecting its Utility earnings Before tax to increase by 117% over 2012 levels.

*Request:*

- a) Please provide a detailed explanation for why YECL’s Utility Earnings Before Tax will increase at such an alarming rate between 2012 and 2015.  
 b) Please provide a detailed explanation for the changes in YECL’s CCA deduction between 2012 and 2015.

- 97) *Reference:* May 27, 2013 Application, Section 11, Attachment 2  
 In response to YUB direction in its Decision 2009-2, YECL has provided details on the non-labour inflation rates used by 6 other utilities. Half of the utilities referenced by YECL are affiliates. YECL refers to this as a response to the YUB's request "to provide a study that compares what other utilities use as a basis for non-labour inflation rates".

*Reference:* May 27, 2013 Application, pages 1-6 – 1-7

YECL has assumed non-labour inflation rates of 1.9%, 2.0% and 2.1% for 2013, 2014 and 2015 respectively in its Application. For 2013, the proposed non-labour inflation rate is based on 50% of forecast Alberta inflation and 50% of forecast Yukon inflation. For 2014 and 2015, no forecast of Yukon inflation was available so the non-labour inflation rates applied by YECL are based on 50% of forecast Alberta inflation and 50% of forecast British Columbia inflation.

*Request:*

- a) Please explain why YECL's "study" did not include analysis included in a report released in October 2012 by the Ontario Energy Board (Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach) which notes that to the extent practicable, non-labour prices should be indexed by distribution industry-specific indices.
  - b) What non-labour inflation rates are currently used by FortisBC Utilities, BC Hydro, Manitoba Hydro, NWT Power Corporation, SaskPower, ENMAX, Nova Scotia Power, New Brunswick Power and Qulliq Energy Corporation? Please provide reference material related to these rates.
  - c) Please provide the sources of the non-inflation rates from Alberta, Yukon and British Columbia used by YECL to determine their proposed non-labour inflation rates.
  - d) Given that YECL's "study" identified non-labour inflation rates used by utilities, please explain why YECL did not use one or more of these regulator-approved rates to determine its proposed non-labour inflation rates.
- 98) *Reference:* May 27, 2013 Application, Section 11, Attachment 6  
 In response to YUB directive, YECL states that it has participated in a joint government and utilities working group, led by the Government of Yukon, which was established to develop an IPP policy.

*Request:*

- a) Please provide details on how and when the referenced working group was established in light of the YUB's direction in February 2009.
- b) Please provide details on how often the working group has met since its formation and how often information / positions / comments have been exchanged.
- c) Please provide a copy of all materials and positions authored by YECL that have been contributed to this consultation process.

- 99) *Reference:* May 27, 2013 Application, Business Case #1  
Fish Lake Unit #2 Penstock Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #1 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 100) *Reference:* May 27, 2013 Application, Business Case #2  
Fish Lake Unit #1 Turbine and Building Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #2 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 101) *Reference:* May 27, 2013 Application, Business Case #3  
Watson Lake Unit #4 Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #3 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and

- discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

102) *Reference:* May 27, 2013 Application, Business Case #4  
500 kW Mobile Generator

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #4 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

103) *Reference:* May 27, 2013 Application, Business Case #5  
Beaver Creek Unit #2 Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #5 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 104) *Reference:* May 27, 2013 Application, Business Case #6  
Watson Lake Bi-Fuel Project

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #6 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 105) *Reference:* May 27, 2013 Application, Business Case #7  
Fish Lake Dyke Upgrade

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #7 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 106) *Reference:* May 27, 2013 Application, Business Case #8  
Old Crow Plant Expansion

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #8 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and

- discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
  - c) Please provide the confidence level associated with the proposed capital cost of this project.

107) *Reference:* May 27, 2013 Application, Business Case #9  
Fish Lake Ditch #3 Diversion Structure Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #9 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

108) *Reference:* May 27, 2013 Application, Business Case #10  
Old Crow Unit # 4 Addition

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #10 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.



- 109) *Reference:* May 27, 2013 Application, Business Case #11  
Beaver Creek Unit # 1 Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #11 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 110) *Reference:* May 27, 2013 Application, Business Case #12  
Carcross 2 MVA Standby Project

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #12 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 111) *Reference:* May 27, 2013 Application, Business Case #13  
Watson Lake Unit #2 Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #13 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and

- discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

112) *Reference:* May 27, 2013 Application, Business Case #14  
Destruction Bay Unit #2 Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #14 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

113) *Reference:* May 27, 2013 Application, Business Case #15  
Old Crow Unit #3 Replacement

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #15 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 114) *Reference:* May 27, 2013 Application, Business Case #16  
Whistle Bend Subdivision Stage 1 & 2

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #16 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project. Please include costs being incurred by YEC to service this subdivision.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 115) *Reference:* May 27, 2013 Application, Business Case #17  
Whistle Bend Subdivision Stage 3

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #17 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 116) *Reference:* May 27, 2013 Application, Business Case #18  
Hillcrest Subdivision Conversion

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #18 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and

- discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

117) *Reference:* May 27, 2013 Application, Business Case #19  
Whistle Bend 34.5kV Substation Distribution Lines

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #19 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

118) *Reference:* May 27, 2013 Application, Business Case #20  
Whistle Bend Substation

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #20 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 119) *Reference:* May 27, 2013 Application, Business Case #21  
Crestview to Mayo Road Corner Double Circuit

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #21 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 120) *Reference:* May 27, 2013 Application, Business Case #22  
McIntyre Subdivision Replacement Stage 1

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #22 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 121) *Reference:* May 27, 2013 Application, Business Case #23  
Whitehorse 5L628 and New 35kV Build

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #23 the following has been provided:
- economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and

- discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

122) *Reference:* May 27, 2013 Application, Business Case #24  
Downtown Whitehorse 25 kV Conversion

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #24 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

123) *Reference:* May 27, 2013 Application, Business Case #25  
Takhini Marwell 4L315 Upgrade to 266 ACSR

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #25 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 124) *Reference:* May 27, 2013 Application, Business Case #26  
Whistle Bend Stage 1, 2 & 3 Street Lights

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #26 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 125) *Reference:* May 27, 2013 Application, Business Case #27 - AMR

*Reference:* YUB Decision 2009-2, Appendix A, Direction No. 23

*“The Board encourages YECL to work with all Interveners, including YEC, to review and assess the costs and potential benefits of the AMR project. Upon completion of the review, YECL is to submit a new business case that outlines the benefits of such a project over time, how it addresses the concerns raised by Interveners, and describe potential economies by partnering with YEC and the City of Whitehorse in the scope and implementation of the project. The Board expects this business case to be filed with YECL’s next GRA.”*

*Request:*

- a) Please identify where in the business case submitted YECL has addressed concerns raised by intervenors.
- b) Please provide details on how YECL worked with all intervenors, including YEC, to review and assess the costs and potential benefits of the AMR project. Please provide all material provided at public and or stakeholder meetings and minutes of these meetings.
- c) Please provide specific details on the total cost of the AMR project – capital and operating.
- d) Will the proposed AMR meters make data available over unsecured wireless transmissions? What safeguards will be in place to guard against data intruders? Please provide any study that YECL has undertaken or used to address privacy and data security issues.
- e) Please provide YECL’s analysis of the electromagnetic emissions expected from its AMR meters and the impact that will have on individuals.
- f) Please provide a copy of any investigation in YECL’s possession as to whether the AMR meters proposed for the Yukon will pose any health hazard to Yukoners.
- g) Please identify the subject expert who conducted the economic analysis of the AMR project and will be available to address specific questions about the analysis that

suggests that there is a cost savings of over \$2 million over 25 years as compared to conventional meter reading.

- h) Please confirm that the AMR meters will remain more expensive for ratepayers for at least 8 years after installation versus the status quo.
- i) Please provide a comparison of the evaluation of the AMR meter project proposed by Newfoundland and Labrador Hydro for its Bear Cove and Plum Point service areas which indicates that there would be positive net present value after 10 years and total savings of \$147,710 after 15 years.  
<http://www.pub.nf.ca/applications/NLH2013Capital/files/application/NLH2013Application-VolumeII-Report23.pdf>
- j) Please provide economic analysis conducted by utilities comparable to YECL related to proposed AMR metering projects and the related regulator decisions regarding their implementation.
- k) Please provide the Excel version of the economic analysis and ensure that all columns are sized to allow all numbers to be seen instead of “#####”.
- l) Please redo the economic analysis assuming a capital structure of 60% debt / 40% equity, an inflation factor of 1%
- m) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #27 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- n) Please provide the confidence level associated with the proposed capital cost of this project.

126) *Reference:* May 27, 2013 Application, Business Case #28  
Fish Lake Water Licence Renewal

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #28 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.



- 127) *Reference:* May 27, 2013 Application, Business Case #29  
Downtown Office Building Envelope Upgrades

*Request:*

- a) Pursuant to the components of business cases identified in YUB Order 2009-8, please identify where in Business Case #29 the following has been provided:
  - economic analysis including preliminary engineering estimates
  - discussion of the risks of proceeding with the chosen alternative
  - discussion of risks of not proceeding with the chosen alternative; and
  - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.
- b) Please provide details of capital and operating costs related to this project as well as the discounted cash flow analysis used by YECL to determine the feasibility of proceeding with this project.
- c) Please provide the confidence level associated with the proposed capital cost of this project.

- 128) *Reference:* May 27, 2013 Application, Business Case #30 - DSM  
Based on full implementation of the five year DSM plan, the Utilities commit to an electricity conservation target of 8.5 GWh of sustained savings by year five.

*Request:*

- a) The utilities state (page 3) that the proposed DSM Plan “was developed by the utilities in collaboration with interveners, Yukon NGOs, community leaders, First Nation governments and the general public”. Please provide details of presentations made and discussions held by the utilities regarding the proposed DSM plan with the each of these stakeholder groups prior to submitting it to the YUB on May 27, 2013. Please include details of how many individuals from these stakeholder groups were involved in each consultation.
- b) Why did the utilities not consult with builders, building contractors and trades specialists?
- c) Please provide details of any discussions, surveys, etc. that the utilities conducted of customer groups to determine if it should offer DSM programming.
- d) Please provide a table that lists all customer classes who have participated in the DSM programs either offered or supported by the utilities from 2008-2012. In the table include the number of programs each customer has participated in, the year(s) they were a participant, if the program was a standard resource acquisition program or a large industrial/commercial specific program, the amount of incentive dollars received by each participant (divided by year), and the cumulative electricity savings achieved each year. (redact the names of the customers if necessary)
- e) Please advise how much less electricity in kWh was being consumed in the Yukon in 2012 as a result of the DSM programs delivered by the utilities since 2008. Please provide specific details on the measurement of this amount.
- f) How much of the proposed DSM plan is targeted at ratepayers living on low and/or fixed incomes? Please compare this to the proportion of DSM programs in other jurisdictions that are dedicated to low income ratepayers.

- g) Please provide a table that lists of all the programs the utilities considered for inclusion in its DSM Plan, the TRC ratio for each program, the cost for each program and the rationale for or against proceeding with the program.
- h) Please confirm that for savings to be eligible to be counted towards the DSM savings targets, the savings must be verified using industry-based evaluation, measurement and verification protocols. Please provide the EM&V protocols that the utilities will be using.
- i) How will the annual results of the proposed DSM program be audited and by whom?
- j) How will the savings generated by utility-sponsored DSM programs be isolated from savings resulting from Yukon government-sponsored DSM and energy conservation programs?
- k) Please set out all steps that the utilities will take over the term of the proposed DSM plan to ensure that all parties have confidence in the electricity savings delivered within the DSM portfolio.
- l) In this and other programs that are based on the level of efficiency in the Yukon's Building Standards Act and the National Building Code, there is a fundamental expectation that all builders fully comply with the legislation and that the performance of the homes and buildings once built and in operation actually achieve the levels anticipated by the legislation. Have the utilities done any research to determine if such assumptions are valid? Are the utilities aware of any research by any other organization or agency to validate the performance of homes and buildings relative to legislated assumptions? If it is the case that homes and buildings are not performing as expected under the Code, would not the utilities' estimates of the impact of its DSM programs to go beyond Code actually understate the savings achieved?
- m) Are the utilities seeking approval of all the elements of the proposed DSM Plan for five years? To the extent that the utilities wish to make changes to the proposed DSM Plan during this five-year period, what process is proposed in order to obtain Board approval for those changes?
- n) Please explain how the utilities will allocate the costs of the proposed DSM Plan between the various rate classes. Does the allocation of these costs take into account differences between the participation levels and savings per participant between the various customer classes?
- o) Please provide a table (or tables) showing for 2008, 2009, 2010, 2011, 2012, 2013, 2014 and 2015 how the DSM costs are allocated to each rate class. In showing the DSM costs allocated to each rate class, please indicate the average rate impact for each rate class.
- p) Please identify all advantages associated with approval of a 5-year DSM framework rather than a 1-year DSM framework.
- q) Please identify the advantages associated with approval of a 1-year DSM framework rather than a 5-year DSM framework.
- r) Have the utilities identified any cost efficiencies with proceeding with a 5-year DSM framework rather than a 1-year DSM framework? If so, please identify all those cost efficiencies. Further, if cost efficiencies have been identified, please explain how those cost efficiencies are passed on to ratepayers.
- s) Do the utilities agree that large industrial customers have the expertise to undertake energy efficiency programs on their own so ratepayer funded DSM programs for large industrial customers should not be mandatory?
- t) What penalties will be incurred by the utilities if they do not meet the electricity conservation target of 8.5 GWh of sustained savings by year five?

- u) In order to adequately challenge the utilities to drive increased participation to target levels, have the utilities considered the use of a variance account such that the utilities will only be reimbursed up to a maximum amount based on achievement of targeted savings levels?
- v) What market barriers have the utilities identified to providing DSM to privately-owned multi-unit residential buildings?
- w) Have the utilities studied other jurisdictions that are providing DSM programs to privately-owned multi-unit residential buildings? If yes, please provide the related research.
- x) Have the utilities analyzed the potential impacts of system level efficiency savings on the price ratepayers pay for electricity? If so, please provide the analysis.
- y) What is the target reduction in peak electricity demand over the 5 year plan period?
- z) What is the required take-up of each proposed DSM program in order to ensure that the savings target will be achieved?
- aa) Please provide any market potential studies / working papers that relate to the housing stock targeted by the proposed DSM plan for social housing units.