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

and

General Rate Application for 2008-09 by
Yukon Energy Corporation

BEFORE:	W. Shanks, Chair		
	R. Hancock	)	September 8, 2009
	K. Avery	)	
	J. Woodland		

BOARD ORDER 2009-8

WHEREAS:

A. On October 6, 2008, Yukon Energy Corporation (YEC) filed with the Yukon Utilities Board (Board) an Application, pursuant to the *Public Utilities Act* and Order-In-Council 1995/90, requesting an Order approving forecast revenue requirements for the 2008 and 2009 test years of $29.217 million for 2008 and $31.599 million for 2009 (General Rate Application or Application).

B. The Board issued Board Order 2008-15 setting out the proposed proceeding schedule for the Application, which was confirmed in Board Order 2009-1.

C. On December 19, 2008, the Minister of Justice authorized the Board to incur the expenses necessary to conduct a public hearing into the Application pursuant to Section 50 of the *Act*.

D. The Board held a pre-hearing conference on January 7, 2009 in Whitehorse.

E. On May 5, 2009, the Board held an oral public hearing in the City of Whitehorse, Yukon.

F. The Board considered the extensive evidence and the written Argument and Reply argument of the parties respecting the Application.

NOW THEREFORE, the Board orders as follows with Reasons attached as Appendix A:

1. The Board directs YEC to provide a compliance filing to the Board within 30 days of the issuance of this Order in accordance with the directions set out in the Reasons for Decision (Appendix A attached to this Order).

2. The Board approves the 2008 and 2009 revenue requirement for YEC with the changes directed in the Reasons for Decision (Appendix A attached to this Order).

3. The Board directs YEC, in conjunction with YECL, to file a complete Phase II (rate design and cost of services) with the Board within 60 days of the date of the decision on the above ordered compliance filing.

DATED at the City of Whitehorse, in the Yukon Territory, the 8th day of September, 2009.

BY ORDER



W. Shanks
Chair

Appendix A

Yukon Utilities Board

Reasons for Decision

Board Order 2009-08

Yukon Energy Corporation

Approval of Revenue Requirements for 2008 and 2009

September 8, 2009

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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 REVENUE REQUIREMENTS FOR 2008 AND 2009

REASONS FOR DECISION

1 INTRODUCTION

1. On October 6, 2008, Yukon Energy Corporation (YEC, Company or Applicant) filed with the Yukon Utilities Board (Board) an application, pursuant to the *Public Utilities Act* (Act) and *Order-in-Council 1995/90*, for approval of its forecast revenue requirements for the 2008 and 2009 test years and approval of certain deferral accounts (Application).

2. YEC is the main generator and transmitter of electrical energy in the Yukon providing 69 kV or 138 kV transmission facilities for the Whitehorse-Aishihik-Faro (WAF) and Mayo-Dawson grid systems. YEC also supplies power through wholesale electricity sales to the Yukon Electrical Company Ltd. (YECL).

3. YEC is seeking approval of a revenue requirement of $29.217 million for 2008 and of $31.599 million for 2009 including approval of the following costs, revenues and other related provisions:

a. **Fuel and Purchased Power Costs** of $0.487 million and $0.582 million in 2008 and 2009 respectively, including approval to adjust diesel prices used in setting fuel costs to reflect current forecast conditions.

b. **Non-Fuel Operating and Maintenance Costs** of $12.362 million and $13.228 million in 2008 and 2009 respectively, including approval:

   i. To apply $0.463 million of the remaining Faro Dewatering Account deferred regulatory liability amounts (related to earlier “de-watering sales” to the Faro mine site) against the current outstanding balance in the Yukon Energy Reserve for Injuries and Damages; and

   ii. To increase the annual appropriation to the Reserve for Injuries and Damages to $150,000 from the current $50,000 level starting in 2009.

c. **Depreciation and Amortization Expenses** of $6.403 million for 2008 and $6.930 million for 2009 including approval to amortize the following regulatory costs:

i. An estimated "placeholder" expense of $0.800 million related to costs for the Application, anticipated to be incurred over 2008 and 2009 for preparation and review of the Application and reimbursement of related intervenor and YUB costs, to be amortized over 2008 and 2009 and approval to adjust the above amount to reflect the full actual amounts incurred or ordered to be reimbursed at the time of the final refiling in the current Application process, following receipt of all final Orders from the Board.

ii. A total incurred cost of $0.643 million related to the regulatory review of Yukon Energy's 2006-2025 Resource Plan, as required by the Minister of Justice, to be amortized over 10 years consistent with the anticipated frequency of full Resource Plan updates.

iii. A total incurred cost of $0.243 million related to the regulatory review of the Minto Explorations Power Purchase Agreement, to be amortized over 12 years which is the currently anticipated economic life of the substantial terms of the PPA.

iv. A total incurred cost of $0.185 million related to the regulatory review of the Carmacks-Stewart Transmission Project (CSTP) under Part 3 of the Public Utilities Act, as required by the Minister of Justice, to be amortized over 45 years consistent with the approximate average life for the project assets.

d. **Mid-Year 2008 and 2009 Forecast Rate Base** costs of $145.212 million and $151.416 million for 2008 and 2009 respectively, including costs for capital works projects brought into service (or forecast to be brought into service) since the 2005 Required Revenues and Related Matters application as well as deferred costs (including deferred costs related to this Application) and working capital forecast to be included in rate base. Relevant major projects (i.e., costs over $1 million) include capital works for the Stage One CSTP, acquisition of the Minto Diesel Units, Whitehorse Mirrlees Diesel (WD3) Rebuild, Faro Mirrlees Diesel (FD1) Recommissioning, and Aishihik Third Turbine. Major projects involving deferred costs include work in progress for planning, engineering, permitting and potential tendering activities regarding Mayo B hydro generation enhancement, other generation feasibility assessments, Western Copper (Carmacks Copper mine) connection, and CSTP Stage Two.

e. **Return on Rate Base** of $9.965 million in 2008 and a placeholder estimate of $10.860 million in 2009, including an allowed rate of return on equity (ROE) of 8.64% for 2008, and a 2009 placeholder ROE of 8.64%, to be adjusted to the final requested level based on the British Columbia Utilities Commission ROE determination for 2009 expected in November 2008[1].

[1] The final ROE rate for 2009 is discussed in Section 8 of this decision.

f. **Faro Dewatering Account:** approval to address (if and as required) specified income forecast contingencies related to final 2008 retail rate revenue requirements (i.e., offsetting, to the extent required to enable final approved forecast 2008 retail rate revenues, any net revenue losses due to delays in the final connection timing of Minto mine and Pelly Crossing loads to the CSTP from the October 1, 2008 connection date assumed in the Application) and secondary sales revenue losses, if any, arising due to below average water flows in any year after 2008.

4. The Applicant also sought an approval of Interim Refundable Rates for retail rate reductions (Rider U) commencing November 1, 2008, which was subsequently amended to December 1, 2008, applicable only to first block rates where feasible, without any rate rebalancing between customer classes. YEC also requested that an increase in residential runoff rates be approved as part of an interim refundable rates Order.

5. On October 30, 2008, the Board issued Board Order 2008-15 regarding the Application in which the Board ordered YEC to publish a Notice of Application and of the Pre-Hearing Conference no later than November 5, 2008, in such appropriate local news publications in YEC's service area to provide adequate notice to the public. YEC was also ordered to make the Application and supporting materials available for inspection at its Head Office located at 2 Miles Canyon Road, Whitehorse, and at its District Offices located at Mayo, Dawson and Faro. Yukon Board Order 2008-15 also proposed a proceeding schedule for the Application with a hearing to commence on May 5, 2009.

6. In Board Order 2008-16 dated November 14, 2008, the Board denied the interim refundable rate as requested by YEC and ordered YEC to implement an interim rate by amending Rider J and applying a 5.98% decrease to the base rates of all rate classes, except Rates 39 and 32, effective December 1, 2008. Subsequently, the Board noted that an error was made in the formula used to calculate the 5.98% decrease to the base rates and the Board issued Board Order 2008-17 to correct the error. On November 17, 2009, the Board ordered YEC is to implement an interim rate by amending Rider J and applying a 3.48% decrease to the base rates of all Residential (Non-Government and Government), General Service (Non-Government and Government) and Lighting customers.

7. On December 19, 2008, the Minister of Justice authorized the Board to incur the expenses necessary to conduct a public hearing into the Application pursuant to section 50 of the Act.

8. The Board held a Pre-Hearing Conference on January 7, 2009 in Whitehorse, at which the Board heard submissions from parties on the following matters:

a. Issues List
b. Intervenor and Observer Status
c. Hearing Cost Process
d. Proceeding Schedule
e. Hearing Process

9. On January 20, 2009, the Board issued Order 2009-1, in which intervenor status was granted to the following:

- Yukon Electrical Company Limited (YECL)
- City of Whitehorse (CW)
- Utilities Consumers' Group (UCG)
- John Maissan (LE)
- Peter Percival
- Erin Giesbrecht
- Laura Cathers

Observer status was granted to the Department of Energy, Mines and Resources, Government of Yukon, Paul Kishchuk and the Carcross/Tagish Development Corporation. Order 2009-1 also confirmed the Proceeding Schedule for the Application and the issues list.

10. The Proceeding Schedule was revised with Board Order 2009-3, dated February 26, 2009, when YEC requested more time to provide responses to information requests, given the large volume of information requests. In addition, the Board ordered YEC to file with the Board all responses to the interrogatories of the Board and Intervenors that it could reasonably complete by the original deadline of February 27, 2009 and to complete the filing of its responses to the interrogatories by March 6, 2009.

11. The Board ruled on YECL's and UCG's motion for better and further responses to their respective interrogatories. In Board Order 2009-4, dated April 7, 2009 the Board directed YEC to provide better and further responses according to the Reasons attached as Appendix A to that Order. The Board also directed YEC to provide in its April update a full explanation for all variances of 10 percent or greater between the 2008 actual amounts and the initial 2008 forecast amounts, as well as provide a revised electronic copy, incorporating all the updates into a single text-searchable document containing YEC's responses to the interrogatories of the Intervenors and the Board.

12. On May 5, 2009, the Board held an oral public hearing in the City of Whitehorse, Yukon. The Board was comprised of Wendy Shanks Chair, Robert Laking Vice-Chair and members Richard Hancock, Jody Woodland, and Kathleen Avery. However, Robert Laking did not participate in the Decision, as he was unavailable.

13. The Board directed the parties to file Final Argument on May 22, 2009 and Reply Argument on June 5, 2009. The Board considers this proceeding closed on June 5, 2009.

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

2 YUKON ENERGY SYSTEM SALES AND GENERATION

2.1 Overview

15. YEC's generation facilities provide over 90% of Yukon's electricity generation needs annually. Furthermore, YEC is the owner and operator of the 138 kV Whitehorse/Aishihik/Faro ("WAF") and 69 kV Mayo-Dawson ("MD") transmission systems in the Yukon.

16. Yukon Energy directly serves about 1900 customers at the distribution (retail) level (about 11% of all electrical retail customers in Yukon), most of whom live in and around Dawson City, Mayo and Faro. Yukon Energy also provides power to Yukon retail customers served on the WAF system through its wholesale sales to the YECL that serves approximately 90% of YEC's total retail customers. [2]

2.2 Sales Forecast and Forecasting Methodology

17. In respect of its forecasting methodology, YEC indicated that it used customer data for the prior 3 years in order to determine the monthly average use per customer. The average use per customer was then multiplied by the forecast number of customers to derive forecast sales by month by rate class. Additionally, YEC submitted that

- Residential and General Service customer counts and usage from the most recent year were subsequently reviewed in order to determine whether each was impacted by a major project; and
- Customer additions and forecasts for General Service customers in Faro and Mayo were adjusted after consultations with YEC personnel. [3]

18. YECL stated that it served approximately 90% of YEC's retail customers and because of this, possessed the detailed customer information necessary to prepare its forecasts. Moreover, YECL added that "YEC appears to rely upon a simple average of past information, with no weather normalization, even though it acknowledged that weather directly impacts monthly wholesale sales (CW-YEC-1-2-Revised; 1T223)." YECL submitted that because its recently approved sales forecast included a methodology that incorporated sound statistical methods and weather normalization, its forecast was superior to YEC's and accordingly should be approved for YEC as well. [4]

19. CW in Argument indicated that YEC had not updated its wholesale sales forecast to reflect the Board's determination in Order 2009-2 or YECL's compliance filing.[5] CW further indicated that YEC relied upon a simple forecasting methodology, with no weather normalization, despite acknowledging that weather directly impacts monthly sales. Accordingly, the City submitted that the Board should direct YEC to adopt YECL's revised forecast approved in YECL's compliance filing.[6]

[2] YEC Application; pages 2-1and 2-2
[3] LE-YEC-1-7
[4] YECL Argument, pages 5-6
[5] CW Argument, page 3
[6] CW Reply Argument, pages 1-2

20. UCG echoed the submissions of YECL and CW, when it recommended that YEC should study the use of weather normalization for load forecasting and results reporting so that load variances resulting from weather could be isolated. [7]

21. YECL noted YEC's confirmation that its forecast primary (wholesale) sales to YECL and YECL's forecast of total purchases from YEC are forecasts whereby "the actual number, once known in any year, will be the same for both utilities."[8] CW submitted that YEC and YECL sales forecasts should be consistent at the interface between the two systems.

22. YEC indicated that it seriously took into account the Board's views expressed in Order 2009-2 regarding the importance of simplicity when developing a forecast; "a more simplified approach … that achieves a reasonable forecast with less costs to rate payers would be more appropriate for the Yukon." Moreover, YEC argued that YECL's assertions regarding the superiority of its methods were irrelevant since allegedly superior methods, i.e. the bottom-up and top-down approach, were incorporated into the development of YEC's wholesale sales forecast.[9]

23. With respect to CW's comments that a future cost of service analysis necessitated a consistency in sales forecasts, YEC submitted that the issue of the overall quantity of the secondary load and its impact on consolidated revenue requirements was a much larger factor in the overall cost allocation process to be embarked upon than firm wholesale sales. The adoption of a consistent wholesale forecast would require two separate adjustments to YEC's forecast in each test year. Respecting the CW's cost of service argument, YEC indicated that CW's consistency argument was, at best, only relevant to 2009 and therefore provided no basis that YEC's 2008 forecast should be consistent with YECL's compliance filing.[10]

24. On a related matter, YECL noted that "YEC used a forecast for both Fish Lake Hydro and wind generation that was below the forecast for Fish Lake Hydro that was recently approved by the Board" in YECL's 2008-2009 GRA.[11]

2.2.1.1 Views of the Board

25. The Board notes that most intervenors took issue with YEC's sales forecast and there was unanimity among intervenors that YEC should incorporate the Board approved YECL forecast as YEC's wholesale sales forecast for the test period. Further, the Board acknowledges the bottom-up and top-down approach that YEC incorporated into its sales forecast.

26. The Board notes YEC's argument that the adoption of the "wholesale forecast used in the YECL compliance filing would require two separate adjustments to YEC's forecast that would result in downward and upward revisions respectively in 2009 and 2010 firm rates.[12] However, the Board is not convinced that it should not adopt the consistent approach that intervenors have proposed in respect of wholesale sales. Further, the Board finds that it would be advantageous to

[7] UCG Argument, page 11
[8] Transcript, page 235, line 22 to Transcript, page 237, line 1
[9] YEC Reply Argument, page 18
[10] YEC Reply Argument, page 16
[11] YECL Argument, page 6
[12] YEC Argument, page 16

have consistent wholesale sales forecasts considering that both utilities are about to "embark on a joint Phase II exercise."[13]

27. Moreover, the Board acknowledges YEC's comment that weather plays an integral part in the variability of loads:

> These forecasts have proven to be useful for YEC planning purposes, keeping in mind that actual individual annual **wholesale loads are subject to considerable variability due to weather, Fish Lake generation** and other factors not captured in any forecast for specific year sales. **[bolding added]**[14]

28. For the above reasons the Board finds it appropriate that YEC's wholesale sales forecast should be YECL's approved forecast. Therefore the Board directs YEC, to incorporate YECL's approved load forecast as wholesale sales forecast in its compliance filing. The Board further directs YEC to adopt YECL's Fish Lake Hydro forecast as well.

29. Additionally, all changes to YEC's revenue requirement forecast resulting from this direction should be referenced (highlighted) in the appropriate tables with accompanying explanations for variances from its Application to assist the Board in its deliberations.

30. The Board finds that YEC's forecasting methodologies for loads other than YECL's to be appropriate.

2.3 Demand Side Management Programs and Their Impact

31. With respect to DSM matters, the Board in Order 2009-2 set out the following:

> The Board views DSM as another critical issue for Yukon. The Board directs YECL in conjunction with YEC, to consult with stakeholders and develop a policy paper with respect to DSM initiatives and include this policy paper as part of YECL's and YEC's next GRA. To be clear, YEC and YECL are to jointly lead these processes and jointly submit the policy papers (IPP and DSM) in their next GRA. The DSM policy papers are to provide DSM initiatives developed through negotiations with Intervenors and communities in its service territory and YEC's service territory.[15]

32. YEC acknowledged that it had not carried out any material studies related to energy efficiency programs or DSM programs.[16] However, YEC indicated that it had reviewed the Board's direction, but YEC had not as yet had the opportunity to meet with YECL. Moreover, YEC proffered that further direction was needed regarding:

(a) the scale of activities to be undertaken by the utilities, and
(b) confirmation that some form of deferral account is appropriate to capture the costs that would be presumably dispositioned at the next GRA.[17]

33. The UCG indicated that load forecasting and planning for load growth should account for the base, non-industrial load separately from the more transitory industrial load in order to protect the longer term ratepayers from intergenerational inequities that might arise. To that end,

[13] CW Argument, page 5
[14] YECL-YEC-1-19
[15] Appendix A to Board Order 2009-2 – Reasons for Decision, page 44
[16] LE-YECL-1-20
[17] UCG-YEC-1-20

a DSM plan was a necessary component of a comprehensive load and facilities forecasting effort, given the long-term nature of effective DSM programs.

34. LE echoed the Board's views set out in Order 2009-2 and recommended that the Board order YEC and YECL to undertake meaningful DSM initiatives for the test years that would address the urgent need for additional electric energy sources. In support of this recommendation, LE further stated that the Board should allow both utilities deferred costs, subject to Board approval at the next GRA.[18]

35. YEC submitted that it was working with the Energy Solutions Centre (ESC) with respect to addressing issues related to DSM. Further, YEC suggested that while DSM was fundamentally a resource that was the core responsibility of the utility providing bulk power services, in this case YEC, there was a fundamental need for YECL being the primary end-user to be actively involved as well. YEC indicated that DSM had not been the focus of YEC's planning activities up to now because there was an abundance of surplus energy until recently and DSM initiatives were not typically considered as meeting near term capacity shortfalls of the type forecast in the Yukon. However:

> Over the longer term, and under the various industrial scenarios … DSM activities have the potential to contribute to savings from diesel fuel generation.[19]

2.3.1.1 Views of the Board

36. The Board finds the UCG and LE recommendations very helpful with respect to the issue of DSM. Further, the Board notes the stated willingness of YEC and YECL to work together on this particular issue.

37. The Board recognizes the perverse economics with respect to energy conservation initiatives:

> … DSM activities in the near-term that lower peak demand levels, but reduce utility sales which are currently being made from surplus hydro will be an adverse rate driver in Yukon…[20]

38. Further, the Board acknowledges that there are limits to the scale of savings available from DSM;[21] the Board notes YEC's assertion that:

> …DSM initiatives … are not typically considered by utilities to provide reliable capacity towards meeting near term capacity of the type forecast in the Yukon.

39. However, the Board is concerned that the longer term electricity ratepayers in the Yukon might face intergenerational inequities that might arise if the more transitory industrial types of

[18] LE Reply Argument, page 4
[19] YEC Reply Argument, pages 21 – 22
[20] YEC Reply Argument, page 21
[21] YEC Reply Argument , page 22

loads are served with long-term capital facilities.[22] Given all of the above, the Board remains convinced that DSM is a vital component in a comprehensive load and facilities planning strategy that complements YEC's strategy to displace forecast baseload diesel generation.

40. Furthermore, the Board finds DSM to be a critical issue for all electric rate payers in Yukon. The Board directs YEC in conjunction with YECL, to consult with stakeholders and develop a policy paper with respect to DSM initiatives. YEC and YECL are to jointly lead this process and submit a policy paper (Plan) in their next GRA. Further the utilities are to be cognizant of and work with ESC where necessary so as not to duplicate efforts.

41. The Plan should include initiatives developed through negotiations with intervenor groups and communities in the Yukon. The Plan should provide a wide range of energy efficiency and conservation measures that will assist ratepayers in dealing with the high cost of energy in the Yukon and also provide support for local initiatives identified through community energy planning initiatives.

42. The Board finds the UCG and LE proposals for deferral accounts in support of the DSM initiatives acceptable and both YEC and YECL can propose appropriate treatment of these accounts at the time of their next GRA.

3 REVENUE REQUIREMENT

3.1 Overview

43. There are three major components to YEC's revenue requirement:

- Operating and maintenance expenses, including fuel costs, labour and costs for administering the utility;
- Depreciation and amortization of assets and deferred costs included in rate base; and
- Return on rate base to cover the costs of the YEC's various sources of capital (long-term debt issuances and equity) required to finance the rate base.

44. YEC stated that it had experienced increasing cost pressures since 2005; these were primarily due to increased operational costs, and feasibility and planning costs necessary to bring on the next generation of bulk power infrastructure. Identified cost pressures include higher fuel costs, increased labour costs and employee requirements, other non-fuel O&M cost increases, amortization cost increases related to deferred costs and increased average costs of debt.[23] The following table illustrates YEC's proposed Revenue Requirement for the test years.

[22] "Both cost and environmental reasons provide strong incentives for Yukon Energy to expand the available complement of renewable generation, as well as transmission interconnections that support enhanced use of renewable generation in Yukon to displace forecast baseload diesel generation."; YEC Argument, page 52.

[23] YEC Argument, page 17

Yukon Energy Revenue Requirement ($000)[24]

				Forecast		Forecast	
	Actual 2005	Actual 2006	Actual 2007	Existing 2008	Proposed 2008	Existing 2009	Proposed 2009
Fuel and Purchased Power	185	178	271	280	487	324	582
Non-Fuel Operating and Maintenance	11,233	11,293	12,116	12,362	12,362	13,128	13,228
Depreciation and Amortization	5,379	5,611	5,779	5,913	6,403	6,441	6,930
Return on Rate Base	9,619	10,609	10,024	10,435	9,965	12,189	10,860
Revenue Requirement	26,416	27,690	28,191	28,991	29,217	32,082	31,599

3.2 Fuel and Purchased Power

45. Fuel and Purchased Power costs showed significant increases since 2005, primarily because of diesel fuel price increases

Fuel and Purchased Power ($000)[25]

				Forecast		Forecast	
	Actual 2005	Actual 2006	Actual 2007	Existing 2008	Proposed 2008	Existing 2009	Proposed 2009
Fuel	137	126	218	227	434	270	528
Purchased Power	48	52	53	53	53	54	54
Total Fuel and Purchased Power	185	178	271	280	487	324	582

46. YEC submitted that forecast fuel prices for the 2008/2009 were approximately $1.108 and $1.149 per liter respectively for 2008 and 2009. CW indicated that YEC in its Updates filing[26] had recalculated "[the] Minto "Fixed" Rider F based on YECL's approved forecast" but had not updated its fuel price forecast. YEC replied that it did not adjust its fuel price forecast stating that:

> [i]n terms of fuel price or volume, there would be no rationale to change the forecast for fuel volume unless you were changing either the sales or some capability with respect to your non-fuel generation, and there [weren't] any changes in those things.[27]

47. Fuel costs, secondary sales revenues, and "fixed" residential Rider F amounts would require adjustment if YEC's forecast was changed. Moreover, YEC submitted that if the fuel

[24] Application, page 3-2 – Table 3.1.
[25] Application, page 3-4
[26] Updates to Yukon Energy Application, dated April 24, 2009
[27] Transcript; page 232, lines 18-22

price forecast was adjusted downward, there would be a net increase in revenue requirement in 2009.[28] CW did not accept YEC's suggestion that its proposed fuel price forecast should be accepted because to do otherwise would increase its revenue requirement.

48. CW acknowledged that the Rider F mechanism would, in the long run keep the utility and its customers whole by correcting for any differences between the GRA forecast fuel prices and actual fuel prices. However, as with any deferral account, inter-generational inequities may arise that in effect send incorrect price signals to the end-user. CW submitted that YEC's 2009 forecast fuel price was too high considering current prices;[29] moreover, the best fuel price forecast was the approved cost of fuel set out for YECL in Order 2009-2 ($0.96/litre).[30]

49. YEC argued that updating fuel prices would ignore basic regulatory principles whereby forecasts are based on the best information available at the time of filing. Further, while potential intergenerational inequities may arise the concern is not merited in the Yukon given that the account is not designed to defer over any material period any costs incurred by either of the two utilities. In summary, given the timing of the YEC and YECL filings, the volatility of fuel prices, YEC submitted that there was no compelling reason for the fuel price forecasts used by either YEC or YECL to be the same.

3.2.1.1 Views of the Board

50. The Board recognizes CW's concerns regarding Rider F and intergenerational inequalities. However the Board agrees with YEC that the account is not designed to defer over any significant length of time, the costs incurred by YEC and YECL with respect to fuel purchase costs.

51. However, the Board is concerned with the significant increase in proposed fuel costs for the test period; proposed fuel costs for each year of the test period are more than double than 2007 actual fuel costs. In particular the Board is mindful that fuel and purchased power were above forecast for 2008 largely due to fuel consumed in December 2008 because of:

> lower than normal temperatures combined with an outage caused by an equipment failure at the Aishihik plant were the drivers of this cost increase.[31]

52. Further, the Board notes that YEC's proposed fuel prices for Whitehorse during the period are approximately $1.108 and $1.149 per liter respectively for 2008 and 2009. Considering the current economic environment and the explanation above regarding purchased power for 2008, the Board finds that YEC's forecast fuel price forecast for the test years to be excessive.

53. Accordingly, the Board directs YEC to use the fuel price of $0.96/litre for Whitehorse. For other YEC locations, as per the Application, the Board approves the additional costs of 3.2 cents/litre (Faro), 1.5 cents/litre (Dawson) and 0.7 cents/litre (Mayo B).

54. The Board directs YEC to reflect the directed fuel price change in its compliance filing and all related schedules.

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[28] CW-YEC-1-16
[29] CW Argument, page 9
[30] CW Reply Argument, page 3
[31] YEC Argument, page 18

3.3 Non-Fuel Operating and Maintenance Expenses

55. YEC sought approval to include in revenue requirement, non-fuel operating and maintenance (O&M) expenses totaling $12.362 million and $13.228 million respectively in 2008 and 2009.

Non-Fuel Operating, Maintenance and Administration Expenses ($000)[32]

				Forecast		Forecast	
	Actual 2005	Actual 2006	Actual 2007	Existing 2008	Proposed 2008	Existing 2009	Proposed 2009
Labour	5,636	6,084	6,632	6,676	6,676	6,880	6,880
Production	797	761	793	657	657	798	798
Transmission	340	354	470	507	507	612	612
Distribution	163	310	97	148	148	178	178
General O&M	592	644	732	807	807	858	858
Administration	2,450	1,978	2,223	2,347	2,347	2,544,	2,544
Insurance and Reserve for Injuries/Damages	1,009	913	914	964	964	1,002	1,002
Property Taxes	246	249	256	256	256	256	256
Total OM&A	11,233	11,293	12,116	12,362	12,362	13,128	13,228

3.3.1 Labour

56. YEC's 2008 and 2009 proposed labour expenses are respectively $44,000 and $248,000 greater than 2007 actuals.

[32] Application, page 3-6, Table 3.3.

57. YEC's employee complement (FTE) for the period 2005 to 2009 is as follows:

Employee Complement History[33]

	Actual 2005	Actual 2006	Actual 2007	GRA 2008	GRA 2009
President	1.60	1.50	2.50	2.50	2.50
Communications	1.00	1.00	1.00	1.00	1.00
Human Resources & Info. Mgmt.	6.06	6.01	6.00	7.00	7.00
Business Development	1.08	1.00	1.00	1.00	1.00
Finance, Cust. Acctg. & Purchasing	11.05	11.49	11.63	12.81	12.81
Operations	34.82	39.43	38.60	40.20	40.10
Engineering Services	13.21	13.58	14.00	12.67	12.00
Health, Safety & Environment	1.00	1.00	3.00	3.33	3.33
Total	69.82	75.01	77.73	80.51	79.74

58. YEC provided justification for its employee complement and indicated that its cost per employee had increased 3.1% since the 2005 GRA. Further, YEC's forecast vacancy rate was consistent with the methodology used by the Board in determining YECL's vacancy rate in Order 2009-2. Based on YEC's approach to forecasting labour and other expenses, YEC submitted that its proposed O&M costs were fair and reasonable.[34]

59. LE, suggested that YEC's staffing growth had been increasing more rapidly than necessary; the growth in staff followed load growth, albeit that load growth was comprised of two customers – YECL and the Minto mine. LE noted that this suggested a reverse economies-of-scale trend that should not be allowed to continue. Further, LE argued that specific indicators were not available that would assist intervenors in ascertaining the prudency of such costs. Accordingly, LE recommended that the Board direct YEC to expand the employee and cost performance indicator information presented in the KPI report and to provide comparative CEA information and a 5-year running average of each indicator.[35]

60. UCG stated that it was unrealistic to argue that higher wages need to be offered to attract qualified employees when concessions were the rule in other jurisdictions in this shrinking economy. UCG submitted that the Board should disallow any proposed increase in labour costs associated with salaries of YEC employees.[36]

61. YEC submitted that it had included annual economic increases of 3.75% and 3.5% respectively for 2008 and 2009.[37] Further, YEC indicated that the increases were the result of

[33] Application, page 3-7, Table 3.4.
[34] YEC Argument, page 19
[35] LE Argument, page 11
[36] UCG Argument, page 13
[37] YECL-YEC-1-39

YEC contractual commitments pursuant to labour contracts. Moreover, YEC argued that there was no basis for UCG suggestion that these increases should be the responsibility of YEC shareholders without evidence that these amounts were not prudently incurred.

3.3.1.1 Views of the Board

62. The Board accepts that these increases result from employee negotiations and are reasonable. Further, intervenors have not brought forward arguments which convince the Board that YEC's applied-for labour increases are not reasonable.

63. Accordingly, the Board accepts YEC's applied-for labour increases that form a part of YEC's Non-Fuel Operating, Maintenance and Administration Expense budget for the test years.

3.3.2 Transmission

64. YEC submitted that 2008 Transmission non-labour cost increases were for the most part the result of required staged increase in brushing activity. For the test years YEC submitted that proposed Transmission labour increases were well above the actual 2005-2007 levels because YEC forecast a full complement of line crew in 2008 and 2009. YEC supplied the following table with respect to Transmission costs:

Transmission Costs ($000)[38]

				Forecast		Forecast	
	Actual 2005	Actual 2006	Actual 2007	Existing 2008	Proposed 2008	Existing 2009	Proposed 2009
Labour	295	307	293	466	466	482	482
Brushing	158	117	239	257	257	377	377
Other Non-Labour	182	237	231	250	250	235	235
Total Transmission	635	661	763	973	973	1,094	1,094

65. YECL submitted that the general responses provided by YEC confirmed the lack of structure with respect to the establishment and implementation of a brushing program. Considering the material increases with respect to brushing expenses, YECL recommended that the Board direct YEC to develop a written brushing policy.[39]

66. YEC's panel indicated that brushing costs had increased year over year due to the requirement to brush more frequently on both the transmission and distribution lines. Further, changes in weather patterns had led to increased brushing requirements in excess of a previously established seven-year cycle.[40]

[38] Application, page 3-8, Table 3.6.
[39] YECL Argument, page 11
[40] Transcripts, pages 148, 485

3.3.2.1 Views of the Board

67. The Board considers YEC's explanation regarding the proposed increase to be acceptable at this time. Therefore the Board accepts the transmission costs as filed.

68. However, the Board has concerns regarding the lack of structure respecting YEC's brushing program. The Board notes YEC's submission that "[YEC] has established systems to address brushing requirements successfully, and as such no new "policy' is required." The Board finds that a written policy that outlines the structure of the program and reasons for the structure would enable interveners and the Board to understand the inherent problems that YEC is facing in regard to brushing, as well as, the reasons underpinning the material increases or decreases that may occur with respect to brushing costs in future GRAs.

69. The Board therefore directs YEC to undertake a study into brushing activities of similar utilities and report its findings to the Board at the time of its next GRA. Further, the Board directs YEC in its report to include a written brushing policy that describes comprehensively YEC's approach and explains the manner in which the budget for any year is derived.

3.3.3 Insurance and Reserve for Injury and Damages (Reserve)

70. YEC's costs related to its Reserve as set out in the Application are shown in the following table.

Insurance and Reserve for Injuries & Damages (Reserve)
($000's)[41]

				Forecast		Forecast	
	Actual 2005	Actual 2006	Actual 2007	Existing 2008	Proposed 2008	Existing 2009	Proposed 2009
Insurance	909	813	814	914	914	952	952
Reserve Appropriation	100	100	100	50	50	50	150
One-time Transfer	744				463		
Less: Application of fire gain funds	(744)				(463)		
Total	1,099	913	914	964	964	1,002	1,102

71. YEC indicated that the Reserve was set up to address uninsured and uninsurable losses[42] as well as the deductible portion of insured losses; the Reserve in essence allowed:

- for a balance to be struck between purchasing additional insurance vs. using a self-insurance type approach via the reserve; and

[41] Application, page 3-13, Table 3.10.

[42] Uninsured losses are defined as losses that could be covered by insurance but which YEC has chosen not to insure because the probability, frequency and/or dollar value of losses do not justify the premium. Uninsurable losses are those losses for which coverage is not available in the conventional insurance market.

- the costs of unforeseen events to be smoothed out over a number of years to avoid rate instability for ratepayers.

72. Since 2005, the balance in the Reserve account has grown from approximately $0 to negative $463,000[43] as at year-end 2007. YEC therefore, sought the following approvals related to the Reserve:

i. To apply $0.463 million of the remaining Faro Dewatering Account deferred regulatory amounts against the current outstanding balance in the YEC Reserve.

ii. To increase, starting in 2009, the ongoing appropriation to the Reserve to $150,000 from the current $50,000 level.[44]

73. YECL and CW expressed concerns with the materiality threshold for charging items to the Reserve. YECL stated the materiality threshold allowed for common occurring incidents, i.e. the result of normal wear-and-tear, to be included in the Reserve that otherwise should have been forecast as part of YEC's O&M budget. Accordingly, YECL stated that YEC's $1,000 materiality threshold was too low and submitted that a materiality threshold on the order of $15,000 or $20,000 be adopted by the Board.

74. CW suggested that the criteria for inclusion of Reserve items appeared to be loose and informal and submitted that YEC should be directed to undertake a study and submit modifications to the criteria at its next GRA. [45] [46] YEC indicated that its CFO made the determination regarding whether an item was charged to the Reserve (with advice of a professional insurance broker for larger incidents) and confirmed that YEC had established criteria with respect to charging items to the Reserve.[47]

75. CW also suggested that the uneven appropriations with respect to the Reserve eliminated the associated rate stability benefits; i.e. $50,000 and $150,000 respectively for 2008 and 2009. CW submitted that appropriations for the Reserve be set at $100,000 for each test year.[48]

76. CW noted that a Reserve item that exceeded the existing deductable was not claimed against the insurance because YEC was advised by YEC's insurance broker that a claim would have resulted in an increase in premiums. CW recommended that the Board direct YEC to perform a risk management study to determine, among other matters, whether raising deductible amounts would reduce property insurance costs in a cost-effective manner, and whether the deductible amounts provided an appropriate balance between the cost of insurance and probable size of claims and criteria for making charges to the Reserve.[49] Moreover, CW submitted that an independent risk management consultant should be retained to determine the appropriate balance between self-insurance, deductible amounts, commercial insurance and the criteria for charging repairs to the Reserve versus normal O&M expenses.[50]

77. YEC submitted in Reply Argument that only material, insurable, accidental events are charged to the Reserve. Further, with respect to the charging of items to the Reserve, YEC

[43] Negative amounts represent an excess of charges to the Reserve compared to appropriations to the Reserve
[44] YEC Application, pages 3-12 to 3-15
[45] YECL Argument, pages 9 – 10.
[46] CW Argument, page 12 -13.
[47] YEC Argument, page 22.
[48] CW Argument, page 12.
[49] CW Argument, pages 12-13.
[50] CW Reply Argument, page 4.

submitted that it applies criteria based on "the sudden and accidental loss of an object" that is defined as one of YEC's assets. YEC specified that "contrary to suggestions by YECL, incidents that arise due to normal wear and tear are not charged to the reserve."[51]

78. YEC indicated that it relies on an independent relevant expert, its insurance broker, prior to expensing major items to the Reserve. Accordingly, YEC submitted that the charges are therefore reasonable and properly recorded as a valid charge to the Reserve.[52] In summary, the criteria and approach used by YEC is defined by YEC's insurance broker and applied by the CFO.[53] Further, YEC submitted that the level of appropriation set for the Reserve in recent history has been insufficient to maintain the Reserve balance within a reasonable range and as such there was ample evidence that the appropriation should be raised as requested.[54]

3.3.3.1 Views of the Board

79. The Board notes intervenors' concerns that a materiality threshold of $1,000 may not be appropriate for charging items to the Reserve. Further, the Board considered YEC's submission that if the materiality threshold was raised, more costs would be charged to maintenance. The Board considers that the $1,000 materiality threshold is too low.

80. Furthermore, the Board notes CW's concerns respecting the trade-offs between the deductible amount of property insurance and the additional costs of making claims on YEC's existing insurance. Also, the Board considered YEC's evidence that "our broker advised against making a claim for the $50,000 differential as this would have a negative effect on future premiums (insurers look at claimed losses in five previous years when pricing policies.)". In addition, the Board is concerned that "charges to the RFID are at the discretion of the CFO"[55] and that YEC lacks a policy for charging items to the Reserve.

81. The Board concludes that a policy outlining the criteria for charging items to the Reserve is needed. The Board directs YEC to undertake a risk management study (Study) of other utilities. The Study should examine and provide results that among other things:

1. maximizes the benefits of tradeoffs between the deductible amounts proposed to be used on property insurance, the additional costs of making claims on its existing insurance and the size of uninsured claims; and

2. outlines the criteria used to include an item in the Reserve, i.e. materiality threshold, probability of the event occurring, etc.

82. With regards to YEC's request to raise the annual appropriation to the Reserve to $150,000, the Board weighed intervenor arguments that the reserve appropriation should be maintained at the $100,000 against YEC's evidence that suggests a higher level of annual appropriation, including the charges to the reserve over the last eleven years.[56]

[51] YEC Reply Argument, page 31.
[52] YEC Argument, page 33.
[53] YEC Argument, page 31.
[54] YEC Argument, page 33.
[55] YECL-YEC-1-29
[56] YEC Application, page 3-14.

83. Given that the Board has directed YEC to undertake a Study that examines the interplay of variables, i.e. materiality threshold, insurance premium and deductible amounts, etc., that contribute to Reserve balances and given the variability in annual losses, the Board finds that the $150,000 appropriation threshold is not reasonable. Therefore, the Board does not approve YEC's request for a 2009 appropriation of $150,000. However, based on the evidence, the Board does find a $100,000 threshold to be reasonable for 2008 and 2009. The Board directs YEC to appropriate $100,000 against the Reserve in each of the test years.

84. Regarding, YEC's request to apply $463,000 to the current balance in the Reserve, the Board directs YEC to apply $413,000 from the Faro Mine Dewatering Account against the current balance in the Reserve. The reason for the change in the amount is that the Board has allowed a 2008 appropriation $100,000 in lieu of YEC's requested $50,000 annual appropriation.

85. The Board directs that YEC incorporate the above directions in its compliance filing.

3.3.4 Property Taxes

86. YEC forecast for property taxes was the constant amount of $256,000 from 2007 actuals to the end of the forecast period (2009). No objections or concerns were brought forward by any party with respect to property taxes.

3.3.4.1 Views of the Board

87. The Board accepts the amount for property taxes as filed by YEC for the 2008 and 2009 forecast years.

3.4 Rate Base, Depreciation and Amortization

88. Rate base for YEC includes property plant and equipment (net of depreciation), deferred study and other costs, various reserves and working capital. Capital additions are discussed in Section 5 (including deferred charges) and reserves (stabilization mechanisms are discussed later in this section).

89. YEC continued with the depreciation methods and assumptions that were approved by the Board in Board Order 2005-12, and as per Board direction ceased making appropriations to the Reserve for Future Removal and Site Restoration (FRSR) account until the account balance reached $2.0 million. YEC said the account will not reach that level during the test period.

90. Details on rate base are discussed in the Application on pages 3-15 to 3-18 inclusive.

91. In Argument, LE was concerned about the significant contributions by Yukon Development Corporation and the Yukon Government (YTG) in terms of optimal supply choices being made and the masking of appropriate price signals to customers.

92. UCG's position on depreciation was that YEC and YECL should perform a joint depreciation study.

93. YECL argued that YEC should perform periodic depreciation studies, and should indicate to the Board when it will undertake its next depreciation study. YECL asked the Board direct YEC, in its compliance filing, to inform the Board when the next depreciation study will take place. This position was maintained in reply. YECL rejected the notion from UCG that YEC

and YECL should undertake a joint depreciation study as YECL has recently submitted one as part of its recent GRA proceeding.

94. UCG in Reply Argument supported the position of YECL that YEC should be directed to undertake a new depreciation study.

95. YEC in Reply Argument noted that YEC and YECL use different depreciation methods that are not compatible to a joint study. YEC further stated that it was only three years ago that its depreciation study was reviewed before the Board and that from a cost perspective it is not prudent to undertake another study right away and increase the "regulatory burden for ratepayers"[57].

3.4.1.1 Views of the Board

The Board accepts the depreciation method employed by YEC for this test period.

3.5 Return on Rate Base (Interest Costs and ROE)

96. Capital structure, return on equity (ROE) and return on debt are discussed in Section 8.

3.5.1 Costs of Debt

97. Capital structure, return on equity (ROE) and return on debt are discussed in Section 8.

3.5.2 Return on Common Equity

98. Capital structure, return on equity (ROE) and return on debt are discussed in Section 8.

3.6 Stabilization Mechanisms

99. YEC uses two mechanisms to stabilize rates and revenues.

100. In Accordance with section 8 of OIC 1995/90, the Deferred Fuel Price Account or Rider F was created. This deferral account records the variance in consumed fuel prices, on a per litre basis, relative to the most recent GRA-approved fuel prices. In addition, on a quarterly basis, YEC credits the account with all variations (positive or negative) to the process of secondary sales relative to the most recent GRA-approved price[58].

101. The second stabilization mechanism is the Diesel Contingency Fund (DCF) which was established in the 1996/97 Negotiated Settlement. Page 3-22 of the Application provides a description of this account. YEC notes that this fund refers to WAF generation and is not applicable to the Mayo-Dawson system. YEC has not forecast using the DCF during the test period.

3.6.1.1 Views of the Board

102. No substantive issues were brought forward regarding the use of the two mechanisms to stabilize rates and revenues. The Board accepts YEC's position that the DCF is not expected to be used during the test period. Therefore the Board approves the continued use of the Deferred Fuel Price Account and the Diesel Contingency Fund as applied for by YEC.

[57] YEC Reply Argument, page 35.
[58] Application, page 3-21.

3.7 Insurance

103. YEC has provided an amount of $952,000 for insurance costs for each of the test years. Insurance is set out at pages 3-12 and 3-13 of the Application.

104. CW expressed a concern that:

> … YEC may not have done its due diligence respecting the tradeoffs between the deductible amounts on property insurance, the additional costs of making claims on its existing insurance and the size of uninsured claims[59].

105. CW requested the Board to direct YEC to undertake a comprehensive risk management assessment and present recommendations at its next GRA.

106. In Reply Argument, CW:

> … recommends that an independent risk management consultant determine the appropriate balance between self-insurance, deductible amounts, commercial insurance and the criteria for charging repairs to the RFID versus normal operations and maintenance expense[60].

107. YEC replied that its risk assessments and insurance needs are reviewed on an annual basis by a professional insurance broker that specializes in utility insurance[61].

3.7.1.1 Views of the Board

108. The Board notes the response to YECL-YEC-1-32 (c):

> Yukon Energy has a professional broker who, among other things, provides management with recommendations on optimal coverage for a given cost given the industry sector and corporate risk profile. On any given renewal, pricing for coverage will fluctuate year over year. The broker reviews these changes and management assesses on a case-by-case basis how to balance premium cost vs. coverage.

109. Also, the response to CW-YEC-1-24(b) relates to insurance costs. It stated the following:

> …On an annual basis, the Corporation provides an update to the broker on assets, incidents and changes in operations. The broker reviews coverages and makes recommendations for enhancements. The program is then marketed to key insurance providers and the broker gets quotations on costs (if any) of enhanced coverages. Decisions on coverage reside with the Chief Financial Officer.

110. No intervenor directly challenged the annual insurance premiums forecast by YEC for these test years. YEC also demonstrated that, from an insurance perspective premiums and coverages are reviewed annually by an insurance broker. Other than the issues with respect to the Reserve for Injuries and Damages as discussed in 3.3.3 above, the Board accepts the levels of insurance premiums as forecast by YEC for each of the test years.

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[59] CW Argument, page 12
[60] CW Reply Argument, page 4
[61] YEC Reply Argument, page 34

3.8 Rate Case Costs

111. In the Application, YEC sought approval for an estimated placeholder expense of $0.800 million related to costs that were anticipated to be incurred over 2008 and 2009 for the Application. YEC updated this placeholder estimate in response to YECL-YEC-1-28 Revised and in Exhibit B-10. It noted in YECL-YEC-1-28(a) Revised that, "the initial estimate provided when the Application was being prepared was based on the assumption that, given the previous review in 2005, the process would be more efficient and costs would be less than experienced at that time. This assumption did not bear out." Based on updated information, YEC forecast costs of the current hearing process as now being $1,100,000. The annual amortization of these costs remain at $0.4 million per year such that a forecast $0.3 million will remain to be amortized in 2010.

112. YEC added that the total incurred costs for various regulatory proceedings which have occurred since the 2005 Required Revenues and Related Matters and have been previously approved by Board Orders were as follows:

- $0.643 million related to regulatory review of Yukon Energy's 2006-2025 Resource Plan, to be amortized over 10 years to be consistent with the anticipated frequency of full Resource Plan updates.
- $0.243 million related to the regulatory review of the Minto Explorations Power Purchase Agreement, to be amortized over 12 years consistent with the currently anticipated economic life of the spur line connecting to the Minto Mine.
- $0.185 million related to the regulatory review of the CSTP under Part 3 of the Public Utilities Act to be amortized over 45 years consistent with the approximate average life of the project assets.

113. YEC argued that it addressed amortization of regulatory hearing costs in its responses to several interrogatories as well as in response to cross examination by YECL and Board Counsel during the oral hearing. It added that the means of accounting for rate case costs were previously addressed in detail during the 2005 Required Reviews and Related Matters hearing. YEC further discussed its approach to amortization of regulatory hearing costs in Undertaking #25 filed on May 15, 2009. YEC submitted that:

- Rate case costs incurred as part of YUB regulatory processes are not included in a specific permanent rate case reserve deferral account, and YEC has never sought, or received YUB approval to establish a permanent rate case deferral account similar to the approved Reserve For Injuries and Damages reserve account.
- Costs for completed rate cases (or other YUB hearing processes) are capitalized and amortized (as deferral costs) over a period or at a rate approved by the Board. These amounts have not had an allowance for funds used during construction (AFUDC) applied to them while they are being deferred.

114. YEC, in Reply Argument, questioned YECL's assertion regarding a need for consistency in treatment for YEC and YECL in light of well known, specifically approved and material differences in the manner in which each utility treats its accounts. It added that a good example in this regard is YECL's continuing use of the ELG technique for depreciation while Yukon Energy has received approval from the Board for the less aggressive (and consequently less costly to ratepayer) ASL approach.

115. YEC further argued that Board Order 2009-2 recognized the need to maintain consistent use of a methodology within a utility and reiterated that YEC has always accounted for its hearing costs in the manner proposed and has never sought approval from the Board to create a hearing cost reserve account. It submitted that YECL had expressly sought approval of such a reserve and that Board Order 2009-2 focused on the fact that YECL closed out its reserve without Board approval and appropriated ratepayer monies accumulated in the reserve to the account of YECL's shareholder. It added that the facts pertaining to YECL in this regard have no relevance to YEC's Application.

116. YEC argued that absent further evidence to support a special need in some specific instance, there was no merit to arguments of consistency without regard to the different approaches taken by YEC and YECL. Also, it noted that YECL had provided no evidence, or even commentary, as to any apparent benefits or technical merit to its "reserve" approach. Also, no other intervenor pursued this issue. In addition, YEC reiterated the above-mentioned arguments and submissions to support its position that the difference in its approach to hearing costs between YEC and YECL was warranted and that YEC should not be ordered to establish a rate case reserve.

117. YECL submitted that it was concerned by YEC's proposed approach to its hearing cost reserve for the following reasons. While YEC's estimate of hearing costs had increased from approximately $800,000 to $1.1 million, purportedly due to the number of information requests received from parties, YEC intended to amortize the approved hearing cost amount over a period of three years. Also, YEC was requesting to treat its hearing cost reserve in a manner that was diametrically opposed to the treatment directed by the Board for Yukon Electrical in its recent *2008/2009* GRA Reasons for Decision (Appendix A to Board Order 2009-2, p. 34-36).

118. YECL added that YEC seemed to consider the hearing cost reserve to be different from other reserves, such as the Reserve for Injuries and Damages, where an appropriation is made to the Reserve for each year (whether it is a test year or not) and the balance in the Reserve is considered at the time of the next GRA. It argued that YEC's justification for the requested treatment seemed to be that the hearing cost reserve was not like the Reserves for Injuries and Damages and had never been treated in a manner similar to that Reserve and current hearing cost reserve should be treated in the same manner as in the Board's Decision regarding YEC's 2005 Revenue Requirement Application.

119. Also, YECL refuted YEC's contention that YEC's treatment of the hearing cost reserve was equivalent to its approach to the forecast of brushing expenditures because the two items were materially different. YECL stated that a forecast amount for brushing would be spent each year, even though actuals would likely vary from forecasts. With respect to the hearing costs reserve, the full costs would be amortized over a period of two to three years; and after that the monies would continue to be collected from customers and (according to YEC) then be used to offset other non-hearing cost related expenses (1T161-166). YECL further argued that YEC did

not appear to deny that its approach would result in customers paying money in rates during non-test years, that would ultimately not be trued-up at the time of YEC's next GRA.

120. YECL submitted that YEC should be required to establish a true hearing cost reserve, which would mean that a standard amount would be included within the Reserve each year until the next GRA, at which time the balance would be brought forward for consideration and disposition by the Board. YECL added that YEC should be treated in exactly the same manner as YECL because there was no basis for directing that the two companies be treated differently.

121. In Reply Argument, YECL reiterated its view that YEC should be treated in the same manner as YECL with respect to the establishment of a Rate Case Reserve. It added that the sum total of YEC's justification for distinct treatment appeared to be that it was not and had never requested that a specific permanent Rate Case Reserve be established for it. YECL argued that YEC did explain why it should be treated differently from YECL and why it should not be required to establish a Reserve which would include an annual provision and be brought forward for final disposition at the time of YEC's next GRA.

3.8.1.1 Views of the Board

122. The Board accepts YEC's evidence and submissions that the Board had addressed the manner in which YEC was to account for rate case costs in the 2005 Required Reviews and Related Matters hearing. Since 2005, YEC has capitalized its rate case costs and amortized such costs (as deferral costs) over a period or at a rate approved by the Board. In this Application, the Board notes that YEC proposes to continue with this approach to and seeks approval of the rate costs and their amortization period as follows:

- $1.1 million estimated rate case costs for this Application which YEC proposes to amortize at $0.4 million for 2008 and 2009 and the remaining $0.3 million in 2010. Actual costs to be determined by the Board.
- $0.643 million related to regulatory review of Yukon Energy's 2006-2025 Resource Plan, to be amortized over 10 years to be consistent with the anticipated frequency of full Resource Plan updates.
- $0.243 million related to the regulatory review of the Minto Explorations Power Purchase Agreement, to be amortized over 12 years consistent with the currently anticipated economic life of the spur line connecting to the Minto Mine.
- $0.185 million related to the regulatory review of the CSTP under Part 3 of the Public Utilities Act to be amortized over 45 years consistent with the approximate average life of the project assets.

123. Furthermore, it is important to emphasize that YEC is not seeking to establish a rate case reserve account and had not established one in the past.

124. For these reasons, the Board approves YEC's rate case costs as proposed, subject to the current hearing costs of this Application being determined by the Board in its hearing costs process. Therefore, the Board rejects YECL's arguments that YEC and YECL should be treated the same regarding the establishment of a rate case reserve because the factual basis which resulted in YECL being ordered to establish a rate case reserve in Board Order 2009-02 differs from the facts as they pertain to YEC. As a result, the Board is not convinced that the current Application costs being amortized over a 3-year period rather than two, is material to change the manner in which YEC has accounted for rate case costs.

3.9 Service Quality Indicators and the Need for Performance Monitoring

125. Service quality indicators were not a part of the YEC application but the issue was raised during the proceedings.

126. In Argument[62], YECL questioned, despite the spending by YEC, whether reliability improvements were indeed occurring. YECL noted that the key performance indicators (KPIs) provided by YEC were largely distribution related and YEC should provide sufficient KPIs to measure transmission and generation performance. YECL reiterated this position in Reply Argument asking that the reporting of KPIs be done on a quarterly basis.

127. UCG[63] stated a position similar to YECL.

128. YEC replied that although the requests have been made by intervenors, no funding suggestions have been provided to support those requests. YEC further reinforced its position by providing evidence from the oral hearing describing some of the activities YEC has undertaken to improve reliability.[64]

3.9.1.1 Views of the Board

129. The Board is persuaded by the submissions of YECL and UCG with respect to KPIs. There is merit in reviewing KPIs for each of the three functions of YEC (generation, transmission, and distribution). At the time YEC files its next GRA, the Board directs YEC to file KPIs for each of the functions included in the application. The KPIs will be provided for the three years prior to the test years and a forecast of KPIs for the test years in that application. YECL should note that for its next GRA, the Board expects the same inclusion.

4 COST ALLOCATION AND RATES

4.1 Overview

130. YEC, in its Application, stated that the rates are designed to recover the revenue requirements as set out in the application less non-rate revenues for each of the test years. YEC also sought approval to transfer $0.463 million from the Faro Dewatering Account to the Reserve for Injuries and Damages for the 2008 test year. YEC proposed that the remaining balance in the Faro Dewatering Account ($0.728 million) be available for use, upon Board approval, to address specific income forecast contingencies.

4.2 Cost Allocation and Revenue-to-Cost Ratios

131. YEC stated in its covering letter to the Application that the GRA "does not address "Phase 2" cost of service and general rate design matters that would require joint work by Yukon Energy and the Yukon Electrical Company Limited ("YECL")"[65].

132. At the oral hearing, YEC acknowledged, in its opening statement, the direction of the Board through Board Order 2009-1 to proceed with a joint cost of service study with YECL.

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62 YECL Argument, page 13
63 UCG Argument, page 14
64 YEC Reply Argument, pages 41-42. These pages and the associated footnotes describe the activities that YEC has undertaken to address reliability concerns and some of the constraints faced by YEC.
65 October 6, 2008 covering letter to YUB accompanying the Application

Accordingly YEC proposed to YECL that the two utilities meet and plan a joint YEC/YECL Phase II application which will involve consultation with interested persons. The Phase II is to review rate design options and changes not impacted by current OIC directives.

133. In argument, LE supported YEC's opening statement position. LE stated:

> This change of position is a very positive development and Leading Edge is very pleased that Yukon Energy has agreed to a Phase II Application and Hearing as this will enable various intervenor concerns and suggestions to be discussed in an appropriate forum.[66]

134. YECL's position in Argument was that the rate design by YEC was piecemeal and that YECL had not been consulted in the rate design process. YECL stated that a joint Phase II proceeding is the best approach to approach rate design issues.[67] YECL argued that YEC claimed an impact from rate changes would be of a long run nature[68] as electricity consumption is not particularly elastic in the short term.

135. UCG in Argument stated that:

> … to arrive at rates that are just and reasonable, the Board needs to make a cost-based rates determination before entertaining rate-setting objectives such as energy conservation or incentive mechanisms that might move rates away from cost causality[69].

136. CW agreed that YEC and YECL should collaborate on a cost of service study. CW also agreed with the suggestion from both utilities to include customers in the process to develop new rates.[70]

137. YEC, in Argument, stated that it intends to move forward with YECL on a joint cost of service filing[71]. YEC further stated:

> All parties appear to recognize that some rate changes can and should be implemented as part of the current Application without waiting to complete the Phase II Application and hearing process, including changes to pass on the firm rate reduction to retail customers, adjustments to bring Pelly Crossing into the hydro rate zone, changes to secondary sales baseline prices and the fixed industrial Rider F (as required to support the firm rate reductions), and likely the changes as proposed to Secondary Sales Rate Schedule 32.
>
> Recognizing the pending joint Phase II application for review by the Board, Yukon Energy submits that its rate proposals in the current Application are limited to matters required and feasible at this time in light of the firm rate revenue requirements for 2009, the bulk power system challenges to address emerging baseload diesel requirements on both grids, the current OICs directives, past practice in Yukon as to rate adjustments that do not require or rely on a cost of service study, and other practical limitations as to what Yukon Energy can propose without the need for joint review and development with YECL[72].

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66 LE Argument, page 2
67 YECL Argument, page 2
68 YECL Argument, page 15
69 UCG Argument, page 16
70 CW Argument, page 14
71 YEC Argument, page 7
72 YEC Argument, page 30

138. In Reply Argument, UCG submitted that any adjustments to rates should not occur until the Board has rendered a decision on Phase II matters[73]. YECL supported this position. UCG also disagreed with YEC's position in Argument that parties recognize some form of rate change can be apart of the current application before the Board.

139. CW, in its Reply Argument, also supported the position that "… no rate restructuring should be carried out in advance of a cost of service study because the cost of service study provides the evidence for changes in rates[74]."

140. YECL said in its reply:

> … the point made by Yukon Electrical and other Interveners is that it should rely upon a Cost of Service Study that examines all issues and the full implications of the proposed changes prior to the implementation of a partial change in rate design[75].

141. In Reply Argument, YEC took the position rate changes could still occur without a Phase II process. Those specific changes will be discussed in later portions of this section.

4.2.1.1 Views of the Board

142. The Board in Board Order 2009-1(Appendix A – Reasons for Decision) made its views clear with respect to cost of service and rate design (Phase II matters) issues. It stated:

> With regard to the issue of a Phase II hearing to deal with cost allocation and rate design, the Board notes that in its July 20, 2007 correspondence to YECL and YEC that it quoted from page 53 of the Report to the Commissioner in Executive Council on the Application by YEC for review of its 20-Year Resource Plan: 2006-2025. The following was quoted:
>
> > Now is an appropriate time for YEC and YECL to have a complete review of all GRA Phase I and Phase II matters. The Board recommends that YEC and YECL file a full GRA application before October 31, 2007. The application should include a full cost of service, rate design and an update of the Electric Service Regulations. The Board also suggests that YEC and YECL consider a performance-based regulation mechanism. As well, the Board recommends that evidence be provided as to what other utilities provide for Maximum Company Investment and model theirs accordingly.
>
> The YECL response of August 17, 2007 stated:
>
> > Our current work-plan is to file a Phase I General Rate Application by March 31, 2008. Similar to recent practice with ATCO Electric and its regulator, The Alberta Energy and Utilities Board, we will file a Phase II General Rate Application shortly thereafter.

[73] UCG Reply Argument, page 7
[74] CW Reply Argument, page 5
[75] YECL Reply Argument, page 9

The YEC response of August 17, 2007 (the actual correspondence had a typographical error using 2006 as the year) stated:

- As reviewed by the Board when approving Yukon Energy's 2005 Revenue Requirement and Related Matters, a "full GRA" in Yukon which addresses cost of service, rate design and other related matters, as well as revenue requirements, requires filings by both YEC and YECL in order to comply with the Rate Directive OIC 1995-90. Initial discussion with YECL suggests that this might best be addressed as follows:

- Phase I – Revenue Requirements: Separate revenue requirement filings (Phase I filings) from YEC and YECL as a first step …
- Phase II – cost of Service and Rate Design: A joint YEC/YECL cost of service and rate design filing (Phase II filings) would appear the most effective way to comply with OIC 1995/90 directives…

Further in its correspondence dated December 17, 2007, YEC stated:

> Based on the above considerations, YEC now plans to file its next revenue requirement application in August/September 2008. Further, based on this timing, YEC and YECL have committed to work together to file a consolidated Phase II cost of service and rate design filing concurrently with YEC's revenue requirement filing so that these matters can be reviewed at the same hearing.

The Board finds that the terms Phase I and Phase II are not foreign to this jurisdiction as they have been referenced by both YEC and YECL. The Board finds that it made its expectations clear on Phase II matters through its decision on YEC's 2005 Revenue Requirement and Related Matters Application and its recommendation in YEC's 20 Year Resource Plan: 2006-2025. The Board also notes the above commitments from YEC and YECL for a joint Phase II filing. Therefore the Board is of the view that a joint Phase II will be held to deal with cost allocation and rate design. For this reason, any issues in this Application relating to cost allocation, rates and Electric Service Regulations (Terms and Conditions of Service) are given a low ranking as such issues would be addressed in a future Phase II proceeding. Further, the Board has given items that have been canvassed in previous proceedings a low ranking.

143. The Board directs YEC and YECL as agreed to file a joint Phase II application containing an up-to-date cost of service study (with electronic models attached) within 60 days of the issuance of the decision on the compliance filing by YEC as directed in this Board Order. The Phase II application is to provide accurate revenue to cost ratios for all rate classes, provide rate design recommendations that comply with previous Board directions and comply with current OICs, provide updated terms and conditions of service, and contain a review on investment levels. As supported by both utilities, the Board expects the application to contain stakeholder input.

4.2.2 Secondary Sales Rate Design

144. On page 4-5 of the Application, YEC set the following secondary sales rates to retail customers for 2008:

Quarter Beginning	Cents/kW.h
January 1, 2008	6.5
April 1, 2008	7.2
July 1, 2008	8.3
October 1, 2008	9.3

145. YEC applied the rate of 9.3 cents/kW.h for forecast revenues for secondary sales to retail customers. YEC proposed only one change to Rate Schedule 32 in this Application. YEC seeks approval "to adjust the rate schedule provision to reflect interruptions being initiated for any forecast requirements to use diesel for more that 10% of the hours over the subsequent five day period[76]." YEC made this request as the seven day forecast period that was approved in the 2005 proceeding is not available through Environment Canada.

146. CW in Reply Argument did not agree with the change as it said 7 day forecasts are now available from Environment Canada[77].

4.2.2.1 Views of the Board

147. The Board expects that Rate Schedule 32 will be included in the full review of rate design and cost of service study that will be jointly filed by YEC and YECL. It is noted that the Environment Canada update provided by CW was not provided during the evidentiary part of the hearing. Consistent with the Board's views expressed in Section 4.2 above, the Board will defer this issue to the joint Phase II proceeding.

4.2.3 Major Industrial Firm Rates

148. The definition for Major Industrial Customers (used by YEC) comes from OIC 1995/90 and describes those customers as "engaged in manufacturing, processing, or mining and whose peak demand for electricity exceeds 1 MW"[78].

149. YEC explained its major industrial firm rate design in pages 4-6 to 4-9 inclusive of the Application. Within this section, based on revised fuel price forecasts for diesel fuel, YEC propose that the Fixed Rider F be set at 0.585 cents/kW.h. for the 2008 and 2009 test period.

150. In Argument, YEC noted that the update to fuel prices, from the YECL 2008/09 GRA decision reflected in Exhibit B-10, that the Fixed Rider F would change from 0.585 cents/kW.h to 0.109 cents/kW.h and that the resultant revenues change from $0.170 million to $0.032 million.

[76] Application, page 4-5
[77] CW Reply Argument, page 11
[78] Application, page 4-6

151. CW did not agree with the Updated Fixed Rider F as proposed by YEC in the Updated GRA Filing of April 24, 2009. CW contended that the updated filing contained an update for YECL (YECL's updated fuel cost) but did not contain an update for YEC.

4.2.3.1 Views of the Board

152. Similar to the views expressed in Section 4.2.1, the Board expects the joint Phase II application to contain a review of Fixed Rider F. The Board will defer this issue until the joint Phase II proceeding.

4.2.4 Non-Industrial Firm Retail Rate Design

153. Firm retail non-industrial rates are to be equal throughout Yukon as prescribed by OIC 1995/90. This applies for both YEC and YECL customers. In this Application, YEC also discussed the need to promote economy and efficiency[79] with regards to retail runoff rates.

154. In the Application, YEC submitted that base rates were as a result of the 1996/97 GRA. The criteria for that rate design entailed first determining the runoff or second block rates by rate zone, and then calculating the first block rate levels to recover the residual revenue requirement not recovered from the runoff rates.

155. YEC further stated that the current runoff rates "no longer have any reasonable relationship to oil prices"[80]. The runoff rates as determined in the 1996/97 GRA were set at levels that approximated the incremental short term cost of generating and extra kW.h using diesel generation (the marginal cost of diesel generation). YEC pointed out that the costs of diesel in 1996/97 were much lower that the diesel costs currently being forecast and therefore the economy and efficiency aspect of OIC 1995/90 is now not being met.

156. YEC provided evidence which supported the position that at the level of current runoff rates, heating homes with electricity is financially more viable than heating those homes with oil and recommended a change to the second block rates for residential customers. YEC stated it is not practical to consider a similar change for General Service customers within this Application.

157. LE in Argument made the following point with respect to diesel prices and home heating:

> The reduction in the cost of fuel since the filing of the GRA [UCG-YEC-1-62(a)] has reduced the cost of diesel generation by twice the above amount per kWh and has thus, at least temporarily, discouraged electric heating more effectively than Yukon Energy's proposal;[81]

158. LE later added:

> The present lower oil prices and the upcoming joint Phase II Application will permit an orderly and timely review of all aspects of residential and General Service rate design[82];

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79 Application, page 4-9
80 Application, page 4-10
81 LE Argument, page 3
82 LE Argument, page 3

159. LE requested that the Board deny YEC's request until a Phase II application addresses the issue of rate design for all customer rate classes.

160. YECL reiterated its thoughts of YEC's approach to rate design as:

> Yukon Electrical submits that, YEC's approach would have the Board address rate design issues in a piecemeal and fragmented fashion and would not take into account the overall impacts of a partial change in rate design.[83]
>
> Furthermore, while YEC acknowledged that Yukon Electrical would be directly impacted by such changes, YEC did not consult with Yukon Electrical (or retail customers) before bringing forward these proposed selected changes[84].

161. Later, YECL said:

> The isolated nature of the approach proposed by YEC would see the neutrality embedded in the existing approved rates being abandoned, without any input or opportunity being afforded to Yukon Electrical and its customers to address all matters related to such rate design changes[85].

162. YECL concluded that:

> Yukon Electrical submits that a much more orderly and constructive approach would see all rate design issues addressed in the context of a comprehensive joint Phase II proceeding. Yukon Electrical submits that YEC's proposed rate changes should be denied[86].

163. CW in Argument stated:

> Notwithstanding its dissatisfaction with YEC's process, the City agrees that YEC and YECL should collaborate on a cost of service. The City also agrees with YEC's and YECL's suggestion to include customers in this process of developing new rates. This will result in an efficient and orderly process including the potential elimination of many contentious issues prior to the joint Phase II hearing[87].

164. The position of UCG was:

> UCG submits that one of the most important aspects of the Board in regulating the energy sector is to identify the fair cost of providing electricity to Yukon's ratepayers, not only at the total revenue requirement level during Phase 1 of the hearing process, but also at the level of appropriately constructed ratepayer classifications. Whether the government, through subsidies outside the regulatory construct or specific restrictions of the Board's ability to shift costs between customer classes, chooses to deviate from cost causality in

[83] YECL Argument, page 13
[84] Ibid, page 14
[85] Ibid
[86] Ibid, page 16
[87] CW Argument, page 14

the final rates experienced by ratepayers does not derogate from the Board's obligation to identify the fair cost of energy.[88]

165. UCG further said:

Specifically with respect to the proposal to adjust the runoff rates for residential customers, UCG submits that it is premature, based on the current record, to make such changes[89].

166. UCG's position was summed up as:

Given the commitment of YEC to work with YECL to assemble cost of service and other Phase 2-related evidence, UCG submits that any adjustments to rates and charges to be applied to the bills of Yukon ratepayers should be deferred until after the Phase 2 evidence has been reviewed and a Board decision issued[90].

167. YEC's position in Reply Argument was:

Yukon Energy notes that, beyond the sweeping assertions in UCG and YECL arguments against any rate change prior to the Phase II proceeding, no intervenor argument directly challenges specific rate-related changes as proposed on the following matters:

- Adjustment to firm retail rate riders as required to confirm and make final interim 2008 rates and to pass through the 2009 rate reduction as allowed for the rate revenue requirement as approved for 2009; in this regard, no intervenor has specifically addressed or opposed YEC's proposed Rider U approach to implement this rate reduction in a consistent way for all firm retail rate classes and schedules (i.e., there is no basis for suggesting that Rider U as proposed is a 'piecemeal' approach) that avoids reducing second block rates and thereby avoid moving these runoff rates further away from the efficient price signals mandated specifically for these runoff rates by OIC 1995/90.

- Adjustments to retail rate schedules as required to bring Pelly Crossing into the hydro rate zone. Section 4.1 of Yukon Energy's Final Argument reviewed (in Table 4.5 Revised) how the effective residential runoff rate (taking into account all riders) has, as a result of various changes since October 2008, moved further away from the efficient price signal required to reflect incremental diesel generation costs.

- Changes as proposed in the Application regarding "forecast" secondary sales retail and wholesale baseline prices as used to determine forecast retail rate revenue requirements for 2008 and 2009 (the 2009 forecast secondary sales baseline prices being based on the prices actually charged in the last quarter of 2008).

- Changes as proposed in the Application to specific terms in Secondary Sales Rate Schedule 32.

88 UCG Argument, page 15
89 Ibid, page 18
90 Ibid, page 20

- Establishment of the fixed industrial Rider F for 2009 (which is also applied in 2008) as proposed in the Application (as amended in the updated Exhibit B-10, and subject to changes to the specific number in the event that the Board adjusts YEC's forecast diesel fuel prices or secondary sales baseline prices for 2009); this fixed industrial Rider F is used to determine forecast retail rate revenue requirements for 2008 and 2009.

Accordingly Yukon Energy submits that each of the above rate changes, including Rider U as proposed (adjusted as required to comply with the final 2009 revenue requirement as determined by the Board), should be approved by the Board at this time without delay or deferral to the upcoming Phase II proceeding[91].

168. YEC later replied:

> Yukon Energy urges the Board to send a clear direction that any delay in dealing with second block rates until the Phase II proceeding is to be a short delay and not an invitation to move away from runoff rate policy settled in the 1996/97 GRA[92].

4.2.4.1 Views of the Board

169. The Board agrees that Pelly Crossing should now be considered part of the Hydro rate zone and approves that change. Except for Pelly Crossing as noted above, and as stated in Section 4.2 of this Decision, the Board is not prepared to decide on other rate design issues until the process for the Phase II application has been completed.

4.2.5 Wholesale Rates

170. OIC 1995/90 sets out the structure for the wholesale rate charged by YEC to YECL. Chiefly, through this rate, YEC must recover costs not recovered from its other customers. YEC described this rate (Rate Schedule 42) as an energy only rate with two levels. One level when the WAF system does not have diesel on the margin, and a second level for when diesel is on the margin. YEC does not expect diesel to be on the margin during this test period[93].

171. For this Application, YEC proposed to adjust the firm wholesale rate by 0.011 cents/kW.h from 6.840 cents/kW.h to 6.851 cents/kW.h. YEC also proposed to adjust the current Energy Reconciliation Adjustment (ERA) to reflect current costs of diesel generation (37.37 cents/kW.h).

172. With respect to Rate Schedule 42, YECL said the following in Argument:

> As detailed in this Exhibit, the scenarios that would unfold under the "current" versus the "proposed" Rate Schedule have quite different impacts for Yukon Electrical's customers. The isolated nature of the approach proposed by YEC would see the neutrality embedded in the existing approved rates being abandoned, without any input or opportunity being afforded to Yukon Electrical and its customers to address all matters related to such rate design changes[94].

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91 YEC Reply Argument, pages 44-45
92 Ibid, page 48
93 Application, page 4-18
94 YECL Argument, page 14

173. In Reply Argument, YEC asserted that YECL's arguments failed to address the flaws of the ERA element of Rate Schedule 42, refuted YECL's concerns on embedded neutrality, and as it now stands, Rate Schedule 42 does not meet Section 7 of OIC 1995/90.

4.2.5.1 Views of the Board

174. The Board defers all issues with respect to Rate Schedule 42 to the joint Phase II proceeding as it is properly a Phase II matter.

5 CAPITAL PROJECTS

5.1 Overview of Capital Spending

175. YEC said that their capital spending plans correlate with pressures of system re-investment and overall load growth. Of the $51.210 million forecast to be spent on capital projects, $42.579 million relates to major projects, where each major project is greater than $1 million.

176. In particular, YEC stated:

> … industrial load, can provide the opportunity to put in place new long-lived renewable generation that will provide benefits well beyond the typical life on any individual mine[95].

5.2 Capital Works

177. YEC divided its capital works into two sections. The first being major capital works projects over $1 million; and the second being ongoing capital projects costing between $100,000 and $1 million.

[95] Application, page 5-2.

5.2.1 Major Projects Over $1 Million

178. The following table[96] depicts Major Projects Over $1.0 million covered by this application:

Project	Capital $ (millions)	Contribution $ (millions)
Carmacks-Stewart/Minto Spur Transmission Project	38.383	34.639
Minto Diesel Units	3.190	
Whitehorse Mirrlees Diesel (WD3) Rebuild	1.1	
Faro Mirrlees Diesel (FD1) Recommissioning	1.565	
Aishihik Third Turbine	4.250	5.000

5.2.1.1 Carmacks-Stewart/Minto Spur (CS/MS) Transmission Project

179. This project is considered the first stage of the Carmacks-Stewart Transmission Project (CSTP) where the long-term plan is to connect the 138 kV WAF system to the 69 kV M-D system. In the Part 3 application, the first stage was described as constructing approximately 98 km of 138 kV transmission line from Carmacks to Pelly Crossing, new substations at Carmacks and Pelly Crossing and a 25-35 kV line in the Minto Landing area to Minto Explorations Ltd.

180. YEC cited the following regulatory processes as support for the first stage of the CSTP:

- YUB report to the Commissioner in Executive Council (January 15, 2007)
- YESAB Review (November 7, 2007)
- Public Utilities Act Part 3 Hearing Review (Energy Project Certificate and Energy Operation Certificate) Report to the Minister of Justice (May 31, 2007)
- Purchase Power Agreement (PPA) approval through Board Order 2007-6 (May 25, 2007)
- Board Order 2008-13 (September 26, 2008) approving Rate Schedule 39.

YEC stated on page 5-7 of the Application that Stage One costs had increased by approximately $5.8 million to $28.394 million ($ 2007) since the Part 3 hearing. Contributions had increased by approximately $2.0 million to $24.650 million, and since the Part 3 hearing Minto Spur capital costs increased by $6.159 million to $9.989 million.

[96] Application, page 5-3, information taken from Section 5.2.1.

181. In Argument, LE[97] noted that the CSTP Phase 1 was completed at costs above the forecast in the 20 Year Resource Plan and that there were scope changes affecting the costs. One set of scope changes arose from the Yukon Environmental and Socio-Economic Assessment Board (YESAB) process (causing higher costs). The other set of scope changes were decisions by YEC to reduce the costs of the project. Overall, LE supported Stage 1 of the CSTP.

182. YECL stated:

> Unfortunately, YEC's approach to Capital Projects provides yet another example of an ill-defined and haphazard approach to project development. YEC appears to have no clear plan when it comes to addressing the reasonably forecast future needs of the generation and transmission systems. In fact, at various points during the proceeding YEC takes contradictory positions with respect to the purpose and usefulness of its 20 Year Resource Plan. At one point YEC argues that the Resource Plan is used to demonstrate not only need, but also the optimum way to meet the identified need (1T82). In this case, YEC appears to rely on the Resource Plan to provide definitive support for its capital projects. However, when YEC is pressed with respect to certain specific capital projects and the estimated capital cost thereof that were reflected in the 20 Year Resource Plan, it quickly indicates that it had very little information on the projects at that time and that the information was very, very preliminary. In fact, these points are amply demonstrated by the significant increases in capital costs experienced regarding these projects, as well as the material scope changes which ultimately took place (1T166-175). YEC's open acknowledgement that it did not have very much information at the time the Resource Plan was examined by the Board casts doubt upon the reliance, if any, that the Board can place on the Resource Plan when assessing the capital projects undertaken and proposed by YEC[98].

183. YECL further stated:

> Also of concern to Yukon Electrical is the fact that YEC has a very poor track record with respect to forecasting capital costs. While YEC asserts that its actual capital costs for the CSTP Stage I came in very close to the costs approved by its Board of Directors, the same cannot be said of the cost estimates put forward before this Board at any point in time. In fact, material cost increases and scope changes occurred between the time the project was put before this Board and when the final costs were incurred. For example, YEC acknowledged that, if the original numbers of substations that were proposed had actually been built, the project costs would have been even higher (1T183)[99].

184. YECL expressed concerns that adequate business cases were not provided for YEC's capital projects in that application.

185. UCG argued that if costs are outside a +/- 15% range for projects in that application, the costs outside the identified range should not be allowed recovery through rates[100].

186. YEC reiterated the regulatory reviews the project underwent in Argument and that there is a continued net-benefit to ratepayers. YEC further stated:

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97 LE Argument, page 4
98 YECL Argument, page 16
99 Ibid, page 17
100 UCG Argument, page 22

> While costs have increased, YEC has demonstrated prudent management of costs and has successfully completed, under very challenging conditions, a project that will provide short-term and long term system benefits and rate benefits as evidenced by the rate reduction proposed in the current Application[101].

187. It was later noted that the final cost for Stage 1 of the project was approximately $29.7 million and the cost for the Minto Spur was approximately $10.8 million. YEC argued that the costs for the project were prudently incurred and that the estimates (costs) provided to the Board, "did not include preliminary, let alone final, engineering".[102]

188. With respect to scope changes it was YEC's position that the Carmacks substation as originally proposed was not needed and that this was offset by the need for a more complicated substation at Minto landing. The substation at Pelly Crossing was deferred until the Stage 2 of the project. YEC concluded by stating that the decisions on the project were prudent as were the costs for the project.

189. YECL said in Reply Argument:

> While costs have increased, YEC has demonstrated prudent management of costs and has successfully completed, under very challenging conditions, a project that will provide short-term and long term system benefits and rate benefits as evidenced by the rate reduction proposed in the current Application[103].

190. UCG took the position in Reply Argument that costs in excess of those identified in the Part 3 review should be on the account of the shareholder of YEC.

191. YEC in Reply Argument noted the prior regulatory processes it had to complete in regards to the CSTP Stage 1. It was further noted by YEC that the Board was made aware that the cost estimate was preliminary and before preliminary engineering estimates were obtained.

5.2.1.2 Views of the Board

192. The Board notes that there have been four opportunities to review the CSTP (Stage 1):

- YEC's 20 Year Resource Plan
- YEC-Minto Purchase Power Agreement
- The Carmacks-Stewart Transmission Project (CSTP) – Part 3 Review
- The YEC 2008 – 2009 GRA.

193. The Board also notes that until this Application, final costs and the final scope of the project were not known. The Board has concerns that the final costs of the project were materially greater than the high estimate that the Board had the last opportunity to review (during the Part 3 review process) and that this cost overrun (when compared to the estimates provided to the Board) in conjunction with the cost overruns of the Mayo-Dawson transmission project display a trend of underestimation by YEC.

[101] YEC Argument, page 41
[102] Transcript, page 576, LL 3 - 4
[103] YECL Reply Argument, page 13

194. The Board is also concerned about the scope changes and the effect on costs of these changes. By energizing the line at 25kV instead of 138 kV, YEC indicated that higher line losses will occur but did not give a cost estimate of those increased losses.

195. However, the Board is convinced by the testimony of YEC that this project provides a net economic benefit to Yukon ratepayers. Evidence of the net economic benefit was provided in each of the above noted proceedings. The fact that there is a net economic benefit was not refuted. Therefore, the Board approves the addition of these costs into rate base.

196. To alleviate existing concerns regarding YEC's ability to estimate, the Board directs YEC, in future, to file any Part 3 applications before this Board only when preliminary engineering estimates are available and included as part of the application. Further, in future GRA applications, the Board directs YEC to include business cases for major capital items, including electronic models. Business cases will include:

- descriptions of the project
- economic analysis including preliminary engineering estimates
- discussion of alternatives and how the chosen option was determined
- discussion of the risks of proceeding with the chosen alternative
- discussion of risks of not proceeding with the chosen alternative; and
- discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs.

5.2.1.3 Minto Diesel Units

197. Within the Application (pages 5-9), YEC requested approval to add the costs of the Minto diesel units into rate base. The cost of the diesel units were shown as $2.24 million plus $200,000 in immediate work plus an additional expenditure of $0.75 million in 2009 giving total capital costs of $3.19 million (before any capitalized financing costs). YEC said the cost of the units approximates $0.498 million/MW which compares to the capacity cost of $0.482 million/MW of the Mirrlees refurbishments. YEC said the acquisition of the Minto units provides YEC "with some flexibility over the longer planning horizon"[104].

198. It was further noted that:

> Absent the Minto diesels but with the Faro Mirrlees re-commissioning and the WD3 Mirrlees refurbishment both completed by winter 2008/09, the N-1 capacity surplus for 2009 would only be 3 MW[105].

199. YEC also pointed out that the Minto units were located near major loads, would not have any emission impacts on Whitehorse, and provide cost effective contingency protection.

200. In Argument, YEC noted from Board Order 2007-5 that to obtain approval of the Minto diesel units into rate base, YEC had to justify that the purchase of the units was the least cost option and that the units were required based on the capacity planning criteria.

201. In Reply Argument, UCG submitted that the cost of the Minto diesels have not been properly or adequately compared to other alternatives to address the need as determined by YEC.

[104] Application, page 5-9
[105] Application, page 5-10

5.2.1.4 Views of the Board

202. In response to YUB-YEC-1-12 (a), YEC quoted from Board Order 2007-5 (at pages 19-20):

> Other than a parenthetic notation late in the Resource Plan process, YEC has not demonstrated a need for the units nor provided an adequate business case supporting this option. Given the new capacity criteria employed by YEC, YEC has not furnished evidence that these units are needed based on those criteria, nor where this capacity addition stacks with the other projects identified within the Resource Plan.
>
> Further, the new funding available for the third turbine at Aishihik from the Government of Yukon also brings into question the need for the units and whether they would be a least cost option. The Board agrees with YECL that no evidence has been offered to support the statement that line loss reductions will offset other incremental costs.

203. In the part (b) response to YUB-YEC-1-12, YEC stated the following:

> As noted on pages 5-8 and 5-9 of the Application, the cost of the Minto diesels (estimated in the Application at $0.498 million/MW including work required to winterize the units) remains competitive with the estimated costs of the Mirrlees Life Extension Project ($0.457 million/MW as noted in supplementary filing Exhibit 16 of the Resource Plan proceeding). Further, it is noted that acquiring the units provides some flexibility with regard to long term planning. Once all PPA commitments have been met regarding the units YEC may elect to sell the units or move them from the mine site to an alternate location.
>
> As noted at page 5-9 of the Application, the Faro Mirrlees re-commissioning project is nearing completion. The Whitehorse Mirrlees Refurbishment (3 units totally 14 MW) is budgeted and anticipated to occur as follows:
>
> - In 2008: Unit #3, providing an additional 5 MW of capacity at a cost of $1.1 million, plus an additional $0.535 million generator rewind for 2010.
> - In 2010: Unit #2, providing an additional 5 MW of capacity at a cost of $1.250 million, plus $0.435 million for the generator.
> - In 2012: Unit #1, providing an additional 4 MW of capacity at a cost of $1.050 million, with no required generator rewind.
>
> Upgrades to common systems were undertaken in 2007 (at a cost of $0.468 million) and 2008 (at a cost of $0.450 million), and are also anticipated to take place in 2010-12 (at an anticipated cost of $1.465 million).
>
> As noted at page 5-9 of the Application, the purchase of the Minto diesels has not changed the planned refurbishment of Unit #3 and Unit #2 or any further planned upgrades to common systems. However, as noted, the timing for refurbishment of Unit #1 is flexible and the option exists to mothball the unit for pending optimum capacity for the unit to be brought back into service.

204. It is clear to the Board that although the costs ($/MW) are close between the Minto diesels and the Mirrlees refurbishments, the Minto diesels are not the least cost option ($0.498/MW for the Minto diesels versus $0.457 for the Mirrlees refurbishments). Further, YEC did not compare the Minto diesel option to any other alternatives. The Board also refers to the response to UCG-YEC-76(c):

> Yukon Energy's least cost options for new capacity were the subject of major review at the 20 Year Resource Plan hearing in 2006. In particular, this topic formed the entire basis for Chapter 4 of the Resource Plan, and review of various options to address capacity issues from Mirrlees refurbishments to new transmission, to new diesels, to other new resources (such as Marsh Lake Fall/Winter Storage) and including CSTP. That review confirmed that the lowest cost source of capacity (as required to meet system winter peak load reliability requirements) to Yukon Energy was the Whitehorse Mirrlees refurbishment, now estimated at $0.482 million/MW, as well as the Faro Mirrlees (which was already the subject of immediate commitment prior to the Minto diesels being acquired). In this regard, no further review of "least cost options" was required in respect of the Minto diesels, as no other options have been identified since the Resource Plan, and there are no expected material changes to the relative costs or feasibility of the options reviewed in 2006.
>
> Given this, the Minto diesels were compared to the Whitehorse Mirrlees life extension project, to which the Minto diesels were determined to be favourable (including in light of the matters noted in part (b) above).

205. The Board is of the view that the feasibility of the Mirrlees refurbishment is addressed when the YEC panel was being cross-examined by counsel for YECL as set out below[106]:

> **YEC PANEL CROSS-EXAMINED BY MR. KEOUGH VOLUME 1**
>
> **Q. Now, you talked about the current cost estimate being in line with what was forecast. And have the units actually been refurbished, and are there any of them up and running, so to speak, in their backup capacity?**
>
> A MR. MORRISON: No, Madam Chair. The unit -- I mean to be very clear. Units are in the process of being refurbished. The Faro unit, while we started it before the Whitehorse unit, we changed plans partway through. And with the Whitehorse unit, I would say is a week or two away from being operable. So it's very, very close. What we've done through this process as well, is we have been able to refine our process and systems on how we can deal with these subsequent units, these Mirrlees. You will recall that when we discussed these -- whether or not to do these units at the previous hearing, we talked about the big issue, from our perspective, was, as Mr. Osler noted, A) when we opened them up, are there big surprises, because they are very big units; they don't move. And B) could we continue to get the parts? So we have solved, and I think discovered, two things that I think are informative and, as Mr. Bowman mentioned, will keep our costs down to these lower levels. One, we've found that through some -- you know, some process, and it wasn't always an easy process, that we can get the parts, and that probably the original equipment manufacturer is the best source of the parts, even though they -- you know, they don't have as big an operation in Canada as they used to have, we still seem to be able to

[106] Transcript Volume 1, page 199 starting at line 12 and continuing to line 1 of page 202

> get the parts and get them in a fairly timely manner. The second one in the process that we discovered that we have an unlikely source of assistance in Western Canada for helping us with these Mirrlees, and that is BC Ferries. And BC Ferries are run on Mirrlees engines. Not all of them, but they certainly have a very large fleet of Mirrlees within the BC ferry operation. They also have a very, very large and comprehensive cadre of qualified Mirrlees mechanics and experts, because they fix these engines all year long. And, in fact, they are the ones that have done the overall of WD3, the Whitehorse Mirrlees. So we contracted with them; they set up a crew; they have done the work. It's worked out -- from my perspective, it's worked very well. It's economic; it's well within budget. As a matter of fact, it is probably going to be a little bit under budget that we set. And they will finish the Faro unit for us as well. So we have been able to find -- solve some of the issues that we thought we might be faced with during the last time we discussed them, and they're coming in, as Mr. Bowman indicated, you know, at the lower end of the range.

Based on the above, the Board finds that it is practical to continue with the Mirrlees refurbishments and that the costs are likely to be slightly lower than the estimates previously provided, further supporting the Mirrlees refurbishments as the least cost alternative.

The need for the Minto units is discussed in the following exchange[107]:

> **YEC PANEL CROSS-EXAMINED BY MS. BENTIVEGNA VOLUME 2**
>
> **All right. Thank you. Now I would like to take you to YUB-YEC-1-12. It's regarding the Minto diesel business case.**
>
> A MR. OSLER: We are there.
>
> **Q Now, is YEC planning to continue refurbishing all the Mirrlees units?**
>
> A MR. MORRISON: Well, I think – and Mr. Osler can jump in on this, he talked about it a little bit, I believe yesterday if not today. The part of the benefit of the Minto diesels is we can -- we can look at and delay timing on the Mirrlees units. And the reason for refurbishing the Mirrlees and looking at the Minto diesel is to provide capacity, as we talked about. So they are there to provide the backup and the capacity on the system. So depending on the timing, whether or not we need to do Mirrlees in addition to Minto, whether we need to do Mirrlees two years from now and three years from now, is also going to depend on the load. But we would do them if we needed additional capacity, that's for certain.
>
> A MR. OSLER: The basic plan is still to do them. The timing of the last one is the major question mark, as discussed in the application.
>
> **Q Now, are the Minto diesels and the Mirrlees, based on the planning criteria N minus 1, are they needed? Are they both needed?**
>
> A MR. MORRISON: I'm going to -- I think while I'm going to let Mr. Osler, or perhaps Mr. Bowman, add something to this, but I just want to make sure that we're careful that when you say needed, it's when they're needed is important. So I'm going to -- based on that, I'm going to let my colleagues jump in.

[107] Transcript Volume 2 starting at page 556 line 4 and continuing to page 561 line 6

> A MR. OSLER: We'll do it. I'm not going to have my mind around the actual numbers, so Mr. Bowman can check on that. But the short answer is, they are needed in the time periods that are being discussed in the application, to the best of our understanding. In the case of the sequence with the Minto and the first two Mirrlees units, it looks like they would be needed in a pretty predictable time period. And the actual timing of the third Mirrlees unit at Whitehorse -- sorry, the Faro unit plus the two units at Whitehorse, are fairly predictable in terms of their timing, it appears. But the fourth Mirrlees unit, the third one at Whitehorse, the timing is the one issue which we are retaining some flexibility around. I understand that they meet the tests of the criteria when we say "needed." Do we have any other numbers we could add?
>
> A MR. BOWMAN: Probably the easiest thing to do in respect of numbers is refer you to page 5-10, which deals with the criteria, as you say. It references in respect to the N minus 1 criteria, which is the driving criteria on the system today, and it is the one on which there is basically no debate on how to apply it. So that has left us with some comfort as to how the criteria is to be applied for at least this time period. The peak that was forecast, and as noted there, for the end of 2009 effectively said, if you did the Faro Mirrlees, as is underway, and you did the first of the Whitehorse Mirrlees, WD-3, as is also underway or basically done, by the time you got to the end of 2009, you would have a surplus of three megawatts, based on the forecast at that time, if you didn't have the Minto diesels. That is a problem, first, because the peak this last winter was about 2 megawatts higher than had been forecast; second, because if you only have a surplus of 3 megawatts, you don't have an easy ability to take out of service a 5 megawatt unit and do the work that's needed on it. Because when you take it out of service, you are driving yourself into a deficit, or you bound yourself into having to do it over the course of the summer, when the capacity is not required, with no ability to have it take longer or run into any trouble. So the Minto diesels have provided that cushion, that flexibility, that once the Faro Mirrlees is done and the Whitehorse Mirrlees is done and we head into 2010, and the loads grow at the level that we are expecting, the second of the Whitehorse Mirrlees can be taken off-line and be refurbished in 2010 and brought online, and there wouldn't be big risk about making sure that you absolutely have to have it done for the start of winter. As we noted, that once that unit was brought back on, you would now have a small bit of cushion on the system, and the question is how quickly that cushion gets used up. And it could get used up by increases in peak load, which we continue to be surprised by, the extent to which Whitehorse's peak load is increasing, or it could be used up by addition of other loads, or by a loss of a unit, catastrophic failure, the type of things that can happen and that this whole criteria is designed to address. And it gives you the flexibility to then decide, do we want to incur the costs on WD-1 at a half a million a megawatt to get it back in service, or can we defer those costs, having spent a half a million a megawatt on the Minto diesels, and save the exact same amount of money. You are no further behind. So that's what the Minto diesels do. They are needed, and they are no more expensive, and they give flexibility in respect of the criteria, the N minus 1 criteria.

206. The Board finds that, it is clear from this testimony that for this test period there is a surplus (3 MW) above the contingency (N-1 criteria) when the Faro and Whitehorse units are included (before consideration of the Minto units). Also, the Board considered testimony from Mr. Morrison that YEC is able to obtain parts and has access to reliable mechanics for the diesels, and that the refurbishments can likely be timed to not occur during the winter peak (and thus avoid violating the N-1 criteria). Further the Board is of the view that, since the costs for

the common upgrades for the Mirrlees units occurred in 2007, the refurbishment of the third Mirrlees unit should occur before the Minto units are allowed in rate base.

207. Therefore the Board is not satisfied that there is a need for the Minto units (based on the capacity planning criteria) and finds that YEC has not shown that the Minto units are the least cost option for YEC to pursue. The Board concludes that the Minto units are not to be included into rate base for this test period and directs YEC in its compliance filing to amend its revenue requirement and schedules accordingly. YEC may reapply in a future GRA when the need for the units is established through load growth and the units are proven to be the least cost option.

5.2.1.5 Whitehorse Mirrlees Diesel Generator (WD3) Rebuild

208. YEC provided a plan to refurbish one Whitehorse 5 MW Mirrlees unit in 2008 (with rewind in 2010), another 5 MW unit in 2010 and if needed the remaining 4 MW Mirrlees unit in 2012.

209. Much of the discussion of the Mirrlees units overlapped with the discussion of the Minto Units.

210. In Argument YEC reaffirmed that refurbishment was the least cost option for additional capacity. YEC reiterated the support for refurbishing the units as discussed in YEC 20 Year Resource Plan process, confirmed the capacity need and that actual costs are coming in at or below budget.

5.2.1.6 Views of the Board

211. The Board accepts the position that the WD3 rebuild is the least cost option for adding capacity to the WAF system and approves the cost of the rebuild and related common costs into rate base as applied for.

5.2.1.7 Faro Mirrlees Diesel (FD1) Recommissioning

212. YEC referred to the report by the Board to the Commissioner in Executive Council (January 15, 2007) on YEC's 20 Year Resource Plan wherein the Board expressed the view that the retired Mirrlees unit should be the first unit to be refurbished and that the refurbishments were the only options which could be implemented in a relatively short period of time[108].

213. In Argument, YEC noted that the project was not completed by the end of 2008, the costs are expected to be under the 20 Year Resource Plan forecast of $2.3 million.

5.2.1.8 Views of the Board

214. The Board reaffirms its view with respect to the Faro Mirrlees Diesel (FD1) Recommissioning and accepts the actual costs of the recommissioning into rate base.

5.2.1.9 Aishihik Third Turbine

215. Construction costs for this project were forecast to be $0.75 million in 2008, $3.5 million in 2009 and a final amount of $4.25 million in 2010. YEC referred to $5.0 million in funding for

[108] YUB Report to Commissioner in Executive Council re YEC 20-Year Resource Plan (January 15, 2007), page 34

the project from the Yukon Government and the Board recommendation for the project in its report on YEC's 20-Year Resource Plan (pages 29-30 of the report).

216. LE supported the project in Argument.

217. UCG did not support the project. It did not see it as a near term priority that provided zero capacity to the N-1 criteria and only added 600kW to the LOLE planning criteria. UCG further stated that with 10 MW of mine load ratepayers would not see a net benefit from this project until up to three years of operations. Without mine load, benefits are not perceived for about 8 years and there is a net loss after 20 years from this project. UCG suggested that there was insufficient information for this project and that the Aishihik 3rd Turbine Project should be evaluated through a Part 3 application of the Public Utilities Act.

218. YEC argued that the Aishihik 3rd Turbine project has been extensively reviewed in several regulatory proceedings and referred to the response to UCG-YEC-1-17(a) for the economic justification of the project.

5.2.1.10 Views of the Board

219. The Board notes the amounts for the Aishihik 3rd Turbine will not be in rate base during these test years and will not become a rate base issue until it is put into service (current projection is 2010). It is also noted that the estimates for this project have increased from the $7.0 million included in the 20-Year Resource Plan to $8.5 million as totaled on page 5-13 of the Application. No party refuted the economic justification for this project. The Board continues to be of the same view as set out in YEC's 20-Year Resource Plan with regards to this project:

> Recommendation No. 37 from the 1992 Resource Plan Report stated:
>
> > The Board recommends that the Companies pursue YTWB approval for the construction of Aishihik #3, assess the environmental costs after giving due consideration to the findings of the environmental reviews, and report back to the Board before commencing construction. The companies should pursue installation of the maximum capacity that is economically, technically and environmentally feasible.
>
> .
>
> The Board recognizes that since 1992, YEC has obtained the necessary licences and environmental approvals for the Aishihik third turbine. The views expressed in 1992 are similarly held today. The question is: When should this project proceed?
>
> The Board's analysis in Sections 4 and 5 above, which was conducted assuming the base-case load forecast, has shown that YEC's proposed expansion plan would be more economic than the alternative plan provided that the Aishihik third turbine is installed in 2013. It should be noted, however, that the addition of the third turbine under YEC's plan is not a capacity requirement determined by the planning criteria, but rather a requirement driven strictly by economic reasons, namely to offset future diesel generation that is expected to increase under the base-case load forecast. However, should the actual loads turn out higher or lower than the loads under the base-case forecast, the optimal timing of the third turbine would move earlier or later than 2013. Therefore, to minimize the uncertainty around timing of the third turbine, the final decision to proceed with this project should be made closer to the date when economic reasons indicate that the turbine

is needed. Therefore, the Board recommends that this project not proceed until that time unless YEC can justify an earlier in-service date[109].

5.2.2 Projects $100,000 to $1 Million

220. Page 5-13 of the Application provided a high level overview of the 2008 and 2009 amounts for projects of $100,000 to $1 Million. Details are provided in the following subsections.

5.2.2.1 Distribution Projects $100,000 to $1 Million

221. YEC has applied for net capital additions to distribution projects of $175,000 for each of the test years. The totals are derived as customer extensions of $475,000 less customer contributions of $400,000 plus $100,000 each year for the Land Management and Easement Project. No party objected to these amounts.

5.2.2.2 Views of the Board

222. The Board approves the amounts for Distribution Projects $100,000 to $1 Million as filed in the Application.

5.2.2.3 Generation Projects $100,000 to $1 Million and Transmission Projects under $1 Million

223. Generation project costs (per project) of less than $1 million were forecast for 2008 and 2009. The total for 2008 is $983,000 and the total for 2009 is $819,000. The projects are described on pages 5-14 to 5-14 of the Application and listed in Table 5-2 of the Application.

224. Transmission project costs (per project) of less than $1 million were forecast for 2008 and 2009. The total for 2008 is $155,000 and the total for 2009 is $890,000. The projects are described on pages 5-18 to 5-19 of the Application and listed in Table 5-2 of the Application

225. No party objected to these amounts.

5.2.2.4 Views of the Board

226. The Board approves the amounts for Generation Projects under $1 Million as filed as well as the amounts for Transmission Projects under $1 Million as filed in the Application.

5.2.2.5 General Plant and Equipment Projects Less Than $1 Million

227. YEC has proposed expenditures of $2.004 million in 2008 and $2.419 million in 2009 on various General Plant and Equipment items of less than $1.0 million. The projects are described in pages 5-15 to 5-18 of the Application and are listed in Table 5-2 of the Application.

228. No party objected to these amounts.

5.2.2.6 Views of the Board

229. The Board approves the amounts for General Plant and Equipment Projects under $1 Million as filed in the Application.

[109] YUB Report to Commissioner in Executive Council re YEC 20-Year Resource Plan, January 15, 2007 – pages 29 and 30.

5.3 Deferred Costs

230. The Deferred Costs section of YEC's application relates to

a) major deferred cost projects (projects > $1 million), and
b) other deferred cost projects costing between $100,000 and $1 million,

that have been undertaken by YEC since the 2005 Required Revenues and Related Matters hearing.

231. YEC indicated that the current hydro generation surplus at long-term flows will likely be fully utilized by firm sales on WAF between 2011 and 2014. Because of that, YEC affirmed that it has been engaged in an "orderly process" to "expand the available complement of renewable generation and transmission … to displace forecast baseload diesel generation." Accordingly, YEC justified its spending as necessary and reasonable and subject to ongoing review and consideration as projects in feasibility planning are further defined. [110]

232. YECL pointed out that YEC had accumulated aggregate study costs equal to 20% of its overall rate base; further, the number of deferred study costs were forecast to double in the test period. [111] YECL and UCG advocated a go-slow approach until future demand could be more fully assessed, rather than making major capital investments in anticipation of unknown potential loads.[112] [113]

233. UCG and YECL requested that the Board direct YEC to provide comprehensive explanations of each study that had been undertaken or was proposed to be undertaken for the period 2005-2009. [114] [115] UCG recommended that deferred costs should be held in a deferral account[116] and that project cost benefit analyses should not include third party contributions.[117]

234. UCG maintained that load forecasting and planning for load growth should account for the base, non-industrial load apart from the more transitory industrial load so as to protect longer term ratepayers from adverse rate impacts associate with capital spending made necessary for the purpose of meeting short-term industrial loads.[118]

235. YEC acknowledged that planning study costs that remain in progress are held in a deferral account, not a part of rate base, until such time that the project is deemed to be used and useful to provide utility service or the project is abandoned. [119]

5.3.1 Major Projects Over $1 Million

236. YEC indicated that there were four major deferred projects with costs exceeding $1 million for the test years, totaling $2.5 million in 2008 and $15.3 million in 2009. These costs were projected to remain work-in-progress during the test years and as a result did not affect

[110] YEC Argument, page 52 - 53
[111] YECL Argument, page 19
[112] UCG Argument, page 27
[113] YECL Argument, pages 3 - 4
[114] YECL Argument, pages 19-21
[115] UCG Argument, page 5 - 6
[116] Ibid
[117] UCG Reply Argument, page 9
[118] UCG Argument; page 5
[119] YEC Argument, pages 60-61

projected test-year amortization expenses or net rate base. The projects include Mayo B, Other Generation Feasibility, Western Copper, and CSTP Stage Two.

237. Other Generation Feasibility projects have been undertaken to enhance the compliment of renewable generation projects in Yukon in light of dwindling surplus hydro. The projects include Gladstone, Atlin, Marsh Lake, and larger scale projects such as geothermal and Houle. YEC's basic premise for pursuing such projects was to manage and plan for its system. YEC alluded to the benefits of having projects that were "shelf-ready" and projects that have other uses and applications. [120]

238. LE requested that the Board direct

- YEC to submit a cost-benefit analysis of all alternatives prior to construction commitments on Mayo B;[121]
- that YTG or YDC subsidies not be used to fund CSTP Stage Two;[122]
- YEC to prepare updates of all projects and anticipated costs at its Compliance Filing.[123]

239. YEC submitted that the current Application was built on the underlying assessment provided in the 20-Year Resource Plan, i.e. the need to plan and develop the system to meet forecast load growth scenarios. Further, YEC stated that its obligation to serve required it to plan the system to meet these expected loads and other requirements that may arise.[124]

240. YEC indicated that LE was not correct in stating that any Mayo B delays could be readily addressed by using diesel generation. Further, YEC submitted that diesel generation and Mayo B were not comparable in economic terms; there would be a material upward pressure on rates if diesel generation were to be utilized. Moreover, diesel generation and Mayo B were not comparable in terms of the greenhouse gas emissions. YEC also submitted that DSM activities were not a viable alternative to Mayo B.[125]

5.3.2 Projects Between $100,000 and $1 Million

241. YEC indicated that none of the projects costing from $100,000 to $1 million were challenged and therefore submitted that the costs as forecast in the Application for these projects should be approved by the Board.

5.3.2.1 Views of the Board

242. The Board understands that YEC does not have the "luxury of waiting for these loads to, with full certainty, materialize before taking any action."[126] Further, the Board notes that YEC's obligation to serve does require it to plan the system to meet these expected loads and any other requirements that may arise. Moreover, the Board considered that YEC is tasked with the obligation to ensure that the ratepayers are protected from paying for the longer-term capital projects such as hydro that may be brought on stream as a result of transitory industrial mine loads.

[120] YEC Argument, pages 57-58
[121] LE Argument, page 5
[122] LE Argument, page 10
[123] LE Argument, page 13
[124] YEC Argument, page 66
[125] YEC Reply Argument, page 67
[126] Ibid, page 66.

243. The Board accepts YEC's arguments regarding the enduring benefits of :

- Having projects that are "shelf ready" such that they are ready to proceed at some future date as circumstances warrant;
- The feasibility work that already has been undertaken may result in products that have other uses and applications of ongoing value to the utility;
- The benefits of engaging with the local community and working with them through the issues;

The Board finds these benefits justify incurring the deferred costs.

244. Despite intervener comments regarding the lack of cost-benefit considerations in respect of deferred costs, the Board takes some comfort with YEC's assertion that Mayo B deferred costs were prudently managed.

> We look at the project and look at a certain set of information. We had to do some baseline, we had to do a series of tasks we had to complete in order to file an environmental Application. We have done that with YESAB. We filed the Application. We are not going very much further down this road in terms of expenditure, and I mean very much at all, without getting some clear indication as to whether or not we are going to get funding.[127]

245. The Board is also aware of the numerous steps that are involved in bringing a project to fruition and the fine balance that exists between micro managing and allowing a utility to conduct its business. However, the Board finds intervenor comments regarding the lack of business cases for each the individual projects and hence the absence of significant and material information to be justifiable. Therefore, in future, for those costs which YEC wishes to include in its revenue requirement, the Board directs YEC to provide appropriate business cases to support those costs.

246. The Board considers YEC's submission in regard to deferred costs of assistance

> Spending for projects… that are included in deferred costs … are necessary and reasonable; … these costs are subject to ongoing review and consideration as projects in feasibility planning are further defined keeping in mind [that] projects … need to achieve key decisions before all budgeted amounts are spent. The feasibility of these projects will continue to be tested and reviewed by the Board of Directors and management of the company to ensure that any funds are prudently and wisely spent.

247. The evidence suggests that YEC has a review process in place wherein concerns are identified, tested and reviewed by YEC's Board of Directors. The Board considers that the review process itself should document more clearly what materials are actually reviewed and how decisions that affect the status of studies and projects are made. Therefore, the Board directs YEC to keep written documentation of any and all deferred cost project review meetings that occur (e.g. agendas, materials presented for discussion, minutes, etc.) and have available for review for those items YEC wishes to include in its revenue requirement.

248. Further, with respect to each deferred cost project, YEC is to prepare a business case that highlights the project status and the underlying reasons for its status. Additionally, the progress of the various stages of the project development should highlight and explain significant

[127] YEC Argument, pages 54-55

variances respecting project costs that may occur and what steps might be employed, if any, to mitigate these variances. The business case with the progress updates is to be supplied at the time YEC requests to include any of the costs in its revenue requirement. Amounts in deferred costs are not to be included in rates without Board approval and will be subject to a prudency review.

249. The Board notes YEC's submission

> [C]osts for planning studies that remain in progress (i.e., studies that relate to projects that have not been either abandoned or received final commitments to proceed to construction are in effect held in a "deferral account" (Work in Progress) and, are "omitted" from (not include in) ratebase until such time as the projects are used and useful to provide service. Until such time as they are used and useful they are "omitted" from ratebase. There is nothing in UCG's recommended process that is unique or inconsistent with Yukon Energy's Application, in the event that the project is in fact developed. In the event that the project is abandoned, however, UCG's recommendations would never allow the utility to recover the costs (as no future revenues are realized), which would not in any way conform to general principles of normal utility regulation practice (and would, if adopted, provide no reasonable basis for a utility to undertake many important planning studies).[128]

250. The Board ultimately determines what is in, or is not in, rate base. The test, as mentioned by YEC is whether an asset is "used and useful to provide [utility] service." The Board will make the rate base determination in respect of deferred costs items when requested by YEC.

251. The Board notes that YEC submitted "[t]he current plan adopted by Yukon Energy for 2009 is reduced from the level assumed at the time of the GRA, to a level of $4.3 million … based on current draft plans". [129] Accordingly, the Board directs YEC to reflect this change at the time of its Compliance Filing and show total deferred costs for 2009 of $4.3 million and to reflect this amendment in all related schedules.

6 BOARD RECOMMENDATIONS DIRECTIVES

252. Section 6 of YEC's 2008/2008 General Rate Application references outstanding directions from previous Board Orders. Each subsection refers to a previous Board Order and discusses the outstanding items of that particular Board Order.

6.1 Order 2005-12, YEC 2005 Revenue Requirement

253. Board Order 2005-12 had three outstanding directives:

- Directive 4 – The Board approves the YEC proposal 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. The YEC Proposal was to assign this amount to the IST **[Income Stabilization Trust]**; due to the IST being denied, YEC is directed to establish a Rate Base deferral account to record the amount.

[128] YEC Reply Argument, page 61
[129] YUB-YEC-1-38

- Directive 15 – The Board approves 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. The 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 Board.

- Directive 18 – The Board requires that YEC discontinue recording an annual provision for FRSR effective January 1, 2005. The Board orders a variance from Generally Accepted Accounting Principles and requires that the December 31, 2004, balance in the FRSR account remain as a liability to be utilized for dismantling cost that are incurred in 2005 and future years. The Board requires YEC to inform Intervenors and stakeholders when the balance of the FRSR liability account reaches $2.0 million.

6.1.1.1 Views of the Board

254. The Board is satisfied with the responses from YEC and that these directives have been followed.

6.2 Order 2007-5 – MINTO Power Purchase Agreement

255. YEC listed the outstanding directives relating to Board Order 2007-5. The outstanding directives related to cost of service and rate design issues.

6.2.1.1 Views of the Board

256. Board Order 2008-13 approved Rate Schedule 39 as final. This Board Order addresses the issue on the Minto diesel units. All other directives from Board Order 2007-5, which can be generically classed as Phase II matters, are considered to be outstanding and are expected to be addressed in the YEC/YECL joint Phase II application that is referred to in this Board Order.

6.3 Board Orders 2007-7, 2007-8, 2007-9, and 2008-1

257. The above noted Board Orders relate to costs for the Resource Plan hearing, the PPA hearing and the Part 3 hearing. YEC has proposed to amortize the cost of the Resource Plan hearing over 10 years, the PPA hearing costs over 12 years and the Part 3 hearing (CSTP Energy and Operation Certificates) over 45 years.

6.3.1.1 Views of the Board

258. For these particular identified costs, the Board accepts the proposed amortization by YEC.

6.4 YUB Report; YEC 20-Year Resource Plan (January 15, 2007)

259. In argument YEC said:

> As was noted in discussion at the hearing, the PUA provides that the Minister may refer a matter to the YUB for review; the Board then must review the matter and provide the Minister with recommendations related to the matter. Recommendations provided by the

> Board through these processes are very different from Board directives, i.e., the recommendations are to be made to the Minister (and not to Yukon Energy or YECL) and issue from processes undertaken outside of the Board's normal jurisdiction where specific directives may be provided to subject parties.
>
> Some confusion persisted during the oral hearing with regard to the premise underlying these separate review proceedings and their outcomes, with counsel for YECL inferring that at the Resource Plan hearing Yukon Energy was seeking Board "approval" of the Resource Plan. It was clarified that Board "approval" for the Resource Plan and for individual projects reviewed under Part 3 of the Public Utilities Act was not sought and could not effectively be provided given the limitations provided by the PUA. Yukon Energy did not seek "approval" of the Resource Plan (or the CSTP during the Part 3 process); a review of the Resource Plan and the CSTP was sought through Ministerial direction and Recommendations (not directives or approvals) were provided by the Board to the Minister[130].

6.4.1.1 Views of the Board

260. The Board is satisfied that YEC has considered and will consider the recommendations made by the Board to the Commissioner in Executive Council on matters relating to YEC's 20 Year Resource Plan

6.5 YUB Report; CSTP Part 3 Review (May 31, 2007)

261. The comments in Section 6.4 above also apply to this Section 6.5. The Board does not consider that there are outstanding issues with respect to Stage 1 of the CSTP as they have been addressed in this Order. It is also noted that conditions for proceeding with Stage 2 of the CSTP are still outstanding and that YEC is not recommending that that project proceed or that costs for that project be recovered in these test years.

6.6 Recommendations of the Auditor General (Mayo-Dawson Line, Feb 05)

262. Matters with respect to the Recommendations of the Auditor General with respect to the Mayo-Dawson Line were brought before this Board during the YEC 20-Year Resource Plan Process. In that process YEC said it would follow the recommendations of the Auditor General. The Board expects that YEC will continue to follow all the recommendations of the Auditor General with respect to the project management issues that arose during the construction of the Mayo-Dawson line.

7 FINANCIAL SCHEDULES

7.1 2008 Actuals

263. In Argument, YECL made the following comments concerning YEC's Financial Schedules and forecasting ability:

> As mentioned above, the information provided by YEC in its April 24, 2009 update (Ex. B-10, Appendix B), clearly indicates that there are concerns with YEC's forecasting accuracy and its ability to provide accurate information to the Board, notwithstanding the

[130] YEC Argument, pages 62-63

> fact that such information was developed late in the 2008 Test Year. Likewise, YEC's historic forecasting accuracy with respect to capital projects creates another area of concern. Yukon Electrical submits that YEC should be required to provide to the Board and parties a detailed explanation of its forecasting methodologies for both O&M and capital[131].

264. UCG in Argument made several submissions pertaining to the conversion to IFRS (International Financial Reporting Standards) and asked questions on how it will affect rates and other charges.

265. In Reply Argument, YEC said it explained its forecasting procedures in YECL-YEC-1-36. YEC further added that variance between forecast and actual of greater than 10% had explanations provided and that "most of the variances were one-time accounting items not expected to recur in 2009[132]".

7.1.1.1 Views of the Board

266. The Board is satisfied with the explanations provided by YEC in respect to the concerns noted by YECL. In future applications when updates occur, the Board directs YEC to provide explanations of all variances (forecast to actual) 10% or greater and a brief explanation of why those variances were not captured in the original forecast.

267. The Board notes that IFRS does not come into effect until January 1, 2011 and that for comparison purposes, 2010 results will need to be reported in the IFRS format. As this is outside the current test period (although some transition costs may affect 2009), the Board sees this as an issue for 2010. Therefore, YEC is to include in its next GRA (Phase I) a section on how the transition to IFRS has affect the reporting of their results and provide a comparison on how the results would have been reported had there not been a transition to IFRS.

8 RETURN ON EQUITY

8.1 Background

268. In its Application, YEC stated that its rate base is financed by two main sources of capital. Those sources are long-term debt and the other being shareholder equity. The equity return is partially governed by OIC 1995/90 (Section 2) and as amended by 1998/32 (Section 1). Since the 1998 rate revision, YEC's return on equity has been set by reference to the British Columbia Utilities Commission (BCUC) formulaic approach.

269. In the 2005 Required Revenues and Related Matter proceeding, the benchmark risk premium was set for YEC at 52 basis points above BCUC generic amount and then was reduced by 0.5% per OIC 1998/32. At the time the approach to return on equity (ROE) for YEC was deemed not to impose a precedent in Yukon[133].

[131] YECL Argument, page 21
[132] YEC Reply Argument, page 71
[133] Application, pages 8-1 to 8-2

8.2 Yukon Energy Allowed ROE for 2008 and 2009

270. YEC proposes the same approach for determining return on equity for the 2008 and 2009 test years in this application. The determination of the return on equity follows a three step process:

1. Determine the BCUC low-risk benchmark utility ROE.

2. Apply the YEC risk premium.

3. Deduct 50 basis points from the return per OIC 1998/32.

271. The BCUC low risk benchmark utility ROE for 2008 is 8.62% (rounded) and for 2009 it is 8.47%. The resultant calculations provide an ROE for YEC of 8.64% in 2008 and an ROE for YEC of 8.49% in 2009.

272. CW in Argument[134] supported the position of YEC, but noted that the BCUC formula does not create a binding precedent as the Board can reject it if it does not produce a fair return on equity. LE supported the ROE proposed by YEC[135].

273. UCG[136] submitted that due to the DCF, the risk assumed by YDC with respect to the Minto PPA and that most of YEC's sales are considered firm, that the risk premium for YEC should be lower.

274. YECL argued that the use of the BCUC formula does not set a precedent and that the Board should be open to other approaches[137] in the future.

275. In Reply Argument CW reaffirmed its position and disagreed with the position taken by UCG.

276. YECL stated in Reply Argument:

> In its Argument (p. 22) Yukon Electrical submitted that the approach proposed by YEC herein, with respect to the use of the BCUC's formula to determine Return on Equity should not be viewed as a precedent on a go-forward basis. In this regard, Yukon Electrical notes that both CW (p. 15) and the UCG (p. 29) submit that the BCUC formula is not a binding precedent and that the Board retains discretion regarding this matter in the future. As well, the approaches used by other tribunals should appropriately be considered by the Board as part of subsequent reviews. Yukon Electrical agrees with these views.
>
> In summary, while the use of the BCUC's approach to determining Return on Equity is acceptable for this current GRA, it is not a binding precedent for the future. As noted, Yukon Electrical specifically reserves the right to put forward any approach it considers appropriate to justify a requested ROE in the future[138].

[134] CW Argument, page 15
[135] LE Argument, page 11
[136] UCG Argument, page30
[137] YECL Argument, page 22
[138] YECL Reply Argument, page 16

277. YEC countered in its Reply Argument with:

> Each intervenor commented on YEC's Return on Equity with CW and Leading Edge recommending the ROE be accepted for the test years, YECL "not taking issue" with the current proposal, and UCG asserting that YEC's business risks have decreased but providing no specific recommendation whether to accept or reject YEC's specific proposal.
>
> The BCUC Approach has been previously reviewed by the Board (during the 2005 Required Revenues and Related Matters hearing) and its application has been accepted for YEC (Order 2005-12) and for YECL (Order 2009-2). It is YEC's position that the continued use of the BCUC approach is reasonable, appropriate and has been accepted by most intervenors and the Board. Further, the 52% risk premium remains appropriate for YEC[139].

278. YEC later stated:

> With regard to the continued use of the 52 basis point risk premium it is noted that Yukon Energy's ROE is only calculated on equity financed rate base, and as such no return is earned on "major project subsidization", i.e., 3rd party contributions; consequently, LE's assertions that that risk is lower due to 3rd party contributions towards major projects is not correct[140].

8.2.1.1 Views of the Board

279. In Appendix A to Board Order 2009-2 – Reasons for Decision (pages 28-29), the Board stated the following:

> The Board strongly agrees with the part of the YECL argument that states:
>
> > The proposal to rely on the generic ROE as a point of departure was intended to be the most efficient means of addressing what is inherently a complex and costly matter, given the current state of ROE determination throughout Canadian regulatory jurisdictions.
>
> YECL covers a geographically dispersed area with a relatively small customer base. It is incumbent upon the Board to explore ways that yield regulatory efficiency and yet provide fairness to all interested parties. In this regard, the Board supports a formula-based approach to determining ROE issues. YECL used the AUC Generic Cost of Capital as its starting point while YEC supports the BCUC formula. CW was also supportive of the BCUC generic cost of capital. Both YECL and YEC have argued that reference to a formula approach is efficient from a regulatory efficiency perspective. To reference a generic cost-of-capital approach from another jurisdiction, the Board must answer the following questions:
>
> - Which generic cost-of-capital model should be used and from which jurisdiction?
> - Should a risk premium be applied?
> - If a risk premium is applied, what risk premium level should be applied to YECL?

280. The Board continues to be of the view that relying on a generic ROE from a different jurisdiction is the most efficient means of addressing an inherently complex and costly matter.

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[139] YEC Reply Argument, page 73
[140] Ibid, page 74

The Board strongly believes that such an approach is the most efficient manner for a jurisdiction such as Yukon.

281. The Board considers that the BCUC approach has been successfully applied to both utilities under this Board's jurisdiction and has resulted in fair returns to both utilities.

282. Therefore it is determined that the BCUC approach is a precedent for this jurisdiction and will continue to be the precedent for this jurisdiction until otherwise ordered by this Board. Further, the Board accepts the risk premium of 52 basis points, as has been previously established, for YEC

283. Based on the above, YEC is directed to use an ROE of 8.64% for 2008 and an ROE of 8.49% for 2009.

8.3 Cost of Capital

8.3.1 Capital Structure and Cost of Capital

284. YEC has maintained the same capital structure since 1992[141]. Thus the capital structure has remained at 60% long-term debt and 40% equity.

285. No issues were brought forward with respect to YEC's capital structure.

8.3.1.1 Views of the Board

286. The Board approves the continued use of the capital structure of 40% equity and 60% long-term debt for YEC.

8.3.2 Cost of Debt

287. Long-term debt for YEC arises from the following sources:

- Unsecured advances from Yukon Development Corporation (YDC)
- Minto Mine Obligations (Minto diesels)
- Yukon Development Flexible Promissory Note
- 7% Flexible Term Note
- TD Canada Trust Note

Details on the above are explained in the Application on pages 5-19 to 5-20 inclusive. YEC forecast long-term debt levels of $92.970 million for 2008 and $94.069 million for 2009[142].

288. TD Canada Trust Note

a) In Argument, LE[143] commented that when the TD Canada Trust Note comes due in 2011, it should be paid out and refinanced at a lower rate.

b) CW had extensive comment of the cost of debt in its Argument.

[141] Application, page 3-18
[142] Ibid, page 3-19
[143] LE Argument, page 11

c) The thrust of the position of CW is that it should be practical and prudent for YEC to refinance the TD Canada Trust Note.

d) YEC in its reply provided the prepayment terms of the loan and offered to discuss with its bank the possibility to negotiate a lower interest rate for the remaining term of the loan and report those findings back to the Board.

289. YDC Debt

a) CW had no issue with YEC's debt issues prior to 2008. It was noted by CW that the loans between YDC and YEC were based upon "120 basis points above the long-term Government of Canada bonds as specified by the Canada Bond rating Service as at the last previous September 30 prior to the issue of the loan."[144] In argument it made the following recommendations[145] for 2008 and 2009 loans from YDC:

Instrument	Amount	Issue Date	Coupon Rate
YDC Loan #17	$3,469,000	December 31, 2008	4.65%
YDC Loan #18	To be determined	December 31, 2009	To be determined

b) In reply, YEC said that the update was to reflect 4 specific areas and that it did not update several of its costs estimates that were likely to be higher. The view of YEC was that CW was cherry picking items that were in the customers favour.

8.3.2.1 Views of the Board

290. TD Canada Trust Loan

a) The Board accepts the offer of YEC to discuss prepayment terms with its bank and to report back to the Board its findings. The Board directs YEC to do so and report its findings in its compliance filing to this application.

291. YDC Debt

a) Based on the evidence it is clear that the coupon rate for YDC Loan #17 would have been known around September 30, 2008. The Board accepts the recommendation on CW with respect to YDC Loan #17 in respect to the amount and with respect to the coupon rate and directs YEC to reflect such in its compliance filing.

b) The Board accepts the coupon rate as filed by YEC for YDC Loan #18 and expects in the compliance filing that the amount of the loan will be determined at such a level as to maintain its proposed capital structure of 60% debt. All other cost of debt issues are accepted as filed.

[144] CW Argument, page 24
[145] Ibid, page 21

9 SUMMARY OF BOARD DIRECTIONS

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

1. For the above reasons the Board finds it appropriate that YEC's wholesale sales forecast should be YECL's approved forecast. Therefore the Board directs YEC, to incorporate YECL's approved load forecast as wholesale sales forecast in its compliance filing. The Board further directs YEC to adopt YECL's Fish Lake Hydro forecast as well. ..... Paragraph 28
2. Additionally, all changes to YEC's revenue requirement forecast resulting from this direction should be referenced (highlighted) in the appropriate tables with accompanying explanations for variances from its Application to assist the Board in its deliberations. ..... Paragraph 29
3. Furthermore, the Board finds DSM to be a critical issue for all electric rate payers in Yukon. The Board directs YEC in conjunction with YECL, to consult with stakeholders and develop a policy paper with respect to DSM initiatives. YEC and YECL are to jointly lead this process and submit a policy paper (Plan) in their next GRA. Further the utilities are to be cognizant of and work with ESC where necessary so as not to duplicate efforts. ..... Paragraph 40
4. The Board finds the UCG and LE proposals for deferral accounts in support of the DSM initiatives acceptable and both YEC and YECL can propose appropriate treatment of these accounts at the time of their next GRA. ..... Paragraph 42
5. Accordingly, the Board directs YEC to use the fuel price of $0.96/litre for Whitehorse. For other YEC locations, as per the Application, the Board approves the additional costs of 3.2 cents/litre (Faro), 1.5 cents/litre (Dawson) and 0.7 cents/litre (Mayo B). ..... Paragraph 53
6. The Board directs YEC to reflect the directed fuel price change in its compliance filing and all related schedules. ..... Paragraph 54
7. The Board therefore directs YEC to undertake a study into brushing activities of similar utilities and report its findings to the Board at the time of its next GRA. Further, the Board directs YEC in its report to include a written brushing policy that describes comprehensively YEC's approach and explains the manner in which the budget for any year is derived. ..... Paragraph 69
8. The Board concludes that a policy outlining the criteria for charging items to the Reserve is needed. The Board directs YEC to undertake a risk management study (Study) of other utilities. The Study should examine and provide results that among other things:
    1. maximizes the benefits of tradeoffs between the deductible amounts proposed to be used on property insurance, the additional costs of making claims on its existing insurance and the size of uninsured claims; and
    2. outlines the criteria used to include an item in the Reserve, i.e. materiality threshold, probability of the event occurring, etc. ..... Paragraph 81

9. Given that the Board has directed YEC to undertake a Study that examines the interplay of variables, i.e. materiality threshold, insurance premium and deductible amounts, etc., that contribute to Reserve balances and given the variability in annual losses, the Board finds that the $150,000 appropriation threshold is not reasonable. Therefore, the Board does not approve YEC's request for a 2009 appropriation of $150,000. However, based on the evidence, the Board does find a $100,000 threshold to be reasonable for 2008 and 2009. The Board directs YEC to appropriate $100,000 against the Reserve in each of the test years..... Paragraph 83

10. Regarding, YEC's request to apply $463,000 to the current balance in the Reserve, the Board directs YEC to apply $413,000 from the Faro Mine Dewatering Account against the current balance in the Reserve. The reason for the change in the amount is that the Board has allowed a 2008 appropriation $100,000 in lieu of YEC's requested $50,000 annual appropriation. ..... Paragraph 84

11. The Board directs that YEC incorporate the above directions in its compliance filing. ..... Paragraph 85

12. The Board is persuaded by the submissions of YECL and UCG with respect to KPIs. There is merit in reviewing KPIs for each of the three functions of YEC (generation, transmission, and distribution). At the time YEC files its next GRA, the Board directs YEC to file KPIs for each of the functions included in the application. The KPIs will be provided for the three years prior to the test years and a forecast of KPIs for the test years in that application. YECL should note that for its next GRA, the Board expects the same inclusion. ..... Paragraph 129

13. The Board directs YEC and YECL as agreed to file a joint Phase II application containing an up-to-date cost of service study (with electronic models attached) within 60 days of the issuance of the decision on the compliance filing by YEC as directed in this Board Order. The Phase II application is to provide accurate revenue to cost ratios for all rate classes, provide rate design recommendations that comply with previous Board directions and comply with current OICs, provide updated terms and conditions of service, and contain a review on investment levels. As supported by both utilities, the Board expects the application to contain stakeholder input..... Paragraph 143

14. To alleviate existing concerns regarding YEC's ability to estimate, the Board directs YEC, in future, to file any Part 3 applications before this Board only when preliminary engineering estimates are available and included as part of the application. Further, in future GRA applications, the Board directs YEC to include business cases for major capital items, including electronic models. Business cases will include:

    - descriptions of the project
    - economic analysis including preliminary engineering estimates
    - discussion of alternatives and how the chosen option was determined
    - discussion of the risks of proceeding with the chosen alternative
    - discussion of risks of not proceeding with the chosen alternative
    - discussion of assumptions included in the business case including escalation factors, loading, financial measures, term of project and associated ancillary costs..... Paragraph 196

15. Therefore the Board is not satisfied that there is a need for the Minto units (based on the capacity planning criteria) and finds that YEC has not shown that the Minto units are the least cost option for YEC to pursue. The Board concludes that the Minto units are not to

be included into rate base for this test period and directs YEC in its compliance filing to amend its revenue requirement and schedules accordingly. YEC may reapply in a future GRA when the need for the units is established through load growth and the units are proven to be the least cost option. Paragraph 207

16. The Board is also aware of the numerous steps that are involved in bringing a project to fruition and the fine balance that exists between micro managing and allowing a utility to conduct its business. However, the Board finds intervenor comments regarding the lack of business cases for each the individual projects and hence the absence of significant and material information to be justifiable. Therefore, in future, for those costs which YEC wishes to include in its revenue requirement, the Board directs YEC to provide appropriate business cases to support those costs. Paragraph 245

17. The evidence suggests that YEC has a review process in place wherein concerns are identified, tested and reviewed by YEC's Board of Directors. The Board considers that the review process itself should be documented more clearly what materials are actually reviewed and how decisions that affect the status of studies and projects are made. Therefore, the Board directs YEC to keep written documentation of any and all deferred cost project review meetings that occur (e.g. agendas, materials presented for discussion, minutes, etc.) and have available for review for those items YEC wishes to include in its revenue requirement. Paragraph 247

18. The Board notes that YEC submitted "[t]he current plan adopted by Yukon Energy for 2009 is reduced from the level assumed at the time of the GRA, to a level of $4.3 million … based on current draft plans". Accordingly, the Board directs YEC to reflect this change at the time of its Compliance Filing and show total deferred costs for 2009 of $4.3 million and to reflect this amendment in all related schedules. Paragraph 251

19. The Board is satisfied with the explanations provided by YEC in respect to the concerns noted by YECL. In future applications when updates occur, the Board directs YEC to provide explanations of all variances (forecast to actual) 10% or greater and a brief explanation of why those variances were not captured in the original forecast. Paragraph 266

20. The Board notes that IFRS does not come into effect until January 1, 2011 and that for comparison purposes, 2010 results will need to be reported in the IFRS format. As this is outside the current test period (although some transition costs may affect 2009), the Board sees this as an issue for 2010. Therefore, YEC is to include in its next GRA (Phase I) a section on how the transition to IFRS has affect the reporting of their results and provide a comparison on how the results would have been reported had there not been a transition to IFRS. Paragraph 267

21. Based on the above, YEC is directed to use an ROE of 8.64% for 2008 and an ROE of 8.49% for 2009. Paragraph 283

22. TD Canada Trust Loan

    a) The Board accepts the offer of YEC to discuss prepayment terms with its bank and to report back to the Board its findings. The Board directs YEC to do so and report its findings in its compliance filing to this application. Paragraph 290

23. YDC Debt

a) Based on the evidence it is clear that the coupon rate for YDC Loan #17 would have been known around September 30, 2008. The Board accepts the recommendation on CW with respect to YDC Loan #17 in respect to the amount and with respect to the coupon rate and directs YEC to reflect such in its compliance filing.

b) The Board accepts the coupon rate as filed by YEC for YDC Loan #18 and expects in the compliance filing that the amount of the loan will be determined at such a level as to maintain its proposed capital structure of 60% debt. All other cost of debt issues are accepted as filed. ..... Paragraph 291