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February 8, 2007

Yukon Utilities Board
P.O. Box 31728
Whitehorse, YT Y1A 6L3

Attention: Ms. Wendy Shanks, Acting Chair

Dear Ms. Shanks:

Re: Power Purchase Agreement ("PPA") between Yukon Energy Corporation ("YEC") and Minto Exploration Ltd. ("Minto")

YEC committed during the Resource Plan review process and in the Term Sheet submitted to the Board on December 21, 2006 that YEC would, as soon as the PPA has been concluded, file an application to seek the Board's approval of the PPA for the supply of electricity by YEC to Minto through a transmission line to be developed by YEC as part of Stage One development of the Carmacks-Stewart Transmission project (the "CS Project").

YEC is pleased to inform the Board that YEC and Minto have reached an agreement today on the PPA. Attached is Yukon Energy's Application to approve the PPA, including the main application and five attachments. Attachment E is the PPA signed by YEC and Minto. Board approval is being sought for new rates, including a new firm mine power rate for the Major Industrial Customer class.

As indicated in the Term Sheet, the PPA includes a \$7.2 million Customer Contribution to the CS Project, a \$24 million minimum Take-or-Pay power purchase provision within the first 8 years of YEC service, and security to be provided by Minto for these commitments. The PPA will not be effective until it is approved by the YUB.

If you have any question regarding the above please do not hesitate to give me a call.

Sincerely,

David Morrison
President & CEO

YUKON ENERGY



YUKON ENERGY CORPORATION APPLICATION TO THE YUKON UTILITIES BOARD

TO APPROVE

THE POWER PURCHASE AGREEMENT ("PPA")

between

**YUKON ENERGY CORPORATION
and
MINTO EXPLORATIONS LTD.**

with regard to the

**Minto Mine
and
Stage One of the Carmacks-Stewart/Minto Spur Transmission Project**

February 8, 2007

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Power Purchase Agreement

1.0 INTRODUCTION

As indicated during the Yukon Utilities Board (the “**Board**” or “**YUB**”) review of Yukon Energy’s 20-Year Resource Plan 2006-2025 (the “**Resource Plan**”), Yukon Energy Corporation (“**Yukon Energy**” or “**YEC**”) and Minto Explorations Ltd. (“**Minto**”) have been negotiating a Power Purchase Agreement (“**PPA**”) for the supply of electricity by YEC to the Minto copper-gold project (the “**Mine**”) from transmission facilities (the “**Transmission Project**”) to be developed by YEC as part of Stage One development of the Carmacks-Stewart Transmission Project, including a spur line to be developed concurrently to connect the Mine to the CS Project. When it has been completed, the Transmission Project will enable Yukon Energy to deliver surplus hydroelectricity from the Whitehorse-Aishihik-Faro (**WAF**) grid to the Mine, thereby displacing on-site diesel generation which Minto will be relying upon when the Mine begins commercial operations in 2007.

Yukon Energy’s letter of December 21, 2006 informed the Board that Yukon Energy and Minto had reached agreement on the key terms to be included in the PPA as outlined in the December 21, 2006 Term Sheet for the PPA (the “**Term Sheet**”), and that YEC would file an application to seek the Board’s approval of the PPA as soon as the PPA was finalized.

Yukon Energy and Minto have now concluded the PPA (see Attachment E), which is hereby filed with the Board. As noted in the PPA, the PPA will not be effective until it has been approved by the YUB, and such approval will be needed on, or before, April 30, 2007 in order to complete the Transmission Project prior to September 30, 2008. Also, as set out in Section 3.1 of the PPA, various other approvals and conditions will need to be fulfilled within certain specified timelines.

Yukon Energy’s Application to the Board for approval of the PPA (the “**Application**”) addresses the following matters:

- Overview of the PPA and Requested Approvals;
- Update from Resource Plan;
- PPA Rates and Impact on WAF System; and
- Protection for Ratepayers over the Longer-Term.

2.0 OVERVIEW OF THE PPA AND REQUESTED APPROVALS

The Term Sheet provided the following background for the PPA, which remains relevant today:

“Minto is in the process of developing the Mine, which is currently approximately 50% developed, and has recently obtained third party financing (the “Current Bank Financing”) to complete development of the Mine for the third quarter of 2007. The Mine is currently expected to begin commercial operations in the second quarter of 2007. The Mine will commence operations using on-site diesel generation (“Mine Diesels”) leased and operated by Minto.

On October 13, 2006, YEC filed with the Yukon Environmental and Socio-economic Assessment Board Executive Committee a Project Proposal Submission for the Carmacks-Stewart/Minto Spur Transmission Project, which includes the following two components:

- a 138 kV transmission line to be developed generally along the Klondike Highway to connect the WAF grid in the Carmacks airport area with the 69 kV Mayo-Dawson grid in the Stewart Crossing area, and all related substations to be developed at Carmacks, Pelly Crossing and Stewart Crossing (the “**CS Project**”); the CS Project is planned to be developed in two stages, with the first stage to include the 138 kV CS development from Carmacks to Pelly Crossing (“**Stage One**”) and the second stage to proceed thereafter with the balance of the CS transmission when conditions will permit its development without adverse impact on ratepayers; and*
- a 25 kV to 35 kV transmission connection from the CS Project in the Minto Landing area to an agreed point of delivery at the Mine (“**Point of Delivery**”), including any related YEC substations, switches, fuses, meters or other equipment at the Minto Landing area and at the Mine required to connect Stage One of the 138 kV CS Project to the Mine (the “**Mine Spur**”); the Mine Spur is planned to be developed concurrently with Stage One of the CS Project.*

*The **Transmission Project** to supply electricity to the Mine includes (a) the Mine Spur, and (b) the CS Project segment between the WAF grid and the Mine Spur in the Minto Landing area (the “**Carmacks-Minto Landing Segment**”).*

YEC’s commitment to develop Stage One of the CS Project and the Transmission Project is subject to completion, execution and delivery of the PPA and the terms of the PPA.

Timely completion of the Transmission Project prior to the end of 2008 will enable YEC to supply electricity to Minto, displacing use of the Mine Diesel and securing economic benefits for both Minto and Yukon electricity ratepayers.”

The PPA specifies that the obligations of the Parties to proceed with and complete the Transmission Project are subject to the fulfilment of the conditions set out in Section 3.1 of the PPA, including YUB approval of the PPA (section 3.2 of this Application reviews these conditions and the related timelines).

Section 3.1(a) of the PPA provides that prior to proceeding with and completing the Transmission Project under the Agreement, on or before April 30, 2007 the YUB will have approved the PPA, including, without limitation, the following provisions set out under Section 3.1(a)(i) to(vii):

1. **Firm Mine Rate:** Approval of the Firm Mine Rate¹, as set out in Schedule C of the PPA, for initial delivery of Mine Firm Electricity by YEC to Minto, and Section 3.5 of the PPA with respect to any future adjustment of the Firm Mine Rate after 2008 (see section 4.1.1 of this Application).

¹ When referring to the PPA, the Application uses capitalized terms as defined in the PPA – see the PPA, Section 1.1 for review of the definitions adopted.

2. **Low Grade Ore Processing Secondary Energy Rate:** Approval of the Low Grade Ore Processing Secondary Energy Rate, as set out in Schedule D of the PPA, for Secondary Mine Processing Energy Electricity delivered by YEC to Minto (see section 4.1.3 of this Application).
3. **Mine Net Revenue Account:** Approval of provisions respecting the Mine Net Revenue Account as set out in Section 3.6 of the PPA. This deferral account, which continues to address annual Mine Net Revenue at least for so long as Minto continues to provide the YEC Security, is one of the key measures to ensure that there are no adverse rate impacts on other ratepayers in Yukon due to the PPA (see section 5.1.2 of this Application).
4. **Capital Cost Contribution:** Approval of provisions respecting the Capital Cost Contribution as set out in Part 5 of the PPA (see section 5.1.1 of this Application).
5. **Take-or-Pay and YEC Security:** Approval of provisions respecting the Minimum Take-or-Pay Amount and the YEC Security as set out in Part 6 of the PPA (see sections 5.1.3 and 5.1.4 of this Application).
6. **YEC Purchase of the Diesel Units:** Approval of provisions respecting the YEC purchase of the four Diesel Units as set out under Part 10 of the PPA (see section 4.2.2 of this Application).
7. **Decommissioning Costs:** Approval of provisions respecting Decommissioning Costs as set out in Part 11 of the PPA (see section 5.1.5 of this Application).

3.0 UPDATE

YEC provided an update on the CS Project and the Minto Mine during the Resource Plan hearing (Exhibit B-16). Further update information is provided below.

3.1 UPDATE FROM OTHER FILINGS, INCLUDING YESAB

On January 25, 2007 the YESAB Executive Committee completed its adequacy review for the Carmacks-Stewart Crossing/Minto Spur (**CS/MS**) Transmission Project, and the project has proceeded to the Executive Committee Screening stage of the YESAB approvals process.

On February 2, 2007, YEC issued a Request for Proposal (**RFP**) to five short listed and pre-qualified bidders for engineering services for the CS/MS Project. It assumes that the engineering work proceeds in stages, starting with a series of systems studies, followed by an examination and confirmation of the proposed route, the development of preliminary design and engineering cost estimates, methodology for dealing with long delivery equipment issues, and an option for final detailed design of Stage One of the project with documentation sufficient to proceed with construction contracts.

Attachment B updates assumptions regarding Minto Mine power loads and timing for YEC service. Further, Minto announced on February 8, 2008 a new C\$45 million debenture financing which will replace the SLF bank debt arranged to date as part of the Current Bank Financing.

Schedule 1 below is a Summary of the Carmacks-Stewart Project Economics updated from the Resource Plan Hearing (Exhibits B-16 and B-22) to reflect the PPA (i.e., the Minto Capital Cost Contributions).

Schedule 1

Summary of Carmacks-Stewart Update Project Economics

Analysis per Exhibit B-16 except as noted: excludes consideration of Carmacks Copper Mine - PV (2005\$million)
Excludes consideration of any additional Yukon Government funding required to prevent adverse ratepayer impacts

	Low Costs	Mid Point Costs	High Costs
Stage 1- Carmacks to Pelly Crossing			
Net YEC Capital Costs			
Project capital costs	17.2	20.2	23.1
Minto Capital Contribution (PPA) ¹	6.5	6.5	6.5
YDC no cost funds (reflects FTN)	5.0	5.0	5.0
YTG funds to date	0.45	0.45	0.45
Net YEC Costs	5.30	8.30	11.20
NET Ratepayer Benefits (PV at 7.5%/yr)²			
Minto Mine net revenues (at Firm Mine Rate)	13.6	13.6	13.6
Pelly Crossing cost savings	2.3	2.3	2.3
Total net ratepayer savings	15.9	15.9	15.9
Overall Stage 1 Net Benefits (Costs)			
With Minto Mine	10.59	7.59	4.69
Stage 2- Pelly Crossing to Stewart Crossing			
Net YEC Capital Costs			
Project capital costs	13.0	15.2	17.5
YTG funds	-	-	-
Net YEC Costs	13.00	15.20	17.50
NET Ratepayer Benefits (PV at 7.5%/yr)²			
Interconnection Cost Savings (assumed)	10.0	10.0	10.0
Overall Stage 2 Net Benefits (Costs)			
	(3.00)	(5.20)	(7.50)
Total Stage 1 and Stage 2- Carmacks to Stewart Crossing			
Net YEC Capital Costs			
Project capital costs	30.2	35.4	40.6
Minto Capital Contribution (PPA) ¹	6.5	6.5	6.5
YDC no cost funds (reflects FTN)	5.00	5.00	5.00
YTG funds to date	0.45	0.45	0.45
Net YEC Costs	18.30	23.50	28.70
NET Ratepayer Benefits (PV at 7.5%/yr)²			
Minto Mine net revenues (at Firm Mine Rate)	13.6	13.6	13.6
Pelly Crossing cost savings	2.3	2.3	2.3
Interconnection Cost Savings	10.0	10.0	10.0
Total net ratepayer savings	25.9	25.9	25.9
Overall Project Net Benefits (Costs)			
	7.59	2.39	(2.81)

Note: 1. PPA Capital Cost Contribution for CS Project is \$7.2 million towards in-services costs;
Schedule shows equivalent 2005\$ costs at \$6.5 million, assuming in-service in Quarter 3 of 2008.
2. See Schedules 2 & 3 of Exhibit B-22: Mine at 32.5 GWh/yr, 8.5 yrs at \$0.10/kWh, no escalation, FTN cost at \$0.017/kWh.

3.2 TIMING REQUIREMENTS AND CONDITIONS

Timing is critical to the viability of the Transmission Project, and in order to achieve an in service date by late 2008 project construction must commence by the fall of 2007. Consequently, pursuant to section 3.1 of the PPA, the following timelines must be achieved:

- **February 15, 2007:** Minto will have received written approval from Macquarie of Minto's execution and delivery of this Agreement and the YEC Security and Minto will have provided a copy of such approval to YEC;
- **February 15, 2007:** YEC will have entered into an agreement with Macquarie and Minto governing the respective rights and obligations of each party;
- **February 28, 2007:** YEC will have completed its due diligence review of Minto and the Mine;
- **March 31, 2007:** Unless the MRI Agreement has been amended (as is currently being re-negotiated) such that MRI no longer has security over the Copper Concentrates, YEC will have entered into an agreement with MRI and Minto governing the respective rights and obligations of each party;
- **April 30, 2007:** YUB will have approved the PPA including the provisions respecting rates, the Capital Cost Contribution, Mine Net Revenue Account, the minimum Take-or-Pay and the YEC Security, YEC's purchase of the Diesel Units, and Decommissioning Costs;
- **May 31, 2007:** Minto will have provided to YEC the YEC Security as required under the PPA;
- **June 30, 2007:** The Mine will have begun commercial operations as defined in the PPA;
- **June 30, 2007:** The right of way will have been secured for the segment of the Mine Spur over the Selkirk First Nation settlement lands on the west side of the Yukon River to the satisfaction of YEC;
- **June 30, 2007:** YEC will have obtained all licences, approvals, consents, and right of ways (excluding the Mine Spur Right of Way which is addressed above) as required by YEC, acting reasonably, to design, engineer, procure, construct, commission and operate the Transmission Project;
- **June 30, 2007:** YDC will have obtained any and all approvals as required under OIC 1993/108 for YDC to allow YEC to proceed with the construction and development of the Transmission Project;
- **July 31, 2007:** YEC will have received tenders for equipment and materials and as otherwise required for construction of the Transmission Project, satisfactory to YEC; and
- **July 31, 2007:** The YEC Board of Directors will have approved contracts for the construction of the Transmission Project.

If any of the above conditions are not either fulfilled or waived on or before the date specified the PPA will be terminated.

Timely completion of the Transmission Project prior to the end of 2008 will enable YEC to supply electricity to Minto, displacing ongoing baseload use of the mine Diesel Units and securing economic benefits for both Minto and Yukon electricity ratepayers.

Further, following the date when all of the conditions in Section 3.1 have been fulfilled or waived, Section 3.3 commits YEC to exercise commercially reasonable efforts to design, engineer, procure, construct, and commission the Transmission Project along the Route on a timely basis in order to provide for Commencement of Delivery as soon as reasonably possibly on or before September 30, 2008, or such date thereafter as is reasonably possible. The PPA sets out that if the Commencement of Delivery occurs after September 30, 2009, the capital costs for the Mine Spur included in the Capital Cost Contribution will not include any interest on such capital costs after January 1, 2009 and (under Section 6.3(b)) the Minimum Take-or-Pay Amount will be reduced by \$250,000 for each added month of delay. Should Commencement of Delivery be delayed until after March 31, 2010, the Capital Cost Contribution payment will be adjusted according to provisions set out under Sections 5.3 or 5.5 of the PPA.²

4.0 PPA RATES AND IMPACT ON WAF SYSTEM

4.1 PPA RATES

4.1.1 Firm Mine Rate

YUB approval of the Firm Mine Rate, as set out in Schedule C of the PPA, is sought for initial delivery of Mine Firm Electricity by YEC to Minto; approval is also sought for Section 3.5 of the PPA with respect to any future adjustment of the Firm Mine Rate after 2008.

The specific, new Industrial Primary Rate (Rate Schedule 39) set out in Schedule C of the PPA for approval of the Board provides for projected 2008 annualized costs of service for the Major Industrial Customer class based on the general and specific cost of service principles and methods in Schedule E of the PPA³, and yields an estimated average annual charge to the Mine at the projected energy purchase requirement of 32.5 GW.h/year⁴ of approximately 10 cents per kW.h.⁵ The Application includes evidence

² Section 5.3 extends payments of the Capital Contribution by one month for each month of delay in YEC's Commencement of Delivery after March 31, 2010, subject to certain conditions to ensure that Mine operation is expected to continue during any such extended payment period. Notwithstanding Section 5.3 (as well as Sections 5.2 and 5.4), Section 5.5 sets out a three year payment process of the Capital Cost Contribution if YEC's Commencement of Delivery is after March 31, 2013, provided that Minto will have no obligations to make such payments after the Commercial Operation Cessation Date.

³ Schedule E of the PPA sets out cost of service principles and methods reflecting OIC 1995/90, past decisions of the Board based on OIC 1995/90 with regard to rates charged to the Faro mine and costs of service assessments regarding such rates and the Major Industrial Customer class, and specific requirements consistent with such past principles and methods as are needed to address the current circumstances related to the PPA and the Mine. Attachment A to the Application reviews these matters and the 2008 Industrial cost of service estimates.

⁴ Section 4.1 of the PPA sets out Minto's Electricity purchase requirements that YEC is to deliver, including provision for Minto (on six months prior written notice to YEC), to increase its Mine Firm Electricity requirement from 32.5 GW.h/year to 42 GW.h/year and 5.7 MVA. These contract conditions of delivery and purchase of YEC electricity continue under the PPA until full payment by Minto of the Capital Cost Contribution and accrued interest, after which time Minto may elect to decrease its Mine Firm Electricity requirements of Electric Energy and for Maximum Demand after providing YEC with at least six months notice.

⁵ The 2008 Firm Mine Rate outlined in Schedule C provides for \$15 kVA per month (demand charge) and \$0.076 per kW.h (energy charge); together these rates equal approximately 10 cents per KW.h for Minto Mine purchase of 32.5 GW.h per year of electricity at a peak annual load of 4.4 kMA. This average rate includes the Demand Charge and Energy Charge rates in the Schedule C Industrial Primary Rate, without consideration of ongoing Fixed Charge provisions relating to ongoing monthly payments by Minto

to confirm that this rate is in full compliance with Order-in-Council 1995/90 and that the rate is sufficient to recover forecast 2008 costs of service to the Major Industrial Customer class (see Attachment A).

Section 3.5 of the PPA confirms that the Firm Mine Rate may be amended by the YUB from time to time after 2008. Section 3.5 also provides that, after 2008, if the Firm Mine Rate is increased above the rate provided for in Schedule C by a decision of the YUB that is made on the basis of cost of service principles and methods which are inconsistent with the cost of service principles and methods in Schedule E of the PPA (or the YUB alters the terms and conditions of the PPA), and such increase or alteration materially adversely affects the cost savings to Minto under the PPA, then YEC and Minto will be required to amend the PPA to reduce the Minimum Take-or-Pay Amount to offset the loss of such cost saving to Minto and to amend the YEC Security so that it is no longer provided as continuing security for the Minimum Take-or-Pay Amount under Section 6.2 of the PPA.

4.1.2 Peak Shaving Rate Option

The Peak Shaving Rate Option included in the Firm Mine Rate in Schedule C of the PPA provides a specified credit⁶ on the firm demand billing rate tied to limits on the mine's ability to affect peak winter loads on the WAF system. Minto can nominate a winter peak contract load (the "**Winter Contract Load**") at no less than two-thirds of the Mine's maximum firm contract load (**MVA**), subject to the following terms and conditions:

- Minto will not exceed Winter Contract Load when the temperature in Whitehorse is below -30 degrees Celsius. YEC will provide Minto with sufficient notice in this regard.
- If Minto contracts for a Winter Contract Load, a year's notice will be required to change any of the contract provisions.
- If Minto's load exceeds the Winter Contract Load, reasonable penalty provision will apply (see Schedule C of the PPA).

The Peak Shaving Rate Option benefits YEC by lowering the need to plan for and run peaking diesels. On the existing WAF system every increased degree between -24 degrees Celsius and -44 degrees Celsius currently tends to increase the system demand by about 400 kW per degree Celsius⁷. If the Mine elects to use this rate option they will be provided a rate break to compensate for their inconvenience; as reviewed in Attachment A, the Peak Shaving rate credit is consistent with the cost of service evidence currently available for the Industrial class. Thus, if used, this rate option results in positive outcomes for the customer and all ratepayers.

for the Capital Contribution. Schedule C also includes provision for a Peak Shaving Credit if Minto elects to nominate a Winter Contract Load as provided for in the rate schedule.

⁶ The credit in each billing month equals 50% of the Demand Charge times the Peak Shaved Load (which equals the amount by which then nominated Winter Contract Demand is less than the Billing Demand for the month).

⁷ Exhibit B-20, Resource Plan Hearing references that the 2006 latest forecast used in 2006 YEC peak with temperature adjustments of 400 kW per Deg C from -24 to -44 degree C. Evidence on the temperature as measured by Environment Canada at the Whitehorse Airport for the years 2000 to 2006 indicates that 3.29% of the annual hours were less than -25 degrees C, 1.24 % less than -30 degrees C, and 0.47% less than -35 degrees C.

4.1.3 Low Grade Ore Processing Secondary Energy Rate

Approval of the Low Grade Ore Processing Secondary Energy Rate (Rate Schedule 35), as set out in Schedule D of the PPA, is sought for Secondary Mine Processing Energy Electricity delivered by YEC to Minto. The Low Grade Ore Secondary Energy Rate is interruptible and available only from surplus hydroelectricity supplies. It is only available for use in processing low grade copper ore as defined in the rate schedule.

Secondary energy is available from time to time under the rate in Schedule D at 6.0 cents per kW.h⁸ and it is only available to Industrial Primary customers supplied under Rate Schedule 39 in parts of the WAF and Mayo-Dawson systems as determined by YEC based on the availability of surplus hydro as well as transmission capacity. The above rate is only applicable to Industrial Primary customers applying for such service and satisfying all of the conditions set out in the rate schedule, including:

- Secondary Energy under this rate is to be used only at a mine site engaged primarily in copper production for processing ore with less than 1% copper content ("**Low Grade Ore**"), and the customer will provide YEC with auditable reporting and controls as reasonably required by YEC to confirm that this secondary energy has been used only to process Low Grade Ore (any such energy use that is not so confirmed will be charged at the Industrial Primary Rate).
- The customer is also to provide reporting as is reasonably required by YEC to determine which portion of its recorded Demand and Energy in any billing month relates to such secondary energy use (any such Demand or Energy use that is not so confirmed will be charged at the Industrial Primary Rate)⁹.
- Service provided under this rate schedule will only be surplus energy remaining after supplying customers served by Rate Schedule 32 Secondary Energy service.

Service under this rate will not contribute to WAF winter peak or the running of diesel generation and will require no more than 24 hours notice for YEC to stop its use by any customer.

Section 4.1(b) of the PPA provides maximum annual use levels by Minto of Secondary Mine Processing Energy Electricity (including, until June 30, 2015 or when the Capital Cost Contribution plus accrued interest is fully paid (whichever is earlier), a maximum annual use limited to permitted use in excess of 32 GW.h/year)¹⁰.

⁸ YEC secondary retail customers, as at the last quarterly rate adjustment for Rate Schedule 32 (based on changes heating oil prices), pay 5.9 cents per kW.h. Whereas Rate Schedule 32 rates are subject to quarterly adjustment, the new Rate Schedule 35 will remain fixed.

⁹ Secondary Energy in this instance will be used to process Low Grade Ore in the same processing equipment used to process high grade ore with Mine Firm Electricity; thus, unlike rate Schedule 32 Secondary Energy, this Rate Schedule 35 energy will not be separately metered from firm energy supplied by YEC. However, metering of the relevant processing equipment would at least allow for separating this processing use of electricity from other uses at the Mine Site.

¹⁰ For the remaining years of the Mine life, the maximum use per year is up to the maximum Electric Energy permitted under Section 4.1(a) (which is currently contemplated to be 42 GW.h per year, subject to Minto giving YEC six months notice to obtain this level of permitted maximum use), subject to the overall Electric Demand not exceeding 6.0 MVA or the Maximum Electric Demand as determined under Section 4.5.

The current Mine plan, as announced August 28, 2006, assumes stockpiling of most Low Grade Ore at the Mine site without any commitment at this time to process this stockpiled ore (this plan, which focuses on high grade ore processing for the first six years and Low Grade Ore processing for only 1.2 years, enhances initial financial returns). In contrast, the Mine Feasibility Study released in July of 2006 assumed that the stockpiled Low Grade Ore (mined in association with the high grade reserves) constituting reserves would all be processed after completion of the six years of high grade ore processing, thereby extending the Mine life by a further 4.6 years or some 3.4 years more than is currently committed. Provision of the Low Grade Ore Processing Secondary Energy Rate enhances the opportunity for Minto to process the balance of the Low Grade Ore in the future, thereby enhancing the prospects for extending the life of the Mine and enhancing benefits to all parties. The PPA provisions in Part 4, however, limit the extent to which Minto can use this Secondary Energy during the initial years of YEC service to the Mine,¹¹ or beyond, to 6.0 MVA at any time. In addition, Minto can also elect (if such Secondary Energy is not available) to process Low Grade Ore using Mine Firm Electricity under Rate Schedule 39.

Attachment B to this Application reviews projected WAF loads and generation with and without the PPA and the Minto mine loads, assuming specific load levels and long-term average water flows. In the Minto Mine firm loads at 32.5 GW.h/year scenarios, surplus electricity drops by about 5 GW.h/year a year until 2015 when all the WAF surplus hydro electricity is used up. Nevertheless, there is an ample supply of WAF surplus hydro available during the initial years of YEC service to the Mine.

Subject to drought and/or other major new power load additions, Attachment B indicates that Rate Schedule 35 would clearly enable Minto to use surplus hydro for many years to process Low Grade Ore on at least a seasonal basis (i.e., during non-winter months). However, the extent to which, in the initial years, Minto may elect to process some of its Low Grade Ore using this secondary energy rate, rather than proceed to use fully all of its available capability to process only high grade ore, is not clear at this time. Capability to supply such surplus hydro secondary energy will decrease materially over the next 5 to 10 years.

4.2 PPA IMPACT ON WAF SYSTEM

4.2.1 Impacts on WAF Loads, Forecast Generation and Surplus Hydro Generation

Attachment B reviews the impact of the PPA and the Minto Mine loads as regards WAF loads, forecast generation (hydro, peaking diesel dispatch and baseload diesel dispatch), and secondary sales (based on surplus hydro and Rate Schedule 32).

In summary, Attachment B indicates that the PPA, over the period to 2016, will increase WAF diesel generation use and decrease WAF secondary sales, with impacts changing from negligible levels in 2009

¹¹ As noted, Minto is restricted during the initial years to use only up to 10 GW.h/year during the first five years of YEC service provided that Minto gives YEC notice to increase its maximum Electric Energy permitted under Section 4.1(a) to 42 GW.h/year (and this initial secondary energy use must be over and above Firm Electric Energy use of 32 GW.h./year). Thereafter, Minto can elect to use such Secondary Energy (if it is available and is used only to process Low Grade Ore as stipulated in the Rate Schedule 35) to meet all of its allowed power load processing requirements to be supplied by YEC.

to the point where baseload diesel generation is required (and secondary sales are no longer available) within four to six years thereafter (by 2013 to 2015, depending on the level of the Minto load). Baseload diesel generation in the last assumed year of the Mine's full scale operation, as reviewed in Attachment B, ranges from 7.2 GW.h (2016) with the 32.5 GW.h/year Mine load to 12.0 GW.h (2015) with the 42 GW.h/year Mine load.

Attachment B indicates that bringing Aishihik 3rd Turbine on line mitigates this situation by reducing diesel generation costs and extending secondary sales opportunities, e.g., baseload diesel generation required in 2016 is reduced to 1.8 GW.h (2016) with the 32.5 GW.h/year Minto Mine load and 6.6 GW.h/year (2015) with the 42 GW.h Minto Mine load. Bringing Aishihik 3rd Turbine on earlier (2010 as compared with 2013) is shown to result in slightly increased economic savings as regards diesel generation costs and secondary sales revenues¹².

4.2.2 Diesel Units at the Mine

The PPA requires YUB approval of provisions respecting the YEC purchase of the four Diesel Units (each with a continuous rating of at least 1.6 MW) as set out under Part 10 of the PPA for \$2.24 million¹³, with YEC to provide payments to Minto in this regard on the same basis as Minto's Mine Spur Capital Cost Contribution payments, i.e., in equal blended monthly payments of interest and principal over the first seven years of YEC service. The negotiated Diesel Units Purchase Price for the assignment to YEC of the Cat Leases for the Diesel Units reflects a proxy for the estimated market value in the event that Minto had proceeded to buy out the Cat Leases and then sell these units to other off-site users (as had been planned to occur after YEC commenced delivery of Grid Electricity to the Mine).

Upon the start of YEC's delivery of Grid Electricity to the Mine, YEC will assume from Minto the Cat Leases¹⁴ for the four 1.6 MW trailer mounted diesel units at the Mine. YEC's obligation to take this assignment of the Diesel Units is subject to various conditions set out in Section 10.2. These conditions include prior completion of a minor overhaul on each unit (and a major overhaul on any unit with 16,000 hours or more of operation), written consent from Caterpillar to the assignment to YEC of the Cat Leases, certain representations and warranties from Minto, Minto's ongoing obligation to pay Caterpillar all lease and other amounts payable under the Cat Leases, and to pay the amount required to be paid on the termination or expiry of the Cat Leases on or before September 6, 2009, as well as provisions for sub-leases, easements, and an operating agreement. So long as YEC maintains the Diesel Units at the Mine, Minto will provide YEC with fuel and operator assistance under an operating agreement. Under the PPA, Minto will be allowed, under certain circumstances, to require that YEC run the Diesel Units to supply the Mine with electricity at Minto's sole cost for fuel and operator assistance when YEC is unable to supply Grid Electricity, and for so long as the units are not required by YEC to supply electricity to the WAF grid.

¹² NPV assessment of all relevant costs and benefits for the Aishihik 3rd Turbine Project, however, tends to show that 2013 in-service provides a slightly higher NPV than 2010 in-service assuming only Minto Mine loads in addition to Base Case WAF loads.

¹³ The Diesel Units Purchase Price payable by YEC provides for deductions from the \$2.24 million with regard to depreciation and maintenance expenses related to actual use in excess of certain stipulated hours of operation.

¹⁴ The PPA provides (Section 10.3(b)) for Minto to pay to Caterpillar on YEC's behalf all lease and other amounts payable under the Cat Leases and to pay the amount required to be paid on the termination or expiry of the Cat Leases on or before September 6, 2009 so that YEC can acquire title to the Diesel Units from Caterpillar, free and clear of all liens, charges and encumbrances.

After acquiring the Diesel Units from Caterpillar, YEC may remove two of the Diesel Units from the Mine at any time after two years after the Commencement of Delivery, and may remove the other two Diesel Units from the Mine at any time after the earlier of the eighth Annual Payment Date and discharge of the YEC Security, subject in each instance to Minto's right to re-acquire the Diesel Units at a price that is generally the greater of:

- the price that YEC has otherwise agreed to sell the Diesel Units to a third party; and
- the Diesel Units Repurchase Price of \$2.24 million less provision for depreciation as affected the Diesel Units Purchase Price originally paid by YEC and for depreciation (as set out in section 10.5(c) of the PPA) during the period of operation of the Diesel Units at the Mine Site by YEC.

After completion of the Transmission Project connecting the Mine to the WAF grid, YEC's purchase of the Diesel Units at the Mine Site will in effect add 6.4 MW of reasonably low cost and low risk diesel capacity to the WAF system. Since the units are mobile they can be easily moved to areas in need of diesel power, or sold in future and moved off site at such time as YEC determines that they are no longer required for WAF. The benefits to the WAF system and the Mine associated with this YEC purchase include:

- The units provide a comparatively low cost addition to WAF peak winter capacity (at a price not exceeding \$350 per kW, the cost is competitive with the Mirrlees Life Extension Project) at a time when YEC is actively examining options to enhance WAF firm winter peak capacity.
- The units provide added security to YEC and Minto as regards reliable supply at the Mine; in YEC's case, the purchase payment arrangements for this asset enhance YEC's security with regard to the Minto obligations to pay the Mine Spur Capital Cost Contribution.
- When WAF diesel operation is required, YEC operation of at least two of the Diesel Units at the Mine Site (especially for baseload operation) is expected to be cost effective (due to the minimization of line losses and related additional diesel generation requirements).¹⁵
- In the near term these units provide cost effective contingency protection until such time as other potential major mine loads (Carmacks Copper) as well as capacity supply options are better clarified.

5.0 PROTECTION FOR RATEPAYERS OVER THE LONGER TERM

5.1 NO ADVERSE IMPACT ON RATEPAYERS

As stated in the PPA¹⁶), it is the Parties' intention that the costs of the Transmission Project required to provide Grid Electricity to the Mine will not adversely impact other ratepayers in Yukon. Accordingly, the PPA ensures that there is "no net cost to Yukon ratepayers", and further, that no individual ratepayer will see an increase to their rates due to the Transmission Project.

¹⁵ Between two and three of the Diesel Units at the Mine Site would rank next to the top of the WAF diesel generation stacking order, reflecting their capability to supply expected Mine load levels at efficient fuel operation levels.

¹⁶ See PPA, page 1, Background item "C".

Bringing Pelly Crossing ratepayers onto the hydro grid will in effect reduce second block energy rates for ratepayers in this community supplied by Yukon Electrical. The “second block” refers to rates for power consumed in excess of 1,000 kW.h per month for residential customers and in excess of 2,000 kW.h per month for businesses. Currently, these second block rates are 12.36 cents/kW.h for Small Diesel communities (Pelly Crossing’s current zone) and 10.45 cents/kW.h for Hydro zone, excluding all riders and taxes. Power consumption for the first block (for consumption less than these amounts on a monthly basis for each of these customer classes; e.g., up to 1,000 kW.h per month for residential and 2,000 kW.h per month for commercial) is at a levelized rate across the Territory and, as such, will not be affected by the connection of Pelly Crossing to the hydro grid.

The PPA includes terms and conditions to help ensure that the provision of Grid Electricity to the Mine through the Transmission Project will have no adverse impact on Yukon ratepayers in either the near-term or the longer-term, including the following terms:

- Minto will provide the Capital Cost Contribution to cover the actual cost of the Mine Spur and to provide \$7.2 million towards the cost of the Carmacks-Minto Landing Segment of the Transmission Project.
- Minto has made a Minimum Take-or-Pay Amount commitment to pay at least \$24 million for Grid Electricity during the first eight years of YEC service, subject to certain provisions in Sections 3.5 and 6.3 of the PPA.
- Minto will provide YEC with acceptable security (the “**YEC Security**”) for the payment of the Capital Cost Contribution, the Minto Power Bills, the Minimum Take-or-Pay Amount, the Decommissioning Cost Payment, and certain other obligations; the YEC Security will be discharged only when the Capital Cost Contribution, Decommissioning Cost Payment, and Minimum Take-or-Pay Amount have been paid in full.
- YEC will establish a deferral account (the “**Mine Net Revenue Account**”) to ensure that incremental annual Mine Net Revenues (or net costs) do not affect YEC earnings or the determination of the revenue requirements affecting other ratepayers in Yukon.
- Upon commencement of delivery, YEC will acquire four 1.6 MW trailer mounted Diesel Units from Minto which will help to provide added security and also provide opportunities to minimize WAF system costs under certain circumstances.
- Minto is fully responsible for all Decommissioning Costs for the Mine Spur; these costs are to be provided for initially out of the Accrued Decommissioning Fund established to set aside an amount equal to 25% of the actual capital costs of the Mine Spur.
- YEC is to conduct comprehensive due diligence with regard to the YEC Security, Minto and the Mine.

5.1.1 Capital Cost Contributions

Section 5.2 of the PPA provides for Minto to pay YEC, after start of YEC service to the Mine, the Capital Cost Contribution (namely, the actual YEC capital costs for the Mine Spur and \$7.2 million towards YEC’s capital costs for the CS Project) plus interest at 7.5% per year on the unpaid balance. Provisions for payment of the Capital Cost Contribution include:

- Mine Spur Capital Cost Contribution to be paid in equal blended monthly payments of interest at 7.5% per year and principal over the first seven years of YEC service.
- Carmacks-Minto Landing Capital Cost Contribution (CS Project contribution) of \$7.2 million¹⁷ to be paid in equal monthly payments of interest at 7.5% per year for the first four years of YEC service, and in equal blended monthly payments of interest and principal over the next three years of YEC service.
- Unless Minto can confirm to YEC's satisfaction by December 31, 2008 its ability and commitment to process Additional Reserves (i.e., added reserves as defined, beyond those confirmed to date in the Mine plan) at the Mine prior to December 31, 2017 sufficient to sustain three years of processing at the Daily Processing Level¹⁸, Minto can be required by YEC to pay the outstanding balance of the Capital Cost Contribution including accrued interest in full on the earlier of December 31, 2013 or the fourth Annual Payment Date.
- Part 5 of the PPA includes provisions to extend or otherwise modify such payments if the start of YEC service to the Mine is delayed beyond March 31, 2010 or March 31, 2013, or the Mine Spur Capital Costs exceed \$4.8 million.
- Part 5 provides for postponement of such payments with regard to the Mine Spur Capital Cost Contribution if YEC is unable to deliver Grid Electricity to Minto for a period of 30 consecutive days or more.
- Under Part 5 of the PPA, YEC will require New YEC Industrial Customers (i.e., a YEC Major Industrial Customer other than Minto (e.g., Carmacks Copper) that receives Electricity through connection with the Transmission Project or the CS Project) to pay customer contributions for their share of capital costs for the CS Project and any spur lines on a similar basis to the Capital Cost Contribution payable by Minto¹⁹.

At the date of the Agreement the Capital Costs of the Mine Spur are estimated at \$3.83 million; however, as provided in Section 5.1 of the PPA, within 30 days of the Transmission Project Start Date YEC will provide Minto with a revised estimated based upon received tenders.

It is anticipated that the total Capital Cost Contribution will be fully paid off within seven years from the commencement of delivery to the Mine by YEC. The PPA provides, however, for acceleration or extension of this timing under various circumstances.

Based on current publicly available information regarding the operating life of the mine²⁰, Low-Grade Ore stockpiles will be processed if the economics warrant it beyond the current mine life of 7.2 years. Additional resources outside of the main Mine area have also been identified and are in the process of being confirmed. Specifically, additional reserves of similar grades and thicknesses of mineralization have

¹⁷ The \$7.2 million amount represents the mid-point in-service capital cost estimate for a 35 kV line over this segment of the CS Project (i.e., the cost of the transmission line segment and voltage level that the Mine would otherwise require to receive Grid Electricity without the CS Project).

¹⁸ The daily processing level at the Mine equivalent to the 2,400 metric tonnes per day level, reasonably adjusted by Minto to reflect the equivalent continuous average operating processing capacity planned by Minto at the Mine within one year after the Commercial Operation Date.

¹⁹ Section 5.7 states that the contribution to the capital costs incurred by YEC for the CS Project would be "based on the segment and voltage level of a transmission line that each New YEC Industrial Customer would require to receive Electricity in the absence of the Transmission Project or the CS Project."

²⁰ The Sherwood Mining Corporation Press Release #06-31 August 28, 2006. See also Attachment B.

been identified at Area 2 and results are expected to be confirmed during 2007. Such Additional Reserves as defined in the PPA, if confirmed, are expected to extend the period of time during which the Mine processes high grade ore and postpone the processing of Low Grade Ore and the cessation of operations at the Mine Site.

Section 5.2(d) ensures that the above Capital Costs payment schedule set out under Section 5.2(a) and (b), and detailed above, is dependant upon Minto providing satisfactory documentation to YEC by December 31, 2008 of Minto's ability and commitment to process Additional Reserves and to extend the Mine life as stipulated. If Minto does not provide satisfactory documentation to YEC that supports an ability to continue such operations as stipulated then YEC may require Minto to pay off the balance of its Capital Cost Contribution on the earlier of either the fourth annual Payment Date or by December 31, 2013.

5.1.2 Mine Net Revenue Account

The PPA requires YUB approval of the provisions respecting the Mine Net Revenue Account as set out in Section 3.6 of the PPA. This deferral account, which continues to address annual Mine Net Revenue at least for so long as Minto continues to provide the YEC Security²¹, is one of the key measures to ensure that there are no adverse rate impacts on other ratepayers in Yukon due to the PPA.

Mine Net Revenue in each fiscal year will be assigned to the Mine Net Revenue Account and will not form part of YEC's earnings in that year. YEC will invest any positive accrued Mine Net Revenue Account amounts at 6.5% interest per annum to fund YEC's regulated rate base until such time as the accrued balance equals or exceeds the CS Project Stage One Undepreciated Capital Cost²², and thereafter YEC will use any positive accrued Mine Net Revenue Account to offset the YEC regulated rate base.²³

Mine Net Revenue in each fiscal year equals Minto Power Bills (plus any take-or-pay payment) less Incremental YEC Costs in that year (i.e., incremental YEC expenses and return on rate base in that year due to the supply of Electricity to Minto by YEC), including any added WAF diesel generation costs, lost income due to displaced interruptible secondary sales, incremental amounts due to the CS Project or the Mine Diesels, or other incremental costs resulting from the PPA.

Overall, Section 3.6 of the PPA provides that a deferral account will be established in order to ensure that the provision of grid power to the Minto mine will have no material impact (positive or adverse) on the rates paid by other Yukon ratepayers, at least during the period prior to discharge of the YEC Security and/or the termination of 6.5% per annum interest earnings on the accrued Mine Net Revenue Account.

²¹ Section 3.6(a) provides for the YUB to determine if Mine Net Revenue continues to be determined by YEC after the discharge of the YEC Security and until the Commercial Operation Cessation Date. Section 3.6(d) provides, after discharge of the YEC Security, that YEC may seek YUB approval, from time to time, to use some or all of the then accrued balance in the Mine Net Revenue Account as a contribution towards the balance of YEC's capital costs not yet depreciated for the CS Project or certain other new generation infrastructure.

²² CS Project Stage One Undepreciated Capital Cost is the balance, at the end of any fiscal year, of YEC's Capital Costs not yet depreciated for the segment of the CS Project from Carmacks to Pelly Crossing, less the balance of the unamortized contributions to such Stage One CS Project capital costs from Minto, YDC and the Yukon Government.

²³ Such offset will tend to provide some positive benefit to ratepayers (through reduction in YEC's overall return on regulated rate base).

In essence, during any fiscal year prior to the cessation of commercial operations at the Mine Site, any net impacts on YEC's earnings due to the Mine or due to the CS Project can be assigned to this deferral account and consequently not be considered when assessing the rate requirements applicable to other ratepayers. These provisions under Section 3.6 of the Agreement set aside positive net incremental earnings due to power sales to the Mine, retaining these net earnings as reserves to offset rate base costs and as protection against any potential future negative earnings related to the Mine activities. Once the Mine ceases commercial operations, YEC, subject to YUB approval, will close the Mine Net Revenue Account and use any remaining funds in such manner as is approved by the YUB, after review of submissions from YEC, Minto, and other interested parties.

Attachment C provides examples as to the operation of the Mine Net Revenue Account during the period through to the end of 2016.

5.1.3 Minimum Take-or-Pay Contract

Section 6.2 provides that, within the first eight years of YEC service and subject to Sections 3.5 and 6.3, Minto will pay YEC a minimum aggregate amount of \$24 million for Grid Electricity regardless of the amount of Grid Electricity actually delivered by YEC or consumed by Minto; provisions are also included during this eight year period for minimum cumulative annual payments averaging \$3 million per year. Section 6.4 enables Minto, prior to the 9th Annual Payment Date, to apply any Take-or-Pay payments made (in excess of Minto Power Bills for Grid Electricity) as a credit against payments in any following year for Grid Electricity purchases in excess of \$3 million.

The \$24 million overall commitment can be reduced under Section 6.3 if Grid Electricity is unavailable for more than 120 hours in any Payment Year,²⁴ or if the Commencement of Delivery occurs after September 30, 2009²⁵. Section 3.5 provides for reduction of the Minimum Take-or-Pay Amount to offset the loss of cost savings to Minto due to certain stipulated YUB decisions²⁶ that materially adversely affect the cost savings to Minto under the PPA arising due to the conversion from reliance on electricity from diesel generation at the Mine Site to Grid Electricity.

Attachment D reviews projected Minto grid power cost savings secured due to the PPA, underlining the basis for Minto's commitments in the PPA.

²⁴ While the take-or-pay amount is to be paid regardless of the amount of electricity delivered by YEC or consumed by Minto, provision has been made to reduce the annual amount payable by \$342 for each hour in excess of a 120 hour threshold for reasonable outages per year. To count towards the 120 hour threshold for outages, Grid Electricity has to have been unavailable for reasons other than reasonable planned maintenance, or for reasons beyond the reasonable control of YEC such as Force Majeure, suspension of supply to Minto provided under Sections 4.6 or 14.2 (e) of the PPA or an Event of Default by Minto.

²⁵ The \$24 million take-or-pay commitment is reduced by \$250,000 for each month that the Commencement of Delivery is delayed beyond September 30, 2009.

²⁶ The stipulated YUB decisions either (a) increase the Firm Mine Rate (after the PPA is approved) by a decision made on the basis of cost of service principles and methods which are inconsistent with the cost of service principles and methods in Schedule E of the PPA, or (b) alter the terms and conditions of the PPA.

5.1.4 YEC Security

Section 6.5 provides that Minto will provide YEC with the YEC Security,²⁷ involving a charge over all assets of Minto, including the Mine, second only to the Current Bank Financing²⁸, as continuing security for the payment of the Capital Cost Contribution plus accrued interest, the Minto Power Bills, the minimum take-or pay obligations, the Decommissioning Cost Payment, and Minto payments to Caterpillar related to the Cat Leases after these leases are assigned to YEC.

Section 6.5 (f) provides that the YEC Security will be discharged only when the Capital Cost Contribution plus accrued interest under Section 5.2, the Decommissioning Cost Payment as required under Section 11.2(b), and the Minimum Take-or-Pay Amount obligation have been paid in full.

The YEC Security may be amended and restated, if required, under Section 3.5 so that, in the event that certain stipulated YUB decisions²⁹ materially adversely affect the cost savings to Minto under the PPA, the YEC Security is no longer provided as continuing security for the Minimum Take-or-Pay Amount under Section 6.2.

The YEC Security is expected to be enhanced by the new C\$45 million debenture financing announced February 8, 2007 that will replace the SLF debt included in the Current Bank Financing.

5.1.5 Decommissioning Costs

The PPA requires YUB approval of the provisions respecting Decommissioning Costs as set out in Part 11 of the PPA.

Minto will be responsible for all Decommissioning Costs incurred by YEC for the Mine Spur.

The Estimated Decommissioning Costs, established prior to actual decommissioning, equal 25% of the Capital Cost to build the Mine Spur.³⁰ Provision is made in Section 11.2(c) to adjust the Estimated Decommissioning Costs when the Mine Spur Revised Estimate is determined and again after the actual Capital Costs for the Mine Spur are determined.

²⁷ Section 6.5 provides that the YEC Security will be substantially in the form as set out in Schedule F to the PPA, subject only to the Current Bank Financing and such other liens, charges, and encumbrances set out in Schedule F.

²⁸ The Current Bank Financing means the Macquarie Financing (which includes the PLF Agreement and the SLF Agreement) and the MRI Financing. Under Section 6.7(c), Minto represents and warrants to YEC the maximum amount of principal outstanding that will pertain to each of the PLF Agreement, the SLF Agreement, and the MRI Financing. Under Sections 6.6(d) and (e), Minto covenants with YEC that Minto will repay the amounts owing under the PLF Agreement by November 30, 2009 and under the SLF Agreement by November 30, 2010. Section 6.6 includes other covenants by Minto to YEC related to the Current Bank Financing, including various provisions preventing changes to the Current Bank Financing without the consent of YEC.

²⁹ See earlier footnote related to section 5.1.3 of this Application.

³⁰ Based on the current estimate of Mine Spur Capital Cost (\$3.83 million) as stated in Section 11.2(c)(i), the initial Estimated Decommissioning Costs equal \$957,500.

YEC will establish the Accrued Decommissioning Fund account, and Minto will make the Decommissioning Cost Payment to YEC under Section 11.2(b) of \$850,000, as adjusted under Section 11.2(c) to reflect actual Minto Spur Capital Costs. YEC will deposit the Decommissioning Cost Payment in the Accrued Decommissioning Fund. The Decommissioning Cost Payment will be paid to YEC by Minto:

- when Minto pays the outstanding balance of the Capital Cost Contribution under Section 5.2(d) at the end of the fourth year of service by YEC; or
- within 180 days after Minto otherwise pays the outstanding balance of the Capital Cost Contribution; or
- in any event on or before the date on which Minto provides notice of the Commercial Operation Cessation Date.

The Accrued Decommissioning Fund will be invested at 6.5% per annum to fund YEC's regulated rate base. As stated in Section 11.2(c), the intent is that the Accrued Decommissioning Fund Amount will equal the Estimated Decommissioning Costs within three years after the Decommissioning Cost Payment by Minto to YEC under Section 11.2(b). This time period reflects the time expected to elapse between the Commercial Operation Cessation Date and the Mine Shut Down Date (when YEC ceases to deliver Grid Electricity to the Mine).

Upon actual decommissioning of the Mine Spur as soon as feasible after the Mine Shut Down Date, Minto will pay to YEC any excess costs above the Accrued Decommissioning Fund (and YEC will repay Minto any excess in the Fund that was not required).

5.1.6 Due Diligence

YEC is undertaking due diligence activities on Minto, its parent Sherwood Mining Corporation ("**Sherwood**"), and the Minto Mine in connection with YEC entering into the PPA with Minto. YEC's due diligence activities are planned to be completed as required by February 28, 2007 as per the provision in the PPA (Section 3.1(e)), although documentation and reporting are expected to continue after that date. There are two parts to YEC's due diligence activities: financial due diligence of Minto and legal due diligence of Minto and Sherwood.

To review the financial due diligence, YEC has commissioned a third party expert (Behre Dolbear, headquartered in Denver) who will be relied upon for financial due diligence activities. Their review will include but not be limited to the Current Bank Financing and associated security which is held by Macquarie Bank Limited, hedging contracts which Minto has entered into for the forward sale of Minto's copper production, and the Feasibility Study and the projected cash flows of the Mine. YEC wants to ensure in this regard that Minto will have sufficient funds to pay off both the Current Bank Financing and the obligations to YEC under the PPA.

The legal due diligence is being provided by Davis and Company LLP. There are two basic components of the legal review. First, reviewing Sherwood's filings with the Ontario Securities Commission including Sherwood's annual reports and annual information forms for the last three years. Second, reviewing the Current Bank Financing and the associated security to ensure that YEC understands Minto's obligations to Macquarie and MRI under the Current Bank Financing and Macquarie's and MRI's rights and remedies.

5.2 RISKS

The cost implications of building the Carmacks-Stewart project have been carefully considered with the risk of the Mine life being shorter than expected and the YEC Security to be provided by Minto to support the minimum payment and other commitments noted in the PPA.

The PPA assumes an expected Mine life of at least 10 years, but also addresses risks of the Mine life being only 7.2 years or less. To assist in review of these matters the following are noted:

- **YEC potential cost risks:** The net cost of the CS Project Stage One development, as noted above in Schedule 1, could be as high as \$20.6 million³¹ prior to any Minto Capital Cost Contribution (and \$13.4 million net of the Minto contribution of \$7.2 million per the PPA); in terms of risk, YEC also initially incurs the costs for the Mine Spur (high cost estimate of \$4.6 million), i.e., total YEC cost at risk is estimated at \$25.2 million.
- **Expected Mine life of 10 years with high grade reserves and 32 GW.h/year power use after first year³²:** The PPA overall assumes an expected Mine life of slightly over 10 years, with power consumption at about 32 GW.h/year i.e., if the Mine starts commercial operations in June 2007, it would be expected to continue such operations until at least September of 2017.
 - Under the PPA, YEC's start of construction on the CS/MS Project is conditional on Minto having commenced commercial operation – this condition addresses risk that Minto might not be able to achieve this milestone.
 - YEC's service to the Mine is targeted to start by September 30, 2008.
 - Based on the assumed 10 year Mine life and the target in-service date for YEC service, YEC power sales to the mine at about 32 GW.h/year would be expected to continue for approximately 9 years.
 - Minto's Take-or-Pay commitment of \$24 million in effect reflects a minimum cumulative purchase of \$3 million per year (30 GW.h/year at the initial firm rate of 10 cents/kW.h) for 8 years.
 - Minto's commitment is also to pay fully by the end of the seventh year of YEC power sales (i.e., two years prior to the end of the expected Mine life) the Capital Cost Contribution (interest and principal) for the Mine Spur and the \$7.2 contribution to the CS Project. By the end of the 7 years of service, the Minto Take-or-Pay commitments will equal at least \$21 million, i.e., an amount well in excess of the net CS Project Stage One high remaining net capital cost estimate of \$13.4 million.
 - Under the above assumptions, the Mine will have stockpiled but not processed most of the Low Grade Ore reserves mined in association with the high grade reserves; these low grade reserves may potentially be processed after the assumed 10 year Mine life (thereby adding to the effective length of time for YEC power sales at the assumed annual energy use levels).

³¹ This estimate reflects the high cost estimates in Schedule 1 of \$23.1 million (2005 \$), adjusted to in-service costs as at third quarter 2008 (\$26.1 million), less contributions by YDC and YTG as noted in Schedule 1.

³² See Attachment B for review of assessed Mine life and YEC service periods under forecast mine conditions.

- **Risk that Mine life may be only 7.2 years with today's high grade reserves:** Based on current announced Mine plans, the Mine today has sufficient high grade ore reserves to operate for six years at the power levels assumed in YEC's current forecasts, i.e., if the Mine starts commercial operations in June 2007, it would be expected to continue such operations using high grade reserves until June 2013, and (based on the current Mine plan) then to process some of the stockpiled Low Grade Ore for 1.2 years until at least September 2014.
 - Based on current Mine plans and the target in-service date for YEC service, YEC power sales to the Mine at about 32 GW.h/year would be expected to continue for approximately 6 years based on today's established high grade ore reserves.
 - If Minto is unable to confirm by December 31, 2008 sufficient additional reserves to extend the Mine life by at least three years at power consumption levels of at least 30 GW.h/year, Minto will be required to pay at the end of the fourth year of YEC power sales (or December 31, 2013, whichever is earlier) the full Capital Cost Contribution amount (with interest) for the Mine Spur and the \$7.2 contribution to the CS Project; this provision in effect provides YEC with full payment of the Capital Cost Contribution about two years prior to the end of this shorter Mine life with today's confirmed high grade ore reserves³³ (in addition, under the take-or-pay commitments, Minto will pay at least \$12 million by the end of the fourth year of YEC service, and about \$18 million by the end of this shorter Mine life with today's high grade reserves, i.e., these payments would exceed the net CS Project Stage One remaining net high capital cost estimate of \$13.4 million).
 - Based on the Mine Feasibility Study (as publicly reported in July 2006), the Mine will stockpile most of the Low Grade Ore reserves mined in association with the high grade reserves which, if processed as assumed in the Minto Feasibility Study (after processing the high grade reserves) would be sufficient to extend the Mine life a further 3.4 years (until near the end of 2017) and provide added security to YEC.
 - If the Mine shuts down operation in 2014 after mining only today's high grade reserves, Minto would also still have an outstanding take-or-pay commitment to YEC that would be subject to the YEC Security (based on the 10 cent firm rate, this outstanding commitment could be from \$4.5 to \$6 million).
- **Minto Security provided to YEC:** The above scenarios involve situations which confirm the ability of Minto payments to enable YEC to recover its capital costs at risk prior to the expected 10 year mine life. In the event that Minto does not meet its Capital Cost Contribution and/or take-or-pay commitments, for whatever reason, the PPA also provides YEC with the YEC Security (the charge on the Mine assets granted to YEC second only to the Current Bank Financing).
 - The Current Bank Financing of senior and subordinated debt that Minto has secured with Maquarie Bank Limited³⁴ for approximately \$85 million is covenanted by Minto in the PPA to be fully repaid by November 30, 2010, i.e., within a period just over the planned initial two years of YEC service to the Mine. After the Maquarie financing has been repaid, YEC

³³ Minto has announced promising results from drilling of Area 2 adjacent to the mine. Minto's plans anticipate confirmation during 2007 of material additional high grade reserves.

³⁴ The balance of the Current Bank Financing as provided by MRI Trading AG of Switzerland is the Copper Concentrate revolving inventory finance facility in the principal amount of up to \$20 million (USD).

will have a first charge on the Mine assets as security for the specified obligations undertaken by Minto, i.e., such a first charge interest is designed to protect YEC interests in the property independent of Minto's corporate financial position.

- Prior to repayment of the Current Bank Financing secured by Minto from Macquarie, YEC has noted the extensive due diligence carried out by the Macquarie Bank Limited, and the protection provided to the Current Bank Financing through forward sales contracts for a portion of the copper, gold, and silver production (into 2011) as well as an off-take agreement with MRI for the sale of concentrates.
- The PPA also provides for YEC to purchase the Diesel Units at the Mine (6.4 MW) at a cost of up to \$2.24 million; these trailer mounted diesel generation assets will provide YEC with added security as to recovery of Minto customer contributions related to the Mine Spur.
- As part of completing the PPA, YEC is also carrying out its own extensive due diligence review of the Minto Current Bank Financing, forward sales contracts, feasibility study, and other relevant information.³⁵

There is not expected to be any material ratepayer impacts from temporary shutdowns of the Minto Mine – and, until the YEC Security is discharged, the Mine would remain liable under the PPA for its Capital Cost Contribution, and Minimum Take-or-Pay Amount and Decommissioning Cost Payment as noted above (as well as any minimum bill payments under the Firm Mine Rate).

5.3 HOW THE PPA WILL APPLY TO OTHER INDUSTRIAL CUSTOMERS

Section 5.7 of the PPA provides that New YEC Industrial Customers, as defined in the PPA³⁶, will be required by YEC to pay a Capital Cost Contribution for their appropriate share of Capital Costs of the CS Project and any spur lines. This will not reduce or otherwise alter Minto's liability for the Capital Cost Contribution in the PPA. Section 5.7 states that the contribution to the Capital Costs incurred by YEC assigned to a New YEC Industrial Customer for the CS Project would be "based on the segment and voltage level of a transmission line that each New YEC Industrial Customer would require to receive Electricity in the absence of the Transmission Project or the CS Project."

The Minto PPA will be used as a template for future PPA customers thus insuring "no negative impact on ratepayers" in this contract will protect ratepayers from being adversely impacted when other industrial customer join the system.

³⁵ Impacts on ratepayers related to net CS/MS Project capital costs not covered by the Minto mine revenues and payments may also be prevented or mitigated if other mine loads are connected to the CS/MS Project.

³⁶ A New YEC Industrial Customer is a YEC Major Industrial Customer, other than Minto, that receives Grid Electricity from the Transmission Project or the CS Project. One potential example would be Carmacks Copper.

ATTACHMENT A

2008 YUKON INDUSTRIAL COST OF SERVICE

ATTACHMENT A: 2008 YUKON INDUSTRIAL COST OF SERVICE

Schedule E in the Power Purchase Agreement (**PPA**) sets out the Cost of Service (**COS**) principles and methods utilized to determine the 2008 Firm Mine Rate as set out in Schedule C of the PPA. This attachment reviews in detail the principles, methods, information, and assumptions adopted to prepare the 2008 Yukon Industrial COS estimates used to determine the 2008 Firm Mine Rate and includes:

- Introduction and Overview
- Key OIC 1995/90 directives followed in determining the 2008 Firm Mine Rate
- Background information on relevant previous Board reports and rulings
- Principles and methods adopted for the 2008 COS
- Explanation of the 2008 Yukon Industrial COS

1.0 INTRODUCTION AND OVERVIEW

The PPA includes a 2008 Firm Mine Rate (revised Rate Schedule 39, Industrial Primary) for Yukon Utilities Board (**YUB**) approval in order to establish at the outset, prior to proceeding with the PPA and its related material long-term commitments, clarity as to the firm rate to be charged to the Mine based on Yukon costs and regulatory principles. Section 3.5 of the PPA acknowledges that, following approval of the PPA, the Firm Mine Rate may be amended by the YUB from time to time after 2008.

The Minto Mine will be a Major Industrial Customer of Yukon Energy Corporation (**YEC**). Pursuant to Order-in-Council 1995/90, YUB approval of any firm rate applicable to this customer must be sufficient to recover the costs of service to that customer class based on treating all of Yukon as one rate zone and pooling costs for both YEC and the Yukon Electrical Company Ltd. (**YECL**). Accordingly, in order to determine the 2008 Firm Mine Rate, it is necessary to determine the 2008 COS for the Major Industrial Customer class within the overall consolidated Yukon rate revenue COS for 2008.

The Firm Mine Rate in the PPA was established based on the COS principles and methods in Schedule E of the PPA. Section 3.5 of the PPA in effect also provides for ongoing adjustment of the Firm Mine Rate after 2008 by the YUB based on the cost of service principles and methods in Schedule E. It sets out impacts with regard to the Minimum Take-or-Pay Amount and the YEC Security in the event that the Firm Mine Rate is increased in future by a decision of the YUB made on the basis of COS principles and methods which are inconsistent with the COS principles and methods in Schedule E when such a Firm Mine Rate increase materially adversely affects the cost savings to Minto under the PPA.

Schedule A-1 below sets out the estimated 2008 Industrial COS, reflecting annualized load level service to the Minto mine and indicating an Industrial class cost of service of approximately \$3.25 million for supply of 32.5 GW.h (i.e., an average COS of 10.0 cents per kW.h), representing 6.6% of the estimated overall consolidated Yukon rate revenue requirement for 2008 as set out in Schedule A-1. The Firm Mine Rate applied under the same 2008 load assumptions for the Minto Mine in effect yields the same average rate of 10.0 cents per kW.h, and 2008 forecast annualized Industrial class revenues equal \$3.26 million

(revenue to cost ratio of 100.3% for the Industrial class). Accordingly, the 2008 Firm Mine Rate conforms to the requirements of OIC 1995/90.

Attachment A sets out the COS principles, methods, information and assumptions adopted to prepare the 2008 Yukon Industrial COS estimates used to determine the 2008 Firm Mine Rate set out in Schedule C of the PPA. The following sections are provided:

1. **Section 2: Key OIC 1995/90 Directives:** The key OIC 1995/90 directives followed in determining the 2008 Firm Mine Rate and Industrial COS are identified and described.
2. **Section 3: Background Information on Previous Board Reports and Rulings:** A brief background review is provided of relevant past Board reports and rulings on COS principles and methods in the context of OIC 1995/90 and Industrial customers. The last relevant rulings affecting determination of the Industrial Primary rate based on a consolidated rate revenue and COS for YEC and YECL was for 1997 based on the 1996/97 General Rate Application (**GRA**); Faro mine related COS rulings are also noted in 1998 after the Faro mine closure.
3. **Section 4: COS Principles and Methods Adopted for 2008 Industrial Class COS Estimates:** The COS principle and methods set out in Schedule E of the PPA are elaborated on in this section, with added detail on the information utilized. As adopted in Schedule E, general principles and methods are addressed separately from specific principles and methods used to determine the 2008 COS.
4. **Section 5: Explanation of Estimated 2008 Yukon Industrial COS:** A detailed review is provided of the principles, methods, information, and assumptions adopted to develop the 2008 COS estimates in Schedule A-1, including;
 - a. **Forecast Loads (Industrial and Other)** – the key energy and peak demand forecast estimates adopted for the 2008 COS.
 - b. **Forecast Consolidated Rate Revenue Requirement** - the approach adopted to estimate the consolidated 2008 rate revenue requirement (YEC and YECL) based on review of changes since the last COS (1997) as well as the latest information filed with the YUB by YEC and YECL.
 - c. **Forecast Costs by Function** – Review of the approach adopted to estimate 2008 forecast consolidated rate revenue costs by Production (Generation), Transmission, and Distribution functions as required for COS (and as shown in Schedule A-1). The 2008 Industrial COS is provided based on these forecast costs by function, along with the classification and allocation subsequently carried out for such costs (as shown in Schedule A-1).
 - d. **Sensitivity Examples** – the Industrial COS sensitivity is reviewed with regard to different elements of the Firm Mine Rate and different Mine load forecast scenarios.
 - e. **Industrial Class Revenue to Cost Ratios** - these are briefly reviewed.

2.0 KEY OIC 1995/90 DIRECTIVES

The following key OIC 1995/90 directives were followed in determining the 2008 Firm Mine Rate (and in assessing Industrial COS for 2008):

1. A major industrial customer is a customer of YEC or YECL engaged in manufacturing, processing, or mining whose peak demand for electricity exceeds 1 MW, but it does not include an isolated industrial customer¹.
 - This directive means that the Minto mine will be a major industrial customer of YEC once it connects to the Whitehorse-Aishihik-Faro (**WAF**) grid through the Carmacks-Stewart/Minto Spur (**CS/MS**) Transmission Project.
 - Based on this directive, no other major industrial customer is currently forecast to be served in 2008 by YEC or YECL.
2. The rates charged to major industrial power customers, whether pursuant to contracts or otherwise, must be sufficient to recover the costs of service to that customer class; when assessing costs of service for the major industrial customer class, the entire Yukon must be treated as one rate zone and costs must be pooled for the two utilities (YEC and YECL) in order to develop a rate that is equal for both utilities².
 - Based on this directive, COS for the major industrial class has been estimated based on the consolidated forecasts of YEC and YECL revenue requirements, net of inter-company sales and non-rate revenues.³
 - Based on this directive, the Firm Mine Rate for 2008 has been determined to be sufficient to recover such costs of service as forecast for that year.

3.0 BACKGROUND INFORMATION ON PREVIOUS BOARD REPORTS AND RULINGS

The Board has addressed Major Industrial Customer class rates, based on COS principles and methods consistent with the OIC 1995/90 directive, through the following reports and orders:

- Board report dated June 1, 1992 to Commissioner in Executive Council following a hearing on COS and rate design pursuant to OIC 1991/62 (which had directives regarding Major Industrial Customer rates substantially the same as those in OIC 1995/90).
- Board Orders related to GRAs and rates (the latest being Order 1996-7 regarding the 1996/97 GRA as filed by YEC and YECL). The 1996/97 GRA set the last firm rates applicable to forecast commercial operation of the Faro mine.

¹ “**Isolated Industrial Customer**” is defined as an industrial customer “*whose electrical service is not inter-connected with electrical service provided to any other customer*”. **Section 6.(2) of the OIC** directs that rates of isolated industrial customers served by YEC or YECL must conform with any contract between the customer and the utility “*and the costs and revenues related to those contracts may not be considered by the Board when establishing rates for other customers.*”

² **Section 6.(1) of the OIC** directs: “*The Board must ensure that the rates charged to major industrial power customers, whether pursuant to contracts or otherwise, are sufficient to recover the costs of service to that customer class; those costs must be determined by treating the whole Yukon as a single rate zone and the rates charged by both utilities must be the same.*”

³ Reflects the practice in the last GRA reviewed by the Board or YEC and YECL (1996/97 GRA).

- Board Orders in 1998 after a hearing related to rate changes following closure of the Faro mine; these orders addressed filings of Yukon Energy which adopted principles and methods for determining COS for the Major Industrial Customer class after closure of the Faro mine for the purpose of assigning costs to the Faro mine, based on the 1997 GRA and actual operation of this mine in 1997 and 1998.

In general, the filings of YEC in these hearings reflected specific COS principles and methods to provide COS estimates for the Major Industrial Customer class (which in effect at that time consisted of one such active producing customer, the Faro mine, although the then shut down United Keno Hill Mine (**UKHM**) was included in COS estimates for this class at that time). These COS filings determined cost of service estimates for each customer class based on consolidated forecasts using a three step methodology to functionalize costs, classify costs, and then allocate costs to each customer class.⁴

Certain key COS principles and methods approved by the Board in Order 1996-7 are summarized below. These principles were adopted and elaborated on in the key filings of YEC reviewed by the Board in 1998 to estimate industrial class COS under different load and cost conditions:

1. **Order 1996-7 directions on principles and methods:** In response to interventions from the Faro mine in the 1996 hearing seeking various COS adjustments (including incremental cost treatments ["new" versus "old" customer assessments], COS based only on the WAF system and YEC operations, etc.), the Board ruled on key elements of COS principles and methods as determined for the 1996/97 GRA Industrial Primary Rate Schedule 39 last applicable to the Faro mine, including the following rulings:
 - a. On the matter of new versus old customers in assessing COS for a class, *"The assignment of 85% of costs of the Faro transmission to the industrial rate class is based on usage and is not related to the status of old versus new customer...the vintage of a customer is not currently appropriate to the development of the cost of service studies for the Yukon."*
 - b. Based on OIC 1995/90, when assessing COS for major industrial power customers, *"the entire Yukon must be treated as one rate zone and costs must be pooled in order to develop a rate that is equal for both utilities."*
 - c. The Board re-affirmed that the 100% classification of Whitehorse Unit #4 to energy *"is appropriate at this time"*, and *"that there is no new evidence"* to change its previously recommended classification of other hydro generation costs 40% to demand and 60% to energy.
2. **Rate 39 approved for 1997:** In 1996 the Board approved a 1997 rate (Rate 39) for the Major Industrial Customer class which, in essence, was the Faro Mine with a forecast load of 180 GW.h/yr. This Rate 39 was based on a 1997 COS estimate for this Industrial class in the 1996/97 GRA filings of YEC and YECL, prepared to comply with the YUB's 1992 COS recommendations, OIC 1995/90 and the approved Consolidated Revenue Requirement for

⁴ Schedule E to the PPA summarizes relevant key principles and methods for each of these three steps (see General Cost of Service Principles and Methods, item 4) as last applied to setting firm rates for the Faro mine in the filings and Board Order relating to the 1996/97 GRA, with modifications for 2008 as needed to reflect closure of the Faro mine, secondary sales due to surplus hydro electricity, use of the Mayo-Dawson Transmission facilities, forecast in-service of the CS Project, and other factors as noted.

YEC and YECL for 1997 (the final approved 1997 COS estimate, based on the approved COS principles and methods as well as the final approved 1997 revenue requirements, was set out in Exhibit 206 filed in that proceeding).

3. **Faro mine COS rulings in 1998 after closure (Order 1998-5):** The 1998 YUB hearing resulted in Board review of Faro Mine COS for partial years of service in 1997 and 1998 (Exhibit 83 in that hearing set out the relevant final assessments relied upon by the Board). As part of the analysis prepared by YEC at that time, the 1997 COS estimate for the Industrial class was in effect modified as required, based on approved COS principles and methods, to reflect the specific adjustments identified regarding Industrial loads, changes to WAF system costs tied to changes in Faro mine loads, and other specific changes set out in the filings regarding YEC's allowed return and amortizations. These filings demonstrate how the approved COS principles and methods were retained while COS estimates for the Major Industrial Customer class were adjusted to address material changes to industrial loads and costs.

4.0 COS PRINCIPLES AND METHODS ADOPTED FOR 2008 INDUSTRIAL CLASS COS ESTIMATES

Schedule E to the PPA sets out the COS principles and methods utilized to determine the 2008 Firm Mine Rate. These are elaborated on in the following section, with added detail on the information utilized.

General Principles and Methods: As noted above, the general principles and methods in Schedule E in most instances reflect OIC 1995/90, past COS filings of YEC/YECL, and previous Board COS rulings on such COS filings and related Major Industrial class rates. The following additional general COS principles and methods were adopted in Schedule E to reflect 2008 forecast conditions that differ from the 1996/97 GRA conditions (when the last full COS was prepared based on YEC/YECL GRA filings):

1. **Faro mine closure changes:** The Faro mine closure affects the following general COS principles and methods:
 - a. **Specific assignment of transmission costs:** The Faro mine closure removes the basis for specifically assigning to the Industrial class (Faro mine) 85% of the WAF transmission costs for the Whitehorse to Faro line. Schedule E classifies 100% of these specific WAF transmission costs to energy (rather than demand) to reflect the approach adopted below for other new transmission projects designed to displace diesel energy generation (rather than to meet system winter peak demands).
 - b. **Secondary sales:** Due to this closure and resulting surplus hydro electricity on WAF, forecast 2008 secondary sales revenues (which were not forecast in 1996/97) are assigned to offset 2008 forecast generation function costs (YEC sales revenues) and distribution function costs (YECL sales revenues).
 - c. **Flexible Term Note (FTN) added interest:** Finally, due to this closure the FTN interest costs (as well as principal payments) are currently sensitive to changes in YEC's WAF sales. Schedule E specifies the principle that added FTN costs (interest) due to

adding Minto mine loads on WAF are assigned to generation function costs for the purpose of estimating 2008 Yukon Industrial COS.⁵

2. **New Projects:** Schedule E addresses two new transmission projects that were not in service in 1996/97, namely the Mayo-Dawson (**MD**) Transmission Project and the CS Project (for the COS assessment, Stage One of the CS project is assumed to be in service all of 2008). For each of these transmission projects, Schedule E specifies that 100% of costs not offset by customer or other contributions are to be classified to energy (rather than demand) – this approach is adopted to reflect the extent to which each of these transmission projects has been designed and planned almost entirely to displace diesel energy generation (rather than to meet system winter peak demands)⁶. In the case of MS/CS transmission capital costs, the following COS principles have also been applied⁷:
 - a. **MS transmission:** All MS capital costs are in effect directly assigned to the Minto mine as a capital contribution required through the PPA; this assignment reflects the fact that, for all practical purposes, the MS facilities are being planned solely to supply WAF grid power to the Minto mine⁸.
 - b. **CS transmission (Stage One):** The Minto mine's \$7.2 million capital contribution to the CS transmission line (as provided for in the PPA) in effect constitutes a direct assignment of these capital costs to the mine, based on the mine's segment of the line and voltage required to receive WAF grid power.

Specific Principles and Methods: Schedule E also sets out specific COS principles and methods utilized to determine the 2008 Firm Mine Rate, many of which relate to sources of information and methods to assess specific cost elements. Further information and explanation of some of these specific principles and methods is provided below:

1. **Initial sources for specific function costs based on last approved COS estimates:**

Given the absence of any YEC/YECL GRA since 1997, the current analysis started with the COS assessments for specific function costs (specific generation, transmission, and

⁵ In previous COS, FTN costs were allocated as part of Return allocations (generally tied to rate base allocations among functions); accordingly, only a portion of such costs would be assigned to the generation function. The principle for 2008 COS addresses the specific circumstance where new WAF loads related to this Minto mine are responsible for a specific increase in these costs.

⁶ Excluding specific assignment to the Faro mine, transmission costs in previous COS were classified 100% to demand at the time of the system peak, without any consideration as to assigning any share to energy. In contrast, most of YEC's hydro generation assets are classified 60% to energy and 40% to demand, reflecting average system load factors; however, the Whitehorse #4 unit costs are classified 100% to energy to reflect this unit's planned use to displace diesel energy generation and not to contribute to meeting winter peak demands. The approach adopted in Schedule E will tend to assign more, rather than less, of the affected costs to the Major Industrial class (given the relatively high annual load factors displayed by this class). All capital costs for the Minto spur line are in effect directly assigned to the Minto mine and, in addition, \$7.2 million of CS line capital costs are also in effect directly assigned to the Minto mine (with payment in each case through a customer contribution).

⁷ The PPA provides that new YEC Industrial Customers will be required by YEC to pay customer contributions for their appropriate share of capital costs for the CS Project and any spur lines on a similar basis to the Capital Cost Contribution under the PPA, "including a contribution to the capital costs incurred by YEC for the CS Project based on the segment and voltage level of transmission line that each New YEC Industrial Customer would require to receive Electricity through in absence of the Transmission Project or the CS Project."

⁸ YEC's September 2006 CS/MS Project Proposal Submission to the Yukon Environmental and Socio-economic Assessment Board (**YESAB**) notes that, once built, the MS facilities on the east side of the Yukon River are expected to be retained after closure of the Minto mine to provide service to local area residents and businesses.

distribution cost elements) as approved for the 1997 GRA and as subsequently adjusted for 1997/98 after the Faro mine closure (as provided in YEC's 1998 filings to the Board during the limited scope 1998 hearing) to reflect reduced and/or no Faro Mine operation and to provide estimated Industrial class COS estimates, as summarized below:

- a. approved 1997 COS for consolidated YEC/YECL revenue requirements and for the Industrial class, adjusted for the 1998 hearing to exclude diesel generation costs and other 1997 GRA costs saved by closure of Faro mine;
- b. established COS functionalization methods for assigning these consolidated and adjusted costs to generation, transmission, and distribution functions;
- c. established COS classification methods to assign the consolidated and adjusted functionalized costs to Energy, Demand, and Customers classifications; and
- d. established COS allocation methods to distribute these classified costs to the Industrial class based on allocation formulae generally related to the class share of energy generation, coincident peak demand, and number of customers (based on consolidated YEC and YECL sales and generation).

2. Updates to reflect 2008 forecast revenue requirements: Adjustments were made to the earlier 1997 COS costs referenced above from the 1998 hearing, as then estimated without the Faro Mine costs and loads, to assess 2008 Major Industrial Class customer forecast costs to serve Minto mine loads at full annual forecast levels (assumes that the CS Project is in service all of 2008) based on the following principles and methods for 2008:

- a. **Non-industrial sales, costs, and revenues** – In order to forecast reasonable 2008 non-industrial sales, utility costs, and revenues as required for a consolidated 2008 COS forecast for YEC and YECL, the most recent information on YEC and YECL sales, costs, revenues, and revenue requirements to be recovered through currently approved rates was adopted as the basis for adjusting the earlier 1997 COS to reflect current requirements and conditions without any new industrial customer loads. The following information was relied upon in this regard:
 - 2005 YEC required revenues forecast approved by YUB and the 2007 YEC required revenues forecast filed with the YUB in December 2006;
 - YECL regulatory filing with the YUB for 2005 (as filed in 2006);
 - escalation of the above YEC and YECL required revenues to 2008, net of inter-company sales and non-rate revenues;
 - the latest YEC/YECL filing in November 2006 on Rider F costs and rates for the current retail customer loads (without industrial customers) as forecast for December 2006 through November 2007;
 - secondary sales revenues as forecast are treated as an offset against generation costs (YEC secondary sales revenues) and distribution costs (YECL secondary sales revenues); the forecast secondary sales rate variance (as forecast for 2007 in the latest Rider F filing with the YUB) are included as offset to generation costs; and
 - YEC costs for the Mayo-Dawson Transmission Project, as approved by the YUB for 2005 and adjusted forward to 2008, are all classified to energy (on the basis that this project was designed and is being operated to displace diesel energy costs).

- b. **Industrial sales and related cost changes; reflection of PPA provisions** – Industrial class forecast 2008 sales and related utility cost changes affecting consolidated 2008 COS forecasts were estimated based on current Minto full annualized forecast power requirements (as forecast in the December 21, 2006 Term Sheet) at 32.5 GW.h per year and 4.4 MW peak load in winter and other relevant PPA provisions. Related cost changes for serving the Minto Mine load were estimated regarding:
- **Minto Diesels:** YEC purchase of the Mine Diesels (at \$2.24 million);
 - **WAF costs:** allowance for marginal added peaking diesel generation fuel costs (\$0.13 million for 2008) related to added Minto loads on WAF⁹; also allowance for Yukon fuel costs savings at Pelly Crossing (\$0.325 million for 2008) due to the CS Project connection¹⁰;
 - **FTN:** FTN added costs due to adding Minto Mine and Pelly Crossing sales to the WAF grid (assigned to generation costs);
 - **Specific assigned transmission costs to Faro Mine:** due to closure of the Faro mine, the 2008 COS analysis no longer assigns 85% of the Whitehorse-Faro transmission costs to the Faro Mine or to the Industrial customer class; Schedule E classifies 100% of these specific WAF transmission costs to energy (rather than demand) to reflect the approach adopted below for other new transmission projects designed to displace diesel energy generation (rather than to meet system winter peak demands);
 - **Distribution costs:** with regard to classifying and allocating distribution function costs to the Industrial class for 2008 without access to a full updated COS based on current detailed YEC/YECL forecasts, only “Accounting and Marketing” costs were so classified and allocated (in 1997 less than 1.5% of distribution costs were assigned to the Faro Mine, representing less than 1% of all costs assigned to the Industrial class - Accounting and Marketing in 1997 represented about 88% of the distribution costs assigned to the Industrial class). Overall, this simplification is considered to provide reasonable assessment of distribution costs to be allocated to the Major Industrial class in 2008; and
 - **Mine Net Revenue Account:** The COS for 2008 excludes any consideration of the Mine Net Revenue Account to be established pursuant to the PPA. The Mine Net Revenue Account (as provided for in the PPA) relates solely to treatment of actual Minto Mine net revenues, after the relevant Firm Mine Rate has been determined to comply with OIC 1995/90.

⁹ See Table B-3 (Attachment B), which presents WAF load and generation forecasts (and related diesel generation costs and secondary sales revenues) with 32.5 GW.h of Minto load starting in 2009, as well as the Pelly Crossing load (assumed at 1.5 GW.h/yr); in contrast to Table B-2 (Attachment B) which shows the same WAF forecasts without the Minto mine load or the Pelly Crossing load, the incremental WAF diesel fuel and O&M costs in 2009 (the first full load year examined in these tables) due to the Minto and Pelly Crossing loads approximates \$130,000. The 2009 estimate is adopted for 2008 to reflect potential full annualized cost impacts.

¹⁰ See Schedule 2 of Exhibit B-22 in the Resource Plan hearing (assumes 1.5 GW.h per year of Pelly Crossing load, diesel generation costs of 20 cents per kW.h in 2005\$, and the first full year (2009) of annualized cost savings).

- c. **Provisions for new bulk power assets** – In order to assess other added major costs not included in current YEC/YECL revenue requirement filings to the YUB and that are potentially relevant to 2008 forecast Industrial class COS (which generally reflect consolidated utility costs related to utility generation/transmission bulk power assets), full annual costs of the following specific new additions were assumed for 2008 based on the Yukon Energy 20-Year Resource Plan and the requirements for the Minto Mine:
- **CS Project Stage One costs** (as estimated in Exhibit B-22 in the Resource Plan hearing plus provision for cost escalation to in-service), net of capital cost contributions from Minto (PPA provisions), the Yukon Development Corporation (**YDC**), and the Government of Yukon (**YTG**); resulting annual costs are classified 100% to energy in the 2008 COS (based on planned Stage One project use to displace diesel generation).
 - **Mirrlees diesel life extension costs** (assumed at \$5 million by 2008)¹¹.

5.0 EXPLANATION OF ESTIMATED 2008 YUKON INDUSTRIAL COS

Schedule A-1 below sets out the estimated 2008 Industrial COS, reflecting annualized load level service to the Minto mine and indicating an Industrial class cost of service of approximately \$3.25 million for supply of 32.5 GW.h (i.e., an average COS of 10.0 cents per KW.h). This schedule provides the following:

- **Total Yukon COS:** Overall consolidated firm rate revenue requirement (YEC/YECL) forecast for 2008 of \$48.97 million, broken out by COS functions (Production or Generation, Transmission, and Distribution).
- **Yukon Loads – Total and Industrial Class:** Forecast Yukon (YEC/YECL) and Industrial class sales (energy and coincident peak demand), generation, and number of customers – these forecast elements are required to classify and allocate the total 2008 Yukon COS to the Industrial customer class for each of the three functions.
- **Classified COS by function:** Based on the adopted COS principles and methods, the COS for each function are classified to Energy and Demand in the schedule (classified costs for Production and Transmission are typically fully addressed in this way – customer cost classification of distribution function costs is also adopted as required for Accounting & Marketing function costs).
- **Industrial class allocated COS:** Classified costs are allocated to the Major Industrial Customer class (shown by Energy and Demand classified costs and then for Total Industrial Class Costs) based on the adopted COS principles and methods. The Industrial class COS is also shown, by function and overall, in cents per KW.h.

Specific elements of the detailed principles, methods, and assumptions used to estimate this 2008 Yukon Industrial COS are reviewed below, along with an overview description of the approach adopted.

¹¹ The updated Resource Plan (Exhibit B-16 in that hearing) provides for Faro rehabilitation at the outset (2007) at a cost of \$2.3 million; allowance for \$5 million costs by the end of 2008 allows as well for proceeding with the initial Mirrlees unit at Whitehorse. Provision is made for full rate base COS of \$5 million in 2008 without any allowance for initial year rate base impact reductions.

The analysis started with consolidated forecast YEC and YECL revenue requirements (loads, expenses, and return accepted for revenue requirements) and then proceeded to allocate such consolidated costs to three separate utility functions (generation, transmission, and distribution). In order to classify and allocate these functionalized costs, forecast customer class loads were required to be estimated as regards consolidated Yukon generation energy and peak winter coincident peak demands.

Details on the relevant key forecast load and cost elements adopted for the attached 2008 COS estimates are reviewed below.

5.1 FORECAST LOADS (INDUSTRIAL AND OTHER)

The key load elements for Industrial COS, based on the stated principles and methods, are share of overall Yukon energy generation and estimated share of overall Yukon coincident peak generation load in winter. Overall, the forecast shares for 2008 set out in the top part of Schedule A-1 (i.e., Minto at 10.09% of energy and 6.16% of coincident peak demand) are considered to be reasonable approximations based on assumed Minto loads. Details underlying the forecast 2008 loads are as follows:

- Sales and Generation (energy):
 - Non-industrial load (“other”) WAF sales are forecast for 2008 per the Resource Plan, after allowance for distribution losses; estimates of sales were adopted for MD and the remaining isolated diesel systems served by YECL.¹²
 - Minto load per PPA (section 4.1 of the PPA).
 - Non-industrial load losses were assumed per 1997 GRA for overall Yukon systems.
 - Minto and CS load related load losses assumed at 5 percentage points above assumed average WAF wholesale losses adopted in the Resource Plan forecasts (7.7%) for non-industrial sales.
 - Generation forecast equals forecast sales plus assumed losses.
- Coincident peak demand:
 - An overall Yukon non-industrial system coincident peak was assumed at 70 MW based on assumed load factor relationships to energy generation estimated for each system.
 - Industrial coincident peak was assumed to be 91.0% of forecast Minto peak winter load (rough approximation of Faro Mine relationships used in 1997).

5.2 FORECAST CONSOLIDATED RATE REVENUE REQUIREMENT

The forecast 2008 consolidated rate revenue requirement (YEC and YECL, net of inter-company sales and non-rate revenues) is estimated in Schedule A-1 at \$48.97 million, based on the following:

- **Changes in YEC and YECL costs since 1997:** Table A-1 below summarizes the following cost and revenue requirement information from 1997, 1999, 2005, and 2007:

¹² An overall cross check for these estimates is that YEC/YECL Rider F filing in November 2006 forecasts 12 month December 2006 to November 2007 non-industrial Yukon retail sales at 288 GW.h and 292 GW.h for 2008; Schedule A-1 below adds less than 1.4% growth overall to this available 2007 joint YEC/YECL retail sales forecast.

- **1997 GRA consolidated revenue requirement:** Approved YEC and YEC 1997 revenue requirements (per Decision 1996-7) are provided by major cost elements, providing for elimination of inter-company transfers as well as “other revenue”, in order to yield an approved consolidated rate revenue requirement of \$47.75 million (assumes Faro mine operation).
- **Adjusted 1999 consolidated revenue requirement after Faro mine closure:** Table A-1 describes (per Exhibit 83 in the 1998 hearing) the adjustments made in the limited scope hearing to estimate approved 1999 “revenue requirement” costs (based on approved 1997 GRA costs after specific adjustments as noted for closure of the Faro mine); the end result was a Schedule 6D (Exhibit 83) consolidated 1999 rate revenue requirement after Faro mine closure of \$37.0 million.
- **2005 YEC and YECL filings:** Based on YEC’s final approved 2005 revenue requirement plus YECL’s 2005 YUB filings, a consolidated rate revenue requirement for 2005 is estimated at \$41.33 million (see Table A-1). Details are provided by major cost functions for comparison with the earlier 1999 estimates without the Faro mine.
- **2007 YEC forecast:** Table A-1 provides the recent 2007 forecast revenue requirement filed with the Board by YEC in December 2006, showing growth in rate revenue requirement (with transfer from Dewatering Account) from \$25.9 million in 2005 to \$27.8 million in 2007.
- **YEC/YECL Consolidated Firm Rate Revenue Requirement for 2008 without Minto mine and new projects forecast for 2008:** Table A-2 below takes the most recent revenue requirements for YEC (2007 forecast) and YECL (2005 actuals as filed) and estimates a consolidated firm rate revenue requirement for 2008 of \$46.69 million (prior to considering Minto mine and other new projects forecast for 2008) based on the following:
 - **COS net estimates** for YEC (2007) and YECL (2005) after inter-company transfer and other revenue.
 - **Escalation** of these COS net estimates to 2008 (at 2.5% per year assumed escalation).
 - **Addition of \$3.0 million Rider F forecast revenues** (December 2006 to November 2007, as filed recently with the Board by YEC/YECL based on forecast retail sales without Minto mine). These revenues, which adjust GRA fuel costs to current forecasts, are included to reflect overall forecast costs for 2008. The result is a consolidated rate revenue requirement of \$48.0 million.
 - **Secondary sales revenues** as forecast for 2007 (after adjustment for secondary rates above the 2005 Revenue Requirement forecast) are then deducted to yield the consolidated firm rate revenue requirement estimate of \$46.69 million for 2008.
- **Project and Other New Costs included for 2008:** The 2008 estimated consolidated rate revenue requirement includes the following \$2.27 million of forecast project and other new costs over and above the \$46.69 million estimated above:
 - **CS Project (Stage 1):** Annual costs of \$924,600 based on estimated depreciation and return on rate base per November 2006 filing with YUB in Resource Plan hearing –

assumes full annualized cost without reductions for initial year rate base or partial year in service.¹³

- **FTN added costs:** Added FTN costs are estimated at \$544,000, reflecting impacts from adding both Minto and Pelly Crossing to WAF loads (assumes estimated 1.6 cent per KW.h added FTN interest cost).
- **Minto and Mirrlees Diesels:** Annual costs of \$1.0 million to reflect depreciation and return costs on YEC's purchase costs of \$2.24 million for the Minto mine diesels (\$0.3 million in 2008) plus an estimated \$5 million of capital costs to 2008 for Mirrlees Life Extension (\$0.7million in 2008)¹⁴.
- **Mine related peaking diesel costs:** Estimated cost of \$0.13 million as reviewed earlier.
- **Pelly Crossing fuel cost saving:** Saving of \$0.325 million as reviewed earlier.

5.3 FORECAST COSTS BY FUNCTION

Costs for each of the three functions in Schedule A-1 below reflect the following:

Production Costs: The total Yukon 2008 numbers for each "production function" sub-component in Schedule A reflect 1997 GRA COS estimates (and GRA COS classifications) adjusted (a) for costs saved due to no Faro Mine (per 1998 filing estimates in Exhibit 83 of that hearing of cost change impacts to 1997 GRA (See Table A-1: Change in Cost Impact to 1997 GRA)) and (b) for other specific changes noted below to reflect estimates for 2008 cost levels. The classification and allocation methods are per the 1997 approved COS except as noted below (see Table A-3: Changes from 1997 Cost of Service (for ease of cross reference to the table, the numbers below identifying specific cost elements correlate with the number for specific rows on the left of the table)):

- **Fixed costs** – 1997 costs are assumed except as follows (cross checks with YEC and YECL annual reports suggest overall generation assets net book values are likely slightly higher than in the 1997 GRA, and appear to have grown slightly since 1999; there is no provision here for any potential Aishihik 3rd Turbine project costs):
 1. **Diesel plant** – includes an added \$700k to reflect assumed depreciation and return on \$5 million of expected Mirrlees Diesel Life Extension costs (assumes that by 2008 a material portion, but not all, of the Resource Plan forecast costs have been incurred for facilities then in service); in addition, includes \$300k to reflect estimated depreciation and return on \$2.24 million cost for YEC purchase of Minto on-site diesel units.
 2. **Wind** – costs for 1997 doubled to reflect second turbine added since then.
- **Other non-fixed costs** - 1997 costs are assumed except as follows:
 3. **Fuel Expenses** – costs reflect recent Rider F filing for YECL and YEC 2007 full fuel costs (included Rider F impacts, forecast diesel fuel prices and forecast diesel generation;

¹³ Full cost in-service of \$22.6 million (mid-point cost estimate in Exhibit B-22 of the Resource Plan Hearing escalated by 12% for inflation and interest during construction per Exhibit B-16 of the Resource Plan Hearing), resulting in a full annual cost of about \$2.1 million for depreciation and return at 7.5%. This annual cost is reduced by about 56% to reflect assumed contributions to the overall capital cost (YDC at \$5 million, Minto at \$7.2 million and YTG funds to date at \$0.45 million). MS transmission capital costs are all fully assigned to Minto as a customer contribution.

¹⁴ Annual depreciation and return costs assume asset life for depreciation of 15 to 20 years, and ignore any reductions related to first year in service.

\$4.948 million for YECL; \$0.104 million for YEC, adjusted to \$0.033 million based on December 2006 YEC filing) – no increase is provided for growth in fuel volumes or costs from 2007 to 2008; with regard to the Carmacks-Stewart Project and the Minto load, the following provisions are made regarding fuel costs:

- o Allowance of \$130k for potential added peaking fuel costs related to serving the assumed Minto load in 2008/2009.
 - o Allowance of \$325k for reduced fuel costs for displacement of Pelly Crossing diesel generation due to CS line.
4. **Wind O&M** – 1997 costs multiplied by two for second turbine and inflated overall by an assumed 26.37% overall inflation factor (see below).
 5. **Other Production O&M** – 1997 GRA costs with Faro mine reduced by \$1 million to reflect no Faro mine load (reduction in diesel generation O&M), and inflated overall by 26.37% overall inflation factor assumed (see below).
 6. **Risk Insurance and Admin & General** – 1997 GRA costs inflated overall by assumed 26.37% overall inflation factor (see below).
 7. **FTN added costs** – a new element not assigned in this way in 1997 GRA production costs; reflects estimate at 1.6 cents per KW.h for added FTN interest costs directly related to new WAF sales to Minto mine and Pelly Crossing (in allocating all such added costs to Production, in effect going beyond normal embedded COS methods which assign these costs across all return to rate base for all functions, the premise adopted is to treat this specific element for this COS on an incremental cost basis, noting that added generation due to the new WAF loads resulting from the CS Project is in effect causing these added costs); all such incremental FTN costs are assumed to be classified to Energy (as it is WAF energy sales by YEC that directly affect these costs).
 8. **Secondary Sales Credit** – a new element not in the 1997 GRA (as there are no such sales with Faro Mine operating) – assumes that secondary sales revenues have no related incremental costs, and are all assigned to offset Production costs and are all classified to Energy – the 2008 estimate reflects YEC 2007 forecast at the 2005 rate approved by YUB (\$875k) plus added revenue (\$226k) reflecting recent Rider F filing (forecast of extent to which actual 2007 secondary sales rates will exceed 2005 rate approved by YUB). The estimate assumes no reduction in such sales due to Minto loads on WAF (this is estimated to be the case for 2008 and 2009, but eventually (about 2012) reductions are forecast to begin occurring – see Attachment B, Table B-3).
 - **Transmission Costs:** The Total Yukon 2008 costs for this function in Table A-3 and Schedule A-1 equal 1997 GRA COS (as well as GRA COS classifications) except as noted:
 9. **Specific Line (WAF)** - the 1997 COS as approved, based on COS principles and methods going back to the last National Energy Board review in 1985, included assignment to the Faro mine of 85% of the transmission costs for the Whitehorse-Faro portion of YEC's WAF transmission facilities - costs for this specific cost component in 2008 are set at 1997 GRA costs, but (due to the closure of the Faro mine) with no specific assignment to the Faro Mine or the Industrial class (unlike 1997). All of these specific WAF transmission costs are assumed to be classified to Energy on the basis that this line is basically being used to displace diesel energy generation (rather than to meet system winter peak demands) for the communities and Industrial customers being served.

10. **Mayo-Dawson line** – a new cost element not included in the 1997 GRA; estimate of depreciation, return on rate base and O&M based on YEC's 2005 revenue requirement hearing filings, rate base costs approved by YUB for that year, and modified depreciation approved by YUB. All such costs are assumed to be classified to Energy on the basis that this line is basically being used to displace diesel energy generation in Dawson City and at other locations.
11. **Carmacks-Stewart (Stage 1)** – a new cost element not included in the 1997 GRA; estimate of depreciation and return on rate base (at 7.5%) per final mid-November 2006 filing with YUB in YEC Resource Plan hearing:
 - o Assumes a full annual cost of about \$2.1 million (2009 year forecast in filing) based on assumed full in-service capital cost of \$22.6 million (mid point cost estimate in Exhibit B-22¹⁵ escalated by 12% for inflation and IDC).
 - o Reduces annual cost by 56% to reflect assumed contributions to the overall capital cost (YDC at \$5 million, Minto at \$7.2 million and YTG funds to date of \$0.45 million).
 - o Reflects that the remainder of project cost is to be recovered through rates.
 - o Assumed costs are classified 100% to energy using the same rationale at this time as assumed above for classifying Mayo Dawson project costs.
- **Distribution Costs:** Review of the 1997 GRA COS with Faro Mine confirms that Distribution Costs generally are not assigned to the Industrial class (i.e., less than 1.5% of such costs in 1997 were assigned to this class even with the assumed operation of Faro Mine, representing less than 1% of all costs then assigned to the Industrial class). Further, of the Distribution Costs so assigned to Industrial, about 88% were due to one cost component (Accounting & Marketing). Accordingly, the 2008 estimate for Industrial COS adopts a simplified COS assessment for distribution function costs that separates out and assigns to Industrial only the Accounting & Marketing sub group costs (classification and allocation of these costs use 1997 GRA methods). The total Yukon 2008 costs for this function shown in Table A-3 and Schedule A-1 equal the 1997 GRA costs except as noted:
 12. **Accounting & Marketing** - 1997 GRA costs inflated overall by assumed 26.37% overall inflation factor (see below).
 13. **Other Distribution Costs** - 1997 GRA costs inflated overall by assumed 26.37% overall inflation factor (see below), less provision for YECL secondary sales revenue (\$234k based on YEC's 2007 forecast sales). These costs have no impact on Industrial COS as estimated for 2008, but are included to enable overall assessment of the total Yukon costs being estimated for 2008.

¹⁵ Exhibit B-22 of the Resource Plan Hearing.

As noted above, an **“overall inflation factor” of 26.37 %** was assumed in the attached COS (Table A-3, and Schedule A-1) to bring overall total Yukon costs, excluding new items related to the Minto mine and the CS Project (as noted above in section 4.2), in line with estimated YEC and YECL consolidated 2008 revenues absent the CS Project (per Table A-2). The following are noted in this regard:

- This factor is applied to the following cost components that are not affected by the CS Project:
 - Production costs – Wind O&M, Other Production O&M, Risk Insurance, Admin & General.
 - Transmission costs – no components (note that Risk Insurance and Admin & General were about 11% to 12% of 1997 GRA COS).
 - Distribution costs – all components.
- As seen below (see Table A-2) the overall YEC and YECL revenue requirements for 2008 as estimated in preparing Schedule A-1 equal \$46.692 million based on the following:
 - YEC 2007 forecast total revenue (\$27.879 million) less inter-company transfers (\$0.051 million) and non-rate other revenues (\$0.106 million), escalated by 2.5% for 2008.
 - YECL 2005 annual report total revenue (\$37.927 million) less inter-company transfers (\$21.682 million purchases from YEC) and non-rate other revenues (\$0.818 million), escalated at 2.5% per year for 3 years (2006 to 2008).
 - Add on \$3.0 million for Rider F to reflect fuel cost adjustment (per recent filing).
 - Deduct secondary sales revenues (\$1.1 million per forecast sales at 2005 approved rates, plus a further deduction of \$0.226 million for forecast as recently filed regarding higher rates above 2005 approved level).

Based on the above assumptions, the COS schedule below (Schedule A-1) shows overall Total Yukon Costs (consolidated) for 2008, including new elements related to the CS Project and the Minto Mine, estimated at \$48.97 million with 6.6% of these costs assigned to the Industrial class (Minto mine). The resulting COS for Industrial is \$3.25 million, or an average COS of 10.0 cents per KW.h of Industrial energy forecast to be purchased from YEC.

5.4 SENSITIVITY EXAMPLES

The assigned 2008 Industrial COS estimate, and the average 2008 COS estimate per KW.h, are sensitive to the assumed Minto loads as well as other factors.

Material changes to Minto's firm loads as provided for in the PPA (section 4.1) could change the Industrial 2008 COS per KW.h. For example, based on Schedule A, a Minto load of 42 GW.h (with related peak load increased to about 5.7 MVA) would reduce average Industrial COS to 9.8 cents per KW.h prior to considering any increases in WAF diesel generation costs related to this increased load (estimates as provided in Table B-6 of Attachment B) suggest a small potential increase in 2009 of about \$60k compared with the 32.5 GW.h Minto load case (see Table B-3, of Attachment B) which would imply an average Industrial COS for 2008 that still approximates 9.8 cents per KW.h).

Alternatively, the option of increased Minto sales through Low Grade Ore secondary sales of up to 10 GW.h/yr in the initial years would tend to raise revenues without any material change in costs (thereby also having downward pressure on the average Industrial class COS per KW.h).

Finally, the Firm Mine Rate also provides the option of a Peak Shaving Credit (at 50% of the Demand Charge multiplied by the Peak Shaved Load). At the minimum Winter Contract Load provided for under this option (two-thirds of the customer's contract maximum demand) Minto could reduce its peak demand to about 2.935 MW. COS assigned to the Industrial class would then be reduced to about 9.4 cents per KW.h.

In summary, it is apparent that the COS estimates are subject to change as assumptions change: however, current information suggests that 10.0 cents average COS for 2008/2009 is a reasonable forecast estimate that is unlikely to be materially changed absent some major new adjustment (e.g., an additional new 2008/2009 major industrial load such as the Carmacks Copper mine resulting in a significant increase in WAF diesel generation, and/or many years of gradual load growth on the WAF system will eventually lead to similar results).

5.5 INDUSTRIAL CLASS REVENUE TO COST RATIOS

Forecast annualized Industrial class revenues equal \$3.26 million (revenue to cost ratio of 100.3%) based on the Firm Mine Rate and the Minto forecast requirements (purchases) adopted in the 2008 COS.

The Industrial revenue to cost ratio would be slightly higher if Minto's actual load is increased to the 42 GW.h level (revenue to cost ratio of 102.4%), or if Minto elected to use the maximum Peak Shaving Credit by nominating the lowest allowed Winter Contract Demand (revenue to cost ratio of 102.5%).

Schedule A-1
Yukon Industrial Cost of Service 2008 Estimate

Yukon Industrial Costs of Service- - 2008 estimate (\$000)

LOADS	Customers	Energy			Coincident Peak			Minto Non-c Peak kW
		Sales MWh	Losses %	Generation MWh	Sales kW	Losses %	Generation kW	
Industrial								
Minto Mine	1	32,500	12.70%	36,627.5	4,004.0	14.70%	4,592.6	4,400.0
other	0	-	0.00%	-	-	0.00%	-	
sub total	1	32,500	12.700%	36,627.5	4,004.0	14.70%	4,592.6	
Other	15,750	292,000	11.81%	326,485	61,947	13.00%	70,000	
Total	15,751	324,500	11.90%	363,113	65,951	13.10%	74,593	
Industrial Share	0.006%			10.087%			6.157%	

% of contract
winter peak shaving 91.0%

cost escalation since 97

26.37%

PRODUCTION COSTS	Total Yukon	Demand Costs			Energy Costs			Total Industrial Class Costs	cents/ kW.h
		Classify %	Yukon Costs	Industrial Costs	Classify %	Yukon Costs	Industrial Costs		
Fixed Costs:									
Diesel Plant	4,302.8	100%	4,302.8	264.9	0%	-	-	264.9	0.0082
Whitehorse #4	7,824.3	0%	-	-	100%	7,824.3	789.2	789.2	0.0243
Other Hydro	3,845.0	40%	1,538.0	94.7	60%	2,307.0	232.7	327.4	0.0101
Wind	199.4	0%	-	-	100%	199.4	20.1	20.1	0.0006
Sub Total	16,171.5	36%	5,840.8	359.6	64%	10,330.7	1,042.1	1,401.7	0.0431
FTN added cost	544.0				100%	544.0	54.9	54.9	0.0017
Sec Sales Credit	(1,101.0)	0%	-	-	100%	(1,101.0)	(111.1)	(111.1)	(0.0034)
Fuel Expenses	4,786.0	0%	-	-	100%	4,786.0	482.8	482.8	0.0149
Wind O&M	91.2	0%	-	-	100%	91.2	9.2	9.2	0.0003
Other Production O&M	5,045.8	50%	2,522.9	155.3	50%	2,522.9	254.5	409.8	0.0126
Risk Insurance	546.7	32%	177.3	10.9	68%	369.3	37.3	48.2	0.0015
Revenue Offsets	(210.8)	33.4%	(70.5)	(4.3)	66.6%	(140.3)	(14.2)	(18.5)	(0.0006)
Admin & General	3,824.1	33.4%	1,278.8	78.7	67%	2,545.2	256.7	335.5	0.0103
Total Production Costs	29,697.5	33%	9,749.4	600.3	67%	19,948.1	2,012.2	2,612.4	0.0804
Minto Mine				600.3			2,012.2	2,612.4	0.0804
TRANSMISSION COSTS									
Specific Line (WAF)	690.9	0%	-	-	100%	690.9	69.7	69.7	0.0021
Mayo Dawson line	2,630.6				100%	2,630.6	265.4	265.4	0.0082
Carmacks-Stewart (Stage 1)	924.6				100%	924.6	93.3	93.3	0.0029
Other Lines	2,786.8	100%	2,786.8	171.6				171.6	0.0053
Total Transmission Costs	7,032.9		2,786.8	171.6		4,246.1	428.3	599.9	0.0185
Minto Mine				171.6			428.3	599.9	0.0185
DISTRIBUTION COSTS									
Accounting & Marketing	2,279.8				37.6			37.6	0.0012
Other	9,956.0				-			-	-
Total Distribution Costs	12,235.8				37.6			37.6	0.0012
Minto Mine					37.6			0.3%	0.0012
other					0			37.6	-
TOTAL COSTS	48,966.2			771.8	37.6		2,440.5	3,250.0	
net of new items	46,693							6.6%	
Minto Mine				771.8	37.6	-	2,440.5	3,250.0	0.1000

Table A-1
Changes in Cost Impact to 1997 GRA (\$000)

Exhibit 83 in 1998 Hearing - no YECL adjustments (\$000)									
	Decision 96-7 1997	Schedule 3 Faro Mine Adjusted 1999	Revenue Required 1999	ROE, debt amortization adjustment 1999	Schedule 6D adjustment 1999	2005 Refiled 2005	Since 1999 Schedule 6D % increase	Forecast 2007	Since 1999 Schedule 6D % increase
YEC									
Fuel	7,828	(6,673)	1,155		1,155	213		25	
Other O&M	9,538	(1,347)	8,191		8,191	10,705	31%	12,021	47%
Depreciation, net	5,352		5,352	(733)	4,619	5,657	22%	6,109	32%
Return	10,417	(1,059)	9,358	(929)	8,429	9,424	12%	9,724	15%
Sub-Total	33,135	(9,079)	24,056	(1,662)	22,394	25,999	16%	27,879	24%
Intercomp transfer	11		11		11	38	245%	51	364%
Total Revenue Required	33,146	(9,079)	24,067	(1,662)	22,405	26,037	16%	27,930	25%
					Other Regulated Revenue	95		106	
					Total Rate Revenue & Transfer from Dewatering Account	25,942		27,824	
YECL						2005 filed fuel approx. (bal in O&M)			
Fuel	2,189		2,189		2,189	1,950	-11%		
Other O&M	5,326		5,326		5,326	7,130	34%		
Income Tax expense	1,957		1,957		1,957	1,306	-33%		
Depreciation, net	2,287		2,287		2,287	2,766	21%		
Return	3,178		3,178		3,178	3,093	-3%		
Sub-Total	14,937		14,937	-	14,937	16,245	9%		
Intercomp transfer	14,735	224	14,959	-	14,959	21,682	45%		
Total Revenue Required	29,672	224	29,896	-	29,896	37,927	27%		
					Sales to Other Utilities	48			
					Other Regulated Revenue	818			
					Total Retail Sales	37,061			
Consolidated Revenue Required	48,072	(9,079)	38,993	(1,662)	37,331	42,244	13%		
Less other revenue	(326)		(326)		(326)	(913)	2		
Consolidated Rate Revenue	47,746	(9,079)	38,667	(1,662)	37,005	41,331	12%		
	1997 COS 47,746	No Mine	1997 COS 39,040						

Table A-2
YEC and YECL Estimated 2008 Revenue Requirements
without Minto and CS Project (\$000)

Revenues (\$000)	Year	total	Less Purchase Power	Less Other Income	COSS net	Escalated to 2008 (2.5%/yr)
YECL	2005	37,927	21,682	818	15,427	16,613
YEC	2007	27,879	51	106	27,722	28,415
Rider F						3,000
Sub-Total						48,028
Less Secondary						(1,110)
Less Secondary above 2005 Revenue Requirement Price						(226)
Total Consolidated Firm Rate Revenue Requirement						46,692

Source: Table A-1

Table A-3
Changes from 1997 Cost of Service by Functions (\$000)

(1997 COS with Faro Mine consistent with Exhibit 206 as filed June 19, 1996 based on Order 1995-7;
1997 COS with no Faro Mine reflects 1998 hearing YEC filing (Exhibit 83) cost change from Faro closure)

	With Faro 1997	No Faro 1997	Additions	Estimate 2008
PRODUCTION COSTS				
Fixed Costs:				
1. Diesel Plant	3,400.1	3,302.8	+\$700k +\$300k	4,302.8
Whitehorse #4	8,153.2	7,824.3		7,824.3
Other Hydro	3,974.3	3,845.0		3,845.0
2. Wind	102.7	99.7	* 2	199.4
Sub Total	15,630.3	15,071.8		16,171.5
7. FTN added cost		N/A	1.6 cents per kWh	544.0
8. Sec Sales Credit		N/A	\$875k + \$226k	(1,101.0)
Low Water Reserve Carry Cost	-	-		N/A
3. Fuel Expenses	10,271.3	3,345.8	\$4,948k +\$33k +\$130k -\$325k	4,786.0
4. Wind O&M	36.1	36.1	*2 inflated by 26.37%	91.2
5. Other Production O&M	4,992.9	3,992.9	-\$1 million inflated by 26.37%	5,045.8
6. Risk Insurance	432.6	432.6	inflated by 26.37%	546.7
Revenue Offsets	(231.9)	(210.8)		(210.8)
Admin & General	3,329.2	3,026.1	inflated by 26.37%	3,824.1
Total Production Costs	34,460.5	25,694.5		29,697.5
TRANSMISSION COSTS				
9. Specific Line (WAF)	685.5	690.9		690.9
10. Mayo Dawson line		N/A		2,630.6
11. Carmacks-Stewart (Stage 1)		N/A	\$2.1 million less 56%	924.6
Other Lines	2,811.0	2,786.8		2,786.8
Total Transmission Costs	3,496.5	3,477.7		7,032.9
DISTRIBUTION COSTS				
12. Accounting & Marketing	1,804.1	1,804.1	inflated by 26.37%	2,279.8
13. Other	7,984.4	8,063.6	inflated by 26.37% -\$234k	9,956.0
Total Distribution Costs	9,788.5	9,867.7		12,235.8
TOTAL COSTS	47,745.5	39,039.9		48,966.2

ATTACHMENT B

MINTO MINE IMPACT ON THE WAF SYSTEM

ATTACHMENT B: MINTO MINE IMPACT ON THE WAF SYSTEM

Attachment B reviews the economics for YEC and YECL WAF operations of the Minto Mine connecting to the WAF system through Stage One development of the Carmacks-Stewart (CS) Transmission Project and the impact that this CS development with the Minto mine would have on WAF peaking diesel, baseload diesel, and secondary sales by year. The analysis focuses only on WAF-related impacts, i.e., cost savings at Pelly Crossing or at the Mine are not examined; for convenience, the “Mine” impacts on WAF include in this analysis connection of the Pelly Crossing load to WAF.

1.0 FRAMEWORK FOR ASSESSMENT

The assessment generally adopts the framework used in the Yukon Energy 20-Year Resource Plan 2006-2025 to assess Base Case WAF forecast loads, generation, and costs under various resource options.

Focusing on the Minto Mine, two firm load cases are identified in the PPA (Section 4.1) with regard to YEC sales to Minto:

- **32.5 GW.h/year** – This case, which is associated with a Maximum Electric Demand in the PPA of up to 4.4 MVA, represents processing at 2,400 metric tonnes per day (mtpd) per the Mine plan announced August 28, 2006¹.
 - Based on the currently announced Mine plan, this level of energy load would continue until about September 2014 (assuming commercial operations commence around mid-2007, and 7.2 years of commercial operations).
 - The PPA in effect assumes, however, that Minto will announce confirmation of a further 3 years of high grade ore reserves from Area 2 at the Mine, and that this level of energy use is therefore assumed to continue until about September 2017 (assumes 10.2 years of commercial operations).
 - This Mine plan assumes 6 years of high grade ore processing and 1.2 years of stockpiled Low Grade Ore² processing; it does not include processing of additional stockpiled Low Grade Ore that would be available at the Mine Site for future processing if the economics so warrant.³
- **42 GW.h/year** – This case, which is associated with a Maximum Electric Demand in the PPA of up to 6.0 MVA, reflects provision in the PPA for a higher mill processing rate being examined by Minto which would involve further expansion of processing facilities at the Mine.
 - Based on the currently announced Mine plan and assuming modification after year 1 for this increased processing rate, this level of energy load would be expected to continue

¹ The Mine is planned to commence operations with processing at the rate of 1,500 mtpd; however, Minto plans to secure amendment of its licenses as required to increase processing by the end of year 1 to 2,400 mtpd.

² As defined in the PPA, Low Grade Ore means ore mined at the Mine with less than 1% copper content.

³ The Minto Feasibility Study released July 10, 2006 assumed 10.6 years of commercial processing at the Mine based on the Area 1 reserves and processing rates of 2,400 mtpd after year 1, with 6 years of high grade ore processing and 4.6 years of Low Grade Ore processing.

until after March 2013 (assuming commercial operations commence around mid-2007, and 5.8 years of commercial operations at the assumed higher processing rate⁴).

- The PPA in effect assumes, however, that Minto will announce confirmation of a further 3 years of high grade ore reserves from Area 2 at the Mine, and (with the assumed expansion of processing capacity) this level of energy use would then be expected to continue until after October 2015 (assumes 8.4 years of commercial operations).
- This case includes the same assumptions regarding Low Grade Ore stockpiling and use as those adopted for the 32.5 GW.h/year case.

Attachment B focuses on the examination of the following two simplified Minto Mine load cases for full calendar year operation⁵, each assuming that Minto confirms the Additional Reserves in Area 2 of the Mine Site:

- **32.5 GW.h/year case with 4.4 MVA peak winter demand** - assumes for full calendar years 2009 through 2016 (ignores potential partial year energy sales in 2008 and 2017, assuming Mine life through to about September 2017).
- **42 GW.h/year with 5.7 MVA peak winter demand** - assumes for full calendar years 2009 through 2015 (ignores potential partial year energy sales in 2008 and assumes full calendar year operation in 2015, notwithstanding that the expected Mine life may end after October 2015); the assumed peak winter demand ensures the same annual load factor for this case as for the 32.5 GW.h/year case.

2.0 OVERVIEW OF ASSESSMENTS

The assessment in Attachment B reviews seven cases:

- Table B-2: WAF System Base Case without Minto or CS development
- Table B-3: WAF System with Minto at 32.5 GW.h
- Table B-4: WAF System with Minto at 32.5 GW.h with Aishihik 3rd Turbine in service in 2010
- Table B-5: WAF System with Minto at 32.5 GW.h with Aishihik 3rd Turbine in service in 2013
- Table B-6: WAF System with Minto at 42.0 GW.h
- Table B-7: WAF System with Minto at 42.0 GW.h with Aishihik 3rd Turbine in service in 2010
- Table B-8: WAF System with Minto at 42.0 GW.h with Aishihik 3rd Turbine in service in 2013

In addition to the update of Minto Mine forecast loads (see Section 1 above), the following key assumptions have changed from similar analysis provided for earlier YUB review of the Resource Plan:

- **Secondary sales cap:** This cap is now assumed at 20.0 GW.h/year as compared with 30 GW.h/year in the Resource Plan. When Minto joins the system it will be less attractive for individual businesses to join the existing secondary sales program (Rate Schedule 32).

⁴ For the purpose of this assessment, time periods have been estimated only based on the differential rates of annual energy use provided for in the PPA. No analysis has been done, or provided, of expected daily processing rates based on the expected equipment and/or processes to be used for such expanded capacity

⁵ Use of full calendar years simplifies the analysis by avoiding assessment of WAF operation impacts on partial year basis. For the purpose of Attachment B, full calendar year assessment was deemed to provide what was needed.

- **Peaking dispatch:** Peaking dispatch is now assumed at 56.0 MW as compared with 54.0 MW in the Resource Plan. This change was made due to further study of the firm hydro power that can be relied upon for peaking dispatch.

Tables B-2 to B-8 provide the following for each case for the years 2005 through 2025:

- **Sales and Losses:** Include the total forecast WAF Load sales for each case is broken down by:
 - the current WAF connected area firm load (forecasts reflect Resource Plan Base Case at 1.85% growth per year);
 - the new industrial load served by the CS project connection starting in 2009, including related line losses assumed at 12.7%:
 - o Minto mine at the two sales load levels (32.5 GW.h/yr and 42 GW.h/yr) provided from the PPA (Section 4.1) for the period from the start of 2009 and extending through to 2016; and
 - o other new CS ongoing load reflecting the addition of Pelly Crossing to WAF loads.
 - secondary sales (under Rate Schedule 32 at assumed cap of 20 GW.h/year); and
 - line losses related separately to WAF firm sales and secondary sales (average line loss percentages assumed at 7.7% for current WAF area loads).
- **Generation:** The forecast WAF generation to supply the above forecast sales and losses is provided based on the current system plus (in certain cases) the Aishihik 3rd Turbine starting at either 2010 or 2013. Forecast WAF generation is broken down into:
 - hydro generation for firm loads (assuming long-term average water flows) used to supply the forecast sales (this is constrained either by the level of sales or, after sufficient load growth to utilize 358 GW.h/yr (without Aishihik 3rd Turbine) or 363.4 GW.h/yr (with Aishihik 3rd Turbine), the available long-term hydro generation);
 - wind generation (average annual);
 - peaking diesel generation (used to supply peak winter period firm loads in winter seasons when no baseload diesel generation requirement);
 - baseload diesel generation (i.e., diesel generation generally required all year round to supply firm loads – no secondary surplus hydro generation available);
 - hydraulic for secondary loads (surplus hydro/wind after supplying firm loads, assumes cap on sales at 20 GW.h/yr plus losses); and
 - surplus hydro generation (when long-term hydro/wind generation capability exceeds forecast firm load - includes, where relevant, surplus for secondary sales).
- **Economic Values:** The bottom four lines of each table provide the economic values with a NPV (at 7.52%/yr discount rate) to 2005\$. The results are summarized below in Table B-1 Summary of Economic Values, and exclude any consideration of Aishihik 3rd Turbine capital or other costs. The economic assessment allows for comparison between the cases of the

following NPV values for the period 2005 through 2025 (assumes inflation of costs and values at 2%/yr)⁶:

- WAF diesel generation fuel costs (assumed cost at 65 cents per litre in 2005\$ with fuel efficiencies at 3.48 KW.h/l for peaking diesel and 3.9 KW.h/l for baseload diesel);
- WAF diesel generation variable operating and maintenance costs (assumed at 1.6 cents/KW.h in 2005\$);
- WAF secondary sales values (assumed at energy rate of 5.5 cents/KW.h in 2005\$); and
- Total incremental NPV WAF costs (diesel generation costs PV less secondary sales PV).

3.0 SUMMARY OF RESULTS

In summary, Table B-1 indicates the following when the Minto mine is connected to the WAF system:

- NPV fuel costs increase and secondary sales values decrease, with impacts growing from negligible initial levels in 2009 to baseload diesel generation being required in 2015 and 2016 with 32.5 GW.h Minto load (maximum baseload generation at 7.2 GW.h/yr), and from 2013 to 2015 with 42 GW.h Minto load (maximum baseload generation at 12.0 GW.h/yr).
- Addition of the Aishihik 3rd Turbine mitigates these losses by reducing diesel generation costs and extending secondary sales opportunities; the overall savings through to 2025 are slightly less than the forecast cost of the Aishihik 3rd Turbine per the Resource Plan)⁷.
 - **32.5 GW.h/yr Minto sales:** Baseload diesel generation is forecast to be required in 2016 (maximum baseload generation at 1.8 GW.h/yr); and
 - **42 GW.h/yr Minto sales:** Baseload diesel generation is forecast to be required from 2014 to 2015 (maximum baseload generation at 6.6 GW.h/yr).
- Bringing the Aishihik 3rd Turbine on line earlier (2010 as compared with 2013) results in slightly increased savings (savings of \$0.7 million (2005\$) at 32.5 GW.h/yr, and \$1.2 million (2005\$) at 42.0 GW.h/yr).

⁶ The economic analysis in these tables looks only at WAF diesel generation costs and secondary sales revenues with and without the CS Project, the Minto mine and the Aishihik 3rd Turbine. Yukon system cost savings (diesel generation) due to connecting Pelly Crossing to WAF are not considered, nor are Minto mine cost savings (or power sales revenue paid to YEC) considered.

⁷ The Resource Plan assumes Aishihik 3rd Turbine capital costs at about \$7million (2005\$); Appendix C of the January 2006 Resource Plan, however, indicates PV (2005\$) life cycle capital and operating costs for this project at about \$6 million for in-service in 2011 (this number would be slightly higher for in-service in 2010, and slightly lower for in-service in 2013), which is slightly more than incremental savings to 2025 as noted in Table B-1. This analysis of incremental savings in Table B-1, however, ignores full life benefits for Aishihik 3rd Turbine due to ongoing diesel generation cost savings after 2025. As demonstrated in Appendix C of the January 2006 Resource Plan Report, PV savings after 2025 (in 2005\$) due to diesel generation displacement have been estimated to exceed \$4 million. Overall, based on life cycle costs, the Aishihik 3rd Turbine is an economically attractive project yielding NPV ratepayer savings with the Minto mine even over the period to 2025 (these NPV savings tend to be slightly higher with Aishihik 3rd Turbine in service in 2013 versus 2010)..

Table B-1
Summary of Economic Values

ECONOMIC VALUES (2005\$000s) - WAF NPV
(2005 to 2025)

Cases Examined with and without Stage One CS	Fuel costs	Diesel Variable O&M	Secondary Energy Sales	Total NPV costs (benefits)
Table B-2: Base Case without Minto or CS	6,938	639	(12,889)	(5,312)
Table B-3: Base Case with Minto at 32.5 GWh/yr	8,979	828	(10,498)	(691)
Table B-4: Case B-3 with Aishihik 3rd Turbine in 2010	4,256	401	(11,061)	(6,404)
Table B-5: Case B-3 with Aishihik 3rd Turbine in 2013	4,755	444	(10,915)	(5,716)
Table B-6: Base Case with Minto at 42 GWh/yr	9,921	920	(9,550)	1,291
Table B-7: Case B-6 with Aishihik 3rd Turbine in 2010	4,831	456	(10,224)	(4,937)
Table B-8: Case B-6 with Aishihik 3rd Turbine in 2013	5,478	511	(9,768)	(3,779)

Table B-2
WAF System Base Case without Minto

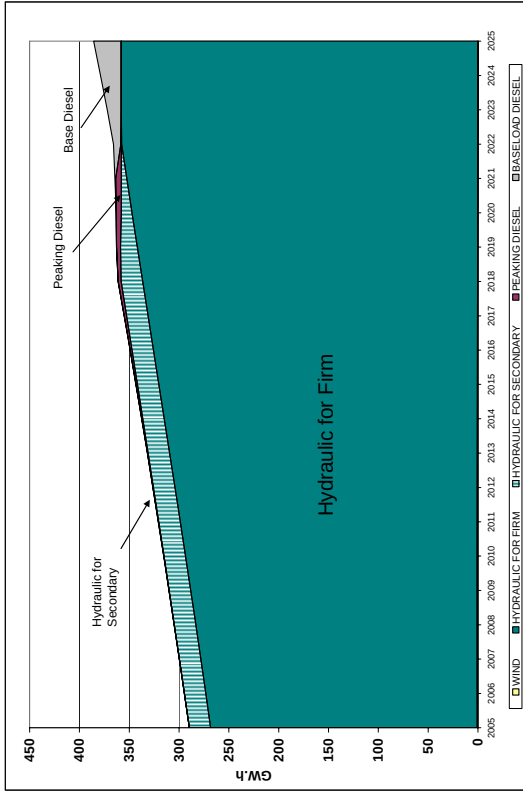
WAF SALES AND GENERATION
Base Case

Key Assumptions	year	Energy	Peak	loss
Industrial	no			12.70%
Minto	no			12.70%
PELTY	no			12.70%
CC	no			
C - S connection	no			
Aishihik 3rd Turbine	no			
Load Forecast Sensitivity	1.85%			

Other Notes:
1. Secondary sales cap is 20.0 GW/h
2. Peaking dispatch assumes 56.0 MW

Economic Assumptions

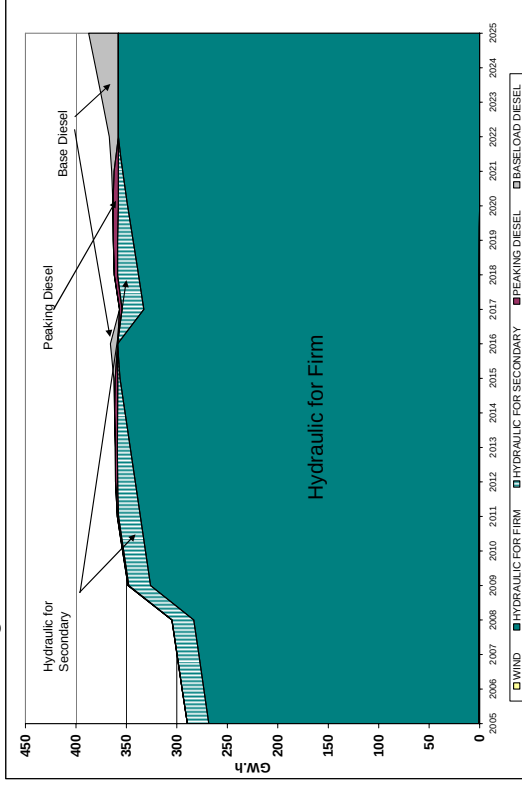
Peaking Diesel Efficiency	3.480
BaseLoad Diesel Efficiency	3.900
WAF Diesel Price per litre 2005	0.650 \$/litre
MD Diesel Price per litre 2005	0.650 \$/litre
Secondary Energy Rate 2005	0.055 \$/kWh
Variable O&M per kW.h 2005	0.016 \$/kWh
WACC 2005	7.52%
Inflation	2.00%



SALES (GWH)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1 WAF LOAD	246.2	253.7	277.8	277.8	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
2 Firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
3 INDUSTRIAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 TOTAL FIRM LOAD	266.4	273.3	278.3	283.3	288.5	293.8	299.2	304.7	310.2	315.9	321.7	327.6	333.6	339.7	345.9	352.3	358.7	365.3	372.0	378.8	385.8
5 SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
6 losses	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
7 TOTAL WAF LOAD	286.7	294.8	299.8	304.9	310.1	315.3	320.7	326.2	331.8	337.5	343.2	349.1	355.1	361.2	367.4	373.8	380.2	386.8	393.5	400.3	407.3
GENERATION (GWH)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
8 HYDRAULIC FOR FIRM	267.5	272.4	277.3	282.4	287.4	292.6	297.9	303.2	308.7	314.1	319.6	325.0	330.4	335.8	341.1	347.2	352.4	357.5	362.6	367.7	372.8
9 WIND	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
10 PEAKING DIESEL	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.6	0.8	1.0	1.4	1.9	2.4	3.2	4.1	5.1	5.6	5.5	5.0	4.0	0.0
11 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	288.5	293.8	299.2	304.7	310.2	315.9	321.7	327.6	333.6	339.7	345.9	352.3	358.7	365.3	372.0	378.8	385.8
13 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
14 TOTAL GENERATION	289.7	294.8	299.8	304.9	310.1	315.3	320.7	326.2	331.8	337.5	343.2	349.1	355.1	361.2	367.4	373.8	380.2	386.8	393.5	400.3	407.3
SURPLUS HYDRO (GWH)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
15 Surplus Average Hydropower Generation	258.9	265.9	272.9	279.9	286.9	293.9	300.9	307.9	314.9	321.9	328.9	335.9	342.9	349.9	356.9	363.9	370.9	377.9	384.9	391.9	398.9
16 Firm Load	268.4	273.3	278.3	283.3	288.5	293.8	299.2	304.7	310.2	315.9	321.7	327.6	333.6	339.7	345.9	352.3	358.7	365.3	372.0	378.8	385.8
17 SURPLUS HYDROWIND FROM FIRM	90.5	85.6	80.6	75.6	70.4	65.1	59.7	54.2	48.5	42.8	37.0	31.1	25.1	19.0	12.8	5.7	(0.7)	(7.3)	(14.0)	(20.8)	(27.8)
ECONOMIC VALUES (\$000s) - WAF	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
18 FIRM NPV to 2025	10,538	0	0	4	18	39	60	81	102	123	144	165	186	207	228	249	270	291	312	333	354
19 VARIABLE O & M COSTS	638	0	0	2	5	7	10	14	18	22	27	31	37	44	51	58	66	74	82	90	98
20 SECONDARY ENERGY SALES	(1,174)	(1,208)	(1,228)	(1,238)	(1,242)	(1,243)	(1,240)	(1,239)	(1,236)	(1,234)	(1,230)	(1,227)	(1,223)	(1,219)	(1,214)	(1,209)	(1,203)	(1,196)	(1,188)	(1,179)	(1,169)
21 TOTAL	(5,311)	(1,174)	(1,208)	(1,238)	(1,242)	(1,243)	(1,240)	(1,239)	(1,236)	(1,234)	(1,230)	(1,227)	(1,223)	(1,219)	(1,214)	(1,209)	(1,203)	(1,196)	(1,188)	(1,179)	(1,169)

Table B-3
WAF System with Minto at 32.5 GW.h

WAF SALES AND GENERATION
Minto 32.5 GWh starting 2009



year	Energy	Peak	loss
2008	32.5	4.4	12.70%
2009	1.5	0.2	12.70%
no			
no			
no			1.85%

Minto	
PELLY	
CC	

Key Assumptions
Industrial

C - S connection
Aishihik 3rd Turbine
Load Forecast Sensitivity

Other Notes:

1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 36.0 MW

Economic Assumptions

Peaking Diesel Efficiency	3.480	kWh/Litre
BaseLoad Diesel Efficiency	3.900	kWh/Litre
WAF Diesel Price per litre 2005	0.650	\$/litre
MD Diesel Price per litre 2005	0.650	\$/litre
Secondary Energy Rate 2005	0.055	\$/kWh
Variable O&M per kW.h 2005	0.016	\$/kWh
WACC 2005	7.52%	
Inflation	2.00%	

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SALES (GWh)																					
1 WAF LOAD	249.2	253.7	256.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
2 firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
3 INDUSTRIAL	0.0	0.0	0.0	0.0	0.0	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
4 TOTAL FIRM LOAD	268.4	273.3	276.3	283.3	288.5	311.1	319.2	324.1	330.3	331.6	337.8	342.6	348.5	354.7	360.0	365.4	370.7	376.0	381.3	386.6	391.9
5 SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
6 FIRM LOAD	288.2	293.3	296.3	303.3	308.5	331.1	339.2	344.1	350.3	351.6	357.8	362.6	368.5	374.7	380.0	385.4	390.7	396.0	401.3	406.6	411.9
7 TOTAL WAF LOAD	288.7	294.8	296.8	304.9	309.8	331.7	339.2	344.1	350.3	351.6	357.8	362.6	368.5	374.7	380.0	385.4	390.7	396.0	401.3	406.6	411.9
GENERATION (GWh)																					
8 HYDRAULIC FOR FIRM	267.5	272.4	277.3	282.4	287.5	310.1	318.2	323.1	329.3	330.6	336.8	341.6	347.5	353.4	358.7	364.6	370.5	376.4	382.3	388.2	394.1
9 WIND	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
10 PEAKING DIESEL	0.0	0.0	0.0	0.1	0.8	1.0	1.3	1.8	2.3	2.9	2.4	0.0	2.5	3.3	4.2	5.3	4.1	0.0	0.0	0.0	0.0
11 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	7.2	0.0	0.0	0.0	0.0	2.4	9.0	15.7	22.5	29.5
12 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	288.5	311.1	319.2	324.1	330.3	331.6	337.8	342.6	348.5	354.7	360.0	365.4	370.7	376.0	381.3	386.6	391.9
13 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
14 TOTAL GENERATION	289.7	294.8	299.8	304.9	309.8	332.6	340.7	345.6	351.8	353.1	359.3	364.1	370.0	376.2	381.5	386.9	392.1	397.5	402.8	408.1	413.4
SURPLUS HYDRO (GWh)																					
15 Long Term Average HydroWind Generation	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9
16 Firm Load	268.4	273.3	278.3	283.3	288.5	311.1	319.2	324.1	330.3	331.6	337.8	342.6	348.5	354.7	360.0	365.4	370.7	376.0	381.3	386.6	391.9
17 SURPLUS HYDROWIND FROM FIRM	90.5	85.6	80.6	75.6	70.6	47.8	39.7	34.8	28.6	27.3	21.1	17.3	11.4	7.7	4.0	4.0	2.4	(9.0)	(15.7)	(22.5)	(29.5)
ECONOMIC VALUES (\$000s) - WAF																					
18 FUEL COSTS	0	0	0	4	18	157	211	283	378	500	653	812	1,437	795	1,036	1,327	1,610	1,893	2,176	2,459	2,742
19 VARIABLE O & M COSTS	0	0	0	2	13	18	24	32	43	56	72	90	112	140	175	217	266	321	382	449	522
20 SECONDARY ENERGY SALES	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,308)	(1,334)	(1,361)	(1,388)	(1,416)	(1,444)	(1,472)	(1,500)	(1,528)	(1,556)	(1,584)	(1,612)	(1,640)	(1,668)	(1,696)	(1,724)
21 TOTAL	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,308)	(1,334)	(1,361)	(1,388)	(1,416)	(1,444)	(1,472)	(1,500)	(1,528)	(1,556)	(1,584)	(1,612)	(1,640)	(1,668)	(1,696)	(1,724)

NPV to 2005	8,979
828	
(10,498)	
(651)	

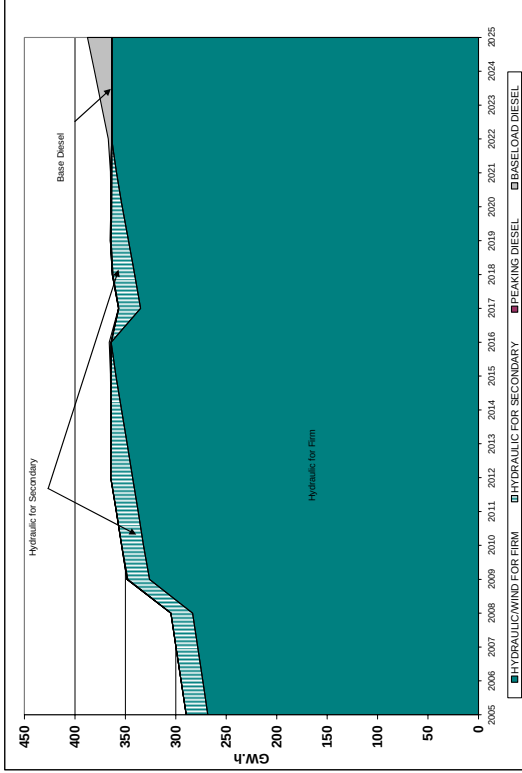
Table B-4

WAF System with Minto at 32.5 GW.h with Aishihik in service 2010

WAF SALES AND GENERATION

Minto 32.5 GW.h starting 2009 and Aishihik 3rd Turbine in service in 2010

Key Assumptions	Minto PELLY CC	year no	Energy no	Peak no	loss
C - S connection		2010	5.4	7	
Aishihik 3rd Turbine					
Load Forecast Sensitivity					1.85%
Other Notes:					
1. Secondary sales cap is 20.0 GW.h					
2. Peaking dispatch assumes 56.0 MW					
Economic Assumptions					
Peaking Diesel Efficiency	3.480	kWh/Lire			
Baseload Diesel Efficiency	3.900	kWh/Lire			
WAF Diesel Price per litre 2005	0.650	\$/Litre			
MD Diesel Price per litre 2005	0.650	\$/Litre			
Secondary Energy Rate 2005	0.055	\$/kWh			
Variable O&M per kW.h 2005	0.016	\$/kWh			
WACC 2005	7.52%				
Inflation	2.00%				



SALES (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	338.2	345.4	351.7	358.2
1 WAF LOAD	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
2 WAF firm losses (7.7%)																					
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	0.0	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
4 TOTAL WAF FIRM LOAD	268.4	273.3	278.3	283.3	288.3	322.1	337.5	343.0	348.6	354.2	360.0	365.9	371.5	377.1	382.7	388.3	393.9	399.5	405.1	410.7	416.3
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
6 LOSSES	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
7 TOTAL WAF LOAD	289.7	294.8	299.8	304.9	310.0	342.6	359.0	364.5	370.1	375.7	381.2	386.9	392.5	398.1	403.7	409.3	414.9	420.5	426.1	431.7	437.3
GENERATION (GWh)																					
8 HYDRAULIC WIND FOR FIRM	268.4	273.3	278.3	283.3	288.3	322.1	337.4	342.7	348.2	353.7	359.4	364.1	368.8	373.5	378.2	382.9	387.6	392.3	397.0	401.7	406.4
9 PEAKING DIESEL	0.0	0.0	0.0	0.1	0.8	0.1	0.1	0.2	0.4	0.5	0.7	0.0	0.4	0.6	0.8	1.1	1.4	1.7	2.0	2.3	2.6
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	288.3	322.1	337.5	343.0	348.6	354.2	360.0	365.9	371.5	377.1	382.7	388.3	393.9	399.5	405.1	410.7	416.3
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	310.0	343.6	359.0	364.5	370.1	375.7	381.2	386.9	392.5	398.1	403.7	409.3	414.9	420.5	426.1	431.7	437.3
SURPLUS HYDRO (GWh)																					
14 Long Term Average HydroWind Generation	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9
15 Firm Load	268.4	273.3	278.3	283.3	288.3	322.1	337.5	343.0	348.6	354.2	360.0	365.9	371.5	377.1	382.7	388.3	393.9	399.5	405.1	410.7	416.3
16 SURPLUS HYDROWIND FROM FIRM	90.5	85.6	80.6	75.6	70.6	36.8	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
ECONOMIC VALUES (\$000s) - WAF																					
18 FUEL COSTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 VARIABLE O & M COSTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 SECONDARY ENERGY SALES	(1.174)	(1.208)	(1.233)	(1.257)	(1.282)	(1.306)	(1.331)	(1.356)	(1.381)	(1.406)	(1.431)	(1.456)	(1.481)	(1.506)	(1.531)	(1.556)	(1.581)	(1.606)	(1.631)	(1.656)	(1.681)
21 TOTAL	(1.174)	(1.208)	(1.233)	(1.257)	(1.282)	(1.306)	(1.331)	(1.356)	(1.381)	(1.406)	(1.431)	(1.456)	(1.481)	(1.506)	(1.531)	(1.556)	(1.581)	(1.606)	(1.631)	(1.656)	(1.681)
NPV to 2005																					
4.256																					
(11.061)																					
(6.805)																					

Table B-5

WAF System with Minto at 32.5 GW.h with Aishihik in service in 2013

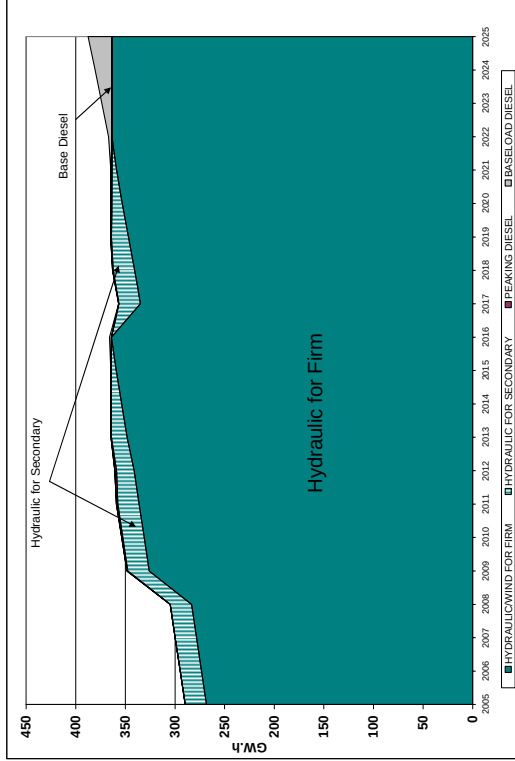
WAF SALES AND GENERATION

Minto 32.5 GWh starting 2009 and Aishihik 3rd Turbine in service in 2013

Key Assumptions	Minto PELTY CC	year no	Energy no	Peak loss	1.85%	7
C - S connection		no	2013	5.4		
Aishihik 3rd Turbine		no	2013	5.4		7
Load Forecast Sensitivity					1.85%	

Other Notes:
1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 56.0 MW

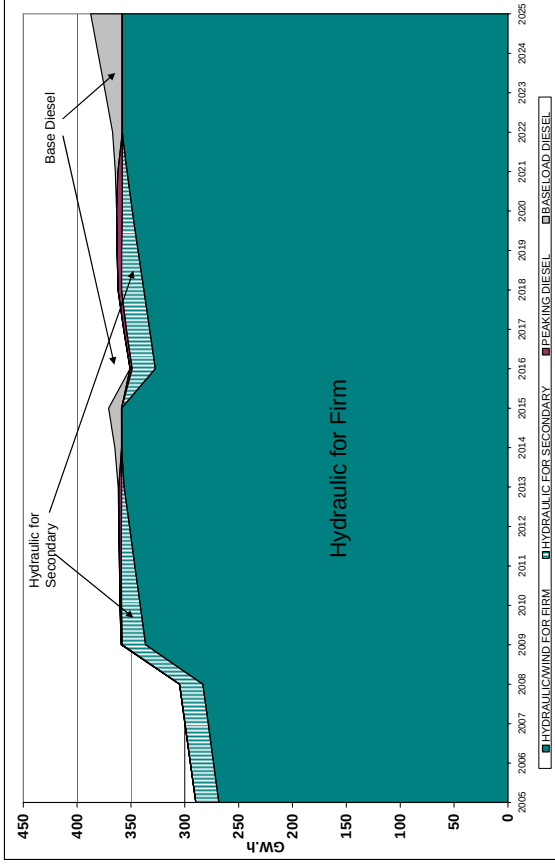
Economic Assumptions	
Peaking Diesel Efficiency	3.480 kWh/Litre
Base-load Diesel Efficiency	3.900 kWh/Litre
WAF Diesel Price per litre 2005	0.650 \$/Litre
MD Diesel Price per litre 2005	0.650 \$/Litre
Secondary Energy Rate 2005	0.055 \$/kWh
Variable O&M per kW.h 2005	0.016 \$/kWh
WACC 2005	7.52%
Inflation	2.00%



SALES (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
1 WAF LOAD	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
2 WAF firm losses (7.7%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 TOTAL WAF FIRM LOAD	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
6 FIRM LOAD	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
7 TOTAL WAF LOAD	288.7	294.8	299.8	304.9	308.4	311.6	315.1	318.6	322.1	325.6	329.1	332.6	336.1	339.6	343.1	346.6	350.1	353.6	357.1	360.6	364.1
GENERATION (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	265.4	273.3	278.2	283.3	288.3	293.3	298.3	303.3	308.3	313.3	318.3	323.3	328.3	333.3	338.3	343.3	348.3	353.3	358.3	363.3	368.3
8 HYDRAULIC FIRM LOAD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9 PEAKING DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 TOTAL GENERATION FOR FIRM	265.4	273.3	278.2	283.3	288.3	293.3	298.3	303.3	308.3	313.3	318.3	323.3	328.3	333.3	338.3	343.3	348.3	353.3	358.3	363.3	368.3
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
13 TOTAL GENERATION	286.7	294.8	299.8	304.9	308.4	311.6	315.1	318.6	322.1	325.6	329.1	332.6	336.1	339.6	343.1	346.6	350.1	353.6	357.1	360.6	364.1
SURPLUS HYDRO (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9
14 Long Term Average HydroWind Generation	268.4	273.3	278.3	283.3	288.3	293.3	298.3	303.3	308.3	313.3	318.3	323.3	328.3	333.3	338.3	343.3	348.3	353.3	358.3	363.3	368.3
15 Firm Load	90.5	85.6	80.6	75.6	70.6	65.6	60.6	55.6	50.6	45.6	40.6	35.6	30.6	25.6	20.6	15.6	10.6	5.6	0.6	0.0	0.0
16 SURPLUS HYDROWIND FROM FIRM	178.4	173.3	178.3	183.3	188.3	193.3	198.3	203.3	208.3	213.3	218.3	223.3	228.3	233.3	238.3	243.3	248.3	253.3	258.3	263.3	268.3
ECONOMIC VALUES (\$000s) - WAF	NPV to 2005																				
	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755	4,755
18 FUEL COSTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 VARIABLE O&M COSTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 SECONDARY ENERGY SALES	(1,174)	(1,208)	(1,236)	(1,266)	(1,296)	(1,326)	(1,356)	(1,386)	(1,416)	(1,446)	(1,476)	(1,506)	(1,536)	(1,566)	(1,596)	(1,626)	(1,656)	(1,686)	(1,716)	(1,746)	(1,776)
21 TOTAL	(1,174)	(1,208)	(1,236)	(1,266)	(1,296)	(1,326)	(1,356)	(1,386)	(1,416)	(1,446)	(1,476)	(1,506)	(1,536)	(1,566)	(1,596)	(1,626)	(1,656)	(1,686)	(1,716)	(1,746)	(1,776)

Table B-6
WAF System with Minto at 42 GW.h
WAF SALES AND GENERATION
Minto 42.0 GWh starting 2009

Key Assumptions	Industrial	Minto PELLY CC	year	Energy	Peak	loss
			2009	42	5.7	12.70%
			2009	1.5	0.2	12.70%
			no			12.70%
C - S connection			no			
Aishihik 3rd Turbine			no			
Load Forecast Sensitivity			no			
			1.85%			
Other Notes:						
1. Secondary sales cap is 20.0 GW.h						
2. Peaking dispatch assumes 56.0 MW						
Economic Assumptions						
Peaking Diesel Efficiency						3.480
Baseload Diesel Efficiency						3.900
WAF Diesel Price per litre 2005						0.650
MD Diesel Price per litre 2005						0.650
Secondary Energy Rate 2005						0.055
Variable O&M per kW.h 2005						0.016
WACC 2005						7.52%
Inflation						2.00%



SALES (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	249.2	233.7	238.4	243.1	247.9	272.8	277.8	283.1	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
1 LOAD	19.2	19.5	19.9	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6	28.1
2 WAF firm losses (7.7%)	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
3 WAF INDUSTRIAL (incl. losses)	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
4 TOTAL WAF FIRM LOAD	19.8	20.0	20.0	20.0	20.0	16.2	11.6	7.0	2.3	0.0	0.0	20.0	20.0	19.2	14.2	8.7	3.8	0.0	0.0	0.0	0.0
5 WAF SECONDARY SALES	1.5	1.5	1.5	1.5	1.5	1.2	0.9	0.5	0.2	0.0	0.0	1.5	1.5	1.5	1.1	0.7	0.3	0.0	0.0	0.0	0.0
6 losses	289.7	294.8	299.8	304.9	359.1	360.3	360.7	361.2	361.7	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
7 TOTAL WAF LOAD	201.3	215.0	219.5	224.8	280.6	277.5	262.5	266.7	271.9	274.9	280.7	287.8	294.9	301.0	307.1	314.4	321.6	328.9	336.2	343.5	350.8
GENERATION (GWh)																					
8 HYDRAULIC/WIND FOR FIRM	268.4	273.3	278.2	283.3	335.5	341.4	346.4	351.3	356.3	361.7	367.3	372.9	378.5	384.1	389.7	395.3	400.9	406.5	412.1	417.7	423.3
9 PEAKING DIESEL	0.0	0.0	0.0	0.1	1.1	1.4	1.8	2.3	2.5	0.0	0.0	1.9	2.5	3.3	4.2	5.3	6.4	7.5	8.6	9.7	10.8
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	6.2	12.0	0.0	0.0	0.0	0.0	0.0	2.4	9.0	15.7	22.5	29.5
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	17.5	12.5	7.6	2.5	0.0	0.0	21.5	21.5	20.6	15.3	9.3	4.1	0.0	0.0	0.0	0.0
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	359.1	360.3	360.7	361.2	361.7	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
SURPLUS HYDRO (GWh)																					
14 Long Term Average Hydro/Wind Generation	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
15 Firm Average Hydro/Wind Generation	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
16 SURPLUS HYDRO/WIND FROM FIRM	90.5	85.6	80.6	75.6	21.3	16.1	10.7	5.2	(0.5)	(6.2)	(12.0)	29.5	23.5	17.3	11.1	4.0	(2.4)	36.0	73.7	111.5	149.0
ECONOMIC VALUES (\$000s) - WAF																					
18 FUEL COSTS	0	0	0	4	18	217	289	383	504	642	1,236	2,436	450	602	796	1,036	1,327	1,610	1,893	2,176	2,459
19 VARIABLE O & M COSTS	0	0	0	0	2	19	25	33	43	56	119	234	39	52	68	89	114	144	174	204	234
20 SECONDARY ENERGY SALES	(1174)	(1,208)	(1,233)	(1,257)	(1,281)	(1,306)	(1,331)	(1,356)	(1,381)	(1,406)	(1,431)	(1,456)	(1,481)	(1,506)	(1,531)	(1,556)	(1,581)	(1,606)	(1,631)	(1,656)	(1,681)
21 TOTAL	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921	9,921

Table B-7

WAF System with Minto at 42 GW.h with Aishihik in service in 2010

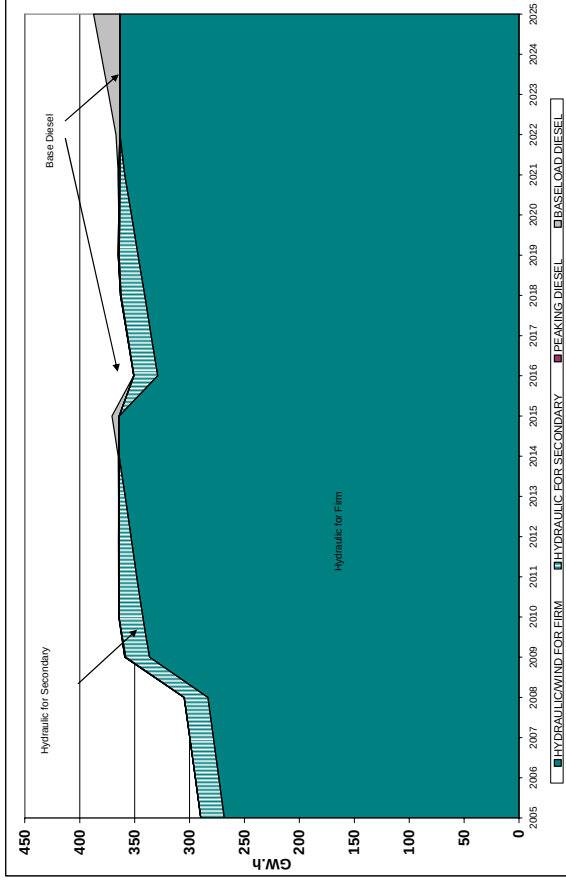
WAF SALES AND GENERATION

Minto 42.0 GW.h starting 2009 and Aishihik 3rd Turbine in service in 2010

Year	Energy	Peak	Loss
2009	42	5.7	12.70%
2009	1.5	0.2	12.70%
no			
no			
2010	5.4	7	
1.85%			

Other Notes:
1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 56.0 MW

Economic Assumptions	
Peaking Diesel Efficiency	3.480
BaseLoad Diesel Efficiency	3.900
WAF Diesel Price per litre 2005	0.650 \$/litre
MD Diesel Price per litre 2005	0.650 \$/litre
Secondary Energy Rate 2005	0.055 \$/kWh
Variable O&M per kW.h 2005	0.016 \$/kWh
WACC 2005	7.52%
Initiation	2.00%



SALES (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
2 WAF firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
4 TOTAL WAF FIRM LOAD	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.8
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
6 WAF firm losses (7.7%)	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
7 TOTAL WAF LOAD	288.7	294.8	299.8	304.9	359.1	364.4	369.7	375.0	380.3	385.6	390.9	396.2	401.5	406.8	412.1	417.4	422.7	428.0	433.3	438.6	443.9
GENERATION (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
8 HYDRAULIC/WIND FOR FIRM	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.8
9 PEAKING DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.8
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	359.1	364.4	369.7	375.0	380.3	385.6	390.9	396.2	401.5	406.8	412.1	417.4	422.7	428.0	433.3	438.6	443.9
SURPLUS HYDRO (GWh)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
14 Long Term Average Hydro/Wind Generation	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9	359.9
15 Firm Load	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.8
16 SURPLUS HYDRO/WIND FROM FIRM	90.5	86.6	80.6	75.6	21.3	21.5	16.1	10.6	4.9	(0.6)	(6.6)	(14.2)	(21.8)	(29.4)	(36.9)	(44.5)	(52.0)	(59.6)	(67.1)	(74.7)	(82.1)
ECONOMIC VALUES (\$000s) - WAF	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
18 FUEL COSTS	0	0	4	18	217	32	54	80	111	160	139	66	98	139	192	265	363	836	2,449	4,154	5,985
19 VARIABLE O & M COSTS	0	0	0	2	19	3	5	7	10	15	128	6	8	12	16	23	31	80	235	399	572
20 SECONDARY ENERGY SALES	(1,174)	(1,208)	(1,233)	(1,257)	(1,282)	(1,308)	(1,333)	(1,358)	(1,383)	(1,408)	(1,433)	(1,458)	(1,483)	(1,508)	(1,533)	(1,558)	(1,583)	(1,608)	(1,633)	(1,658)	(1,683)
21 TOTAL	(1,174)	(1,208)	(1,228)	(1,238)	(1,047)	(1,273)	(954)	(608)	(226)	175	1,467	(1,402)	(1,396)	(1,382)	(1,047)	(490)	62	918	2,684	4,553	6,530

Table B-8

WAF System with Minto at 42 GW.h with Aishihik in service in 2013

WAF SALES AND GENERATION

Minto 42.0 GW.h starting 2009 and Aishihik 3rd Turbine in service in 2013

Key Assumptions

Year	Energy	Peak	Loss
2009	42	5.7	12.70%
2009	1.5	0.2	12.70%
no			12.70%
no			
2013	5.4	7	
1.85%			

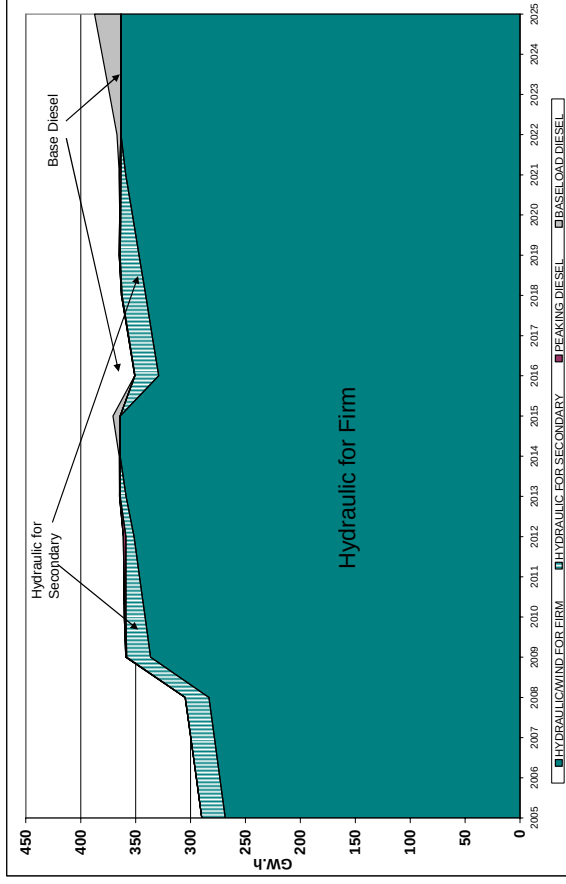
C - S connection
Aishihik 3rd Turbine
Load Forecast Sensitivity

Other Notes:

1. Secondary sales cap is 20.0 GW.h
2. Peaking dispatch assumes 56.0 MW

Economic Assumptions

Peaking Diesel Efficiency	3.480
BaseLoad Diesel Efficiency	3.900
WAF Diesel Price per litre 2005	0.650 \$/litre
MD Diesel Price per litre 2005	0.650 \$/litre
Secondary Energy Rate 2005	0.055 \$/kWh
Variable O&M per kW.h 2005	0.016 \$/kWh
WACC 2005	7.52%
Initiation	2.00%



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SALES (GW.h)																					
1 WAF LOAD	249.2	253.7	258.4	263.1	267.9	272.8	277.8	282.9	288.1	293.3	298.7	304.2	309.7	315.4	321.2	327.1	333.1	339.2	345.4	351.7	358.2
2 WAF firm losses (7.7%)	19.2	19.5	19.9	20.3	20.6	21.0	21.4	21.8	22.2	22.6	23.0	23.4	23.8	24.3	24.7	25.2	25.6	26.1	26.6	27.1	27.6
3 WAF INDUSTRIAL (incl. losses)	0.0	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
4 TOTAL WAF FIRM LOAD	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
5 WAF SECONDARY SALES	19.8	20.0	20.0	20.0	20.0	16.2	11.6	7.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 WAF FIRM LOSSES	14.5	14.5	14.5	14.5	14.5	11.6	7.0	4.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 TOTAL WAF LOAD	288.7	294.8	299.8	304.9	359.1	360.3	360.7	361.2	361.6	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
GENERATION (GW.h)																					
8 HYDRAULIC/WIND FOR FIRM	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
9 PEAKING DIESEL	0.0	0.0	0.0	0.1	1.1	1.4	1.8	2.3	0.5	0.0	0.0	0.3	0.4	0.6	0.8	1.1	1.4	0.0	0.0	0.0	0.0
10 BASELOAD DIESEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	10.3	17.1	24.1
11 TOTAL GENERATION FOR FIRM	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
12 HYDRAULIC FOR SECONDARY	21.3	21.5	21.5	21.5	21.5	17.5	12.5	7.6	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 TOTAL GENERATION	289.7	294.8	299.8	304.9	359.1	360.3	360.7	361.2	364.6	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
SURPLUS HYDRO (GW.h)																					
14 Long Term Average Hydro/Wind Generation	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9
15 Firm Load	268.4	273.3	278.3	283.3	337.6	342.8	348.2	353.7	359.3	364.9	370.7	376.3	381.9	387.5	393.1	398.7	404.3	409.9	415.5	421.1	426.7
16 SURPLUS HYDRO/WIND FROM FIRM	90.5	85.6	80.6	75.6	21.3	16.1	10.7	5.2	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ECONOMIC VALUES (\$000s) - WAF																					
18 FUEL COSTS	0	0	4	18	217	289	383	504	111	160	139	66	8	139	192	265	363	836	2,449	4,154	5,985
19 VARIABLE O & M COSTS	0	0	0	2	19	25	33	43	10	15	128	6	8	12	16	23	31	80	235	399	572
20 SECONDARY ENERGY SALES	(1,174)	(1,208)	(1,233)	(1,257)	(1,283)	(1,308)	(1,333)	(1,358)	(1,383)	(1,408)	(1,433)	(1,458)	(1,483)	(1,508)	(1,533)	(1,558)	(1,583)	(1,608)	(1,633)	(1,658)	(1,683)
21 TOTAL	(1,174)	(1,208)	(1,228)	(1,238)	(1,047)	(747)	(359)	69	(226)	175	1,467	(1,402)	(1,396)	(1,382)	(1,367)	(1,352)	(1,337)	(1,322)	(1,307)	(1,292)	(1,277)
NPV to 2005																					
18 FUEL COSTS	0	0	4	18	217	289	383	504	111	160	139	66	8	139	192	265	363	836	2,449	4,154	5,985
19 VARIABLE O & M COSTS	0	0	0	2	19	25	33	43	10	15	128	6	8	12	16	23	31	80	235	399	572
20 SECONDARY ENERGY SALES	(1,174)	(1,208)	(1,233)	(1,257)	(1,283)	(1,308)	(1,333)	(1,358)	(1,383)	(1,408)	(1,433)	(1,458)	(1,483)	(1,508)	(1,533)	(1,558)	(1,583)	(1,608)	(1,633)	(1,658)	(1,683)
21 TOTAL	(1,174)	(1,208)	(1,228)	(1,238)	(1,047)	(747)	(359)	69	(226)	175	1,467	(1,402)	(1,396)	(1,382)	(1,367)	(1,352)	(1,337)	(1,322)	(1,307)	(1,292)	(1,277)

ATTACHMENT C

**MINE NET REVENUE
ACCOUNT EXAMPLES**

ATTACHMENT C: MINE NET REVENUE ACCOUNT EXAMPLES

Attachment C provides examples for the Mine Net Revenue Account during eight calendar years of Minto mine operation and service by YEC under the PPA (2009 through 2016 for 32.5 GW.h scenario and 2009 through 2015 for 42.5 GW.h scenario).

1.0 MINE NET REVENUE ACCOUNT

As indicated in Section 3.6 of the PPA, YEC will establish a deferral account (the Mine Net Revenue Account) to which, in each YEC fiscal year prior to the Commercial Operation Cessation Date for the Mine, the Mine Net Revenue will be assigned and thereby not form part of YEC's earnings in that fiscal year.

The PPA defines the Mine Net Revenue in any YEC fiscal year as the amount, if any, equal to:

- a. the Minto Power Bills plus any take-or pay payments by Minto in that fiscal year, less
- b. the Incremental YEC Costs in that fiscal year. These specific incremental costs are defined as incremental YEC expenses and return on rate base in that year, if any, due to the supply of Electricity to Minto by YEC.¹

2.0 EXAMPLES WITH MINTO MINE AT 32.5 AND 42 GW.H/YEAR

Table C-1 (Mine Net Revenue Account Example: Minto at 32.5 GW.h/yr) demonstrates the following impacts by year from 2009 through 2016:

- **Minto Power Bills (column 2):** The incremental revenue to YEC from firm sales to the Minto mine assumed at a Firm Mine Rate of 10 cents per kW.h (i.e., the rate in Schedule C to the PPA) without change over the period.
- **Incremental Increase in Diesel Generation Costs (columns 3, 4 and 5):** The WAF incremental diesel generation costs (fuel plus variable O&M) by year with and without the mine are provided in Attachment B (Tables B-2 and B-3 respectively), and reflect incremental WAF peaking and/or baseload diesel generation costs due to YEC serving the Minto mine and Pelly Crossing through the CS Project connection.
- **Incremental Decrease in Secondary Sales (columns 6, 7 and 8):** The WAF incremental decrease in secondary sales by year with and without the mine are provided in Attachment B (Tables B-2 and B-3 respectively), and reflect incremental reductions in YEC WAF secondary revenues under Rate Schedule 32 due to YEC serving the Minto mine and

¹ The PPA states that such incremental costs include, without limitation: incremental interest costs on the Flexible Term Note and incremental diesel generation expenses based on actual diesel fuel prices and long-term average water flows for hydroelectric generation; any incremental loss of income related to displaced secondary energy sales to other YEC customers for space or process heating; any depreciation, operating and maintenance expenses and return on rate base related to the CS Project or the Diesel Units owned by YEC at the Minto mine; and any incremental increase in expenses and return on rate base related to accelerated development of other YEC generation projects to displace diesel generation that would otherwise have been related to supplying Electricity to Minto by YEC.

- Pelly Crossing through the CS Project connection. YEC's share of WAF secondary sales revenues is estimated at 80% of the revenues in the Attachment B tables.
- **Pelly Diesel Savings (column 9):** YEC's portion of the incremental diesel savings that result when Pelly Crossing is connected to the WAF grid. This accounts for 6.8 cents per kW.h wholesale rate YEC receives from YECL for the 1.5 GW.h/year of load at Pelly.
 - **FTN (column 10):** The incremental change in the FTN interest payments by YEC as a result of the increased sales to the mine are estimated (these changes occur until YEC WAF sales increase to 310 GW.h/year or higher)².
 - **CS (column 11):** Estimated depreciation and return annual costs related to the CS Project, after consideration of capital contributions by the Minto mine, YDC and YTG (see Attachment A for more detailed review of assumptions).
 - **YEC Mine Diesels (column 12):** Estimated depreciation and return annual costs related to the Diesel Units at the Mine (6.4 MW) that YEC is assumed to purchase at \$2.24 million.
 - **Mine Net Revenue Incremental (column 13):** The annual incremental amount equal to the Minto Power Bills less the incremental YEC costs. In each fiscal year these amounts are assigned to the deferred account and do not form part of YEC's earnings in that year.
 - **Mine Net Revenue Account Accrued (column 14):** The accrued amounts in the Mine Net Revenue Account are assumed to accrue over the assumed operating life of the Minto Mine (Section 3.6 provides for possible termination of accruals (subject to YUB determination) after the YEC Security is discharged). Column 14 includes 6.5% interest per annum to fund YEC's regulated rate base similar to the Accrued Decommissioning Fund in section 11.2 of the PPA, so long as the accrued account at the start of the year is less than CS Stage One Undepreciated Capital Cost account; thereafter, when the Mine Net Revenue Account is greater than CS Stage One Undepreciated Capital Cost account, no interest is earned (in effect, the accrued account then offsets YEC's rate base and becomes a zero cost capital source of funds for YEC's regulated rate base). After the discharge of the YEC Security, YEC may (subject to YUB approval) use some or all of the then balance in this account as a contribution towards the balance of YEC's capital costs not yet depreciated for the CS Project or for any new generation infrastructure developed by YEC on an accelerated basis due to the Minto mine or the CS Project. After the cessation of the Mine's commercial operation YEC will, subject to YUB approval, terminate this account.
 - **CS Stage One Undepreciated Capital Costs Accrued (column 15):** The CS Project Stage One Undepreciated Capital Costs amount at year end equals YEC's Capital Costs not yet depreciated for the segment of the CS Project from Carmacks to Pelly Crossing, less the balance of the unamortized contributions to such Capital Costs relating to the contributions from Minto (\$7.2 million), YDC (\$5.0 million) and the Yukon Government (\$0.45 million).

Table C-1 estimates an accrued balance in the Mine Net revenue Account at the end of 2016 of \$12.1 million (which is higher than the estimated not yet depreciated CS Project cost of \$8.3 million as at that same date).

² WAF sales for the purpose of the FTN are projected at 259.5 GW.h/year in 2008 without the Minto mine or the CS Project. Increased WAF sales due to the Minto mine result in increased interest expenses (as shown in Table C-1) as well as increased FTN principal payments. Higher principal payments reduce the FTN balance, which explains why in 2016 Table C-1 estimates lower FTN interest due to the mine.

Table C-2 provides the same analysis for an example with the Minto mine at 42 GW.h/yr, and estimates an accrued balance in the Mine Net revenue Account at the end of 2015 of \$11.2 million.

Table C-1
Mine Net Revenue Account Example: Minto at 32.5 GW.h/yr (\$000)

Mine Year	Year starting	Mine Loads 32.5 GWh/yr	Minto Power Bills 0.10 thous \$	Incremental increase in Diesel Generation w O & M		Incremental decrease in Secondary Sales		Pelly Diesel Savings thous \$	FTN thous \$	CS thous \$	YEC Mine Diesels thous \$	Mine Net Revenue Incremental thous \$	Mine Net Revenue Account Accrued thous \$	CS Stage One Undepreciated Capital Costs Accrued thous \$
				w/o Mine thous \$	w Mine thous \$	w/o Mine thous \$	w Mine thous \$							
1	2007													
2	2008	-	-	-	-	-	-	9	10	11	12	13	14	15
3	2009	32.5	3,250	40	170	1,282	1,282	102	516	563	-	1,951	-	9,731
4	2010	32.5	3,250	65	229	1,308	1,308	102	482	921	192	1,517	1,951	9,532
5	2011	32.5	3,250	94	307	1,334	1,334	102	447	906	267	1,527	3,595	9,333
6	2012	32.5	3,250	132	410	1,361	1,117	102	384	891	259	1,353	5,356	9,135
7	2013	32.5	3,250	182	543	1,388	803	102	277	876	242	1,127	7,057	8,936
8	2014	32.5	3,250	251	709	1,416	488	102	177	861	234	880	10,085	8,738
9	2015	32.5	3,250	343	884	1,444	162	102	83	846	225	630	10,716	8,539
10	2016	32.5	3,250	467	1,630	1,473	-	102	(3)	832	217	(35)	10,680	8,341

Notes:

- Commercial operations are expected to commence in Q2, 2007. Table assumes YEC commences delivery Jan 1, 2009, and mine operations cease Dec 31, 2016.
- Diesel Generation with Operating and Maintenance costs, as well as Secondary Sales, are from Attachment B.
- Attachment B changes reflect new WAF sales to Pelly Crossing as well as the Minto mine (Pelly Crossing has minor impact relative to Mine impacts).
- Attachment B reflects YEC and YEC's share as required for Mine Net Revenue is estimated at 80% of the amounts shown in columns 6, 7 and 8.
- The balance of YEC's capital costs not yet depreciated for the CS Project at the end of 2016 is projected in this analysis to equal \$8.3 million.
- Pelly Crossing diesel saving assumes only YEC portion of diesel saving at \$.068 per kWh.
- Assumes 6.5% interest per annum earned on the account to fund YEC's regulated rate base similar to the Accrued Decommissioning Fund in Section 11.2 of the PPA, so long as the account at start of year is less than CS Stage One Undepreciated Capital Cost (otherwise, assume zero earnings).
- Other cost such as those related to the PPA hearing would also be included in the Mine Net Revenue Account

Table C-2
Mine Net Revenue Account Example: Minto at 42 GW.h/yr (\$000)

Mine Year	Year starting	Mine Loads GWh/yr 42	Minto Power Bills 0.10 thous \$	Incremental increase in Diesel Generation w O & M			Incremental decrease in Secondary Sales		Pelly Diesel Savings thous \$	FTN thous \$	CS thous \$	YEC Mine Diesels thous \$	Mine Net Revenue Incremental thous \$	Mine Net Revenue Account Accrued thous \$	CS Stage One Undepreciated Capital Costs Accrued thous \$	
				w/o Mine thous \$	w Mine thous \$	Net thous \$	w/o Mine thous \$	w Mine thous \$								Net thous \$
1	2007	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	2009	42	4,200	40	236	196	1,282	1,282	-	102	664	563	192	2,687	2,687	9,731
4	2010	42	4,200	65	314	249	1,308	1,061	247	102	601	921	267	2,066	4,927	9,532
5	2011	42	4,200	94	416	322	1,334	775	559	102	483	906	259	1,884	7,132	9,333
6	2012	42	4,200	132	547	415	1,361	478	883	102	371	891	251	1,668	9,263	9,135
7	2013	42	4,200	182	698	516	1,388	159	1,229	102	264	876	242	1,421	10,684	8,936
8	2014	42	4,200	251	1,355	1,104	1,416	-	1,416	102	163	861	234	807	11,491	8,738
9	2015	42	4,200	343	2,670	2,327	1,444	-	1,444	102	70	846	225	(322)	11,169	8,539

Notes:

- Commercial operations are expected to commence in Q2, 2007. Table assumes YEC commences delivery Jan 1, 2009, and mine operations cease Dec 31, 2016.
- Diesel Generation with Operating and Maintenance costs, as well as Secondary Sales, are from Attachment B.
- Attachment B changes reflect new WAF sales to Pelly Crossing as well as the Minto mine (Pelly Crossing has minor impact relative to Mine impacts). Attachment B reflects YEC and YEC's share as required for Mine Net Revenue is estimated at 80% of the amounts shown in columns 5, 6 and 7.
- The balance of YEC's capital costs not yet depreciated for the CS Project at the end of 2016 is projected in this analysis to equal \$8.3 million.
- Pelly Crossing diesel saving assumes only YEC portion of diesel saving at \$0.68 per kWh.
- Assumes 6.5% interest per annum earned on the account to fund YEC's regulated rate base similar to the Accrued Decommissioning Fund in Section 11.2 of the PPA, so long as the account at start of year is less than CS Stage One Undepreciated Capital Cost (otherwise, assume zero earnings).
- Other cost such as those related to the PPA hearing would also be included in the Mine Net Revenue Account

ATTACHMENT D

MINTO GRID POWER COST SAVINGS WITH PPA

ATTACHMENT D: MINTO GRID POWER COST SAVINGS WITH PPA

Attachment D estimates Minto electricity power cost savings with and without the PPA.

Table D-1 below summarizes Minto electricity cash flows for the first nine years of YEC service assuming:

- Minto high grade reserves sufficient for 10+ years of commercial operations (9+ supplied by YEC).
- 32.5 GW.h/year power needs at the mine (YEC supplies at Firm Mine rate).
- Diesel power costs for Minto for on-site diesel generation (if no grid power) at 24 cents per KW.h with no escalation, per Minto July 2007 Feasibility Study.
- YEC starts service half way through Minto's second 12 months of operation.
- YEC power rate for this service at 10 cents per KW.h per PPA, Schedule C (no escalation assumed).
- Minto Capital Cost Contribution of about \$11 million (about \$3.8 million for Mine Spur Capital Cost Contribution and \$7.2 million for the CS Capital Cost Contribution).
- YEC payments for purchase of four Minto on-site diesel units (\$2.24 million) with YEC payments to Minto as offset for Minto Mine Spur payments.

Table D-1 shows cash flows where YEC finances the Minto Capital Cost Contribution as provided for in the PPA (assumes 7 years equal blended interest and principal payments per month for the Mine Spur component; on the CS component the monthly payments for the first 4 years are interest only payments, followed by 3 years with equal blended interest and principal payments per month).

- **Electricity cash savings** for Minto each year equal diesel costs saved less (YEC power rate charge plus Minto Capital Cost Contribution payment)
 - \$3.33 million per year for 4 years when pay only interest
 - Drops to \$1.17 million for 3 years when must pay principal
 - PV saving at 7.5% of \$16.6 million
- **Diesel Units offset** is YEC payments for purchase of four Minto on-site diesel units (\$2.24 million) with YEC payments to Minto as offset for Minto Mine Spur payments. The effect of the offset will increase the positive impacts for Minto as demonstrated on the lower half of Table D-1.

Table D-1
Summary of Minto Electricity Cost Cash Flows with PPA (\$000,000)

Power Requirement at 32.5 GW.h/year - 2008 through 2016

	Minto Electricity Cash Flows (\$million)								
	1	2	3	4	5	6	7	8	9
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016
Year Starting :									
\$/kWh									
0.24	3.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
On Site Diesel (without PPA)									
Minto Electricity Costs with PPA	1.63	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
Power Rate									
0.10									
Capital Cost Contribution at \$11 million									
Mine Spur cost (est. \$3.8 million - 7 yr blended monthly)	0.35	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.35
CS contribution (\$7.2 million-interest only 4 yrs, blended 3 yrs)	0.26	0.52	0.52	0.52	1.60	2.68	2.68	2.68	1.34
Total Capital Cost Contribution Payments	0.61	1.22	1.22	1.22	2.30	3.38	3.38	3.38	1.69
Total PPA Grid Power Cost	2.24	4.47	4.47	4.47	5.55	6.63	6.63	4.94	3.25
Net Cash Saving for Minto Electricity	1.66	3.33	3.33	3.33	2.25	1.17	1.17	2.86	4.55
PV 7.5% \$16.61									
Summary of Minto Electricity Cost Cash Flows with and without PPA Inducing Diesel Units (\$000,000)									
Power Requirement at 32.5 GW.h/year - 2008 through 2016									
	Minto Electricity Cash Flows (\$million)								
	1	2	3	4	5	6	7	8	9
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016
Year Starting :									
\$/kWh									
0.24	3.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
On Site Diesel (without PPA)									
Minto Electricity Costs with PPA	1.63	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
Power Rate									
0.10									
Capital Cost Contribution at \$11 million									
Mine Spur cost (est. \$3.8 million - 7 yr blended monthly)	0.35	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.35
Diesel Units offset payments by YEC (\$2.24 million)	(0.20)	(0.41)	(0.41)	(0.41)	(0.41)	(0.41)	(0.41)	(0.20)	-
Total Including Diesel	0.15	0.29	0.29	0.29	0.29	0.29	0.29	0.15	0.00
CS contribution (\$7.2 million-interest only 4 yrs, blended 3 yrs)	0.26	0.52	0.52	0.52	1.60	2.68	2.68	1.34	-
Total Capital Cost Contribution Payments	0.41	0.81	0.81	0.81	1.89	2.97	2.97	1.48	-
Total PPA Grid Power Cost	2.03	4.06	4.06	4.06	5.14	6.22	6.22	4.73	3.25
Net Cash Saving for Minto Electricity	1.87	3.74	3.74	3.74	2.66	1.58	1.58	3.07	4.55
PV 7.5% \$18.70									

ATTACHMENT E

POWER PURCHASE AGREEMENT

ATTACHMENT E

POWER PURCHASE AGREEMENT

POWER PURCHASE AGREEMENT
BETWEEN
YUKON ENERGY CORPORATION
AND
MINTO EXPLORATIONS LTD.
DATED
FEBRUARY 8, 2007

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POWER PURCHASE AGREEMENT

This Agreement dated February 8, 2007:

Between:

YUKON ENERGY CORPORATION, a Yukon Territory corporation, having an office at P.O. Box 5920, #2 Miles Canyon Road, Whitehorse, Yukon Territory, Y1A 6S7

(**"YEC"**)

and:

MINTO EXPLORATIONS LTD., a British Columbia company, having an office at 860 - 625 Howe Street, Vancouver, British Columbia, V6C 2T6

(**"Minto"**)

Background:

- A. Minto owns the Mine Site, is in the process of developing the Mine, and has obtained the Current Bank Financing to develop the Mine and begin Commercial Operations;
- B. Subject to this Agreement, YEC has agreed to build the Transmission Project to supply Grid Electricity to the Mine and YEC has agreed to sell to Minto and Minto has agreed to purchase from YEC Grid Electricity required by Minto to operate the Mine;
- C. It is the Parties' intention that other ratepayers in the Yukon Territory will not be adversely impacted by the costs of the Transmission Project required to provide Grid Electricity to the Mine; and
- D. The Parties have agreed to enter into this Agreement to set out their respective rights and obligations.

Agreement:

The Parties agree as follows:

PART 1 **DEFINITIONS AND INTERPRETATION**

1.1 Definitions

In this Agreement, unless the context otherwise requires:

- (a) **“Acceptance Notice”** has the meaning in Section 10.5(e);
- (b) **“Acceptance Period”** has the meaning in Sections 10.5(d)(i) and (ii);
- (c) **“Accrued Decommissioning Fund”** means a separate account to be set up by YEC under Part 11;
- (d) **“Accrued Decommissioning Fund Amount”** means the amount standing to the credit of the Accrued Decommissioning Fund from time to time;
- (e) **“Act”** has the meaning in Section 7.1;
- (f) **“Additional Reserves”** means additional ore reserves at the Mine, excluding Low Grade Ore, that Minto incorporates into its announced mine and processing plans at the Mine over and above the approximate 5.869 million metric tonnes of high grade ore reserves that Minto announced August 28, 2006 would be processed at the Mine during the initial 7.2 years of operation, such additional ore reserves to have average ore grades sufficient to sustain an additional three years of processing at the Mine, beyond the 7.2 years announced in August, 2006 at the Daily Processing Level;
- (g) **“Affiliate”** for a Party means a corporation that is:
 - (i) the parent or subsidiary of that Party or a subsidiary of the same parent as that Party; or
 - (ii) the parent or subsidiary of a corporation referred to in Section 1.1(g)(i);and for this purpose the relationship of parent and subsidiary is deemed to exist where one corporation Controls another corporation. A corporation will be deemed to be a subsidiary of another corporation if:
 - (iii) it is Controlled by:
 - A. that other; or
 - B. that other and one or more corporations each of which is Controlled by that other; or
 - C. two or more corporations each of which is Controlled by that other; or
 - (iv) it is a subsidiary of a corporation, or a subsidiary of a subsidiary of a corporation, that is that other’s subsidiary;

- (h) **“Annual Payment Date”** means the anniversary of the Commencement of Delivery in each year, and more specifically the first day of the calendar month in which such anniversary falls;
- (i) **“Business Day”** means any day which is not a Saturday, Sunday, or a statutory holiday in the Yukon Territory or the Province of British Columbia;
- (j) **“Capital Cost Contribution”** means the Mine Spur Capital Cost Contribution plus the Carmacks-Minto Landing Capital Cost Contribution;
- (k) **“Capital Costs”** for a segment of the Transmission Project, means the actual costs incurred by YEC to develop and commission that segment of the Transmission Project, including all related planning, permitting, design, engineering, procurement, construction, commissioning, and normal YEC overhead costs and, prior to the Commencement of Delivery, interest at the Cost of Capital on such costs;
- (l) **“Carmacks-Minto Landing Capital Cost Contribution”** means the sum of \$7.2 million, representing Minto’s contribution to the Capital Costs incurred by YEC for the Carmacks-Minto Landing Segment;
- (m) **“Carmacks-Minto Landing Segment”** means the segment of the CS Project between the Whitehorse-Aishihik-Faro 138 kV grid and the Mine Spur in the Minto Landing area, excluding any substations and related transformers, switches, meters, or fuses;
- (n) **“Caterpillar”** means Caterpillar Financial Services Limited;
- (o) **“Cat Leases”** means three leases each dated November 2, 2006 among Minto, Sherwood, and Caterpillar for the lease of three of the Diesel Units and a fourth lease to be entered into among Minto, Sherwood, and Caterpillar for the lease of a fourth Diesel Unit;
- (p) **“Commencement of Delivery”** means the date on which YEC provides written notice to Minto that, in the reasonable opinion of YEC, the Transmission Project is commissioned and available to supply Grid Electricity to the Mine from YEC’s Whitehorse-Aishihik-Faro grid-based generation facilities under this Agreement;
- (q) **“Commercial Operation Cessation Date”** means the date on which the Mine has permanently ceased to produce Copper Concentrates, and reclamation or decommissioning of the Mine Site has commenced;
- (r) **“Commercial Operation Date”** means the first date on which the Mine has in place facilities and mineral resources (including stockpiled ore materials) as required to produce, and is producing or is reasonably expected to produce within 60 days, at a rate in excess of 1500 metric tonnes of ore per day;

- (s) **“Conditions”** means the conditions listed in Section 3.1;
- (t) **“Confidential Information”** has the meaning in Section 18.1;
- (u) **“Control”** means the right to exercise, directly or indirectly, more than 50% of the votes which may be cast at a general meeting of a Party;
- (v) **“Copper Concentrate”** means the copper concentrate produced at the Mine;
- (w) **“Cost of Capital”** means YEC’s average weighted cost of debt and equity for new capital projects, which for the purpose of this Agreement will be deemed to be 7.5 % per annum;
- (x) **“CS Project”** means the 138 kV transmission line to be developed generally along the Klondike Highway to connect the 138 kV Whitehorse-Aishihik-Faro grid in the Carmacks airport area with the 69 kV Mayo-Dawson grid in the Stewart Crossing Area, and all related substations to be developed at Carmacks, Pelly Crossing and Stewart Crossing;
- (y) **“Creditable Amount”** means the amount in excess of \$3,000,000 in any Payment Year that is payable by Minto to YEC for Grid Electricity in any Payment Year prior to the ninth Annual Payment Date;
- (z) **“CS Project Stage One Undepreciated Capital Costs”** means, at the end of any fiscal year of YEC, the balance of:
 - (i) YEC’s Capital Costs not yet depreciated for the segment of the CS Project from Carmacks to Pelly Crossing; less
 - (ii) the unamortized contributions to such capital costs relating to the Carmacks-Minto Landing Capital Cost Contribution and any other capital contributions provided by Yukon Development Corporation or the Yukon Territory Government towards this initial stage of CS Project development;
- (aa) **“Current Bank Financing”** means the Macquarie Financing and the MRI Agreement;
- (bb) **“Daily Processing Level”** means the daily processing level at the Mine equivalent to the 2,400 metric tonnes per day level, reasonably adjusted by Minto to reflect the equivalent continuous average operating processing capacity planned by Minto at the Mine within one year after the Commercial Operation Date;
- (cc) **“Decommissioning Costs”** means all decommissioning and other costs incurred by YEC (including, without limitation, costs to take down and remove facilities and costs to restore any property under applicable law, less credits for recovery sales of any materials removed and sold) required to remove such parts of the

Mine Spur to be decommissioned after the Mine Shut Down Date as YEC at that time may determine require to be decommissioned;

- (dd) **“Decommissioning Cost Payment”** means an \$850,000 payment, as adjusted under Section 11.2(c), to be made by Minto to YEC under Section 11.2, that YEC will deposit in the Accrued Decommissioning Fund;
- (ee) **“Defaulting Party”** has the meaning in Section 14.1;
- (ff) **“Diesel Plant Site”** means the location at the Mine Site where the Diesel Units and any other diesel generators owned or leased by Minto are situated, and includes any substation facilities used by Minto that are located in or adjacent to such location;
- (gg) **“Diesel Units”** means the three Caterpillar 3516 trailer-mounted diesel generator units, (Serial numbers 7RN01208, 7RN01123, and 7RN01200) leased by Minto and Sherwood from Caterpillar under the Cat Leases and a fourth diesel unit similar to the existing diesel units to be leased by Minto and Sherwood from Caterpillar, such diesel units to be operated by Minto at the Mine prior to the Commencement of Delivery;
- (hh) **“Diesel Units Purchase Price”** means \$2,240,000 less the amounts, if any:
 - (i) for each Diesel Unit for which a minor or top end overhaul has not been performed under Section 10.2(f), the amount of \$70,000;
 - (ii) for each Diesel Unit with 16,000 or more hours of operation at Commencement of Delivery for which a major overhaul has not been performed under Section 10.2(f), the amount of \$160,000;
 - (iii) excluding any Diesel Unit with 16,000 hours or more of operation at Commencement of Delivery, for each hour of operation per Diesel Unit in excess of 12,000 hours but less than 16,000 hours, during its life and prior to the Commencement of Delivery, the amount of \$20 per hour; and
 - (iv) for each hour of combined operation of the four Diesel Units in excess of 45,000 hours, during each Diesel Unit’s life and prior to the Commencement of Delivery, the amount of \$11 per hour;
- (ii) **“Diesel Units Repurchase Price”** means \$2,240,000 less \$11 per hour for each hour of operation of the Diesel Units in excess of 45,000 hours prior to the Commencement of Delivery;
- (jj) **“Dispute”** means any dispute, difference, or disagreement between the Parties:
 - (i) as to the meaning, application, or implementation of this Agreement; or

- (ii) as to whether an Event of Default has occurred;
- (kk) **“Electric Demand”** means the capacity at which Electricity is delivered by YEC expressed in kilovoltamperes, averaged over a rolling 15 minute period following YEC billing and metering practice for industrial customers receiving Electricity;
- (ll) **“Electric Energy”** means electric energy expressed in kilowatt hours (KWhrs) delivered by YEC;
- (mm) **“Electricity”** means Electric Energy and Electric Demand delivered by YEC;
- (nn) **“ESRs”** means the Electric Service Regulations applicable to YEC, as approved by the YUB;
- (oo) **“Estimated Decommissioning Costs”** means an amount equal to 25% of the Capital Costs incurred by YEC for the Mine Spur;
- (pp) **“Event of Default”** has the meaning in Section 14.1;
- (qq) **“Event of Insolvency”** means any one or more of the following:
 - (i) if a Party files a petition for reorganization or for an arrangement pursuant to any applicable bankruptcy law or under any similar laws, now or hereafter in effect, or is adjudged by a court of competent jurisdiction bankrupt or becomes insolvent or makes an assignment for the benefit of its creditors or admits in writing its inability to pay its debts generally as they become due or is dissolved or suspends payment generally of its obligations;
 - (ii) if a petition is filed proposing the adjudication of a Party as a bankrupt or its re-organization under any applicable bankruptcy law or any similar law, now or hereafter in effect and:
 - A. the Party consents to the filing thereof;
 - B. the petition is not discharged or denied within 60 days after the filing thereof; or
 - C. the petition is not diligently defended against; and
 - (iii) if a receiver, receiver-manager, trustee, monitor, or liquidator (or other similar official) is appointed to take charge of all or substantially all of the business or assets of a Party and:
 - A. that Party consents to such appointment; or

- B. the appointment is not discharged or withdrawn, or action is not taken by that Party to secure the discharge of that official, within 60 days after the appointment;
- (rr) **“Firm Mine Rate”** means the rate set out in Schedule C, as may be amended by the YUB from time to time after 2008;
- (ss) **“First Nations”** means the Little Salmon/Carmacks First Nation, the Selkirk First Nation, or the First Nation of Nacho Nyak Dun;
- (tt) **“Flexible Term Note”** means the long term loan to YEC that Yukon Development Corporation purchased from the Government of Canada on March 30, 2005 which bears interest at up to 7% per annum, and requires annual principal payments of up to \$1 million, with provision for payments of interest and principal by YEC in any calendar year to be deferred and abated, respectively, if YEC’s power sales on the Whitehorse-Aishihik-Faro distribution system in that calendar year are less than specified amounts;
- (uu) **“Force Majeure”** means any event or circumstance suffered by a Party which is not within the reasonable control of the Party claiming Force Majeure and includes, without limitation:
- (i) acts of God, including wind, ice and other storms, lightning, floods, earthquakes, volcanic eruptions, and landslides;
 - (ii) strikes, lockouts, and other industrial disturbances;
 - (iii) epidemics, war (whether or not declared), terrorism, blockades, acts of public enemies, acts of sabotage, civil insurrection, riots, and civil disobedience;
 - (iv) acts or omissions of Governmental Authorities; and
 - (v) explosions and fires;
- (vv) **“GAAP”** means Canadian generally accepted accounting principles, consistently applied;
- (ww) **“Government Approvals”** means all licences, permits, consents, authorizations, or approvals from, withholding of objection on the part of, or filing, registration or qualification with, any and all Governmental Authorities required for any particular decision, act, or event;
- (xx) **“Governmental Authority”** means the government of Canada, the government of the Yukon Territory, a municipality or other political subdivision thereof, and any entity exercising executive, legislative, judicial, regulatory, or administrative functions including, without limitation, the First Nations and the YUB;

- (yy) **“Grid Electricity”** means Electricity delivered by YEC to Minto under this Agreement, excluding any such Electricity provided by the Diesel Units under Sections 4.8 or 10.4(b);
- (zz) **“GW.h”** means millions of kilowatt hours;
- (aaa) **“Incremental YEC Costs”** means, in any YEC fiscal year, incremental YEC expenses and return on rate base in that fiscal year, if any, as reasonably estimated by YEC, on a consistent basis from year to year, due to the supply of Grid Electricity to Minto by YEC, including, without limitation:
 - (i) any such incremental increase in expenses in that fiscal year related to incremental interest costs on the Flexible Term Note and incremental diesel generation expenses based on actual diesel fuel prices and long-term average water flows for hydroelectric generation; plus
 - (ii) any such incremental loss of income in that fiscal year related to displaced interruptible secondary Electric Energy sales to other YEC customers for space or process heating; plus
 - (iii) any depreciation, operating, and maintenance expenses, and return on rate base in that fiscal year related to the Transmission Project, the CS Project facilities, or the Diesel Units during the time period, if any, that the Diesel Units are owned by YEC; plus
 - (iv) any such incremental increase in expenses and return on rate base in that fiscal year related to accelerated development of other YEC generation projects to displace diesel generation that would otherwise have been related to the supply of Grid Electricity to Minto by YEC; for greater certainty, no such incremental amount will be estimated for any such generation project after the date when it is reasonably estimated by YEC that the generation project would have been in service without the need for YEC to supply Grid Electricity to Minto;
- (bbb) **“Interest Rate”** means the interest rate charged by the lead banker of YEC from time to time on unsecured commercial loans made to YEC or if YEC does not have any unsecured commercial loans outstanding at such time, the variable nominal interest rate per annum being the prime interest rate of Canadian Imperial Bank of Commerce (or its successor) for Canadian dollar commercial loans in Canada as publicly declared from time to time as its prime rate;
- (ccc) **“Low Grade Ore”** means ore mined at the Mine with less than 1% copper content;
- (ddd) **“Low Grade Ore Processing Secondary Energy Rate”** means the rate set out in Schedule D;

- (eee) **“Macquarie”** means Macquarie Bank Limited;
- (fff) **“Macquarie Financing”** means the third party financing of senior and subordinated debt that Minto has secured with Macquarie and with any other financial institution named in Schedule 1 to the PLF Agreement and the SLF Agreement, respectively, as lender, including, without limitation, the PLF Agreement and the SLF Agreement and any security granted by Minto and/or its parent corporation, Sherwood, to Macquarie under the PLF Agreement or the SLF Agreement;
- (ggg) **“Major Industrial Customer”** means a customer of YEC, or of any other regulated electric utility in Yukon Territory, engaged in manufacturing, processing, or mining whose electrical service is inter-connected with electrical service provided to any other customer of such electric utilities and whose peak Electric Demand exceeds one megawatt;
- (hhh) **“Maximum Electric Demand”** means the maximum Electric Demand for Mine Firm Electricity that YEC may be obligated to deliver to Minto at the Point of Delivery under Part 4;
- (iii) **“Mine”** means the copper-gold mine project owned by Minto and located at the Mine Site;
- (jjj) **“Mine Firm Electricity”** means Grid Electricity delivered by YEC to the Mine on a firm basis;
- (kkk) **“Mine Net Revenue”** has the meaning in Section 3.6(a);
- (lll) **“Mine Net Revenue Account”** has the meaning in Section 3.6;
- (mmm) **“Mine Shut Down Date”** is the date that Mine reclamation and decommissioning has been sufficiently completed by Minto to permit Minto to provide written notice to YEC to terminate permanently any further delivery of Electricity to the Mine and the Mine Site;
- (nnn) **“Mine Site”** means those lands and premises used for the Mine and located approximately 76 km North-North-West of Carmacks in the upper reaches of the Minto Creek watershed with access facilitated from the Klondike Highway by barge from Minto Landing to a gravel access road that leads to the Mine;
- (ooo) **“Mine Spur”** means a 25 kV to 35 kV transmission connection from the Minto Landing area to the Point of Delivery at the Mine Site, including any related YEC substations and related switches, fuses, meters or other equipment at the Minto Landing area and at the Diesel Plant Site, connecting the CS Project to the Mine;
- (ppp) **“Mine Spur Capital Cost Contribution”** means, subject to Section 3.3, the Capital Costs incurred by YEC for the Mine Spur;

- (qqq) **“Mine Spur Revised Estimate”** has the meaning in Section 5.1;
- (rrr) **“Mine Spur Right of Way”** means the right of way, generally of 30 metres width, as required for YEC to construct and operate the Mine Spur along the segment of the Route for the Mine Spur;
- (sss) **“Minimum Take or Pay Amount”** means \$24,000,000, less any reductions provided for under Sections 3.5 and 6.3;
- (ttt) **“Minto Forecasts”** has the meaning in Section 4.2;
- (uuu) **“Minto Power Bill”** means the monthly bill sent to Minto by YEC under Section 6.1, including Mine Firm Electricity, Secondary Mine Processing Energy Electricity, Secondary Heating Energy Electricity, and Capital Cost Contribution under Part 5;
- (vvv) **“MRI”** means MRI Trading AG of Switzerland;
- (www) **“MRI Agreement”** means the Copper Concentrate revolving inventory finance facility in the principal amount of up to \$20,000,000 (USD) to be provided to Minto by MRI and referred to in the contract of purchase dated September 27, 2006 between Minto and MRI which Minto is currently re-negotiating with MRI such that MRI will purchase and pay for Copper Concentrate on the Mine Site;
- (xxx) **“MVA”** means thousands of kilovoltamperes;
- (yyy) **“New YEC Industrial Customer”** means a YEC Major Industrial Customer, other than Minto, that receives Grid Electricity from the Transmission Project or the CS Project;
- (zzz) **“Non-Defaulting Party”** has the meaning in Section 14.2;
- (aaaa) **“Offer Notice”** has the meaning in Section 10.5(c);
- (bbbb) **“Parties”** means YEC and Minto and **“Party”** means either of them;
- (cccc) **“Payment Year”** means:
 - (i) for the first such year, the period from Commencement of Delivery until the first Annual Payment Date; and
 - (ii) for each subsequent such year, the twelve month period between each Annual Payment Date;
- (dddd) **“Person”** means an individual, firm, partnership, body corporate or other legal entity, a government or any department or agency thereof, a trustee, any

unincorporated organization and the heirs, executors, administrators or other legal representatives of an individual, as the case may be;

- (eeee) **“PLF Agreement”** means the confidential syndicated project facility agreement dated for reference October 24, 2006 between Minto as borrower, Sherwood as guarantor, Macquarie as agent, and the financial institutions named in Schedule 1 thereto as lenders;
- (ffff) **“Point of Delivery”** means the point at the Mine Site which YEC’s service conductors forming part of the Transmission Project are connected to the wires or apparatus of Minto at the Diesel Plant Site, specifically at the secondary side of the transformation equipment used to step down from 25 kV or 35 kV to 4.16 kV, which will be the point of metering;
- (gggg) **“Power Factor”** means the ratio of the highest metered kilowatt demand in a billing period to the highest metered kilovoltampere demand in that same billing period;
- (hhhh) **“Route”** means the route for the Transmission Project as authorized by Government Approvals which, as at the date of this Agreement:
 - (i) for the Carmacks-Minto Landing Segment, is planned to follow the route as shown in Schedule B; and
 - (ii) for the Mine Spur, is planned to follow the route as shown in Schedule A;
- (iiii) **“Secondary Heating Energy Electricity”** means Grid Electricity delivered by YEC to the Mine on an interruptible basis for space or process heating under the current Rate Schedule 32, as amended and approved by the YUB from time to time, or any successor secondary energy rate for such use approved by the YUB;
- (jjjj) **“Secondary Mine Processing Energy Electricity”** means Grid Electricity delivered by YEC to the Mine on an interruptible basis for processing Low Grade Ore under the Low Grade Ore Processing Secondary Energy Rate;
- (kkkk) **“Service Charge”** means the late payment charge on any overdue account of YEC as provided for in the ESRs;
- (llll) **“Sherwood”** means Sherwood Copper Corporation, Minto’s parent corporation;
- (mmmm) **“SLF Agreement”** means the confidential syndicated subordinated loan facility agreement dated for reference October 24, 2006 between Minto as borrower, Sherwood as guarantor, Macquarie as agent, and the financial institutions named in Schedule 1 thereto as lenders;
- (nnnn) **“Term”** has the meaning in Section 2.1;

(oooo) **“Transmission Project”** means the transmission facilities to be developed, owned, and operated by YEC to connect the Point of Delivery with YEC’s Whitehorse-Aishihik-Faro 138 kV transmission grid in the Carmacks area, and comprises the Carmacks-Minto Landing Segment, the Mine Spur, and the related Carmacks substation for connection to the Whitehorse-Aishihik-Faro 138 kV transmission grid;

(pppp) **“Transmission Project Start Date”** means the date on which all conditions set out in Section 3.1 are fulfilled or waived;

(qqqq) **“YEC Diesel Units”** has the meaning in Section 10.5(c);

(rrrr) **“YEC Security”** has the meaning in Section 6.5; and

(ssss) **“YUB”** means the Yukon Utilities Board.

1.2 Schedules

The following Schedules are attached to and form a part of this Agreement:

Schedule A - Planned Route for Mine Spur;

Schedule B- Planned Route for Carmacks-Minto Landing Segment;

Schedule C – Firm Mine Rate;

Schedule D – Low Grade Ore Processing Secondary Energy Rate;

Schedule E – Yukon Industrial Costs of Service Principles;

Schedule F - YEC Security; and

Schedule G - Diesel Unit Descriptions.

1.3 Interpretation

Under this Agreement:

- (a) references to voltage (including, without limitation, references to “25 kV” and “35 kV” and “138 kV”) are approximate;
- (b) words importing the masculine gender include the feminine and neuter genders, and Persons, and words in the singular include the plural, and vice versa, wherever the context requires;
- (c) all references to designated Parts and Sections are to the designated Parts and Sections of this Agreement;

- (d) using separate Parts and Sections, providing a table of contents, and inserting headings are for convenience only and will not affect how this Agreement is interpreted;
- (e) all accounting terms not otherwise defined have the meanings ordinarily assigned to them at the date of this Agreement under GAAP and all computations made under this Agreement must be made under GAAP applicable from time to time;
- (f) unless otherwise indicated, any reference to a currency is a reference to Canadian currency;
- (g) except where otherwise specified, any reference to a statute includes a reference to such statute and to its regulations, with all amendments in force from time to time, and to any statute or regulation that may be passed which has the effect of supplementing or superseding the statute or regulation; and
- (h) any reference to a Person includes a reference to any Person that is a successor to that Person.

PART 2

DURATION

2.1 Term

This Agreement will commence as of the date of this Agreement and, unless terminated earlier under this Agreement, will terminate on the date, following the Mine Shut Down Date, when decommissioning of the Mine Spur has been completed under Part 11.

PART 3

TRANSMISSION PROJECT

3.1 Conditions

The obligations of the Parties to proceed with and complete the Transmission Project are subject to fulfilment of the following conditions:

- (a) on or before April 30, 2007, the YUB will have approved this Agreement, including, without limitation, the following provisions:
 - (i) the Firm Mine Rate for initial delivery of Mine Firm Electricity by YEC to Minto, and Section 3.5 respecting any future adjustment to the Firm Mine Rate;
 - (ii) the Low Grade Ore Processing Secondary Energy Rate for Secondary Mine Processing Energy Electricity delivered by YEC to Minto;
 - (iii) Section 3.6 respecting the Mine Net Revenue Account;

- (iv) Part 5 respecting the Capital Cost Contribution;
 - (v) Part 6 respecting the minimum take-or-pay and the YEC Security;
 - (vi) Part 10 respecting YEC purchase of the Diesel Units; and
 - (vii) Part 11 respecting Decommissioning Costs;
- (b) on or before February 15, 2007, Minto will have received written approval from Macquarie of Minto's execution and delivery of this Agreement and the YEC Security and Minto will have provided a copy of such approval to YEC;
 - (c) on or before February 15, 2007, YEC will have entered into an agreement with Macquarie and Minto governing the respective rights and obligations of each of Macquarie under the Macquarie Financing and YEC under this Agreement and the YEC Security on terms and conditions satisfactory to YEC, acting reasonably;
 - (d) unless the MRI Agreement has been amended such that MRI no longer has security over the Copper Concentrate, on or before March 31, 2007, YEC will have entered into an agreement with MRI and Minto governing the respective obligations of each of MRI and YEC under the MRI Agreement and the YEC Security on terms and conditions satisfactory to YEC, acting reasonably;
 - (e) on or before February 28, 2007, YEC will have completed its due diligence of Minto and the Mine and YEC will have provided written notice to Minto of the completion of such due diligence to the satisfaction of YEC, acting reasonably;
 - (f) on or before May 31, 2007, Minto will have executed and delivered to YEC the YEC Security and YEC will have registered the YEC Security in all registries required to perfect the YEC Security, such that the YEC Security ranks second only to the Macquarie Financing generally and third only to MRI and Macquarie on the Copper Concentrate or if MRI, as a result of any changes to the MRI Agreement, no longer has security over the Copper Concentrate the YEC Security will rank second on the Copper Concentrate behind the Macquarie Financing;
 - (g) on or before June 30, 2007, the Commercial Operation Date will have occurred and Minto will have provided written notice to YEC of such date under Section 3.4;
 - (h) on or before June 30, 2007, the right of way for YEC will have been secured by Minto, working with YEC, for the segment of the Mine Spur Right of Way over the Selkirk First Nation settlement lands on the west side of the Yukon River on terms and conditions satisfactory to YEC, acting reasonably;
 - (i) on or before June 30, 2007, YEC will have obtained all licences, approvals, consents, and rights of way (including, without limitation, Government Approvals, but excluding Governmental Approvals under Condition 3.1(h) for the

segment of the Mine Spur Right of Way over the Selkirk First Nation Settlement Lands), required by YEC, each on terms and conditions satisfactory to YEC, acting reasonably, to design, engineer, procure, construct, commission, and operate the Transmission Project;

- (j) on or before June 30, 2007, Yukon Development Corporation will have obtained any and all approvals as required under Order-in-Council 1993/108 for Yukon Development Corporation to allow YEC to proceed with the construction and development of the Transmission Project;
- (k) on or before July 31, 2007, YEC will have received tenders for equipment and materials and as otherwise required for construction of the Transmission Project, on terms and conditions satisfactory to YEC, acting reasonably; and
- (l) on or before July 31, 2007, the YEC Board of Directors will have approved contracts for the construction of the Transmission Project.

Conditions 3.1(a) to (d) and (h) are for the benefit of both Parties and may only be waived, altered or the time period extended by written agreement between the Parties. Conditions 3.1(e) to (g) and (i) to (l) inclusive are for the sole benefit of YEC and may be waived or the time period extended by YEC, in its sole and absolute discretion, by written notice by YEC to Minto at any time. The Parties will exercise commercially reasonable efforts, to ensure that the Conditions for which they are responsible are fulfilled or waived on or before the date specified. If any of the Conditions set out in this Section 3.1 are neither fulfilled nor waived on or before the date specified, this Agreement will terminate with immediate effect and neither Party will have any further right or obligation under this Agreement except for the fulfillment of those obligations which arose prior to the date of termination and except for any rights or obligations which are expressly stated to survive the termination of this Agreement.

3.2 Filing with YUB

Upon execution and delivery of this Agreement, YEC will file an application with the YUB seeking YUB approval of this Agreement under Section 3.1(a). YEC will provide the YUB with such supporting documentation as required by the YUB for such application, including evidence in support of the Major Industrial Customer class costs of service estimated for 2008 to confirm that the Firm Mine Rate in the form of Schedule C on the date of execution and delivery of this Agreement for initial YEC delivery of Mine Firm Electricity complies with the Order-in Council 1995/90. Minto will support the YEC application to the YUB as YEC may reasonably require to obtain the approval of the YUB under this Section 3.2.

3.3 Transmission Project

Upon the Transmission Project Start Date, YEC will exercise commercially reasonable efforts to design, engineer, procure, construct, and commission the Transmission Project along the Route on a timely basis to provide Commencement of Delivery as soon as is reasonably possible on or before September 30, 2008, or such date thereafter as is reasonably possible, and to supply Grid

Electricity to the Mine after Commencement of Delivery. If Commencement of Delivery occurs after September 30, 2009, the Capital Costs for the Mine Spur included in the Capital Cost Contribution will not include any interest on such Capital Costs after January 1, 2009. If Commencement of Delivery occurs after March 31, 2010, the Capital Cost Contribution payment will be adjusted under Sections 5.3, 5.4 or 5.5.

3.4 Minto Mine

Upon execution and delivery of this Agreement, Minto will exercise commercially reasonable efforts, to finance, design, engineer, procure, and construct the Mine on a timely basis to reach the Commercial Operation Date as soon as reasonably practicable and not later than the date specified in Section 3.1(g). Minto will provide written notice to YEC of the Commercial Operation Date within 30 days of the Commercial Operation Date having occurred. The Mine will operate at the Commercial Operation Date with Electricity supplied from the Diesel Units. Minto will ensure that the Mine will be able to receive Grid Electricity from YEC at any time after the Commercial Operation Date but on or before Commencement of Delivery, and Minto will receive Grid Electricity from YEC on Commencement of Delivery .

3.5 YUB Decision on Firm Mine Rate

The Parties acknowledge that the Firm Mine Rate was established based on the cost of service principles and methods in Schedule E and that the Firm Mine Rate may be amended by the YUB from time to time after 2008. Notwithstanding Section 6.5:

- (a) if the Firm Mine Rate is increased at any time after approval by the YUB of the Firm Mine Rate in the form of Schedule C on the date of execution and delivery of this Agreement by a decision of the YUB made on the basis of cost of service principles and methods which are inconsistent with the cost of service principles and methods in Schedule E; or
- (b) if the YUB, in exercising its statutory jurisdiction, alters the terms and conditions of this Agreement; and
- (c) such increase or alteration materially adversely affects the cost savings to Minto under this Agreement arising due to the conversion from reliance on electricity from diesel generation at the Mine Site to Grid Electricity;

the Parties will amend and restate:

- (d) this Agreement to reduce the Minimum Take or Pay Amount to offset the loss of such cost savings to Minto; and
- (e) the YEC Security so that the YEC Security is no longer provided as continuing security for the Minimum Take or Pay Amount under Section 6.2.

3.6 Mine Net Revenue Account

YEC will establish a deferral account (the “**Mine Net Revenue Account**”) as follows:

- (a) in each YEC fiscal year prior to the discharge of the YEC Security, and thereafter as the YUB may determine until the Commercial Operation Cessation Date, YEC will determine the amount (the “**Mine Net Revenue**”), if any, equal to the Minto Power Bills in that fiscal year plus any payment by Minto under Section 6.2 in that fiscal year less the Incremental YEC Costs in that fiscal year;
- (b) the Mine Net Revenue amount for each fiscal year will be assigned to the Mine Net Revenue Account and will not form part of YEC’s earnings in that fiscal year;
- (c) unless otherwise provided for in Section 3.6(d):
 - (i) until such time as the accrued balance of the Mine Net Revenue Account equals or exceeds the CS Project Stage One Undepreciated Capital Costs, YEC will invest any positive accrued Mine Net Revenue Account at 6.5% interest per annum to fund YEC’s regulated rate base; and
 - (ii) thereafter, YEC will use any positive accrued amount in the Mine Net Revenue Account to offset the YEC regulated rate base; and
- (d) upon the discharge of the YEC Security, YEC may, from time to time, subject to YUB approval, use some or all of the then accrued balance in the Mine Net Revenue Account as a contribution towards the balance of YEC’s capital costs not yet depreciated for the CS Project or for any new generation infrastructure developed by YEC on an accelerated basis due to the Mine or the CS Project. After the Commercial Operation Cessation Date YEC will, subject to the approval of the YUB, terminate the Mine Net Revenue Account and the Parties will each provide independent submissions to the YUB as to how the Mine Net Revenue Account should be disposed of for the benefit of Yukon Territory rate payers.

PART 4 **ELECTRICITY**

4.1 Electricity to be Made Available

From Commencement of Delivery, YEC will deliver to Minto and Minto will purchase from YEC Grid Electricity as follows:

- (a) **Mine Firm Electricity:** Until the Commercial Operation Cessation Date, which is currently expected to occur after the seventh anniversary of the Commercial Operation Date, YEC will deliver to Minto and Minto will purchase from YEC, as Mine Firm Electricity, subject to the Firm Mine Rate, Maximum Electric Demand up to 4.4 MVA and Electric Energy of approximately 32.5 GW.h per year. Minto may, by prior written notice to YEC of not less than six months, elect to increase

its Mine Firm Electricity requirements for Maximum Electric Demand up to 6.0 MVA and for Electric Energy up to 42 GW.h per calendar year.

- (b) **Secondary Mine Processing Energy Electricity:** Until the Commercial Operation Cessation Date, Minto may elect from time to time to process Low Grade Ore using Secondary Mine Processing Energy Electricity, subject to the Low Grade Ore Processing Secondary Energy Rate terms and conditions and the following maximum annual use levels by Minto:
 - (i) during the period from Commencement of Delivery until the Capital Cost Contribution plus accrued interest under Section 5.2 is fully paid or June 30, 2015, whichever is earlier, up to the difference between 32 GW.h per one year period and the maximum Electric Energy permitted under Section 4.1(a), subject to the combined Electric Demand for Mine Firm Electricity plus Secondary Mine Processing Energy Electricity not exceeding 6.0 MVA or the Maximum Electric Demand as determined under Section 4.5; and
 - (ii) thereafter, up to a level per one year period equal to the maximum Electric Energy permitted under Section 4.1(a), subject to the combined Electric Demand for Mine Firm Electricity plus Secondary Mine Processing Energy Electricity not exceeding 6.0 MVA or the Maximum Electric Demand as determined under Section 4.5.
- (c) **Secondary Heating Energy Electricity:** Minto anticipates that the Mine's heat requirements will be supplied through the use of propane. However, Minto may by providing prior written notice to YEC of not less than six months, setting out its expected requirements, elect to heat the Mine using Secondary Heating Energy Electricity, provided Minto meets all the terms and conditions for Secondary Heating Energy Electricity, and subject to the remaining amount of such Secondary Heating Energy Electricity that YEC is prepared to supply to new customers from time to time, in which case YEC will exercise commercially reasonable efforts to supply such Secondary Heating Energy Electricity to the Mine under this Agreement and the relevant rate schedule for Secondary Heating Energy Electricity. Minto will, under the relevant rate schedule, facilitate separate metering of Secondary Heating Energy Electricity to enable separate identification of the consumption and separate billing for the use of this Secondary Heating Energy Electricity.

4.2 Minto Forecasts

Minto will provide to YEC annual written forecasts ("**Minto Forecasts**") of the Grid Electricity requirements of the Mine at the Point of Delivery for the succeeding five calendar years, so as to allow YEC to forecast the future loads on its facilities. The Minto Forecast will be provided to YEC eight months in advance of each calendar year end, starting in May, 2008, and will include load patterns showing the characteristics of the expected Mine Firm Electricity, including the

characteristics for Electric Demand and Electric Energy on a monthly, weekly, and daily basis, and with separate forecasts for any Secondary Mine Processing Energy Electricity or Secondary Heating Energy Electricity requirements. Minto will advise YEC forthwith of any material change to the Minto Forecasts for Mine Firm Electricity, including the characteristics for Electric Energy or Electric Demand, Secondary Mine Processing Energy Electricity, or Secondary Heating Energy Electricity. During the first week of each month after Commencement of Delivery, Minto will advise YEC by written notice of its estimated daily requirements for Mine Firm Electricity during the following month.

4.3 YEC Forecasts

Six months in advance of each calendar year end, starting in July, 2008, YEC will provide to Minto annual written forecasts of the expected availability of surplus hydroelectric generation for purchase by Minto as Secondary Mine Processing Energy Electricity during the next five calendar years, with estimates by month for the first of these five years. If Minto applies to YEC for such secondary energy under the Low Grade Ore Processing Secondary Energy Rate, YEC will provide Minto with ongoing written forecasts of such secondary energy availability under the Low Grade Ore Processing Secondary Energy Rate.

4.4 Point of Delivery

YEC will deliver Grid Electricity to Minto and Minto will receive Grid Electricity from YEC at the Point of Delivery. YEC may, as part of the Mine Spur development, establish, and maintain the Point of Delivery at the Diesel Plant Site after YEC having provided written notice to Minto.

4.5 Maximum Electric Demand

YEC's obligation to supply Mine Firm Electricity to Minto will not exceed the Maximum Electric Demand in effect at any time. Notwithstanding the Maximum Electric Demand, if Minto receives from YEC Mine Firm Electricity Electric Demand in excess of this maximum, Minto will pay for the billing demand charge on all metered kV.A billing demand recorded under the Firm Mine Rate. If Minto requires an increase to its Maximum Electric Demand in excess of that under Section 4.1(a), the following will apply:

- (a) Minto will provide YEC with written notice of the specified amount of the requested increase together with the period of time during which the increase is required and the related increase in Mine Firm Electricity Electric Energy requirement;
- (b) after receipt of such written notice, YEC will have a reasonable period of time to determine whether or not its facilities have the transmission capacity to supply and maintain that increased Electric Demand, as well as any potential requirement for an increase to the Mine Firm Rate related to such increase in Mine Firm Electricity Electric Energy, and YEC will forthwith provide written notice to Minto of YEC's determination; and

- (c) following such written notice by YEC to Minto, if YEC is unable to agree to the requested increase in Maximum Electric Demand, no increase in Maximum Electric Demand will be provided.

4.6 Minto Standards for Usage of Electricity

Minto will regulate its electrical load so that the Power Factor for the Minto Mine is maintained within a reasonable operating range, as agreed to by the Parties from time to time, acting reasonably. Minto will operate its equipment and use the Grid Electricity at the Mine Site so as not to endanger any of YEC's plant or equipment or cause any unacceptable fluctuations of YEC's electrical system. Minto will comply with reasonable standards of operation as provided by YEC to Minto by written notice from time to time. If Minto fails to comply with these requirements or standards of operation so as to endanger any of YEC's plant or equipment or cause any unacceptable fluctuations on YEC's electrical system, YEC may by written notice to Minto require that Minto remedy the situation. Should Minto fail to immediately comply with this Section 4.6 upon receiving such written notice, YEC may immediately suspend the supply of Grid Electricity to Minto and continue such suspension until the default is remedied. Upon receipt of such written notice Minto may provide written notice to YEC that Minto wishes YEC to operate any such equipment endangering YEC's plant, or equipment, or electrical system at Minto's sole cost and expense. Upon receipt of such written notice YEC will provide written notice to Minto as to whether YEC will operate such equipment and in such case Minto will indemnify and save harmless YEC against any costs, damages, or losses associated with such operations.

4.7 ESRs

The ESRs apply to YEC and Minto with regard to Electricity delivered by YEC to Minto under this Agreement including, without limitation, the provisions regarding the responsibility and liability of each Party. If there is an inconsistency between the ESRs and this Agreement the ESRs will govern.

4.8 Quality of Electrical Service

If Minto considers its equipment at the Mine to be at risk of damage from the supply of Grid Electricity by YEC under this Agreement and YEC is also unable to use the Diesel Units to supply Electricity to the Whitehorse- Aishihik-Faro grid, Minto may by providing written notice to YEC, require that the Diesel Units be used to supply the Mine with Electricity with the sole cost to Minto being costs for fuel and operator assistance.

4.9 Commercial Operation Cessation Date

Minto will provide written notice to YEC of the Commercial Operation Cessation Date within 30 days of the occurrence of such Commercial Operation Cessation Date.

PART 5
CAPITAL COST CONTRIBUTION

5.1 Mine Spur Capital Cost Estimate

As at the date of this Agreement, the estimate for the Capital Costs for the Mine Spur is \$3,830,000. Within 30 days of the Transmission Project Start Date, YEC will provide written notice to Minto of the revised estimate (based on tenders received by YEC) of such Capital Costs (the “**Mine Spur Revised Estimate**”).

5.2 Capital Cost Contribution

Subject to Sections 5.3, 5.4, and 5.5, after Commencement of Delivery, Minto will pay to YEC the Capital Cost Contribution plus interest per annum at the Cost of Capital on the unpaid balance, to be paid as follows:

- (a) within 5 Business Days of the end of each month from Commencement of Delivery until fourth Annual Payment Date, Minto will pay to YEC:
 - (i) equal blended payments of interest and principal on the Mine Spur Capital Cost Contribution such that the Mine Spur Capital Cost Contribution will be paid out in full on the seventh Annual Payment Date; and
 - (ii) interest accrued on the Carmacks-Minto Landing Capital Cost Contribution;
- (b) within 5 Business Days of the end of each month from the Fourth Annual Payment Date until the seventh Annual Payment Date, Minto will pay to YEC:
 - (i) equal blended payments of interest and principal on the Mine Spur Capital Cost Contribution such that the Mine Spur Capital Cost Contribution will be paid out in full on the seventh Annual Payment Date; and
 - (ii) equal blended payments of interest and principal on the Carmacks-Minto Landing Capital Cost Contribution such that the Carmacks-Minto Landing Capital Cost Contribution will be paid out in full on the seventh Annual Payment Date;
- (c) if the amount of the Mine Spur Capital Cost Contribution has not yet been finally determined on any relevant payment date under Sections 5.2(a) or 5.2(b), the Mine Spur Capital Cost Contribution for the purposes of the relevant payment will be deemed to be the Mine Spur Revised Estimate. When the actual Mine Spur Capital Cost Contribution is determined to be greater or less than the Mine Spur Revised Estimate, an appropriate adjustment will be made between the Parties to the payments to be made under Sections 5.2(a) or 5.2(b) from the date such determination is made; and

- (d) notwithstanding Sections 5.2(a) and (b) and 5.4, if Minto does not provide documentation to YEC by December 31, 2008 which confirms to the satisfaction of YEC, acting reasonably, Minto's ability and commitment to process Additional Reserves at the Mine prior to December 31, 2017 sufficient to sustain an additional three years of processing at the Mine at the Daily Processing Level, YEC may, at its discretion, by written notice to Minto at any time prior to December 31, 2011, require Minto to pay the outstanding balance of the Capital Cost Contribution including accrued interest in full on the earlier of:
 - (i) the fourth Annual Payment Date; and
 - (ii) December 31, 2013.

5.3 Adjustment if Commencement of Delivery After March 31, 2010

If Commencement of Delivery occurs after March 31, 2010, the payments payable by Minto to YEC under Section 5.2(b) will be extended by one month (or any portion thereof) for each month (or any portion thereof) that the Commencement of Delivery is delayed beyond March 31, 2010 provided:

- (a) Minto has provided to YEC the confirmation required under Section 5.2(d) and YEC is satisfied, acting reasonably, with such confirmation; and
- (b) the extension of the payments under this Section 5.3 will not go beyond the date which Minto confirms in writing to the satisfaction of YEC, acting reasonably, that ore reserves at the Mine are planned to be processed at the Mine, provided that the processing level planned is not less than the Daily Processing Level.

5.4 Adjustment if Mine Spur Capital Costs exceeds \$4.8 million

If the Capital Costs for the Mine Spur exceed \$4,800,000, the payments payable by Minto to YEC under Section 5.2(b)(i) will be extended by two years provided:

- (a) Minto has provided to YEC the confirmation required under Section 5.2(d) and YEC is satisfied, acting reasonably, with such confirmation; and
- (b) the extension of the payments under this Section 5.4 will not go beyond the date which Minto confirms in writing to the satisfaction of YEC, acting reasonably, that ore reserves at the Mine are planned to be processed at the Mine, provided that the processing level planned is not less than the Daily Processing Level.

5.5 Adjustment if Commencement of Delivery after March 31, 2013

Notwithstanding Sections 5.2, 5.3, and 5.4, if Commencement of Delivery occurs after March 31, 2013, Minto will pay to YEC the Capital Cost Contribution plus interest per annum at the Cost of Capital on the unpaid balance, to be paid in equal blended monthly payments of interest and principal on the Capital Cost Contribution, payable within 5 Business Days of the end of each

month, such that the Capital Cost Contribution will be paid out in full on the third Annual Payment Date, provided Minto will have no obligations to make payments under this Section 5.5 after the Commercial Operation Cessation Date at which point Minto's obligations under this Section 5.5 will cease. In no event will the Capital Cost Contribution under this Section 5.5 exceed \$.24 per kilowatt hour less the cost of Electric Energy per kilowatt hour based on the rates provided for under this Agreement times the Electric Energy use for that period. If the Mine resumes processing after the Commercial Operation Cessation Date, the Capital Cost Contribution payable under this Section 5.5 will resume until the date of the next Commercial Operation Cessation Date.

5.6 Outages

If YEC is unable to deliver Grid Electricity to Minto for a period of 30 consecutive days (other than due to Force Majeure, suspension of supply under Sections 4.6 or 14.2(e), an Event of Default by Minto, or an inability or unwillingness of Minto to receive Grid Electricity), the payment of any amounts under Sections 5.2(a)(i) and 5.2(b)(i) will be postponed by 30 days for each period of 30 consecutive days or any multiple thereof that such condition continues.

5.7 New YEC Industrial Customers

YEC will require New YEC Industrial Customers to pay customer contributions for their share of capital costs for the CS Project and any spur lines on a similar basis to the Capital Cost Contribution, including a contribution to the capital costs incurred by YEC for the CS Project based on the segment and voltage level of a transmission line that each New YEC Industrial Customer would require to receive Electricity in the absence of the Transmission Project or the CS Project. Any contributions received from New YEC Industrial Customers will not reduce, nor will the absence of contributions received from New YEC Industrial Customers increase, Minto's liability for the Capital Cost Contribution.

PART 6

BILLING/PAYMENT AND SECURITY

6.1 Minto Power Bill

As soon as practicable following the last day of each month after the Commencement of Delivery, YEC will deliver the Minto Power Bill to Minto in writing setting out the amount payable to YEC by Minto under this Agreement for:

- (a) all Electricity delivered by YEC to Minto during such month; and
- (b) the amount currently payable by Minto to YEC for the Capital Cost Contribution.

Minto will pay YEC the amount set out in each Minto Power Bill within 15 Business Days of the date of delivery of the Minto Power Bill to Minto, except for amounts payable by Minto for the Capital Cost Contribution which will be payable within the time periods set out in Part 5. Electricity provided by YEC to Minto will be charged to Minto at the rates provided for in this Agreement.

6.2 Minimum Take-or-Pay. From Commencement of Delivery until the eighth Annual Payment Date Minto will pay YEC the Minimum Take or Pay Amount for Grid Electricity regardless of the amount of Grid Electricity actually delivered by YEC or consumed by Minto and payable under Section 6.1(a). The Minimum Take or Pay Amount will be satisfied by Minto paying to YEC, within 30 days after each of the first seven Annual Payment Dates, the amount (if any) by which:

- (a) the aggregate amount of Grid Electricity payments by Minto to YEC under Section 6.1(a) during all Payment Years to date; plus
- (b) the aggregate amount of any payments made under this Section 6.2 for prior Payment Years;

is less than \$3,000,000 times the number of such Payment Years to date. Within 30 days of the eighth Annual Payment Date, Minto will pay to YEC the amount (if any) by which:

- (c) the aggregate amount of Grid Electricity payments by Minto to YEC under Section 6.1(a) during all Payment Years to date; plus
- (d) the aggregate amount of any payments made under Section 6.2(b);

is less than the Minimum Take or Pay Amount.

6.3 Unavailability of Grid Electricity

Minto's minimum take-or-pay obligation of \$24,000,000 under Section 6.2 will be reduced:

- (a) by \$342 for each hour in excess of 120 hours in any Payment Year that Grid Electricity is unavailable (other than due to reasonable planned maintenance, Force Majeure, suspension or termination of supply under Sections 4.6 or 14.2(e), or an Event of Default by Minto) for purchase by Minto at times when Minto requires Grid Electricity in the amounts under Section 4.1; and
- (b) if the Commencement of Delivery occurs after September 30, 2009, by \$250,000 for each month that the Commencement of Delivery is delayed beyond September 30, 2009.

6.4 Credit for Payments

If Minto makes a payment to YEC under Section 6.2, the amount of that payment will be applied as a credit against the Creditable Amount payable by Minto to YEC under Section 6.1(a) in any following Payment Year prior to the ninth Annual Payment Date.

6.5 YEC Security

As continuing security for the payment of the:

- (a) Capital Cost Contribution plus accrued interest under Section 5.2; and

- (b) Minto Power Bills under Section 6.1, excluding Capital Cost Contributions under Section 6.5(a);
- (c) minimum take-or-pay obligations under Section 6.2;
- (d) obligations under Section 10.3; and
- (e) obligations under Sections 11.2(b) and 11.3;

Minto will provide YEC with a charge over all assets of Minto, including, without limitation, the Mine, substantially in the form attached to this Agreement as Schedule F (the “**YEC Security**”), subject only to the Current Bank Financing and such other liens, charges, and encumbrances set out in Schedule F. The YEC Security will be discharged by YEC:

- (f) on the later of:
 - (i) the date when the Capital Cost Contribution plus accrued interest under Section 5.2 has been paid in full;
 - (ii) the date when the Decommissioning Cost Payment has been paid in full under Section 11.2(b); and
 - (iii) the date when the aggregate of Minto payments to YEC for Grid Electricity plus Minto’s take-or-pay payments under Section 6.2 reach the Minimum Take or Pay Amount.

The YEC Security will be amended and restated, if required, under Section 3.5.

6.6 Current Bank Financing

Minto represents and warrants to YEC that:

- (a) Minto has provided to YEC access to view true copies of all documents constituting the Current Bank Financing;
- (b) on the date of this Agreement the Current Bank Financing is in full force and effect and no default has occurred and is continuing under the Current Bank Financing;

Minto covenants with YEC that Minto will:

- (c) not permit the amount of principal outstanding under the Current Bank Financing to exceed:
 - (i) in the case of the PLF Agreement, by more than \$5,000,000 (USD), the \$57,788,051 (USD) in total commitments made under the PLF Agreement,

provided such \$5,000,000 (USD) may not be borrowed by Minto later than 90 days after the Commercial Operation Date;

- (ii) \$20,000,000 (CDN) for the SLF Agreement; and
- (iii) \$20,000,000 (USD) for the MRI Agreement.
- (d) subject to Section 6.6(h), repay the amounts owing under the PLF Agreement in full on or before November 30, 2009;
- (e) subject to Section 6.6(h), repay the amounts owing under the SLF Agreement in full on or before November 30, 2010;
- (f) perform and observe each of the terms, covenants, and agreements to be performed or observed by it under each of Current Bank Financing and to do all things necessary to preserve and keep unimpaired its rights thereunder and, except as provided for under Section 6.6(h), make all payments under the Current Bank Financing as required under those Agreements and not agree to any re-advances of amounts already paid;
- (g) forthwith upon receipt, provide YEC with copies of any notices of default it may receive from Macquarie or MRI in respect of the Current Bank Financing;
- (h) not extend the maturity date for the facility under the PLF Agreement or the facility under the SLF Agreement by more than 6 months beyond the maturity date currently provided for in each such agreement, respectively, without the written consent of YEC, such consent not to be unreasonably withheld;
- (i) not use any principal amount borrowed by Minto under the PLF Agreement or the SLF Agreement, respectively, on the development of any mineral interests located outside the boundaries of the area comprised of the mineral claims more particularly set out in Schedule 3 to the YEC Security without the written consent of YEC, such consent not to be unreasonably withheld; and
- (j) not agree to a change in the interest rates currently provided for in the Current Bank Financing, without the written consent of YEC, such consent not to be unreasonably withheld.

6.7 Canadian Funds

All payments by Minto to YEC will be made in Canadian funds to an office or banker of YEC, as YEC may direct to Minto in writing, at Whitehorse, Yukon Territory.

6.8 Failure to Render Invoice

Failure to render an invoice within the time periods set out in this Agreement will not abrogate YEC's right to receive payment of the Minto Power Bill, Capital Cost Contribution, Decommissioning Costs, or other amounts payable under this Agreement.

6.9 Late Payment

Any payment to be made by Minto to YEC under this Agreement that remains unpaid, in whole or in part, when due will be subject to a late payment charge at a rate of interest equivalent to the Service Charge calculated on the amount unpaid from the due date of payment until payment is made in full.

6.10 Prepayments

Any payments to be made by Minto to YEC under this Agreement may be prepaid by Minto at any time in whole or in part without penalty.

6.11 Taxes

All sales taxes, excise taxes, or similar charges payable on Electricity delivered to Minto under this Agreement will be added to the Minto Power Bill and paid by Minto under Section 6.1.

PART 7 **METERING**

7.1 Metering

The Electricity purchased under this Agreement will be measured and recorded at the Point of Delivery by revenue meters having one hour integrating intervals, which meters, will be types approved for revenue metering by Industry Canada and will comply with the *Electricity and Gas Inspection Act* (the "**Act**").

7.2 Testing

YEC will test its metering equipment under Section 7.1 and field test the metering installation in compliance with the Act. If requested to do so by Minto, YEC will make additional tests or inspections of such installations, the expense of which will be paid by Minto, unless Minto has confirmed by such testing that the metering is faulty in which case such testing will be paid for by YEC. YEC will give reasonable notice to Minto of the time when any such test or inspection is to be made. Minto may have representatives present at such test or inspection. Any component of such installations found to be defective or inaccurate will be adjusted, repaired, or replaced by YEC to provide accurate metering. If a meter is found not to be functioning within the prescribed limit of error, the Electricity purchased will be determined under the Act.

7.3 Backup Metering

Minto may, at its cost and expense, install a backup metering system to check YEC's metering system performance and, if so, Minto will own, operate, and maintain this system, at Minto's sole cost and expense.

7.4 Costs

All costs and expenses incurred by YEC, beyond normal reading and testing of meters and other costs that YEC is to pay under Section 7.2, in complying with its obligations under this Section 7.2 will be invoiced separately to Minto by YEC and will be paid by Minto upon receipt.

PART 8 **PERMITS, LICENCES, AND APPROVALS**

8.1 Government Approvals

Subject to Section 3.1(i), YEC will use commercially reasonable efforts to obtain and renew all Government Approvals that are required to be obtained by YEC for the construction and operation of the Transmission Project, decommissioning of the Mine Spur, and the sale of Grid Electricity to Minto. Minto will use commercially reasonable efforts to cooperate with and support YEC's efforts to obtain and renew all necessary Governmental Approvals.

PART 9 **MAINTENANCE OF RECORDS**

9.1 Records

Each Party will keep complete and accurate records and all other data required by each of them for the purposes of proper administration of this Agreement including, without limitation, the following:

- (a) YEC will keep records of:
 - (i) Electricity sales to Minto for each month;
 - (ii) Capital Cost Contribution and Decommissioning Costs;
 - (iii) changes in operating status, including any outages;
 - (iv) any unusual conditions found during inspections;
 - (v) information on the availability of surplus hydro-generation available for Secondary Mine Processing Energy Electricity sales; and
 - (vi) Minto's use of the Diesel Units under Sections 4.8 and 10.4(b).
- (b) Minto will keep records of:

- (i) its stockpiling and processing of Low Grade Ore under Section 4.1(b);
- (ii) its use of Secondary Mine Processing Energy Electricity under the Low Grade Ore Secondary Processing Energy Rate;
- (iii) its facilities, mineral reserves, ore processing capability, and ore processing production records as required to determine the Commercial Operation Date, Additional Reserves, and the Commercial Operation Cessation Date; and
- (iv) Minto's use of the Diesel Units under Section 4.8 and 10.4(b).

All such records will be maintained for a minimum of 60 months after the creation of such record or data provided, however, that the Parties will not dispose of or destroy any such records after such 60 month period without 30 days prior written notice to the other Party.

9.2 Information

Upon written notice from a Party to the other Party the Party receiving such written notice will provide to the other Party the information under Section 9.1 as may reasonably be required by a Party to verify the performance by the other Party of its obligations under this Agreement.

PART 10 DIESEL UNITS

10.1 Cat Leases

Subject to Section 10.2, upon Commencement of Delivery, Minto will and Minto will cause Sherwood to assign to YEC and YEC will assume from Minto and Sherwood the Cat Leases.

10.2 Conditions to Assignment

YEC's obligation to take an assignment of the Cat Leases is conditional upon:

- (a) Minto and Sherwood obtaining the written consent of Caterpillar to the assignment of the Cat Leases to YEC and YEC and Caterpillar entering into such agreements as may be required by YEC to take an assignment of the Cat Leases, each on terms and conditions satisfactory to YEC, acting reasonably, and Caterpillar providing written confirmation to YEC that the Cat Leases are in good standing and that all amounts due and owing under the Cat Leases have been paid in full;
- (b) YEC being satisfied, acting reasonably, that Minto will be able to make the payments under Section 10.3(b);
- (c) Minto and Sherwood assigning to YEC all other warranty rights on the Diesel Units under the Cat Leases or under any other warranty on the Diesel Units;

- (d) Minto providing all maintenance records for the Diesel Units, including daily operator logs, all oil and filter changes, oil sample analysis, and a record of all routine and non-routine work done and all overhaul reports;
- (e) Minto representing and warranting to YEC that, as at Commencement of Delivery, each of the Diesel Units:
 - (i) has a continuous rating of at least 1600 kW per generator at 4160 V output;
 - (ii) conforms to the specifications and description in Schedule G (notwithstanding that the reference in Schedule G only refers to three of the Diesel Units);
- (f) Minto performing, prior to purchase by YEC:
 - (i) a minor or top end overhaul on each of the Diesel Units, in accordance with manufacturer recommendations for an overhaul on such a Diesel Unit with approximately 8,000 hours of operation; and
 - (ii) for each of the Diesel Units with 16,000 hours of operation or more, a major overhaul in accordance with manufacturer recommendations for an overhaul of such a Diesel Unit with approximately 16,000 hours of operation;
- (g) the Diesel Units being otherwise in good condition and fit for their intended purpose at the time of purchase by YEC;
- (h) YEC having an opportunity to inspect the Diesel Units and YEC being satisfied, acting reasonably, that the condition of such Diesel Units is consistent with Sections 10.2(e), (f), and (g);
- (i) the Parties executing and delivering the following agreements, each in a form satisfactory to each of the Parties:
 - (i) a sub-lease and an easement or right of way providing YEC with access to the Mine and the Mine Site to provide YEC with access at all times to the Diesel Units located in the Diesel Plant Site at a fee of \$10.00 per year; and
 - (ii) an operating agreement under which Minto will provide YEC with fuel and operator assistance and fuel inventory, as reasonably required by YEC to operate the Diesel Units, the costs for such assistance to be charged by Minto to YEC on a monthly basis at Minto's actual cost (including direct and reasonable indirect costs and, in relation to fuel cost, taxes on fuel applicable to stationary diesel use by YEC) for payment by YEC within 15 Business Days of receipt of such invoice; and

- (j) if possible, Minto assigning to YEC permits and licences required to operate the Diesel Units, on terms and conditions satisfactory to YEC, acting reasonably.

The conditions in this Section 10.2 are for the sole benefit of YEC and may be waived or the time period extended by YEC, in its sole and absolute discretion, by written notice by YEC to Minto. The Parties will exercise commercially reasonable efforts to ensure that the conditions in this Section 10.2 for which they are responsible are fulfilled or waived on or before Commencement of Delivery. If any of the conditions set out in this Section 10.2 are neither fulfilled nor waived on or before Commencement of Delivery YEC will not be bound to take an assignment of the Cat Leases. Upon taking an assignment of the Cat Leases, YEC will be responsible for the operation and maintenance of the Diesel Units and the Diesel Units will be at the risk of YEC. Minto's obligation to assign the Cat Leases to YEC is conditional upon Minto and Sherwood receiving a full release from Caterpillar of Minto and Sherwood's obligations under the Cat Leases.

10.3 Payments

- (a) In consideration for the assignment of the Cat Leases, YEC will pay to Minto the Diesel Units Purchase Price plus interest per annum at the Cost of Capital on the unpaid balance to be paid in equal blended payments of interest and principal payable within 5 Business Days of the beginning of each month from Commencement of Delivery until the seventh Annual Payment Date such that the Diesel Units Purchase Price will be paid out in full on the seventh Annual Payment Date. If YEC fails to make such payments as and when due Minto may deduct such amounts from the amounts payable by Minto to YEC for the Mine Spur Capital Cost Contribution.
- (b) Minto will pay to Caterpillar on behalf of YEC as and when required under the Cat Leases all lease and other payments payable under the Cat Leases and Minto will pay the amount required to be paid on the termination or expiry of the Cat Leases for YEC to acquire title to the Diesel Units from Caterpillar, free and clear of all liens, charges, and encumbrances on or before September 6, 2009. If Minto fails to make such payments as and when due YEC may elect to make such payments on Minto's behalf and YEC may deduct such amounts from the amounts payable by YEC to Minto under this Section 10.3, with adjustments as required for interest at the Cost of Capital.

10.4 Operation of Diesel Units at Mine Site

After the closing of the assignment of the Cat Leases, Minto will cooperate with YEC to facilitate the operation of the Diesel Units at the Mine Site. For as long as the Diesel Units are leased by YEC from Caterpillar or owned by YEC and remain at the Mine Site:

- (a) YEC will connect the Diesel Units to the Transmission Project as required for YEC operation independent of the Mine, and as required for separate metering of any Electricity delivered to Minto from the Diesel Units to the Point of Delivery;

- (b) during any period when YEC is unable to supply Grid Electricity to the Mine, and YEC is also otherwise unable to use the Diesel Units to supply Electricity to the Whitehorse-Aishihik-Faro grid, Minto may by providing written notice to YEC require that the Diesel Units be used to supply the Mine with Electricity with the sole cost to Minto being costs for fuel and operator assistance; and
- (c) subject to Section 10.4(b), YEC will be responsible for operation and maintenance costs for the Diesel Units.

10.5 Removal of Diesel Units/Right of First Refusal

If YEC purchases the Diesel Units from Caterpillar:

- (a) YEC may remove two of the Diesel Units from the Mine Site or sell or otherwise dispose of such two Diesel Units to a third party at any time after two years after the Commencement of Delivery; and
- (b) YEC may remove the remaining two Diesel Units from the Mine Site or sell or otherwise dispose of such remaining two Diesel Units to a third party at any time after the earlier of:
 - (i) the eighth Annual Payment Date; and
 - (ii) discharge of the YEC Security.

In such event, YEC will first offer the Diesel Units to Minto as follows:

- (c) YEC will, by written notice to Minto (an **“Offer Notice”**), offer to sell the Diesel Units in question to be sold or removed under this Section 10.5 (the **“YEC Diesel Units”**) to Minto at a price that is the greater of:
 - (i) subject to Section 10.5(h), the price that YEC has otherwise agreed to sell the YEC Diesel Units to a third party; and
 - (ii) the Diesel Unit Repurchase Price less the greater of:
 - A. a cumulative amount of depreciation based on \$112,000 per 12 months since YEC purchased the YEC Diesel Units, or
 - B. \$11 per hour for each hour of operation of the YEC Diesel Units at the Mine Site by YEC;
- (d) if the price set out in the Offer Notice is:
 - (i) greater than the price under Section 10.5(c)(ii), the **“Acceptance Period”** will be 15 Business Days from the date of the Offer Notice; and

- (ii) less than or equal to the price under Section 10.5(c)(ii), the **“Acceptance Period”** will be 60 Business Days from the date of the Offer Notice;
- (e) Minto may, during the Acceptance Period provide written notice to YEC that it wishes to accept the offer set out in the Offer Notice (an **“Acceptance Notice”**);
- (f) if Minto provides an Acceptance Notice within the Acceptance Period, YEC will be bound to sell and Minto will be bound to purchase the YEC Diesel Units at the price set out in the Offer Notice, provided such sale and purchase is completed within 30 days of the expiry of the Acceptance Period;
- (g) if Minto does not provide an Acceptance Notice within the Acceptance Period, or if Minto provides an Acceptance Notice within the Acceptance Period but does not complete the sale and purchase of the YEC Diesel Units within 30 days of the expiry of the Acceptance Period, YEC may remove the YEC Diesel Units from the Mine Site or sell or otherwise dispose of the YEC Diesel Units; and
- (h) if, at the time of an Offer Notice, Grid Electricity supply to the Mine since Commencement of Delivery has experienced outages (other than due to reasonable planned maintenance, Force Majeure, suspension or termination of supply under Sections 4.6 or 14.2(e), an Event of Default by Minto, or an unwillingness or inability of Minto to receive Grid Electricity) averaging in excess of 120 hours per year, YEC will not be eligible to provide an Offer Notice to Minto with the price under Section 10.5(c)(i) that YEC has otherwise agreed to sell the YEC Diesel Units to a third party, and in such circumstance the Offer Notice will only offer the price under Section 10.5(c)(ii).

The closing of the purchase and sale of the Diesel Units to Minto under this Section 10.5 will take place under Section 10.6 and at such place and on such date as the Parties may agree.

10.6 Closing of Sale of Diesel Units

A sale by YEC and purchase by Minto of the YEC Diesel Units under Section 10.5 will proceed as follows:

- (a) YEC will provide Minto with title to the YEC Diesel Units, free and clear of all liens, charges, and encumbrances;
- (b) the Parties will execute and deliver the following agreements, each in a form satisfactory to each of the Parties:
 - (i) a bill of sale to transfer title to the YEC Diesel Units to Minto free and clear of all liens, charges, and encumbrances;
 - (ii) an agreement terminating the agreements referred to Section 10.2(i);

- (c) Minto will pay all sales, excise, and transfer taxes associated with the purchase of the YEC Diesel Units; and
- (d) if possible, YEC will assign permits and licences required to operate the YEC Diesel Units to Minto.

PART 11

DECOMMISSIONING

11.1 Decommissioning Costs

Minto will be responsible for all Decommissioning Costs incurred by YEC. Minto will provide YEC with not less than six months prior written notice of the Mine Shut Down Date. On or before the Mine Shut Down Date, YEC will provide written notice to Minto of the parts of the Mine Spur to be decommissioned as soon as is feasible after the Mine Shut Down Date, and after such date YEC will exercise commercially reasonable efforts to carry out and complete such decommissioning as soon as is reasonably feasible.

11.2 Accrued Decommissioning Fund

YEC will establish the Accrued Decommissioning Fund account, and Minto will make the Decommissioning Cost Payment to YEC, as follows:

- (a) YEC will deposit the Decommissioning Cost Payment into the Accrued Decommissioning Fund, and invest the Accrued Decommissioning Fund at 6.5% interest per annum to fund YEC's regulated rate base during the Term under this Part 11;
- (b) subject to Section 11.2(c), Minto will make the Decommissioning Cost Payment to YEC and that YEC will deposit into the Accrued Decommissioning Fund as follows:
 - (i) if Minto pays the outstanding balance of the Capital Cost Contribution to YEC under Section 5.2(d), Minto will pay the Decommissioning Cost Payment to YEC on the same date as Minto pays the outstanding balance of the Capital Cost Contribution to YEC under Section 5.2(d);
 - (ii) if Minto does not pay the Capital Cost Contribution to YEC under Section 5.2(d), Minto will pay the Decommissioning Cost Payment to YEC on or before 180 days after the date on which Minto pays the outstanding balance of the Capital Cost Contribution to YEC; and
 - (iii) in any event Minto will make the Decommissioning Cost Payment on or before the date on which Minto provides notice of the Commercial Operation Cessation Date;

- (c) the Parties intend that the Accrued Decommissioning Fund Amount within three years after payment under Section 11.2(b) will equal the Estimated Decommissioning Costs and, to achieve this, adjustments will be made to the amount of the Decommissioning Cost Payment under Section 11.2(b) to reflect the following:
 - (i) prior to determination of the actual Capital Costs for the Mine Spur, the amount by which the Mine Spur Revised Estimate is determined to be greater or less than the current estimated Capital Cost of the Mine Spur of \$3,830,000; and
 - (ii) after determination of actual Capital Costs for the Mine Spur, the amount by which the actual Capital Costs for the Mine Spur are determined to be greater or less than the Mine Spur Revised Estimate.

11.3 Application of Accrued Decommissioning Fund and Payment of Decommissioning Costs

After the Mine Shut Down Date, the Accrued Decommissioning Fund Amount will be used to pay the actual Decommissioning Costs. If the actual Decommissioning Costs exceed the Accrued Decommissioning Fund Amount, Minto will pay to YEC the amount of the excess. Such excess costs will be invoiced by YEC within 10 Business Days of the end of the month in which the costs are incurred. Minto will pay YEC the amount set out in each such invoice on or before the 15th Business Day after the invoice is received. If the Accrued Decommissioning Fund Amount exceeds the actual Decommissioning Costs, YEC will:

- (a) set the excess, if any, off against any other amounts owed by Minto to YEC under this Agreement; and
- (b) then refund the remaining excess, if any, to Minto at the end of the Term.

PART 12 **FORCE MAJEURE**

12.1 Force Majeure

Subject to Section 12.3, neither Party will be liable to the other Party for any delay in or inability of the first Party to perform its obligations under this Agreement if any such delay or inability is a direct result of Force Majeure.

12.2 Notice of Force Majeure

If a Party suffers a Force Majeure it will promptly notify the other Party and within 10 days of becoming so aware will give written notice to the other Party:

- (a) describing the Force Majeure in reasonable detail and stating, to the extent reasonably practicable at such time, its estimate of the duration of the Force Majeure;
- (b) setting out in reasonable detail the obligations under this Agreement which it is unable to perform or will be delayed in performing as a direct result of the Force Majeure;
- (c) containing particulars of the circumstances causing the Party to be unable to perform or delayed in performing its obligations under this Agreement as a direct result of the Force Majeure; and
- (d) describing what needs to be done and what will be done to end the Force Majeure.

12.3 Exclusions

A Party may not invoke Force Majeure:

- (a) for lack of money or credit;
- (b) if the Force Majeure is the result of a breach by the Party seeking to invoke Force Majeure of a permit, certificate, licence, approval, or of any applicable laws, regulations, or orders;
- (c) if the Party seeking to invoke Force Majeure has failed to use commercially reasonable efforts to prevent or remedy the situation and remove, so far as possible and with reasonable dispatch, the effects of the Force Majeure; or
- (d) if the Force Majeure was caused by a breach of, or default under this Agreement or a wilful or negligent act or omission by the Party seeking to invoke Force Majeure.

If a Party is required to perform an obligation by a certain date or with a specified time period and the Party is delayed in performing that obligation by a Force Majeure the date or time for the performance of that obligation will be extended by a period of time equal to the length of the Force Majeure. Notwithstanding the foregoing, no Force Majeure invoked or claimed by Minto will relieve Minto of its take or pay obligation under Section 6.2, unless the Force Majeure is under Section 1.1(uu)(iv) and the Force Majeure directly results in a material closure of the Mine.

PART 13
REPRESENTATIONS AND WARRANTIES

13.1 YEC Representations and Warranties

To induce Minto to enter into this Agreement YEC hereby represents and warrants to Minto as of the effective date of this Agreement, upon each of which representations and warranties Minto specifically relies, as follows:

- (a) **YEC Corporate Organization and Authority:** YEC has been duly incorporated and is a validly existing corporation under the laws of the Yukon Territory, is in good standing with respect to all required filings in the office of the Registrar of Companies and has the full corporate power and capacity to execute and deliver this Agreement and perform its obligations under this Agreement.
- (b) **Authorization, Consents, and Enforceability:** The execution and delivery of this Agreement by YEC and the consummation by YEC of the transactions contemplated hereby have been duly authorized by the Board of Directors of YEC and this Agreement constitutes valid and binding obligations of YEC, enforceable against YEC in accordance with its terms, subject to the availability of equitable remedies and enforcement of creditors' rights generally.
- (c) **Compliance:** The entering into and compliance by YEC with this Agreement is legal, does not violate any provisions of any requirement of law and does not result in any breach of any of the provisions of, or constitute a default under any charter document, by-law, unanimous shareholder agreement, loan agreement, or other agreement or instrument to which YEC is a party or by which it is or its property may be bound.

13.2 Minto Representations and Warranties

To induce YEC to enter into this Agreement Minto hereby represents and warrants to YEC as of the effective date of this Agreement, upon each of which representations and warranties YEC specifically relies, as follows:

- (a) **Minto Corporate Organization and Authority:** Minto has been duly incorporated and is a validly existing corporation under the laws of the Province of British Columbia and is in good standing with respect to all required filings in the office of the Registrar of Companies and has the full corporate power and capacity to perform business in the Yukon and to execute and deliver this Agreement and perform its obligations under this Agreement.
- (b) **Authorization, Consents, and Enforceability:** The execution and delivery of this Agreement by Minto and the consummation by Minto of the transactions contemplated hereby have been duly authorized by the Board of Directors of Minto and this Agreement has been duly executed and delivered by Minto and constitutes valid and binding obligations of Minto, enforceable against Minto in

accordance with its terms, subject to the availability of equitable remedies and enforcement of creditors' rights generally.

- (c) **Compliance:** Subject to Minto obtaining the written approval of Macquarie under Section 3.1(b), the entering and compliancy by Minto with this Agreement is legal, does not violate any provisions of any requirement of law and does not result in any breach of any of the provisions of, or constitute a default under any charter document, by-law, unanimous shareholder agreement, loan agreement, or other agreement or instrument to which Minto is a party or by which it or its property may be bound.

PART 14

DEFAULT

14.1 Event of Default

Each of the following events constitutes an “**Event of Default**” for a Party in question (the “**Defaulting Party**”):

- (a) an Event of Insolvency of such Party; or
- (b) any representation or warranty of such Party contained in this Agreement being untrue in any material respect unless the default is of a nature that can be cured and it is cured within 30 days, or such reasonable time period as may be required given the default, following receipt by the Defaulting Party of notice from the other Party specifying the nature of the default and requiring that the default be cured; or
- (c) any default (other than defaults of a non-material nature) by such Party in the performance or observance of any of the covenants, agreements, and obligations on its part to be performed or observed under this Agreement, unless the default is of a nature that can be cured and it is cured within 30 days, or such reasonable time period as may be required given the default, following receipt by the Defaulting Party of notice from the other Party specifying the nature of the default and requiring that the default be cured; or
- (d) any default by Minto under Sections 5.2, 6.1, 6.2, 10.3, or 11.2(b).

14.2 Remedies

If an Event of Default under Section 14.1 occurs, any Party not in default (the “**Non-Defaulting Party**”) may do one or more of the following:

- (a) pursue any remedy available to it in law or equity, it being acknowledged by each of the Parties that specific performance, injunctive relief (mandatory or otherwise), or other equitable relief may be the only adequate remedy for an Event of Default; or

- (b) if the Event of Default is curable, take all actions in its own name or in the name of the Defaulting Party as may reasonably be required to cure the Event of Default, in which event all payments, costs, and expenses incurred therefore will be payable by the Defaulting Party to the Non-Defaulting Party on demand with interest at the Interest Rate; or
- (c) waive the Event of Default, provided any waiver of the particular Event of Default will not operate as a waiver of any subsequent or continuing Event of Default; or
- (d) in the case of an Event of Default by Minto, YEC may exercise its rights under the YEC Security, subject to claims, if any, of Minto's creditors ranking in priority to the YEC Security; or
- (e) in the case of an Event of Default by Minto under Section 14.1(d), YEC may suspend or discontinue the supply of Electricity to Minto but no such suspension or discontinuance by YEC will relieve Minto of its obligations under this Agreement, including the obligation to make payment of any sum, nor will any such suspension or discontinuance constitute or be deemed to constitute rescission of this Agreement.

PART 15

DISPUTE RESOLUTION

15.1 Confidentiality of Process.

The Parties will maintain the dispute resolution process set out in this Part 15 as confidential and such process will not be disclosed, unless otherwise required by law and subject to the following proviso, by any Party to any other Person unless previously discussed and agreed to in writing by the Parties, provided that Minto may make disclosure of such process to Macquarie. For greater certainty, no part of the dispute resolution process will be open to the public.

15.2 Stages.

Disputes that arise among the Parties will progress, until resolved, through the following stages of the dispute resolution process:

Step 1: Within 10 days of one Party providing written notice to the other Parties that a Dispute exists, the Presidents of each of the Parties, or their nominees in the first instance or themselves if they cannot resolve the Dispute, will meet and make good faith efforts to resolve the Dispute through collaborative negotiation by:

- (i) identifying underlying interests;
- (ii) isolating points of agreement and disagreement;

- (iii) exploring alternative solutions;
- (iv) considering compromises or accommodations; and
- (v) taking any other measures that may assist in resolution of the Dispute.

Step 2: If the Presidents of each of the Parties are unable to resolve the Dispute themselves within 30 days of the written notice under Step 1, either Party may give written notice to the other Party of a desire to commence mediation and the Parties will jointly appoint a mutually acceptable mediator within 30 days after the date that such notice is given. If the Parties are unable to agree upon the appointment of a mediator within 30 days after a Party has given notice of a desire to mediate the Dispute, either Party may apply to the British Columbia Mediator Roster Society for appointment of a mediator. The Parties agree that the mediation will be conducted under the Mediation Rules of the British Columbia Mediator Roster Society.

Step 3: If a Dispute has not been resolved through mediation under Step 2 within 30 days of the appointment of a mediator, either Party, by notice in writing to the other Party, may refer such unresolved Dispute to binding arbitration under the *Arbitration Act*, (R.S.Y., 2002, c.8). The Parties will agree upon an Arbitrator within 30 days of the notice of arbitration being provided, failing which the Arbitrator will be selected under the *Arbitration Act*, (R.S.Y., 2002, c.8). The decision of the arbitrator will be final and binding on the Parties.

15.3 Availability of Argument.

In any Dispute, a Party may raise any defence or argument that it would otherwise have been able to raise at law, equity, or otherwise, had the Dispute been referred to a Court of competent jurisdiction, including a defence that the Dispute is statute-barred by the *Limitation of Actions Act*, (R.S.Y., 2002, c.139).

15.4 No Further Claims.

When Disputes are settled among the Parties to the Agreement under this Part 15:

- (a) no further claim may be made; and
- (b) no further compensation will be payable by any Party,

for the same Dispute.

15.5 Continued Payment

Pending resolution of any Dispute, Minto will continue to pay to YEC any sums payable under this Agreement and YEC may avail itself of its remedy under Section 14.2(e) in relation to a failure by Minto to do so.

PART 16
INDEMNITY

16.1 Limitation of Liability

No Party will be liable to the other Party in contract, tort, warranty, strict liability, or any other legal theory for any indirect, consequential, incidental, punitive, or exemplary damages arising under or in connection with this Agreement or in connection with the failure to perform or observe obligations under this Agreement. No Party will have any liability to the other Party except under, or for breach of, this Agreement provided, however, that this Section 16.1 is not intended to constitute a waiver of any rights of one Party against the other Party for matters which are unrelated to this Agreement.

16.2 Indemnification

- (a) Minto will indemnify and save YEC harmless for any loss or damage to property, death, or injury to Persons (or any claim against YEC in respect thereof) and all expenses relating thereto (including without limitation reasonable legal fees) suffered or incurred by YEC in connection with this Agreement resulting from any negligence or wilful default of Minto in connection with the performance of its obligations under this Agreement or a breach by Minto of its obligations under this Agreement. The indemnity will not extend to any loss, damage, death, or injury (or any claim in respect thereof) or any expenses relating thereto to the extent that it was caused by the negligence or wilful default of YEC or the failure of YEC to take reasonable steps in mitigation thereof. Notwithstanding anything to the contrary contained in the preceding sentence, nothing in this Section 16.2(a) will apply to any loss, damage, cost, or expense in respect to which, and to the extent that, YEC is compensated under any insurance, agreement, or through any other means.
- (b) YEC will indemnify and save Minto harmless for any loss of or damage to property, death or injury to person (or any claim against Minto in respect thereof) and all expenses relating thereto (including without limitation reasonable legal fees) suffered or incurred by Minto in connection with this Agreement from any negligence or wilful default of YEC in connection with the performance of its obligations under this Agreement or a breach by YEC of its obligations under this Agreement. The indemnity will not extend to any loss, damage, death, or injury (or any claim in respect thereof) or any expenses relating thereto to the extent that it was caused by the negligence or wilful default of Minto or the failure of Minto to take reasonable steps in mitigation thereof. Notwithstanding anything to the contrary contained in this preceding sentence, nothing in this Section 16.2(b) will apply to any loss, damage, cost or expense in respect of which, and to the extent that, Minto is compensated under any insurance, agreement, or through any other means.

- (c) If such injury or damage results from the joint or concurrent negligent or intentional acts of the Parties each will be liable under this indemnification in proportion to its relative degree of fault.

16.3 Assertion of Claims

Neither Party will be entitled to assert any claim for indemnification until such time as all claims of such Party for indemnification under this Agreement exceed an amount equal to \$10,000, in the aggregate, at which time all claims of such Party for indemnification under this Agreement may be asserted; provided, however, that when such claims have been asserted the same rule will apply in respect of future claims. Notwithstanding the preceding sentence, either Party may assert a claim for indemnification regardless of amount upon the expiry or earlier termination of this Agreement or if such claim would otherwise be barred by the *Limitation of Actions Act*, (R.S.Y., 2002, c.139).

16.4 Defence of Claims

The indemnified Party will have the right, but not the obligation, to contest, defend, and litigate any claim, action, suit, or proceeding by any Person alleged or asserted against such Party in respect of, resulting from, related to, or arising out of any matter for which it is entitled to be indemnified under this Agreement, and the reasonable costs and expenses thereof will be subject to the indemnification obligations of the indemnifying Party under this Agreement provided, however, that if the indemnifying Party acknowledges in writing its obligations to indemnify the indemnified Party in respect of loss to the full extent provided by Section 16.2, the indemnifying Party will be entitled, at its option, to assume and control the defence of such claim action, suit, or proceeding at its expense and through counsel of its choice if it gives prompt notice of its intention to do so to the indemnified Party and, reimburses the indemnified Party for the reasonable costs and expenses incurred by the indemnified Party prior to the assumption by the indemnifying Party of such defence, and provides reasonably adequate security for any judgment for costs that might be imposed on the indemnified Party. The indemnified Party will not be entitled to settle or compromise any such claim action, suit, or proceeding without the prior written consent of the indemnifying Party, which consent will not be unreasonably withheld or delayed. The indemnified Party will have the right to employ its own counsel and such counsel may participate in such action (but the fees and expenses of such counsel will be at the expense of such indemnified Party), provided that:

- (a) the employment of counsel by such indemnified Party has been authorized in writing by the indemnifying Party;
- (b) the indemnified Party will have reasonably concluded that there may be a conflict of interest between the indemnifying Party and the indemnified Party in the conduct of the defence of such action;
- (c) the indemnifying Party will not in fact have employed independent counsel reasonably satisfactory to the indemnified Party to assume the defence of such action and will have been so notified by the indemnified Party; or

- (d) the indemnified Party will have reasonably concluded and specifically notified the indemnifying Party either that there may be specific defences available to it which are different from or additional to those available to the indemnifying Party or that such claim action, suit, or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement.

If Sections 16.4(a), (b), (c), or (d) are applicable, then counsel for the indemnified Party will have the right to direct the defence of such claim, action, suit, or proceeding on behalf of the indemnified Party and the reasonable fees and disbursements of such counsel will constitute legal or other expenses under this Agreement.

PART 17

ASSIGNMENT

17.1 Assignment

Neither Party may assign this Agreement without the prior written consent of the other Party, such consent not to be unreasonably withheld.

17.2 Sale of the Transmission Project

If YEC disposes of all or any interest in the Transmission Project or YEC's other assets required to meet YEC's obligations under this Agreement, YEC will ensure that the obligation to sell Electricity from the Transmission Project or such other assets on the same basis as provided for in this Agreement will continue and be assumed by the purchaser of the Transmission Project for the Term. YEC will require as a condition of the closing of the disposition of the Transmission Project or such other assets, that the purchaser sign an agreement in a form satisfactory to Minto, acting reasonably, which provides that the purchaser agrees to be bound by this Agreement.

17.3 Sale of the Mine

If Minto disposes of all or any interest in the Mine, Minto will ensure that the obligation to purchase Electricity from YEC on the same basis as provided for in this Agreement will continue and be assumed by the purchaser of the Mine for the Term. Minto will require as a condition of the closing of the disposition of the Mine that the purchaser sign an agreement in a form satisfactory to YEC, acting reasonably, which provides that the purchaser agrees to be bound by this Agreement for the Term.

PART 18

CONFIDENTIALITY

18.1 Confidentiality.

Except as required by law, and subject to Section 15.1 and the rights of Macquarie under a tripartite (direct) agreement to be entered into between Macquarie and the Parties, a Party will not disclose to a third person who is not a Party any information, data, or documents, supplied by one Party to the other Parties under this Agreement (collectively, the “**Confidential**

Information”) without the consent of the other Party, such consent not to be unreasonably withheld.

18.2 Exceptions.

Section 18.1 will not:

- (a) extend to information that is already in the public domain or becomes, after having been disclosed to a Party, generally available to the public unless the disclosure was made directly or indirectly by a Party in breach of this Agreement;
- (b) prevent a Party from divulging Confidential Information in confidence to its Affiliates and to its or their officers, directors, employees, agents, or other representatives on a “need-to-know” basis;
- (c) prevent a Party from divulging Confidential Information in confidence to third parties (provided the third party is subject to similar confidentiality restrictions), in order to permit the operation of the Mine or the Transmission Project, as the case may be, in the ordinary course, all on a “need-to-know” basis;
- (d) prevent a Party from divulging Confidential Information to the extent required by applicable legislation or stock exchange requirements;
- (e) prevent a Party from divulging Confidential Information to the extent necessary in connection with any dispute resolution commenced under this Agreement or any litigation commenced in respect of this Agreement;
- (f) prevent a Party from divulging Confidential Information to the extent necessary, in confidence, to any financial institution for the purpose of obtaining financing for such Party or any of its Affiliates;
- (g) prevent a Party from divulging Confidential Information to the extent required by any Governmental Authority having jurisdiction to require the production of such Confidential Information; and
- (h) prevent a Party from divulging Confidential Information to the extent necessary, in confidence, to a prospective purchaser of the Mine or the Transmission Project or YEC’s other assets required to meet YEC’s obligations under this Agreement, as the case may be, on a “need to know” basis.

If any Party is required to disclose Confidential Information under Sections 18.2(d), (e), or (g), such Party will advise the other Party in writing in advance of any such disclosure where reasonable so that the other Party may take such action as they consider necessary to maintain the confidentiality of such Confidential Information, and will take reasonable steps to limit the extent of the disclosure and to make such disclosure confidential under the applicable legislation, stock exchange rules, or rules of any governmental or regulatory authority having jurisdiction, as the case may be.

18.3 Survival

The obligations of confidentiality in Section 18.1 will survive the termination or expiry of this Agreement indefinitely, and any Party who ceases to be a Party will continue to be bound by such obligations following such termination or expiry.

18.4 Injunctive Relief

Each Party acknowledges that all Confidential Information is proprietary to the disclosing Party and that breach of this Agreement by a Party may result in irreparable injury to the other Party. Accordingly, in the event of any breach of Section 18.1 by a Party, the other Party will be entitled to seek and obtain an order of specific performance, restraining order, or injunctive relief, in addition to any other legal or equitable remedies provided under this Agreement.

PART 19 **GENERAL**

19.1 Notices

Except as otherwise provided in this Agreement, any notice, direction, demand, request, or document required or permitted to be given by any Party to any other Party under this Agreement will be in writing and deemed to have been sufficiently given if signed by or on behalf of the Party giving the notice and delivered or transmitted by facsimile or e-mail to the other Party's address, facsimile number, or e-mail address as shown below:

To YEC:

Yukon Energy Corporation
P.O. Box 5920, #2 Miles Canyon Road
Whitehorse, YT Y1A 6S7

Attention: President

Facsimile: 867-393-5323

E-mail: david.morrison@yec.yk.ca

with a copy to:

Davis & Company, LLP
2800 - 666 Burrard Street
Vancouver, BC V6C 2Z7

Attention: John Landry

Facsimile: 604-605-3588

E-mail: john_landry@davis.ca

To Minto:

Minto Explorations Ltd.
860 - 625 Howe Street
Vancouver, BC V6C 2T6

Attention: Stephen P. Quin, CEO

Facsimile: 604-689-5041

E-mail: stephenq@northair.com

with a copy to:

Austring, Fendrick, Fairman & Parkkari
Lawyers
3081 Third Avenue
Whitehorse, Yukon Y1A 4Z7

Attention: Lorne Austring

Facsimile: (867) 668-3710

E-mail: laustring@lawyukon.com

or to such other address, to such other facsimile number or e-mail address or to the attention of such other official or individual as a Party will have most recently notified the other Party of in the manner hereinbefore provided. Any such notice, direction, request, or document will conclusively be deemed to have been received by the intended recipient on the date of delivery or transmission, as the case may be, except that if it is not received at such address or at the facsimile device by 5:00 P.M. on a Business Day (at the place of receipt) it will conclusively be deemed to have been received by the intended recipient on the next Business Day immediately following its receipt at such address or at such facsimile device.

19.2 Coordination of Communications

Each Party agrees to cooperate with the other Parties in order to coordinate all press, news, or other releases to private or public media groups in connection with this Agreement. Each Party will use all reasonable efforts to allow the other Parties to review such releases in advance of release and will comply with all reasonable requests from the other Parties as to the content or manner of publication of such releases.

19.3 Amendment

The only amendments, which may be made to this Agreement are amendments in writing which have been approved by the Parties.

19.4 Governing Law and Language

This Agreement will be governed by and construed under the laws of the Yukon Territory and applicable Canadian law and will be treated in all respects as a Yukon Territory contract.

19.5 Submission to Jurisdiction

Each of the Parties will:

- (a) submit to the jurisdiction of the Yukon Territory courts;
- (b) if not incorporated or registered in the Yukon Territory appoint an agent to receive service of any process in the Yukon Territory; and
- (c) if any appointed agent is required, notify the others of the name and address of its appointed agent.

19.6 Severability

Each provision of this Agreement is intended to be severable and if any provision is illegal or invalid, such illegality or invalidity will not affect the validity of this Agreement or the remaining provisions.

19.7 Entire Agreement

- (a) This Agreement and any other arrangement in writing between any of the Parties, which is entered into substantially contemporaneously with this Agreement constitute the entire agreement between the Parties relating to the subject matter of this Agreement and supersedes all prior negotiations and agreements, whether written, oral, implied or collateral, between the Parties, provided, however, that any confidentiality agreements, or confidentiality provisions contained in any agreements, executed between the Parties in connection with the transactions contemplated in this agreement will continue in full force and effect and will survive any termination of this Agreement.
- (b) No representation or inducement whether made by statement or delivery of data or other information of any kind or nature whatsoever and whether in writing, orally or in any other manner conveyed by any Party to any other Party survives the execution of this Agreement unless expressly made in this Agreement.

19.8 Further Assurances

As and so often as any Party may reasonably require, the Parties agree to execute and deliver further and other documents, assurances and conveyances as may be necessary to properly carry out the intention of this Agreement.

19.9 Successors and Assigns

This Agreement enures to the benefit of and will be binding upon the Parties and their respective permitted successors and permitted assigns.

19.10 Waivers

No provision of this Agreement may be waived except by a written instrument and any waiver of a provision:

- (a) is valid only in respect of the specific instance to which it relates and is not a continuing waiver; and
- (b) is not to be construed as a waiver of any other provision.

19.11 Time

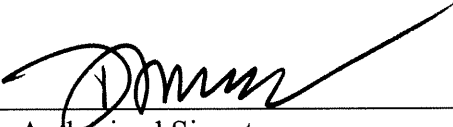
Subject to Part 12, time is of the essence of this Agreement.

19.12 Counterparts

This Agreement may be executed in any number of counterparts with the same effect as if the Parties had signed and delivered the same document. All counterparts will be construed together and will constitute one and the same agreement. This Agreement will be duly executed and delivered if facsimile signature pages are exchanged by the Parties.

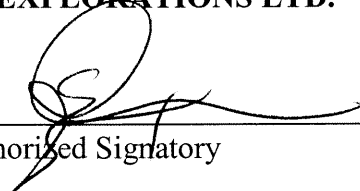
This Agreement is executed in multiple originals effective as of the day and year first written above.

YUKON ENERGY CORPORATION

By: 

Per: Authorized Signatory

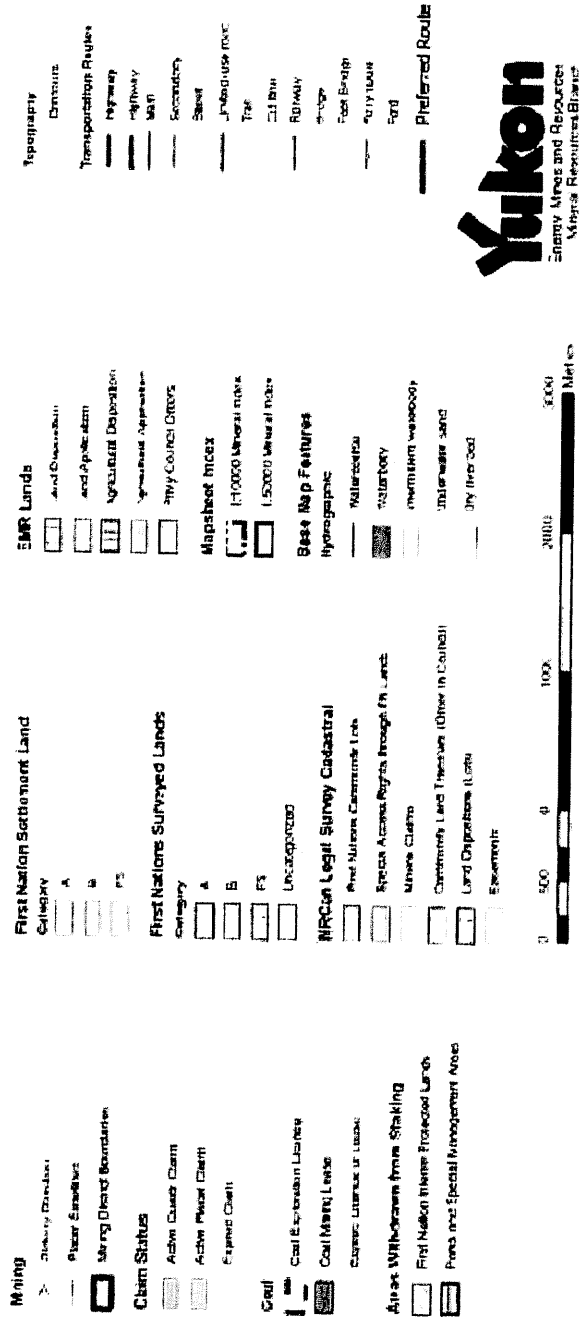
MINTO EXPLORATIONS LTD.

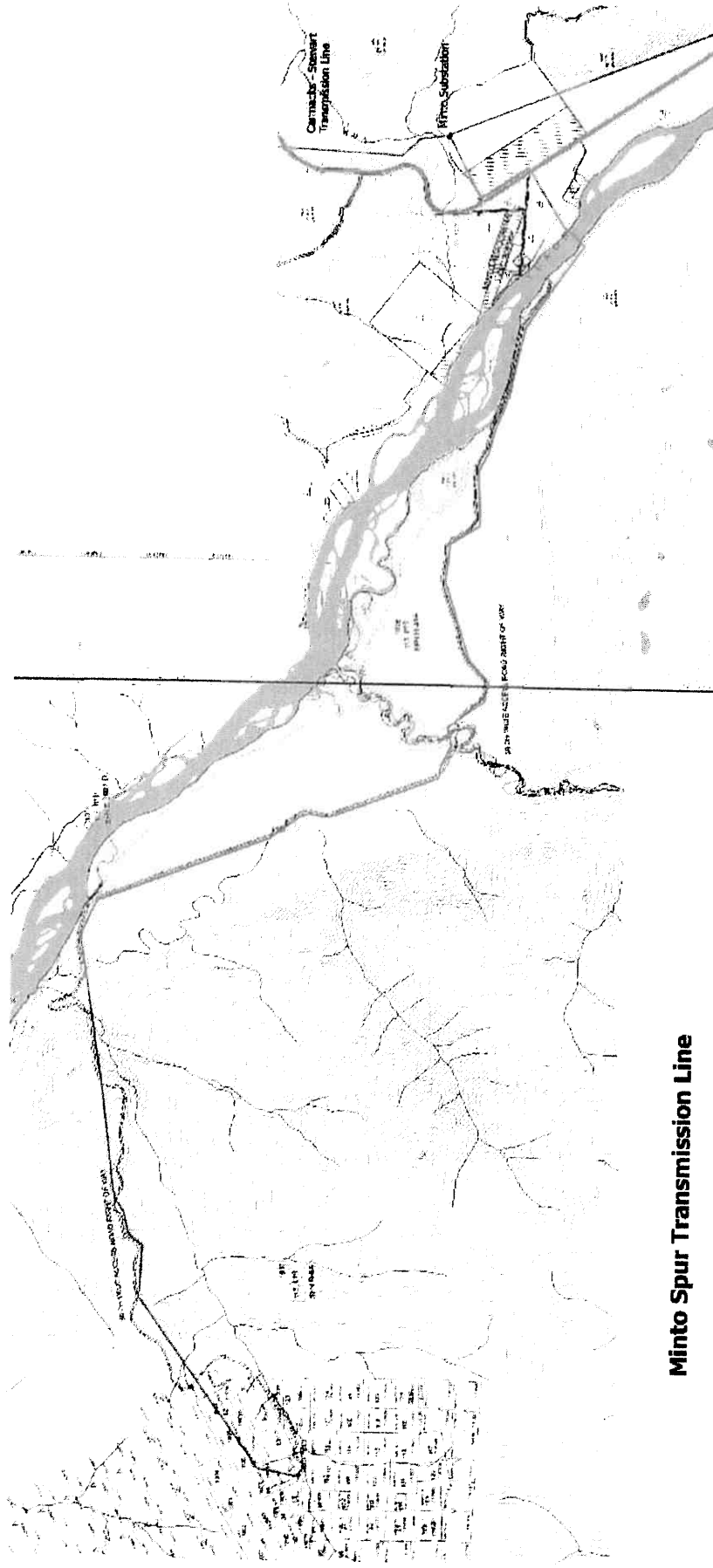
By: 

Per: Authorized Signatory

SCHEDULE A

PLANNED ROUTE FOR MINE SPUR





Minto Spur Transmission Line

Preferred Route

SCHEDULE B

PLANNED ROUTE FOR CARMACKS-MINTO LANDING SEGMENT

Segment 1

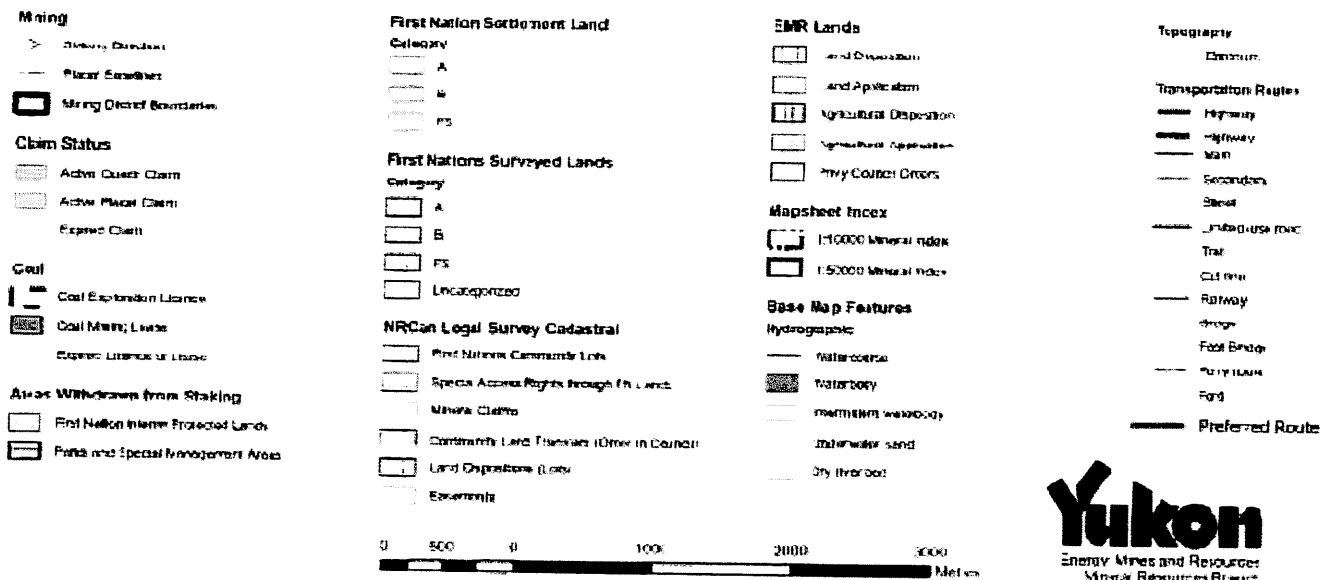
Map 1 Segment 1.1 Carmacks to Tatchun Creek

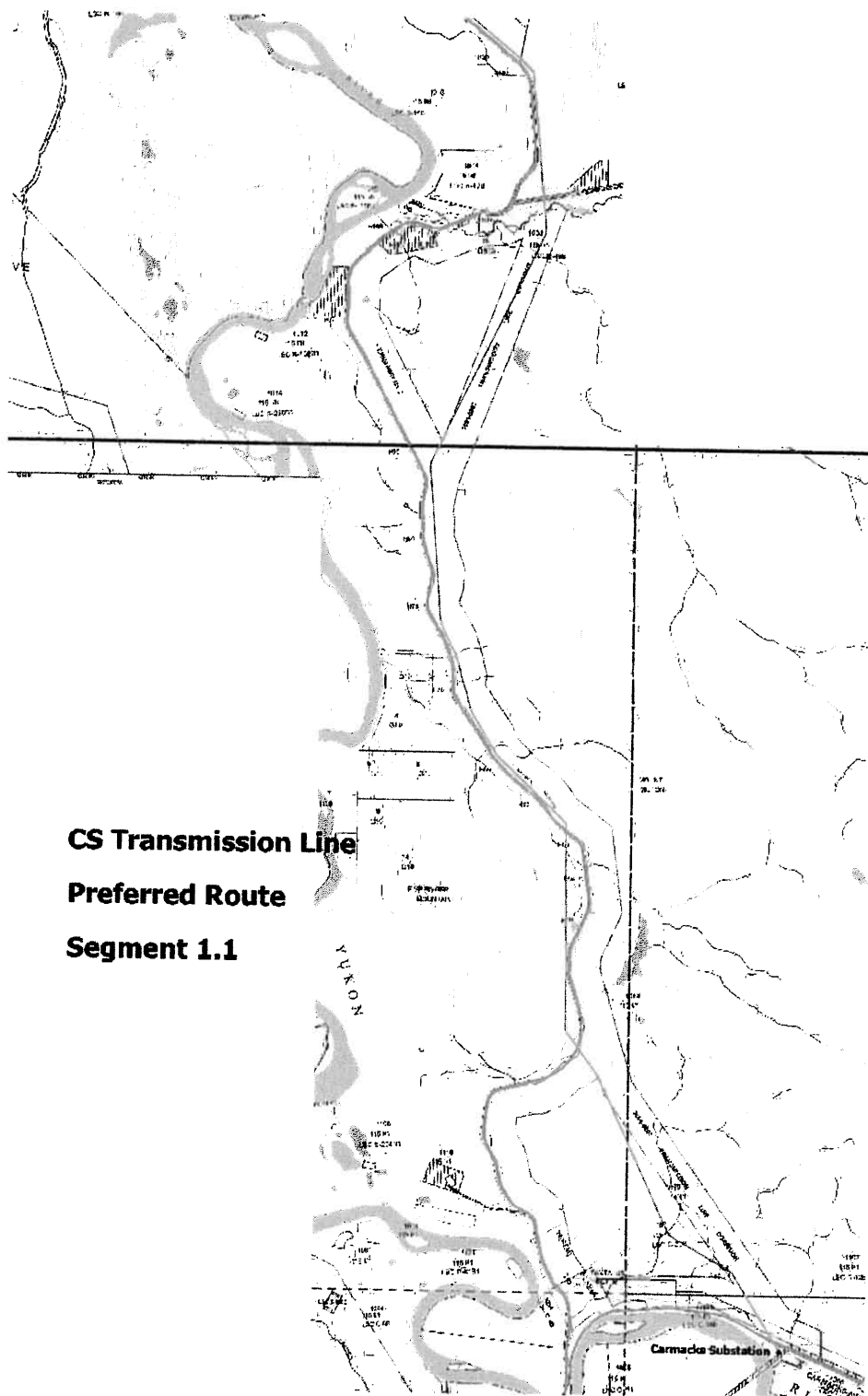
Map 2 Segment 1.2 Tatchun Creek to McGregor Creek

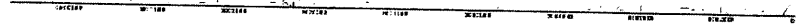
Segment 2

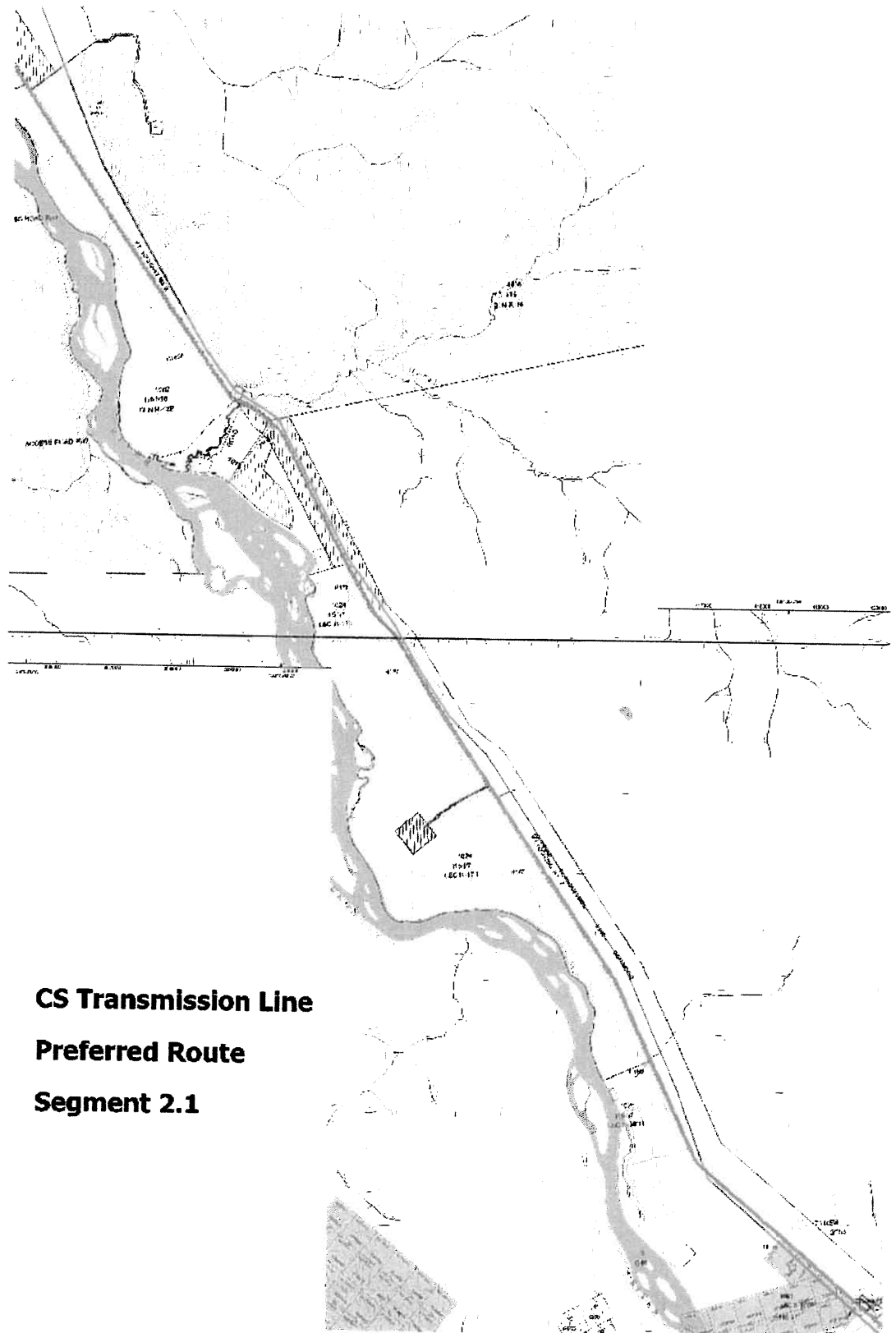
Map 3 Segment 2.1 McGregor Creek to Minto Landing

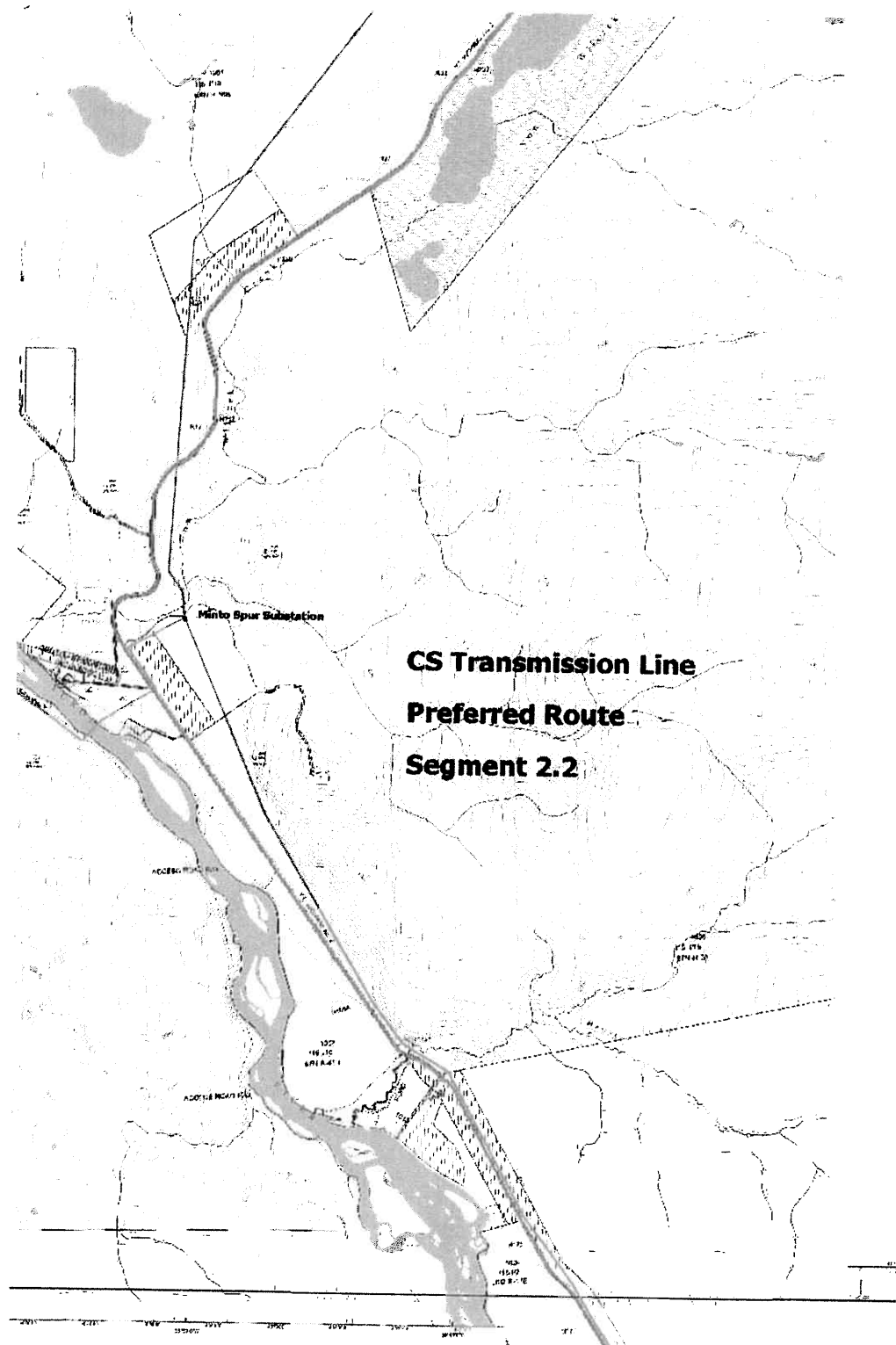
Map 4 Segment 2.2 Minto Landing to Lhutsaw Wetlands











SCHEDULE C

FIRM MINE RATE

RATE SCHEDULE 39

INDUSTRIAL PRIMARY

AVAILABLE:

Throughout the service areas of Yukon Energy Corporation (“YEC”) served by the Whitehorse-Aishihik-Faro and Mayo-Dawson systems.

APPLICABLE:

To all major industrial customers engaged in manufacturing, processing or mining with an electric service capacity in excess of 1,000 kW.

RATE:

Charges in any one billing month shall be the sum of the following:

- (a) Demand Charge of \$15.00/kV.A of Billing Demand
- (b) Energy Charge of 7.60¢/kW.h for all energy used.
- (c) Fixed Charge

For service to Minto mine site, the Fixed Charge each month shall equal the payments then required under the Power Purchase Agreement (the “PPA”) dated February 8, 2007 between YEC and Minto Explorations Ltd. (“Minto”) between YEC and Minto for monthly Capital Cost Contributions for transmission connection to the mine.

**PEAK
SHAVING
CREDIT:**

For customers with an established Winter Contract Load in good standing, a Peak Shaving Credit in each billing month equal to 50% of the Demand Charge times the Peak Shaved Load.

**MINIMUM
MONTHLY
BILL:**

The minimum monthly bill will be the sum of the Demand Charge and the monthly Fixed Charge, less any applicable Peak Shaving Credit.

PEAK

**SHAVED
LOAD:**

Peak Shaved Load in any billing month is the amount by which then nominated Winter Contract Load is less than the Billing Demand for the month.

**BILLING
DEMAND:**

The Billing Demand shall be the greater of:

- (a) the highest metered kV.A demand recorded in the current billing month, or
- (b) the highest metered kV.A demand recorded in the previous 12-month period including the current billing month, excluding the months April through September, or
- (c) the contract minimum demand.

**WINTER
CONTRACT
LOAD:**

A customer may, by six month written notice to YEC, nominate a Winter Contract Load at not less than two-thirds of the customer's contract maximum demand subject to the following conditions:

- a) the customer will thereby contract with YEC not to exceed the nominated Winter Contract Load whenever the temperature at Whitehorse is below -30 degrees Centigrade, based on YEC informing the customer by phone, fax or e-mail as to forecast and actual winter temperatures at Whitehorse as provided for in paragraph (b);
- b) YEC will inform the customer at least one hour in advance, and not more than one day in advance, of a forecast temperature at Whitehorse being below -30 degree Centigrade; thereafter, until YEC informs the customer otherwise, the customer will be responsible for ensuring that its metered kV.A demand does not exceed the Winter Contract Load during any hour when the actual temperature at Whitehorse is below -30 degrees Centigrade; YEC will inform the customer forthwith when the temperature at Whitehorse is no longer forecast to be below -30 degree Centigrade within the next 24 hours;

- c) the customer agrees that the contract for the nominated Winter Contract Load will continue until terminated by written notice of not less than 12 months by the customer to YEC;
- d) if during such contract period for the Winter Contract Load the customer's metered kV.A demand recorded, after YEC has provided notice as specified in paragraph (b), exceeds the Winter Contract Load when the temperature at Whitehorse is less than -30 degrees Centigrade, the Winter Contract Load contract will be terminated forthwith, the customer will forthwith be required to repay to YEC all Peak Shaving Credits determined within the previous 12 billing months, and the customer will also pay for that billing month to YEC as penalty an amount equal to four times the Demand Charge on the metered kV.A demand recorded in excess of the Winter Contract Demand; in addition, YEC reserves the right if so required to meet system loads when the temperature at Whitehorse is less than 30 degrees Centigrade during the then current month and the following 12 months to interrupt electricity supplied to the customer in excess of the previous Winter Contract Load.

BASE

LOAD

ENERGY:

A Base Load Energy amount per month may be established for a customer of 90% of forecast use when YEC expects to require diesel fuel generation to service use in excess of such a Base Load Energy amount. At such time, Rate Schedule 39 will be submitted to the Yukon Utilities Board for amendment to adjust the Energy rate as required for a two part rate that yields the same overall energy charge at forecast energy use, with all energy consumed in excess of the Base Load being charged at a rate reflecting the incremental cost of service using diesel fuel generation and all other energy being charged at the reduced rate required to yield the same overall energy charge at forecast energy use.

RATE

MODIFICATIONS

APPLICABLE:

No rate riders are applicable.

**ELECTRIC
SERVICE**

REGULATIONS:

The Electric Service Regulations approved by the Yukon Utilities Board form part of this rate schedule and apply to YEC and every customer supplied with electric service by YEC in the Yukon Territory. Copies of the Electric Service Regulations are available for inspection in the offices of YEC during normal working hours.

SCHEDULE D

RATE SCHEDULE - 35

LOW GRADE ORE PROCESSING SECONDARY ENERGY

AVAILABLE:

Secondary Energy is available from time to time to Industrial customers supplied with Industrial Primary service under Rate Schedule 39 in parts of the Whitehorse-Aishihik-Faro and Mayo-Dawson systems as determined by Yukon Energy Corporation (“YEC”) based on the availability of surplus hydro as well as transmission capacity. YEC will notify participating customers on at least a seasonal basis, and more frequently as required, as to the expected availability (if any) of such secondary energy, and the customer and YEC shall agree in writing from time to time as to the maximum Secondary Energy available to the customer under this rate schedule.

YEC has discretion to end subscription to the program (and limit quantities delivered) on either of its systems when the supply of surplus energy on that system becomes fully contracted under Rate Schedule 32 and this rate schedule. The specific subscription limit will be dependent on the types of loads that enroll in future, their seasonality and load diversity.

APPLICABLE:

Secondary Energy is applicable under this rate schedule only to Industrial Primary customers applying in writing to YEC for specific levels of such service and satisfying all of the following conditions:

- (1) The Secondary Energy provided under this rate schedule is to be used only at a mine site engaged primarily in copper production for processing ore with less than 1% copper content (“**Low Grade Ore**”); the customer will provide YEC with auditable reporting and controls as reasonably required by YEC to confirm that all Secondary Energy so provided has been used only to process Low Grade Ore; any such energy use that is not so confirmed will be charged at the Industrial Primary rate (Rate Schedule 39 Demand Charge, Energy Charge and Fixed Charge).
- (2) In addition to the conditions under paragraph (1) above, the Secondary Energy use recorded under this rate schedule will be as follows:

- a) if Secondary Energy service under this rate schedule is separately metered at the mine site with meters not otherwise used to record Industrial Primary Service under Rate Schedule 39, energy as recorded by such separate meters; or
 - b) if Secondary Energy service under this rate schedule is not separately metered under (a) and the customer and YEC so agree in advance, the Secondary Energy under this rate schedule shall be all energy associated with the kV.A demand taken by the customer in excess of the customer's contract maximum kV.A demand and energy under Industrial Primary Service; or
 - c) if neither paragraphs (a) or (b) apply, the customer will be required to provide such further reporting as is reasonably required by YEC to determine which portion of the customer's recorded Demand and Energy in any billing month relates to such Secondary Energy use under this rate schedule rather than firm energy at the Industrial Primary rate; any such Billing Demand and Energy that is not so confirmed will be charged at the Industrial Primary rate (Rate Schedule 39).
- (3) Service provided under this rate schedule will only be surplus energy remaining after supplying customers served by Rate Schedule 32 Secondary Energy service.
 - (4) Participating customers will be eligible in any time period to use Secondary Sales under this rate schedule only up to the energy levels agreed to in advance in writing with YEC; during peak winter months such levels may be required to be arranged on a weekly or daily basis.

RATE:

The Low Grade Ore Processing Secondary Energy Charge for each customer will be the standard rate as follows: Energy rate: 6.0 cents per kW.h.

INTERRUPTIONS:

Notwithstanding all other provisions, YEC will be able at any time to require a participating customer to stop using Secondary Energy

under this rate schedule on notice not exceeding 24 hours in the event that conditions so require because surplus hydro-electric energy is not, or will not be, available as previously forecast.

INSTALLATION COST: The customer is responsible for any cost of installing any separate service, metering and any load control apparatus that is in excess of the relevant Utility Investment provision in the ESRs. The customer is also responsible for any costs of upgrading or advancing system capacity improvements necessitated by their Secondary Energy load.

**ELECTRIC
SERVICE
REGULATIONS:**

The Electric Service Regulations approved by the Yukon Utilities Board form part of this rate schedule and apply to YEC and every customer supplied with electric service by YEC in the Yukon Territory. Copies of the Electric Service Regulations are available for inspection in the offices of YEC during normal working hours.

SCHEDULE E

Costs of Service Principles and Methods Utilized to Determine the 2008 Firm Mine Rate Set Out in Schedule C

A. General Cost of Service Principles and Methods Utilized to Determine the 2008 Firm Mine Rate

- 1. Industrial rates must recover costs of service with Yukon treated as one rate zone¹**
 - The rates charged to Major Industrial Customers, whether pursuant to contracts or otherwise, must be sufficient to recover the cost of service to that customer class.
 - When assessing cost of service for the Major Industrial Customer class, the entire Yukon must be treated as one rate zone and costs must be pooled for the two utilities (YEC and YECL (Yukon Electrical)) in order to develop a rate that is equal for both utilities.
- 2. Cost of service estimates will be prepared based on consolidated forecasts²**
 - Cost of service estimates are to be prepared based on the consolidated forecasts of YEC and YECL revenue requirements, net of inter-company sales and non-rate revenues.
- 3. Cost of service will not consider vintage of a customer³**
 - The vintage of a customer (i.e., the status of old versus new customer) is not relevant in determining cost of service for any customer class, including the Major Industrial Customer Class.
- 4. Cost of service estimates for each customer class are to be based on consolidated forecasts using the following three stage methodology: functionalize costs, classify costs and allocate costs⁴**
 - **Functionalize costs:** In accordance with normal utility practice and methods, consolidated costs are first assigned to three separate utility functions (generation, transmission and distribution), with the following specific assignments to reflect 2008 cost conditions:
 - Secondary energy sales treated as an offset to generation costs (YEC secondary sales revenues) and distribution (YECL secondary sales revenues);

¹ These principles reflect Section 6(1) of Order-in-Council 1995/90. The definition of Major Industrial Customer is as provided for in the Agreement.

² Reflects practice in last GRA reviewed by the YUB for YEC and YECL (1996/97 GRA).

³ Board Order 1996-7.

⁴ Principles applicable when the Faro mine was operating were adopted in YEC/YECL 1996/97 GRA cost of service filings and approved in YUB Order 1996-7; in many instances, these confirm YUB recommendations in its June 1, 1992 report to the Commissioner in Executive Council following a hearing on cost of service and rate design review pursuant to Order-in-Council 1991/62.

- Flexible Term Note (FTN) added costs due to adding Minto Mine loads on Whitehorse-Aishihik-Faro grid assigned to generation costs.
- **Classify costs:** Functionalized costs are then assigned to energy, demand and customer cost classifications in accordance with normal utility practice and the following specific assignments adopted in Yukon:
 1. classifying the cost of existing hydro generation plant (other than Whitehorse Unit #4) 40% to demand and 60% to energy;
 2. classifying the costs of the Whitehorse hydro Unit # 4 100% to energy;
 3. classifying the cost of diesel plant 100% to demand;
 4. classifying the Mayo-Dawson Transmission costs, the CS Project costs, and the Whitehorse to Faro Transmission line costs 100% to energy⁵; and
 5. classifying all remaining transmission costs on the basis of demand at the time of the system peak; aside from Capital Cost Contributions provided for in the PPA, no transmission costs are specifically assigned to any Major Industrial Customer.⁶
- **Allocate costs:** Classified costs are then allocated to each customer class using forecast customer class loads based on consolidated Yukon energy generation, coincident peak winter demands at generation, number of customers, and certain other factors or combinations of factors that are in the YEC/YECL cost of service filings in 1992 (one example of which is marketing expense to be allocated 15% on basis of number of customers and 85% on the basis of energy).

B. Specific Cost of Service Principles and Methods Utilized to Determine the 2008 Firm Mine Rate

1. **Cost of service estimates for 2008 were based on full annual forecast levels of power use by the Minto Mine**
 - To estimate 2008 cost of service for full annualized forecast level of power to be used by the Minto Mine, the Transmission Project was assumed to be in service for the full year, Mine Firm Electricity was forecast at 32.5 GW.h with 4.4 MVA Maximum Electric Demand, and no other Major Industrial Customer loads were forecast to be connected in Yukon.

⁵ CS Project capital costs for this purpose are net of the Minto Capital Cost Contribution as well as any other capital cost contributions.

⁶ When the Faro mine was operating, the COS specifically assigned to the Faro mine 85% of costs for the Whitehorse to Faro transmission line, (with all remaining transmission costs allocated on the basis of demand at the time of system peak). Today, when the Faro mine is permanently shut down, no such specific assignment is made of the costs for the Whitehorse to Faro transmission line. The Minto Mine Spur costs are to be fully charged to the Minto Mine (as a customer contribution).

2. The most recent YEC and YECL information was utilized

- Non-industrial sales, costs, revenues and revenue requirements for YEC and YECL in 2008 are based on the most recent relevant filings with the YUB, and include the following:
 - i. full Rider F costs and the secondary sales rate variance as last forecast by YEC/YECL in YUB filings
 - ii. 2008 consolidated costs based on these most recent forecasts, with escalation, as required, to provide 2008 estimates net of inter-company sales and non-rate revenues.

3. New bulk power asset costs were provided for in the 2008 consolidated revenue requirement forecasts

- The 2008 consolidated revenue requirement forecasts include provision for:
 - i. \$5 million of Mirrlees Life Extension assets;
 - ii. Diesel Units at the Mine, sold to YEC at \$2.24 million;
 - iii. CS Project Stage One assets (Carmacks to Pelly Crossing), net of capital cost contributions forecast from Minto, Yukon Development Corporation and the Yukon Government.

4. Other relevant cost changes were provided for in the 2008 consolidated revenue requirement forecasts

- The 2008 consolidated revenue requirement forecasts include provision for:
 - i. FTN added costs due to adding Minto and Pelly Crossing loads to the Whitehorse-Aishihik-Faro grid;
 - ii. Allowance for incremental peaking diesel generation costs related to added Minto mine and Pelly Crossing loads to the Whitehorse-Aishihik-Faro grid;
 - iii. Allowance for savings in Yukon fuel costs at Pelly Crossing due to CS Project connection.

5. Only “Accounting and Marketing” distribution costs were classified and assigned to the Industrial cost of service.⁷

6. The cost of service for 2008 excludes any consideration of the Mine Net Revenue Account.

⁷ In 1997, distribution costs were less than 1% of all COS assigned to the Major Industrial class with the Faro mine assumed to be operating with 180 GW.h of energy use, and Marketing and Administration costs represented about 88% of the distribution costs so assigned to this class.

GENERAL SECURITY AGREEMENT

THIS AGREEMENT is between:

MINTO EXPLORATIONS LTD., a British Columbia company
having an office at 860 - 625 Howe Street Vancouver, British
Columbia, V6C 2T6

(“Debtor”)

AND

YUKON ENERGY CORPORATION, a Yukon Territory
corporation, having an office at P.O. Box 5920, #2 Miles Canyon
Road Whitehorse, YT Y1A 6S7

(“Secured Party”)

PART 1

SECURITY INTERESTS

1.1 Security Interests. For valuable consideration and as security for the payment and performance of the Obligations (as later defined) the Debtor hereby:

- (a) mortgages and charges to the Secured Party, and grants to the Secured Party a security interest in, and the Secured Party hereby takes a security interest in, all of the Debtor’s right, title and interest in and to all of the Debtor’s present and after-acquired personal property and all proceeds thereof (except the property of the Debtor described in paragraph 1.3) of whatsoever nature and kind and wherever situate including, without limiting the generality of the foregoing, all of the Debtor’s right, title and interest in and to all of the Debtor’s present and after-acquired:
 - (i) **Accounts.** Debts, accounts, claims, monies and choses in action due or owing to or owned by the Debtor, and all books, records, documents, papers and electronically recorded data recording, evidencing, securing or otherwise relating to such debts, accounts, claims, monies and choses in action or any part or parts thereof (collectively “Accounts”);
 - (ii) **Equipment.** Goods and equipment, including all machinery, fixtures, plants, tools, furniture, vehicles of any kind or description, all spare parts, accessions and accessories located at or installed in or affixed or attached

to any of the foregoing, and all drawings, specifications, plans and manuals relating thereto and any other goods that are not Inventory (collectively "Equipment");

- (iii) **Inventory.** Inventory of whatever kind, including all raw materials, materials used or consumed in the business or profession of the Debtor, goods, work in progress, finished goods, returned goods, repossessed goods, goods used for packing, all packaging materials, supplies and containers, materials used in the business of the Debtor whether or not intended for sale and goods acquired or held for sale, lease or resale or furnished or to be furnished under contracts of rental or service (collectively "Inventory");
 - (iv) **Other Tangible Personal Property.** Chattel paper, documents of title, instruments, money, securities and other goods that are not Accounts, Equipment or Inventory;
 - (v) **Intangibles.** Intangibles and intangible property (except for Accounts) including, without limitation, all contractual rights, licenses, goodwill, patents, trademarks, tradenames, copyrights, other industrial designs and other industrial or intellectual property and undertaking of the Debtor and all other choses in action of the Debtor of every kind which now are, or which may at any time hereafter be, due or owing to or owned by the Debtor and all other intangible property of the Debtor which is not Accounts, goods, chattel paper, documents of title, instruments, money or securities;
- (b) grants, assigns, mortgages and charges, to and in favour of the Secured Party, as and by way of a fixed and specific charge, each of the following:
- (i) all of its Mineral Rights (as hereinafter defined), both present and future, of every nature and kind and wherever situate, including those set forth in Schedule 3; and
 - (ii) the mine known as the Minto copper-gold-silver project in the Yukon Territory (the "Project"), including the real property rights comprised therein and together with all buildings and improvements now or hereafter situate thereon and fixtures forming a part thereof;

except such of the forgoing as are validly subject to the fixed and specific mortgages, charges and security interests granted pursuant to paragraph 1.1(a); and

- (c) grants, mortgages and charges, to and in favour of the Secured Party, as and by way of a floating charge, all of its currently owned and held or hereafter acquired property, assets and undertakings, real and personal, of every nature and kind and

wherever situate, except such of its property, assets, undertakings and interests as are validly subject to the fixed and specific mortgages, charges and security interests granted pursuant to paragraphs 1.1(a) and (b);

Mineral Rights means:

- (i) the mineral rights, claims, mineral claims and tenements comprising the Project as of the date hereof, including those set forth in schedule 3;
- (ii) any other mineral rights, claims, mineral claims and tenements from time to time comprising the Project;
- (iii) any leases, permits, easements, licences, claims, subleases, rights of way or other rights to carry out or conduct mining operations connected with the mineral rights, claims, mineral claims and tenements referred to in paragraphs (i) or (ii) issued or transferred to or held by or on behalf of the Debtor or in which the Debtor has or acquires any interest or shares therein;

and includes:

- (i) any applications for, or mineral rights, claims, mineral claims and tenements issued in place of, those referred to above; and
- (ii) the mineral rights, claims, mineral claims and tenements referred to above as renewed, extended, modified or varied from time to time;

and for the purposes of this security agreement the terms “**mine**”, “**claim**” and “**mineral claim**” shall have the meanings set forth in the *Quartz Mining Act* (Yukon) or the *Placer Mining Act* (Yukon), as applicable.

1.2 Collateral. The term “Collateral” means collectively all of the Debtor’s right, title and interest in and to all of the Debtor’s present and after-acquired property (real and personal), assets and undertakings, and all proceeds thereof (except the property of the Debtor described in paragraph 1.3) of whatsoever nature and kind and wherever situate including without limiting the generality of the foregoing all of the property described in paragraphs 1.1(a), 1.1(c) and 1.1(c).

1.3 Exclusions. The mortgages, charges and security interests granted in this Security Agreement do not apply or extend to:

- (a) the last day of any term created by any lease or agreement therefor now held or hereafter acquired by the Debtor, but the Debtor will stand possessed of the reversion thereby remaining in the Debtor of any leasehold premises upon trust for the Secured Party to assign and dispose thereof as the Secured Party or any purchaser of such leasehold premises directs;

- (b) any lease or other agreement which contains a provision which provides in effect that such lease or agreement may not be assigned, subleased, charged or encumbered without the leave, licence, consent or approval of the lessor or other party until such leave, licence, consent or approval is obtained, and the security interest created hereby will attach and extend to such lease or agreement as soon as such leave, licence, consent or approval is obtained;
- (c) any consumer goods of the Debtor.

1.4 Intellectual Property. Nothing in paragraph 1.1 shall be construed as constituting an absolute transfer or assignment of any present or future intellectual property or rights and interests therein, but that paragraph shall still be construed as granting to the Secured Party a security interest in and a charge on all of the Debtor's present and after-acquired intellectual property and rights and interests in intellectual property.

1.5 Attachment. The Debtor and the Secured Party do not intend to postpone the attachment of the security interests hereby created, except as provided in paragraph 1.3(b), and except as provided therein the security interests hereby created will attach when:

- (a) this Security Agreement has been executed, or in the case of after-acquired property, such property has been acquired by the Debtor;
- (b) value has been given; and
- (c) the Debtor has rights in the Collateral, or in the case of after-acquired property, acquires rights in the Collateral.

1.6 Notification. If this Security Agreement grants a security interest in Accounts, before or after an Event of Default (as later defined) has occurred, the Secured Party may notify any debtor of the Debtor on an intangible, chattel paper, or account, or any obligor on an instrument ("Account Debtor") of the security interest created hereby, and after an Event of Default the Secured Party may notify any Account Debtor to make all payments on Collateral to the Secured Party. The Debtor acknowledges that the proceeds of all sales, or any payments on or other proceeds of the Collateral, including but not limited to payments on, or other proceeds of, the Collateral received by the Debtor from any Account Debtor, whether before or after notification to such Account Debtor and whether before or after default under this Security Agreement, will be received and held by the Debtor in trust for the Secured Party and will be turned over to the Secured Party upon request, and the Debtor will not commingle any proceeds of or payments on the Collateral with any of the Debtor's funds or property, but will hold them separate and apart.

1.7 Floating Charge Not a Fixed Charge. The floating charge on real property created hereby is a floating charge within the meaning of section 203 of the *Land Title Act* (British Columbia) and does not become a fixed charge on specific land until the occurrence of an Event of Default (as later defined) under paragraph 6.1 below. The floating charge on real property in the Yukon Territory created hereby does not become a fixed charge on specific land until the occurrence of an Event of Default (as later defined) under paragraph 6.1 below.

PART 2

OBLIGATIONS SECURED

2.1 Power Purchase Agreement. The Secured Party and the Debtor are parties to a power purchase agreement dated >, 2007 (the "PPA") with respect, inter alia, to the construction of a transmission facility by the Secured Party in order to deliver electricity to the Debtor in order for the Debtor to operate the Project.

2.2 Obligations. This Security Agreement and the security interests hereby created will be continuing security for the payment of:

- (i) the Capital Cost Contribution plus accrued interest under section 5.2 of the PPA;
- (ii) the Minto Power Bills under section 6.1 of the PPA;
- (iii) the minimum take-or-pay obligations under sections 6.2 of the PPA;
- (iv) the obligations under section 10.3 of the PPA; and
- (v) the obligations under sections 11.2 (b) and 11.3 of the PPA;

all pursuant to and as defined in the PPA (collectively, the "Obligations").

PART 3

REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties. The Debtor represents and warrants to the Secured Party the following:

- (a) **Corporate Requirements.** If the Debtor is a corporation:
 - (i) it is duly incorporated and it is in good standing under the laws of the Province of British Columbia;
 - (ii) it has the power and authority to carry on the business now being carried on by it and has the full power and authority to execute and deliver this Security Agreement;
 - (iii) all necessary and requisite corporate proceedings, resolutions and authorizations have been taken, passed, done and given by it and by its directors to authorize, permit and enable it to execute and deliver this Security Agreement; and

- (iv) the entering into this Security Agreement is not in contravention of any statute, the organizational or constating documents of the Debtor or any agreement or other document to which the Debtor is a party, subject to the Debtor obtaining the consent in writing pursuant to the Debtor's Current Bank Financing as that term is defined in the PPA;
- (b) **No Actions.** There are no actions or proceedings pending or, to the knowledge of the Debtor, threatened which challenge the validity of this Security Agreement or which might result in a material adverse change in the financial condition of the Debtor or which would materially adversely affect the ability of the Debtor to perform its obligations under this Security Agreement or any document evidencing any indebtedness of the Debtor to the Secured Party;
- (c) **Owns Collateral.** The Debtor owns, possesses and has good title to all currently held Collateral, free from all security interests, mortgages, charges, encumbrances, liens and claims, except only those, if any, shown in Schedule 1;
- (d) **Right and Authority.** The Debtor has the right and authority to create the security interests created in this Security Agreement;
- (e) **Location of Collateral.** The only locations of Collateral (other than Inventory in transit) and the only places the Debtor carries on business are described in Schedule 2;
- (f) **Financial Information.** All financial information and financial statements supplied to the Secured Party by or for the Debtor:
 - (i) are not untrue in any material respect;
 - (ii) have revealed all material facts the omission of which would make such information or statements misleading;
 - (iii) disclose all facts which materially adversely affect, or so far as the Debtor can reasonably foresee will materially adversely affect, the Debtor's financial condition, the Collateral or the Debtor's ability to perform its obligations hereunder; and
 - (iv) in the case of financial statements, have been prepared in accordance with generally accepted accounting principles.

3.2 **Reliance and Survival.** All representations and warranties of the Debtor made in this Security Agreement or in any certificate or other document delivered by or on behalf of the Debtor for the benefit of the Secured Party are material, will survive the execution and delivery of this Security Agreement and will continue in full force and effect without time limit. The Secured Party will be considered to have relied upon each such representation and warranty in spite of any investigation made by or on behalf of the Secured Party at any time.

PART 4

POSITIVE COVENANTS

4.1 **Positive Covenants.** The Debtor covenants with the Secured Party the following:

- (a) **Defend Collateral.** It will defend the Collateral against all claims and demands of all persons claiming the Collateral or an interest therein at any time;
- (b) **PPA.** It will perform and observe all of its obligations and covenants contained in the PPA;
- (c) **Provide Information.** Upon the demand by the Secured Party it will furnish in writing to the Secured Party all information requested concerning the Collateral, and it will promptly advise the Secured Party of the serial number, year, make and model of each serial numbered good at any time included in the Collateral, provided that all information furnished by the Debtor will be subject to the confidentiality provisions contained in the PPA;
- (d) **Insurance.** It will insure and keep insured to their full insurable value with a company or companies selected by the Debtor and approved in writing by the Secured Party all the Collateral against such perils as may be prudent having regard to the nature of the Collateral and the business of the Debtor (including an extended coverage insurance clause), and whenever and to the extent required in writing by the Secured Party, the Debtor will:
 - (i) cause to be endorsed in such form as may be required by the Secured Party on the policies evidencing such insurance a notation that any amounts payable under such policies will be paid to the Secured Party as its interest may appear; and
 - (ii) deposit with the Secured Party every policy and renewal certificate for such insurance or a certified copy thereof;
- (e) **Repair.** It will keep the Collateral in good condition and repair according to the nature and description thereof respectively and if the Debtor neglects to keep the Collateral or any part thereof in good condition and repair then the Secured Party may (but will not be required to) from time to time, without any notice to the Debtor in situations considered by the Secured Party to be emergency situations and otherwise upon not less than 15 days' notice, make such repairs as it in its sole discretion considers necessary;
- (f) **Other Indebtedness.** It will pay and discharge as they become due all payments due and owing under or concerning any other indebtedness created or security given by the Debtor to any person or corporation and will observe, perform and carry out all the terms, covenants, provisions and agreements relating thereto, and any default in payment of any monies due and payable under or relating to any

previous indebtedness or security or in the observance, performance or carrying out of any of the terms, covenants, provisions and agreements relating thereto will be considered to be a default hereunder at the option of the Secured Party and any and all remedies available to the Secured Party hereunder by reason of any default hereunder or by law or otherwise will be immediately available to the Secured Party upon any default of the Debtor under the other indebtedness created or security given by the Debtor;

- (g) **Right of Inspection.** The Secured Party will have the right whenever it considers reasonably necessary either by its officers or authorized agents to enter upon the Debtor's premises and to inspect the Collateral, all books of account and records of the Debtor and copies of all returns made from time to time by the Debtor to boards, agencies or governmental departments and to make extracts therefrom, and generally to conduct such examinations as it may see fit, and without limiting the generality of the foregoing the Secured Party may request information from the solicitor, auditor and other advisors and agents of the Debtor for the time being concerning the affairs and the conduct of business of the Debtor, and the Debtor hereby irrevocably authorizes and directs, and this will constitute the sufficient authority and direction to, any such solicitor, auditor or other person to disclose to the Secured Party such information as to any and all matters relating to the affairs and conduct of the business of the Debtor whether of a confidential nature or otherwise and any costs, expenses and outlays which the Secured Party may incur pursuant hereto will be payable immediately by the Debtor to the Secured Party, will bear interest at the highest rate borne by any of the other Obligations and will, together with such interest, form part of the Obligations secured by this Security Agreement;
- (h) **Costs of Enforcement.** It will pay all costs, charges and expenses of and incidental to in taking, recovering, keeping possession of or inspecting the Collateral and generally in any other proceedings taken in enforcing the remedies in this Security Agreement or otherwise in connection with this Security Agreement or by reason of non-payment or procuring payment of the monies hereby secured;
- (i) **Costs Caused by Default.** If the Debtor defaults in any covenant to be performed by it hereunder, the Secured Party may, but is not required to, perform any covenant of the Debtor capable of being performed by the Secured Party, and if the Secured Party is put to any costs, charges, expenses or outlays to perform any such covenant, the Debtor will indemnify the Secured Party for such costs, charges, expenses or outlays and such costs, charges, expenses or outlays (including solicitors' fees and charges incurred by the Secured Party on an "own client" basis) will be payable immediately by the Debtor to the Secured Party, will bear interest at the highest rate borne by any of the other Obligations and will, together with such interest, form part of the Obligations secured by this Security Agreement;

- (j) **Court Costs.** In any judicial proceedings taken to cancel this Security Agreement or to enforce this Security Agreement and the covenants of the Debtor hereunder the Secured Party will be entitled to special costs. Any costs so recovered will be credited against any solicitors' fees and charges paid or incurred by the Secured Party relating to the matters in respect of which the costs were awarded and which have been added to the monies secured hereunder pursuant to the foregoing clause;
- (k) **Notice of Litigation.** It will give written notice to the Secured Party of all litigation or other claims before any court, administrative board or other tribunal affecting the Debtor or the Collateral or any part thereof;
- (l) **Corporate Existence etc.** It will at all times maintain its corporate existence; that it will carry on and conduct its business in a proper, efficient and businesslike manner and in accordance with good business practice; and that it will keep or cause to be kept proper books of account in accordance with sound accounting practice;
- (m) **Taxes.** It will pay all taxes, rates, levies, charges, assessments, statute labour or other imposition whatsoever now or hereafter rated, charged, assessed, levied or imposed by any lawful authority or otherwise howsoever on it, on the Collateral or on the Secured Party in respect of the Collateral or any part or parts thereof, or any other matter or thing in connection with this Security Agreement, except when and so long as the validity of such taxes, rates, levies, charges, assessments, statute labour or other imposition is in good faith contested by it, and will, if and when required in writing by the Secured Party, furnish for inspection the receipts for any such payments;
- (n) **Payments.** It will promptly pay or remit all amounts which if left unpaid or unremitted might give rise to a lien or charge on any of the Collateral ranking or purporting to rank in priority to any security interest created by this Security Agreement;
- (o) **Further Assurances.** It will do, execute, acknowledge and deliver or cause to be done, executed, acknowledged or delivered, such further acts, deeds, mortgages, transfers and assurances as the Secured Party may reasonably require for the better assuring, charging, assigning and conferring unto the Secured Party the Collateral and the security interests intended to be created hereunder, for the purpose of accomplishing and effecting the intention of this Security Agreement;
- (p) **Purchase Monies.** If the Secured Party advances money to the Debtor for the purpose of enabling the Debtor to purchase or acquire rights in any Collateral the Debtor will use such money only for that purpose and will promptly provide the Secured Party with evidence that such money was so applied;

- (q) **Securities.** If the Collateral at any time includes a security the Debtor will, if required by the Secured Party, deliver any certificate evidencing the security to the Secured Party and transfer the security into the name of the Secured Party or the Secured Party's nominee, and until an Event of Default the Secured Party will provide the Debtor with all notices and other communications received by it or its nominee as registered owner of such security and will appoint, or cause its nominee to appoint, the Debtor as proxy to vote concerning the security.

PART 5

NEGATIVE COVENANTS

5.1 Negative Covenants. The Debtor covenants and agrees with the Secured Party that it will not, without the prior written consent of the Secured Party:

- (a) **Change Name.** Change its name;
- (b) **Amalgamate.** Amalgamate or otherwise merge its business with the business of any other person;
- (c) **Continue.** Continue from the jurisdiction which presently exercises primary corporate governance over the affairs of the Debtor;
- (d) **Permit Charges.** Permit the Collateral or any part or parts thereof to become subject to any mortgage, charge, lien, encumbrance or security interest, whether made, given or created by the Debtor or otherwise except for mortgages, charges, liens, encumbrances and security interests which secure the whole or any part of the purchase price of such Collateral and as permitted by Schedule 1;
- (e) **Sell Collateral.** Except as permitted in paragraph 5.2 sell, lease or otherwise dispose of the Collateral or any part or parts thereof (and in the event of any sale, lease or other disposition permitted or consented to it will pay the proceeds to the Secured Party);
- (f) **Abandon Collateral.** Release, surrender or abandon the Collateral or any part or parts thereof;
- (g) **Move Collateral.** Move the Collateral or any part or parts thereof from its present location or locations (and will promptly advise the Secured Party of the new location or locations);
- (h) **Accessions.** Permit any of the Collateral to become an accession to any property other than other Collateral.

5.2 Sale of Inventory. If this Security Agreement grants a security interest in Inventory, until an Event of Default has occurred and the Secured Party has determined to enforce the

security interests hereby created, the Debtor may only sell Inventory in the ordinary course of business and provided that all sales will be on commercially reasonable terms.

PART 6

DEFAULT AND ENFORCEMENT

6.1 Events of Default. The happening of any one or more of the following events or conditions will constitute an event of default under this Security Agreement (“Event of Default”):

- (a) **Default.** If the Debtor defaults in payment or performance of the Obligations or in the observance or performance of something required to be done or some covenant or condition required to be observed or performed in this Security Agreement or in the PPA or any other agreement or instrument between the Debtor and the Secured Party;
- (b) **Misrepresentation.** If any representation or warranty of the Debtor contained in this Security Agreement is untrue in any material respect unless the default is of a nature that can be cured and it is cured within 30 days, or such reasonable time period as may be required given the default, following receipt by the Debtor of notice from the Secured Party specifying the nature of the default and requiring that the default be cured;
- (c) **Event of Insolvency.** If the Debtor commits an Event of Insolvency as defined in the PPA;
- (d) **Other Indebtedness.** If the Debtor permits any sum which has been admitted as due by the Debtor or is not disputed to be due by it and which forms or is capable of being made a charge upon any of the Collateral in priority to the security interests created by this Security Agreement to remain unpaid for 30 days;
- (e) **Default in Other Payment.** If the Debtor defaults in payment of any indebtedness or liability to the Secured Party or any other person, whether secured hereby or not;
- (f) **Material Adverse Change.** If, in the opinion of the Secured Party, a material adverse change occurs in the financial condition of the Debtor.

6.2 Acceleration. If an Event of Default occurs the Secured Party, in its sole and absolute discretion, may declare all or any part of the Obligations (whether or not by their terms payable on demand) immediately due and payable, without any further demand or notice of any kind.

6.3 Security Interests Enforceable. The occurrence of an Event of Default will cause the security interests created hereby to become enforceable without the need for any action or notice by the Secured Party.

6.4 Remedies of the Secured Party. If the security interests hereby created become enforceable, the Secured Party may enforce its rights by any one or more of the following remedies and subject to the claims, if any, of the creditors of the Debtor ranking in priority to the security constituted by this Security Agreement:

- (a) **Take Possession.** By taking possession of the Collateral or any part thereof, and collecting, demanding, suing, enforcing, recovering, receiving and otherwise getting in the Collateral, and for that purpose entering into and upon any lands, tenements, buildings, houses and premises and doing any act and taking any proceedings in the name of the Debtor, or otherwise, as the Secured Party considers necessary;
- (b) **Court Appointed Receiver.** By proceedings in any court of competent jurisdiction for the appointment of a receiver or receiver-manager of all or any part of the Collateral;
- (c) **Court Ordered Sale.** By proceedings in any court of competent jurisdiction for the sale or foreclosure of all or any part of the Collateral;
- (d) **File Proofs of Claim.** By filing of proofs of claim and other documents to establish its claims in any proceeding or proceedings relating to the Debtor;
- (e) **Appoint Receiver.** By appointment by instrument in writing of a receiver or receiver-manager of all or any part of the Collateral;
- (f) **Sale or Lease.** By sale or lease by the Secured Party of all or any part of the Collateral (whether or not it has taken possession of the Collateral);
- (g) **Voluntary Foreclosure.** By retaining any of the Collateral in satisfaction of all or part of the Obligations, in accordance with paragraph 6.10;
- (h) **Other Remedies.** By any other remedy or proceeding authorized or permitted hereby or by law or equity (including all of the rights and remedies of a secured party under the *Personal Property Security Act* in effect from time to time);

and in exercising, delaying in exercising or failing to exercise, any such right or remedy the Secured Party will not incur any liability to the Debtor.

6.5 Power of Sale. The provisions of paragraph 6.6(g) will apply, mutatis mutandis, to a sale or lease of any of the Collateral by the Secured Party under paragraph 6.4(f).

6.6 Receiver or Receiver-Manager. Any time after the security interests hereby created have become enforceable, the Secured Party may from time to time appoint in writing any qualified person to be a receiver or receiver-manager ("Receiver") of the Collateral and may likewise remove any such person so appointed and appoint another qualified person in his stead. Any Receiver appointed hereunder will have the following powers:

- (a) **Take Possession.** To take possession of the Collateral or any part thereof, and to collect and get in the Collateral and for that purpose to enter into and upon any lands, tenements, buildings, houses and premises wheresoever and whatsoever and to do any act and take any proceedings in the name of the Debtor, or otherwise, as the Receiver considers necessary;
- (b) **Carry On Business.** If this Security Agreement creates security interests in substantially all of the Debtor's present and after-acquired personal property, to carry on or concur in carrying on the business of the Debtor (including, without limiting the generality of the powers contained in this Security Agreement, the payment of the obligations of the Debtor whether or not they are due and the cancellation or amendment of any contracts between the Debtor and any other person) and the employment and discharge of such agents, managers, clerks, accountants, servants, workmen and others upon such terms and with such salaries, wages or remuneration as the Receiver thinks proper;
- (c) **Repair.** To repair and keep in repair the Collateral or any part or parts thereof and to do all necessary acts and things for the protection of the Collateral;
- (d) **Arrangements.** To make any arrangement or compromise which the Receiver thinks expedient in the interests of the Secured Party or the Debtor and to assent to any modification or change in or omission from the provisions of this Security Agreement;
- (e) **Exchange.** To exchange any part or parts of the Collateral for any other property suitable for the purposes of the Debtor upon such terms as may seem expedient and either with or without payment or exchange of money or equality of exchange or otherwise;
- (f) **Borrow.** To raise on the security of the Collateral or any part or parts thereof, by mortgage, charge or otherwise any sum of money required for the repair, insurance or protection thereof, or any other purposes mentioned in this Security Agreement, or as may be required to pay off or discharge any lien, charge or encumbrance upon the Collateral or any part thereof, which would or might have priority over the security interests hereby created;
- (g) **Sell or Lease.** Whether or not the Receiver has taken possession, to sell or lease or concur in the sale or leasing of any of the Collateral or any part or parts thereof after giving the Debtor not less than 20 days' written notice of the Receiver's intention to sell or lease, and to carry any such sale or lease into effect by conveying, transferring, letting or assigning in the name of or on behalf of the Debtor or otherwise; and any such sale or lease may be made either at public sale or lease (including public auction or closed tender), or by private sale or lease, as the Receiver may determine and any such sale or lease may be made from time to time as to the whole or any part or parts of the Collateral; and the Receiver may make any stipulations as to title or conveyance or otherwise which the Receiver

considers proper; and the Receiver may rescind or vary any contract for the sale or lease of any of the Collateral or any part or parts thereof, and may resell and re-lease without being answerable for any loss occasioned thereby; and the Receiver may sell or lease any of the Collateral for cash or credit, or part cash and part credit, or otherwise as may appear to be most advantageous, and at such prices as can be reasonably obtained therefor, and in the event of a sale or lease on credit neither the Receiver nor the Secured Party will be accountable for or charged with any monies until actually received.

6.7 Liability of Receiver. The Receiver appointed and exercising powers under the provisions hereof will not be liable for any loss howsoever arising unless the loss is caused by the Receiver's own gross negligence or wilful default, and the Receiver will when so appointed be considered to be the agent of the Debtor and the Debtor will be solely responsible for the Receiver's acts and defaults and for the Receiver's remuneration.

6.8 Effect of Appointment of Receiver. As soon as the Secured Party takes possession of any Collateral or appoints a Receiver, all powers, functions, rights and privileges of the directors and officers of the Debtor concerning the Collateral will cease, unless specifically continued by the written consent of the Secured Party or the Receiver.

6.9 Validity of Sale or Lease. No purchaser at any sale and no lessee under any lease purporting to be made in pursuance of the powers set out in paragraph 6.4(f) and paragraph 6.6(g) will be bound to see or enquire whether any default has been made or continues or whether any notice required hereunder has been given or as to the necessity or expediency of the stipulations subject to which sale or lease has been made or otherwise as to the propriety of such sale or lease, or the regularity of proceedings or be affected by notice that such default has been made or continues or notice given as aforesaid, or that the sale or lease is otherwise unnecessary, improper or irregular; and in spite of any impropriety or irregularity or notice thereof to such purchaser or lessee the sale or lease to such purchaser or lessee will be considered to be within the aforesaid power and to be valid accordingly and the remedy (if any) of the Debtor in respect of any impropriety or irregularity whatsoever in any such sale or lease will be in damages only.

6.10 Voluntary Foreclosure. The Secured Party may elect to retain any of the Collateral in satisfaction of the Obligations or any of them. The Secured Party may designate any part of the Obligations to be satisfied by the retention of particular Collateral which the Secured Party considers to have a net realizable value approximating the amount of the designated part of the Obligations, in which case only the designated part of the Obligations will be considered to be satisfied by the retention of the particular Collateral.

6.11 Proceeds of Disposition. Subject to applicable law and the claims, if any, of the creditors of the Debtor ranking in priority to the security constituted by this Security Agreement, the proceeds of the sale, lease or other disposition of the whole or any part of the Collateral will be applied as follows:

- (a) FIRSTLY to pay and discharge all rents, taxes, rates, insurance premiums and out-goings affecting the Collateral;
- (b) SECONDLY to pay all costs and expenses of taking possession and/or sale or lease or otherwise (including the Receiver's remuneration, if any);
- (c) THIRDLY to pay such amounts as are necessary to keep in good standing all liens and charges on the Collateral ranking in priority to the security interests hereby created;
- (d) FOURTHLY to pay any principal, interest and other monies due and payable hereunder (in such order as the Secured Party may require); and
- (e) if any surplus remains in the hands of the Receiver or the Secured Party then the Debtor will be entitled to such surplus but only upon demand in writing made therefor.

6.12 Deficiency. If the proceeds of the realization of the Collateral are insufficient to fully pay to the Secured Party the Obligations, the Debtor will immediately pay such deficiency or cause it to be paid to the Secured Party.

6.13 Waiver. The Secured Party may waive any breach by the Debtor of any of the provisions contained in this Security Agreement or any Event of Default, provided always that no act or omission of the Secured Party will extend to or be taken in any manner whatsoever to affect any subsequent breach or Event of Default or the rights resulting therefrom.

6.14 Time for Payment. If the Secured Party demands payment of any Obligations which are payable on demand or if any Obligations are otherwise due by maturity or acceleration, it will be considered reasonable for the Secured Party to exercise its remedies immediately if such payment is not made, and any days of grace or any time for payment which might otherwise be required to be given to the Debtor by applicable law is hereby irrevocably waived.

PART 7

NOTICES

Notices. Except as otherwise provided in this Security Agreement, any notice, direction, demand, request, or document required or permitted to be given by any party to any other party under this Security Agreement will be in writing and deemed to have been sufficiently given if signed by or on behalf of the party giving the notice and delivered or transmitted by facsimile or e-mail to the other Party's address, facsimile number, or e-mail address as shown below:

To Secured Party:

Yukon Energy Corporation
P.O. Box 5920, #2 Miles Canyon Road
Whitehorse, YT Y1A 6S7

Attention: President

Facsimile: 867-393-5323

E-mail: david.morrison@yec.yk.ca

with a copy to:

Davis & Company, LLP
2800 - 666 Burrard Street
Vancouver, BC V6C 2Z7

Attention: John Landry

Facsimile: 604-605-3588

E-mail: john_landry@davis.ca

To Debtor:

Minto Explorations Ltd.
860 - 625 Howe Street
Vancouver, BC V6C 2T6

Attention: Stephen P. Quin, CEO

Facsimile: 604-689-5041

E-mail: stephenq@northair.com

with a copy to:

Austring, Fendrick, Fairman & Parkkari
Lawyers
3081 Third Avenue
Whitehorse, Yukon Y1A 4Z7

Attention: Lorne Austring

Facsimile: (867) 668-3710

E-mail: laustring@lawyukon.com

or to such other address, to such other facsimile number or e-mail address or to the attention of such other official or individual as a party will have most recently notified the other party of in the manner hereinbefore provided. Any such notice, direction, request, or document will conclusively be deemed to have been received by the intended recipient on the date of delivery or transmission, as the case may be, except that if it is not received at such address or at the

facsimile device by 5:00 P.M. on a business day (at the place of receipt) it will conclusively be deemed to have been received by the intended recipient on the next business day immediately following its receipt at such address or at such facsimile device.

In this Security Agreement "business day" means any day which is not a Saturday, Sunday, or a statutory holiday in the Yukon Territory.

PART 8

GENERAL

8.1 **Discharge.** If at any time there are no Obligations then outstanding and the Debtor is not in default of any of the covenants, terms and provisos on the Debtor's part contained in this Security Agreement, then, at the request and at the expense of the Debtor and upon payment by the Debtor to the Secured Party of the Secured Party's reasonable discharge fee for discharging a security agreement, the Secured Party will cancel and discharge this Security Agreement and the security interests granted in this Security Agreement and the Secured Party will execute and deliver to the Debtor all such documents as are required to effect such discharge.

8.2 **Security Additional.** The Debtor agrees that the security interests created by this Security Agreement are in addition to and not in substitution for any other security now or hereafter held by the Secured Party.

8.3 **Realization.** The Debtor acknowledges and agrees that the Secured Party may realize upon various securities securing the Obligations or any part thereof in such order as it may be advised and any such realization by any means upon any security or any part thereof will not bar realization upon any other security or the security hereby constituted or parts thereof.

8.4 **No Merger.** This Security Agreement will not operate to create any merger or discharge of any of the Obligations, or of any assignment, transfer, guarantee, lien, contract, promissory note, bill of exchange or security interest held or which may hereafter be held by the Secured Party from the Debtor or from any other person whomsoever. The taking of a judgment concerning any of the Obligations will not operate as a merger of any of the covenants contained in this Security Agreement.

8.5 **Appropriation of Payments.** Subject to section 6.11 with respect to proceeds of sale, lease or other disposition, any and all payments made in respect of the Obligations from time to time and monies realized from any security interests held therefor (including monies collected in accordance with or realized on any enforcement of this Security Agreement) may be applied to such part or parts of the Obligations as the Secured Party may see fit and the Secured Party may at all times and from time to time change any appropriation as the Secured Party may see fit.

8.6 **No Representations.** The Debtor acknowledges and agrees that the Secured Party has made no representations or warranties other than those contained in the PPA or this Security Agreement.

8.7 Use of Collateral by Debtor. Except as provided herein, until an Event of Default occurs the Debtor will be entitled to possess, operate, collect, use and enjoy the Collateral in any manner not inconsistent with the terms hereof.

8.8 Modifications, Etc. No modification or amendment of this Security Agreement will be effective unless in writing and executed by the Debtor and the Secured Party and no waiver of any of the provisions of this Security Agreement will be effective unless in writing and signed by the party waiving the provision.

8.9 Disclosure of Information. The Debtor consents to the Secured Party, in compliance or purported compliance with any statutory disclosure requirements, disclosing information about the Debtor, this Security Agreement, the Collateral and the Obligations to any person the Secured Party believes is entitled to such information, provided that any disclosure is subject to the confidentiality provisions contained in the PPA.

8.10 Statutory Waivers. To the fullest extent permitted by law, the Debtor waives all of the rights, benefits and protections given by the provisions of any existing or future statute which imposes limitations upon the powers, rights or remedies of a secured party or upon the methods of realization of security, including any seize or sue or anti-deficiency statute or any similar provisions of any other statute.

PART 9

INTERPRETATION

9.1 Incorporated Definitions. In this Security Agreement words which are defined in the *Personal Property Security Act* (Yukon Territory) which are not defined in this Security Agreement will have the meaning set out in the *Personal Property Security Act*.

9.2 Headings. The headings in this Security Agreement are inserted for convenience of reference only and will not affect the construction or interpretation of this Security Agreement.

9.3 Generally Accepted Accounting Principles. Where the Canadian Institute of Chartered Accountants includes a recommendation in its Handbook concerning the treatment of any accounting matter, such recommendation will be regarded as the only generally accepted accounting principle applicable to the circumstances that it covers and references in this Security Agreement to generally accepted accounting principles will be interpreted accordingly.

9.4 Severability. If any provision contained in this Security Agreement is invalid or unenforceable the remainder of this Security Agreement will not be affected thereby and each provision of this Security Agreement will separately be valid and enforceable to the fullest extent permitted by law.

9.5 Laws of Yukon Territory. This Security Agreement is governed by, and construed in accordance with, the laws of the Yukon Territory and the Debtor submits to the non-exclusive jurisdiction of the courts of the Yukon Territory concerning this Security Agreement.

9.6 **Joint Obligations.** If more than one person is the Debtor, the agreements of, and all obligations and covenants to be performed and observed by, the Debtor hereunder will be the joint and several agreements, obligations and covenants of each of the persons comprising the Debtor and any request or authorization given to the Secured Party by any of the persons comprising the Debtor will be considered to be the joint and several requests or authorizations of each of the persons comprising the Debtor.

9.7 **Time of Essence.** Time will be of the essence hereof.

9.8 **Number and Gender.** In this Security Agreement, words in the singular include the plural and vice-versa and words in one gender include all genders.

9.9 **Counterparts.** This Security Agreement may be signed by original or facsimile and, if applicable, executed in any number of counterparts, and each executed counterpart will be considered to be an original. All executed counterparts taken together will constitute one agreement.

9.10 **Enurement.** This Security Agreement will enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and permitted assigns.

9.11 **Paramountcy.** In the event of any inconsistency between the provisions of this Security Agreement and the PPA, the provisions of the PPA shall govern.

PART 10

ACKNOWLEDGMENT AND WAIVER

10.1 **Acknowledgment and Waiver.** The Debtor:

- (a) acknowledges receiving a copy of this Security Agreement; and
- (b) waives all rights to receive from the Secured Party a copy of any financing statement, financing change statement or verification statement filed or issued, as the case may be, at any time in respect of this Security Agreement or any amendments hereto.

TO EVIDENCE ITS AGREEMENT the Debtor has executed this Security Agreement on the date appearing below.

MINTO EXPLORATIONS LTD.

By:

Title, Authorized Signatory

Print Name: _____

Dated: _____

SCHEDULE 1

Prior Security Interests

BRITISH COLUMBIA PERSONAL PROPERTY REGISTRY

1. financing statement as amended in favour of Westminster Auto Leasing Ltd. filed on July 26, 2005 under base registration number 484833C,
2. financing statement in favour of Westminster Auto Leasing Ltd. filed on December 21, 2005 under base registration number 755418C,
3. financing statement in favour of Bank of Montreal filed on March 16, 2006 under base registration number 895096C,
4. financing statement as amended in favour of Bank of Montreal filed on May 8, 2006 under base registration number 990890C,
5. financing statement in favour of Irwin Commercial Finance Canada Corporation filed on June 15, 2006 under base registration number 067056D,
6. financing statement in favour of Parkland Industries Ltd. filed on September 11, 2006 under base registration number 229808D,
7. financing statement in favour of Macquarie Bank Limited filed on October 5, 2006 under base registration number 279525D,
8. financing statement as amended in favour of Caterpillar Financial Services Limited filed on October 26, 2006 under base registration number 316673D, and
9. financing statement in favour of Northern Trailer Ltd. filed on January 17, 2007 under base registration number 455686D.

YUKON TERRITORY PERSONAL PROPERTY SECURITY REGISTRY

1. financing statement in favour of Whitehorse Motors Limited filed on April 10, 2006 under registration number 13415,
2. financing statement in favour of Westminster Auto Leasing Ltd. filed on April 12, 2006 under registration number 14666,
3. financing statement in favour of Irwin Commercial Finance Canada Corporation filed on June 16, 2006 under registration number 32730,
4. financing statement in favour of Kingland Ford Sales Ltd. filed on July 25, 2006 under registration number 43793,

5. financing statement in favour of Kingland Ford Sales Ltd. filed on July 25, 2006 under registration number 43801,
6. financing statement in favour of Macquarie Bank Limited filed on October 6, 2006 under registration number 61823,
7. financing statement in favour of Caterpillar Financial Services Limited filed on October 13, 2006 under registration number 62785, and
8. financing statement in favour of Northern Trailer Ltd. filed January 31, 2007 under registration number 87377.

YUKON TERRITORY QUARTZ MINING ACT

1. Amended and restated general security agreement dated for reference October 6, 2006 made by Minto explorations Ltd. in favour of Macquarie Bank Limited, as amended by the first amendment to amended and restated general security agreement dated for reference January 6, 2007, registered as a charge in favour of Macquarie Bank Limited against each of the mineral claims set out in Schedule 3.

OTHER

1. Royalty interest claimed by the Selkirk First Nation,
2. Rights of MRI Trading AG in Copper Concentrates produced at the Project pursuant to the contract of purchase number P.07.CUCN.MT30488 between the Debtor and MRI Trading AG dated September 27, 2006.

SCHEDULE 2

Debtor's Place(s) of Business

and

Location(s) of Collateral

The Project known as the Minto copper-gold-silver mine in the Yukon Territory, Canada located on the area which is the subject of the Mineral Rights.

Any assets of the Debtor situate in its offices in Whitehorse, Yukon Territory or Vancouver, British Columbia.

SCHEDULE 3

Mineral claims comprising the Project

CLAIM NAME ¹	GRANT NUMBER	LAPSE DATE ²	REGISTERED OWNER ³
DEF 1	Y 61693	07/10/07	MINTO
DEF 2	Y 61694	07/10/07	MINTO
DEF 3	Y 61695	07/10/07	MINTO
DEF 4	Y 61696	07/10/07	MINTO
DEF 5	Y 61697	07/10/07	MINTO
DEF 6	Y 61698	07/10/07	MINTO
DEF 7	Y 61699	07/10/07	MINTO
DEF 8	Y 61700	07/10/07	MINTO
DEF 9	Y 61701	07/10/07	MINTO
DEF 10	Y 61702	01/03/08	MINTO
DEF 11	Y 61703	07/10/07	MINTO
DEF 12	Y 61704	01/03/08	MINTO
DEF 13	Y 61705	07/10/07	MINTO
DEF 14	Y 61706	07/10/07	MINTO
DEF 15	Y 61707	07/10/07	MINTO
DEF 16	Y 61708	07/10/07	MINTO
DEF 17	Y 61709	07/10/07	MINTO
DEF 18	Y 61710	07/10/07	MINTO
DEF 19	Y 61711	01/03/08	MINTO

¹ Claim names are shown for ease of reference only and may be abbreviated. Claim (grant) numbers should be primarily relied on for purposes of properly identifying a claim. All of the claims are located in the Whitehorse Mining District in the Yukon Territory under and subject to the *Quartz Mining Act* (Yukon).

² Lapse dates are shown in the format day/month/year.

³ The notation "MINTO" appearing as registered owner in this column designates Minto Explorations Ltd.

CLAIM NAME ¹	GRANT NUMBER	LAPSE DATE ²	REGISTERED OWNER ³
DEF 20	Y 61712	01/03/08	MINTO
DEF 21	Y 61713	01/03/08	MINTO
DEF 22	Y 61714	01/03/08	MINTO
DEF 23	Y 61715	01/03/08	MINTO
DEF 24	Y 61716	01/03/08	MINTO
DEF 25	Y 61717	01/03/08	MINTO
DEF 26	Y 61718	01/03/08	MINTO
DEF 27	Y 61719	01/03/08	MINTO
DEF 28	Y 61720	01/03/08	MINTO
DEF 29	Y 61721	01/03/08	MINTO
DEF 30	Y 61722	01/03/08	MINTO
DEF 31	Y 61723	07/10/07	MINTO
DEF 32	Y 61724	07/10/07	MINTO
DEF 33	Y 61978	07/10/07	MINTO
DEF 34	Y 61979	07/10/07	MINTO
DEF 35	Y 61980	01/03/08	MINTO
DEF 36	Y 61981	01/03/08	MINTO
DEF 37	Y 61982	07/10/07	MINTO
DEF 38	Y 61983	07/10/07	MINTO
DEF 39	Y 61984	01/03/08	MINTO
DEF 40	Y 61985	01/03/08	MINTO
DEF 41	Y 61986	01/03/08	MINTO
DEF 42	Y 61987	01/03/08	MINTO
DEF 43	Y 61988	01/03/08	MINTO

CLAIM NAME ¹	GRANT NUMBER	LAPSE DATE ²	REGISTERED OWNER ³
DEF 44	Y 61989	01/03/08	MINTO
DEF 45	Y 61990	01/03/08	MINTO
DEF 46	Y 61991	01/03/08	MINTO
DEF 47	Y 61992	01/03/08	MINTO
DEF 48	Y 61993	01/03/08	MINTO
DEF 49	Y 61994	01/03/08	MINTO
DEF 50	Y 61995	01/03/08	MINTO
DEF 51	Y 61996	01/03/08	MINTO
DEF 52	Y 61997	01/03/08	MINTO
DEF 53	Y 61998	01/03/08	MINTO
DEF 54	Y 61999	01/03/08	MINTO
DEF 55	Y 62000	01/03/08	MINTO
DEF 56	Y 62001	01/03/08	MINTO
DEF 57	Y 62002	01/03/08	MINTO
DEF 58	Y 62003	01/03/08	MINTO
DEF 59	Y 62004	01/03/08	MINTO
DEF 60	Y 62005	01/03/08	MINTO
DEF 61	Y 62006	01/03/08	MINTO
DEF 62	Y 62007	01/03/08	MINTO
DEF 63	Y 62008	01/03/08	MINTO
DEF 64	Y 62009	01/03/08	MINTO
DEF 65	Y 62010	01/03/08	MINTO
DEF 66	Y 62011	01/03/08	MINTO
DEF 67	Y 62012	01/03/08	MINTO

CLAIM NAME ¹	GRANT NUMBER	LAPSE DATE ²	REGISTERED OWNER ³
DEF 68	Y 62013	01/03/08	MINTO
DEF 69	Y 62014	01/03/08	MINTO
DEF 70	Y 62015	01/03/08	MINTO
DEF 71	Y 62016	01/03/08	MINTO
DEF 72	Y 62017	01/03/08	MINTO
DEF 73	Y 62018	01/03/08	MINTO
DEF 74	Y 62019	01/03/08	MINTO
DEF 75	Y 62020	01/03/08	MINTO
DEF 76	Y 62021	01/03/08	MINTO
DEF 77	Y 62022	01/03/08	MINTO
DEF 78	Y 62023	01/03/08	MINTO
DEF 79	Y 66779	07/10/07	MINTO
DEF 80	Y 66780	07/10/07	MINTO
DEF 81	Y 66781	07/10/07	MINTO
DEF 82	Y 66782	07/10/07	MINTO
DEF 83	Y 66783	07/10/07	MINTO
DEF 84	Y 66784	07/10/07	MINTO
DEF 85	Y 76954	01/03/08	MINTO
DEF 86	Y 76955	01/03/08	MINTO
DEF 87	Y 76956	01/03/08	MINTO
DEF 1379	Y 76953	07/10/07	MINTO
MINTO 1	Y 61620	13/05/18	MINTO
MINTO 2	Y 61621	13/05/18	MINTO
MINTO 3	Y 61622	13/05/18	MINTO

CLAIM NAME ¹	GRANT NUMBER	LAPSE DATE ²	REGISTERED OWNER ³
MINTO 4	Y 61623	13/05/18	MINTO
MINTO 5	Y 61624	13/05/18	MINTO
MINTO 6	Y 61625	13/05/18	MINTO
MINTO 7	Y 61626	13/05/18	MINTO
MINTO 8	Y 61627	13/05/18	MINTO
MINTO 9	Y 61628	13/05/18	MINTO
MINTO 10	Y 61629	13/05/18	MINTO
MINTO 11	Y 61630	13/05/18	MINTO
MINTO 12	Y 61631	13/05/18	MINTO
MINTO 13	Y 61632	13/05/18	MINTO
MINTO 14	Y 61633	13/05/18	MINTO
MINTO 15	Y 61634	13/05/18	MINTO
MINTO 16	Y 61635	13/05/18	MINTO
MINTO 17	Y 61904	13/05/18	MINTO
MINTO 18	Y 61905	13/05/18	MINTO
MINTO 19	Y 61906	01/03/087	MINTO
MINTO 20	Y 61907	01/03/08	MINTO
MINTO 23	Y 61914	01/03/08	MINTO
MINTO 24	Y 61915	01/03/08	MINTO

CLAIM NAME ¹	GRANT NUMBER	LAPSE DATE ²	REGISTERED OWNER ³
MINTO 25	Y 61916	01/03/08	MINTO
MINTO 26	Y 61917	01/03/08	MINTO
MINTO 27	Y 61918	01/03/08	MINTO
MINTO 28	Y 61919	01/03/08	MINTO
MINTO 29	Y 61932	01/03/08	MINTO
MINTO 30	Y 61933	01/03/08	MINTO
MINTO 31	Y 61920	01/03/08	MINTO
MINTO 32	Y 61921	13/05/18	MINTO
MINTO 33	Y 61922	01/03/08	MINTO
MINTO 34	Y 61923	13/05/18	MINTO
MINTO 35	Y 61908	13/05/18	MINTO
MINTO 36	Y 61909	13/05/18	MINTO
MINTO 37	Y 61910	01/03/08	MINTO
MINTO 38	Y 61911	01/03/08	MINTO
MINTO 41	Y 61926	01/03/08	MINTO
MINTO 42	Y 61927	01/03/08	MINTO
MINTO 43	Y 61928	01/03/08	MINTO
MINTO 44	Y 61929	01/03/08	MINTO
MINTO 45	Y 61930	13/05/18	MINTO

CLAIM NAME ¹	GRANT NUMBER	LAPSE DATE ²	REGISTERED OWNER ³
MINTO 46	Y 61931	13/05/18	MINTO
MINTO 47	Y 61934	13/05/18	MINTO
MINTO 48	Y 61935	13/05/18	MINTO
MINTO 49	Y 61936	13/05/18	MINTO
MINTO 50	Y 61937	13/05/18	MINTO
MINTO 51	Y 61938	13/05/18	MINTO
MINTO 52	Y 61939	13/05/18	MINTO
MINTO 65	Y 62296	13/05/18	MINTO
MINTO 66	Y 62297	13/05/18	MINTO
MINTO 67	Y 62298	13/05/18	MINTO
MINTO 68	Y 62299	13/05/18	MINTO
MINTO 69	Y 62300	01/03/08	MINTO
MINTO 70	Y 62301	13/05/18	MINTO
MINTO 71	Y 62302	13/05/18	MINTO
MINTO 72	Y 62303	01/03/08	MINTO
MINTO 73	Y 62304	01/03/08	MINTO
MINTO 75	Y 62305	01/03/08	MINTO
MINTO 76	Y 62306	01/03/08	MINTO
MINTO 77	Y 62307	01/03/08	MINTO

CLAIM NAME ¹	GRANT NUMBER	LAPSE DATE ²	REGISTERED OWNER ³
MINTO 78	Y 62308	01/03/08	MINTO
MINTO 79	Y 62309	01/03/08	MINTO
MINTO 80	Y 62310	01/03/08	MINTO
MINTO 81	Y 62311	01/03/08	MINTO
MINTO 82	Y 62312	01/03/08	MINTO
MINTO 83	Y 62313	01/03/08	MINTO
MINTO 84	Y 62314	01/03/08	MINTO
MINTO 85	Y 62315	01/03/08	MINTO
MINTO 86	Y 62316	01/03/08	MINTO
MINTO 87	Y 62317	01/03/08	MINTO
MINTO 88	Y 62318	01/03/08	MINTO
MINTO 89	Y 62319	01/03/08	MINTO
MINTO 94	Y 77310	01/03/08	MINTO
MINTO 95	Y 77311	01/03/08	MINTO
MINTO 96	Y 78024	01/03/08	MINTO
MINTO 97	Y 78025	01/03/08	MINTO

Each of the mineral claims is noted in the abstract of record remarks column as being subject to "Agreement dated April 28, 1999 between Selkirk First Nations and Minto Explorations Ltd. and registered on April 28, 1999 as Quartz Registered Document No. RW01459".



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Generator Packages

Engine – Caterpillar Model 3516 B
2000 kW Standby/1825 kW Prime Power/ 1600 kW Continuous Duty
Electronic fuel injection turbocharged-after cooled

AIR INLET SYSTEM

Air cleaner, dual element heavy duty with service indicators

CHARGING SYSTEM

Battery charger, current limiting 20 amperes, automatic equalize/float
Charging alternator, 24 VDC, 35 ampere

CONTROL SYSTEM

Governor, Caterpillar ADEM Electronic

COOLING SYSTEM

Radiator, ECO52F stacked dual circuit dual core, 100° ambient with 50/50 glycol/water
Fuel cooler
Jacket water heater, dual 3kW, 120/240 VAC, single phase, 60 Hz
Low coolant level sensor

ENCLOSURES

ISO/TC104, ANSI/MH5.1, UIC592.1 ISO Container With:
Galvanized steel deck on floor, nine motorized air intake louvers, and motorized radiator air discharge roof doors to protect generator set from the weather. Switchgear located in front end of container.
Sound attenuation, including doors and louvers, to give a four point logarithmic average Of 85 dB (A) sound pressure level at a distance of 50 feet measured perpendicular to center of each side of the site at an elevation of 1.5 m (5 ft) above the ground.
Interior walls and ceiling are insulated with 50 mm (2 in) of acoustic glass and covered with aluminum for durable interior wall surface.
Safety decals on interior and exterior of container as required.
120 VAC incandescent light and 24 VDC light, switchgear and generator area

Switchgear has access door on side of module for external access to side of switchgear for cable connections and service. A side load cable opening is provided under bus bars of switchgear for connections. Container has three (3) entrance doors with stainless steel handle and steel hinges with brass pins, which allow access into engine room and switchgear area. ABS and CSC rated. Interior loads feed from circuit breaker distribution located at front of container by the switchgear (jacket water heaters, battery charger, space heaters, 120 V duplex receptacles, lights and fuel transfer pump) are powered off of the load bus, supplied by the utility source.

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Two only portable stairs for access doors

Two only five 5 kW 240 VAC interior space heaters provided in switchgear area and in the generator area

EXHAUST SYSTEM

18" diameter with rain cap, bolt on

Flexible fitting, 305 mm (12")

Muffler, 30 dBA sound reduction of exhaust noise only, internally insulated, mounted inside the container

Exhaust system insulated with 25 mm (1") thick, soft-wrap insulation blanket from engine to module wall

FUEL SYSTEM

Fuel tanks, including level gauge and UL listed

1400 Gallon Double Wall Tank in container with leak detection alarm

Fuel priming pump, RH

Fuel Water Strainer

Automatic/manual fuel transfer system

Level switches control start/stop operation of the fuel transfer system when in the automatic mode

High-level switch prevents over filling in the automatic or manual mode

Low fuel level alarm

Low fuel level shutdown

GENERATORS AND GENERATOR ATTACHMENTS

Brushless PM excited, SR4B

Six lead generator with cable access box, R.H. side

4160V 826F frame (2 bearing) generator vacuum/pressure impregnation insulation protection on stator, form wound.

Volts per hertz automatic voltage regulator-switchgear mounted, BASLER DECS

Space heater, 115/230 VAC, 1200 watts, with cut-out relay

INSTRUMENTATION AND CONTROLS, EMCP II PLUS

Generator mounted, dust proof

Digital (LCD) Indication, keypad accessible

AC voltage (L-L & L-N)

AC amps

kW (total & per phase)

kV-A (total)

kV-AR (total)

kWhr (total)

kV-ARhr (total)

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PF (Average total & per phase)
% of rated kW (total)
Frequency
DC voltage
Coolant temperature
Oil pressure
Rpm
Hours run
System diagnostic
Controls
Auto start/stop
Emergency stop
Lamp test
Cycle crank
Voltage control
Phase selector switch
Load demand relay
Spare relay - programmable
Enclosure
NEMA 1, IP22
Vandal door
Panel lights
Auxiliary relay

INSTRUMENTATION AND CONTROLS, EMCP II PLUS - continued

Indicating Lights
Low oil pressure
High coolant temperature
Over Speed
Over Crank
Coolant level sensor, shutdown or alarm
Emergency stop
Fault shutdown
Fault alarms
3 Spare lights/4 spare inputs
Pre-alarm and LED indicators for:
 Approach high coolant temperature
 Low coolant temperature (70⁰ F.)
 Approach low oil pressure
 Low DC volts
 System not in "automatic"
 Low fuel level

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Charger failure

Low coolant level (shutdown or alarm)

Two (2) spares

Customer programmable (shutdown or alarm) to spare alarm or fault LEDs

Protective relaying

Programmable relays for:

- Over voltage
- Over/under frequency

Customer communication module for ZTR interface

LUBE SYSTEM

Lubricating oil - SAE 10W30, CF4 diesel engine oil

Lube oil drain (located on engine rail)

Lube oil sample valve

Sump pump, RH mounted

Low oil level alarm

STARTING SYSTEM

Batteries and battery rack: CCA rating 2600, 380 ampere-hours, includes 4 batteries above -30°C (-22°F)

Electric starter motor, dual, heavy duty

UNDERCARRIAGE:

Three (3) Axle container under carriage

Mechanical Suspension System

DOT Lighting Package

Air Brakes

GENERAL

Fire extinguisher, two (2), 10 LB, carbon dioxide

First Aid Kit

Literature

Generator test report

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5 KV SWITCHGEAR

Utility paralleling 4160 VAC class switchgear is intended for automatic, manual and black start operation involving a microprocessor based automatic loading control with soft loading, base load control and soft unloading. The controls allow for automatic operation, initiated locally or remotely.

Floor Standing Switchgear Featuring the Following:

Protection

Shutdowns: over speed, over crank, high water temperature, low oil pressure, emergency stop and coolant loss with indicator for each condition.

AC Metering

Three (3) phase volts, three (3) phase amperes and frequency with phase select push-button.

Metering accuracy is 1%.

Power factor meter along with wattmeter

Control

Automatic starting with field adjustable cycle cranks over crank and cool down timer

Programming and diagnostics

Includes field programmable set points for engine control

Failure of the Programmable Logic Controller initiates a visual and audible alarm.

Alarm module

Flashing led warnings for: Low coolant temperature, high coolant temperature (pre-alarm), low oil pressure (pre-alarm), engine control switch not in automatic and low DC voltage. Includes alarm horn and acknowledge push-button.

CONTROLS

Engine Control Switch

Snap action rotary switch, four (4) position - off/reset, automatic, manual, stop/cool down

Off/reset for engine shutdown and resetting faults, automatic for local or remote automatic operation, when initiated by switch operation or contact closure, manual for local starting and manual paralleling, stop/cool down for manual operation cool down.

Circuit Breaker Control Switch

Heavy duty, three (3) position spring return to center with momentary trip and close position and slip contacts (NAC) for automatic closing.

Includes circuit breaker position indicating lamps, lamp test switch, momentary pushbutton

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Emergency Stop Push Button

Mushroom head, twist to reset, causes engine shutdown and tripping of the generator circuit breaker.

Prevents engine starting when depressed

Remote Start/Stop Circuit

Accepts signals (normally open dry contact closure) from remote control or other device to initiate operation

Requires ZTR signals for generator start and generator stop.

Failed to Auto-Parallel

Time delay circuit to cause engine shutdown if the generator circuit breaker fails to close after initiation of automatic operation

Dead Bus Closing Circuit

For Prime power operation only. Permits automatic or manual closing of the generator set circuit breaker to a dead bus.

Low Fuel Level Shutdown

Circuit to cause engine shutdown via dry contact and trip the generator circuit breaker with approximately 15 minutes of fuel remaining in the power module day tank

Electric Louver Control Circuit

Circuit to control power module electrically operated louver.

CIRCUIT BREAKER

Draw out, vacuum type 3 pole, electrically operated 1200amp circuit breaker.

Includes 24 VDC shunt trip coil activated on any monitored engine or electrical fault

Circuit breaker is sized for full load capacity of the generator set at 0.8 power factor, with 36ka RMS interrupting capacity at 4160 VAC.

DIGITAL SPEED, SYNCHRONIZING AND LOAD CONTROL:

Electronic Load Sharing Governor and Associated Circuitry

Woodward DSLC w/Raise-Lower Voltage Switch & Raise-Lower Frequency Switch

Includes VAR/PF Control, Import & Export Capability

Speed Matching Automatic Synchronizer

Automatically synchronizes and parallels the generator with a utility source.

Manual Paralleling

Synchronizing lights (2) and switch for manual paralleling with sync-scope

Automatic Base Load Control

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PLC based system provides soft loading and unloading of the generator set as it transitions on and off of the utility grid. Once the generator is connected to the utility generator output is gradually increased (one (1) minute time frame) up to the base load setting of the load control. Generator output will remain at the base load level until the generator is signalled to shutdown. When signalled to shutdown the load control will gradually decrease (one (1) minute time frame) generator output and trip open the generator circuit breaker when the unload setting of the load control is reached, the engine is then placed in cool down mode.

Field adjustable parameters include load time unload time and base load level (generator steady state output)

The load control is disabled operating isolated from the utility source.

Load Sharing

During prime power operation the engine governor set shall be set for isochronous load sharing with other parallel units.

Site interconnect of the load share lines is required.

Voltage Regulation and Power Factor Control

Switchgear mounted voltage regulator with voltage adjust raise-lower switch.

Power factor control for maintaining constant generator power factor while paralleled with the utility

Includes provisions for manual power factor adjustment

Controls are disabled when operating isolated from the utility.

Current Transformers (3) – Relay Class, Suitable For Metering

5 ampere secondary with shorting terminal strips

Potential Transformers (4) – Relay Class, Suitable For Metering

120 VAC secondary with primary and secondary fuse protection, two (2) connected to the generator side of the circuit breaker, two (2) connected to the utility side of the circuit breaker.

Potential transformers-draw out construction

Control Power Transformers (2)

120 VAC secondary connected to both sides of circuit breaker to supply 120 VAC in open or closed position. Transformer is fixed.

Electrical System Protective Relays

Schweitzer Model SEL-300G Multifunction-relay

Relays include field adjustable pick-up and time delay. Operation of relays is indicated by lamp and sounding of alarm horn, draw-out relay operation is indicated by trip target and sounding of the alarm horn.

Reverse Power Relay

ANSI device 32, single phase sensing, activation of relay causes tripping of the generator circuit breaker and immediate engine shutdown

Reverse VAR Relay

Acting as loss of excitation relay, ANSI device 40, single phase sensing, activation of the relay causes tripping of the generator circuit breaker and immediate engine shutdown.

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Under Voltage Relay

ANSI device 27, three phase sensing. Activation of relay causes tripping of the generator circuit breaker and places the engine in cool down mode.

Over Voltage Relay

ANSI device 59, single phase sensing, activation of relay causes tripping of the generator circuit breaker and immediate engine shutdown.

Over/Under Frequency Rely

ANSI device 81O/U, Ssetting's for over frequency and under frequency with time delays, adjustable in cycles. Activation of relay causes tripping of the generator circuit breaker and places the engine in cool down mode. Relay is disabled when operating isolated from the utility.

Over Current Relay

ANSI device 50/51 activation of relay causes tripping of the generator circuit breaker and immediate engine shutdown. Relay is solid state with instantaneous setting.

Ground Over Current

ANSI device 51G, activation of relay causes tripping of the generator circuit breaker and immediate engine shutdown. Includes current transformer mounted on generator neutral - ground connection.

Lock-out Relay

ANSI device 86, high speed, manually re-settable, operated by protective relays, causes tripping of the generator circuit breaker and prevents resoling of the circuit breaker until reset.

Generator Differential Relay

ANSI device 87, solid-state draw-out type with field adjustable pick-up and time delay. Operation of a relay is indicated by relay trip target and sounding of alarm horn. Relay trips the generator circuit breaker via the generator lockout relay (ANSI device 86) and causes immediate engine shutdown. Includes six (6) current transformers, three (3) mounted within the generator housing on the neutral side of each stator winding and three (3) mounted at the generator circuit breaker.

Auxiliary Trip Circuit

Circuit accepts input (normally open dry contact) from customer's system protective relay(s) or other controlling device. Operation of contacts causes tripping of the generator circuit breaker via the generator lockout relay ANSI device 86, and places the engine in cool down mode. Circuit is disabled when operating isolated from the utility.

Bus Bars – Stabs Only

Three phase plus fully rated neutral bus bars are silver plated copper with NEMA standard hole pattern for connection of load cables and generator cables, bus bars are sized for full load

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capacity of the generator set at 0.8-power factor. Also includes ground bus, silver plated copper, connected to generator frame ground and container frame with holes for connection of field ground cable. Bus bars are accessible from outside of the power module via hinged, lockable cable access door.

AC Distribution

Distributes voltage to power module AC panel board

Provides sufficient power for all module accessories

Customer Monitoring Outputs

Form 'C' contacts for customer monitoring indicating the following conditions:

Circuit Breaker status, engine running, system in auto

Form 'A' contacts for customer monitoring indicating the following conditions: electrical lockout, summary alarm.

UTILITY CONTAINER MONITORING AND CONTROL SYSTEM

One ZTR-Lynx™ Data Collection and Communication Hardware is mounted inside each Utility Container Switchgear. The hardware for the generators can be networked together and as a system or signally they provide following minimum monitoring and control points:

Points Monitored on the Generator Set

Engine Running

EMCPH+ (ECS) Not In Auto

Generator Set Locked Out

High Coolant Temperature Alarm

Low Coolant Temperature Alarm

Low Oil Pressure Alarm

EMCPH Diagnostic Code Shutdown

Emergency Stop Shutdown

Coolant Loss Shutdown

High Coolant Temperature Shutdown

Low Oil Pressure Shutdown

Over Crank Shutdown

Over Speed Shutdown

Engine Coolant Temperature

Engine Oil Pressure

Fuel Consumption

Exhaust Temperature Left / Right

Protective Relay function trip (as provided on the SEL Relay)

Generator Set Run Time Hours

Generator Voltage, Current (Amps/Phase), kW, kWh, and Frequency

Points Monitored on the Switchgear

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Utility Status

Generator Available/Not Available

Control Locked Out

Common Alarm

Generator Connected to Utility

Control Power Status

Not in auto

Controller Failure

Remote Enable Status

Operational Mode Status

Failed to Sync Alarm

ZTR-Lynx System's Internal Alarms

Alarm and Event History Overflow

Communication Failure

Additional Generator Set System Points Monitored

Day and Main Tank Low / High Fuel Alarm

Day and Main Tank Fuel Level

Rupture Base Tank Alarm

Battery Charger Failure Alarm

Starting Battery Voltage

Container Internal Ambient Temperature

Supervisory Control Outputs

Remote Start/Stop

Scheduled Start/Stop

Generator Remote Load Adjust

Louver Control – Open and Close

Warning of Start – Start Warning Horn

Generator Set Start Alarm Horn Enclosure – It is mounted in the container to provide 30 seconds (continuous) warning prior to Generator Set start.

ZTR-Lynx Monitoring HMI Server Software

PC Based, installed on the on-site PC (see next item). MS Windows® NT based user-friendly graphical interface which provides easy to use menus and screens to display relevant Generator Set information, alarms, and events. In addition, provides the user the ability to adjust GenSet output power. Using the ZTR Monitoring and Control software on an off-site PC, the user is able to dial into the site and monitor and control the Generator Set and the breaker operation.

On-site PC Running HMI Server Software – by others

As a minimum – Pentium II Class PC, 300 MHz, MS Windows NT, Mouse Pointing Device, 128 Megabytes of Memory, 10 Gigabytes hard drive, SVGA Monitor, Modem.

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Remote Access to the Monitoring System

A user can access the monitoring system using a PC located offsite (supplied by others), equipped with modem and MS Internet Explorer Version 5 browser. The user shall dial the On-site PC (running the server software as described above) and use the browser software to link to the HMI Server Software. Once connected then the user has access to the monitoring and control items as described above.

SERVICES – BY OTHERS

Engineering services as required

Electrical Installation

- All Permits as required

Mechanical Installation

- Suitable pad for module placement
- Main fuel supply tank
- Supply and return piping from main fuel supply tank as required to modules
- Cranes for unloading as required
- Trenching as required

FINNING SUPPLIED SERVICES/COMPONENTS

Engineering Services as required including:

- Power module grounding design
- Complete drawing package
- Complete operation and maintenance manuals

Electrical Installation as required including:

- Cabling and system connection from container to container as required
- Ground grid connection as required
- Final termination to the distribution system
- Control cabling for networking modules

Mechanical Installation as required including:

- Spotting modules on customer supplied pad
- Installation of Finning (Canada) supplied fuel header
- Connection of fuel header to main fuel supply piping as required

Package to consist of three 1.6 MW continuous rated power modules, with total plant capacity being 4.8 MW