Yukon Electrical Company Limited
2013-2015 general rate application

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

YUB-YECL-1
Reference: **YECL Application, page 1-5**
Issue/sub-issue: **Deferral accounts**
Quote: The deferral accounts for which Yukon Electrical is seeking approval meet the standard criteria for the establishment of a deferral account:

Request:
(a) Please cite the regulatory body, regulation or rules which provide or state the criteria for a deferral account.

(b) For the seven deferral accounts listed on page 1-6, please state which criteria applies, and if the second criteria applies, please provide the analysis that determined that "an error in forecasting could produce a loss or a gain of a substantial magnitude".

(c) How did YECL manage these costs prior to the proposal of deferral accounts?

YUB-YECL-2
Reference: **YECL Application, page 1-6**
Issue/sub-issue: **Deferral accounts**

Request:
Please explain how depreciation parameters, rate of return on common equity and the defined benefit pension plan are not under the control of the company.

YUB-YECL-3
Reference: **YECL Application, page 1-6**
Issue/sub-issue: **Flow-through costs**
Quote: Yukon Electrical also seeks the ability to flow-through (dollar for dollar) to the tariff any costs related to Board Orders or legislative provisions resulting in changes to the rules or parameters that Yukon Electrical operates under, or that bear on the nature and extent of Yukon Electrical's obligations as a regulated utility and which impact its 2013-2015 revenues or revenue requirement.
Preamble: YECL's request appears open-ended.

Request:
(a) Does YECL view the flow-through of the above as something that can be invoked without Board approval?

(b) What has changed in YECL's environment that requires YECL to now make such a request?

YUB-YECL-4
Reference: **YECL Application Section 1, Attachment 2**
Issue/sub-issue: **IFRS**

Request:
Of the 24 boxes listed in Attachment 2, 21 list the change to IFRS as having either no change or the proposed treatment has no impact. Please comment on how this may affect accounting and administrative costs for YECL.

YUB-YECL-5
Reference: **YECL Application, page 5-3**
YECL Application, Schedule 5-1 and Schedule 5-2
Issue/sub-issue: **Defined Pension Benefit**
Quote: For the purposes of this Application, the 2013 test period assumes the same defined benefit contribution rates as 2012. Since the next defined benefit pension actuarial evaluation will be completed as of December 31, 2012 to determine 2013 required funding, any required change to the 2013 defined benefit pension funding requirements will impact the defined benefit pension expense related to YECL's eligible northern based staff. Beginning in 2013, YECL is requesting a deferral account to flow through the increases or decreases to required cash contributions to the company's defined benefit pension plan as a result of the required annual actuarial evaluations.
Preamble: The Board seeks clarification in relation to defined benefit pension actuarial evaluation and the forecast pension costs during the test period.

Request:
(a) YECL submitted that the pension valuation will be completed by December 31, 2012. Please explain whether or not YECL is able to provide an update as to what the actual pension cost for 2013. If confirmed, please explain how this will affect YECL's O&M forecasts for 2013, 2014, and 2015.

(b) Please describe whether YECL will complete another defined benefit pension actuarial evaluation during the test period. If YECL is not expecting to complete another actuarial evaluation during the test period, please indicate when YECL expects to complete another one.

(c) Please explain whether YECL shares a pension plan with its ATCO affiliates. If not, please provide more details about the nature of this pension plan.

(d) If YECL shares a pension plan with its ATCO affiliates, describe whether YECL's regulated affiliates in other Canadian jurisdictions have a deferral account for their defined benefit pension plans. If yes, please describe this treatment (e.g. only current service portion, only special payments, or both).

(e) Schedule 5.1 does not provide an account for pension expense. Please provide a table showing the pension expense for 2008, 2009, 2010, 2011, and 2012, and where applicable, indicate the YECL forecasted pension expense YECL and the actual pension expense for these years. Also break these costs into those attributable to current service payments and those attributable to special payments.

(f) Please describe which accounts in schedule 5.1 are affected by pension expenses and breakout the pension expenses from these accounts (i.e. show the account amounts less expenses attributable to pension benefits).

(g) Please indicate what percentage of YECL employees are under a defined benefit pension plan versus a defined contribution pension plan? Can new employees to YECL be covered under a defined benefit pension plan?

YUB-YECL-6

Reference:	**YECL Application, page 5-4** **YECL Application, Schedule 5-3**
Issue/sub-issue:	**Affiliate Costs**
Quote:	Yukon Electrical outsources certain major administrative functions to affiliate companies, such as ATCO Electric, to take advantage of the economies of scale of services available from a larger utility. The cost of these services is detailed in Schedule 5.3 and is based on a fully allocated cost methodology that does not contain any element of profit or return.
Preamble:	The Board wants to better understand the allocated cost methodology used by YECL and its affiliates.

Request:

(a) Please describe the fully allocated cost methodology that YECL and affiliate companies use to determine how costs are allocated.

(b) Please explain whether the cost allocation methodology has changed since 2008.

(c) Please explain the increases in affiliate charges in Account 87500 – Meters and Meter Testing. Are the increases in affiliate charges due to the rate charged or the volume of work? If due to volume, provide an explanation for these volume increases.

(d) What type of metering services does ATCO Electric provides to YECL?

(e) Please explain the increases in affiliate charges in Account 87000 – Supervision. Are these increases due to the rate charged or the volume of work? If due to volume, provide an explanation for these volume increases. In particular, explain why the costs to answer calls after hours will double from 2012 to the test period.

(f) What type of meter services does ATCO Gas provide to YECL?

(g) Please explain the increases in affiliate charges in Account 72100 and Account 71300. Are the increases in affiliate charges due to the rate charged or the volume of work? If due to volume, please provide an explanation for these volume increases. In particular, address the increases related to Rates and Terms & Conditions, Financial Reporting and Regulatory Support, and Payroll, Use of Systems and IT.

(h) With regard to affiliate services provided by ATCO I-Tek, please indicate whether YECL is charged the same rate by ATCO I-Tek as other ATCO affiliates. If the rate is different, explain why it is different. Please provide evidence that the affiliate services received by YECL are at a cost/price that is lower than can be internally provided or at a cost/price that is less than can be obtained locally.

(i) With regard to Account 64600 – Diesel Generation, please describe the services that ATCO Gas provides to YECL in more detail. Can YECL confirm that ATCO Gas is the cheapest provider for these services and by what method has YECL made this determination?

(j) Account 87000 shows $62,000 for After Hours – Call Answering. Please provide details for these costs and explain why these costs have almost doubled from 2012 to 2013.

YUB-YECL-7

Reference:	**YECL Application, page 5-5** **YECL Application, Schedule 5-2**
Issue/sub-issue:	**Discontinuance of Third Party Distribution Line (Property Insurance)**
Quote:	Yukon Electrical is proposing to discontinue purchased third party distribution line (property) insurance at the end of the 2013/2014 insurance period, July 1, 2014. On a go forward basis, insurable losses during construction or operations, if and when they occur, would be charged to the Reserve for Injuries and Damages.
Preamble:	The Board requires more details regarding YECL's plan.

Request:

(a) Please describe YECL's current RFID policy.

(b) Please explain how the proposed change will affect YECL's RFID policy and practices (e.g. will appropriations increase?).

YUB-YECL-8

Reference:	**YECL Application, Schedule 5.1** **YECL Application, Schedule 5.2**
Issue/sub-issue:	**Account 62600 – Hydro Generation**
Preamble:	The Board requires more information regarding the cost increases in Account 62600 – Hydro Generation

Request:

(a) Please explain in more detail the specific environmental costs related to the Fish Lake water licensing process which caused the cost increase in 2012.

(b) Please describe in further detail the drivers for the increased inspection and maintenance that resulted in $60,000 of cost in 2013.

(c) Please describe in further detail the specifics of the costs related to the Fish Lake water licensing process that resulted in $106,000 of cost in 2013.

YUB-YECL-9

Reference:	**YECL Application, Schedule 5.1** **YECL Application, Schedule 5.2**
Issue/sub-issue:	**Account 87400 – Underground Line Maintenance**
Preamble:	The Board requires more information regarding the cost increases in Account 87400 – Underground Line Maintenance

Request:

(a) Please describe in further detail the specifics of the "increased overall activity" that resulted in $89,000 of costs.

(b) Please explain why YECL included costs for Arctic Winter Games (AWG) support in this account. How does this cost relate to underground line maintenance?

(c) Please describe in more detail the activities related to the $25,000 cost.

YUB-YECL-10

Reference:	**YECL Application, Schedule 5.1** **YECL Application, Schedule 5.2**
Issue/sub-issue:	**Account 87700 – Transformer Repair and Replacement**
Preamble:	The Board requires more information regarding the cost increases in Account 87700 – Transformer Repair and Replacement

Request:

A cost of $67,000 was incurred in 2012 for repairs required for the Shipyards Park transformer; however, YECL does not explain the cost increases from 2011 to the test period. Please explain why YECL believes these costs will increase to $78,000 in 2013 and continue to increase to $87,000 in 2015.

YUB-YECL-11

Reference:	**YECL Application, Schedule 5.1** **YECL Application, Schedule 5.2**
Issue/sub-issue:	**Account 70200 – General Public Information**
Preamble:	The Board requires more information regarding the cost increases in Account 70200 – General Public Information

Request:

(a) Please confirm that if the Senior Corporate Communication Advisor joined YECL in mid-2011. If yes, should the full cost of this 0.6 FTE already be reflected in 2012? If confirmed, please explain the increase in Account 70200 from 2012 to 2013.

(b) Please explain whether any of the costs forecasted for the test period would be for marketing or advertising purposes.

YUB-YECL-12

Reference:	**YECL Application, Schedule 5.1** **YECL Application, Schedule 5.2**
Issue/sub-issue:	**Account 72100 – Administrative**
Preamble:	The Board requires more information regarding the cost increases in Account 72100 – Administrative

Request:

On line 184 and 185 on page 4 of 5 of Schedule 5.2, YECL submitted that it paid higher Head Office Cost of $31,000. How much did YECL previously pay for the head office space before the increase?

YUB-YECL-13

Reference:	**YECL Application, Schedule 5.1** **YECL Application, Schedule 5.2**
Issue/sub-issue:	**Account 72200 – Administration Corporate**
Preamble:	The Board requires more information regarding the cost increases in Account 72200 – Administration Corporate

Request:

(a) Costs in this account increased by $22,000 in 2012 over 2011 due to higher banking fees. Explain the additional $42,000 forecast increase in 2013 over 2012 (i.e. $71,000 plus $22,000 is only $93,000 and not $135,000 leaving $42,000 unaccounted for).

(b) Are the banking fees a direct cost or an allocated cost?

YUB-YECL-14

Reference:	**YECL Application, Schedule 5.1** **YECL Application, Schedule 5.2**
Issue/sub-issue:	**Account 72600 – Training and Safety**
Preamble:	The Board requires more information regarding the cost increases in Account 72600 – Training and Safety

Request:

(a) Costs in this account increased by $69,000 (or 18%) in 2012 due to required safety programs for staff. Please describe this safety program and the components. How many staff members were trained?

(b) Please explain why this cost increase will continue throughout the test period. Does YECL plan to provide this safety program every year going forward?

(c) Please explain why this cost increase did not occur in 2010 or 2011. Was this program not required in 2010 or 2011? What changed in 2012?

YUB-YECL-15

Reference:	**YECL Application, Schedule 5.1** **YECL Application, Schedule 5.2**
Issue/sub-issue:	**Account 72700 – Relocation**
Preamble:	The Board requires more information regarding the cost increases in Account 72700 – Relocation

Request:

(a) Please explain the average cost of relocating an employee or how YECL forecasts how much it will cost to relocate an employee.

(b) Please provide the number of employees YECL forecasts relocating in the test period and how YECL came up with this number.

(c) Please explain whether the costs stem from employees relocating to other ATCO opportunities at the request of ATCO.

YUB-YECL-16

Reference:	**YECL Application, Schedule 5.1**
Issue/sub-issue:	**Historical forecast and actuals**
Preamble:	The Board requires historical information

Request:

Please update Schedule 5.1 with forecasted, approved, and actual amounts for 2008 and 2009.

YUB-YECL-17

Reference:	**YECL Application, pages 1-6 to 1-7**
Issue/sub-issue:	**Inflation forecasts and key assumptions table**
Quote:	For the 2013 and 2014 test periods, in-scope (subject to a collective agreement) and out-of-scope (not subject to a collective agreement) labour has been escalated by 3.5% and 3.5% respectively. This escalation is based on Yukon Electrical's existing collective agreement that expires on December 31, 2014. For the 2015 test period, in-scope and out-of-scope labour is escalated by 3.5%. This escalation rate reflects Yukon Electrical's forecast of the increase required.
Preamble:	The Board wants to better understand YECL's labour inflation forecast and the methodology YECL used to come up with it

Request:

(a) For the 2013 and 2014 test years the labour inflation rate is subject to a collective agreement that expires on December 31, 2014. Please explain why YECL expects labour inflation to continue to grow at 3.5% in 2015. Please provide any materials/research to support this forecast.

(b) Please provide the date on which YECL negotiated the noted collective agreement and the period to which it applies.

(c) Please provide the inflation forecast for the Yukon (and any other applicable jurisdictions) for the period being negotiated that were available at the time of these negotiations and describe the manner in which YECL and the other negotiating parties arrived at a 3.5% labour inflation rate.

(d) Please explain whether 3.5% is still the most accurate forecast of labour inflation for 2013, 2014, and 2015 given the current economic environment and rates. If not, please provide an updated forecast for 2013, 2014 and 2015.

(e) Would labour inflation be less than what is based on the collective agreement if turnover from more senior to more junior employees is factored in? Please comment.

(f) Please provide statistics on employee turnover for the period from 2008 to 2012.

YUB-YECL-18

Reference:	**YECL Application, page 1-7**
Issue/sub-issue:	**Inflation forecasts and key assumptions table**
Quote:	For non-labour costs, an inflation rate of 1.9% has been applied for 2013 based on 50% of forecast Yukon inflation. For 2014 and 2015, no forecast of Yukon inflation was available so inflation rates of 2.0% and 2.1%, respectively, were applied based on 50% of forecast Alberta inflation and 50% of forecast British Columbia inflation.
Preamble:	The Board wants better understand YECL's non-labour inflation forecast and the methodology YECL used to come up with it

Request:

(a) Please provide the raw data that YECL used to determine the non-labour inflation rates used in this application.

(b) Please explain why YECL used a methodology that weights half of the non-labour inflation rate on Alberta inflation.

(c) Please explain why British Columbia inflation is the best proxy for Yukon inflation. Are there no forecasts for any other jurisdictions that are more representative of economic activity in the Yukon than British Columbia? Does YECL have historical evidence that supports using the British Columbia inflation rate?

YUB-YECL-19

Reference:	**YECL Application, page 1-7**
Issue/sub-issue:	**Inflation forecasts**
Quote:	A vacancy rate of 3.4% (approximately 2 FTEs) has been applied to all labour expenses for the 2013-2015 test periods. This is based on a five-year historical average which Yukon Electrical believes to be reasonable and is consistent with the methodology approved in Board Order 2009-2.
Preamble:	The Board seeks clarification regarding YECL's vacancy rate calculation.

Request:

(a) Please provide the raw data that YECL used to determine the vacancy rate.

(b) Please provide the calculations/steps YECL used to come up with the 3.4% vacancy rate.

YUB-YECL-20
Reference: **YECL Application, pages 1-8 to 1-13**
Issue/sub-issue: **Added positions**

Request:
(a) For each of the proposed positions to be added, please indicate which ones will be located in Yukon.

(b) For the senior corporate communications advisor, what is the impact on service quality if the position is not approved by the Board? If there is an effect on service quality, please state the service quality measure and provide an estimate of the impact.

(c) For the environmental technician position, please cite the specific increased regulatory standards, and mandated ongoing ecological and biological studies, and each project requiring an environmental permit.

YUB-YECL-21
Reference: **YECL Application, Section 1, Attachment 1**
Issue/sub-issue: **Organizational chart**

Request:
(a) Please show the equivalent organization chart for YECL for 2009.

(b) The organization chart shows an allocation of 4.17 people from Head Office. How or by what positions was this work done in YECL's 2008-09 GRA? Where were those costs incurred?

(c) On page 2 of Attachment 1, please explain why there is a need for a supervisor for one person.

YUB-YECL-22
Reference: **YECL Application, page 1-7 to page 1-13**
YECL Application, Attachment 1, page 1 to page 2
Issue/sub-issue: **Staff Positions**
Preamble: The Board needs more information regarding YECL's staff positions and the operational relationship between YECL and affiliates

Request:
(a) Please confirm that the Supervisor, Financial Services and the Corporate Accountant, who are based out of ATCO Electric's head office, work exclusively on YECL work.

(b) Please confirm that none of the costs associated with the employment of either the Supervisor, Financial Services or the Corporate Accountant are recovered by any other regulated affiliates.

(c) Please confirm that no more than 50% of the cost associated with the employment of the Manager, Financial Reporting and Accounting North of 60, for which YECL is requesting relief, are recovered by any of YECL's other regulated affiliates.

(d) Please explain in further detail the need for the Senior Corporate Communications Advisor. What changed in 2011 that required YECL to establish this position and staff it?

(e) Please provide an estimate of how much of the Senior Corporate Communications Advisor's efforts are spent on advertising campaigns and media relations.

(f) Please explain in further detail the need for the Financial Analyst. What changed in 2011 that necessitated this additional FTE?

(g) Please explain in further detail the need for the Administrative Assistant. What changed in 2011 that necessitated this additional FTE? Who was responsible for YECL's Safe Work Management System before this individual was hired?

(h) Please explain the reasoning for the Engineering Department's reorganization that lead to the creation of the Planning Supervisor position in 2012.

(i) For Meter Readers: Please quantify the increase in customers and further describe "to read meters effectively" (i.e., how was it not effective?).

(j) Once IFRS has been fully implemented, will the Manager, Financial Reporting and Accounting, North of 60 position be removed? If not, why not?

(k) Once IFRS has been fully implemented, will the Corporate Accountant position be removed? If not, why not?

(l) Please explain why YECL has decided to reinstate the Engineer-in-Training position in 2014 after it has been vacant since 2012?

(m) Please explain the need for the Construction Lead position. Before the Construction Lead was hired, who was responsible for overseeing external civil contractors and line crews? What has changed that has necessitated this position?

(n) Please compare the cost of outsourcing the work done by the Engineering Tech 1 Civil and bringing this work in house. If bringing this work in house is costlier than outsourcing to contractors, please provide YECL's justification for doing so. Please describe the offsetting cost savings of bringing this work in house and identify the account in schedule 5.1 that contains the forecast costs for this position.

(o) Please explain in further detail the functions of the Customer Service Advisor. How does this relate to the After-hours – Call Answering service that ATCO Electric provides to YECL? Are these functions redundant?

(p) Please explain the need for the Customer Service Representative. Before the position of Customer Service Representative was established and staffed who was responsible for this position's workload? What has changed that has necessitated this position?

(q) Please explain the need for the Environmental Technician. Before the position of Environmental Technician was established and staffed who was responsible for this position's workload? What has changed that has necessitated this position?

(r) YECL and YEC will jointly be administering the DSM plan and initiatives. Further, YEC is responsible for maintaining the Energy Conservation Office, which was part of its 2012-2013 GRA, and this office has two FTEs. Please explain whether YECL is responsible for any costs originating from the Energy Conservation Office?

(s) If YECL is responsible for any costs originating from the Energy Conservation Office, when were they recovered and is YECL trying to recover any of these costs in its 2013, 2014 or 2015 revenue requirement?

(t) Please confirm that most of the planning and research with regard to the DSM initiative has already been completed by consultants.

(u) Please confirm whether YECL has hired or plans on hiring a DSM Administrator in anticipation of approval of the DSM plan.

(v) Please confirm that the role of the DSM Administrator is to implement the DSM programs. If not, please explain what portion of this FTE is, or will be, dedicated to DSM program implementation. What other responsibilities will this position have?

YUB-YECL-23

Reference:	**YECL Application, page 9-51**
Issue/sub-issue:	**Line item – Display Change to YECL Billing Statements, projected expenditure of $260,000**
Quote:	To provide customers with additional electrical consumption information about their own consumption and to provide additional transparency about the electrical rate structure in the Yukon and how customer consumption translates to their actual electrical costs.

Request:

(a) Please explain in further detail the expected benefit that both the company and consumers will receive from changing the display in the electrical billing statements.

(b) Please provide a cost breakdown of the actions and/or processes required to make the billing statement change (e.g. programming, capital acquisitions, graphic design).

YUB-YECL-24

Reference:	**YECL Application, Business Case #30, page 1**
Issue/sub-issue:	**Demand-side management as it relates to revenue requirement**
Quote:	Yukon Electrical, in partnership with Yukon Energy (YEC), has developed a five-year plan (2013-2018) to implement and measure demand-side management (DSM) programs for the Yukon that is being filed with this Application.
Preamble:	The Board seeks clarification on forecast costs related to DSM planning and implementation.

Request:

(a) Based on the quote above, please confirm that YECL anticipates implementing the DSM programs in 2013.

(b) On page 6 of Business Case #30, YECL submitted that Project Costs were $204,000, $143,000, $135,000, $522,000, $730,000 in 2011, 2012, 2013, 2014 and 2015 respectively. Please provide an update on how much YECL has actually spent on DSM to date since 2010. What were these costs for? Please delineate these costs.

(c) Have any costs related to DSM been expensed or gone into YECL's revenue requirement? If so, which accounts have been affected and by how much?

(d) Please provide the cost/benefit analysis for this business case.

YUB-YECL-25

Reference:	**Yukon Five Year Demand Side Management Plan, page 4**
Issue/sub-issue:	**Electricity consumption in the Yukon**
Quote:	The CPR shows that in 2010, Yukon's residential sector consumed about 146,000 MWh of electricity
Preamble:	The Board requires the most up-to-date information available.

Request:

(a) Do YEC and YECL have an update of how much electricity is consumed in the Yukon for both the residential and commercial classes?

(b) Has the DSM program been implemented yet?

(c) To date, what activities have YEC and YECL conducted with regard to implementation of DSM? What has YECL done?

(d) What elasticity studies has YECL undertaken with respect to the demand for electricity? Please provide the results of those studies.

YUB-YECL-26

Reference:	**Yukon Five Year Demand Side Management Plan, page 8**
Issue/sub-issue:	**Public messaging and programing**
Quote:	The working group will jointly agree to develop: a program delivery process, electricity conservation public messaging, youth education programming, stakeholder consultation, evaluation, measurement, and verification of programs.
Preamble:	The Board wants to further understand how YEC and YECL plan on evaluating, measuring, and verifying program effectiveness

Request:

(a) Please describe how YEC and YECL plan on evaluating, measuring and verifying whether the electricity conservation public messaging is effective.

(b) Please describe how YEC and YECL plan on evaluating, measuring and verifying whether the youth education programming is effective.

(c) Please describe how YEC and YECL plan on evaluating, measuring and verifying whether the stakeholder consultations have been effective.

YUB-YECL-27

Reference:	**Yukon Five Year Demand Side Management Plan, page 14**
Issue/sub-issue:	**Allocation of promotional and educational costs**
Quote:	Benefit/Cost results are not calculated for program elements that are promotional or educational in nature; however, their associated costs are captured and distributed among those program elements that do create electricity savings.
Preamble:	The Board wants to better understand how these promotional or educational costs will be allocated among the different programs.

Request:
Please describe the methodology that YEC and YECL used to decide how much of the promotional or educational costs are allocated to each program.

YUB-YECL-28
Reference: **Yukon Five Year Demand Side Management Plan**
Issue/sub-issue: **General**
Preamble: The Board wants to better understand some of the programs in the DSM plan

Request:
(a) Why do YEC and YECL have a scenario where government buildings are excluded?

(b) Please describe whether non-incentive costs for these programs are fixed costs (i.e. if no participants, then will the costs be the same?).

(c) Please describe whether the incentive costs for these programs are purely variable costs (i.e., if no participants, then will the costs will be zero?).

(d) For the programs involving rebates or some sort of cash incentive, what will happen to total costs if the participation rate is much higher than YEC and YECL anticipated? Do YEC and YECL have a cap on how much can be spent on these programs or how many participants will be accepted each year?

(e) What if the participation rate of these programs is much lower than YEC and YECL anticipated?

(f) For programs that involve providing the participant with a rebate or some sort of cash incentive, why do YEC and YECL have to provide such a rebate or incentive if the programs pass the "Participant Costs" test. If they are rational profit maximizing agents, will the participants/owners/managers not be willing to take on these activities independent of any incentive from YEC and YECL?

YUB-YECL-29
Reference: **Yukon Five Year Demand Side Management Plan**
Issue/sub-issue: **Residential Programs**
Preamble: The Board wants to better understand the Residential programs proposed in the Five Year Demand Side Management Plan.

Request:
(a) With regard to the LED Lighting and Automotive Heater Timer Rebates, how much of the total costs of purchase will the rebates cover?

(b) With regard to the Low-cost Energy Efficient Products, please provide more details regarding what costs are included in the non-incentive and incentive costs? Please confirm whether or not rebates will be a part of this program. If confirmed, how much will rebates account for the total costs of these products?

(c) With regard to the Low-cost Energy Efficient Products, please confirm that YEC and YECL plan on promoting certain energy-efficient products in stores. Please describe whether YEC and YECL have started this initiative, and if so, identify in which stores.

(d) With regard to the CCHP and GSHP Initiative, please describe how much money YEC and YECL plan on giving to purchasers of a new home with a CCHP or GSHP system, or to owners of homes with electric central air heating systems to retrofit their home with CCHP or GSHP. For how much of the total costs will this incentive account?

(e) The Public Engagement, Education and Communication program appears to have a number of overlapping areas and activities with that of the Low-cost Energy Efficient Products program. Please confirm and explain the reasons for the overlaps.

(f) On page 20 of the Yukon Five Year Demand Side Management Plan, YEC and YECL noted that "many of the engagement initiatives carried out by the Utilities will also be used to disseminate information about the Yukon Housing conservation programs and the ESC energy conservation programs to increase value for the audience and create synergy between stakeholders." Please describe whether YEC and YECL will recover any of the costs attributable to these activities from these stakeholders. If not, how much money can be attributable to these activities?

YUB-YECL-30

Reference: **Yukon Five Year Demand Side Management Plan, page 20**
Issue/sub-issue: **General Service Programs**
Preamble: The Board wants to better understand the General Service programs proposed in the Five Year Demand Side Management Plan.

Request:

(a) With regard to the Lighting Redesign and Equipment Incentive, how much of the total costs of these retrofits will the rebates cover?

(b) With regard to the High Efficiency Refrigeration Incentive, how much of the total costs of these retrofits will the rebates cover?

(c) On page 22 of the DSM plan, YEC and YECL noted that they "will provide extensive refrigeration-specific technical assistance to identify the opportunities, to develop the projects, to manage the construction works, and to measure and monitor the performance of the projects." Please explain how or when YEC and YECL developed the technical expertise in refrigeration specifics.

(d) With regard to the Energy Star Computer Incentive, how much of the total costs of these products will the rebates cover? Are any Yukon-based companies or organizations eligible for this program?

(e) With regard to the New Construction Incentive, how much of the total costs of these buildings will the rebates cover? Are any Yukon-based companies or organizations eligible for this program?

YUB-YECL-31

Reference: **YECL Application, Section 8 – Return on Rate Base, page 8-4, lines 13-15**
Issue/sub-issue: **Business risk**
Quote: Consistent with the various business risk factors identified in its 2008-2009 GRA, Yukon Electrical's ongoing business risks encompass market demand, operational costs, physical hazards and regulation."
Preamble: The Board wants to understand how the business risks identified in the quote have changed since the 2008-2009 GRA

Request:

(a) Is it the position of YECL that it faces greater business risks than it did in the 2008-09 GRA? If yes, explain why.

(b) Please discuss how the following risks have changed since the 2008-09 GRA:

i. Market demand

ii. Operational costs

iii. Physical hazards

iv. Regulation

(c) For each of the above risk factors, please quantify the impact of the change in risk.

YUB-YECL-32

Reference: **YECL Application, Schedule 8.1**
Issue/sub-issue: **Return on equity**
Preamble: The Board wants to confirm the return on equity for 2008 to 2012.

Request:

(a) Please confirm the following returns from Schedule 8.1:

i. 2008: 7.03%

ii. 2009: 11.35%

iii. 2010: 10.54%

iv. 2011: 10.74%

v. 2012: 10.18%

(b) Please confirm that the average ROE for the years 2008 to 2012 was 9.968%.

(c) Please discuss the need for an increase in approved ROE to 9.21%, given that YECL has been earning an average of 9.968% when the approved ROEs in the past five years were lower than the requested ROE.

YUB-YECL-33

Reference: **YECL Application, Section 8 – Return on Rate Base, page 8-6**
Issue/sub-issue: **Common equity ratio**
Quote: 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.
Preamble: Although the BCUC increased its common equity ratio for its benchmark utility after 2008, it also lowered the common equity ratio effective January 1, 2013.

Request:

(a) Please confirm that the BCUC reduced the common equity ratio for its benchmark utility from 40% to 38.5% in Order G-75-13.

(b) Given that the BCUC has determined that a lower common equity ratio is appropriate from 2013, please discuss the differences for YECL which make an increase of 4% to its common equity ratio more reasonable than the benchmark utility for BCUC.

YUB-YECL-34

Reference: **YECL Application, pages 1-5 – 1-6**
Section 10 – Income Tax, page 10-1

Issue/sub-issue: **Forecast income taxes**

Quote: The deferral accounts for which Yukon Electrical is seeking approval meet the standard criteria for the establishment of a deferral account:

(a) Costs are not under the control of the company and are not reasonably forecastable; or

(b) An error in forecasting could produce a loss or gain of a substantial magnitude.

Preamble: The Board wants to better understand the request for a deferral account for income taxes.

Request:

(a) Please confirm the following calculations derived from the table on page 10-1

	Amount	Increase	Percentage Increase
2013	$248,000	$555,000	n/a
2014	$704,000	$456,000	184%
2015	$828,000	$124,000	18%

(b) YECL has forecast substantial increases in income taxes for the test period. Please discuss the factors that would lead to the increases noted above.

(c) Please provide additional detail on the position of YECL that income taxes require the use of deferral accounts.

YUB-YECL-35

Reference: **YECL Application, Section 6 – Taxes Other than Income, page 6-1**

Issue/sub-issue: **Increases in forecast property taxes**

Quote: 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.

Preamble: The Board seeks additional detail regarding the forecast increases in property taxes.

Request:

Please provide a schedule that details the forecast increases in property taxes between increases due to capital work and increases due to inflation.

YUB-YECL-36

Reference: **YECL Application, Business Case #1, page 2**

Issue/sub-issue: **Fish Lake Unit #2 Penstock Replacement**

Quote: Replacement of the current above ground wood stave penstock with a new penstock. The new penstock will be installed in the same general area as the existing penstock. Civil works will be completed for the new penstock as an 'in ground' installation. Water in this section of the Fish Lake hydro system will be passed through the overflow spillway at Headpond #2 to maintain water flow through the system to McIntyre Creek until the project is complete.

Preamble: YECL has included demand side management costs of $204,000, $143,000, $135,000, $522,000, and $730,000, respectively for 2011, 2012, 2013, 2014, and 2015.

Request:

(a) The current above ground wood stave penstock is to be replaced with an *in ground* installation. Please provide an explanation as to what is meant by an *in ground* installation.

(b) Please provided a comparison of costs between *in ground* and *above ground* installations.

(c) Does the decision to go with the in ground installation preclude or render any other associated apparatus inappropriate or require additions to Fish lake hydro system? Please explain.

YUB-YECL-37

Reference: **YECL Application, Business Case 2, page 3**

Issue/sub-issue: **Business Cases #1, 2, 7, 9, and 28; Fish Lake-related projects**

Quote: In March 2010, a catastrophic failure of Fish Lake Unit #1 plant occurred, irreparably damaging the facility. In consideration of Yukon Electrical's ongoing water management responsibilities, existing hydro system infrastructure, the continued operation of Fish Lake Unit #2 as well as the ongoing declarations of diesel being on-the-margin; returning Fish Lake Unit #1 to operation has been determined to be the best option available.

Request:

(a) For each of the business cases listed above, please provide an economic analysis similar to what was provided in business case #2, the Fish Lake Unit #1 turbine and building replacement.

(b) Please provide a economic analysis similar to what was provided in business case #2, which considers all Fish Lake-related business cases in total, i.e. $9,653 million:

i. Business case #1 - $556,000,
ii. Business case #2 - $3,908,000,
iii. Business case #7 - $1,720,000,
iv. Business case #9 - $1,640,000, and
v. Business case #28 - $1,829,000.

(c) Please confirm whether there are additional expenses related to the Fish Lake hydro system that have arisen since YECL filed its application.

(d) Once all the work has been completed and the Fish Lake infrastructure has been updated with current engineered standards and equipped with more efficient apparatus please explain why the

forecast Fish Lake hydro generation in the test period should not be greater than the base hydro generation for Fish Lake, which was approved in Board Order 2009-2.

YUB-YECL-38

Reference: **YECL Application, Business Case #3, pages 2 and 4**

Issue/sub-issue: **Watson Lake Unit #4 Replacement**

Quote: Yukon Electrical is planning to replace Unit #4 (CUL 258), which is at the end of its life, with a new diesel generator. Based on forecast load growth and Yukon Electrical's planning criteria, the new unit is planned to have similar generating capacity in comparison to the existing unit.

…

End of Life Condition: CUL 258 [1,500 KW] was manufactured in 1985 and currently has **140,226** operational hours… [emphasis added]

…

- Available plant floor space in the existing unit position is not sufficient to allow for a larger unit;
- Maintaining the same output capacity allows Yukon Electrical to continue use of existing electrical equipment;

Request:

(a) Are any of the other units in the Watson Lake plant approaching their end of life? What are the ages and operating hours (end-of-life conditions) of the other units in the Watson Lake generating plant?

(b) Given that Watson Lake Unit #4 is planned to be replaced, is there still a requirement to replace the muffler, heat exchanger and radiator as the replacement unit is the same size as the existing unit? Please explain.

YUB-YECL-39

Reference: **YECL Application, Business Case #13, pages 2 and 4**

Issue/sub-issue: **Business Case #13, Watson Lake Unit #2 Replacement**

Quote: Yukon Electrical is scheduled to replace Unit #2 (CUL 257) [800 kW], which is at the end of its life, with a new diesel generator. Primary drivers for this replacement are: unit age (1985), poor condition of the alternating current (AC) generator, total operating hours and community loading. **The replacement unit is to have a larger generating capacity in comparison to the existing unit to handle load growth and contingency concerns.** [emphasis added]

…

End of Life Condition: The AC generator on the engine is 1974 vintage and was installed on CUL 257 with 51,404 operational hours from a previous unit in Watson Lake (CUL 192). As of January 1, 2013, CUL 257) [800 kW] had 84,524 operational hours which would put the total hours on the AC generator at **135,928** hours. This generator failed in 2011 and was sent out for repair. [emphasis added]

…

Alternative #3: Replace **CUL 258** with a new larger size unit. This option addresses the end of life replacement of CUL 257 and the need for additional capacity in the Watson Lake facility. [emphasis added]

Recommendation:
Proceed with replacement **of CUL 257 with a unit of similar size and generating capacity to continue to meet the community's load and avoid further costs in respect of this unit, which will be at the end of its life**. [emphasis added]

Request:

(a) With respect to the Watson Lake Unit #4 replacement, YECL submitted that "in 2012 a peak of 3,126kW was recorded". However, with regard to this business case, YECL submits that the "Watson Lake plant had a recent peak of 3,205kW recorded for the community." Please explain the reasons for ascribing the community of Watson Lake with the different peak loads.

(b) Please provide information as to how often and when major and minor overhauls are performed on units such as CUL 257.

(c) When YECL states that CUL 257 is to be replaced with a similarly sized unit or a larger sized unit, is YECL referring to the unit's generating capacity or physical size?

(d) With respect to replacing the unit, alternative #3 speaks of replacing CUL 258 with a new larger sized unit to address the end-of-life replacement of CUL 257. Should CUL 258 read CUL 257? Please explain.

(e) This business case recommends the replacement of a unit to meet the need for additional capacity in the Watson Lake facility. However, the recommendation is to proceed with the replacement of unit CUL 257 with a unit of similar size and generating capacity to continue to meet the community's load. Please clarify what size of unit is to replace CUL 257.

(f) Please provide a listing by unit of unit capacity, operating hours and utilization factor for 2011 and 2012. Please provide this information for all plant locations.

(g) Will the replacement of the Watson Lake Unit #2 be by a diesel or natural gas unit?

YUB-YECL-40

Reference: **YECL Application, Business Case #4, page 2**

Issue/sub-issue: **500 kW Mobile Generator**

Quote: Purchase a 500kW 2400V mobile generator to provide contingency power to isolated generation communities. The load in these communities has increased, resulting in the **existing 350kW** mobile generator not being large enough to provide full contingency power in the event of a planned or unplanned plant shutdown. As a result, a larger mobile unit is required. [emphasis added]

…

The existing 350kW unit is unable to meet the current peak loads of the communities it serves. In 2011, a system peak of 359kW was recorded for Beaver Creek and Destruction Bay had a system peak of 389kW. In 2012, a system peak of 355kW was recorded for Beaver Creek and Destruction Bay had a system peak of 415kW. The mobile units will continue to provide emergency backup as well as system supply for planned regular maintenance and plant shutdowns.

Request:
Please explain what YECL intends to do with respect to the existing 350kW unit.

YUB-YECL-41

Reference: **YECL Application, Business Case #5, page 2**
Issue/sub-issue: **Beaver Creek Unit #2 Replacement**
Quote: Purchase new diesel generator unit complete with manufacturer-supplied and specified radiator, exhaust, and heat exchanger. Remove existing unit, install new unit and supplied devices, integrate unit into electrical supply and control systems and connect unit into waste heat and fuel systems.

Request:
With respect to the Beaver Creek generating plant unit, what is the generating capacity of Unit #2 and what is the generating size of the replacement unit?

YUB-YECL-42

Reference: **YECL Application, Business Case #6, page 2**
Issue/sub-issue: **Watson Lake Bi-Fuel Project**
Quote: Phase 1 of the project (2013) involves the modification of Watson Lake power plant generation Unit #5 to a bi-fuel system which allows the unit to run on a combination of diesel and natural gas (NG). The purpose of this phase is to verify that NG injection into the engine provides reliable electricity generation for a utility power system along with the environmental benefit to reduce emissions. Phase 2 of the project (2014) will convert the remaining 5 units at the Watson Lake power plant to bi-fuel operation.
…

This project will reduce the dependency of Watson Lake on a single fuel (diesel). In addition to the environmental benefits of this project to reduce emissions of particulate matter, sulfur oxides, nitrogen oxides and carbon dioxide, this initiative will assist in determining the operational and financial benefits of the use of LNG as an alternate fuel for electricity generation.
Preamble: The Board notes that Unit #5 was to be bi-fuel operational in 2012

Request:

(a) Please provide an economic analysis for this project that supports YECL's decision to make Watson Lake Unit #5 bi-fuel operational.

(b) Is Unit #5 operational as a bi-fuel (LNG/diesel) unit?

i. If so, have emissions testing been performed? If so, please provide the results.

ii. If not, when does YECL expect that Unit #5 will be bi-fuel operational?

(c) Does YECL wish to update its project costs to convert all units in the Watson Lake facility to possess bi-fuel operational capabilities?

(d) YECL submits that the "natural gas will be trucked to Watson Lake from a production facility near Delta, British Columbia in a specialized, low pressure, double-walled, well-insulated or vacuum jacketed vessel." Please provide information regarding:

i. a competitive supply market for LNG, as well as

ii. a competitive transportation market for LNG.

(e) Please provide information regarding the component technologies that have been successfully used in on-grid applications — e.g. providing continuous power to a community like Watson Lake rather than smaller end-users such as localized generation for commercial buildings, oil and gas companies.

(f) For the proposed replacement of Watson Lake Unit #2, what are the differences in emissions between a new diesel-only unit and a natural-gas-only unit? Please quantify in terms of kilograms of emissions per kW.h for each case.

YUB-YECL-43

Reference: **YECL Application, Business Case #8, pages 2, 3, 6 and 7**

Issue/sub-issue: **Old Crow Plant Expansion**

Quote: Yukon Electrical is planning to construct a 1,350 square foot additional generating building adjacent to the existing Old Crow plant. Both the existing building and the new building will be sized to house two diesel generators, associated equipment, and provide sufficient working space for regular work to be safely performed.

The additional building is required as the existing plant does not provide enough space to replace the existing units as they reach their end of life, as new units of the same or greater kW rating will not physically fit in the same space as the current units. It also does not provide adequate wall or floor space to facilitate the installation of new control equipment and does not allow for the addition of any more units as are required due to load growth.

…

Waste Heat

Existing waste heat system will be expanded to include the new building and units. The connection between buildings will be accomplished by above ground piping installed within containment.

Electrical Distribution
Electrical connection to both the generation system and distribution lines will be accomplished by a combination of overhead and underground methods.
As contingency, the new building will be able to supply energy to the distribution system through either the existing 2.4kV generation system or, in the case of emergency or planned maintenance, directly onto the distribution feeders.
…

In 2010, a peak of 450kW was recorded and in 2011, 478 kW was recorded.
…

If a situation arises during the winter which removes one of the larger units from operation, the other unit is then enlisted into 24/7 operation. If the situation persists, and the 24/7 running unit is required to be taken offline for a regular service; then a partial outage to the community must occur to reduce the community load to a level that can be handled by the smaller 170kW CUL 384.

Request:

(a) With respect to waste heat, please explain what is done with the waste heat.

(b) Does the existing building have the capability to supply energy to the distribution system through either the 2.4kV generating system or, in the case of emergency or planned maintenance, directly onto the distribution feeders?

(c) For each year (2013 and 2014) please provide the forecast/incurred cost of each of the forecast cost items listed under the Project Cost heading. For each item, please delineate the costs as being either labour-related or other.

(d) Do the forecast costs include any necessary training for a local operator/expertise with respect to operating and or maintaining the isolated plant? Please explain.

(e) Please explain why a full flow rated heat exchanger is required to be installed on Unit #1.

(f) Please provide load duration curves for each year of the period from January 2008 to June 2013.

(g) Over the period from January 2008 to June 2013, please provide the number of times that a partial outage to the community has occurred during the winter, which has reduced the community load to a level that was handled by the smaller CUL 384 unit. Please provide the dates for the outages as well as the reasons underpinning the partial outages.

YUB-YECL-44

Reference: **YECL Application, Business Case #10, page 2**

Issue/sub-issue: **Old Crow Unit #4 Addition**

Quote: Purchase a new **400kW** unit to be installed in the new Old Crow building (see Business Case #8). This project is required to provide full contingency generation for the isolated community of Old Crow in the event of a scheduled plant shutdown or an unplanned shutdown. [emphasis added]

Contingency; ability to provide backup generation to the community in the event of loss of existing plant. In an emergency situation for the existing plant,

transportation of mobile backup generation to this isolated fly in only community is a lengthy process due to known locations of Hercules aircraft that are out of Territory. This process would result in a long duration outage. The cost to complete this in an emergency situation would be approximately 25% of the cost of this planned project. This unit would also be able to provide full backup for scheduled maintenance shutdowns or upgrades that require a complete outage to the community. There will be a number of scheduled full shutdowns needed in the next three years.

Modernization of existing facility; plant Programmable Logic Controller is obsolete and the control system requires replacement. To complete this work a complete shutdown of the existing plant is needed. Onsite backup generation is required to avoid day long outages for multiple days, this need would be satisfied by the new unit**.**

Request:

(a) Please explain why the forecast $500,000 for this business case is the same as that for the replacement of Old Crow unit CUL 384 with a 250kW unit, considering that this business case provides for the "[m]odernization of existing facility; plant Programmable Logic Controller is obsolete and the control system requires replacement. To complete this work a complete shutdown of the existing plant is needed. Onsite backup generation is required to avoid day long outages for multiple days, this need would be satisfied by the new unit**."**

(b) During downtime for repairs on a unit in the old building, is it necessary to have all the units housed in the old building idle? If so, has this always been the case? If not, why is it being addressed now? Please explain.

(c) Please provide the number of times in the last decade that there has been a loss of an existing plant, where flown-in mobile backup generation has been necessary. Provide the dates, the length of time and the cause of each outage.

YUB-YECL-45

Reference: **YECL Application, Business Case #11, pages 2**

Issue/sub-issue: **Beaver Creek Unit #1 Replacement**

Quote: Purchase new diesel generator unit complete with manufacturer-supplied and specified radiator, exhaust, and heat exchanger. Remove existing unit, install new unit and supplied devices, integrate unit into electrical supply and control systems, and connect unit into waste heat and fuel systems.

Request:

(a) With respect to the Beaver Creek generating plant unit, what is the generating capacity of Unit #1 and what is the generating size of the replacement unit?

(b) Is the replacement unit identical to what is being proposed in Business Case #5? Please explain.

(c) Are modifications to the electrical supply and control system necessary? Please explain.

YUB-YECL-46

Reference: **YECL Application, Business Case #12, page 2**

Issue/sub-issue: **Carcross 2 MVA standby project**

Quote: This project includes the purchase and installation of a 2MW self-contained generating unit for contingency in the Carcross substation. The communities of Carcross and Tagish, including the surrounding areas, have peak load demands of 1.5MW in the winter with approximately 712 total customers.

Should a loss of generation on the Yukon Interconnected System or loss of Distribution System capability on the single radial line to the service area occur, customers in Carcross and Tagish would be without electricity. A back up power supply would provide these customers with a backup power supply similar to six other Yukon communities. A power system planning principle, "N-1," is used as a criterion to ensure contingency of supply to meet customer peak loads while a largest generating unit or major distribution/transmission component is out of service. This criterion is used in larger customer centers to provide a high reliability level to customers, however, is not practical on an individual customer basis. Yukon Electrical proposes a threshold minimum load of 1.0MWHs and 300 customers to enact the N-1 planning criteria

Request:

(a) In respect of the N-1 planning criteria, please explain what the minimum threshold load and number of customers is currently necessary to enact the N-1 criteria. Please discuss the reasons why these minimums were chosen. If there are currently no minimum thresholds, please indicate the reason(s).

(b) Please explain what has changed to influence the justification/rationale for proposing the minimum thresholds alluded to in part (a).

(c) Please provide the names of the various communities throughout the Yukon with standby generators that are connected to the Yukon Interconnected System (YIS). Please provide the dates that the generator sets were installed. Also, indicate if any of the communities were initially isolated with local generation and were subsequently connected to the YIS.

(d) With respect to outage statistics, has the line to Carcross and Tagish been identified to be a problem area?

   i. Please provide on an annual basis the number of outages and the relevant statistics for the last decade where the communities of Carcross and Tagish have been isolated from the Yukon.
   ii. Please provide the underlying reasons for the outages — e.g. lightning, trees falling on the line, poles falling, wildlife, etc. — and the costs to mitigate the identified problem areas.
   iii. Please provide the results of any reviews that have been undertaken to analyze and correct any of the problems in parts (i) and (ii).
   iv. Please provide the results of any engineering analyses that have been undertaken to analyze and determine the most effective way to complete the required work that has arisen out of part (iii) reviews.

(e) Please provide the planned and executed staged distribution improvements in the area to mitigate problems alluded to in part (d).

(f) Other than the rationale that the Carcross-Tagish area contains a population that exceeds the population of some of the communities that currently have backup generation capability is there any other rationale to support threshold minimums to enact the N-1 planning criteria?

(g) If the Board were to accept the proposed threshold minimums to enact the N-1 planning criteria, are there other communities for which the planning criteria would be enacted in the short term?

(h) Please provide a detailed cost estimate for the proposed 2MVA standby project — e.g. labour, pad, generator, substation, buildings, etc.

(i) Please discuss what alternatives were considered with respect to this project.

YUB-YECL-47

Reference: **YECL Application, Business Case #14, page 2**
Issue/sub-issue: **Destruction Bay Unit #2 Replacement**
Quote: Replace Unit #2 in Destruction Bay, which is at the end of its life, with a new diesel generator. Based on forecast load growth and Yukon Electrical's planning criteria, the new unit is planned to have similar generating capacity in comparison to the existing unit.

Request:
Please provide the size of the existing Unit #2 and the size of its proposed replacement.

YUB-YECL-48

Reference: **YECL Application; Business Case #27, page 2 and 3**
Issue/sub-issue: **Automated Meter Reading – Whitehorse and area**
Quote: This project is to convert conventional electronic and mechanical meters to Automated Meter Reading (AMR) technology. The project will convert all meters in the Whitehorse area, Marsh Lake, Carcross, Tagish and Teslin communities to AMR technology, which is approximately 80% of all Yukon Electrical meters. The benefits of conversion will be improved customer service, improved safety performance for employees and customers and reduced vehicle emissions, as well as long term cost savings of over $2 million over 25 years as compared to conventional meter reading.
…
… the City [of Whitehorse] … is investigating the utilization of AMR technology to obtain water meter readings … there may be potential benefits to the project in terms of costs if the City chooses to partner with Yukon Electrical on the project.

Request:
(a) Please explain the difference between the terms "automated meter reading" (AMR) and "advanced metering infrastructure" (AMI).

(b) With respect to this AMR business case, please explain the significant changes since YECL's last GRA that makes the project move viable and beneficial, and at the same addresses the concerns that were raised by interveners in YECL's previous GRA.

(c) Please list and explain the potential benefits/economies if YECL were to partner with the City of Whitehorse respecting the AMR project — e.g. Does the crossover point shown on the *CPV of AMR Conventional Meters: Cost Comparison* (Business Case #27, Attachment 1, page 1 of 11) move to the left?

(d) Please explain if there are additional capital costs if YECL were to transition to AMI from AMR.

(e) Respecting the AMR meters that YECL is proposing to use, please explain the benefits of having the time-of-use ability built into the meter and the related costs.

   i. If in the future the Board were to approve additional costs to enable time-of-use metering, please provide the additional asset-related costs and time that would be required to make the time-of-use metering benefits available to customers.

(j) Are the costs of equipping YECL's proposed Whistle Bend substation with a two-way automatic communication system (TWACS) built into the AMR business case?

(k) Has YECL had discussions or worked with YEC to review and assess the costs and potential benefits of the AMR project? Please provide a detailed explanation.

(l) Please explain what YECL is meaning respecting its submission that "there will be beneficial long-term cost savings." For example, are there any additional costs and time required in order to realize the long-term cost savings? Please explain.

(m) Please provide the cost/benefit analysis for this business case.

(n) Does the proposed AMR project enable YECL to provide time-of-use rates? If so, does YECL intend to apply for time-of-use rates? Have YECL customers requested time-of-use rates?

YUB-YECL-49

Reference: **YECL Application, Business Case #15, page 2**

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

Quote: Purchase and install a new **250kW** unit to replace the existing undersized 170kW unit (CUL 384). Load growth and load duration of Old Crow community have steadily diminished the utilization of the existing unit due to its rated capacity. The new 250kW unit will be installed in the new building in Old Crow (see Business Case #8), as it will not physically fit in the existing building, so the purchase of new switchgear and engine controls components is also required. [emphasis added]

Request:

(a) Please provide the ages and operating hours of the units in the Old Crow generating plant? Will the units soon be at the end of life?

(b) Please indicate what future plans YECL has in respect of unit CUL 384.

YUB-YECL-50

Reference: **YECL Application, Business Case #18, page 2**

Issue/sub-issue: **Hillcrest Subdivision Conversion**

Quote: The project is to reduce the load on 4L306 by converting a subdivision to 25kV electrical infrastructure and transferring to 5L630. The existing infrastructure is also at end of life condition with poor condition of poles and aged electrical hardware that is degrading.

Preamble: The Hillcrest subdivision load is to be converted to 25kV and transferred to 5L630.

Request:

Once the conversion is completed and throughout the conversion, what are the contingency plans if there is a fault on either 4L306 or 5L630?

YUB-YECL-51

Reference: **YECL Application, Business Case #21, page 2**

Issue/sub-issue: **Crestview to Mayo Road Corner Double Circuit**

Quote: Build a new distribution line in double circuit configuration from Crestview area to the Mayo road intersection. The new 34.5 kV top distribution line will be built with 266 ACSR conductors. The bottom circuit, 5L628, will be replacing the existing distribution line. Permitting, easements, brushing and construction will be completed to standard.

Request:

(a) Please provide an itemized list of the costs that make up the forecast $0.6 million total for this project.

(b) Please provide a single-line diagram showing the proposed 34.5kv line, 5l628 and the new YEC substation for which business cases 21 and 23 apply.

YUB-YECL-52

Reference: **YECL Application, Business Case #23, page 2**

Issue/sub-issue: **Whitehorse 5L628 and new 35kV Build**

Quote: The project is to build a double circuit distribution line on the North Klondike Highway to the Yukon Energy Takhini Switching Station.

The new top circuit will be built to 34.5kV standards with sufficient capacity to safely accommodate the design of the supply source.

The bottom circuit will be a replacement of 5L628 in this area. The existing line in the area serves all customers on the North Klondike Highway (approximately 750). Most poles in the area are unable to accommodate the addition of another circuit. Where possible, existing infrastructure will be utilized to complete the project.

Request:

Please provide an itemized list of the costs that make up the forecast $1.9 million total for this project.

YUB-YECL-53
Reference: **YECL Application, Business Case #28**
Issue/sub-issue: **Fish Lake Water Licence Renewal**

Request:
(a) Please provide a comprehensive list of the activities that make up the expenses incurred in 2011, 2012 and 2013, respectively $491,000, $688,000 and $650,000.

(b) At what stage of renewing the water licence is YECL?

(c) At this point, can YECL confirm that no further modifications to the Fish Lake hydro facility that will arise (a) as a result of acquiring the licence, or (b) out of the licensing requirements?

(d) In addition to part (c), does YECL see any increases related to operating and maintenance activities that may arise out of the new Fish Lake licensing requirements? Please explain.

(e) Have all studies been undertaken that are required with respect to renewing YECL's Fish Lake long-term licence? Please explain.

(f) In addition to the long-term licensing requirements, is it YECL's intent to perform any studies, notwithstanding that said studies may not be related to Fish Lake licensing requirements? Please explain.

YUB-YECL-54
Reference: **YECL Application; Business Case #29, page 2 and 3**
Issue/sub-issue: **Downtown Office Building Envelope Upgrades**
Quote: This project will replace the exterior building envelope of Yukon Electrical's downtown office. The exterior upgrades are required to improve the energy efficiency of the building and create a more comfortable environment for staff and customers, as well as preventing further water damage and potential mold growth in the future.
…

A Building Evaluation Report was prepared in Q4 2011 that recommends that upgrades be carried out to the exterior of the building to improve and update the overall integrity of the building. The upgrades will also improve the comfort level of the occupants **and it is projected that these improvements will result in an annual reduction in energy costs of 20%.** [emphasis added]
…

- The changes to the exterior construction and increase in insulation will also result in cost savings and environmental benefits due to a reduction in both electricity use and furnace fuel consumption.

Request:
With respect to the projected 20% reduction in energy costs, please provide a cost/benefit analysis that illustrates the project payback based on forecast energy savings.

YUB-YECL-55

Reference: **YECL Application, pages 1-1, 2-7, and 2-8**

Issue/sub-issue: **Deferral account – Whitehorse Copper Tailings**

Quote: Yukon Electrical seeks the following approvals from the Board:

…

(2) Approval of the continued use of the deferral accounts listed in detail later in this section during the test period;

…

A new industrial customer, Whitehorse Copper Tailings (WHCT), is forecast to start operations in the fall of 2013. While the customer has acknowledged uncertainty in the exact timing of its start-up as well as its ultimate load, the latest available information results in a 2013 forecast of 1,025 MWh and 4,620 MWh for each of 2014 and 2015.

… 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.

Request:

Does YECL envision drafting a purchase power agreement with WHCT, similar to what the Yukon Energy Corporation (YEC) has in place with Minto and Alexco mines, in order to safeguard the utility and its customers? Please provide a detailed explanation.

YUB-YECL-56

Reference: **YECL Application, Section 2, page 2-3**

Issue/sub-issue: **Yukon economic activity**

Quote: The latest economic projection from the Yukon Government, however, suggests a sharp slowdown in the pace of economic activity in 2012 and 2013. The Yukon Territory real Gross Domestic Product is estimated to have grown in the range of 2%-3% in 2012 and is expected to grow only 2% in 2013, down sharply from the 2011 growth rate of 6.5%. The Territory's unemployment rate rose to 6.9% in 2012, from 5.4% in 2011, and is projected to rise further, to 7.3%, in 2013. The Yukon Government also expects a slower population growth in 2013, dropping from 2.1% in 2012 to 1.3%. The value of building permits is estimated to have dropped 43% in 2012, compared to 2011. In its latest Northern Housing Report, Canada Mortgage and Housing Corporation forecast a 25% decrease in Whitehorse housing starts in 2012 as compared to 2011.

Preamble: The projections were based on forecasts from Yukon Economic Review 2012, Yukon Economic Development (February 5, 2013), and Northern Housing Report, Canada Mortgage and Housing Corporation, 2012.

Request:
Please provide the Yukon Government's latest economic projection for 2012 and for each year of the test period.

YUB-YECL-57

Reference:	**YECL Application, page 2-5**
Issue/sub-issue:	**Demand-side management impacts beyond 2013**
Quote:	The increase in UPC relating to electric space heating, however, is not expected to be extended beyond 2013, as it is expected to be offset by a reduction in consumption due to the demand side management program. Attachments 1 to 21 show the historical data as well as the regression results.

Request:
Please provide the excel spreadsheet(s) with all formulas intact for Attachments 2 to 21, of Section 2 in the application.

YUB-YECL-58

Reference:	**YECL Application, Section 3, pages 3-2 and 3-3**
Issue/sub-issue:	**Line Losses**
Quote:	The energy component of the purchase power cost is determined by applying Yukon Energy's wholesale rate to the total forecast energy (kWh) purchases. Total forecast purchases are determined by 1 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:
Please indicate where the Board, in Board Order 2009-2, approved YECL's five-year historical average approach. Provide a specific reference(s).

YUB-YECL-59

Reference:	**YECL Application, Section 9, page 9-4, Schedule 9.1**
Issue/sub-issue:	**Capital Additions**
Quote:	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.
Preamble:	With respect to capital expenditure totals, YECL has forecast a total of $63.5 million to be spent over the 2013-2015 test period.

Request:
Considering that the $63.5-million forecast expenditures related to capital is almost double the amount of capital expenditures for any prior three-year period and considering the relatively short construction season, please provide a prioritized list of expenditures that make up the $63.5-million test period total shown in Schedule 9.1.

YUB-YECL-60
Reference: **YECL Application**
Issue/sub-issue: **Generation plant replacement**

Request:
Please provide a comparative listing of all YECL generator sets on a per plant basis. The listing should include peak plant loading and by unit, the total engine hours and the total annual hourly usage for the period from 2008 to 2012, as well as the total forecast hours for each year of the forecast period.

YUB-YECL-61
Reference: **YECL Application, page 9-4**
Issue/sub-issue: **2008-2015 capital expenditures**
Quote: 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.

Request:
For each of the capital expenditures for 2008-2015 provided on pages 9-5 to 9-67, please provide a continuity table. Please retain the following headings: Generation Plants, Distribution New Extensions (gross and net of customer contributions), Distribution Improvements, Street and Sentinel lighting, Transformers & Regulators, Meters, General Property & Equipment, CIS Billing System Conversion. Moreover, please ensure that projects that are ongoing from year to year, such as replacement of transportation equipment, replacement of meters and new installations, new underground line extensions, and pole replacement are aligned as one project over the years.

YUB-YECL-62
Reference: **YECL Application, page 9-45**
Issue/sub-issue: **New 250kW Mobile Generator**
Quote: This generator provides contingency power to smaller communities. Contingency situations include emergency backup and scheduled maintenance shutdowns of power plants. The unit is also used during other system improvement projects to supply temporary power.
Preamble: YECL presently has a 350kW mobile unit as stated in BC #4 that is unable to meet the current peak loads of the communities it serves.

Request:
(a) Please provide the justification for the purchase of this unit.

(b) How does YECL plan to utilize the 350kW mobile?

YUB-YECL-63
Reference: **YECL Application, page 9-45**
Issue/sub-issue: **Line item – Fish Lake Unit #2 SCADA**

Request:
Please provide the benefits YECL obtains by installing this SCADA system.

YUB-YECL-64
Reference: **YECL Application, page 9-45**
Issue/sub-issue: **Line item – Fish Lake Unit #2 Penstock Improvements**

Request:
Please provide any details on what the improvements are and how the operation of Fish Lake Unit #2 will benefit.

YUB-YECL-65
Reference: **YECL Application, page 9-46**
Issue/sub-issue: **Line item – Miscellaneous O/H Services – Various Subdivisions**
Quote: Capital expenditures required for the connection of new residential and commercial customers in Yukon Electrical's service area in compliance with Terms and Conditions. Any new extension (driven by a customer) that is under $25k is included in this.

Request:
Please provide details to the Board on how this level of expenditure was determined.

YUB-YECL-66
Reference: **YECL Application, page 9-48**
Issue/sub-issue: **Line item – Miscellaneous Distribution Pole Replacement**
Quote: Various deficient poles are identified through distribution system inspections, test and treat program and in unplanned situations. System inspections identify ground rot, pest infestation, broken or damaged poles and electrical degradation. The test and treat program identifies internal condition of the pole. Unplanned situations include emergency situations due to failure of the pole and forced projects.

Request:

(a) Please provide an explanation on how the program is tracked and how pole replacement is prioritized.

(b) For this item, what is the forecast O&M expenditure for each of the test years?

YUB-YECL-67

Reference: **YECL Application, page 9-48**

Issue/sub-issue: **Line item – PCB Identification and Transformer Change Outs**

Quote: Identification of Polychlorinated Biphenyl (PCB) content of all oil-filled equipment, in compliance with the Canadian Environmental Protection Act 1999. Oil-filled equipment containing PCBs in a concentration of at least 50 mg/kg but less than 500 mg/kg is being removed from service.

Preamble: Both YEC and YECL have been working on this issue since the mid-1980s and do not appear to making progress, as costs continue to be incurred. In the GRA, costs have been incurred or allocated for this project between 2011-15

Request:

(a) What is YECL's estimate of how many of the transformers remaining still contain PCBs ?

(b) Please provide the plan and schedule that YECL plans to follow to have all transformers containing PCB's disposed of for each of the test years.

YUB-YECL-68

Reference: **YECL Application, page 9-49**

Issue/sub-issue: **Line item – Whitehorse Safety Code Corrections**

Request:

Please provide a list of what safety code corrections are included in this expenditure.

YUB-YECL-69

Reference: **YECL Application, page 9-50**

Issue/sub-issue: **Line item – Miscellaneous Street Light Replacements**

Quote: Planned replacement program based on street light inspections and condition assessment of infrastructure. Condition assessment is based on performance of street lights, deficiencies or substandard conditions and the general physical condition. Inspection of the general physical condition includes the base and metal structure for deterioration, rust, broken bolts and damage.

Request:

Please provide more details pertaining to the planned replacement program for each of the test years.

YUB-YECL-70

Reference: **Application, page 9-50**

Issue/sub-issue: **Line item – Replacement of Meters and Installing New Meters**

Quote: The installation of new meters is required to accommodate load growth associated with customer requests for service. These expenditures allow Yukon Electrical to meet its obligation to provide metered service connections. The capital meter additions are planned based on known areas of development and expected connection requests. New meters are also required to replace obsolete or end of life meters as identified by Measurement Canada. The new meters to be installed in 2013 will be AMR compatible in preparation for the conversion to AMR in 2014 and 2015.

Locations include Chestnut, Mulberry and Hickory Street.

Request:

(a) Please explain why an additional $50,000 in 2014-15 is required for replacement meters after expending $600,000 through this project?

(b) Are any AMR meters included in this line item?

YUB-YECL-71

Reference: **YECL Application, Schedule 9.1, line 18**

Issue/sub-issue: **Tools, Instruments & Equipment**

Request:

(a) Does YECL have a tool replacement policy? If so, please provide a copy of YECL's tool replacement policy.

(b) What is the impact if any of the tools or equipment expenditures are denied by the Board?

YUB-YECL-72

Reference: **YECL Application, page 9-51**

Issue/sub-issue: **Line item – Transportation Equipment**

Quote:
- Replacement of Units 161, 163, 372, 674 and 675
- Purchase New Pole Trailer
- Purchase New Service Truck PLT Team Lead
- Purchase Zoom Boom Personnel Lift
- 4 Place Stringing and Pulling Trailer

Request:

(a) Please provide the replacement policy/criteria for vehicle replacement.

(b) Please provide any business cases for the purchase of new vehicles for each of the test years.

YUB-YECL-73

Reference: **YECL Application, page 9-51**
Issue/sub-issue: **Line item – Whitehorse Service Complex Pole Storage**
Quote: Environmental requirement to get the poles off the ground

Request:
Please provide more detailed information on the projected cost of $150,000.

YUB-YECL-74

Reference: **YECL Application, page 9-54**
Issue/sub-issue: **Line item – Destruction Bay Unit #3 Replacement**
Quote: Purchase new unit complete with new manufacturer supplied and sized, radiator, exhaust, and heat exchanger. Remove existing unit, install new unit and supplied devices, integrate unit into electrical supply and control systems, connect unit into waste heat and fuel systems.

Request:
Please provide the reasons as to why this unit is being replaced.

YUB-YECL-75

Reference: **YECL Application, page 9-54**
Issue/sub-issue: **Line item – Destruction Bay Programmable Logic Controller Upgrade**
Quote: Replacement of circa 1982 IDEC PLC as this control equipment is no longer supported or available from the manufacturer. The software driver is not compatible with the next generation System C and Data Acquisition (SCADA) program. Includes design and procurement of control equipment and panels as well as on-site installation and commissioning of the equipment.

Request:
Have all the other plants replaced their PLC's to work with the new SCADA system?

YUB-YECL-76

Reference: **YECL Application, page 9-55**
Issue/sub-issue: **Line item – Watson Lake Replace ABB 5HK Breakers**
Quote: Current breakers are at the end of life and obsolete technology. Replace existing breakers with vacuum breakers and install them into existing cells.
Preamble: If there are five breakers to be replaced at $45,000 each, the projected cost would be $225,000.

Request:
(a) Confirm the number of breakers that need to be replaced.

(b) Are any of the present breakers in immediate danger of failure?

(c) Do the present breakers present a safety hazard to the employees?

YUB-YECL-77

Reference:	**YECL Application, page 9-55**
Issue/sub-issue:	**Line item – Stewart Crossing Plant Improvements**
Quote:	General improvements including control system upgrades as well as building heating improvements. This will improve reliable operation of the generator and improve the energy efficiency of the building.
Preamble:	This plant is now tied into the grid and is now a standby plant

Request:
Please explain the control system upgrades required if the Stewart Crossing Plant is now a standby plant. Please provide the current reliability metrics and the forecast improved reliability metrics.

YUB-YECL-78

Reference:	**YECL Application, page 9-55**
Issue/sub-issue:	**Line item – Ross River Replace ABB 5HK Breakers**

Request:
(a) Is the present breaker in immediate danger of failure?

(b) Does the present breaker present a safety hazard to the employees?

YUB-YECL-79

Reference:	**YECL Application, page 9-56**
Issue/sub-issue:	**Line item – Miscellaneous O/H Services – Various Subdivisions**
Quote:	Capital expenditures required for the connection of new residential and commercial customers in Yukon Electrical's service area in compliance with Terms and Conditions. Any new extension (driven by a customer) that is under $25k is included in this.

Request:
Please provide the details as to how the projected expenditure was determined for each of the test years.

YUB-YECL-80

Reference: **YECL Application, page 7-1**

Issue/sub-issue: **Depreciation**

Quote: The depreciation rates used to calculate actual 2008 through 2012 depreciation expense were developed using the Board-approved depreciation parameters form Yukon Electrical's last General Rate Application.

Request:

(a) Please provide the terms of reference and the direction given by YECL to Gannett Fleming Inc. to undertake and the need for the depreciation study.

(b) Why is there a need to change YECL's depreciation study?

YUB-YECL-81

Reference: **YECL Application, page 7-1**

Issue/sub-issue: **Depreciation**

Quote: For this depreciation study, Yukon Electrical has incorporated the usage of a life span analysis (similar to hydro generation) for each of its diesel generation locations. This will allow for more accurate depreciation rates for diesel generation facilities.

Request:

(a) Please describe and explain the method used to determine the depreciation expense for diesel generation facilities in prior YECL applications.

(b) Please explain lifespan analysis.

YUB-YECL-82

Reference: **YECL Application, pages 7-2 and 7-3**

Issue/sub-issue: **Deferral on depreciation parameters, process to determine whether a change in depreciation parameters may be required**

Quote: Yukon Electrical is requesting approval for a deferral account to allow it the ability to file future applications, as necessary, to change its depreciation parameters within the 2013-2015 test period, and flow through the impact of any such change to customers within the test period.

If a significant change has occurred, but not only in the current year but over a few years (i.e.2 to 3) that cannot be discounted as being a non-typical transaction and appears to be a valid retirement pressure that is supported by the appropriate engineers and management, than a new depreciation parameter may be warranted.

Request:

(a) Please explain why the above-noted request may not be considered as retroactive ratemaking?

(b) Would the YECL request to potentially change depreciation parameters shift forecast risk for this item form YECL to customers?

(c) The timing required to detect a significant change extends beyond the requested test period. Would it be more efficient then to propose changes to depreciation parameters in a subsequent GRA?

(d) YECL has stated that, "each change in depreciation parameters must be assessed on an individual basis with regard to materiality". Please provide YECL's views of what those materiality guidelines should be.

YUB-YECL-83

Reference: **YECL Application, Schedules 7-1 to 7-5 inclusive**
Issue/sub-issue: **Depreciation**

Request:

(a) Please restate the Section 7 schedules, using the methods and Iowa curves approved in YECL's 2008-09 GRA.

(b) In schedule 7.5, please fully explain the transition from ($382,000) to $71,000 (2012 Actual to 2013 Forecast) for the total amortization of differences.

YUB-YECL-84

Reference: **YECL Application, Section 7, Attachment 1, page 31 of 208**
Issue/sub-issue: **Average life curves**
Quote: In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit … It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group, assuming no contrary relevant factors external to the analysis of historical data.

Request:

(a) What is used to determine which curve gives the best fit? Is a goodness-of-fit test or some other statistical method used to make the determination? Please explain.

(b) If statistics are not the only factor used in determining the best fitting curve, what weighting is given to statistical analysis versus "contrary relevant factors"?

YUB-YECL-85

Reference: **YECL Application, Section 7, Attachment 1, page 31 of 208**
Issue/sub-issue: **Survivor curve judgments**
Quote: The primary factors were the statistical analysis of data; current policies and outlook as determined during conversations with management personnel and engineering staff, and survivor curve estimates form previous studies of this Company and other electric distribution companies.

Request:
Please explain why any weighting should be given to other distribution companies

YUB-YECL-86

Reference: **YECL Application, Section 7, Attachment 1, pages 31 of 208 to 35 of 208**
Issue/sub-issue: **Asset accounts**

Request:
(a) For each of the asset accounts listed, please provide a table that shows the Iowa curve previously used and approved by the Board, the Iowa curve recommended in this application, the corresponding depreciation rates previously approved and now recommended, and if there is a change an explanation of the primary factor for that change from what was approved to what is being recommended.

(b) In general, does a change in the Iowa curve from a 50-RX to a 45-RX imply a change in expected service life form 50 years to 45 years?

(c) For Account 475.00 the change from Iowa 50-R4 to Iowa 45-R3 is "to better fit industry retirement trends". What curve best represents YECL's retirement trends for that asset class?

(d) For account 478.10, the Iowa curve has been changed from an Iowa 25-R3 to an Iowa 30-R3 "to better fit industry retirement trends". Please define the industry, the trend, and the location of that industry and how those locations are an appropriate match for a location such as Yukon.

(e) Please explain why the retirement history for Accounts 422.00 through 427.00 were not available. What was used in past studies for YECL?

YUB-YECL-87

Reference: **YECL Application, Section 7, Attachment 1, pages 35 to 37 of 208**
Issue/sub-issue: **Estimation of net salvage**
Quote: The estimates of net salvage were based primarily on the professional judgment of Gannett Fleming, in part on historical data for the years 1983 through 2011, and in part through a comparison to peer electric distribution companies.

The net salvage percentages estimated in this study have been determined using the "Traditional Approach" for net salvage estimation.

Request:

(a) Please list the peer distribution companies and the weighting given to each company.

(b) Please confirm whether the "Traditional Approach" conforms with past directions form this Board.

(c) Please provide a table showing for each asset account, the approved net salvage percentages approved in the 2008-09 YECL GRA and the net salvage percentages recommended in the current application.

YUB-YECL-88

Reference: **YECL Application, Section 7, Attachment 1, page 43 of 208**

Issue/sub-issue: **Results of study**

Quote: An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and salvage and for the change of the composition of property in service.

The service life and net salvage estimates were based on judgment that incorporated statistical analysis of retirement data, discussions with management and consideration of estimates made for other electric utilities.

Request:

(a) For the first quote above, please define "a long period of time". Would consistent accrual rates imply accuracy and a reasonable estimation of average service life for an asset?

(b) Why would any consideration be given to estimates made for other electric utilities?

YUB-YECL-89

Reference: **YECL Application, Section 7, Attachment 2**

Issue/sub-issue: **Additional evidence**

Request:

Was this additional evidence provided at the request of YECL? Please explain.

YUB-YECL-90
Reference: **YECL Application, Section 7, Attachment 2**
Issue/sub-issue: **Inclusion of net salvage in the depreciation rate calculations**

Request:

(a) To clarify, when net salvage is included in depreciation rates, are customers therefore currently paying for a service (salvage) or part thereof, which would occur in the future, and whose final cost is an estimate subject to change?

(b) Do accounting guidelines, MFRs or other rules or regulations delineate the use of depreciation parameters and FRSR policies based on type of ownership (Crown versus private)?

(c) If FRSR balances are a current recovery for a future service (salvage), should such balances or contributions earn a return until said services are performed?

(d) If FRSR contributions are based on estimates, who is at risk for any variances between actual and forecast results? Please explain.