

**In the Matter of the *Public Utilities Act*  
Revised Statutes of Yukon, 2002, c. 186 as Amended**

**and**

**An Application by Yukon Energy Corporation  
For Approval of 2005 Revenue Requirements**

**REASONS FOR DECISION**

**Background**

Yukon Energy Corporation (“YEC”, “the Company” or “the Applicant”) is the main generator and transmitter of electricity in the Yukon, accounting for more than 90% of annual power generation, and providing 69 kV or 138 kV transmission facilities for the Whitehorse-Aishihik-Faro (“WAF”) and Mayo-Dawson grid systems. YEC directly serves approximately 1700 customers at the distribution retail level, which represents about 11% of all electrical customers in the Yukon. Indirectly, YEC provides power to most other Yukon retail customers served on the WAF and Mayo-Dawson systems through wholesale electricity sales to the Yukon Electrical Company Ltd. (“YECL”).

**Application**

On December 13, 2004, YEC filed with the Yukon Utilities Board (“the Board” or “YUB”) pursuant to the *Public Utilities Act* (“the Act”) and Order-in-Council 1995/90, an Application for 2005 Required Revenues and Related Matters (“the Application”) requesting approvals that would:

- 1) Establish 2005 Revenue Requirements (excluding the Income Stabilization Trust, (“IST”), transfers) as set out in the Application of \$26.757 million, including:
  - a) Operating and Maintenance costs for 2005 of \$11.254 million, including approval to adjust diesel fuel prices used in fuel costs to reflect current forecasts, approval to apply the one-time deferred fire insurance gain arising from the favourable settlement of the Whitehorse Rapids fire claim of \$744,000 against the current outstanding balance in the YEC Reserve for Injuries and Damages, and approval to increase the annual appropriation to the YEC Reserve for Injuries and Damages to \$150,000 from the current \$50,000 level;
  - b) Depreciation and amortization expenses for 2005 forecast of \$6.03 million, including approval to reduce YEC’s depreciation rates for fixed assets (by approximately \$1.2 million) to reflect changes to service lives, salvage rates, and group procedure as set out in the Application;

- c) Mid-year 2005 Forecast Rate Base costs of \$142.514 million, including costs for capital works projects brought into service since the 1996/97 GRA (including the relevant costs associated with the Mayo-Dawson transmission line) as well as deferred costs (including deferred costs related to this Application) and working capital forecasts to be included in Rate Base; and
  - d) Return on Rate Base of \$9.473 million for 2005, including an allowed return on common equity of 9.05% set by reference to the British Columbia Utilities Commission (“BCUC”) rate of return on equity (“ROE”) automated adjustment mechanism.
- 2) Establish a new IST as set out in the Application, and confirm existing firm rates until at least 2007 based on the current forecasts, including approval:
- a) To assign in 2005 the deferred Faro mine site Rate Schedule 34 revenues and the balance of the Diesel Contingency Fund (“DCF”) amounts (forecast to be \$2.8 million) to a new YEC trust account (the “IST”) outside of YEC’s Rate Base for use in stabilizing YEC’s income such that YEC will not require any general retail rate increases until after 2007 based on current forecasts;
  - b) To use transfers from the IST as set out in the Application to fund YEC forecast revenue shortfall for 2005 as required to prevent any adjustments in firm rates;
  - c) After 2005, to transfer to YEC’s income in each subsequent year, out of the then remaining IST account, an amount equal to the lesser of the 2005 transfer from the IST account as approved by the Board, and the balance of the IST account;
  - d) Starting in 2005, to assign to the IST an amount equal to any interest forgiven on the Mayo Dawson Note, less any portion that is used to cover costs incurred to supply power to Dawson; and
  - e) To confirm existing firm rates of YEC, excluding Rate Schedule 34, which is requested to be terminated below.
- 3) Establish changes to the Secondary Energy Rates Schedules effective January 1, 2005, for interruptible surplus hydro generation as set out in the Application, including approval:
- a) To establish a new Secondary Sales rate schedule and related quarterly rate-setting mechanism as set out in the Application to maintain the Secondary Energy rate at 70% of the customers’ avoided cost of heating with fuel oil;
  - b) To establish new terms and conditions for Secondary Energy services as set out in the revised Rate Schedules 32 and 43 of this Application; and
  - c) To use the Rider F Deferred Fuel Price account to normalize the Secondary Sales revenues for any changes after January 2005 to the Secondary Sales retail rate from the 5.5 cents/kW.h forecast in this Application.

- 4) Eliminate Rate Schedule 34 Faro Mine Firm Shutdown Power and change the Customer to normal General Service – Government rate schedule effective January 1, 2005;
- 5) Establish Interim refundable rates effective January 1, 2005, for the above requested Secondary Energy and Faro mine site rate schedules;
- 6) Establish a new voluntary Green Power Rate as set out in the Application to allow those individuals interested in supporting wind and other green power initiative to do so; and
- 7) Amend the Electric Service Regulations to increase the General Service Maximum Utility Investment, establish a new Secondary Energy Maximum Utility Investment, and update the definition of “interconnected system”.

Board Order 2004-1 approved an interim refundable increase to rates for the Company’s Secondary Energy customers of 2.2 cents per kW.h to 5.5 cents per kW.h, from 3.3 cents per kW.h, for retail customers and 4.4 cents per kW.h for wholesale customers, from 2.5 cents per kW.h, effective January 1, 2005. Order 2004-1 also approved the requested increase to the Faro mine site rate on an interim refundable basis effective January 1, 2005, both of which satisfy the requested approval number 5, above, whereby YEC requested that the Board approve the requested rate increases on an interim refundable basis.

Board Order 2004-1 further scheduled a workshop on January 13, 2005, to review the Application and a Pre-hearing Conference for January 14, 2005. A draft issues list and a regulatory timetable prepared by Board staff were distributed to participants at the workshop. Mr. McMahon also provided written suggestions for the issues list. The Board received comments and submissions from Intervenor on the draft issues list and the draft regulatory timetable at the Pre-hearing Conference. The Board determined that a final issues list and regulatory timetable would be required and issued Board Order 2005-2 on February 4, 2005, establishing a regulatory timetable to hear the YEC Application. The order also established a final issues list that would be the focus of the hearing (Exhibit A-8). The Regulatory Timetable is set out as Appendix B to Order 2005-2, ordering an oral public hearing commencing April 18, 2005. The final issues list is set out as Appendix C to Board Order 2005-2.

YEC's Board of Directors requested that the Auditor General review the Mayo-Dawson Transmission line project from a project management perspective, to determine why cost overruns occurred and how YEC may correct deficiencies in their contracting practices in future in order to ensure that other projects of the magnitude of the Mayo-Dawson line are properly controlled. Specifically, the audit focused on the areas of feasibility and cost-benefit analysis, overall project management, contracting practices, project implementation, financial management and cost controls, and adherence to original project specifications. The Auditor

General's Report on the Mayo-Dawson line was issued on February 7, 2005, and became an exhibit (Exhibit B1-6).

Review of the Application proceeded through an interrogatory process, which included Information Requests, ("IRs") on the Application and the Auditor General's Report on the Mayo-Dawson Transmission line. One round of IRs was permitted from Intervenor, with IRs pertaining to the Application due by February 11, 2005, and IRs pertaining to the Auditor General's Report due on February 14, 2005. IRs were received by YEC from the YUB, YECL, the Utilities Consumers' Group ("UCG"), Deloitte and Touche, the Ad Hoc Group of Businesses ("AGB"), the Yukon Conservation Society ("YCS"), Gary McRobb ("McRobb"), and Pat McMahon ("McMahon"). YEC responded to IRs pertaining to the Application on March 4 and the Auditor General's Report on March 7, 2005.

Intervenor was entitled to submit evidence on March 18, 2005, on which YEC issued IRs by March 24, 2005. Intervenor responded to YEC's IRs on April 8, 2005. Intervenor evidence was filed by UCG (Exhibit C3-12), AGB (Exhibit C7-3), and YECL (Exhibit C14-11). Intervenor evidence from Mr. G. Clark of Boston Pizza (Exhibit D1-2) in Whitehorse was filed on March 29, 2005. YEC issued IRs on March 24, 2005, relating to the YECL and AGB evidence. Responses to YEC's IRs were received on April 8, 2005. YEC filed rebuttal evidence to the Intervenor evidence on April 15, 2005 (Exhibit B1-28). At the same time, YEC also notified the YUB, Intervenor and Interested Parties that they were withdrawing their Green Power Rate proposal that forms section 4.4 of the Application due to administrative, cost, and logistical difficulties in implementing the proposed rate within the YECL billing system. Specifically, YEC was informed that the cost of billing the Green Power Rate would exceed 50% of the actual revenues derived from the Rate, such that it undermines the purpose of the proposed Green Energy Rate. YEC further states that they will revisit the Green Power Rate proposal once they have determined a cost-effective billing method that would make the Green Power Rate economical to administer (Exhibit B1-28).

An oral public hearing convened on April 18, 2005, at the Yukon Inn in the City of Whitehorse, Yukon Territory. The hearing took place over four days, with YEC panel being cross-examined on their evidence by participating Intervenor and counsel for the YUB. The UCG did not participate during the oral phase of the public hearing. YEC then cross-examined YECL and the AGB on their respective evidence. On the last day of the hearing, a supplementary regulatory timetable was adopted by all parties laying out dates for Final Argument and reply, which were established as May 6, 2005, for Final Argument of YEC; May 20, 2005, for Intervenor Final Arguments; and May 27, 2005, for YEC reply to Intervenor Final Arguments. YEC filed their Final Argument on May 6, 2005. Intervenor Final Arguments were received from the AGB, UCG, the Yukon Conservation Society (YCS), McMahon, and YECL (Exhibit C14-16), all of which can be found on YEC's website [www.yukonenergy.ca](http://www.yukonenergy.ca). YEC filed their Reply Argument on May 27, 2005 (Exhibit B1-43).

Subsequent to the filing of Final Arguments and Reply Argument, YEC applied on May 26, 2005, for an interim refundable increase to their Secondary Retail and Wholesale Energy Rates effective July 1, 2005, on the basis that the oil price survey has indicated that the retail rate for heating oil had increased since their last quarterly survey. The YUB reviewed the application and supporting schedules, and determined that it was in the public interest to amend the Secondary Energy Rates as applied for on an interim refundable basis, pending the outcome and Decision relating to the YEC Application. The YUB issued Order 2005-10 approving the application (Exhibit A-40). YEC also applied on August 26, 2005, for an increase to their interim refundable Secondary Energy Rate Schedules effective October 1, 2005, to reflect the latest results in the quarterly oil price survey, which indicated an increase was necessary. The YUB reviewed the application and supporting schedules and determined that it is in the public interest to amend the Secondary Energy Rates as applied for on an interim refundable basis. The YUB issued Order 2005-11 approving the application.

## **Requested Approvals**

The following approvals requiring a decision from the YUB arise either from the YEC Application or from issues raised during the proceeding.

### **1.0 INCOME STABILIZATION TRUST ACCOUNT AND EXISTING RATES**

#### **1.1 Income Stabilization Trust Account and Reclassification of Industrial Rate 34**

##### **Background**

In their Application, YEC has proposed the implementation of an IST account for the purpose of managing cost changes over time and to hold rates stable. Sources of funds in the IST are proposed to come from the DCF, which is expected to have a balance at the end of 2004 of approximately \$780,000 (\$755,000 plus interest), and Deferred Rate Schedule 34 – Faro Mine Shutdown Power, or De-watering Revenues, with a projected balance of \$2,050,000 at the end of 2004. In their Application, YEC proposes to merge these two accounts into the IST, an interest bearing, non-Rate Base deferral account used to stabilize YEC's income. YEC provided updates to their Application for 2004 actual results in Exhibit B1-23. In that document, the actual balances at the end of 2004 of the DCF and the Faro De-watering Rate Schedule 34 were \$772,000 and \$2,067,000 respectively, resulting in an amount of \$2,839,000 available to be transferred to the IST in 2005.

The \$772,000 in the DCF resulted from monies received in an insurance payout of \$744,000 in 2002 relating to the fire at the Whitehorse Rapids hydro plant, with interest accruing annually thereafter. YEC believes that there is a very low likelihood that the funds in the DCF will be required in the near future due to low water levels as defined in the trust account. Under Schedule 34, YEC collects revenues from the Federal Government for the

ongoing shutdown and de-watering power requirements at the Faro mine site. Pursuant to Board Order 1998-5, all revenue received under Schedule 34, less reasonable incremental costs associated with supplying power to the mine site, have been placed in a deferral account for future application to the benefit of customers.

YEC is seeking approval to use the IST to fund the forecast 2005 revenue shortfall in order to prevent the need for a general service rate increase. After 2005, YEC is seeking approval to fund future revenue shortfalls up to the remaining balance of the IST. YEC is also seeking approval to add to the IST, commencing in 2005, the amount of interest on the Mayo-Dawson Note that may be forgiven under the terms of that Note, less the cost of supplying energy to Dawson. Based on forecasts in the Application, YEC anticipates that the IST will have sufficient funds to permit rate stability until the end of 2007. However, included in YEC's update to the Application for most recent results filed in Exhibit B1-23, YEC now expects that the hearing costs have increased from the forecast of \$500,000 to between approximately \$750,000 to \$850,000. Based on increased amortization of the hearing costs in each of 2005 and 2006, YEC now expects that the IST will only fund income shortfalls for two full years, 2005 and 2006, with some income shortfall in 2007 being covered by the IST.

### **Evidence**

The issue of whether or not the IST is in the best interests of the ratepayers was explored in YUB IR 1-5, and further during cross-examination of the YEC panel by Board counsel beginning at T5:902. IR YUB 1-5 requested that YEC examine the relative benefit to ratepayers of the IST proposal compared to leaving the DCF and the Rate Schedule 34 revenues accumulated to date as they are, and to transfer the 2005 Faro mine de-watering revenues to General Service – Government rate, over a period of 10 years. In their response to YUB IR 1-5, YEC discussed that the proposed IST treatment reduces the need for rate increases in 2005 through 2007, while the results of the requested comparison whereby the existing rates are left in place would require an increase to existing rates in 2005 through 2007, all else being equal.

Under the IST treatment proposed in the Application, YEC assumes it is in the interests of ratepayers to draw down the existing DCF and Faro mine de-watering credit balance deferral accounts over the three year period 2005 to 2007 in order to alleviate any current and short-term need for a rate increase to general firm sales and transportation rate classes. YEC argues that these accounts were set up to the benefit of ratepayers, and this is one means of providing a direct benefit to those ratepayers of the monies collected from prior periods.

The issue was further explored by Board counsel (T5: 902-912; 918-926). However, at this time, updates for 2004 actual results and most recent forecasts for 2005 activities and the issues of the Future Removal and Site Restoration (“FRSR”) and Asset Retirement Obligations (“ARO”) were available to include in the review on the IST proposal. A discussion of the FRSR and ARO proposals in the Application are found in section 8.1 of these Reasons.

Under the revised numbers, the IST provided relief from general service rate increases until some time in 2007, as amortization increased from \$950,000 to \$1,097,000 in 2005 and 2006 due to higher hearing costs. YEC confirmed that the forecast 2005 revenue shortfall contained a provision of \$524,000 as part of the depreciation expense with an offsetting increase in the FRSR liability account. Board counsel requested that further examples of the IST similar to IR YUB-1-5 be carried out, including amortization of the hearing costs over three years instead of two, that the FRSR account is held constant from 2005 onward with a corresponding decrease in depreciation expense, and that the Faro mine de-watering revenues continue the deferral account methodology currently used, similar to the Board’s 1998 Order.

YEC filed their response to Board counsel’s request in their Responses to IRs filed as Exhibit B1-42 on April 29, 2005, IR number 37. Under the requested scenarios, the amortization of hearing costs over three years resulted in a reduction in the amortization of the IST account from \$1,097,000 in each of 2005 and 2006 and \$733,000 in 2007, to \$969,000 in each year over the three years 2005, 2006 and 2007. Under this assumption, the IST provides protection from any rate increases through the three-year period 2005 to 2007, with a residual amount of approximately \$30,000 to help offset cost increases in 2008. The second requested change, removal of the FRSR charges from revenue requirement starting in 2005, reduces revenue requirement and therefore transfers from the IST by approximately \$590,000 per year over several years to 2009, all else being equal. However, the corollary to this treatment is that Rate Base increases by approximately \$5.5 million over the 10-year analysis, which will impact future customers’ rates and as site restoration charges occur. Sensitivity Case 3 requested that the IST proposal be removed and the existing accounting treatment for the DCF and the Faro mine de-watering revenues continue in effect, with revenue shortfalls being made up by adjustments to Rider J. The requested treatment is similar to the treatment required under Board Order 1998-5 (“1998 Board Order approval”). Under these assumptions, YEC calculated that Rider J would need to increase to recover the projected annual shortfall of \$1,371,000 in 2005, resulting in a general rate increase to all General Service firm retail customers of 3.96%, and the deferral account for the Faro mine de-watering account would also grow to a forecast credit balance of \$5.1 million over the analysis period, all else being equal.

## Arguments

In their Final Argument filed May 6, 2005, section 5.4, starting at page 27 and continuing to the top of page 31, YEC addresses the IST proposal. YEC argues at page 28 that the impact to ratepayers under either the IST proposal or the 1998 Board Order Approach would be similar, which is a departure from the suggested outcome in IR 37 (Exhibit B1-42). YEC argues that in 2005 the YUB could implement an IST-like account to act as a negative rate rider, presumably from the existing DCF trust account, similar to the approach taken in Board Order 1998-5, whereby any increase in Rate Rider J would be offset by the negative IST amortization until the expiry of the IST-like account. At that time, a rate increase would be required, which would occur sometime after 2005. For 2005, YEC agrees that either the IST as proposed in the Application, or the 1998 Board Order Approach would result in similar results in 2005, and that 2005 revenue requirements would be recovered with no need for a rate increase. However, after the IST runs out, YEC argues at page 29, there would be a significant difference between the two approaches. Under the proposed IST approach, YEC would need to come back before the Board to address a material revenue shortfall, providing perhaps a more transparent process for rate setting in 2007 or 2008. By comparison, under the 1998 Board Order Approach, ratepayers would feel the impact of the Rider J increase after the IST-like account had expired, but YEC would not be in a revenue deficiency position and would have no reason to seek a further rate process.

YEC argues that the IST proposal contained in the Application provides a fair means to ensure that ratepayers see a direct benefit from funds that are accumulating in the accounts of YEC on behalf of ratepayers, specifically the DCF and the Faro mine de-watering deferred revenues. YEC submits that it is fair and appropriate at this time to ensure that ratepayers see the benefits of these funds now, rather than let them accumulate further, with the possibility of incurring a rate increase at the same time as the accounts are continuing to grow. YEC also argues that a further benefit to their IST proposal is that ratepayers are assured that YEC will be back before the Board sooner as compared to the 1998 Board Order Approach.

Comments on the IST proposal were included in section E of YECL's Final Argument. YECL argued that they are not opposed to YEC using ratepayer funds contained in various accounts to offset justified increases in YEC's revenue requirements, particularly if such an action would defer expensive regulatory proceedings (YECL Final Argument, page 19). However, in YECL's view, YEC has not provided the necessary justification for the level of revenue requirements in 2006 and beyond that supports the ongoing drawdown of the IST, and as such, the Board should not approve any drawdown to the IST after 2005 without YEC first providing sufficient justification and support for their annual revenue requirement in those years (YECL Final Argument, page 20). YECL also contends that the IST should

not be for the exclusive use by YEC, since the funds are derived from all customers in the Yukon.

In their Final Argument at page 17, the UCG does not support the implementation of the IST proposal, since they are of the view that revenue requirements should be declining, as opposed to increasing, and there are currently sufficient revenues to cover 2005 revenue requirements. The UCG also opposes the use of the DCF and the Faro mine de-watering revenues for the same reasons.

McMahon also opposes the implementation of the IST proposal. At paragraphs 14 through 19 of his Final Argument, McMahon states that there is no revenue shortfall, and there are already agreed upon uses for funds currently in the DCF and the revenues from the sales to the Faro mine site (paragraph 16). At paragraph 17, McMahon refers to Board Order 1996-7 that specifies how the DCF is to be used, stating that “the fund is only to be used for the purposes of stabilizing rates and offsetting diesel generation cost estimates and the fund is not to be accessed for other reasons, including government subsidy of rates”. McMahon also argues at paragraph 19 that the Faro mine de-watering deferral account is being used to the benefit of ratepayers in that it is providing YEC with a source of no-cost capital, thereby reducing current revenue requirements through a lower Rate Base than otherwise would occur.

## **1.2 Reclassification of Industrial Rate Schedule 34**

Concurrent with the IST Proposal is a request that revenues from the Faro mine site, which is currently served under Rate Schedule 34, be reclassified as General Service – Government, effective January 1, 2005. The Anvil Range Mine near Faro is currently served under special Rate Schedule 34, approved by Board Order 1998-5. All revenue received under Rate Schedule 34, less any incremental costs associated with supplying power to the Faro mine site under this rate schedule, is to be placed in a deferral account for future application to the benefit of customers. In their Application at page 4-13, YEC requests that Rate Schedule 34 be terminated effective January 1, 2005, as it is no longer appropriate. YEC states that the site is being maintained by the Federal Government using the services of a court appointed receiver. YEC will continue to serve the Faro mine site with shutdown and de-watering power, but under the General Service – Government rate schedule. The additional revenue associated with the change in rate classification will help offset the need for general rate increases in 2005 onward.

According to Order-in-Council 1995/90, a government customer is a retail customer who a) is a federal or territorial department or agency; b) a body, other than one carrying on a business with a view to making a profit, that derives all or substantially all of its funding from a body referred to in

paragraph (a). It is also up to the YUB to establish upon application whether or not a customer is or is not a government customer (Exhibit B-1, page 4-13).

In the case of the Faro mine site, the court-appointed Receiver is Deloitte and Touche. Deloitte and Touche registered as an Intervenor in the Application but did not provide any position or argument for or against the proposed reclassification of its rate from Rate Schedule 34 to General Service – Government. Deloitte and Touche withdrew as an Intervenor on April 13, 2005, prior to the commencement of the oral public hearing (Exhibit C8-4).

### **Determination**

The YUB agrees with YEC that the Faro mine de-watering deferral account can and should be drawn down to provide rate stability to customers. However, the YUB considers that it is not necessary to create an IST account in order to take advantage of the existing balances within that account. As shown in YUB-YEC-1-5.1, the annual shortfall amount for 2005 to 2007 is lower when the drawdown is made directly to the Faro mine de-watering deferral account than when the drawdown is made from the IST. The Board considers that the drawdown from the Faro mine de-watering deferral account can be amortized directly to cost of service, in an amount equal to the revenue shortfall approved during a particular year. The DCF is to be excluded from the drawdown for the 2005-07 shortfall.

YEC states in their Final Argument that the IST Proposal is preferable to the 1998 Board Order Approach in that the IST proposal forces YEC back before the Board when the IST deferral account runs out, requiring a further rate proposal and review process. According to YEC, under the 1998 Board Order Approach, there will be less of a need for YEC to come before the Board since Rider J will be providing revenues to recover shortfalls (YEC Final Argument, p. 29). However, the Board does not accept this view, given that it has the authority to require YEC to come before it at any time to set rates that are fair and reasonable and in the public interest.

YECL in their Final Argument accepts the use of the DCF and the Faro mine de-watering deferral accounts to offset the need for a general rate increase, however they do not support the use of the IST Proposal post 2005 since no information on 2006 or 2007 revenue requirements on the YEC system have been provided. The Board is mindful of its duty to oversee the activities of YEC, not only in the Application currently before the Board, but also in the ensuing period between applications. Therefore, to address the concern raised by YECL, the Board considers that an annual financial forecast is required from YEC by December 1, 2005, for the 2006 calendar year and by November 1, 2006, for the 2007 calendar year.

The Board denies YEC's request for an IST deferral account on the basis that it is not necessary and directs YEC, commencing January 1, 2005, to amortize the Faro mine de-watering deferral account credit balance in such a manner as to offset the need for general service rate increases at the amount equal to the revenue shortfall approved by the Board for 2005 to 2007. The 2005 shortfall is the maximum drawdown, and the review of the 2006-07 financial forecast will confirm the maximum approved drawdown for that year.

The Board accepts that the Mayo-Dawson Note and that forgiving some portion of interest otherwise payable is a benefit to ratepayers. The Board approves the YEC proposal, shown as item 2(d) in the Application section of these Reasons, to assign an amount equal to any interest forgiven on the Mayo Dawson Note, less any portion that is used to cover costs incurred to supply power to Dawson. Since the Board has denied YEC's request for an IST deferral account, YEC is directed to establish a Rate Base deferral account to record an amount equal to any interest forgiven on the Mayo Dawson Note, less any portion that is used to cover costs incurred to supply power to Dawson.

To ensure that Faro mine de-watering deferral account is not being drawn down unnecessarily, the YUB directs YEC to file a financial forecast by December 1, 2005, for the 2006 calendar year, and November 1, 2006, for the 2007 calendar year. The financial forecast is to provide the YUB and registered Intervenor with a review of the previous year's actual results, the current year's forecast and actual activities with respect to the approved revenue requirements, Rate Base and deferral account drawdown. The financial forecast is to provide a forecast of the coming year's revenue requirements and Rate Base activities, and the forecast drawdown of the Faro mine de-watering deferral account.

The issue of reclassification of the Faro Mine Firm Shutdown Rate Schedule 34 to General Service – Government, is based on the determination by the Board as to whether or not the Faro mine is a Government customer. Pursuant to Order-in-Council 1995/90, a government customer must meet certain criteria as established by that Order. Also, in their Application (Exhibit B-1, page 4-13), YEC states that the Faro mine is being maintained by the Federal Government, through Indian and Northern Affairs Canada, which is primarily responsible for all site maintenance activities. Therefore, the request meets both the criteria of Order-in-Council 1995/90, that the customer be a retail customer who is a federal or territorial department or agency and that the customer is not carrying on a business with a view to making a profit and derives all or substantially all of its funding from a federal or territorial department or agency.

In addition, the acting Receiver, Deloitte and Touche, did not oppose the request, or file any argument or counter proposal with respect to the

requested treatment by YEC in their Application. Deloitte and Touche withdrew its request for Intervenor Status in the proceeding prior to the commencement of the oral public hearing.

**The Board determines that the customer being served by YEC at the Faro mine site is a retail government customer under the terms of Order-in-Council 1995/90. As such, the Board approves the closure of Rate Schedule 34, effective January 1, 2005, and the reclassification of the customer to General Service – Government, also effective January 1, 2005.**

## **2.0 PROPOSED RATE CHANGES**

### **2.1 Secondary Energy Sales Rate and Electrical Service Regulations**

#### **2.1.1 Secondary Energy Sales Rate, Quarterly Adjustment Mechanism, and Tariff Changes**

In their Application, YEC is seeking approval for a new Secondary Energy Sales Rate schedule, which ties interruptible electricity sales to 70% of the avoided cost of the alternative energy source heating oil and the implementation of a quarterly rate-setting mechanism to automatically adjust the Secondary Energy Sales Rate through tracking the cost of heating oil in order to adjust the price for Secondary Energy sales on a quarterly basis. Effective January 1, 2005, YEC proposes to increase the Secondary Energy Sales Rate from 3.3 cents/kW.h to 5.5 cents/kW.h, a 66.7% increase over the existing retail rate and to adjust the Secondary Energy Sales Rate quarterly to maintain these rates at 70% of the price of fuel oil.

The YUB approved a refundable increase to Secondary Energy Sales Rates consistent with the methodology contained in this Application in Board Order 2004-1 pending the outcome of the Hearing. Additional quarterly approvals were granted by the YUB by Board Orders 2005-6, 2005-10 and 2005-11. If it is found that the increase applied for is not in the public interest, then the Board may order that any difference between amounts billed to date and the finally approved rate shall be refunded with interest to ratepayers.

Secondary Energy Sales result from surplus hydroelectric generation on the WAF system, allowing YEC to market interruptible energy sales in order to take advantage of the surplus generation to the benefit of firm sales customers through lower firm sales rates. Customers that sign up for Secondary Energy Sales understand that this supply is interruptible and that they must have access to another source of firm energy in the event that YEC curtails their Secondary Energy Sales during peak times.

Secondary Energy Sales were introduced during the time of the Northern Canada Power Commission (“NCPC”) as a means of improving the efficiency of the hydro generation facilities and the WAF transmission line through higher energy sales, benefiting all firm customers on the system from interruptible energy sales. Although interruptible energy was not always available due to the Faro mine being in operation, the Secondary Energy Sales Rate at the time of the transfer of the NCPC to YEC was 3.53 cents/kW.h. Interruptible sales did not become available on a normal basis until 1993, when the Faro mine shut down for the first time. The existing rate of 3.3 cents/kW.h was introduced in the 1993/94 GRA, and it was designed to recover two thirds, or 66.7%, of the equivalent cost of heating fuel oil. The Secondary Energy Sales Rate encourages customers to use Secondary Energy by providing customers with ongoing savings over fuel oil, allowing customers the opportunity to recover their investment in heating systems. Pursuant to OIC 1995/90, a wholesale rate of 2.2 cents/kW.h was introduced in 1995 in order to permit YECL to keep 1.1 cents/kW.h charged to retail customers on the YECL system.

YEC is requesting that the Secondary Energy Sales Rate be set to 70% of fuel oil, resulting in a retail rate of 5.5 cents/kW.h, and a wholesale rate of 4.4 cents/kW.h. YEC is proposing to maintain that ratio through an automated rate-setting mechanism by measuring the price of furnace oil from the Yukon Bureau of Statistics’ bi-weekly oil survey. YEC would use the lowest of the three most recent bi-weekly surveys as the basis for establishing the next quarterly Secondary Energy Sales Rate. To address volatility in revenues resulting from the proposed quarterly automated adjustment mechanism, YEC is applying to use the Rider F Deferred Fuel Price mechanism to normalize Secondary Energy Sales revenues to the benefit of both ratepayers and YEC. Recording incremental changes in Secondary Energy revenues in the Rider F deferral account will act as a natural hedge against volatile diesel fuel prices used in the generation of electricity.

The YEC Application also requests changes to the Secondary Energy Sales Rate Schedule 32, to clarify the availability and applicability of the rate offering. YEC states at page 4-10 of their Application that the most benefit from interruptible sales comes from customers with large loads that can easily be interrupted, and those with peaks that are outside the coldest winter days, or have sustained loads throughout the year. Specifically, YEC is requesting the tariff be amended in the areas of Availability, Subscription Limit, Subscription Periods and Gaming, and Interruptions as described in detail on pages 4-10 through 4-12 of Exhibit B1-1. During the evidentiary phase of the hearing it became evident that YECL was experiencing distribution capacity constraints on their system, which may result in some Secondary Energy customers being interrupted during peak periods unless system upgrades are made to alleviate the capacity issues. As a result, YEC proposed a wording revision surrounding Availability of the Secondary

Energy in their rebuttal evidence Exhibit B1-28, page 8 of 8. The revised wording provides stronger signals to existing and potential customers, compared to the original tariff wording, that Secondary Energy service will only be available on distribution systems that have sufficient reserve capacity, unless the potential customer is willing to make a contribution for system upgrades.

### **2.1.2 Evidence**

Secondary Energy issues were examined through IRs, Intervenors' pre-filed evidence, rebuttal evidence from YEC, during cross-examination by the YUB counsel and Intervenors and in Final Argument. Issues relating to the rate increase applied for tying the rate to alternate fuel sources, the quarterly adjustment mechanism and rate shock all received substantial and material review during the cross-examination portion of the hearing.

#### **2.1.2.1 Rate Design Issue**

The areas of rate design, rate shock and quarterly rate-setting mechanism were examined in IR YUB-YEC 1-12. In particular, the IR sought an explanation of the rate design principles that were considered in the development of the rate. In response to IR 1-12.1, YEC stated that the Secondary Energy Sales Rate is based on value for service as opposed to a cost based rate. Secondary Energy Sales customers obtain value from energy savings of 30% compared to alternative fuel choices. In addition, firm customers benefit from having secondary interruptible sales through higher efficiency of the system, and the additional revenues provide lower sales rates to firm customers as a result of the additional revenues.

During cross-examination, the AGB and Peter Percival challenged the 30% savings figure put forward by YEC as potential savings to Secondary Energy Sales customers and the ability of those customers to recover their investment in backup heating systems. Under cross-examination of the AGB by Mr. Percival, the AGB stated at T5:948 to 950 that the current heating oil discount available to commercial customers is considerably larger than the 5 cents/litre assumed by YEC in their analysis in Exhibit B1-28 Rebuttal Evidence. Mr. Baxter states at T5:950 that the fuel oil savings to commercial customers is approximately 20% off the posted rack price, which would mean that two thirds of the savings proposed by YEC is already enjoyed by commercial customers. In their rebuttal evidence to Intervenor pre-filed evidence, filed April 15, 2005, as Exhibit B1-28, YEC discussed this issue at pages 3 through 5, indicating that the AGB in their analysis used an implied efficiency factor of approximately 70% to 80%, compared to the 90% efficiency assumed by YEC in their calculations. In their opinion, YEC believes that the additional advantage provided by higher wholesale discounts for fuel oil to commercial customers is substantially reduced by the

efficiency losses of their equipment, and that the proposed savings of 30% over alternative fuels is a reasonably accurate number.

Also in their Final Argument, the AGB did not fully support the proposed rate design. The AGB supported tying Secondary Energy Sales Rates to alternate fuels (heating fuel oil), only if YEC provided a more equitable sharing of the benefits with Secondary Energy customers through capital investments in existing and new customers.

### **2.1.2.2 Rate Shock Issue**

Rate shock is a concern to customers and the YUB. The AGB is concerned that with a 66.7% rate hike they will not be able to recover investment in backup heating systems in a reasonable timeframe. Discussion surrounding recovery of investment occurred during the hearing through cross-examination by representatives of AGB of the YEC panel. Starting at T3:501, Mr. Clarke questioned YEC on the type of predicament customers may be in with a 66.7% increase in rates in one year.

During cross-examination, Board counsel inquired about potential rate shock to customers by increasing the price of interruptible energy by 66.7% in one jump. In their response to IR YUB-YEC-1-12.1, YEC expressed the view that the increase does not constitute rate shock due to the volatility of the underlying commodity. During cross-examination, YEC did admit that normally such a large rate increase would be considered rate shock (T5:851 to 852); however, this does not apply to Secondary Energy customers due to price volatility in alternate energy. Spreading the increase over a longer period of three to four years was also explored by Board counsel starting at T5:853. At page T5:860, Board counsel also canvassed the possibility of stepping in the increase in increments of moving to 50% of oil in 2005, 60% of oil in 2006, and moving to 70% of oil in 2007. YEC did not object to the proposal; however, they were concerned that the proposed treatment would create upward pressure on firm customer rates due to the loss in Secondary Energy revenues of approximately \$300,000 per year helping to offset the need for firm customer rate increases.

During cross-examination by McMahon on regulatory principles, Mr. Osler stated that an important rate principle is not to give customers undue shock in any one period (T4:647).

### **2.1.2.3 Quarterly Rate Setting Issue**

The quarterly rate-setting mechanism as proposed by YEC was addressed in cross-examination. Board counsel requested that YEC provide details in their Final Argument as to which sections of the Act provide the YUB with the authority to allow quarterly rate setting (T5:855). YEC provided their position

on the jurisdictional ability of the YUB to approve quarterly rate setting starting at page B3 of 14, section 2.2, of their Final Argument.

At page 2 of Exhibit C7-3, the AGB conditionally supported the concept of Secondary Energy Rates being tied to the price of fuel oil as discussed above. In their view, tying the Secondary Energy sales rate to the price of fuel oil provided customers with the ability to participate in lower rates should the price of oil decline. No objections to the quarterly rate-setting mechanism were registered from the AGB in their argument. The applicable sections of the Act providing the Board with the ability to approve a quarterly rate-setting mechanism are discussed in section 2.1.3.3 of these Reasons.

#### **2.1.2.4 Proposed Tariff Changes**

During examination of the Tariff Changes to the Secondary Energy Sales Rate Schedule proposed by YEC in their Application, it became apparent that YECL is facing distribution system capacity constraints on several of their main distribution feeders, and may need to curtail Secondary Energy customers to ensure that firm customers are not impacted (Exhibit C14-11). In response to YECL's distribution capacity shortfall, YEC strengthened their wording surrounding Availability at the bottom of page 8 of Exhibit B1-28, to ensure that future Secondary Energy customers are fully aware that they are responsible for system upgrades if there is insufficient distribution capacity.

During cross-examination, YECL challenged YEC on their position with respect to how they interrupt Secondary Energy Sales customers on distribution systems. The existing tariff requires that Secondary Sales customers be interrupted once there is no longer any surplus hydro power and does not consider other constraints such as distribution capacity. YEC responded that they are requesting amendments to their Secondary Energy sales tariff to take into consideration other constraints in their decision to permit new Secondary Energy customers and how those customers are served by changing the Availability section of the tariff.

Also during the cross-examination of the YEC panel, YECL counsel asked YEC panel members questions around the safeguards in the Secondary Energy tariff to prevent customers from gaming the system and switching between Secondary Energy and firm energy. The YEC panel assured YECL and the Board that the proposed changes to the Secondary Energy tariff prevented customers from not having backup heating systems such as oil fired equipment, and once a customer switches from interruptible service to firm, the customer cannot go back to interruptible Secondary Energy service. In addition, the nature of the service being interruptible would ensure that any customer that switches to Secondary Energy would make the necessary investment in backup heating systems to protect property from the freezing temperatures in the Yukon (T3:376 and 377).

Board counsel questioned the YEC panel about the proposed tariff changes pertaining to Interruptions. Specifically, Board counsel canvassed the proposal to provide more consistent Secondary Energy service at the same rate if the customer installs SCADA equipment on their premises, providing YEC with the ability to curtail service at their discretion. YEC believes that the installation of SCADA equipment on customers premises does not lead to price discrimination, since the customer with SCADA is more valuable to YEC, and that customer has paid an investment in SCADA to ensure more access to service (T5:867 to 871).

### **2.1.3 Determination**

#### **2.1.3.1 Rate Design Issue**

On the issue of rate design, the YEC proposal to tie the Secondary Energy Sales Rate to 70% of the price of fuel oil is based on value for service as opposed to a cost based rate. The rate is designed to maximize the value firm ratepayers receive from excess capacity of hydro generation, which firm ratepayers pay for. The proposed rate is also designed to provide ongoing savings of 30% over alternate energy sources (primarily fuel oil) to Secondary Energy customers. In their Final Argument, YEC states that this level of savings to Secondary Energy customers is sufficient to permit recovery of investment in back-up heating systems required during service interruptions.

Overall, the concept of tying the Secondary Energy Sales Rate to the price of heating fuel oil is a reasonable one. Such an approach promotes the use of spare hydro generation capacity on the WAF and Mayo-Dawson systems, and is a means of ensuring that both firm and interruptible ratepayers benefit from Secondary Energy sales. In their Final Argument, the AGB conditionally supports the rate design, stating that they have no problem tying together the rate for Secondary Energy and the price of fuel oil so that both parties share in the windfall of rising energy prices, as well as those of declining energy prices. However, the AGB is concerned that there is not a “fair and equitable” sharing of the benefits. The AGB only supports this rate design as long as the utility undertakes their other recommendation, principally that YEC share in the risks by making a utility investment for existing and future Secondary Energy customers (AGB Final Argument, page 2).

The AGB also brings up the existing pricing model, setting Secondary Energy Sales service at 3.3 cents/kW.h since the 1993/94 GRA. The Board notes that Secondary Energy customer rates have been left unchanged since that time, and this fact may have led to customers believing that the rate is fixed or guaranteed to remain at that level over time. However, YEC in their Application stated that the rate was originally designed to be set at 66.7% of the price of fuel oil, when it was established during the 1993/4 GRA. In their current Application, YEC has not provided any evidence supporting a change

from 66.7% to 70%. In the view of the Board, YEC was responsible for the Secondary Energy rate and should have managed the rate over time by maintaining a correlation with fuel oil, rather than leaving the rate fixed. Although the Board is aware that the availability of the Secondary Energy service has been limited from time to time, due to the Faro mine being in operation, that mine shutdown in 1998 provided availability to Secondary Energy service. YEC has had a number of opportunities to manage the rate as it was originally intended since 1998, and has not, which provided support to customers' belief that the rate was not intended to be tied to fuel oil, or fixed in nature. The Board notes that oil prices have been extremely volatile during the period 2000 through 2004.

The AGB's Final Arguments centre around the sharing of the risks and the rewards of having Secondary Energy Sales revenues, and it requested that the utility make investments in Secondary Energy customers services and ensure that the payback of capital expenditures needed to take part in Secondary Energy service meets their expectations. Although the Board understands the AGB's point of view, the Board must consider the public interest in that it is not the business of utilities to be making investments in order to take on or share in risk of their customers. Utilities normally sell low season energy on an interruptible basis in an effort to improve the efficiency of the utility, lower unit costs and provide benefits to all customers. It is not within the jurisdiction of the Board, absent some evidence of unfairness or unreasonableness in the rate of a public utility, to protect individual customers' own investment decisions (section 31 of the Act). It is unclear to the YUB whether any promises were made under the Secondary Energy program by either YEC or the ESC, and therefore the Board must assume that each individual customer made the best investment decision that he or she could have made based on the information known at the time.

The Board approves YEC's request for a Secondary Energy Sales Rate that is based on value of service and tied to the price of fuel oil. However, the Board does not agree that 70% is appropriate and approves a ratio of two-thirds the price of fuel oil, or 66.7% of the posted price of fuel oil, which is the ratio that was used when the rate was first established in the 1993/4 GRA.

### **2.1.3.2 Rate Shock Issue**

The Board is of the opinion that YEC's analysis of the potential savings from both an efficiency and wholesale pricing perspective is more than fair. For Secondary Energy Sales Rate customers, the Board is aware that AGB had oil-burning appliances that were 70-80% efficient while YEC assumed a 90% efficiency. Electricity is assumed to be 100% efficient so the AGB would have needed roughly 1.2 to 1.3 times as much oil to obtain the same heat value as electricity. Since YEC assumed a 90% efficiency rate, that represents a benefit to the Secondary Energy customers. The proposed 30% discount from oil prices in setting the Secondary Energy Sales Rate was also better

than the oil market discount of 20%, so the Secondary Energy customers also benefited. As to setting the rate at 30% savings to the posted price of fuel oil, the Board notes that the original intent of the Secondary Energy Sales rate was set to recover 66.7% of the price of fuel oil. Therefore, the Board supports this level going forward, and believes that it is appropriate to provide a 33.3% discount to the price of fuel oil.

**The Board approves the use of a discount to the posted price of fuel oil in setting the Secondary Energy Sales rate as outlined in the Application, page 4-8 but the Board considers that the discount should be set at 33.3% . Based on the determination that Secondary Energy Sales Rate be set to 66.7% of the price of fuel oil, YEC is directed to refund revenues with interest collected from Secondary Energy customers during 2005 that are over and above the approved revenue amounts required to comply with the above percentages, effective January 1, 2005.**

### **2.1.3.3 Quarterly Rate Setting Issue**

Generally, the quarterly rate-setting mechanism was not disputed by any party. Board counsel requested that YEC provide their interpretation of the *Public Utilities Act* and the sections that permit quarterly rate setting. Starting at page B3 of 14 of their Final Argument, YEC references sections 27, 28, 30 and 31 of the Act, as well as the definition of the term “rate”. In their view, section 28(1) of the Act provides the YUB with the discretion to set rates. Section 27 allows the YUB to make orders, including orders respecting rates. YEC interprets the definition of the word “rate” found in section 1 of the Act as providing the YUB with considerable latitude as to what is considered to be a rate.

**The Board agrees that it does have the jurisdiction to set quarterly rates in the manner proposed for the automatic adjustment mechanism at page 4-8 to 4-9 of the Application.**

In addition, the Board agrees that although it has reduced the amount of the requested increase approved for 2005 and 2006, it is appropriate to continue to use the quarterly rate-setting mechanism due to the price volatility of fuel oil. Setting the rate once per year may result in Secondary Energy rates that vary considerably from the approved percentage discount. Quarterly rate setting would result in Secondary Energy rates that remain much closer to the approved discounts. To manage revenue or earnings fluctuations as a result of the quarterly rate-setting process, the Board agrees that YEC may normalize Secondary Sales revenues by recording the revenue changes in Rider F as requested in the Application at page 4-9.

**The Board approves the quarterly rate-setting mechanism as described on pages 4-8 and 4-9 of the Application.**

#### **2.1.3.4 Proposed Tariff Changes**

YEC is proposing several changes to their Secondary Sales Retail Rate Schedule. Specifically, changes are requested in Availability, Subscription Limit, Subscription Periods and Gaming, and Interruptions. Generally, the Board accepts the wording proposed in their Application surrounding the requested Tariff changes. In response to YECL's concerns over impending distribution capacity shortfalls on several of their feeders, YEC amended their wording on Availability at page 8 of Exhibit B1-28. The revised wording strengthens YEC's caution to potential Secondary Energy customers that distribution system capacity constraints will require the customer to make a contribution to system improvements necessary to serve that customer. In the Board's opinion, the strengthened wording surrounding Availability should be sufficient to allay YECL's concerns that their feeders will not be able to accommodate potential Secondary Energy customers, if they desire to take up that service.

With respect to the requested change to Interruptions, through the introduction of choice for customers being a SCADA controlled customer versus a standard manual service, the Board is satisfied that the requested change will not result in two or more classes of Secondary Energy customers. In their Final Argument, YEC points out that although a SCADA-controlled customer will have greater hours of access to Secondary Energy compared to a standard manual service, standard manual service customers will only be curtailed for generation constraints, i.e. when YEC forecasts using diesel. By using SCADA to control customer access to Secondary Energy service, YEC may need to curtail SCADA controlled customers from time to time for reasons other than generation constraints such as unplanned system emergencies. Additionally, SCADA controlled customers will need to make a significant investment in SCADA equipment for the privilege of having more hours of access to Secondary Energy service compared to no investment made by standard service customers (page B10).

**The Board approves the requested changes to the Secondary Energy Retail Rate Schedule as described in the YEC Application for Subscription Limit, Subscription Period and Gaming, and Interruptions. The Board approves the proposed wording for Availability at page 8 of Exhibit B1-28.**

## **2.2 Electrical Service Regulations (ESR)**

In their Application on pages 4-20 to 4-22 of Exhibit B1-1, YEC requests two changes in their ESR as a result of the Faro mine closing and the interconnection of Dawson with the Mayo hydro generating station. The first change is with respect to the Maximum Company Investment made by YEC for the connection of a customer to the system. The second change is in the definition of the interconnected system to include the Mayo-Dawson grid.

### 2.2.1 Maximum Company Investment

The Maximum Company Investment currently allowed in the ESR for primary General Service customers to connect to the grid is \$180/kW of billing demand. YEC is requesting that this amount be increased to \$400/kW of billing demand to take into consideration that incremental power generation on both the WAF and Mayo-Dawson grids have become considerably lower since these Schedule B amounts were developed due to the closure of the Faro mine. YEC asserts that the present value of benefits new General Service customers bring to the system are considerably higher than the corresponding existing utility investment, permitting a higher Maximum Company Investment in order to attract firm General Service customers.

YEC is also requesting that a Maximum Utility Investment be introduced for Secondary Energy customers in the amount of one half of the forecast of annual sales of new Secondary Energy customers. Typical practice in the Yukon has been to have no utility investment in attaching Secondary Energy customers to the grid due to the interruptible nature of these customers. However, with the closing of the Faro mine, YEC has little expectation of curtailment of Secondary Energy customers in the near future, and therefore to encourage additional secondary power sales, the Company should provide a nominal Maximum Utility Investment to recognize the benefit these customers provide to firm customers and YEC and the ability to recover such investment.

Costs in excess of the proposed Maximum Utility Investment to attach either new firm General Service or Secondary Energy customers would be paid as a one-time contribution from the new customers. YEC is proposing to re-assess the accuracy of customers' estimates of consumption, and they will collect/refund from/to the customer any contributions required due to significantly different loads than originally estimated.

#### Evidence

As stated in YEC's Application at page 4-19, the ESR are an integrated document, so changes to the ESR that are requested by YEC will impact YECL. With respect to the requested increase in General Service – Primary to \$400/kW billing demand from \$180/kW, YEC demonstrated in response to IR YUB-YEC-1-18.1 that the present value of the benefits provided by firm customers is considerably higher than the amount of Maximum Utility Investment currently provided under the ESR. In order to maximize the use of surplus generation capacity, which exists currently and for the foreseeable future due to the shutdown of the Faro mine, it is in the public interest to attract General Service commercial customers to the system. In their Final Argument, YECL would like to ensure that if the requested increase is approved, that it also be applicable to YECL as well (YECL Final Argument, page 9), otherwise customers connecting to the YECL system would need to

pay a higher contribution towards service compared to customers on the YEC system, which in YECL's view is blatantly unfair. YECL also does not support the increase in Maximum Utility Investment to \$400/kW as this constitutes a change to the tariff and therefore results in a change in general retail rates (YECL Final Argument, page 10), and the calculation used in response to IR YUB-YEC-18.1 is outdated and should be updated before agreeing with the results. Also, YECL is of the opinion that encouraging use of surplus hydro generation capacity at this point in time is not justification for increasing the Maximum Utility Investment (YECL Final Argument, page 11). In YECL's view, many factors govern the appropriate setting of the Maximum Utility Investment, stating that they would not support a request for lowering the utility investment if generation or distribution capacity constraints existed.

With respect to the introduction of a Maximum Utility Investment for Secondary Energy service, YEC's position is that the added revenues Secondary Energy customers bring to the benefit of firm customers far outweighs the incremental cost of producing that revenue. Therefore, there is system wide benefit by encouraging Secondary Energy sales through a modest Maximum Utility Investment of one-half of one year's revenues (section 5.1 of Attachment B, YEC Final Argument page B11). Although YECL does not state directly that they oppose implementing any Maximum Utility Investment for interruptible Secondary Energy customers in their Final Argument, they do not appear to support a Maximum Utility Investment in Secondary Energy customers either. YECL appears to be concerned that the implementation of a Maximum Utility Investment for Secondary Energy service may end up attracting interruptible loads onto distribution systems that are nearing capacity, and that the existing revenues they retain (1.1 cents/kW.h) will not be sufficient to meet their revenue requirements resulting from the added load requiring system upgrades. YEC considers this position to be too risk averse (Attachment B, page B12).

### **Determination**

The Board recognizes that since the ESR are an integrated document, any change in level of Maximum Company Investment approved in the ESR will be applicable to both YEC and YECL. YECL may decide to file a revenue requirements application to request approval of changes to their revenue requirements that arise due to approvals granted in this proceeding. The Board finds that it is in the public interest to attract high margin General Service – Primary customers to the system due to the benefits these customers bring to the hydro interconnected systems. The Board does not agree with the YECL position that a change to the ESR results in a change to the retail rates, which are requested to remain unchanged through 2007 in the Application.

**The Board approves an increase to the General Service – Primary Maximum Utility Investment to \$400/kW billing demand, from \$180/kW of billing demand, effective on the date of this Order.**

With respect to the requested Maximum Utility Investment proposed for Secondary Energy sales service customers of one-half of one year's forecasted revenues, the Board does not see this modest investment as detrimental to firm customers. Although the investment does become part of Rate Base and there is a possibility that a large industrial customer such as Faro mine may require service at some time in the future, thereby limiting or eliminating access to Secondary Energy service, the Board believes that the benefits of attracting new secondary service customers outweighs the cost of providing investment equal to one-half of one years revenues. YECL's concern that this is placing added load on feeders already nearing capacity should be resolved with the wording change associated with Availability dealt with in the section on tariff changes above. If YECL believes that the revenue they receive from Secondary Energy service of 1.1 cents/kW.h is insufficient to recover their revenue requirement impact of making a modest Secondary Energy investment, then they may address that matter in their next revenue requirements application.

**The Board approves the proposed Maximum Utility Investment in Secondary Energy sales service as outlined on pages 4-21 and 4-22 of the Application.**

### **2.2.2 Interconnected System**

With the addition of the Mayo-Dawson transmission line, the definition of the Interconnected System within the ESR requires changing. The purpose of the term Interconnected System is to permit customers to heat their houses with electricity during winter months with no prior written permission from YEC. The Mayo-Dawson system interconnects with the Mayo hydro station that is expected to have surplus power for the foreseeable future. Therefore, customers in the communities of Mayo, Dawson and Stewart Crossing are now on an Interconnected System and can install electric heating systems.

No parties objected to the change in the definition of Interconnected System in the evidentiary, oral hearing or argument parts of this proceeding. Therefore, the Board approves the wording change requested by YEC to their ESR surrounding the addition of Mayo-Dawson in the definition of an Interconnected System.

**The Board approves the revised definition of Interconnected System as found on page 4-22 of the Application.**

**3 LOAD FORECAST**

In their Application, YEC provided actual energy sales and revenues for the years 2000 through 2003, a forecast for 2004 (since the year was not complete at time of filing the Application) and a forecast for 2005 energy sales and revenues. Table 2.1 in section 2 of the Application identifies actual total annual energy sales for 2003 of 267,897 MW.h, and forecast 2004 and 2005 total annual energy sales of 275,865 MW.h and 282,428 MW.h respectively. The forecast for 2005 includes the re-classification of the Anvil Range Mine de-watering energy sales forecast of 3,000 MW.h to General Service retail sales that were previously recorded in the Faro mine de-watering deferral account.

Included in their update of 2004 actual results filed as Exhibit B1-23, actual total company energy sales for 2004, as shown in Schedule 11 of Exhibit B1-23, increased 1,365 MW.h to 277,230 MW.h. The increase was primarily the result of higher wholesale sales of approximately 3,000 MW.h, and higher retail energy sales of approximately 415 MW.h, offset by a decrease in Secondary Energy sales of approximately 2,016 MW.h. YEC did not update their forecast for 2005 total company energy sales during the update, which remains at 282,428 MW.h, which is a 1.9% increase over actual 2004 results.

**Evidence**

From table 2.1 in the Application, the load forecast can be broken down into its main components, Firm Retail energy sales, Wholesale energy sales, and Secondary Energy Sales. Given that Wholesale energy sales make up 84% of total company energy sales and that the forecast for Wholesale energy sales is provided by YECL to YEC, most of the sales forecast cannot be tested for accuracy or reasonableness. The following table provides a summary of energy sales from 2003 to 2005 forecast.

Energy Sales (MWh)	2003 Actual	2004 Actual	2005 Forecast
Firm Retail (1)	27,792	28,164	27,274
Wholesale	229,971	235,982	234,542
Secondary	13,892	16,517	20,613
Total Company	271,655	280,663	282,428

(1) Includes ARM de-watering energy sales

From the above table, it is obvious that Firm Retail energy sales are forecast to be reasonably stable and actually show a small decline. Wholesale energy sales to YECL also show no growth compared to 2004. The only real forecast growth is in Secondary Energy Sales, increasing from 16,517 MW.h, to 20,613 MW.h. During cross-examination by YECL counsel on their sales forecast, YEC confirmed that they had used the same forecasting methodology for 2005 as in past years. Generally, YEC forecasts their own

customer load forecast and adds in the forecast provided by YECL for their purchase requirements (T3:348). When questioned by the Board counsel as to whether or not the load forecast was weather normalized, YEC responded that they do not weather normalize their own customer forecast since the load is relatively small in relation to the total sales including wholesale energy sales to YECL. YEC cannot provide weather normalized sales forecasts for Wholesale Energy sales (YUB-YEC-1-36).

### **Argument**

McMahon points out in his Final Argument that some 93% of sales are firm, either through retail or wholesale channels. In this case, there is very little variability in sales forecast, and with no large industrial loads, there is very little forecast risk left.

### **Determination**

Based on the evidence provided, the Board is of the view that the YEC load forecast as presented in their Application is reasonable. In order to determine the 2006 forecast drawdown of the Faro de-watering deferral account, YEC will be required to provide a load forecast for 2006 when the December 1, 2005, financial forecast for 2006 is filed.

**The Board approves the 2005 load forecast of 282,428 MW.h, included as Table 2.1 at page 2-8 of the Application. The Board also accepts the 2004 update of preliminary actual energy sales presented in Exhibit B1-23, of 280,663 MW.h. If there is a material change in forecasted loads during 2005, such as the introduction of a new mine load on the YEC system, YEC is directed to re-file their revenue requirements for the upcoming year. YEC is to provide an updated forecast (or actual results if available) for 2005 energy sales and a forecast of 2006 energy sales in their December 1, 2005, financial forecast for the 2006 calendar year.**

## **4 OPERATING, MAINTENANCE, AND ADMINISTRATIVE EXPENSES**

Section 3.0 of the Application provides details of YEC's revenue requirements. Included in the forecast of 2005 revenue requirements are Operations, Maintenance and Administrative (OM&A) expenses incurred by the Company for running the day-to-day operations. Section 3.2 of the Application describes the various components of OM&A, how the forecasts for the components were established, and provides material variance explanations from previous years. Major components of OM&A are broken out between labour and non-labour costs in Table 3.2 on page 3-5 of the Application. Overall, the 2005 forecast OM&A increased 7.3% to \$11,254,000 compared to the 2004 forecast OM&A of \$10,493,000 or an increase of approximately \$761,000. When compared to 2003 actual results, 2005 forecast OM&A of \$11,254,000 is \$156,000 lower than the 2003 actual results for OM&A of 11,410,000, a decrease of 1.4%. However, when

comparing 2005 to 2003, the impact of the Mayo-Dawson transmission line must be considered, and diesel fuel costs must be normalized in 2003 to compare that year to future years.

The major transition that has occurred between 2003 and 2005 has been the introduction of the Mayo-Dawson transmission line during 2003, producing considerable savings in diesel fuel costs (\$766,000 compared to 2003). Offsetting these savings are higher labour costs resulting from contract settlements and added employees, transmission costs due to the Mayo-Dawson line, administration costs, as well as other minor variances. Explanations for cost changes between 2000 and 2005 for the various sub-categories of Table 3.2 are found on pages 3-5 through 3-15 of the Application.

Exhibit B1-23 provided updates to various aspects of the Application for 2004 actual results. Item 3 on page 2 of Exhibit B1-23 indicates that actual OM&A was lower than the 2004 forecast included in the Application by \$41,000, resulting in actual OM&A of \$10,452,000 for 2004.

### **Evidence**

The only evidence on OM&A costs filed in this Application proceeding has been by YEC through the Application materials, and their responses to IRs from various parties. AGB evidence filed as Exhibit C7-3 focused on the Secondary Energy rate proposal only. The evidence filed by YECL as Exhibit B14-11 concentrated on issues surrounding Secondary Energy issues and capacity constraints on their distribution systems that must be addressed prior to implementation of additional Secondary Energy sales.

IRs relating to the level of detail for costs pre-2000 were asked by McMahon and the UCG. Both McMahon and UCG believed that YEC did not provide sufficient detail to allow the Board to make a ruling as it relates to both OM&A and capital expenditures (Rate Base) pre-2000. In its ruling on a motion brought forward by UCG to have YEC provide more detail on pre-2000 costs in their IR UCG-YEC-1-18 and 1-21, the Board determined that sufficient information was provided by YEC for the pre-2000 period (Board Order 2005-8, items 9 and 10 in Reasons for Decision).

In response to IRs, YEC provided additional explanations for OM&A cost increases between 2000 and 2004 relating to administration costs in their response to YUB-YEC-1-10 and 67; and YECL-YEC-1-33, transmission and distribution costs in response to YUB-YEC-1-9 and 65, and YECL-YEC-27. In responses to YUB 1-10, YEC identified the main reasons for higher administration costs as pertaining to increases in Fish Hatchery costs, Training, Recruitment, Board of Directors, and Materials Management. All other administration costs have remained relatively flat since 2000. Table 3.8 on page 3-11 of the Application shows that two areas of considerable

increase are training-related costs and costs related to Board of Directors. YEC states in response to YUB 1-10 and 1-67 that training costs for the years 2000 through 2003 were estimates only, due to training budgets being managed by individual departments causing difficulty in data mining and are not necessarily comparable to 2004 and 2005 levels of expenditure. Training costs in 2004 and 2005, however, are a more accurate portrayal of actual training costs. Additional details of particular departmental training costs are provided in YUB 1-67. In response to YUB 1-10, YEC explained that they have budgeted training costs based on Conference Board of Canada averages (3.2% with a provision to account for added travel related costs due to being in Northern Canada) at 3.5% for 2005. Board of Director costs have increased significantly from 2004 estimates of \$120,000 to \$258,000 in 2005. Explanations provided in response to YUB 1-10 include honoraria based on Conference Board averages and additional consulting costs for special audit purposes, partly in response to the Auditor General's Report on the Mayo-Dawson line. Generally, the evidence provided by YEC on Administration costs, and specifically as it relates to Training and Board of Directors cost increases is somewhat discretionary in nature and does not fully support the requested increases.

No significant additional evidence pertaining to OM&A was introduced into the record during cross-examination of the YEC panel by Intervenors. Questions to panel members were limited to clarification and understanding.

### **Arguments**

In their Final Argument filed May 6, 2005, YEC provides a response to concerns about increasing costs in Fuel Prices (page 9), Production Costs (diesel and wind) at page 10, Administration Costs and Inventory Write-Downs also on page 11. Generally, YEC has supportable reasons for the increase in these cost categories, which are well covered in their Final Argument.

In their Final Argument, Intervenors were more critical of cost increases and submitted that considerable costs should be disallowed from revenue requirements. Beginning at page IV of his Final Argument, McMahon identified costs relating to internal resources that should be charged to hearing deferral accounts in the amount of \$100,000, embedded cost savings since 1998 as a result of direct management in the amount of \$3.358 million, as well as other cost disallowances detailed over pages 4 and 5. YECL has identified certain cost disallowances to OM&A at section F of their Final Argument starting at page 28. Specifically, YECL argued that cost disallowances should be for R&D (\$30,000), Administration cost increases limited to CPI increases since the last GRA, with any costs above that amount being disallowed. Marketing and communication costs were set at \$12/customer, resulting in total marketing and communications cost in 2005 of \$21,000.

In their Reply Argument at pages 11 through 23, YEC responds to each of the issues raised in each Intervenor Final Argument. With respect to Administration cost increases, YEC responded that they have fully justified their forecast of costs for 2005 within their IR responses and that the assertions included in the Final Argument of the Intervenor should be disregarded (YEC Reply Argument, pages 13 and 14). YEC's response to the assertion of McMahon in his Final Argument that the YUB should remove \$3.358 million from OM&A due to savings related to direct management can be found on pages 14 and 15 under the heading 4.1.4.2 Direct Management Costs. In their reply, YEC states that McMahon has not introduced evidence supporting the claimed amount of \$3.358 million, and therefore, no party was able to ask questions or cross-examine this position. YEC further states that McMahon also did not provide any evidence supporting the requested amount of disallowance, so YEC management cannot determine the accuracy of such a claim.

### **Determination**

The Board is of the opinion that the Intervenors have not, to the extent submitted by the Intervenors, persuaded it to reduce YEC's OM&A. Concerns and issues raised by Intervenors have been adequately addressed in responses to IRs, and in YEC's Final Argument and Reply Argument.. The Board notes that the requested increases in Administration Costs pertaining to Training and Board of Directors is subjective in nature, and does not support the requested increase from 2003 actual levels as presented in Table 3.8 on page 3-11 of the Application (\$126,000 increase in Training; \$150,000 increase in Board of Directors costs). The Board notes that 2004 forecast on Schedule 3.8 provides sufficient increase in Administration costs as it pertains to Training (\$189,000) and that the provision for Board of Directors should be increased by 30% (from \$120,000 to \$156,000), and is comfortable with using the 2004 forecast for the determination of 2005 test period Administration OM&A. The Board believes that it is appropriate to reduce requested OM&A for disallowed Administration costs of \$149,000.

**The Board orders a reduction in allowed OM&A of \$149,000 as it relates to Administration costs for 2005.**

### **Reserve for Injuries and Damages**

In their Application, YEC requests an increase in their annual appropriation for Injuries and Damages from \$50,000 annually to \$150,000 in 2005 and forward. YEC uses the reserve to smooth out future large uninsured losses to mitigate the rate impact of such a future event. According to the Application, annual uninsured losses have been between \$150,000 and \$175,000 (pages 3-12) from 2000 to 2004, considerably higher than the appropriation of \$50,000 in all but one year in the last seven, resulting in the forecast balance

of the Reserve Account being a debit of \$805,000 at the end of 2004. The reserve account is normally expected to be in credit position unless a very large uninsured loss occurred in a particular year. In order to draw down the large debit balance in the Reserve, YEC is proposing to use the gain from the Whitehorse Rapids fire insurance settlement of \$744,000, and to increase the annual appropriation from \$50,000 to \$150,000. If the Board denies the application of the Whitehorse Rapids fire insurance gain, YEC would require the annual appropriation to increase to \$350,000 to draw down the reserve account over the next four to five years to a reasonable level, increasing annual revenue requirements by a like amount.

### **Evidence**

In their response to YUB-YEC-1-11.1, YEC provided a table showing the continuity schedule for activity that has affected the Reserve for Uninsured Losses account, and updated the balance of the Reserve as at December 31, 2004 to actual amount of \$788,289. No further evidence was submitted by Intervenor on this issue.

### **Determination**

The Board agrees that the Reserve for Uninsured Losses large debit account should be drawn down to a more realistic value. Currently the balance is a debit of \$788,289 as per YUB 1-11.2, and the trend is that the losses exceed the appropriation by approximately \$100,000 each year, which would increase the debit balance over time if no other action were approved. Therefore the YUB agrees that the favourable settlement from the Whitehorse Rapids fire claim of \$744,000 should be applied against the Reserve in 2005. In addition, YEC has requested that the annual appropriation be increased to \$150,000 from \$50,000, which increases annual revenue requirement. Recording the \$744,000 from the fire claim against the 2004 Reserve balance, results in a debit balance in the Reserve at 2005 of \$44,289. Applying the currently approved annual appropriation of \$50,000 would bring the balance down to a credit balance of approximately \$5,700.

YEC has not provided any detail as to actual uninsured losses in 2005, however, in response to YUB 1-11.1, YEC has shown that the average annual losses for the past four years has been approximately \$150,000. However, the Board notes that there is considerable variability in the annual losses, ranging from \$25,000 to nearly \$400,000 from 2000 through 2004. Although the YUB agrees that the annual appropriation for uninsured losses should be increased, it believes that \$150,000 in 2005 may be too high given lack of information on 2005 actual losses. Therefore the Board approves increasing the appropriation to \$100,000 in 2005.

**The Board accepts the proposal to apply the Whitehorse Rapids Fire Insurance Gain of \$744,000 to the Reserve for Uninsured Losses in 2005. The Board also approves an increase to the annual appropriation to \$100,000 for 2005, 2006, and 2007.**

**OM&A is therefore reduced by the amount for the reduction in Administration costs of \$149,000 discussed above, and for the reduction to the appropriation for uninsured losses of \$50,000. The Board approves OM&A of \$11,055,000 in 2005. YEC is fully at risk for their OM&A projection, such that over or under spending will impact return on equity. In the financial forecast, YEC is to provide a forecast of 2006 OM&A for determining the 2006 drawdown of the Faro de-watering deferral account.**

## **5 DEPRECIATION STUDY**

YEC retained the services of Gannett Fleming, which has expertise on depreciation rates for utilities and other industries, to conduct a routine review of their depreciation rates and remaining asset lives. The Depreciation Study is filed in section 11 of the Application, and a description of the Study and its results commence at page 3-16 of the Application. The result of the Depreciation Study has been a significant change to annual depreciation expense, useful service lives of assets, salvage values, and Average Service Life group procedures. Incorporating the revised service lives and depreciation rates recommended by Gannett Fleming results in a reduction in annual depreciation expense to \$5,238,830 annually (Application, Table 1, Depreciation Study; Tab 11). Reducing annual depreciation reduces the Accumulated Depreciation amount in the calculation of Rate Base, increasing Rate Base all else being equal compared to existing approved depreciation rates.

In the case of YEC, the reduction in depreciation expense results from two requested changes. The first being the lower depreciation rates as a result of the Depreciation Study determining that useful service lives are longer than those determined in the 1996/7 GRA. The second reason for the lower depreciation expense is due to a change in grouping procedures. Gannett Fleming recommends using the Average Service Life procedure, which is a departure from the Equal Life Group used in the 1996/7 GRA.

### **Evidence**

The principal evidence supporting the requested changes to Depreciation Expense is the Gannett Fleming Study included as section 11 of the Application. YEC also responded to several IRs from Intervenors. McMahon requested information on the qualifications and experience of Gannett Fleming in McMahon-YEC 1-16. In their response, YEC listed the various utilities Gannett Fleming has provided depreciation studies for. McMahon

also requested the rationale for choosing Gannett Flemming over any other consultant in his IR McMahon-YEC 1-39. YEC states in their responses that there are few depreciation experts in Canada capable of doing the work, and Gannett Fleming is well recognized within that community.

During his cross-examination of the YEC panel, McMahon requested additional information on why YEC chose Gannett Fleming versus another depreciation expert. At T4:595 of the Transcript, McMahon requested details of a request for proposal process YEC undertook to get the work done. YEC responded that Gannett Fleming was available, and is the recognized expert in this field in Canada, so the use of Gannett Fleming was a sole-source contract.

### **Determination**

**The Board agrees with the findings of the Gannett Fleming Depreciation Study as contained at Tab 11 of the Application. YEC is to implement the new depreciation rates and grouping procedure effective January 1, 2005, and adjust gross depreciation expense downwards to \$5,283,830 from \$7,071,000 at existing rates. The amount for net salvage identified in the Gannett Fleming Study, Table 1A, Tab 11 is discussed below at section 8.1 Future Removal and Site Restoration and Asset Retirement Obligations.**

## **6 MID-YEAR RATE BASE**

### **6.1 Mayo-Dawson Transmission Line**

The Mayo-Dawson transmission project is an approximately 223 km 69 kV transmission line providing the city of Dawson with hydro electricity from the Mayo hydro-electric generating plant. The project was brought into service in September, 2003 and provides substantially all of the electricity needs of Dawson City. YEC will continue to use diesel generators as back-ups to the Mayo-Dawson transmission line in the event of a failure. The forecast cost of the Mayo-Dawson transmission line included in the Application was \$35.6 million. The Yukon Development Corporation ("YDC") is providing a non-refundable contribution in aid of construction of \$5.8 million towards the project, at no cost to ratepayers, reducing the final Rate Base impact of the project to \$29.8 million (Application, pages 5-11).

The Mayo-Dawson transmission project was supported on the basis of overall revenue requirement savings due to the replacement of higher cost diesel generation with low cost hydro electric generation, and the resulting reduction in diesel fuel costs, over the life of the project. YEC compared the net present value of the expected cost savings (resulting from reduction in diesel fuel, maintenance, and engine replacements) to the expected costs of a transmission line (return on Rate Base, depreciation expense) over the economic life of the transmission line. Table 5.6 included in Tab 5 of the

Application shows that YEC expected a NPV of project benefits to ratepayers of \$20.5 million over the 50 years the transmission system is expected to be in service, based on diesel fuel costs and capital cost forecasts known at time of Application.

Due to the high up front capital costs of such a large transmission project, rates are typically impacted in the early years. To address this concern, YDC structured flexible financing to YEC in the form of the Mayo-Dawson note, such that ratepayers will be protected from paying more for the hydro electric generation than they currently paid under diesel generation.

The Mayo-Dawson transmission line project was originally considered and reviewed by the YUB in the 1992 Major Capital Projects hearing. At that time the YUB recommended that no further studies on the Mayo-Dawson transmission line be undertaken unless demand for energy in Dawson changes sufficiently to warrant further review (Recommendation 42). In 1998, the project was revisited due to increasing demand and lower available cost of capital, and YEC developed a more refined feasibility study including design, costs, and a technical review by external consultants. After a peer review of the project by BC Hydro in 1999/2000, YEC contracted with BC Hydro International Ltd.. to do a detailed engineering and cost estimate for the project. Based on the provided cost estimate, changing demand, lower cost of capital, and support for the market risks provided by YDC, YEC decided in 2000 to proceed with the project on an engineering, procure, construct and manage (EPCM) basis and received ministerial approval to proceed with the project.

The Mayo-Dawson transmission project was originally forecast to cost \$27,246,000 (or \$23,246,000 net of \$4,000,000 in non-refundable contributions from YDC), and to be in service by September 2002. Change requests for known changes to the project totaling \$1,800,000 were approved by YDC, including the funding of a larger conductor after the project was issued approval, bringing the total capital cost forecast for the project to \$29,046,000. In response to the higher costs of the project, YDC increased their contribution to \$5,800,000, such that the final cost of the project ratepayers would be responsible for in rates remained as originally approved at \$23,246,000.

At the time of filing the Application, YEC forecast the final cost of the Mayo-Dawson transmission line at \$35,589,000, which is a cost overrun of \$6,543,000 or 22.5%. In addition, the Mayo-Dawson transmission line did not enter service until September 2003, one year later than forecast. Outstanding disputes and claims between the contractor, Chant Construction, and YEC are currently unsettled, and will have an impact on the final costs of the project once settled.

In Exhibit C4-21 is a copy of a January 18, 2001 letter from YEC to the Board Chair where YEC identified that “Under the Act, there is no requirement for YEC to obtain prior approval from YUB before proceeding with the Project...YUB has jurisdiction to review the Project once YEC seeks to recover costs of that Project from customers through rates. At that time, the YUB can evaluate the prudence of any expenditure made on the Project.” The Board did not expect that its review of the prudently incurred costs, as described in the preceding letter from YEC, would be linked to the treatment of the YDC contribution. The terms of the YDC contribution were disclosed in an agreement dated February 13, 2004 between YEC and YDC where the YDC contribution is required to fund in the first instance any capital costs incurred by YEC in developing the project which are not allowed by the YUB as part of YEC’s Rate Base, with any remainder as a no-cost contribution towards YEC’s Rate Base (“YDC Contribution Agreement”) (Application, Appendix 5.1). The Mayo-Dawson transmission line went into service in September, 2003 while the YEC request to recover the Project costs in customers' rates and a copy of the YDC Contribution Agreement were filed with the Board on December 14, 2004. YDC is not regulated by the Board and under the Act, the Board does not have the jurisdiction to require an amendment to the YDC Contribution Agreement.

### **Evidence**

The request by YEC to include the total cost of the Mayo-Dawson transmission line in Rate Base was well canvassed through Intervenor, and YEC submissions, IRs and filed exhibits, cross-examination during the hearing and argument. In making its determination on this request, the Board paid particular attention to YEC’s responses to YUB-YEC 1-19, the Auditor General’s Report on the Mayo-Dawson Transmission Line (Exhibit B1-6) and the Public Accounts Committee (“PAC”) transcripts (Exhibit A-18), as well as the opening statement at the hearing by YEC (Exhibit B1-29), responses to cross-examination provided by YEC panel members during the hearing (transcript references) and argument and Reply Argument by YEC and Intervenors.

In their response to YUB-YEC-1-19.1, YEC defends their position of including the full cost of the Mayo-Dawson line in Rate Base on the basis of the original cost standard, incorporating the prudent investment principle (page 2). Under these principles, the Board should include investments in Rate Base if the investment was made with reasonable business judgment on the facts as they were known at the time the investment was made, and not based on a hind-sight review of the investment. YEC also points out in this response that the project is in service and is therefore used and useful, and is highly beneficial to ratepayers. YEC states in response to YUB-YEC-1-19.1 that the NPV of the benefits provided by the Mayo-Dawson transmission are considerably higher than originally forecast in 2000 of \$14 million when the project was approved by the Yukon Energy

Board. Additionally, the Mayo-Dawson note provides protection to ratepayers from ever paying higher rates for the Mayo-Dawson line than they would have paid using diesel generation. During cross-examination by YUB counsel, YEC was asked to provide sensitivity analyses supporting their claim that the project benefits ratepayers under varying economic conditions (T4:806) such as shorter life expectancy, lower diesel fuel costs than forecast in the Application. YEC provided their response in Exhibit B1-36, showing the results of those sensitivity analyses, which range from positive rate impacts of between \$10.0 million to just over \$20.0 million.

Total capital cost forecast, actual costs, and variance explanations are provided by YEC in their response to YUB-YEC-1-19.2. With respect to the management of the project, YEC is of the opinion that management acted reasonably to establish an effective management and contracting regime for the project based on the selected design-build contract approach. In the opinion of YEC, the prime reason for the cost overrun related to performance of the design-build contractor, Chant Construction, which created unforeseen and serious delays and disputes beyond what might reasonably have been considered by management for this project (response to 1-19.1, page 4). These unforeseen and serious delays led YEC to incur internal management activities far beyond what was originally planned to bring the project to completion. The table on pages 9 and 10 of 12 (reproduced in these Reasons and titled "Table of Mayo-Dawson Variances" after the Board's determination) provides the details of where cost variances occurred in relation to the originally approved project. Of the total \$6,543,000 cost overrun, \$2,528,000 were construction cost overruns, and \$4,015,000 were owner-related costs not previously budgeted for. YEC points out at page 5 in their response that the original approved project budget was for \$29,046,000 and not \$27,246,000. Cost and scope changes totaling \$1,300,000 were approved prior to the final approval being issued, and the additional \$500,000 for the conductor was approved by YDC shortly after final approvals were issued.

The Auditor General's Report on the Mayo-Dawson transmission line (Exhibit B1-6) was requested by YEC in response to the cost overruns experienced on this project. The Auditor General's Report was critical of the practices and methods of construction and contracting undertaken by YEC. The AG found that the project was not well managed by YEC (page 1). The Auditor General identified shortcomings in defining the project scope and costs, substantial risk in the chosen construction approach, weak project management, significant deficiencies in contracting for construction services, and inadequate financial controls. In particular at page 5 of the Auditor General's Report, the Auditor General found that YEC lacked the experience and expertise to carry out a project of this magnitude. While the need for the project and its feasibility and benefits

were well documented and justified, the Auditor General found that project scope and costs were not adequately defined in the feasibility and cost estimates. At page 7, the Auditor General concludes that estimates of project costs were understated. In particular, potential internal costs were not clearly identified and budgeted for. The Auditor General also identified substantial risks using the design-build approach to managing and constructing the project (pages 7 and 8). The engineering firm hired by YEC in 2000 to do a preliminary engineering and cost estimate identified three approaches to project delivery, the design-build approach, the design supply and installation approach, and the construction management approach. The engineering report cited many disadvantages and few advantages of the design-build approach, and recommended the construction management approach. However, the management of YEC ignored the consulting engineer's findings and recommended using the design-build approach to the Board of YEC, against the recommendation of the engineering firm.

Under cross-examination by the Board counsel and Intervenors, YEC defended their positions with respect to the Mayo-Dawson transmission line. Board counsel cross examination begins at T4:753 of the Transcript. He cross-examined YEC on the Auditor General's findings and the cost overruns associated with the Mayo-Dawson project. In response to cross-examination, YEC stated that in general they agree with the Auditor General's characterization that there were considerable lapses in management control, errors on tendering, lack of management control (T4:755). YEC also agreed with the findings of the Auditor General that there were problems with the overall budgeting of the project, and they considered that the budget of \$29,046,000 was sufficient (T4:757). At T4:758, YEC defended their choice of using the design-build approach on the basis that the existing president at the time of approval had experience with design-build, and it was believed that the corporation could appropriately manage that approach. As per YEC's response to McMahon-YEC 1-54, YEC lacked technical and construction related personnel, and therefore the design-build approach better suited YEC's circumstances. Further cross-examination addressed YEC's lack of contracting policies and procedures. Mr. Morrison explained that YEC was young and that those abilities were lacking at the time of letting contracts (T4:764). Board counsel also explored the practice of letting sole-source contracts, and whether or not these resulted in lowest costs (T4:766), as well as the overall tendering process (T4: 769). Board counsel reviewed with the YEC panel their response to YUB IR 1-19 starting at page T4:790 of the Transcript. During cross-examination, questions focused on the use of internal oversight that was not budgeted for, considering the type of design-build contract that was entered into with the contractor. At T4:794, Mr. Morrison explained what the project engineer was hired to do, which was to check the work of the contractor, Chant Construction. Mr. Morrison

explained that this function was originally included in the budget for project management of \$800,000 (T4:796), however these costs ended up being over \$2,800,000, resulting in an unfavourable variance of \$2,056,000. The Auditor General found that the use of a project engineer was contrary to the design-build concept as proposed by management, which was to have a small project management team with only one contractor acting as project manager. According to the contract, under the direction of the project manager, the engineering firm's field office staff and staff at its head office and other locations would provide engineering services (Auditor General's Report, page 14, paragraph 54).

### **Argument**

At page 18 of their final argument, YEC is requesting that the Board approve a mid-year Rate Base addition for the Mayo-Dawson transmission line project of \$27,675,000. That amount is comprised of the gross capital expenditure related to the Mayo-Dawson project of \$35,589,000 at the time of filing its Application, less the YDC contribution of \$5,750,000 and depreciation relating to the project since it went into operation in September of 2003.

In addition, YEC has included as Attachment A, a defense of their final position on the inclusion in Rate Base of the Mayo-Dawson line. Attachment A deals with YEC's position on the why YEC did not approach the YUB for a review of the project prior to construction. YEC states at page 1 of 23 that the Act governing the YUB does not provide for pre-approval of the project, which is not an energy project under the terms of the Act. YEC also provided the legal framework of how the Board should be reviewing the Mayo-Dawson transmission line. According to YEC, the YUB must review the project pursuant to section 32 of the Act, and to determine if the project is used and useful, and that the YUB must apply an original cost standard incorporating the prudent management standard. Under the prudent management standard, The YUB must assess the ability of YEC management decisions on a foresight basis, and not on a hindsight basis, which is how the Auditor General's review of the Mayo-Dawson project was undertaken (Attachment A, pages 3 and 4). In the view of YEC, the project is in service and providing substantial benefits to ratepayers of YEC (Attachment A, page 6), and the benefit is getting much larger as a result of higher fuel oil prices. YEC also points out that the benefits are substantial under various sensitivity analyses provided in Exhibit B1-36 in response to IRs from Board counsel during his cross-examination.

Section 4 of Attachment A provides YEC's position on the prudence of YEC's decisions and the resulting capital costs related to the Mayo-Dawson line. It is the argument of YEC that they acted prudently in all of their decision making related to the Mayo-Dawson line, and therefore these costs should be allowed in Rate Base. Specifically, YEC addresses their

decision making on the issues of deciding to proceed with the project in the first place (section 4.1), the decision to use the design-build approach to constructing the transmission line (section 4.2), selection of the contractor (section 4.3) and the various decisions that had to be undertaken with respect to project management (section 4.4).

Intervenor Final Arguments also provided the Board with comments on the inclusion of the Mayo-Dawson project costs in Rate Base. McMahon argues that there has not been sufficient resource planning to understand whether or not there is any need for the added transmission system. As a result, McMahon is recommending disallowance of costs related to AFUDC (\$788,000) and, duplication of project management costs (\$538,000), as well as lower capital costs due to the level of uncertainty in forecasting a project of this magnitude, resulting in gross additions of \$25,620,000. UCG argues that YEC/YDC undertook a large project with no up front regulatory scrutiny, and therefore runs the risk of disallowance of costs. In the submission from UCG, all costs related to the Mayo-Dawson line should be disallowed (Recommendation X) since the costs were not prudently incurred, and therefore be denied (Recommendation XI).

### **Determination**

The Board has considered all of the positions advanced by all parties, and has the following comments. YEC is of the view in their arguments and responses to IRs that the appropriate test of whether to allow costs in Rate Base are the used and useful test, and the prudent management test. The Board does not dispute that the Mayo-Dawson line is used and useful and that the project is providing considerable benefit to ratepayers. However, the Board must still determine, based on all the evidence, whether or not the expenditures were prudently incurred.

Considerable evidence is on the record to suggest that some costs relating to the construction of the Mayo-Dawson line should be disallowed. The Auditor General's Report highlighted considerable lapses in management of the process, unbudgeted internal costs, improper contracting practices, and the Board of Directors not being provided with adequate and accurate information with which to make timely decisions. In particular, the Board notes that YEC was advised by their consulting engineers not to use the design-build method for construction due to its limited benefits and considerable risks, and should instead use the construction management approach. As is noted above, YEC decided to ignore the advice and proceed with the design-build approach. The Board also notes that the Auditor General's Report considers that a number of the difficulties that were encountered with the construction contractor, Chant Construction, (over-tensioning of lines, trespass on First Nation lands, delays in construction timetable, re-routing of the transmission line around the airport, timber removal, vibration problems with the transmission line) are

directly attributable to YEC's poor planning, communication, and project management (Auditor General's Report, page 16, paragraph 60).. The Board notes that the final project costs are unknown at this time as a result of claim and counterclaims between the contractor and YEC that have not been resolved and are expected to be outstanding for some time.

The Board agrees with YEC that the approved contract amount for the Mayo-Dawson line is \$29,046,000 (excluding YDC contribution of \$5,750,000). The Board notes that the approved change orders of \$1,750,000 resulting in the approved construction cost of \$29,046,000 were included in the revised contribution from YDC of \$5,750,000. Based on the evidence established in this proceeding, the Board finds that the forecast of \$29,046,000 is accepted as the appropriate capital cost of the Mayo-Dawson transmission line to be allowed in rates. The Board notes that a number of bad decisions are identified in the planning and construction phase that has led to a cost overrun of \$6,543,000, resulting in the total cost of the project being \$35,589,000. Currently it is not known if the final cost of the project will come over or under this amount due to claims and counter claims between YEC and their contractor, Chant Construction. Any costs that are recovered from Chant Construction, up to \$5,750,000, are to be recorded in an interest bearing deferral account for review and disposition by the Board. The Board notes that the change orders leading to that amount also were included in the revised contribution from YDC of \$5,750,000. Based on the above, the Board disallows the cost overrun of \$6,543,000

**The Board allows total capital expenditures related to the Mayo-Dawson transmission line in Rate Base in the amount of \$29,046,000 as of October 1, 2003. Therefore, mid-year Rate Base impact for 2005 will be \$29,046,000, less applicable depreciation expense as of the in-service date of October 1, 2003. To the extent that further costs are incurred on the Mayo-Dawson line due to the claims and counter claims between Chant Construction and YEC, those costs would similarly be disallowed. Cost recoveries from Chant Construction are to be recorded in an interest bearing deferral account for review and disposition by the Yukon Utilities Board.**

### Table of Mayo-Dawson Variances

Yukon Energy Corporation - Reconciliation of Mayo-Dawson Budget to 2005 Forecast (\$000s)

	Original Budget	Reallocation	Budget Adjusted incl. all final approvals	Actual	Variance
<b>CONSTRUCTION COSTS</b>					
Callison Substation	2,750	0	2,750	2,506	154
Mayo GS	1,358	0	1,358	1,208	150
Dawson City Diesel GS	1,123	0	1,123	437	686
Transmission Line	14,451	1,061	15,512	16,991	-1,479
Project and Construction Management	1,393	-438	956	2,377	-1,422
Stewart Crossing Substation	0	67	67	67	0
<b>Total Chant Construction</b>	<b>21,075</b>	<b>691</b>	<b>21,766</b>	<b>23,676</b>	<b>-1,911</b>
less: Transformer put in inventory, not used on proj.			0	-35	35
Other Contractors Required	0		0	798	-798
Other Materials Required	0		0	80	-80
Forecast Deficiency Correction, hardware tightening, survey, drawings	0		0	1,589	-1,589
Dawson Diesel Plant Standby Upgrades	0		0	285	-285
Rural Electrification Projects		222	222	222	0
<b>Total Construction with Contingency</b>	<b>21,075</b>	<b>913</b>	<b>21,988</b>	<b>26,615</b>	<b>-4,628</b>
Contingency (at 10%)	2,100		2,100	0	2,100
<b>Total Construction with Contingency</b>	<b>23,175</b>	<b>913</b>	<b>24,088</b>	<b>26,615</b>	<b>-2,528</b>
<b>OWNER'S COSTS</b>					
feasibility	1,000	738	1,738	1,649	89
tender prep, etc.	200	-200	0		0
YEC project management	150	650	800	2,856	-2,056
<i>made up of: project manager</i>				383	
<i>project manager support costs</i>				155	
<i>project engineer</i>				1,837	
<i>project engineer support costs</i>				336	
<i>regulatory (env'l and utility)</i>				145	
YEC staff costs	100	-50	50	1,146	-1,096
Overhead and directly allocated internal costs	50		50	301	-251
Right of Way, licence, permits, stumpage	25	-25	0		0
Heritage	50	-50	0		0
Geotechnical	25	-25	0		0
Legal surveys	200	-200	0		0
Public Consultation	25		25	78	-53
Insurance (property, third party liability, errors and omissions)				344	-344
Legal (post Design-Build Agreement)				911	-911
Land Acquisition		50	50	114	-64
<b>Total Owner's Costs</b>	<b>1,825</b>	<b>888</b>	<b>2,713</b>	<b>7,399</b>	<b>-4,687</b>
<b>TOTAL YUKON ENERGY COSTS</b>					
<b>Subtotal before interest and inflation</b>	<b>25,000</b>	<b>1,800</b>	<b>26,800</b>	<b>34,014</b>	<b>-7,214</b>
AFUDC	1,905		1,905	1,575	330
Inflation	341		341		341
<b>Subtotal</b>	<b>27,246</b>	<b>1,800</b>	<b>29,046</b>	<b>35,589</b>	<b>-6,543</b>
plus: items paid for by YDC not yet included above					
items known at June 2000	1300	-1300	0	0	0
larger conductor added Feb 2001	500	-500	0	0	0
<b>Total Project Costs</b>	<b>29,046</b>	<b>0</b>	<b>29,046</b>	<b>35,589</b>	<b>-6,543</b>

## 6.2 Other Rate Base Items

In their Application, YEC provided information on their capital expenditure program for the period covering 2000 to 2005, including actual expenditures for 2000 through 2003, and forecasts for 2004 and 2005. Section 5.1 of the Application provides details of YEC's large capital projects for 2005, totaling \$6.45 million. Deferred capital spending plans for 2005, totaling \$1.35 million are discussed in section 5.2, and section 5.3 reviews Rate Base additions for the years 2000 through 2004. YEC is requesting in their Application that all of the amounts identified in sections 5.1 to 5.3 be allowed to become part of Rate Base for the purposes of establishing revenue requirements and rates. Section 5.3.1 reviewed the Mayo-Dawson transmission line, and has been dealt with above. Section 5.3.2 discusses the rebuilding of the Whitehorse hydro electric power generation station, the impacts of which were approved through Order 2003-5. Planning criteria for the WAF system, and generation adequacy are also presented in section 5 of the Application. Tables at the back of section 5 provide details of capital expenditures and the timing of those expenditures (Tables 5.1 and 5.2). Table 5.3 provides details of deferred costs.

The last time YEC provided detail of their capital program was during the 1996/7 GRA, which included a forecast of spending on capital projects. Capital expenditures have occurred since the previous GRA, however YEC has not provided stakeholders with a description or details of those expenditures for the period 1997 through 1999 in this Application. However, these projects and their impact on Rate Base are implicitly included within the opening balance of Rate Base as included in the regulatory schedules of section 7 of the Application. Capital costs incurred from 1997 to 1999 are included in the opening balance of Schedule 3, Capital Expenditure continuity schedule, which forms a part of mid year Rate Base. Concerns from Intervenors that YEC had not provided sufficient details or justification to include these capital expenditures in Rate Base were addressed in a motion brought before the Board by UCG. In that motion, UCG argued that these expenditures should not be included in Rate Base since there was not sufficient detail or justification on those expenditures provided by YEC, and therefore should not be permitted to become part of Rate Base. YEC responded that they were unable to report on the details of those projects as the data bases containing the details were difficult to retrieve information from (Response to IR YECL-YEC-1-9). The Board issued Order 2005-8 accepting the argument of YEC, and agreed that they had provided sufficient information with respect to the years 1997 through 1999.

## Evidence

During the hearing, YECL examined the appropriateness of including in Rate Base capital investments that YECL believed were not permitted under the terms of the ESR for making capital investment in customers' facilities. YEC invested approximately \$142,000 at the Whitehorse Hospital allowing the hospital to access Secondary Energy service. At T2:123 of the Transcript, YECL counsel wished to understand how a payment of \$142,000 could be made outside the ESR. YEC response was that since the Whitehorse Hospital was not a YEC customer, the ESR did not apply to that type of expenditure, and that type of expenditure was supported by a business case that showed the expenditure is providing exceptional returns to ratepayers (T2:124). At T2:126 of the Transcript, Mr. Bowman discussed that the ESR govern the level of capital investment a utility can make to attach a customer to the distribution system, and not the type of decision related to investing in customers facilities, such as the transformer at the Whitehorse Hospital. At T2:127, YECL counsel asked if it is YEC's view that they are not constrained by the ESRs in their capital investments in non-customers facilities, and should therefore not include those expenditures in Rate Base. YEC responded that they were not constrained by the ESR in such a case, and that that type of investment was governed by other tests such as used and useful, and of meeting the prudent investment criteria (T2:127).

YECL also inquired about an investment of \$87,000 made by YEC to connect a customer directly to the transmission system, which is part of a rural electrification program supported by contributions from YDC (T2:140), and whether or not those types of investment were covered by the ESR. YEC responded that this program was not covered by the ESR since it was a direct tie-in to the transmission system, and not for connecting customers to the distribution system. Expenditures totaling \$17,000 at the Mayo School for the installation of metering equipment were also questioned by YECL, who wished to understand if these expenditures were made pursuant to the ESR. YEC responded that these expenditures were part of a pilot program to understand how Secondary Energy customers impacted the system during peak times, and that the expenditure was not covered by the ESRs, but related more to the SCADA tariff changes (T2:144 to 146).

## Argument

Final Arguments of Intervenors generally centred on YEC's lack of justification for capital projects undertaken in previous periods, and therefore should not form part of Rate Base for rate making purposes. Another area of concern was that the expenditures were not consistent with the ESR and should therefore not be allowed in Rate Base. YECL submits at page 7 of their Final Arguments that YEC cannot make investments to cover customer facility costs that are outside the scope of the approved

rate schedules and the ESR and, as such, YEC has been acting in a manner inconsistent with the Board's approved terms and conditions in this regard. Consequently, YEC should not be permitted to include in their Rate Base, or otherwise recover in their revenue requirement, any of the unauthorized costs that have been expended without Board approval.

In their Reply Argument, YEC deals with each of the concerns of YECL, McMahon and UCG with respect to Rate Base additions. Starting at page 27 of their Reply Argument, YEC provides their views on specific customer related expenditures for potential transformers that allow customers to be served directly from the transmission system. Because the use of potential transformers ("PT") permits multiple customer attachments, the use of a PT is outside the ESR because it is a system cost. In addition, YEC explains that each of these programs (\$87,700 for Site Improvements and \$53,539 for System Improvements) to attach customers through potential transformers was made based on a test to provide some utility investment, up to approximately the value of expected benefits of providing service. All other costs are covered through ratepayer contributions. It is YEC's position that both the Rural Electrification (\$222,000) and Stewart Crossing (\$357,000) projects identified by YECL received offsetting grants from YDC, and are in Rate Base at no cost.

### **Determination**

Although YECL, McMahon and UCG targeted some utility investments as being unjustified and having insufficient details, none of the Intervenor provided evidence that the assets were not used and useful and that they were not providing a positive value to existing ratepayers. YECL comments surrounding investments must be made pursuant to the rules of the ESR is appropriate for expenditures related to customer attachments (i.e. service lines), however, to categorize all investments as having to meet the ESR is in the Board's opinion too limiting and may preclude investments that provide significant benefits and lower rates, all else being equal, to existing and future customers. With respect to capital expenditures made during the period between the last GRA and 2000, the Board notes that YEC addressed the issue of inadequate records at the Pre-Hearing Conference held in January. YEC has provided a breakdown of capital expenditures made during the 1997 to 1999 timeframe on Exhibit B1-30, showing capital expenditures by plant category. In addition, YEC has provided their annual reports for that period of time in question. The majority of capital spending resulted from the rebuilding of the Whitehorse Rapids fire rebuilding project, the costs of which were approved by Board Order 2002-3. Board Order 2005-8 accepted the YEC explanation, and determined that no further information was required in respect of details on 1997 to 1999 capital spending. No other Intervenor evidence was filed that would support disallowing capital expenditures over the period 1997 to 2004.

**Therefore, the Board accepts the Rate Base of YEC as of December 31, 2004 shown on revised Schedule 1 included as part of Exhibit B1-23, except for the adjustment noted above for the disallowance of the Mayo-Dawson transmission line (adjusted for changes in AFUDC relating to the disallowance). The Board accepts the forecast capital expenditures for 2005 as updated in Exhibit B1-23, Schedule 3.**

## **7 CAPITAL STRUCTURE AND RATE OF RETURN ON EQUITY**

YEC is capitalized at a ratio of 60% long-term debt, and 40% equity. Therefore, YEC's rates are set to include a provision for a fair return on common equity, less 50 basis points pursuant to OIC 1995/90 section 2 as amended by OIC 1998/32. The rate of return on equity set during the 1996/7 GRA was 10.75%, which was then modified as a result of the Faro mine closure to 9.138% in 1998. Therefore, YEC's existing rate includes a rate of return on equity equal to 9.138% (Application, page 1-5). YEC's actual return on equity has been well below the allowed return in each year of the period 2000 to 2004, and is forecast to be 7.1% during 2005 at existing rates. Generally, increasing cost pressures have eroded YEC's return since the closure of the Faro mine. YEC is seeking to adjust their allowed return on equity to better reflect existing bond yields, compared to when the existing return was established in 1998, and to help maintain stable firm service rates during the drawdown of deferral accounts and funds pursuant to the IST proposal. Therefore, in their Application, YEC is proposing that the allowed return on equity be set by reference to the BCUC formula approach, resulting in an allowed ROE of 9.05% for 2005 (Application, page 3-23)

### **Evidence**

OIC 1998/32 requires that YEC receive a fair return on common equity, less 50 basis points, or 0.5%. Based on the material filed in section 3.4.2 of the Application, the BCUC methodology of setting utility return on equity in British Columbia has been used as a means of establishing a fair return, as ordered by OIC. The BCUC automated adjustment mechanism is a formulaic approach that sets the risk for a benchmark low-risk utility, based on long Canada bond yields, plus an equity premium of 350 basis points. Each individual utility then is assessed a risk premium based on its individual business and financial risks over and above the benchmark utility. YEC is requesting that an appropriate risk premium would be 52 basis points, which is midway between the FortisBC risk premium of 40 basis points, and Pacific Northern Gas risk premium of 65 basis points (Application, page 8-4 to 8-6). Table 8.1 on page 8-6 of the Application provides a table showing the calculation in detail of the requested return on equity for YEC.

YEC proposes to use the BCUC approach for 2005 only, as a means of establishing a fair return without having to incur the cost of providing a full

cost of capital review, which is time consuming and expensive. YEC believes that it is appropriate to adopt approaches that can avoid the need for such expert evidence, thereby reducing cost burden on ratepayers (Application, pages 3-23). However, YEC is not proposing to move towards an annual ROE adjustment mechanism, similar to the BCUC or other jurisdictions at this time (Application, pages 8-9), YEC is only requesting that the Board approve an allowed return on equity based on the BCUC methodology for 2005 (Application, page 8-2).

Return on equity was reviewed through Intervenor and Board staff IRs, as well as during cross examination of the YEC panel in the hearing. During cross examination, questions from Percival focused on the return YEC required as compared to the return YEC has requested approval for. Percival notes that YEC's average return over the period 2000 to 2003 was approximately 7.6% (T4:716), and questioned YEC on why they did not seek relief from the Board. Based on the lack of action on these below allowed returns, Percival asked if the YEC Board of Directors was willing to accept returns of approximately 7.6% (T4:719 to 720). YEC responded that the low returns were to a certain extent the result of warm weather, and bad debt write-offs pertaining to the Keno mine, consistent with the response to IR YUB 1-1, and that the Board of Directors did not just accept these returns, but also considered the cost to ratepayers of an application process that would be required to adjust rates (T4:726 to 727). Board counsel cross examined the YEC panel on relative risk of YEC compared to peer utilities, such as YECL, FortisBC and PNG in an effort to understand where YEC fits into the risk premium spectrum (T5:931 to 935). YEC accepted that they are less risky than PNG, but argued they are more risky than FortisBC due to the inter-tie with other utility networks, which allows it to generate less electricity and purchase more of its demand when needed.

### **Argument**

Overall, the use of the BCUC formula as a proxy for setting a fair return on equity for 2005 is not considered unreasonable. McMahon in his Final Argument supports the use of the BCUC methodology for 2005 for expediency purposes in the absence of expert evidence (McMahon Final Argument, page 9). However, McMahon does not support a risk premium over and above the benchmark utility since no evidence has been introduced to support a risk premium specific to YEC (McMahon Final Argument, page 9). McMahon's suggestion would yield a return on equity for 2005 of 8.2%, given the long Canada bond yields available in April 2005.

Although the UCG does not oppose the use of the BCUC methodology, they prefer to use the method and risk premium established in the last GRA. This would result in an allowed return of 8.278% (based on a risk premium of 275 basis points) as determined at page 10 of their Final Arguments. Another area of concern for UCG was the risk premium applicable to YEC. In their

view, UCG asserts that YEC does not have a level of business risk that would support the level of risk premium being applied for. In their view, forecast risk is reduced by the IST mechanism of drawing down deferral accounts to recover any shortfall in revenue requirement, so in essence they make their allowed return through the IST mechanism (UCG Final Argument, page 10, paragraph 69), minimizing financial risk.

YECL, in their Final Argument (page 30), does not support the level of return being requested, and does not support the use of an automated adjustment mechanism similar to that of the BCUC. In the view of YECL, since no evidence has been introduced by YEC on the pros and cons of such a mechanism, then the Board should not make any determination with respect to return on equity.

YEC responded to the above Intervenor concerns in their Reply Argument in section 4.4.2 at page 45.

### **Determination**

The Board is of the opinion that the rate of return on common equity that YEC is requesting is reasonable, given their level of risk in relation to other utilities within their peer group. Using the BCUC automated adjustment mechanism as a proxy of rate of return on equity does not impose a precedent in the Yukon, and is an expedient and means of determining return for the current one year period. As for the issue of risk premium, the Board agrees that YEC likely falls somewhere between PNG at 65 basis points, and FortisBC at 40 basis points. To ensure that there is sufficient forecast risk within the revenue requirement model, YEC should be at risk for their forecasts of load, OM&A and capital expenditures.

**Therefore, the Board determines that an appropriate rate of return on common equity for YEC is 9.05% (9.55% less 0.5% as per OIC 1998/32). YEC is at risk for their forecast for annual deliveries, OM&A, and capital expenditures for 2005.**

## **8 OTHER ISSUES**

### **8.1 Future Removal and Site Restoration (FRSR) Costs and Asset Retirement Obligations (ARO)**

An issue that was explored during the hearing by Board counsel was on the FRSR provision that YEC charges annually into revenue requirements as a component of depreciation expense with the corresponding credit being recorded in the FRSR liability account.

YEC's treatment of FRSR and ARO is described respectively in its 2003 Audited Financial Statements (Application, Tab 9) and its draft YEC 2004

Financial Statements (Exhibit B1-23, p. 7). In the notes to the draft YEC 2004 Financial Statements, YEC states that effective January 1, 2004 it retroactively adopted the CICA Recommendations on accounting for ARO ("Note (b)" Asset Retirement Obligations). Note (b) describes that ARO treatment requires the Company to identify the legal obligations associated with the retirement of tangible long lived assets. Note (b) states that YEC has some tangible long lived assets which have future legal obligations but it anticipates using the assets for an indefinite period, the date of removal cannot be reasonably determined and therefore an ARO has not been recorded.

### **Evidence**

The use of FRSR by YEC was examined in YUB-YEC-1-72. In their response to YUB-YEC-1-72.3, YEC identified the balance in the reserve account at the end of 2003 as being \$5,144,000, and growing to a forecast balance of \$6,514,000 by the end of 2005 under the current practice. Based on their response to YUB-YEC-1-72.3, YEC charges approximately \$500,000 annually to the FRSR reserve. Several questions were asked during cross-examination of YEC by Board counsel, starting at T5:875 and continuing on to T5:897. Also, the actual balance in the FRSR reserve was updated in Exhibit B1-23 to \$5,757,000 as at December 31, 2004. Board counsel asked questions on how the FRSR reserve is accounted for, and Mr. Bowman explained that the charge is recorded as Depreciation Expense on the Income Statement, with a corresponding credit to the FRSR reserve on the Balance Sheet (T5:876-877).

Exhibit A-35 introduced by Board counsel provides the current prescribed GAAP treatment regarding FRSR accounting treatment. Section 3110 of the CICA Handbook is very clear that FRSR appropriations are no longer required under GAAP, and that long lived assets with retirement obligations should be recognized or disclosed in the notes to the Financial Statements if the fair value cannot be reasonably estimated. Under sections 1506 and 3110 of the CICA Handbook where ARO are required, the reserve for the ARO is to be established and the reserve for FRSR should be removed from the Balance Sheet, and recorded in retained earnings.

Board counsel also questioned the YEC panel on Exhibit A-35 (CICA Handbook, sections 3110 and 1506), which deals with the prescribed accounting treatment of transitioning from FRSR to ARO. At T5:883 to 891, Board counsel queried YEC on their treatment of FRSR in relation to changes to the CICA Handbook that require companies to remove their reserves for FRSR once they adopt ARO accounting, which YEC has done effective January 1, 2004. Board counsel asked whether or not YEC agreed that they should be changing their financial reporting to take into account the transition from FRSR accounting treatment to ARO accounting treatment (T5:884 to 886). YEC does not agree currently that they should

make those changes, and that is does not wish to take the FRSR into retained earnings in 2005 (T5:890).

Board counsel also introduced Exhibit A-36, an excerpt from the BC Hydro 2005/6 revenue requirements application. In that application, BC Hydro determined that it no longer would be making appropriations to its FRSR accounts, and would now be recording ARO consistent with section 3110 of the CICA Handbook, and Generally Accepted Accounting Principles (“GAAP”). In BC Hydro’s case, it removed the liability for FRSR from the balance sheet, and proposed to transfer the balance to retained earnings. When questioned by Board counsel on whether YEC agreed with the BC Hydro treatment, YEC did not commit to the same treatment, and considered the FRSR liability as a ratepayer account that should not be taken into retained earnings.

### **Argument**

YEC discussed the FRSR and ARO obligations in their Final Argument, beginning at page 13. The YEC position is that the treatment of FRSR and ARO is controversial, and care must be taken (page 13). In their view, the Depreciation Study undertaken by Gannett Fleming continues to propose Site Restoration charges in the amount of \$533,366 in 2005, and Gannett Fleming is an expert in this matter. Also, other jurisdictions such as the AEUB and Manitoba have maintained net salvage amounts in revenue requirement (page 14). YEC states in Final Argument that the only evidence before the Board is from Gannett Fleming, recognized depreciation experts. YEC also states at page 14, that there is no evidence currently before the Board that suggests that net salvage should not be included in revenue requirements for 2005. YEC also argues that the FRSR fund is a liability that belongs to ratepayers and it would be inappropriate to take those monies into retained earnings, since ratepayers have made those contributions over time to pay for their share of the cost of site restoration or removal so as to avoid intergenerational issues (page 14 and 15).

### **Determination**

The Board is of the view that if there is no longer a need for YEC to collect amounts for annual appropriation to the FRSR reserve, then consistent with section 3110 of the CICA Handbook, YEC should comply with GAAP and remove these charges from annual revenue requirements. Based on the Depreciation Study, the result would be a reduction in annual Depreciation Expense of \$533,336. The Board agrees with YEC’s concern about the GAAP requirement to transfer the balance in the FRSR liability account to retained earnings and considers that a variance from section 3110 of the CICA Handbook is required.

**The Board requires that YEC discontinue recording an annual provision for FRSR effective January 1, 2005. The Board orders a variance from GAAP and requires that the December 31, 2004, balance in the FRSR account remain as a liability to be utilized for dismantling costs that are incurred in 2005 and future years. The Board requires YEC to inform Intervenors and stakeholders when the balance of the site removal liability account reaches \$2.0 million.**

## **8.2 2005 Hearing Costs**

With the changes discussed above, it is expected that the Faro mine de-watering deferral account will be available to stabilize existing general service rates, with no need for a rate increase, until after 2007. Therefore, the final hearing cost deferral account should be amortized over three years, beginning in 2005.

**The Board therefore directs YEC that once all final costs are recorded in the 2005 Hearing Cost Deferral Account, to amortize that account equally over the 3-year period beginning 2005.**

## **8.3 Revenue Requirement Schedules**

The approvals contained in this Order have made material adjustments to the Revenue Requirements requested in YEC's filed Application.

**In order to ensure that all parties understand the full and final effects of this Order, the Board orders YEC to incorporate all above changes and approvals, and to re-file the appropriate Schedules that make up section 7 of the Application within 30 days of issuance of this Order.**

## **8.4 Financial Review**

**The Board finds that a financial review of YEC is necessary in accordance with sections 23 and 24 of the Act. The timing and the scope of the Board financial review will be determined at a later date. The focus of the financial review is expected to involve enquiry and analytical procedures in regards to the financial information provided by YEC, examinations on a test basis of documentation supporting amounts included in utility records and an assessment of compliance with Board directives. The Board will allow YEC deferral account recovery of the costs incurred in the financial review, subject to Board review and approval.**