

**IN THE MATTER OF the *Public Utilities Act*
Revised Statutes of Yukon, 2002, c. 186, as amended**

and

**An Application by Yukon Electrical Company Limited
For Approval of Revenue Requirements for 2008 and 2009**

REASONS FOR DECISION

APPENDIX A TO BOARD ORDER 2009-2

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1 INTRODUCTION

On April 30, 2008, Yukon Electrical Company Limited (YECL) filed with the Yukon Utilities Board (Board) an Application, pursuant to the *Public Utilities Act* (Act) and Order-in-Council 1995/90, for approval of its forecast revenue requirements for the 2008 and 2009 test years and approval of certain deferral accounts (Application).

YECL is a wholly owned subsidiary of ATCO Electric Ltd., a private, investor-owned utility which is a member of the ATCO group of companies. YECL distributes electricity to approximately 15,000 customers throughout the Yukon. The YECL distribution system is fed by power purchased from Yukon Energy Corporation (YEC). In addition, it maintains back-up generating plants in certain communities in the event of a power interruption. YECL also generates and distributes electricity in several remote communities through diesel generating plants.

YECL is seeking approval for the following:

- 1) A revenue requirement of \$46,660,000 for 2008;
- 2) A revenue requirement of \$47,902,000 for 2009;
- 3) To continue the existing deferral accounts for Purchase Power Flow Through Costs, Fuel Price Flow Through Costs and Costs for the Diesel Contingency Fund; and
- 4) New deferral accounts to cover the Increased Fuel Costs Associated with Pelly Crossing and an Income Tax Rate Variance Deferral Account.

The revenue requirement for 2008 represents an increase of \$2,220,000 over the amount that would be recovered under existing rates and riders; for 2009, the revenue requirement represents an increase of \$4,130,000. These amounts represent an increase of 5.9% in 2008 and 5.1% in 2009, but do not include fuel price increases as stated in Section 4 of the Application.

Further, YECL requested that certain affiliate costs associated with ATCO I-Tek Ltd. and ATCO I-Tek Business Services Ltd. — affiliates of ATCO Electric Ltd. — be reserved as placeholders until such time as the Alberta Utilities Commission (AUC) rules on those costs as part of the benchmarking process before the AUC.

The Applicant also sought an Interim Rate Rider (Rider R), and Temporary Refund/Surcharge Rider (Rider G). These riders were to apply to all rate classes for YECL and YEC retail customers, except for Secondary Energy Rate 32 and Industrial Primary Rate 39.

In Board Order 2008-4, dated May 16, 2008, the Board ordered YECL to publish a Notice of Application and pre-hearing conference no later than May 23, 2008, in such appropriate local news publications in YECL's service area. YECL was also ordered to make the application and supporting materials available for inspection at its Whitehorse office at 100-1100 First Avenue and at the Watson Lake and Haines Junction public libraries.

On May 20, 2008, the Minister of Justice authorized the Board to incur the expenses necessary to conduct a public hearing into the Application pursuant to Section 50 of the Act.

The Board held a pre-hearing conference on June 12, 2008, in Whitehorse, at which time the Board heard submissions from parties on the following matters:

- a) Issues List
- b) Intervenor and Observer Status
- c) Hearing Cost Process
- d) Proceeding Schedule
- e) Hearing Process
- f) Interim Application

On June 20, 2008, the Board issued Order 2008-5, in which Intervenor status was granted to:

- Yukon Energy Corporation (YEC)
- City of Whitehorse (CW)
- Utilities Consumers' Group (UCG)
- Yukon Conservation Society (YCS)
- Department of Energy, Mines and Resources, Government of Yukon
- John Maissan, Leading Edge Projects Inc. (LE)

Observer status was granted to Paul Kishchuk, Vector Research. This Order also established a Proceeding Schedule for the Application and the Issues List. In addition, the Board directed YECL to file additional information as described in the Order.

Board Order 2008-6 approved an increase of 5.0% to existing primary base rates to be applied effective August 1, 2008, in the form of Interim Refundable Rider R. The Board denied the request for Rider G.

The Proceeding Schedule was further revised with Board Order 2008-7 when YECL requested additional time to provide responses to Information Requests (IRs) given the large volume of IRs. In addition, Board Order 2008-9 ordered YECL to provide further and better IR Responses in accordance with the Reasons attached in Appendix A to the Order by the close of business on September 15, 2008. The Board also allowed an additional round of IRs on depreciation through Board Order 2008-11.

On October 7, 2008, the Board held an oral public hearing in the City of Whitehorse, Yukon, before the Board comprised of Chair Wendy Shanks, Vice-Chair Robert Laking, and members Richard Hancock, Jody Woodland, and Kathleen Avery.

The Board directed the parties to file final argument by October 27, 2008 and reply argument by November 10, 2008. The Board considers the evidentiary portion of this proceeding closed as of November 10, 2008.

In reaching the determinations contained within this Decision, the Board has considered all relevant materials comprising the record of this proceeding, including the evidence and argument provided by each party. Accordingly, references in this Decision to specific parts of the record are intended to assist the reader in understanding the Board's reasoning related to a particular matter and should not be taken as an indication that the Board did not consider all relevant portions of the record with respect to that matter.

2 DISCUSSION OF ISSUES

2.1 Sales and Revenue

YECL forecast total primary sales to increase 0.8% in each of 2008 and 2009 while wholesale sales were forecast to remain at their current level of 488 MWh. Secondary sales were forecast to decrease by 28.5% in 2008 and a further 58.7% in 2009. The reduction in secondary sales was primarily due to the reduced availability of surplus hydro as a result of YEC sales to the Minto Mine.

The revenues associated with the energy forecast, including the proposed rate increases, are projected to be \$45.8 million and \$47.1 million respectively for 2008 and 2009.

FORECAST¹	Actual 2007	Forecast 2008	Forecast 2009
Primary Sales (MWh)	267,698	269,913	272,054
Growth Rate (%)		0.8	0.8
Secondary Sales (MWh)	23,566	16,853	6,954
Growth Rate (%)		-28.5	-58.7
Total Company Sales (MWh)	291,752	287,255	279,497
Growth Rate (%)		-1.5	-2.7
Total Revenues from Existing Rates ² (\$000)	40,177	39,970	39,557
Growth Rate (%)		-0.6	-1.3
Total Revenues from Proposed Rates (\$000)		45,850	47,075
Rate Increase from Existing Rates (\$000)		5,881	7,518
Less: Impact of higher Fuel Costs (Recovered through Rider F)		(3,661)	(3,388)
Net Rate Increase from Existing Rates (\$000)		<u>2,220</u>	<u>4,130</u>
YECL Primary Retail Revenue		33,677	33,937
YEC Primary Retail Revenue		3,795	3,750
Total YEC/YECL Primary Retail Revenue		<u>37,471</u>	<u>37,687</u>
% Rate Increase over Existing Rates		5.9	11.0

2.2 Forecast Process

YECL's forecast process involved a review of historic sales data by customer class and took into account the most recent information available at the time the forecast was prepared. YECL obtained the information through its work in the community and consultations with CW, Government of Yukon and local developers. In its Application,

¹ YECL 2008-2009 General Rate Application, Schedule 2.1; growth numbers have been calculated

² Includes YEC Revenue Shortfall (Rider J)

YECL indicated that the secondary sales forecast mainly came from YEC as YEC was responsible for determining the forecast availability of surplus hydro.

The sales forecast was prepared by customer class: residential, commercial, street and sentinel lighting, secondary and wholesale (sales to YEC). Intervenors took issue with what was felt were conservative sales and revenue forecasts made by YECL.

LE in argument stated that a great deal of detailed work went into preparing the sales forecast as outlined in the Application. Further, LE pointed out that information on the record indicated — for example, for the years 1996, 1997, and 2003 to 2007 — that YECL had underestimated their sales forecast. Despite this, LE concluded that the forecast should be accepted as filed.

YEC and CW recommended that the Board not approve YECL's sales forecast. Additionally, YEC did not support LE's recommendation to monitor YECL sales revenue forecast for future consideration.

Acknowledging YEC's point that YECL's actual sales had exceeded its internal business plan forecasts for prior years, YECL argued that the level of scrutiny and detail used to formulate YECL's internal business plan forecasts was nowhere near as rigorous or comprehensive as was used to derive the current General Rate Application (GRA) quality forecast. Further, the internal business plan forecasts were not the result of any statistical analysis and any comparisons made to the non-test year actuals by YEC were inappropriate and unfair. In summary, YECL submitted that the forecasts in its Application must be judged based on the evidence provided on the record and not on the attempt by YEC to derive a comparison that simply does not exist.

Views of the Board

The Board acknowledges YECL's submissions in argument that it had conducted extensive due diligence in respect of preparing its GRA quality forecasts as well as providing a large amount of documentation in its filing. Further, the Board understands that YECL's level of scrutiny and detail used to formulate YECL's internal business-plan forecasts is not as detailed as was used to derive the current GRA forecast.

However, the Board is concerned with the lack of evidence on the record regarding past YECL sales forecasts. The Board notes that the sales forecasts in evidence indicate that YECL's actual sales exceeded its GRA forecast by 3.9% and 1.5% for the years 1996 and 1997 respectively.³ Further, regarding YECL's internal business plan forecasts for the years 2003 to 2007, the Board notes that the actuals exceeded forecasts within the range of 1.4% to 4.1% over the period.⁴

In considering the evidence regarding YECL's sales revenue forecast in the following sections, the Board will take the above into consideration.

³ YEC-YECL-2(e) REVISED; dated September 15, 2008

⁴ Exhibit C1-18

2.3 Residential Customer Sales Forecast

The residential sales forecast has two key inputs: the net customer additions and the average use per customer (UPC). The energy sales forecast is obtained by multiplying the forecast number of customers by the average UPC forecast.

Energy sales to residential customers are expected to rise 1.3% and 1.1% respectively in 2008 and 2009. YECL's customer count grew by 1.8% in 2006 and 2.1% in 2007 and is forecast to continue in this range with increases of 1.9% and 1.1% in 2008 and 2009 respectively.

2.3.1 Residential Customer Additions

In its argument, noting that the average increase in residential customer additions from 2003 to 2007 was 229, CW submitted that there was no detailed evidence to support YECL's substantial reduction to the growth rate of residential customers for 2009. Accordingly, CW submitted that the forecast residential customer growth rate for 2009 should be 1.9% (the same as 2008); thus, the residential customer increase for 2009 rises to 241 from 143 and at the same time the average number of customers rises from 12,836⁵ to 12,934.

YECL replied that CW was dismissive of the facts presented by YECL, which materially affect its sales forecast, without providing any reason for dismissing such evidence. For example, with respect to the forecast number of residential customers for 2009, CW rejected YECL's evidence that the lack of developed land in the Whitehorse area will impact its sales forecast. YECL submitted that the Board should accept its uncontroverted evidence in this regard. Further, YECL suggested that there was no basis to arbitrarily increase the number of customer additions as suggested by CW. YECL submitted that its forecast should be approved as it is based on an extensive examination of the factors impacting such growth and specific information related to expected customer additions.

Views of the Board

The Board acknowledges YECL's statements regarding the availability of developed land in the Whitehorse area and the affect it may have on its sales forecasts. However, the Board notes CW's submission that, respecting residential customer additions for the period 2003 to 2007, the average growth rate was 229 customers or 1.9%. The Board further notes that the average increase of residential customers throughout the period was lowest in 2004 when the increase was 191 or 1.7%.

After carefully weighing the evidence respecting the forecast and actual increases in residential customers on the record, the Board accepts YECL's proposal that the number of residential customer additions grow by 1.9% in 2008. However, the Board agrees with CW that YECL's evidence does not support its forecast for 2009 indicating a significant reduction in the growth rate of residential customers. The Board notes that during the period 2003 to 2007, a 1.7% growth rate is the minimum growth rate for increases in residential customers. Therefore, the Board finds, based on previous years'

⁵ Application, Schedule 2.1, Line 2

growth in residential customers, that the number of residential customers will increase by 1.7% in 2009. This 1.7% increase takes into account YECL's projections at the time of filing that there may be a shortage of developed lots in 2009.

Accordingly, the Board directs YECL in its refile to adjust its 2009 forecast with respect to the number of residential customer additions from 1.1% to 1.7%. To be clear, the Board directs YECL in its refile to increase the number of residential customers to 12,908 from 12,836 currently in the forecast and to reflect this change in related schedules and its revenue requirement in the GRA.

2.3.2 Residential UPC

The average UPC for the test period was determined by taking a three-year average of monthly UPC by community. UPC was normalized for Whitehorse and Watson Lake area communities using a "Normal" temperature, which is defined as a 20-year (1988-2007) average Heating Degree Days for Whitehorse and a 12-year (1996-2007) average for Watson Lake. Intervenors took issue with the process used to determine the average UPC.

CW in its argument submitted that inconsistencies in the regression analyses raised concerns regarding the soundness of the analyses. First, not all of the communities had their UPC normalized and second, of the communities that had their UPC normalized, the Normal temperatures that were used were different. Respecting the R^2 values used in the regression analyses, CW in its argument, as well as in its reply argument, expressed concerns regarding the use of R^2 values, which were less than 0.7 and YECL's inconsistent approach to justifying the levels of R^2 used in the Application. In conclusion, CW proposed a trend-line analysis⁶ and submitted that its analysis was simpler and more trustworthy than the YECL analysis.

YECL replied that the use of 12-year versus 20-year data in no way materially alters YECL's forecast results and certainly does not diminish the validity or accuracy of the methodology used. YECL submitted that it would be highly inappropriate for the Board to abandon the consistent and previously accepted approach adopted by it in developing a sales forecast in favour of convenient "trends" that are not in fact based on any long-term data, and which only serve to fulfill CW's predetermined objective. YECL has clearly shown that weather affects residential sales.

Views of the Board

The Board acknowledges that YECL performed a great deal of detailed analyses to arrive at its sales revenue forecasts as outlined in the Application. However, the Board is not convinced that a more simplified approach could not achieve reasonable results with far less effort and cost to ratepayers. Therefore, the Board directs YECL at the time of its next GRA to include comparisons of its analyses and the analyses undertaken by other utilities in Canada to arrive at sales revenue forecasts.

⁶ City of Whitehorse Argument

The Board has concerns with the range of R^2 values used throughout the analyses and YECL's justification for the wide range of values. Accordingly, the Board directs YECL at the time of its next GRA to include a detailed study as to what other jurisdictions consider a minimum value for R^2 that is acceptable in regression analyses.

Additionally the Board notes YECL's use of one variable in its regression analyses and the wide range of R^2 values in YECL's regression analyses. It is unclear to the Board whether or not the use of one variable in regression analyses is a contributing factor to the wide range of R^2 values. Consequently, the Board directs YECL to undertake a study that compares the types of regression analyses — for example, univariate or multivariate — that other utilities may use in order to arrive at their analyses.

Considering the range of R^2 values and the lack of evidence as to what constitutes an acceptable R^2 value, the Board is not convinced that the residential UPCs as calculated are reasonable. The Board is of the view that a 2% increase in YECL's residential UPC is reasonable as it appears to be the low end of the variance where actual residential UPCs exceed forecast YECL residential UPCs. Therefore, the Board directs YECL in its refiling to increase its residential UPC by 2%, and to reflect this increase in all related schedules and its revenue requirement for the test years.

2.3.3 Commercial Sales Forecast

In the Application, the forecast UPC for existing commercial customers, except as noted in the Whitehorse area, was determined by taking a three-year average of monthly UPC by community. YECL based its Whitehorse commercial customer UPC forecast on the 2007 weather-normalized and adjusted UPC. YECL indicated that use of 2007 forecasts captures the impact of the larger commercial customers who came online in 2005, 2006 and 2007. Additionally, the Whitehorse 2007 UPC was adjusted to remove load specifically attributable to the Canada Winter Games.

Increased sales to the commercial class were due primarily to new commercial customers. Customer additions were forecast to increase by 1.1% in both 2008 and 2009. YECL anticipated most of the new commercial customers in its forecast to be running at or below the average UPC, keeping the growth in energy sales to a modest 0.4% and 0.5% in 2008 and 2009 respectively.⁷

In response to CW-YECL-15(d), YECL provided three reasons for the 1.4% reduction in commercial UPC between 2007 and 2009:

- Several new customer additions in 2008 and 2009 with lower than the 2007 annual average would bring down the overall average;
- The three-year average historical UPC used as the 2008 and 2009 UPC forecast for existing customers outside of Whitehorse was lower than the 2007 actual UPC; and
- The Whitehorse UPC based on the 2007 weather-normalized UPC and adjusted for the one-time load attributable to the Canada Winter Games resulted in a reduced Whitehorse normalized commercial average UPC forecast.

⁷ Application, page 2-4

Having concerns with YECL's response to CW-YECL-15(d), CW in its argument indicated that without the detail required to support these forecasts, serious doubt was cast on the UPC forecast for 2009.⁸ CW further pointed out that the one-time Canada Winter Games adjustment did reduce the Whitehorse normalized commercial average UPC in 2007, but was not significant enough to change the upward trend in commercial UPC in Whitehorse for the period from 2003 to 2007. CW stated that the three-year historical commercial UPCs were lower than their 2007 actual UPCs because the commercial customers outside the city of Whitehorse had UPCs that had trended upward for the years 2005 to 2007. In conclusion, CW submitted that YECL's downward trending commercial UPC forecasts for 2008 and 2009 are unpersuasive as the explanations provided in CW-YECL-14(d) and YEC-YECL-2(j) were general in nature, unconvincing and misleading.

YECL in reply argued that the fact that customer-specific information was not provided on the record does not detract from the validity of the positions presented by YECL in its evidence. Further, YECL submitted that the use of a three-year commercial UPC was common practice, was previously used and approved in the 1996-97 GRA, and should be accepted by the Board.

Views of the Board

The Board is not convinced that there is justification for the proposal by YECL to level off or reduce CW's UPC for the test period. The Board notes that UPCs for the commercial customers outside the city of Whitehorse, for the most part, have been increasing over the period 2005 to 2007. Therefore, the Board is not persuaded that the use of a three-year average justifies a decrease in commercial average UPCs for communities outside of Whitehorse. Further, the Board has concerns with the lack of data that forms the basis of the small load commercial customers connected to the system in 2009. The Board has concerns with the difficulties that YECL experienced in obtaining monthly UPC data⁹.

Considering the above, the Board finds that the commercial UPC forecast should be increased. The Board finds an increase of 2%¹⁰ is reasonable for the test years; 2% is in the lower range of values that represents YECL's consistent under forecasting and sales revenues. Accordingly, the Board directs YECL in its refiling to increase its commercial sales forecast by 2%. To be clear, the Board directs YECL in its refiling to increase its 2008 and 2009 MWh sales per customer¹¹ to 55.7 and 55.3 respectively.

Further, the Board directs YECL in its next GRA to provide a comparative study as to the analyses other utilities make use of to derive sales-revenue forecasts. The study should answer, but is not limited to, the following: What is the predominant methodology for forecasting sales revenues, i.e. averaging techniques, regression analyses, other? If averaging is used, what length of interval to average over is recommended and why? If

⁸ Detailed information on the new customers cannot be provided due to customer confidentiality; CW-YECL-15(d)

⁹ YEC-YECL-2(j).

¹⁰ The forecast range can be referenced in YEC-YECL-2(e) Revised, September 15, 2008 and Exhibit C1-18.

¹¹ GRA Application, Schedule 2.1

regression analyses are used, how many variables account for the variability, what value of R^2 is valid, what are other relevant statistics?

3 PURCHASE POWER

Purchase power costs included in the Application were expected to remain relatively flat for the test period:

Description ¹²	Actuals (\$000)		Test Period (\$000)	
	2006	2007	2008	2009
Primary Purchase Power	17,227	17,436	17,790	18,003
Secondary Purchase Power	1,130	1,194	1,028	424
Shortfall Rider J	4,882	5,017	5,028	5,067
Total Purchased Power	23,239	23,647	23,846	23,494

Approximately 90% of the power supply required by YECL is purchased from YEC. The purchases are for YECL's customers on the Whitehorse-Aishihik-Faro (WAF) and Mayo-Dawson (MD) grids. The amounts included in the Shortfall Rider J are related to YEC's Shortfall Rider J and are a flow-through for YECL.

YECL requested approval of two deferral accounts. The first deferral account is related to increases or decreases to the cost of purchased power, which was based on YEC's rates that were in place for primary energy and secondary sales¹³. YECL indicated that subsequent increases or decreases to these rates would be flowed through to YECL's customers. YECL also requested the continuation of the Diesel Contingency Fund (DCF) mechanism as approved in the 1996-97 GRA.

In its Application, YECL stated that Fish Lake hydro generation throughout the test period was based on the average generation over the last 10 years and adjusted for estimated downtime in the test period for required rebuilds. Intervenors took issue with the basis of YECL's Fish Lake hydro generation forecasts as well as the expensing of purchase power costs associated with the Fish Lake hydro rebuilds.

In its argument, YEC indicated that the DCF as established in the 1996-97 GRA settlement (Ex.C1-11, Tab 5) directed that "Rates and the fund will be determined using the long-term average water expected to be available for generation". YEC pointed out that the forecast Fish Lake generation (6.8 GW.h) at Fish Lake throughout the 2008 and 2009 test period was 3.8 GW.h below that which was forecast in the 1996-97 GRA and compared with 2007, the Application forecasts a reduction 2.8 GW.h in each test year.

YEC recommended that the Board direct YECL to adjust its Application so that Fish Lake hydro generation reflects the Fish Lake hydro long-term average water expected to be available for generation. YEC further recommended that the long-term average be

¹² YECL 2008-2009 General Rate Application, page 3-1

¹³ YECL 2008-2009 GRA Application; Schedule 3.1, lines 6 and 7

based on all years of available data and not, as was done in the Application,¹⁴ based on the last 10 years on record.

Contrary to YEC's argument, LE submitted that YECL should use a Fish Lake generation forecast that reflects recent practice, 6.962 GW.h per year, and that any generation below this actually experienced due to the required rebuilds should be clearly documented.

LE and YEC agreed and submitted in argument that YECL should be required to capitalize the purchase power required because of the Fish Lake Hydro rebuild. This would better reflect all relevant capital costs associated with the hydro rebuild and would avoid artificially raising test-year rates to recover added purchase power related to the Fish Lake Hydro rebuild.

In its reply argument, YECL indicated that relying on a 10-year average, adjusted for the planned rebuilds, was a reasonable approach considering the forecast output was higher than actual output in six of the last 10 years. Accordingly, YECL submitted that the forecast of purchase power, including the amount of generation from Fish Lake, was reasonable and appropriate for the test years and should be approved by the Board, as filed. With respect to the capitalization of purchase power costs associated with the Fish Lake rebuilds, YECL in its reply argument, submitted that it had followed a standard methodology in determining that these costs should be expensed and this approach should be approved by the Board.

Since there was little debate concerning the deferral accounts, YECL in its reply submitted that these deferral accounts should also be approved as requested.

Views of the Board

The Board acknowledges that enduring benefits will be provided to the facility and ratepayers as a result of the Fish Lake hydro rebuild. Further, the Board notes the capital costs associated with the rebuild are to be amortized over time due to the enduring benefits. The Board considered the YECL witness response that the incremental purchase costs from WAF related to the rebuild could be capitalized.¹⁵ Therefore, the Board finds it reasonable to amortize the increased power purchase costs directly related to the rebuild project over time.

Further, the Board notes LE's argument that indicated that incremental power purchases incurred because of the required rebuilds should be clearly documented. The Board agrees that this is a reasonable approach. Therefore, the Board directs YECL in its refiling to capitalize the forecast purchased power costs associated with the Fish Lake rebuild and to not treat these costs as an expense item in the test years. The Board further directs YECL at the time of its next GRA to provide clear documentation of these incremental power purchases from WAF due to the Fish Lake hydro rebuild.

¹⁴ The record that shows the basis for calculating the 10.042 GWh/yr average adopted in the 1996/97 GRA as well as the adjusted average when including the additional years of record now available; YEC Argument, page 13

¹⁵ Transcript; pages 275 - 276

The Board acknowledges that there was little debate regarding the deferral accounts described in the Application, i.e. the Diesel Contingency Fund and Rate from YEC¹⁶. Therefore, the Board approves YECL's request for continuation of the aforementioned deferral accounts (see Footnote 16).

The Board is concerned with the YECL's proposed Fish Lake hydro generation forecast of 6.2 GW.h for each of the test years, which is a 3.8-GW.h reduction from the 10 GW.h of generation proposed in YECL's last GRA. The Board notes that YECL's statement that the 10-year average for Fish Lake generation of 7 GW.h is higher than the actual output in six of the last 10 years¹⁷. However, the Board notes that the average generation for the years when output exceeded the 7 GW.h, the average generation for the four years was almost 9 GW.h.

In making a determination on this issue, the Board considered YECL's submission in argument that it is in a new water-licence period and is subject to certain restrictions. Further, the Board accepts YEC's suggestion that the available generation at the Fish Lake hydro plant should be based on all years of available data. Accordingly, the Board finds 8.73 GW.h¹⁸ is reasonable as the base generation for the Fish Lake hydro facility, prior to considering the impact of any downtime due to the Fish Lake hydro rebuilds. Therefore, the Board directs YECL in its refilling to reflect base hydro generation of 8.73 GW.h.

4 DIESEL FUEL COSTS

The following table¹⁹ shows total diesel fuel costs included in the Application:

	Actuals (\$000)		Test Period (\$000)	
	2006	2007	2008	2009
Diesel Fuel Costs	2,026	2,054	5,715	5,299

The forecast diesel fuel cost increase of \$3.6 million in 2008 is mainly due to the inclusion of the Rider F fuel rider in base rates for the test period.²⁰ The forecast diesel fuel cost decrease of approximately \$0.4 million in 2009 is due to reduced diesel generation in Pelly Crossing because of its interconnection to the WAF grid. YECL is seeking continuation of Rider F as well as a deferral account for the incremental costs associated with a change to the assumption that Pelly Crossing's connection to the WAF grid would be effective November 1, 2008.²¹

In its argument, LE pointed out that YECL has not proposed conservation or efficiency programs in its diesel communities despite incurring diesel fuel costs greater than \$5 million in 2006 and 2007. In light of the high diesel fuel costs, LE and YEC submitted

¹⁶ GRA Application; page 3-2

¹⁷ YUB-YECL-05 Attachment 1.xls

¹⁸

¹⁹ YECL 2008-2009 General Rate Application, page 4-1

²⁰ Prior to 2008, YECL recovered the difference between the forecast 1997 fuel rates and the current fuel rate using Rider F.

²¹ Pelly Crossing deferral account basis shown in the Application, page 4-3

that YECL should be directed to initiate energy conservation and efficiency programs in its isolated communities.²²

In respect of the proposed Pelly Crossing deferral account, LE and YEC argued that if the Board were to approve the deferral account, any delays in connecting Pelly Crossing to the WAF grid should be clearly documented and justified. Additionally in its argument, YEC submitted that the Board should seek clarification from YECL with respect to how the Pelly Crossing deferral account would provide benefits to ratepayers, should it be connected to the grid earlier than November 1, 2008.

In its reply argument, YECL stated that it was always amenable to participating in conservation programs albeit YECL's experience has been that such energy conservation and efficiency programs have typically been led by a government-based entity. With respect to the Pelly Crossing deferral account, YECL indicated that the requested deferral account clearly meets the standard criteria for the approval of such a mechanism and accordingly submitted that the deferral account should be approved, as requested.

Views of the Board

With respect to the proposed Pelly Crossing deferral account, the Board notes that the typical criteria used in determining whether to approve the use of a deferral account are the level of uncertainty regarding the accuracy of the forecast and the utility's ability to control the factors influencing the forecast. The Board agrees with YECL that the Pelly Crossing deferral account meets the standard criteria and is reasonable and appropriate.

The Board agrees that YECL's proposal to continue a diesel fuel price rider deferral account, in order to address differences between forecast and actual fuel prices, is reasonable and appropriate. Therefore, the Board approves YECL's proposal for a diesel fuel price rider.

5 OPERATIONS AND MAINTENANCE EXPENSES

For 2008 and 2009, YECL has requested approval of operations and maintenance expenses (O&M) totaling \$8.8 million and \$9.3 million respectively. The Board notes the actual O&M for 2006 was \$7.0 million while actual O&M for 2007 was \$7.3 million

5.1 Labour Costs

In regard to labour costs, YECL indicated that it had to respond to competitive market forces (i.e. the tight "south of 60" labour market, and the reluctance of people to move to the north when high-paying jobs are available in the south) by developing and offering a compensation package that provided a fair compensation.

Expectations were that an average job-class wage increase of 9.5% for 2009 would result from the fall 2008 negotiations.²³ For the test period, this agreement also provided

²² LE Argument, Page 9.

²³ The 2009-2010 collective agreement

wage increases related to certain job classifications that were technical in nature and mandatory to delivering safe and reliable service to customers. Additionally, commencing in 2009, YECL indicated that employees would also be entitled to additional travel benefits.

In argument, YECL stated that it had introduced programs that would assist it in attracting and retaining necessary resources, and its ability to provide safe and reliable service would be compromised if the cost pressures were not recognized and the associated O&M costs approved in its revenue requirement.

LE argued that YECL's staff remuneration proposals should be accepted but because of the significant increases, the approved FTE complement should be reduced. In its argument, YEC indicated that O&M labour cost increases from 2007 to 2009 equaled 36.7%, as compared with average annual increases of about 4.45% from 2003 to 2007. Further, YEC indicated that no requirement to pay the 9.5% existed in the collective agreement with YECL's employee association and the 9.5% figure was largely based on assumptions derived from remaining competitive with an Alberta-based market as opposed to a Yukon-based market.

YEC submitted that the Application had not provided sufficient evidence to support the 9.5% increase and recommended that the Board not approve a revenue requirement wherein the labour costs had yet to be negotiated.

In reply argument, YECL stated that it considered the information provided throughout the proceeding to be an accurate indication of what it would be required to pay under its own collective bargaining agreement for 2009. Further, YECL relied on the Sierra Systems to assist it in developing appropriate compensation measures that would assist it in remaining competitive in the marketplace.

In reply argument, YEC submitted that emerging market conditions suggested that caution should be taken in assuming that the tight labour market in western Canada would continue. YEC also submitted that a reasonable cap on overall O&M cost increases would avoid the need to interfere in the details of remuneration negotiations.

Views of the Board

The Board acknowledges the pressures that YECL has operated under with respect to maintaining its workforce complement, due to the tight labour markets in Western Canada in the past and the reluctance of people to move north. Although, as YECL stated in argument, no Intervenor took issue regarding the challenges that the utility faced with respect to securing and retaining qualified personnel over the past number of years, the Board must determine whether YECL has shown its forecast is reasonable.

The Board notes that YECL submitted the Application prior to entering into negotiations with its employee association. Further, the Board notes YECL employed the services of a third party to assist it in developing appropriate compensation measures that would help YECL retain its competitive position in the marketplace.

That being said, the Board has concerns respecting YECL's proposal for an average job-class wage increase of 9.5% for 2009 that YECL expects to result from the fall 2008 negotiations, considering the 22.5% increase in average compensation per FTE from 2007 to 2009. The Board notes that for the period from 2003 to 2007 the compensation increase was almost 18%, or 4.45% on average.²⁴ However, the 9.5% increase had not been negotiated at the time of the hearing. The Board is of the view that the tight labour market in western Canada is unlikely to continue seeing the emerging market conditions at the time of the hearing. As the Board considers the best available information at the time of the hearing, the Board is of the view that YECL has not shown that 9.5% increase in 2009 is reasonable. Rather the Board is of the view that the proposed increases for the test period are excessive. Further, the Board finds it reasonable to approve average annual compensation increases for the test period of 6.0%. Therefore, the Board directs YECL in its refile to reflect a compensation increase per FTE of 6.0% for each of the years in the test period.

5.2 Vacancy Rate

YECL proposed a vacancy rate of 4.0% (2.25 FTEs) to be applied to all labour expenses for 2008 and 1.7% (2.0 FTEs) for 2009.

In argument, YEC stated that, given the fact that YECL had not been before the Board for a review in more than 10 years, the historic FTEs and vacancies that have occurred over that period are essential to understanding, on a go-forward basis, the relationship between FTEs and safe and reliable operation of a utility.²⁵ YEC further argued that no evidence is available that would provide assurance that the programs proposed by YECL to reduce vacancies would be successful or that the vacancy rates would be materially different than those experienced over the past decade. Accordingly, YEC recommended that the Board set YECL's O&M costs for revenue requirements based on the evidence regarding actual YECL average annual vacancy rates from 2003 to 2007.

In its argument, CW indicated that the average actual vacancies from 2003 to 2007 was 3.5²⁶. Referring to YECL's response to CW-YECL-24, CW submitted that the downward pressure on the vacancy rates instituted by the Community Skills Premium would be offset by upward pressure created by employees wanting to work for other prominent companies in the north that offer superior benefits. Accordingly, CW submitted that the Board should rule that the FTE vacancy rate be 3.5 for both 2008 and 2009. YEC agreed with CW's recommendation.²⁷

In its argument, LE submitted that YECL's FTE be approved as 55.43 in 2008 and 2009, and that the approved vacancy rate should be 1 FTE. LE further argued that if YECL's Automated Meter Reading (AMR) project was implemented the number of FTEs should be automatically reduced by one.

²⁴ Exhibit C1-14; YEC Argument, page 21

²⁵ YEC Argument, page 22

²⁶ City of Whitehorse Argument, Section 5.0, Vacancy Rates; Undertaking document, page 7 of 212

²⁷ YEC Reply, page 22

In reply argument, YECL indicated an average vacancy-rate approach, if adopted for the test years, would ignore the extensive programs that YECL had implemented in order to address its resource requirements and the success of these programs. Further, contrary to CW's evidence, YECL's enhanced efforts and increased benefits are working as it has been able to fill the vacancies previously experienced. Therefore, YECL submitted that its forecast vacancy rate was reasonable and appropriate given the current circumstances and should be approved by the Board, as filed.

Views of the Board

Because of the lack of evidence in support of the vacancy forecast, the Board finds that YECL has not met its burden of proof and is not approving YECL's proposed FTE vacancy rate forecast. The Board agrees with YEC that there is no assurance that vacancy rates will be materially different than those experienced over the past decade. Considering the above, the Board finds a vacancy rate of 3.5, the average actual vacancies for the period 2003 to 2007, to be reasonable for the test years. Therefore, the Board directs YECL in its refiling to reflect a vacancy rate of 3.5 FTEs for each of the test years.

5.3 Non-Labour Costs

YECL forecast non-labour costs in two parts: (i) ongoing operational and administrative activities (O&A), and (ii) new programs or projects. For non-labour costs, YECL proposed that an Alberta-based inflation rate of 5.0% be applied for each of the test years. In the Application, YECL explained that ongoing O&A are based on historic spending requirements which are then adjusted for known changes in work to be completed in the forecast period.

In its argument, YECL iterated that Alberta rates remain appropriate as this is the location of YECL's parent company, from which it acquires a number of services and materials. Furthermore, YECL stated in response to YEC-YECL-9 that it had experienced inflationary increases at least as high as the Alberta inflation rate. Given that the year-on-year inflation rate to August 2008 was 4%, YECL submitted that its forecast for other inflation was reasonable and appropriate and should be approved as filed.

In argument, LE suggested, in consideration of the global economy, that it did not seem reasonable to source everything from the highest cost province. LE submitted the 5% inflation rate was inappropriate now with the global financial crisis and rapidly declining commodity prices.

Likewise, YEC suggested that a Yukon-based inflation rate would appear to be the most relevant inflation rate for a utility operating within the territory; this would provide for a 2.5% inflation rate. Further, in argument, YEC pointed out that "... YECL selected the highest year-over-year inflation rate since 1988 for any of Canada, Alberta, Whitehorse, and British Columbia ..." ²⁸ YEC recommended that the Board set YECL's O&M costs for revenue requirements based on the 2.5% inflation rate reported for the Yukon.

²⁸ YEC Argument; page 24

CW submitted in argument that the average increase for non-labour costs for the period 2004 through 2007 was 5.4% while for 2008 and 2009 it was 10.15%, a significant increase. CW further submitted that the 2008 and 2009 inflation rate for non-labour costs should be 3.25% based on a 50/50 weighting of the August 2007 to August 2008 Alberta CPI (4%) and the 2007 Whitehorse CPI (2.5%).

In reply argument, YECL stated that the local rates for Whitehorse, or macro-level rates for Canada, that fall below the 5% rate being utilized by YECL were not appropriate in the current circumstances. YECL indicated that the 5% rate used in the Application was still viewed as a reasonable rate for the two-year test period, given that the year-on-year inflation to August 2008 was 4%. Accordingly, YECL submitted that its forecast for other inflation was reasonable and appropriate and should be approved.

Views of the Board

The Board has concerns with approving YECL's proposed inflation rate of 5%, given that it was an Alberta-based rate and the year-on-year inflation rate to August 2008 was 4%. The Board further notes that the proposed 5% inflation rate represents the highest year-over-year inflation rate, i.e. Canada, Alberta, Whitehorse or British Columbia, since 1998.²⁹ Accordingly, the Board does not accept YECL's proposed 5% inflation rate for the two-year test period, as YECL has not shown it is a reasonable inflation rate.

Recognizing that YECL purchases a quantum of goods and services outside of the Yukon, the Board does not agree with YEC's recommendation to approve YECL's O&M costs for revenue requirements based solely on a Yukon inflation rate of 2.5%. The Board notes CW's suggestion regarding a hybrid inflation rate comprised of Alberta and Yukon CPI rates.

The Board finds it reasonable that the forecast non-labour inflation rate for 2008 and 2009 be 3.75%, which is calculated using a 50/50 weighting and inflation rates of 5.0% (Alberta) and 2.5% (Whitehorse).³⁰ The Board therefore directs YECL in its refiling to reflect in its revenue requirement, an inflation rate of 3.75% for its O&M costs other than labour.

The Board shares CW's concerns as to whether or not CPI is the appropriate inflation index to apply to the basket of goods and services purchased by YECL. Accordingly, the Board directs YECL in its next GRA to provide a study that compares what other utilities use as a basis for non-labour inflation rates.

²⁹ YEC-YECL-9(d)

³⁰ YUB-YECL-8(f)

5.4 Affiliate Costs

YECL out-sources certain major administrative functions to affiliate companies such as ATCO Electric (AE) to take advantage of the economies associated with the scope and scale of services available from a larger utility. In its Application, YECL indicated the costs of these services to be based on a fully allocated cost methodology that does not contain any element of profit or return.

Further, in addition to labour support provided from AE, YECL purchases information technology and billing system services from ATCO I-Tek and ATCO I-Tek Business Services respectively. YECL explained that these services were being reviewed as part of a benchmarking process and that a final report was to be filed by ATCO with the AUC. YECL stated that it would update the placeholders included in this Application once the appropriate reports had been finalized and approved by the AUC.

During the hearing, YECL indicated that the I-Tek costs were developed from the costs filed before the Alberta Energy and Utilities Commission (EUB) as part of a benchmarking study. When questioned by CW as to why YECL did not regard the rates in the Application as placeholders, to be changed at the time that those rates were fixed in Alberta, YECL's witness stated:

Again, given the exposure to more proceedings, given that I-Tek – the I-Tek does mirror the I-Tek rates that are in the benchmark report, because it is the same services for I-Tek that Yukon Electrical receives – that ATCO Electric receives. I do appreciate that there is an ongoing process, but to put it in perspective, from an ATCO position, we think the rates are final. Agreed they're not approved, so there could be some adjustments, but we're looking at \$300,000 in costs for Yukon Electrical compared to around \$50 million of I-Tek costs for the ATCO Utilities. So within that \$50 million, that number could change slightly. It's been a four-year process. I don't think it's going to be substantive, but there could be some slight changes. We felt that, rather than let Yukon Electrical get wrapped up in another process, the substantive savings have been captured and are reflected in this filing³¹.

In argument, CW indicated that it was prepared to accept YECL's explanation concerning why the Evergreen³² rates were not employed, i.e. that YECL received different billing services from I-Tek than does AE or ATCO Gas.

Further, notwithstanding this limited acceptance, CW indicated that it was not satisfied that the Alberta CPI rates of inflation used to inflate the benchmarking costs on an annual basis were appropriate. CW opined that information processing costs change at a different rate than the general CPI basket.

³¹ Transcript Volume 3, October 9, 2008 page 311 lines 15-26 inclusive.

³² A term used by CW in its Argument under the section for Affiliate Costs (page 20) which refers to a benchmarking process respecting IT and customer-care services that is ongoing before the Alberta Utilities Commission (AUC) in Alberta and involves such ATCO-regulated affiliates as ATCO Electric (AE) and ATCO Gas (AG) and the unregulated company known generically as ATCO I-Tek which provides the IT and customer-care services. The final decision on this AUC process will form the basis of costs from the unregulated entity (I-Tek) to the regulated companies (AE and AG) when the study is completed.

Although it might be more exact to use a placeholder for I-Tek rates, CW considered that it would be more efficient from the regulatory standpoint to accept these rates as final for setting YECL's rates. Finally, CW submitted that the Board should order YECL to file for information purposes the final I-Tek rates that result from the Evergreen process and the difference it would have made for revenue requirement for each test year once the Evergreen process is completed.

Views of the Board

The Board finds CW's proposal to accept these (I-Tek) rates as final for setting information technology and customer care rates appropriate from an efficiency standpoint. Accordingly, the Board approves YECL's proposed affiliate costs subject to the proviso that the inflation rate will be adjusted to the Board-approved inflation rate for non-labour costs (see above Section 5.3). The Board directs YECL in its refiling to align its proposed affiliate costs with the non-labour costs adjusted to reflect the Board-approved non-labour inflation rate.

5.5 Taxes Other Than Income

In its Application, YECL provided actual property tax values for 2006 and 2007 and forecast values for the years 2008 and 2009. Increases in property taxes were said to be primarily due to inflation. "Property taxes are paid ... annually for Yukon Electrical's office building, generation facilities, substation properties and power lines."³³ In its Application, YECL requested approval of \$249,000 for Taxes Other Than Income for 2008 and \$261,000 for 2009.

When questioned by Board counsel, YECL stated that the actual property tax rate for 2008 was 3.8%³⁴.

YECL was the only party to comment on this in argument where it said that the 7.5% increase for property taxes was the best information at the time and therefore the forecast amount should be approved.

In reply argument, YEC stated:

... the Board should direct that YECL's application be adjusted to provide for a property tax rate increase in 2008 of 3.8%, with consistent adjustments made as required also to the 2009 property tax forecasts³⁵.

³³ Application, page 6-1

³⁴ Transcript volume 3, October 9, 2008 page 389 lines 20-30 inclusive

³⁵ YEC Reply, page 26

Views of the Board

The Board agrees with the position of YEC that the 3.8% increase for 2008 is the most accurate and up-to-date information in this proceeding. Therefore, the Board directs YECL to use 3.8% as the increase in Taxes Other Than Income for 2008 over 2007 actual costs. The Board accepts the 4% forecast increase amount over 2008 costs for 2009 costs as proposed by YECL.

5.6 Depreciation

5.6.1 Equal Life Group (ELG) versus Average Service Life (ASL) methodologies

Depreciation for 2008 and 2009 for YECL was based on a depreciation study by Gannett Fleming Inc. (the Study). The Study based the depreciation rates on the straight-line whole-life method using the equal-group life procedure.³⁶ Attachment 1 of Section 7 of the Application contains the Study. Part I explains the scope, Part II describes the Study, and Part III provides the results. Depreciation expense, through the Study was determined to be \$4,365,000 for 2008 and \$4,837,000 for 2009. The Study is a continuation of the methods and assumptions utilized by YECL in the past. The position of YECL is that the ELG method has regulatory acceptance in several jurisdictions and provides better matching of asset consumption to depreciation expense.

In its argument, YEC stated that for regulatory consistency and to reduce test-year costs for ratepayers, YECL should have considered adopting the ASL approach as well as followed the Future Reserve for Site Restoration directions from Order 2005-12.

YEC contended that the ASL method was widely accepted in Canadian regulatory jurisdictions, was a means to balance utility and ratepayer interests, and was accepted by the Board in Order 2005-12.³⁷

YEC further submitted that rate stability is a consideration when determining a depreciation method and that such was a governing factor when choosing the method for YEC in its previous application.

LE was of the view that there was not enough evidence to suggest YECL should change the method of depreciation utilized.

In its argument, YECL stated that the depreciation method employed by YECL was the same method as previously utilized by YECL. YECL confirmed that it supports the expert evidence that Gannett Fleming provided. The YECL position is that the ELG method is technically superior, widely accepted, complies with International Financial Reporting Standards, and should not be changed based on a criteria to reduce the test year revenue requirement.

³⁶ Application, Section 7 – Attachment 1, page 2 of 158

³⁷ From YEC Argument, pages 16-17 inclusive

CW supported the position of YEC (ASL method) in reply argument on the basis of regulatory consistency (the same method utilized by YEC) and the effect of lowering costs and the revenue requirement.

YEC maintained its position that YECL did not propose a depreciation method that is accepted in Canada and would reduce ratepayer costs. Further, it did not make a case that the use of ASL is inappropriate. YEC contended that the question of technical superiority of ELG versus ASL was of no relevance or assistance to the Board³⁸. YEC submitted that consistent treatment of a depreciation method (the ASL method) is in the interests of current ratepayers and is not unfair to YECL.

LE said in its reply argument:

... the short term benefits of the ASL approach would be outweighed by the future higher ratepayer costs when who knows what other cost pressures there might be. The ASL is likely to be short term gain for long term pain. The better intergenerational fairness and the reduction in depreciation expense actually being realized should make it easy to stay the course and continue to use the ELG approach³⁹.

In its reply argument, YECL said "... that it was YEC, against the recommendation of its expert witness, that sought changes to the depreciation methodology previously approved by the Board, which is indeed consistent with Yukon Electrical's treatment as proposed herein⁴⁰." YECL further asserted that it was adopting the advice of its expert witness on the continuation of the depreciation method employed by YECL. Finally, YECL noted that the use of the ELG method was supported by LE.

5.6.2 Future Reserve for Site Restoration (FRSR)

The issue of FRSR did not appear in the Application. The topic did not come up until IRs were asked of YECL.

In argument, YEC said:

In Order 2005-12, notwithstanding arguments to the contrary from Yukon Energy and YECL, the Board also directed Yukon Energy to discontinue recording its annual depreciation provision for Future Removal and Site Restoration ("FRSR") costs effective January 1, 2005 (which the Board estimated in its Order at \$533,336), ordered a variance for Yukon Energy from Generally Accepted Accounting Principles ("GAAP"), and required that the December 31, 2004 balance in the FRSR account for Yukon Energy remain as a liability to be utilized for dismantling costs that are incurred in 2005 and future years⁴¹.

YEC further stated, "that YECL should be subject to the same treatment regarding FRSR depreciation as directed by the Board with regard to YEC in Order 2005-12⁴²."

³⁸ YEC Reply, page 29

³⁹ LE Reply, page 3

⁴⁰ YECL Reply, page 18

⁴¹ YEC Argument, page 14

⁴² YEC Argument, page 18

YEC got confirmation through YECL's response to YEC-YECL-II-2 that YECL has a form of FRSR⁴³ built into its depreciation rates and has a means for separately accounting for that amount. YEC contended that the arguments supporting the continuation of an FRSR item by YECL were parallel to those proposed by YEC in 2005 that were ultimately rejected by the Board. YEC added that the FRSR liability balance to the end of 2007 for YECL was \$4,688,111⁴⁴ and that the annual costs of FRSR for the test years were \$945,000⁴⁵ for 2008 and \$1,003,000⁴⁶ for 2009. YEC asked that for regulatory consistency for both utilities (YEC and YECL) and to show reductions that benefit ratepayers, that YECL should cease recording any provision for FRSR effective January 1, 2008. Forecast depreciation expense, as determined by YEC, would be reduced by \$945,000 in 2008 and by \$1,003,000 in 2009.

CW submitted that there should be consistency among Yukon utilities for FRSR. CW recommended that the FRSR equivalent be separated to determine total negative net salvage in the reserve and allow the Board and Intervenor to seek if FRSR is reasonable or needs to be capped.

In its argument, YECL stated that based on the testimony of its expert depreciation witness, it is only aware of YEC and B.C. Hydro using an FRSR fund. YECL's position was that the collection of negative net salvage had long been approved by the Board and was a widely accepted practice across North America. Finally, YECL submitted, "that the recovery of net negative salvage through tolls best complies with the depreciation objective to recover the service value of assets over there [sic] estimated lives, and best complies with regulatory fairness⁴⁷."

In reply CW stated:

While CW considers that it is appropriate to collect certain future costs in the present, over-collecting negative net salvage through rates results in present customers paying the cost of future customers. If the actual cost of site restoration and remediation is less than what was collected in rates, intergenerational inequity will result⁴⁸.

Further, CW agreed with YEC in that the accumulated negative net salvage value should be capped as at the end of 2007 and amounts for 2008 and 2009 should be removed from the depreciation rates. It was CW's view that this would bring consistent regulation and result in lower regulatory risk.

Consistency between the two utilities was necessary from the reply of YEC. YEC also noted that it did not choose the method determined by the Board in Order 2005-12. YEC

⁴³ YECL's form of FRSR is known as negative net salvage

⁴⁴ YEC-YECL-II-2(c) Attachment 2

⁴⁵ Ibid

⁴⁶ Ibid. The above two amounts \$945,000 and \$1,003,000 were net salvage for 2008 and 2009 respectively. To determine the ending balance for Accumulated Depreciation Net Salvage forecast net salvage amounts need to be removed. These amounts are -\$113,000 and -\$75,000 for 2008 and 2009 respectively.

⁴⁷ YECL Argument, page 21

⁴⁸ CW Reply, page 8

stated that YECL's arguments do not recognize that it was the Board that raised the FRSR issue in 2005 and decided that that was the approach to be taken in Yukon.

In its reply argument, YECL said that YEC is asking the Board to decide this topic based on a previous YEC proceeding and argued that if a decision was made on this basis, it could result in an error of law. YECL maintained that its treatment of negative net salvage was consistent with past practice, based on the expert testimony of its witness, and is widely applied across North America.

Views of the Board

The Board acknowledges that both the ELG and ASL methods are recognized in Canadian regulatory jurisdictions. Until 2005, both YECL and YEC utilized the ELG method when determining the amounts to be included in depreciation. The Board, with the exception noted below, finds that it is in agreement with the findings of the depreciation study undertaken by Gannett Fleming Inc. It is the Board's view that consistency is important and that it is not limited to methods employed across utilities but requires a consistent use of methodology within a utility. In this particular case, both YECL and YEC calculate depreciation and use depreciation expense to determine overall revenue requirement. YECL has demonstrated that it has consistently employed the same methodology. Therefore, the Board accepts the use of the ELG method by YECL.

With respect to FRSR, the Board is persuaded by the arguments of YEC and CW that consistency in this area is important. YECL responded that two critical facts were specific to YEC and those facts were not consistent with the circumstances of YECL: (1) YEC has recorded an Asset Retirement Obligation related to the legal requirement for the removal of facilities in compliance with Section 3110 of the CICA handbook; and (2) The company has recorded FRSR requirements into a separate balance sheet account⁴⁹. The Board is of the view that the substance of the circumstance of YECL is similar to that of YEC. That is, YECL has a salvage obligation and YECL has the ability and can account for amounts equivalent to FRSR. Whereas both YECL and YEC utilized acceptable depreciation methods, the treatment of FRSR or negative net salvage is not consistent between the two utilities. Given that the negative net salvage balance continues to grow, the Board does not believe that there is a need to continue to collect such amounts. YECL is to remove these amounts⁵⁰ from its depreciation expense for each of the test years and is not to include any amounts for negative net salvage until Board approval is provided. Further, the Board orders that the December 31, 2007, accumulated amount for net negative salvage be shown as a liability and be reduced as salvage costs are incurred for the years commencing with 2008. Similar to YEC, YECL is to inform the Board and interested parties when the balance for this liability account reaches \$2 million.

⁴⁹ YEC-YECL-17(g), page 4 of 6

⁵⁰ YECL is to remove from depreciation expense \$945,000 for 2008 and \$1,003,000 for 2009

5.7 Return on Rate Base

5.7.1 Cost of Capital

5.7.1.1 Capital Structure

YECL requested a capital structure consisting of 47.5%⁵¹ equity. The derivation of the capital structure and the rate of return on equity is provided in Attachment 1 of Section 8 of the Application in a report prepared by Kathleen C. McShane (Ms. McShane) of Foster Associates (Foster Report).

The Foster Report described the parameters of the engagement with YECL as follows:

Yukon Electrical Company Limited ("Yukon Electrical") has requested an expert opinion on fair return, comprised of both an appropriate capital structure and a return on equity (ROE) for the Company's 2008 and 2009 test years, using, for the express purpose of these two test years, the benchmark return on equity established by the Alberta Energy and Utilities Board (EUB) as a point of departure⁵².

Without restating the Foster Report, the approach used "... is to assess the specific regulated company's business risks then establish a capital structure that is compatible with its business risks and permits the application of the cost of equity determined by reference to proxies to the specific regulated company without any adjustment to the proxy companies' cost of equity"⁵³. This was determined through the following three principles outlined in the Foster Report⁵⁴:

1. The Stand Alone Principle
2. Compatibility of Capital Structure with Business Risks
3. Maintenance of Creditworthiness/Financial Integrity

In terms of business risk, the Foster Report said that YECL:

- Is exposed to a significantly higher degree of business risk than the typical electricity distribution utility in Canada;
- Is of higher than average business risk within the spectrum of Canadian utilities; and
- Is of similar business risk to its sister utility in the Northwest Territories, Northland Utilities (Yellowknife) Limited⁵⁵.

Further conclusions in the Foster Report were:

- Capital structures of YECL peers imply that the equity ratio for YECL should be no less than 50%.

⁵¹ Application, page 8-2

⁵² Application, Section 8, Attachment 1, page 1

⁵³ Application, Section 8, Attachment 1, page 4

⁵⁴ For a description of these principles and how they were applied to YECL, see Attachment 1 of Section 8 of the Application, pages 12 to 15 inclusive

⁵⁵ Application, Section 8, Attachment 1, page 22

- For YECL's business risk, debt rating agency guidelines suggest a capital structure of 45-55% equity.
- Financial metrics for YECL, with guideline ranges and comparisons for other electric utilities suggest an equity ratio for YECL to be in the upper end of the 47.5% to 52.5% range.
- Debt-rating agencies are commenting the equity ratios and returns for Canadian utilities are too low.

In argument, UCG stated:

UCG submits that this stand-alone principle falls apart when rationalizing YECL's proposal for raising its equity to debt structure as well as receiving a higher rate of return for being a small stand-alone company. Evidence above shows that YECL does not go out and raise debt on its own, nor do they stand alone when doing business with affiliates and mother corporation.⁵⁶

YEC argued that YECL's application violated several consistency principles. The requested increase in the equity component is, "... a material departure from the common equity ratios approved to date by the Board ...⁵⁷" YEC submitted that historically the equity ratio of YECL has been less than that of YEC and that the equity level and ROE as recommended by the Foster Report is higher than that of comparable Canadian utilities. YEC recommended that the equity ratio for YECL not exceed 40%⁵⁸.

CW refuted several of the business-risk assessments in the Foster Report. CW pointed out in its argument that the Minto mine was not a YECL customer and the secondary impact of a loss-of-mine load only comes after a lag. Further, CW cited the stability of the public administration sector in Whitehorse and the small amount of generation in YECL's asset portfolio as reasons to support a lower business risk assessment for YECL. In terms of comparing YECL to Northland Utilities (Yellowknife) Limited [NUL(YK)], CW noted that the last approved equity ratio for NUL(YK) was 40% and that YECL is nearly twice the size of that utility⁵⁹.

YECL reaffirmed the evidence of the Foster Report in its argument and noted that in Order 2005-12, the Board did not impose a precedent in Yukon when using the BCUC automated-adjustment mechanism. YECL noted that it argued against the BCUC automated-adjustment mechanism approach in YEC's 2005 application. The use of the BCUC, AUC or NEB approaches to determining the rate of return provided results essentially in the same range and YECL utilized this approach, "... as it would avoid an extensive debate over the appropriateness of using the traditional methods to determine return on equity ...⁶⁰"

YECL stated that the change in capital structure since their last time before the Board is, "... based on the changes that have occurred in the market and the conditions ...⁶¹"

⁵⁶ UCG Argument, page 3, point 18

⁵⁷ YEC Argument, page 35

⁵⁸ YEC Argument, page 39

⁵⁹ CW Argument, page 32

⁶⁰ YECL Argument, page 22

⁶¹ Ibid, page 24

YECL further argued that the three principles utilized in the Foster Report are widely accepted and that:

The fair return standard then requires that the combination of capital structure and ROE produce a return on capital which meets the three requirements of the fair return standard: these three requirements, the comparable returns standard, the financial integrity standard and the capital attraction standard⁶² ...

YECL reinforced its support for the stand-alone principle, stated that the capital structure and return should be maintained at a level similar to CU's high credit rating. A lower capital structure or return on equity would effectively create a cross-subsidization from CU Inc.

YECL summarized that it was a higher business risk than the typical electricity distribution utility in Canada and that the recommendation for capital structure was based on⁶³:

1. Capital structures allowed for YECL peers with any risk premiums adopted;
2. Actual capital structures maintained by other utilities;
3. Guidelines for capital structure and A debt ratings set forth by debt-rating agencies; and
4. Analysis of the resulting financial metrics.

CW replied:

In fact, Ms. McShane's recommendations result in an interest coverage that is well above the comparable returns of her own sample. Only the recommendation of CW of an ROE of 8.75% and an equity ratio in the 40-42% range results in an interest coverage ratio that is comparable to that of an average Canadian electric utility⁶⁴. YEC also noted that YECL was unable to identify any business risks that exceed those for the average Canadian utility⁶⁵.

CW submitted that:

... YECL has not established in evidence or provided any credible argument as to why its FFO interest coverage ratio should exceed the Canadian average and, therefore, why its equity thickness should lie outside the 40-42% range⁶⁶.

YEC replied that it agreed with CW in that YECL is less risky than YEC or NUL (YK). Assuming an ROE of 8.75%, YEC recommended an equity ratio that should be less than the range of 40-43%.

⁶² Ibid, page 25

⁶³ Ibid, page 26

⁶⁴ CW Reply, page 10

⁶⁵ Ibid, page 12

⁶⁶ Ibid, page 13

LE replied that in the past the Board has viewed YECL as a high-grade or low-risk utility⁶⁷. LE recommended an equity ratio of 47.5% on a return of 8.75% or an equity ratio of 42.5% on a return of 9.25%.

YECL replied that the YEC arguments do not consider the evidence in the Foster Report and that the business-risk concerns raised by CW were part of YECL's assessment.

Views of the Board

In response to YUB-YECL-33(c), YECL responded:

Yes, in principle Yukon Electrical would contribute to the size of CU Inc., and thus provide some small contribution to the size and diversification of the entity which provides its debt.

The Board interprets this response to mean that YECL also contributes (albeit in a small way) to the size, diversification and capital structure on AE. Given that capital in the form of either debt or equity flows to YECL through AE (or through CU), and that there is a strong management influence⁶⁸ on YECL through AE, and given the significant affiliated transactions and contracts between YECL, AE and other ATCO companies, this Board rejects the stand-alone principle in determining capital structure.

Responses to YUB-YECL-38(a) whereby YECL stated that YECL does not face a higher regulatory risk than a typical electricity distribution company in Canada and to YUB-YECL-34(e) where YECL stated that the ability to earn the allowed return is not a financial risk but a business regulatory risk give credence to the argument that YECL is not a high-risk utility.

The Board accepts the argument from CW that based on the equity ratio proposed by YECL the FFO⁶⁹ interest-coverage ratio is higher than that for other Canadian transmission or distribution utilities. The Board also accepts CW's argument that YECL has not satisfied the Board that YECL's business risks are higher than those of a typical distribution or transmission utility.

Further, in response to YEC-YECL- 40(c), YECL confirmed that YECL has operated at a capital structure of approximately 40-43% equity for the years 2003 to 2007. The Board is not satisfied that evidence has been placed before it which would warrant any upward movement in the equity ratio. Comparable evidence on equity thickness from CW-YECL-36(a) wherein EUB Decision 2004-052, the benchmark capital structure (equity) for electric transmission and distribution utilities is 33 and 37% respectively. CW-YECL-36(c) gives an equity ratio for Ontario distributors of 40%.

⁶⁷ LE Reply, page 4

⁶⁸ Page 5-3 of the application describes the affiliate costs. Page 5-4 describes the affiliated parties, and Schedule 5-3 quantifies the costs. In addition YECL has adopted operational policies such as ROW Maintenance, and is proposing to use AE to implement an AMR system

⁶⁹ FFO – Funds From Operations

The Board considered the statement⁷⁰ in the Foster Report that YECL is of similar business risk to NUL(YK). Oral testimony from YECL confirmed that the actual equity ratio had been approximately 40% and that the last approved (based on a Decision in 2005) equity ratio for NUL(YK) was 40%⁷¹.

The Board is not convinced that the YECL situation or risk profile has changed since its last approved equity ratio for 1997⁷² to warrant a substantial increase in the equity ratio.

For these reasons, the Board cannot accept the equity ratio as proposed by YECL. Given current market conditions which are discussed in the Cost of Debt Section, the Board directs YECL to use the last approved⁷³ equity ratio of 40% which is similar to the more recent (2005) PUBNWT Decision for the equity ratio of NUL(YK).

Finally, in arriving at its finding on this issue, the Board did not consider comments in reply argument by CW and YEC relating to PUBNWT Decisions 24-2008 and 25-2008. The Board considers these comments as new evidence that had not been discussed at the hearing.

5.7.1.2 Cost of Equity

The cost of equity is strongly linked to the capital structure. This was the position of YECL and largely acknowledged by the Intervenor. As noted above, Attachment 1 of Section 8 contains the Foster Report which provides the recommendation for the cost of equity for YECL. YECL accepted the recommendation in the Foster Report, that is, a capital structure of 47.5 % equity and a return on equity (ROE) of 9.25%. Much of the evidence on cost of equity is contained in the Capital Structure section and will not be repeated here.

In argument, UCG submitted that the benchmark rate of return proposed in YECL's application be denied. UCG made a recommendation for an overall rate of return but did not make a recommendation specific to the return on equity.

YEC expressed the following concerns in its argument:

More specifically, the approach adopted in the Application fails to follow past YUB practice with regard to determining a fair rate of return for YECL (based on Board decisions issued when YECL was previously reviewed by the YUB: 1992-1; 1992-2; 1993-8 and 1996-6), significantly deviates from the AUC benchmarking methodology which it "uses as a point of departure" for determining a fair return, and moves away from the approach utilized by YEC in 2005 to determine its return on equity during the Required Revenues and Related Matters hearing⁷⁴.

⁷⁰ Section 8, Attachment 1 - Foster Report, page 22.

⁷¹ Transcript Volume 2, October 8, 2008. Page 169 lines 5 to 27 inclusive

⁷² Board Order 1996-6, page 11 of 17, Schedule 4B.

⁷³ Board order 1996-6.

⁷⁴ YEC Argument, page 35

YEC argued that historically the Board has concluded that the business risk of YECL does not differ from that of a high-grade utility. YEC labeled the YECL approach as hybrid as it used a benchmarked rate from one jurisdiction and then made adjustments. YECL is a lower-risk utility when compared to YEC. YEC recommended that YECL use either the AUC benchmarked rate or the BCUC benchmarked rate plus premium (total return on equity would be 9.02%).

LE stated in argument: “A fair return on equity for YECL is probably lower for the proposed capital structure than is being requested”⁷⁵.

CW recommended in its argument a return on equity of 8.75%.

YECL stated in its argument:

The proposal to base the ROE on the AUC formula rather than re-determining the ROE from first principles recognizes that (1) a formula ROE similar to the AUC's currently governs most of the major Canadian utilities and (2) the validity of the existing formulas is currently undergoing review in two major jurisdictions, before the NEB and the AUC. The proposal to rely on the generic ROE as a point of departure was intended to be the most efficient means of addressing what is inherently a complex and costly matter, given the current state of ROE determination throughout Canadian regulatory jurisdictions⁷⁶.

In reply argument, CW reaffirmed its position that an ROE of 8.75% is appropriate.

YEC noted that although the formula-based approach is being review by the National Energy Board (NEB) and by the AUC, it was last reviewed by the BCUC in 2006 and hence is not under current review. YEC added that YECL stated the NEB, AUC and BCUC formulae within a range yield similar results. YEC recommended an 8.75% ROE with a deemed equity ratio of 40-43%.

LE did not accept YECL arguments that it is a higher risk than other Canadian utilities but did state that the recommendation made in its final argument is appropriate.

YECL disagreed with the position of YEC in its reply argument. YECL did state that it was prepared to accept a return of 9.14% based on the BCUC formula.

Views of the Board

The Board strongly agrees with the part of the YECL argument that states:

The proposal to rely on the generic ROE as a point of departure was intended to be the most efficient means of addressing what is inherently a complex and costly matter, given the current state of ROE determination throughout Canadian regulatory jurisdictions⁷⁷.

⁷⁵ LE Argument, page 6

⁷⁶ YECL Argument, page 23

⁷⁷ YECL Argument, page 23

YECL covers a geographically dispersed area with a relatively small customer base. It is incumbent upon the Board to explore ways that yield regulatory efficiency and yet provide fairness to all interested parties. In this regard, the Board supports a formula-based approach to determining ROE issues. YECL used the AUC Generic Cost of Capital as its starting point while YEC supports the BCUC formula⁷⁸. CW was also supportive of the BCUC generic cost of capital⁷⁹. Both YECL and YEC have argued that reference to a formula approach is efficient from a regulatory efficiency perspective. To reference a generic cost-of-capital approach from another jurisdiction, the Board must answer the following questions:

- Which generic cost-of-capital model should be used and from which jurisdiction?
- Should a risk premium be applied?
- If a risk premium is applied, what risk premium level should be applied to YECL?

Which generic cost-of-capital model should be used and from which jurisdiction?

Of the three models discussed (NEB, AUC, and BCUC) the BCUC model has been the most recently reviewed and is not under current review. In reply, YECL said it was prepared to accept a return based on the BCUC formula. Therefore, the Board directs that the BCUC generic cost of capital is the most appropriate as it has been the most recently reviewed, and is generally accepted by the parties.

Should a risk premium be applied?

In Appendix A to Board Order 2005-12, the Board accepted YEC's recommendation of a risk premium of 52 basis points and noted that it was greater than the risk premium for FortisBC and less than the risk premium for Pacific Northern Gas. YEC argued that it was more risky than FortisBC since FortisBC had inter-tie connections with other utilities allowing more purchase power options and affording greater flexibility to its generation. The evidence in the Foster Report, although related to capital structure, also suggested a risk premium for YECL. The Board accepts that when using the BCUC generic cost of capital, a risk premium is required for Yukon utilities.

What risk premium should be applied to YECL?

In its reply argument, YECL suggested a risk premium of 52 basis points, the same as YEC. However, the Board notes that YECL acknowledges that relative to YECL, YEC has more risk⁸⁰. The Board considered Appendix A of Board Order 2005-12 in finding that without the same inter-tie connections as FortisBC, YECL is more risky than FortisBC. As a result, the Board finds it reasonable to place the risk premium for YECL at the midpoint of the risk premiums between YEC and FortisBC — at 46 basis points. Therefore YECL is directed to use an ROE for 2008 of 9.08%. For 2009, YECL will use a risk premium of 46 basis points above the BCUC 2009 benchmark ROE.

⁷⁸ Appendix A to Board Order 2005-12, page 43. "Therefore, in their Application, YEC is proposing that the allowed return on equity be set by reference to the BCUC formula approach ..."

⁷⁹ CW Argument, page 28 where CW stated: "For regulatory consistency with YEC, CW would have preferred that YECL use the BCUC generic cost of capital as the appropriate point of departure."

⁸⁰ Transcript Volume 2, October 8, 2008. Page 206 lines 4-7 inclusive

5.7.1.3 Cost of Debt

In its Application, YECL forecast an embedded debt cost of 7.01% for 2008 and 6.83% for 2009.⁸¹ The embedded debt cost was calculated based on the weighted average of all debt issues. This included the actual existing historical debt issues plus the forecast amount and cost of debt to be issued in 2008 and 2009.

There was no controversy regarding the cost of the existing debt issues. However there was debate regarding the forecast cost of debt for 2008 and 2009.

Interest Rate Calculation Method

YEC took issue in argument with YECL's method of calculating the interest costs of new debt issued in 2008 and 2009. YEC indicated that YECL's method averaged the interest cost rate during the test year rather than taking into account the date that the new debt was expected to be issued. The Board notes that the Schedule 8.3 of the Application indicates that the new debt was forecast to be issued on November 20 of 2008 and 2009 and that debt in the past had often been issued on about November 20. In reply argument, YECL submitted that its mid-year rate-base method has been in place for decades and was consistent with the calculation of mid-year rate base, mid-year debt amount and mid-year work in process.

Views of the Board

The Board notes that YEC provided figures that indicated the impact of its proposed calculation method would lower the debt costs from 7.01% and 6.83% to 6.77% and 6.65% for 2008 and 2009, respectively. However, the record of the proceeding does not contain details of this calculation. Therefore, the Board did not consider this evidence as it had not been tested in the hearing.

The Board agrees with YECL that its mid-year method of calculation is consistent with past practice and is appropriate.

Forecast Debt Cost Rate

YECL forecast a cost of new debt for 2008 of 6.60%. This amount was derived as follows⁸²:

Forecast Long Canada Bond Yield	4.55%
Spread	2.00
Issue Costs	<u>0.05</u>
Total	6.60%

YEC submitted in argument that the Canada Long Term Bond yield should be 4.2% based on "current experience" and as supported by the updated forecast for six months to June 30, 2008, of 4.1% that was provided in YEC-YECL-39(g). The Board notes that YEC-YECL-39(g) indicates the 4.1% figure was presented as an actual average yield for the first six months of 2008, and not as an "updated forecast" as YEC indicates.

⁸¹ Application Schedule 8.1

⁸² Application, page 8-2, lines 10-14

In reply argument, YEC noted that each Intervenor had raised significant concerns regarding the debt rate. YEC submitted that CW had noted that YECL had ample warning that the forecast Canada bond yields in the 2008 test year would be significantly lower than forecast in November 2007. YEC supported the reductions in debt-rate costs recommended by CW for 2008 and 2009 debt issuances.

In argument, LE submitted that the fact that the actual Canada Long Term Bonds averaged 4.1% in the first half of 2008 and the fact that CU had issued 30-year debentures on August 18 at 5.573% (which would be mirrored down to YECL at 5.623%) indicated that YECL's 2008 forecast for the Canada Long Term Bonds and for the spread were conservative (favored YECL) and called into question the forecast for 2009.

In argument, YECL noted that its actual debt-cost rate for new debt in 2008 was 5.623% but submitted that the forecast included in the Application was based on the best information available at the time and should be accepted by the Board and approved.

In argument, CW submitted that YECL should be directed to use the actual debt cost of 5.623% for 2008, since it is now known. CW disagreed that the forecast debt cost was based on the best information available. CW stated that the 4.55% long Canada forecast was based on a November 2007 forecast employed by the EUB to determine its 2008 generic cost of equity. CW submitted that the fact that the average long Canada yield during the first half of 2008 was 4.1% should have indicated by the date of filing that a downward revision to the debt cost forecast was necessary.

In its argument, CW further submitted that YECL's debt-spread forecast of 200 basis points was apparently based on ATCO Gas' GRA request and was not based on the opinion of CU's staff. CW submitted that CU's actual debt issue cost of 5.623% combined with the "... actual first quarter [2008] long term Canada yield of 4.10% would indicate that the actual premium [spread] for CU's corporate bonds is approximately 150 basis points..."⁸³ CW submitted that YECL had or should have had ample indication by the time of filing that its forecasted cost of debt was too high. CW indicated: "Given the current financial conditions, Ms. McShane's forecast 2009 long term Canada rate of 4.5% may not be excessive."⁸⁴ However, CW argued that the spread should be reduced to 150 basis points "... based on the premium that CU actually commands in the financial markets."⁸⁵ Based on the 4.5% Canada yield, the 1.50% spread and 0.05% for issue costs, CW submitted that the allowed cost rate for debt issued in 2009 should be 6.05%.

CW added that if the Board did not reduce the costs for the 2008 and 2009 new debt issues as recommended then "... YECL will have embedded in its rates on an on-going basis an extra \$35,000 in debt costs that it will not actually incur."⁸⁶

⁸³ CW Argument, Section 8

⁸⁴ Ibid

⁸⁵ Ibid

⁸⁶ Ibid

In reply argument, CW reiterated its position that the 6.60% rate was not based on the best information available at the time. CW submitted that there was "... evidence that YECL knew at the time of filing that CU was actually issuing debt at a coupon rate that was well below its forecasted rate in the Application."⁸⁷ CW cited Transcript page 178 where YECL indicated that it had discussions with CU Inc. CW also argued that it was inconsistent of YECL to request that the amount of the issue be adjusted to reflect the actual issue amount but that the issue rate should not be adjusted to actual.

UCG submitted in argument that YECL had not produced evidence that its borrowing via CU Inc. allowed for a better interest rate for YECL and that YECL had admitted that it had not inquired into interest rates from any other financial institution. UCG also noted that the evidence indicated that AE charged a 0.05% fee above the CU opportunity cost. UCG noted that YECL's costs for new loan debentures in 2005 and 2007 has been 5.23% and 5.07% respectively and that interest rates and long term government bonds have had very little variation in 2005, 2006 and 2007. UCG submitted that there was not proper evidence that the 6.6% rate from CU inc. was a fair market value cost as no other institution was approached for the opportunity to compare. UCG submitted that this suggests that the 6.6% rate is inflated and not prudent and should not be passed on to ratepayers.

In reply argument, YECL reiterated that the 6.60% debt rate was based on the "best information available at the time the Application was prepared and, in a forward Test Year approach to regulation, should be accepted by the Board as filed."⁸⁸ YECL submitted that it is clearly the case that the mirroring down of debt costs from YECL's parent is clearly beneficial and are much more favorable than YECL could obtain on its own.

YECL said that the Board, "... must be cognizant of the fact that, while yields are indeed down, there has been an offsetting increase in spreads with the result that utilities would not be able to borrow at low rates"⁸⁹. YECL submitted that the evidence confirms that the requested rate for the test years may be modest, if anything. YECL submitted that its requested cost of debt should be approved as filed.

Views of the Board

The first issue for the Board to determine is whether or not information related to actual debt costs in 2008 that became available after the Application was filed should be considered.

In the Board's view it may consider the best available information that is on the record. Debt costs and its components are observable in the general market and are not entirely specific to any one utility. The Board finds that it can and should consider the updated information available on the record.

⁸⁷ CW Reply, page 10

⁸⁸ YECL Reply, page 23

⁸⁹ YECL Reply, page 24

The Board reviewed the evidence regarding debt costs for 2008 and 2009 based on the information on the record.

Regarding 2008, the Board considers that YECL has confirmed that its debt costs will be 5.623%⁹⁰. The Board is of the view that this is the best available information provided at the hearing on which to base its decision. The Board finds that YECL should use a debt rate of 5.623% for the debt issued in 2008.

Regarding 2009, the Board notes the evidence that actual government yields have declined substantially since the time of the 5.55% forecast that was used by AE. However, the Board notes that forecast debt costs for a future year are seldom exactly equal to prevailing actual debt costs when a forecast is made. The Board notes that no specific evidence regarding market forecasts of 2009 government interest rates was placed on the record or referred to in argument. The Board therefore cannot accept CW's argument that the government bond yield from the first portion of 2008 of 4.1% should be relied on as the forecast for 2009.

The Board also notes YECL's reply argument regarding the fact that increased spreads have offset the lower government yield rates.

The Board does not accept CW's argument supported by YEC that a spread of 150 basis points, based on their view of the indicated actual spread in August 2008, is appropriate. The Board notes that Intervenors did not provide evidence regarding 2009 debt-cost forecasts. Given the credit crisis and the increased spread costs which YECL has referenced, and the lack of alternative evidence regarding a forecast of 2009 interest costs, the Board accepts that YECL's forecast of 6.60% is a reasonable forecast of debt costs for 2009. The Board also notes that CW is not correct in suggesting that if actual borrowing costs turn out to be lower, then YECL will have embedded the higher costs in its rates on an ongoing basis. In fact, this rate would be updated to reflect the actual costs for purpose of future test years beyond 2009.

5.7.1.4 No Cost Capital

YECL included in its Application No Cost Capital amounts of \$669,000 and \$695,000 for the years 2008 and 2009 respectively. Amounts for deferred pensions including other post-employment benefit plans (OPEB) and the reserve for injuries and damages constituted the no cost capital amounts. Part of the increase for this item related to accounting for the OPEB on the cash basis starting in 2008.

Views of the Board

As there were no issues or concerns raised, the Board accepts the No Cost Capital amounts as filed.

⁹⁰ Transcript, page 179, line 25

5.7.2 Rate Base

5.7.2.1 Capital Additions

Page 8-4 of the Application describes at a high level the drivers for capital additions. Capital additions are discussed in Section 5.8 of the Application.

5.7.2.2 Contributions

YECL stated that contributions are received from customers in accordance with the company's investment policy and included contributions of \$2,560,000 and \$2,506,000 for the test years 2008 and 2009 respectively.

Views of the Board

As there were no issues or concerns raised, the Board accepts the customer contribution amounts as filed.

5.7.2.3 Deferred Charges and Credits

YECL included amounts for Rate Case Reserve, Diesel Plant Major Overhaul Reserve and Fish Lake License Renewal Costs in Deferred Charges and Credits.

Rate Case Reserve

YECL is proposing to use a deferral account to flow through to customers the costs associated with filing its 2008-09 GRA for both the Phase 1 and Phase II applications. YECL has forecast these costs to be \$750,000 over the test years. YECL submitted that the arguments of the Intervenor did not comment materially on the Rate Case Reserve account.⁹¹

In its response to YEC-YECL-45(c), YECL stated:

At the time of the 1996/97 proceeding Yukon Electrical did have a rate case reserve. In 2005, however, this treatment changed to be consistent with the treatment followed by YEC and supported in Board Order 2005-17.

In addition, YECL in its response to YEC-YECL-45(h) stated:

To be consistent with the treatment followed by YEC in its 2005-2006 GRA and supported by the Board Order 2005-17, Yukon Electrical adjusted its treatment of rate case costs in 2005 such that it was no longer accorded deferral account treatment for the period 1998-2007.

YECL also testified that by 2005 there was about \$450,000 in the Rate Case Reserve and that this reserve was for purposes of rate case issues.⁹² YECL explained that the \$450,000 reserve amount, "... was put into retained earning as a result of that decision [2005] which, from our perspective, as it related to 1996-97, which was a joint proceeding with joint rate hearing costs, we applied that decision to that."⁹³

⁹¹ YECL Reply, page 24

⁹² Transcript p. 87

⁹³ Transcript p. 87

YEC submitted that YECL established a Rate Case Reserve account after the 1996-97 GRA to which it allocated approximately \$75,000 each year for rate-case purposes, accumulating \$450,000 by 2005.⁹⁴ YEC added that YECL, from 1996 to 2005, charged annual expenses of about \$75,000 and reported such expenses annually to the Board until 2005. However, in 2005 the \$450,000 in the Rate Case Reserve account of YECL was taken into retained earnings of YECL, without review or approval of the Board. YEC submitted that the Board should determine if this YECL Rate Case Reserve was properly put into retained earnings given that at the time it was a rate payer account or whether this amount should be applied to the present Application's rate-case costs.

In its argument, LE submitted that it was disturbing that about \$450,000 of rate payers' contributions could be taken directly into retained earnings. LE added that this Reserve Account of ratepayers' money could pay for a large portion of the rest of this GRA for which ratepayers now have to pay again.⁹⁵

UCG submitted that the \$30,000 preliminary internal work on this GRA should be paid for by YECL rate case fund "... which Yukon Electrical now conveniently suggest is empty. This is even though Yukon Electrical has not been in front of this Board for some twelve years. If this is indeed the case, the Company should swallow this internal spending as does [sic] other parties in such processes." ⁹⁶ UCG further contended that the remainder of the \$720,000 be adequately broken down and identified.

Views of the Board

The Board finds that the uncontested evidence before the Board is that YECL, at the time of the 1996-97 GRA proceeding, had a deferral account, Rate Case Reserve, which by 2005 had accumulated in it the amount of \$450,000. The purpose of this account was to defray the costs of rate applications. In addition, YECL never asked the Board for approval to close this deferral account. The Board is of the view that YECL had to obtain approval to withdraw funds from this account or to close the account and convert the funds to retained earnings.

The Board considered the reasons given by YECL for its action regarding the deferral account, Rate Case Reserve. The Board finds it unreasonable that YECL unilaterally decided that the closing of this account was consistent with the treatment followed by YEC in its 2005-06 GRA. YECL has not provided to the Board any explanation for this position. Also, in the Board's view, Board Order 2005-17 does not support the YECL decision in this matter as this Order related to the YEC 2005 Revenue Requirement and directed YEC to revise the amount in its cost deferral account and to include the allowed hearing costs. Further, as the account was established and by 2005 YECL had not been before the Board with a GRA for a number of years, it would have been reasonable for YECL to assume that YECL would need the funds to defray the costs of a rate case when it filed its next GRA. The Board is supported in its findings by the fact that YECL is now seeking a deferral account, Rate Case Reserve of \$750,000 for the test years.

⁹⁴ YEC Argument page 46

⁹⁵ LE Argument page 9

⁹⁶ UCG Argument point 46

As a result, the Board directs YECL to re-establish the Rate Case Reserve Account with the initial balance of \$450,000 carried over from 2005 as the beginning balance in 2008 and allow provisions of \$150,000 for each of 2008 and 2009 to establish an ending balance in 2009 of \$750,000. YECL in its refilling must adjust its revenue requirement accordingly.

Furthermore, the Board directs that YECL must, in future, make an application to this Board to apply any amounts in this account to rate-case proceedings. In general, YECL cannot dispense with any balances in deferral or reserve accounts without prior Board approval.

Regarding Diesel Plant Major Overhaul Reserve and Fish Lake License Renewal Costs in Deferred Charges and Credits, the Board notes that no parties objected to these amounts; therefore, the Board accepts the amounts as filed by YECL except for the Rate Case Reserve, as noted above. The Board directs that YECL is to only use the amounts in these reserve accounts for the purposes for which they are intended. Other uses are not allowed without Board approval.

5.7.2.4 Working Capital

Working Capital amounts of \$2,805,000 and \$2,650,000 for 2008 and 2009 were included in the Application. No comments were received on working capital.

Views of the Board

The Board finds the working capital amounts and calculations in YECL's application to be reasonable. Therefore, the Board accepts the working capital amounts as filed.

5.8 Capital Additions

Section 9 of YECL's Application lists the capital additions for 2008 and 2009. YECL has forecast capital expenditures of \$9,560,000 for 2008 and \$13,504,000 for 2009. With the exception for the projects noted below, generally capital additions are for new extensions, distribution improvements, lights, meters, general plant and equipment, and generation.

Generic descriptions of each category and a listing of projects are detailed in pages 9-1 to 9-28 of the Application.

In argument, LE stated: "It is the author's view that the capital expenditures proposed in the Application are higher than is reasonable under the present circumstances⁹⁷..." LE further recommended:

YECL's approved capital expenditures should be reduced such that their net additions to rate base do not exceed \$6.5 million per year (in other words about \$9 million per year including contributions in aid of construction).⁹⁸

⁹⁷ LE Argument, page 6

⁹⁸ Ibid, page 10

YECL in its argument said:

Yukon Electrical submits that aside from the three projects identified above, that are new to the Test Period, it is “business as usual” for Yukon Electrical from a capital expenditure point of review. Yukon Electrical confirmed that it has available the resources necessary to complete its forecasted capital program (3T397). Yukon Electrical requests that its forecast of capital expenditures be approved as filed.⁹⁹

Views of the Board

The Board shares the concern of LE about the level of capital projects and the ability (resource availability) of YECL to complete all the projects included in the forecast years. The Board notes that YECL’s testimony is that it expects to complete the work in their capital plans in the test period.¹⁰⁰

Therefore, with the exception of the projects noted below, the Board accepts the values for the remaining capital expenditures to be reasonable and consistent with past practice. 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 Intervenor 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.

5.9 Carcross Diesel Power Plant

In its Application, YECL proposed to spend \$2.0 million for a new 1.5 MW power plant to be installed at Carcross in 2009. In accordance with the Board-approved Yukon Energy Corporation 20-Year Resource Plan, YECL indicated that communities with loads over 1 MW should have local generation to serve them if the grid should stop serving the community. Of the Intervenor, only LE supported the installation of the power plant noting the frequent outages and the fact that Carcross was the only significant established community in Yukon that did not have back-up diesel generation.

In its argument, UCG submitted that there was no justification for the expenditure, noting that there was no evidence or analysis on the record related to options in lieu of purchasing the diesel unit. YEC agreed with the UCG and explained in its argument that the WAF and MD grid Community Criteria in the 20-Year Resource Plan only suggested that communities over 1.0 MW would be considered as the preferred location for new diesel units, providing grid support as well as local generation during line failures. Further, highlighting this point, YEC pointed out that there was no current need for new diesel units to meet grid system requirements.

⁹⁹ YECL Argument, page 33

¹⁰⁰ Transcript Volume 3, October 9, 2008. Page 397, lines 1-6 inclusive

In argument, YECL confirmed that it was concerned with providing safe and reliable service to its customers and indicated that it had introduced Exhibit B-17 to highlight its reliability concerns and the need for backup generation. In its argument, YEC affirmed that there was no written evidence made available prior to the hearing to address local reliability concerns at Carcross and to consider options to address such concerns. YEC further argued that Exhibit B-17, which purported to justify the need for a diesel unit at Carcross by demonstrating statistics for the number of customers affected by outages, was at best misleading. Accordingly, YEC submitted that the Board should not approve the proposed Carcross diesel unit as an addition to YECL's rate base for the test years or any other near-term period.

YECL responded in reply argument that it was of the view that the approval of the Carcross generating station was necessary in order to provide an appropriate level of service to the Carcross-Tagish area. Further, all Yukon customers would benefit from the mobile nature of this standby plant. Accordingly, YECL submitted that the requested capital expenditure should be approved as filed.

Views of the Board

The Board notes LE's support of YECL's proposal to install the 1.5 MW genset in Carcross. However, the Board observes that LE in its argument indicated that YECL had neither examined alternatives nor performed a cost-benefit analysis regarding options to address reliability concerns in the area.

The Board has concerns respecting the lack of evidence on the record that YECL had explored other options with respect to mitigating the reliability in Carcross-Tagish area. The Board notes that tree-related outages have decreased noticeably since the introduction of YECL's new and improved brushing program.¹⁰¹ Further, in making its finding on this issue, the Board considered proposed distribution improvement programs in the area including line relocates¹⁰² and rebuilds¹⁰³ that include pole replacements. The Board finds that YECL has proposed these improvements to address safety and reliability issues in the Carcross-Tagish area. The Board further finds that these types of projects appear to be a reasonable alternative to YECL's proposed Carcross generator to address reliability concerns.

Considering the above, the Board is not convinced that the Carcross generator is the best option at this time to mitigate outages in the Carcross-Tagish area. Therefore, the Board does not approve the proposed Carcross diesel unit in YECL's rate base for the test years. Accordingly, the Board directs YECL in its refiling to reflect the removal of the proposed Carcross diesel unit from its proposed capital additions. Further, at the time of its next GRA, the Board directs YECL to present its business case respecting the Carcross genset if it is still the preferred option to mitigate reliability concerns in the area.

¹⁰¹ YECL Argument; page 17

¹⁰² Carcross Relocate, Application, page 9-25; Carcross Km 129-131.5, Application, page 9-18

¹⁰³ Tagish Road Rebuild, Application, page 9-18; Tagish Section to Taku 2.5 km, Application, page 9-25

In addition, the Board has concerns with YECL's response to YUB-YECL-1. YECL failed to provide recognized indicators that could be used to benchmark distribution reliability in the area and indicated that it tracks reliability on its system as a whole rather than on a line or feeder basis. Recognizing the importance of system reliability, the Board directs YECL in its next GRA to present industry recognized statistics that affirm the success of its projects and program initiatives that have safety and reliability as their basis.

Considering the number of miscellaneous pole-replacement projects YECL has proposed, the Board directs YECL to investigate the replacement of existing poles with taller poles as was suggested by LE and report back to the Board at the time of its next GRA. Further, the Board directs YECL at the time of its next GRA to provide a study that illustrates the initiatives that similar utilities (north of 60) are undertaking to address reliability concerns.

5.10 Haines Junction Diesel Plant

In argument, YECL indicated that it was very clear from the record that the rationale supporting the installation of the Haines Junction unit was as a result of extended outages and lengthy restoration times experienced with respect to this community. YECL submitted that should any residual confusion remain regarding the rationale for the installation of the Haines Junction diesel unit it has now been cleared up, as it had nothing to do with WAF grid capacity.

YEC replied that there was minimal information on the record regarding the need for the unit or any alternatives that were considered. YEC submitted that the Board should require YECL to provide such information prior to approving this unit's inclusion in rate base.

Views of the Board

The Board notes that YECL spent \$542,000 on a Haines Junction diesel unit and step-up transformer bank in 1997.¹⁰⁴ The Board notes YECL's argument that the unit was installed to address extended outage and lengthy restoration times. The Board will allow the Haines Junction diesel plant into rate base without prejudice.

5.11 North 60 New Billing System

In its Application, YECL proposed expenditures of \$1,008,000 (in 2008) for a new customer care and billing system. No business case was provided with the Application¹⁰⁵.

In argument, UCG noted that the billing system is over 10 years old and makes errors. UCG submitted that "the new billing system costs are not prudent and therefore should not be awarded to capital expenditures¹⁰⁶."

¹⁰⁴ YEC-YECL-25(a)

¹⁰⁵ The business case was later supplied as Attachment 1 to YUB-YECL 16(b)

¹⁰⁶ UCG Argument, point 37

LE was surprised that a new system would cost more to operate than an existing outdated system and recommended approval of the new billing system providing that YECL gives a detailed O&M cost comparison between the current system and the proposed new system.

YECL argued that the database technology of the existing billing system was no longer economically supportable. YECL further summarized:

Yukon Electrical confirmed that it is sharing the costs of the new billing system with the other Northwest Territories based ATCO Electric affiliates, in order to minimize costs to all ratepayers (3T337). Yukon Electrical submits that it has conducted an extensive examination to determine the most appropriate billing system for its use and has arrived at a cost effective solution that provides maximum benefits to customers¹⁰⁷.

In reply argument, UCG reaffirmed its argument and requested that the capital costs for this project be denied.

YEC in its reply argument said, "Of all three major capital projects included, the North of 60 Billing Project appears to have the most merit at this time, and Yukon Energy supports LE's recommendation."¹⁰⁸

YECL in its reply argument said that other than UCG no party objected to the new billing system. YECL further stated that the old billing system no longer had economies of scale and submitted that it approval should be given for this project.

View of the Board

Most parties appear to generally acknowledge that the old billing system is rapidly becoming obsolete and that past economies of scale for the operations of that system have been lost. The Board is concerned that YECL did not use an independent consultant to evaluate alternatives and make a recommendation. The use of ATCO I-Tek as the evaluator, criteria developer, and ultimately one of the vendors clouds the transparency of this decision.

The Board accepts that a new billing system is required by YECL and, absent other evidence, the evidence on the record supports YECL's choice for its new billing system. Therefore, the Board accepts the costs for a new billing system as filed.

5.12 Automated Meter Reading (AMR)

YECL included within the capital additions \$330,000 in 2008 and \$3,855,000 in 2009 for AMR installation. The business case for the AMR project was filed as Attachment 1 to YUB-YECL-15(c).

In argument, UCG asked that if the current meters are not broken then why is YECL required to fix them? UCG asked that the AMR costs be denied.

¹⁰⁷ YECL Argument, page 30

¹⁰⁸ YEC Reply, page 43

LE pointed out that some of the benefits listed for the project required further capital outlays. LE added that although it was stated that AMR would reduce meter reading errors, no quantifiable data was presented. According to LE, the AMR system would be more expensive to operate for the first eight years and if there was a 10% cost overrun it would be 15 years before AMR became the cost efficient alternative. LE argued that AMR was a weak project and should be deferred.

YEC argued the position that AMR is not essential, and given the requested increase in controllable costs by YECL, expenditures on AMR are not required. YECL recommended that AMR expenditures not be allowed in rate base for the test years.

CW noted that the AMR project could produce cumulative present value savings of \$901,400 over 25 years based on current assumptions and savings of \$550,000 and \$200,500 over the same period for cost overruns of 10% and 20% respectively. CW shared the same concerns as LE regarding the purported benefits and additional expenditures to achieve those benefits. Concerns about the overstatement of benefits of the AMR project created doubts CW had about the validity of the business case. CW did not oppose approval of the project but was concerned that significant cost overruns could make the project financially unsound. Based on those concerns, CW asked that a cap be placed on the capital expenditures and the level for the cap be placed at 10% above the current estimated cost.

YECL argued that the AMR project is justified based on cost saving over the life of the project. YECL further stated that, "... implementing AMR is a business altering development¹⁰⁹". The use of AMR by AE and Northwest Territories Power Corporation shows that AMR is a proven technology. YECL concluded that the record shows that AMR gives long and short term benefits to customers and should be approved as filed.

UCG replied that the costs do not warrant the benefits and therefore the cost for the project should be denied.

YEC replied that, "the AMR project is fraught with cost and other risks and lacks any justification as being required or essential for the test years¹¹⁰". YEC said it agreed with LE and UCG that the project should not be approved at this time.

In reply, YECL restated its position. YECL said the AMR project is justified solely upon economic benefits over the life of the project. YECL also said it was responsible to bring to the Board projects providing long-term benefits that extend beyond the test years. YECL rejected CW's recommendation that a cap be applied to the project.

Views of the Board

The Board has concerns with the business case for AMR. The business case has an escalation of 3% and yet YECL has asked for a 5% inflation rate over the test years. In the Board's view, several of the benefits in the business case appear overstated. That

¹⁰⁹ YECL Argument, page 30

¹¹⁰ YEC Reply, page 43

the cross-over of the benefits is nine years away¹¹¹ puts the economic benefits of the business case at risk. Due to these concerns, the Board is not prepared to accept this project at this time and directs YECL to remove this project and its costs from rate base. The Board encourages YECL to work with all Intervenor, 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 Intervenor, 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.

5.13 Income Tax

In its Application, YECL made a provision for income taxes of \$421,000 for 2008 and \$1,060,000 for 2009. Income taxes were calculated using the flow-through method whereby taxable income is minimized by claiming the maximum of all available deductions including capital cost allowances. Future taxes are not booked¹¹².

YECL has requested a Tax Rate Deferral Account, arguing that income taxes are not under the control of company and not reasonably forecastable; or an error in forecasting could produce a loss or gain of a substantial magnitude¹¹³.

In argument, LE stated that the based on his deduction, YECL is a low-risk utility and the potential deferral amount was small. In reply, LE contended that if income tax rates were going to be reduced, "(A)ny such benefit could have been passed on by including in the Application the anticipated lower tax rate or returning it in another fashion at their discretion (e.g. as no cost capital).¹¹⁴"

Views of the Board

The Board accepts the methodology used by YECL for the calculation of income taxes and expects YECL to use this method when it prepares its compliance filing. The Board is not persuaded by YECL's contention that notices of changes in tax rates are not received in sufficient time to be reasonably included in YECL's forecast. Therefore, the Board does not accept YECL's request for an income tax deferral account and directs that YECL not use such an account in its refiling.

The Board directs YECL to refile its 2008-09 revenue requirement to reflect the findings, conclusions and directions in the Reasons within 45 days of the issuance of the Order. Further, the Board directs YECL in its refiling, to provide a summary that sets out a detailed reconciliation of its requested revenue requirement for 2008 and 2009 in its Application to the revenue requirement resulting from the Board's determinations in the Reasons.

¹¹¹ The crossover can be even greater if there are cost overruns

¹¹² Application, page 10-1

¹¹³ Application, page 1-5

¹¹⁴ LE Reply, page 5

6. OTHER MATTERS

6.1 Independent Power Producers Policy

The Application did not contain any sections with respect to Independent Power Producers (IPPs) or Demand-Side Management (DSM). In Response to YCS-YECL-2, YECL said:

Yukon Electrical does not have a YUB approved rate for IPP's at the present time. It may be appropriate as a starting point to consider the avoided cost of diesel fuel as one option for pricing of IPP energy. Yukon Electrical is also not aware of any legislation that exists to allow sales of energy to the electrical grid by IPP's. Until the practices and policies are created in the Yukon, Yukon Electrical encourages IPP's to focus on off loading their own power requirements which in turn results in less fuel being burned at the central generation facility.

Yukon Electrical is open to discussions with any IPP who provides a safe, reliable and cost effective solution to offsetting the diesel fuel usage in the communities served by Yukon Electrical.

There were no comments in argument or reply argument on this issue.

Views of the Board

The Board notes the response by YECL to YCS-YECL-10:

With respect to the establishment of a regulatory and legislative framework, Yukon Electrical believes that this is a critical step that has yet to take place.

Should there be an interest in pursuing this topic further; Yukon electrical would be pleased to discuss it with the YUB, government as well as industry leaders.

The Board sees this as an important long-term issue, critical to security of supply in Yukon and of interest to Yukon ratepayers. Therefore, the Board directs YECL, in conjunction with YEC, to consult with stakeholders and develop a policy paper with respect to IPPs to be included as part of YECL's and YEC's next GRA.

6.2 Demand-Side Management (DSM)

The Board shares the concerns of LE submitted in argument; despite the significant fuel costs borne by all ratepayers, there are no DSM programs that reflect conservation and efficiency respecting electricity usage in communities served with isolated diesel plants. LE also noted in the YECL evidence where DSM programs were either strongly endorsed or at the least, did not provide a disincentive to a utility¹¹⁵.

¹¹⁵ LE Argument, page 3.

YEC in its reply argument said:

In this context, it makes sense for the Board to consider how YECL can have an incentive to consider active and effective conservation and efficiency programs in diesel served communities¹¹⁶.

YECL in its reply argument stated on page 11:

While Yukon Electrical is always amenable to participating in such programs, its experience is that conservation and efficiency programs are typically lead by a Government based entity, in furtherance of policy objectives and not spear-headed by an individual utility. Notwithstanding, Yukon Electrical remains open to discuss such programs with the Government, YEC and customers.

Views of the Board

The Board views DSM as another critical issue for Yukon. The Board directs YECL in conjunction with YEC, to consult with stakeholders and develop a policy paper with respect to DSM initiatives and include this policy paper as part of YECL's and YEC's next GRA. To be clear, YEC and YECL are to jointly lead these processes and jointly submit the policy papers (IPP and DSM) in their next GRA. The DSM policy papers are to provide DSM initiatives developed through negotiations with Intervenor and communities in its service territory and YEC's service territory.

¹¹⁶ YEC Reply, page 18.

7. HIGHLIGHTS OF BOARD DIRECTIONS

This section is provided for the convenience of readers and provides highlights of Board Directions. In the event of any difference between the directions in this section and those in the main body of the Board Order and Reasons for Decision, the wording in the main body shall prevail.

1. The Board finds, based on previous years' growth in residential customers, that the number of residential customers will increase by 1.7% in 2009. This 1.7% increase takes into account YECL's projections at the time of filing that there may be a shortage of developed lots in 2009. Accordingly, the Board directs YECL in its refiling to adjust its 2009 forecast with respect to the number of residential customer additions from 1.1% to 1.7%. To be clear, the Board directs YECL in its refiling to increase the number of residential customers to 12,908 from 12,836 currently in the forecast and to reflect this change in related schedules and its revenue requirement in the GRA. (Pages 5-6)
2. The Board directs YECL at the time of its next GRA to include comparisons of its analyses and the analyses undertaken by other utilities in Canada to arrive at sales revenue forecasts. The Board directs YECL at the time of its next GRA to include a detailed study as to what other jurisdictions consider a minimum value for R^2 that is acceptable in regression analyses. The Board directs YECL to undertake a study that compares the types of regression analyses that other utilities may use in order to arrive at their analyses. The Board is of the view that a 2% increase in YECL's residential UPC is reasonable as it appears to be the low end of the variance where actual residential UPCs exceed forecast YECL residential UPCs. Therefore, the Board directs YECL in its refiling to increase its residential UPC by 2%, and to reflect this increase in all related schedules and its revenue requirement for the test years. (Pages 6-7)
3. The Board is not persuaded that the use of a three-year average justifies a decrease in commercial average UPCs for communities outside of Whitehorse. Further, the Board has concerns with the lack of data that forms the basis of the small load commercial customers connected to the system in 2009. The Board has concerns with the difficulties that YECL experienced in obtaining monthly UPC data. Considering the above, the Board finds that the commercial UPC forecast should be increased. The Board directs YECL in its refiling to increase its commercial sales forecast by 2%. To be clear, the Board directs YECL in its refiling to increase its 2008 and 2009 MWh sales per customer to 55.7 and 55.3 respectively. Further, the Board directs YECL in its next GRA to provide a comparative study as to the analyses other utilities make use of to derive sales-revenue forecasts. (Page 8)

4. The Board finds it reasonable to amortize the increased power purchase costs directly related to the Fish Lake rebuild project over time. The Board directs YECL in its refiling to capitalize the forecast purchased power costs associated with the rebuild and to not treat these costs as an expense item in the test years. The Board further directs YECL at the time of its next GRA to provide clear documentation of these incremental power purchases from WAF due to the Fish Lake hydro rebuild. The Board approves YECL's request for continuation of the deferral accounts outlined on Page 11. The Board is concerned with the YECL's proposed Fish Lake hydro generation forecast of 6.2 GW.h for each of the test years, which is a 3.8-GW.h reduction from the 10 GW.h of generation proposed in YECL's last GRA. The Board accepts YEC's suggestion that the available generation at the Fish Lake hydro plant should be based on all years of available data. Accordingly, the Board finds 8.73 GW.h is reasonable as the base generation for the Fish Lake hydro facility, prior to considering the impact of any downtime due to the Fish Lake hydro rebuilds. Therefore, the Board directs YECL in its refiling to reflect base hydro generation of 8.73 GW.h. (Pages 10-11)
5. The Board agrees with YECL that the Pelly Crossing deferral account meets the standard criteria and is reasonable and appropriate. The Board agrees that YECL's proposal to continue a diesel fuel price rider deferral account, in order to address differences between forecast and actual fuel prices, is reasonable and appropriate. Therefore, the Board approves YECL's proposal for a diesel fuel price rider. (Page 12)
6. The Board has concerns respecting YECL's proposal for an average job-class wage increase of 9.5% for 2009 that YECL expects to result from the fall 2008 negotiations, considering the 22.5% increase in average compensation per FTE from 2007 to 2009. The Board is of the view that the proposed increases for the test period are excessive. Further, the Board finds it reasonable to approve average annual compensation increases for the test period of 6.0%. Therefore, the Board directs YECL in its refiling to reflect a compensation increase per FTE of 6.0% for each of the years in the test period. (Page 14)
7. The Board finds a vacancy rate of 3.5, the average actual vacancies for the period 2003 to 2007, to be reasonable for the test years. Therefore, the Board directs YECL in its refiling to reflect a vacancy rate of 3.5 FTEs for each of the test years. (Page 15)
8. The Board does not accept YECL's proposed 5% inflation rate for the two-year test period, as YECL has not shown it is a reasonable inflation rate. Recognizing that YECL purchases a quantum of goods and services outside of the Yukon, the Board does not agree with YEC's recommendation to approve YECL's O&M costs for revenue requirements based solely on a Yukon inflation rate of 2.5%. The Board notes CW's suggestion regarding a hybrid inflation rate comprised of Alberta and Yukon CPI rates. The Board finds it reasonable that the forecast non-labour inflation rate for 2008 and 2009 be 3.75%, which is calculated using a 50/50 weighting and inflation rates of 5.0% (Alberta) and 2.5% (Whitehorse). The Board therefore directs YECL in its refiling to reflect in its revenue requirement, an inflation rate of 3.75% for its O&M costs other than labour. The Board directs

YECL in its next GRA to provide a study that compares what other utilities use as a basis for non-labour inflation rates. (Page 16)

9. The Board finds CW's proposal to accept the I-Tek rates as final for setting information technology and customer care rates appropriate from an efficiency standpoint. Accordingly, the Board approves YECL's proposed affiliate costs subject to the proviso that the inflation rate will be adjusted to the Board-approved inflation rate for non-labour costs. The Board directs YECL in its refiling to align its proposed affiliate costs with the non-labour costs adjusted to reflect the Board-approved non-labour inflation rate. (Page 18)
10. The Board agrees with the position of YEC that the 3.8% increase for 2008 is the most accurate and up-to-date information in this proceeding. Therefore, the Board directs YECL to use 3.8% as the increase in Taxes Other Than Income for 2008 over 2007 actual costs. The Board accepts the 4% forecast increase amount over 2008 costs for 2009 costs as proposed by YECL. (Page 19)
11. With respect to FRSR, the Board is persuaded by the arguments of YEC and CW that consistency in this area is important. Given that the negative net salvage balance continues to grow, the Board does not believe that there is a need to continue to collect such amounts. YECL is to remove these amounts from its depreciation expense for each of the test years and is not to include any amounts for negative net salvage until Board approval is provided. Further, the Board orders that the December 31, 2007, accumulated amount for net negative salvage be shown as a liability and be reduced as salvage costs are incurred for the years commencing with 2008. Similar to YEC, YECL is to inform the Board and interested parties when the balance for this liability account reaches \$2 million. (Page 22)
12. The Board cannot accept the equity ratio as proposed by YECL. Given current market conditions which are discussed in the Cost of Debt Section, the Board directs YECL to use the last approved equity ratio of 40%. (Page 27)
13. YECL is directed to use an ROE for 2008 of 9.08%. For 2009, YECL will use a risk premium of 46 basis points above the BCUC 2009 benchmark ROE. (Page 29)
14. The Board finds that YECL should use a debt rate of 5.623% for the debt issued in 2008. (Page 33)
15. As there were no issues or concerns raised, the Board accepts the No Cost Capital amounts as filed. (Page 33)
16. As there were no issues or concerns raised, the Board accepts the customer contribution amounts as filed. (Page 34)
17. The Board directs YECL to re-establish the Rate Case Reserve Account with the initial balance of \$450,000 carried over from 2005 as the beginning balance in 2008 and allow provisions of \$150,000 for each of 2008 and 2009 to establish and ending balance in 2009 of \$750,000. YECL in its refiling must adjust its revenue requirement accordingly. Furthermore, the Board directs that YECL must, in future, make an application to this Board to apply any amounts in this account to rate-case proceedings. In general, YECL cannot dispense with any balances in deferral or reserve accounts without prior Board approval. Regarding Diesel Plant Major

Overhaul Reserve and Fish Lake License Renewal Costs in Deferred Charges and Credits, the Board accepts the amounts as filed by YECL except for the Rate Case Reserve. The Board directs that YECL is to only use the amounts in these reserve accounts for the purposes for which they are intended. Other uses are not allowed without Board approval. (Page 36)

18. The Board finds the working capital amounts and calculations in YECL's application to be reasonable. Therefore, the Board accepts the working capital amounts as filed. (Page 36)
19. With the exception of the projects noted, the Board accepts the values for the remaining capital expenditures to be reasonable and consistent with past practice. 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. (Page 37)
20. The Board finds that YECL has proposed improvements to address safety and reliability issues in the Carcross-Tagish area. The Board further finds that these types of projects appear to be a reasonable alternative to YECL's proposed Carcross generator to address reliability concerns. The Board is not convinced that the Carcross generator is the best option at this time to mitigate outages in the Carcross-Tagish area. Therefore, the Board does not approve the proposed Carcross diesel unit in YECL's rate base for the test years. Accordingly, the Board directs YECL in its refiling to reflect the removal of the proposed Carcross diesel unit from its proposed capital additions. Further, at the time of its next GRA, the Board directs YECL to present its business case respecting the Carcross genset if it is still the preferred option to mitigate reliability concerns in the area. The Board directs YECL in its next GRA to present industry recognized statistics that affirm the success of its projects and program initiatives that have safety and reliability as their basis. The Board directs YECL to investigate the replacement of existing poles with taller poles as was suggested by LE and report back to the Board at the time of its next GRA. Further, the Board directs YECL at the time of its next GRA to provide a study that illustrates the initiatives that similar utilities (north of 60) are undertaking to address reliability concerns. (Page 38)
21. The Board notes that YECL spent \$542,000 on a Haines Junction diesel unit and step-up transformer bank in 1997. The Board notes YECL's argument that the unit was installed to address extended outage and lengthy restoration times. The Board will allow the Haines Junction diesel plant into rate base without prejudice (Page 39)
22. The Board accepts that a new billing system is required by YECL and, absent other evidence, the evidence on the record supports YECL's choice for its new billing system. Therefore, the Board accepts the costs for a new billing system as filed. (Page 40)

23. The Board is not prepared to accept the AMR project at this time and directs YECL to remove this project and its costs from rate base. The Board encourages YECL to work with all Intervenors, 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 Intervenors, 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. (Page 42)
24. The Board accepts the methodology used by YECL for the calculation of income taxes and expects YECL to use this method when it prepares its compliance filing. The Board is not persuaded by YECL's contention that notices of changes in tax rates are not received in sufficient time to be reasonably included in YECL's forecast. Therefore, the Board does not accept YECL's request for an income tax deferral account and directs that YECL not use such an account in its refiling. (Page 42)
25. The Board directs YECL to refile its 2008-09 revenue requirement to reflect the findings, conclusions and directions in the Reasons within 45 days of the issuance of the Order. Further, the Board directs YECL in its refiling, to provide a summary that sets out a detailed reconciliation of its requested revenue requirement for 2008 and 2009 in its Application to the revenue requirement resulting from the Board's determinations in the Reasons. (Page 42)
26. The Board directs YECL, in conjunction with YEC, to consult with stakeholders and develop a policy paper with respect to IPPs to be included as part of YECL's and YEC's next GRA. (Page 43)
27. The Board directs YECL in conjunction with YEC, to consult with stakeholders and develop a policy paper with respect to DSM initiatives and include this policy paper as part of YECL's and YEC's next GRA. To be clear, YEC and YECL are to jointly lead these processes and jointly submit the policy papers (IPP and DSM) in their next GRA. The DSM policy papers are to provide DSM initiatives developed through negotiations with Intervenors and communities in its service territory and YEC's service territory. (Page 44)