YUKON ENERGY CORPORATION

APPLICATION FOR

AN ENERGY PROJECT CERTIFICATE

AND

AN ENERGY OPERATION CERTIFICATE

REGARDING THE PROPOSED

CARMACKS-STEWART TRANSMISSION PROJECT

April 2, 2007

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1.0 INTRODUCTION

Yukon Energy Corporation ("**YEC**" or "**Yukon Energy**") hereby applies (the "**Application**") to the Minister of Justice (the "**Minister**") for an energy project certificate and an energy operation certificate (the "**Certificates**") for the proposed Carmacks-Stewart Transmission Project ("**CSTP**" or the "**Project**"). The Project has been designated by OIC 2007/51 as a "regulated project" under Part 3 of the *Public Utilities Act.* It is understood that, as required by Part 3 of the *Public Utilities Act,* the Minister will refer this Application for the Certificates to the Yukon Utilities Board (the "**YUB**", or the "**Board**") for a review.

The proposed CSTP will connect the 138 kV Whitehorse-Aishihik-Faro ("**WAF**") and the 69 kV Mayo Dawson electricity grids, and involve a new 138 kV transmission line of approximately 172 km between the WAF grid at Carmacks and the Mayo-Dawson grid at Stewart-Crossing, along with new transmission substations in Carmacks and Pelly Crossing, and expansion of the existing Stewart Crossing substation.

Stage One of the CSTP involves a new 138 kV transmission line of approximately 98 km between the WAF grid at Carmacks and Pelly Crossing, and includes new substations at Carmacks and Pelly Crossing. Stage One of the CSTP is to be developed in conjunction with the 25 kV to 35 kV transmission line and any related YEC substations (the "**Mine Spur**") required to connect Stage One of the CSTP in the Minto Landing area to the copper-gold project (the "**Mine**") currently being developed by Minto Explorations Ltd. ("**Minto**").

Stage Two of the CSTP involves a new 138 kV transmission line from Pelly Crossing to the existing Mayo-Dawson grid substation at Stewart Crossing, and includes expansion of the existing Stewart Crossing substation. Stage Two is currently expected to be developed in conjunction with a 138 kV transmission line and any related substations required to connect the CSTP in the McGregor Creek area to the copper project ("**Carmacks Copper Mine**") currently being permitted by Western Copper Corporation ("**Western Copper**").

Review of the CSTP to date has included the following regulatory proceedings:

- **YUB Resource Plan Review:** The CSTP was included as a major project in the YUB hearing to review YEC's 20 Year Resource Plan 2006-2025 (the "**Resource Plan**"). The CSTP was addressed in YEC's January 2006 Resource Plan, YEC's May 2006 Supplemental Update, YEC's November 9, 2006 Update (also known as Exhibit B-16 from the Resource Plan Hearing), two rounds of Board information requests to YEC, one round of information requests to YEC from intervenors, the public hearing transcript (November 14 to 16, 2006), the final and reply arguments of the parties, and the Board's January 15, 2007 Report to the Commissioner in Executive Council.
- **YESAB Project Proposal Screening**: The CSTP and the Mine Spur together were included in YEC's October 13, 2006 Project Proposal Submission to the Yukon Environmental and

Socio-economic Assessment Board ("**YESAB**") Executive Committee[1]. The YESAB review process to date has included a pre-screening adequacy review of the Project Proposal Submission (October to December 2006), Supplementary Addendum provided January 24, 2007, and completion of YESAB's pre-screening Adequacy Review February 2, 2007. The public comment period on the Project Proposal Submission has been extended to April 4th, 2007. YESAB continues to prepare a Draft Screening Report.

- **YUB PPA Review**: On February 8, 2007 Yukon Energy filed an application with the YUB for approval of the Power Purchase Agreement ("**PPA**") between Minto and YEC for the supply of electricity by YEC from the WAF grid to the Mine from Stage One of the CSTP and the Mine Spur. The Board's PPA Review to date has included YEC response to information requests from the Board and intervenors.

Subsequent to the above filings, the Commissioner in Executive Council has designated the CSTP as a regulated project under Part 3 of the *Public Utilities Act,* and the Yukon Government has committed to provide new funding as required for up to $10 million of the capital costs for Stage One of the CSTP, and to work with YEC and industry to ensure that Stage Two of the CSTP can also be constructed in the future without any direct cost to other ratepayers (see letter from Minister, Attachment D to this Application). In addition, $5 million in new funding from Canada has been announced to proceed with the Aishihik 3rd Turbine project.

As prescribed by OIC 2007/50, Yukon Energy's Application for the Certificates for the CSTP includes the following sections:

- Applicant
- Project Description
- Project Justification
- Consultation
- Other Applications and Approvals

2.0 APPLICANT

The required information on the Applicant is as follows:
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[1] Resource Plan Hearing Exhibit B-13 is the entire YESAB Submission, and Exhibit B-16, is a Resource Plan Update with a summary of key parts found in Section 4.

3.0 PROJECT DESCRIPTION

3.1 PROJECT SUMMARY DESCRIPTION

The Carmacks-Stewart Transmission Project (CSTP) will be located in the Yukon interior region within the Northern Tutchone Planning Region, between Carmacks and the Stewart Crossing area. It is an enhancement opportunity which when fully developed will interconnect the Mayo-Dawson and WAF grids with 138 kV facilities (approximate length of 172 km) and provide long-term system efficiencies and enhanced economic development opportunities in the project area.[2]

Stage One of the CSTP is planned to extend the WAF grid at 138 kV from Carmacks to Pelly Crossing, with targeted in-service in the third quarter of 2008, providing WAF surplus hydro to displace diesel generation at both the Minto mine[3] and at Pelly Crossing[4]. Stage One includes the following key facilities (see attached Figure 3.1-1 for an overview map of the proposed route and facilities of the entire Project):

- 138 kV transmission line from Carmacks to Pelly Crossing (approximately 98 km) generally following the Klondike Highway (a detailed description of the Stage One route is provided in the YESAB Supplementary Addendum, Map Line Segments (Attachment YESAB-YEC-1-3))[5];
- new substation facilities at Carmacks[6], adjacent to the existing 138 kV WAF transmission line and west of the Carmacks airport, including an all-weather gravel access road (approximately 150 m) from the Robert Campbell Highway into the proposed Carmacks substation; and
- new substation facilities at Pelly Crossing[7] on Selkirk First Nation ("**SFN**") settlement land, immediately west of the SFN Lands Department equipment yard, including an all-weather access road extension (approximately 30-40 m) to the existing road into the SFN equipment yard.

[2] The YESAB Project Proposal Submission is for environmental and socio-economic assessment of the entire Carmacks-Stewart/Minto Spur Transmission Project.

[3] The Minto Mine will be served through an additional 25 kV to 35 kV spur line of about 27 km in length originating at a proposed Minto Landing substation adjacent to the CSTP, and ending at a step-down substation at the Minto Mine Site. The Mine Spur includes related YEC substations and related switches, fuses, metres or other equipment at the Minto Landing area or the Mine.

[4] Minto Mine loads as described in the PPA Application are assumed at 32.5 GW.h/year, with Mine life expected to commence in mid 2007 and continue for about 10 years (fall 2017), i.e., the length of service by YEC under the PPA is affected by the timing for Stage One in-service as well as potential changes in Mine parameters (e.g., changes in ore reserves and/or mill processing levels). The Pelly Crossing load currently served by diesel generation approximates 1.5 GW.h/year. The Stage One CSTP and Mine Spur will also provide long-term opportunities to supply new retail distribution customers in the Minto Landing area east of the Yukon River.

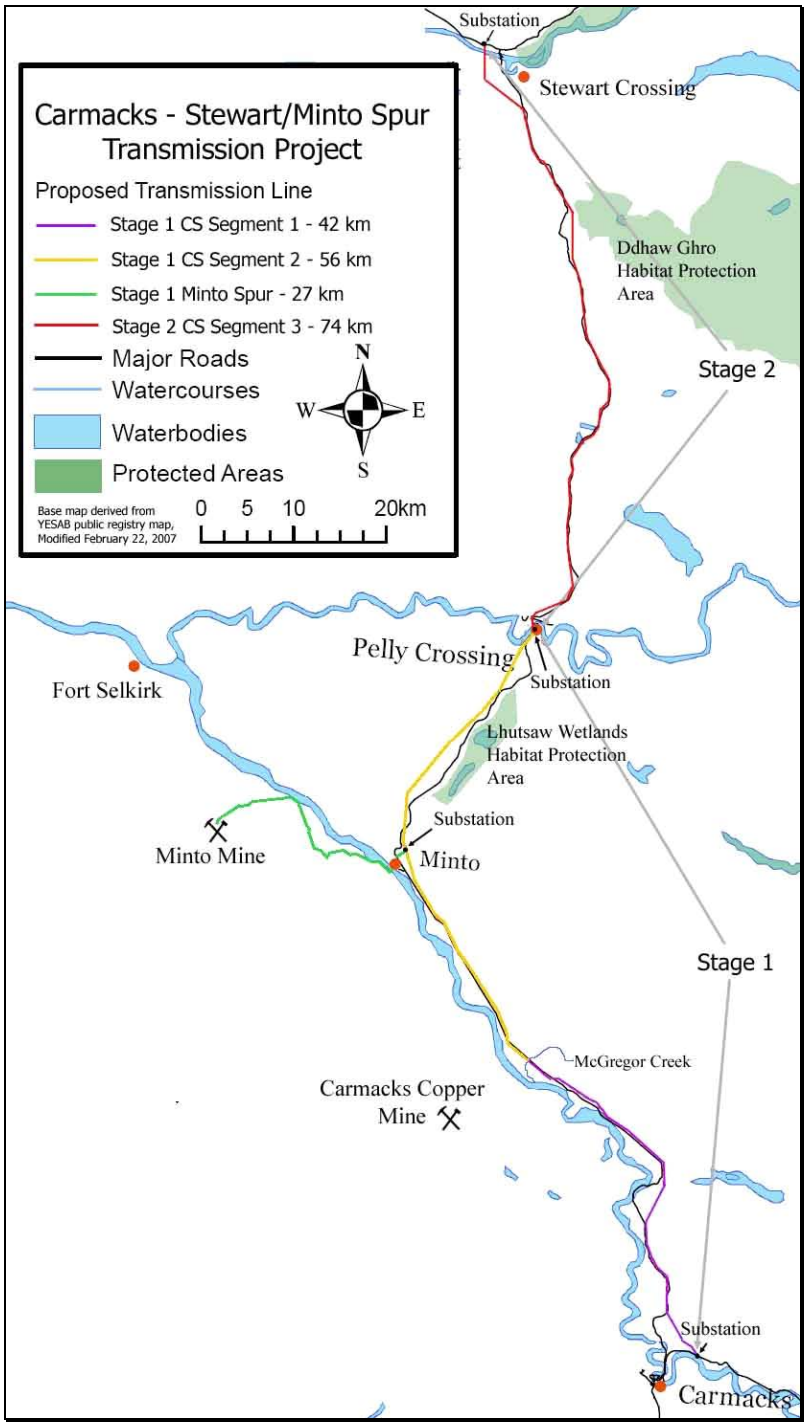
[5] The Stage One CSTP route includes CS segments 1.1, 1.2, 2.1, 2.2 and 2.3. The Stage Two CSTP route includes CS segments 3.1, 3.2 and 3.3. See also Photomosaics of the Project Site Area in Appendix 7B of the YESAB Project Submission, with replacements for CS segments 1.1 and 1.2 as well as 3.3, 3.4, 3.9, and 3.10 in the YESAB Supplementary Addendum. The Mine Spur route is also described in detail in these same submissions.

[6] Connection of the new Carmacks substation to the distribution facilities serving Carmacks will require a new distribution line connection by YECL (at which time YEC would anticipate decommissioning and removal of its existing Carmacks substation).

[7] Connection of the new Pelly Crossing substation to distribution facilities (and the diesel plant) at Pelly Crossing will require a new distribution line connection by YECL.

Stage Two of the CSTP involves a new 138 kV transmission line from Pelly Crossing to the existing 69 kV Mayo-Dawson grid substation at Stewart Crossing (approximately 74 km), generally following the Klondike Highway, and includes expansion of the existing Stewart Crossing substation.

Figure 3.1-1 – Project Area Map



Chapter 5 of the YESAB Project Proposal Submission and Supplementary Information YESAB-YEC-2-1 provide a detailed description of the Project; this information will not be materially enhanced prior to completion of an engineering dynamic system model, preliminary engineering design work and the YESAB Draft Screening Report.

As fully described in the Project Proposal (see Chapters 7 on Route Selection and Chapter 4 on Consultation), Yukon Energy selected a preferred transmission route based on an iterative route selection and assessment process. This process considered various factors such as environmental and socio-economic effects, engineering requirements and costs. Given the inherent flexibilities in selecting a final ROW (including pole placement and clearing within such ROW), the route selection process sought to identify areas to be avoided and/or used to minimize adverse effects and enhance beneficial effects of the Project.

The route selection process included several rounds of consultation with the three Northern Tutchone First Nations ("**NTFN**") whose traditional territory is crossed by the Transmission Project (see also Section 5.0 Consultation below). In May 2006, a Memorandum of Understanding ("**MOU**") was concluded between Yukon Energy and the three NTFNs; all parties agreed that the development of this Project would provide meaningful benefits and opportunities for the NTFNs and their members, as well as all Yukoners, for a number of years. The MOU provided for joint support of the CSTP (as well as the Minto Spur), and established commitments with regard to a consultation process for the route selection and for a YESAB filing process. In addition, the NTFNs provided letters of support for the Project to YESAB in October, 2006. [8]

An updated overview of the CSTP project economics was provided to the YUB as Exhibits B-16 and B-22 of the Resource Plan Hearing, to reflect updated capital cost (2005$) estimates, with mid point updated cost estimates of $20.2 million for Stage One development and $15.2 million for Stage Two[9], as well as an assumed YDC contribution of approximately $5 million (reflecting the then estimated value of increased payments to YDC under the Flexible Term Note ("FTN"))[10] and estimated potential net

[8] SFN and LSCFN indicated the need to continue discussions on the topics of route selection (in three specific areas), access management and trap line mitigation measures, however each First Nation indicated that this could be done as part of the YESAB process and should not prevent the Project from proceeding with the YESAB screening.

[9] The update provided a range of potential line-related capital cost estimates (2005$) to reflect uncertainties regarding the impact of tight labour market conditions in Western Canada and other factors (e.g., raw material cost increases), based on reviews of recent YEC cost experience and also discussions in August with engineering consulting firms leading to securing expressions of interest to submit proposals on the upcoming RFP for engineering services for this project. Yukon Energy submits that it has addressed uncertainty with regard to such cost estimates to the extent feasible prior to completion of final design and costing, and potentially prior to completion of actual tendering. The update also provided estimates of likely escalation of Stage 1 costs by 10% to 15% from 2005$ to final in-service costs (reflecting inflation and interest during construction) in quarter 3 of 2008.

[10] On March 30, 2005 Yukon Development Corporation (YDC) purchased this Note from the Government of Canada for $11.3 million; the purchase price reflected the Note's reduced value (face value of $28.278 million at the time of the acquisition) due to there being no industrial customers on WAF. The terms of the Note with YEC, which remain unchanged, provide for payments of interest and principal to be deferred and abated, respectively, if YEC's power sales on the WAF distribution system are less than specified amounts. The Note bears interest at 7%, and requires principal payments of up to $1 million, payable in annual instalments; after adjusting for abated interest, the effective interest rate on the Note for 2005 was 2.90% (2004-2.86%).

ratepayer benefits under stipulated assumptions.[11] The PPA Application filed February 8, 2007, as well as information filed with YESAB in the Supplementary Filing January 24, 2007 (as YESAB-YEC-2-5), further updated the CSTP project economics to reflect the PPA provisions for a $7.2 million capital contribution by Minto to the Stage One CSTP capital costs.

Schedule 1 below provides a further update of this information for Stage One and Stage Two of the CSTP, presented in 2007$ (rather than 2005$) with estimated in-service capital costs and with provision for the Yukon Government new funding of the CSTP (see Attachment D).

Stage One development of the CSTP is very sensitive to timing considerations, particularly as regards delivery of power to the Minto Mine. The sooner that Stage One of this Project (as well as the Mine Spur) is built, and delivery of grid power to the Minto mine commences, the sooner (and longer) ratepayers can start to capture the benefits of these new firm sales of surplus WAF hydro generation over the limited life of this mine.[12] The current schedule, as set out below in section 3.2, assumes, in order to achieve in-service in 3rd quarter of 2008, that construction must be able to start as soon in fall 2007 as all approvals are secured.

Stage Two development of the CSTP is currently expected in conjunction with Yukon Government funding and added power loads and capital contributions from other new mine developments in the CSTP area.[13] Schedule 1 cost estimates assume potential in-service of Stage Two by the fall of 2009. The Yukon Government has committed to provide new funding for Stage Two of the CSTP, and to work with industry to ensure that the funding will enable Stage Two to be committed without any cost to other ratepayers (see Attachment D).

There is no timetable or plan for final disposition or decommissioning of the CSTP facilities. As stated on pg. 5-35 of the YESAB Project Proposal Submission, and reiterated here, the design life of the facility before substantial refurbishment is 50 to 100 years. This is so far into the future that it is not feasible today, based on available information and agreements, to provide meaningful assessment of likely plans or their effects for rehabilitating the operational components and related infrastructure of the Project at the end of operational life. When decommissioning plans are required, Yukon Energy will submit these plans for regulatory review and approval prior to implementation.

[11] As reviewed in Exhibit B-22, net ratepayer benefits in Stage 1 reflect use of WAF hydro resources to displace diesel generation at Pelly Crossing and the Minto mine.

[12] See PPA IR YUB-YEC-1-4, "Timely completion of the Project will yield material ratepayer benefits equal to at least $250,000 per month of avoided delay (reflecting expected minimum Minto payments), ignoring additional impacts that arise under the PPA if delay extends beyond September 30, 2009."

[13] By way of example, connection of the Carmacks Copper Mine would likely involve a further 48 GW.h/year of power load for 8.5 years based on past feasibility studies for this mine. Based on the principles in the Minto PPA, Western Copper's capital cost contribution requirement to the CSTP would approximate $8.5 million; in addition, an approximate 11 km 138 kV spur would be required from this mine to the CSTP in the McGregor Creek area (this spur would require review (as a separate project) by the YESAB Executive Committee). Yukon Energy understands that Carmacks Copper is currently in the initial permitting stage based on a proposal which assumes use only of on-site diesel generation. Western Copper has not yet entered into an LOI (or any other understanding) with Yukon Energy and until this occurs, Yukon Energy is assuming that if and when Carmacks Copper starts operations it will do so with diesel.

Schedule 1 - Summary of Carmacks-Stewart Update Project Economics (2007$)
Analysis per Exhibit B-16 except as noted: excludes consideration of Carmacks Copper Mine - PV (2007$million)

	Low Costs	Mid Point Costs	High Costs
Stage 1- Carmacks to Pelly Crossing			
Net YEC Capital Costs			
Project capital costs (in-service costs)[1]	19.3	22.6	25.9
Minto Capital Contribution (PPA)	7.2	7.2	7.2
YDC no cost funds (reflects FTN)	5.0	5.0	5.0
New YTG Funds	6.6	9.9	10.0
YTG funds to date (planning)	0.45	0.45	0.45
Net YEC Costs	-	-	3.22
NET Ratepayer Benefits (PV at 7.5%/yr)[2]			
Minto Mine net revenues (at Firm Mine Rate)	17.1	17.1	17.1
Pelly Crossing cost savings	2.6	2.6	2.6
Total net ratepayer savings	19.7	19.7	19.7
Overall Stage 1 Net Benefits (Costs)			
With Minto Mine	**19.70**	**19.70**	**16.48**
Stage 2- Pelly Crossing to Stewart Crossing			
Net YEC Capital Costs			
Project capital costs[3]	15.0	17.5	20.1
Potential Carmacks Copper Capital Contribution	8.5	8.5	8.5
Potential New YTG Funds	6.5	9.0	10.0
Net YEC Costs	-	-	1.63
NET Ratepayer Benefits (PV at 7.5%/yr)[2]			
Interconnection Cost Savings (assumed)[4]	10.0	10.0	10.0
Overall Stage 2 Net Benefits (Costs)	**10.00**	**10.00**	**8.38**

Note: 1. Estimates in 2005$ escalated by 12% for in-service in late 2008.
2. See Schedules 2 & 3 of Exhibit B-22: Mine at 32.5 GWh/yr, 8.5 yrs at $0.10/kWh, no escalation, discounted to 2007$.
FTN cost adjusted to reflect PPA Application Attachment 3 FTN estimates, Table C-1.
3. Estimates in 2005$ escalated by 15% for in-service in late 2009.
4. Interconnection cost savings for capacity and surplus hydro energy assume no new MD mine loads such as UKHM.

3.2 ANTICIPATED TIMELINE

An updated outline of the anticipated Stage One timetable for construction together with dates by which critical events, including approvals required from other agencies, must take place to ensure continued economic viability are provided in Figure 3.2-1 below[14]. Once the CSTP is commissioned and is in operation, it is expected to continue in operation indefinitely.

[14] Similar updated timelines for Stage Two will be developed when warranted based on discussions with industry and the Yukon Government. The Project Proposal Submission to YESAB, Figure 5.4-2, assumed in-service in quarter 3 of 2009.

Recognizing that delays in bringing this Project into service will adversely affect the Minto mine and existing ratepayers, the schedule describes the anticipated timing of the additional activities required to achieve in-service of Stage One as soon as possible during or after the targeted 3rd quarter of 2008. Three points can be highlighted from this anticipated Project schedule for Stage One:

- **Permitting and Approvals**: The schedule anticipates completion of the YESAB review, and securing all needed permits and approvals, by mid-summer 2007 (see section 6.1 below for review of these requirements and YEC's approach to addressing schedule-related issues in this regard).
  - **The YESAB Executive Committee assessment process** includes at a minimum the following major steps;
    - a pre-screening adequacy review (completed Feb 2, 2007),
    - screening with public comment (target completion of public comment April 4),
    - release of a Draft Screening Report (target for April 30 in Figure 3.2-1),
    - public comment on the Draft Screening Report (minimum 30-day period), and release of the Final Report recommendations (target for June 30 release in Figure 3.2-1).
  - **Permits and approvals** can be issued by federal, territorial and First Nation regulatory authorities only after release of the YESAB Final Report recommendations and (if undue delay is to be avoided) only after each Decision Body has issued a Decision Document accepting the YESAB recommendations. To facilitate timely completion of the overall permit and approval process, the following activities have/will be undertaken:
    - YEC has recently submitted its Land Use Permit Applications for the CSTP and the Mine Spur to the Yukon Government Lands Branch, and is working with LSCFN and SFN to develop prior to the end of April similar Access Applications as required for access and use of First Nation settlement lands.
    - Engineering design/digital mapping of Stage One CSTP and Mine Spur line location will be completed in April/May to facilitate final screening and permits.
    - Target NTFN Project Agreement by April 30, 2007, as provided for in the MOU, and as required to enable the CSTP to proceed.
    - Review YESAB Draft Screening Report - facilitate preparation of draft Decision Documents, permits and approvals prior to YESAB Final Report recommendations
    - Based on these prior arrangements, Figure 3.2-1 targets for all required Decision Documents, permits and approvals to be issued within one month after release of the YESAB Final report recommendations i.e., by the end of July.
- **Final Design and Tendering**: In order to secure the earliest possible construction start date, Stage One construction preparation involving preliminary engineering and costing has been planned to begin in March 2007, prior to completion of the YESAB review process, with provision to order long-lead equipment (with cancellation provisions) in May/June and for

completion of final design and then tendering during summer 2007 so that Stage One construction could start in fall 2007. To this end, the following will be/has been undertaken:

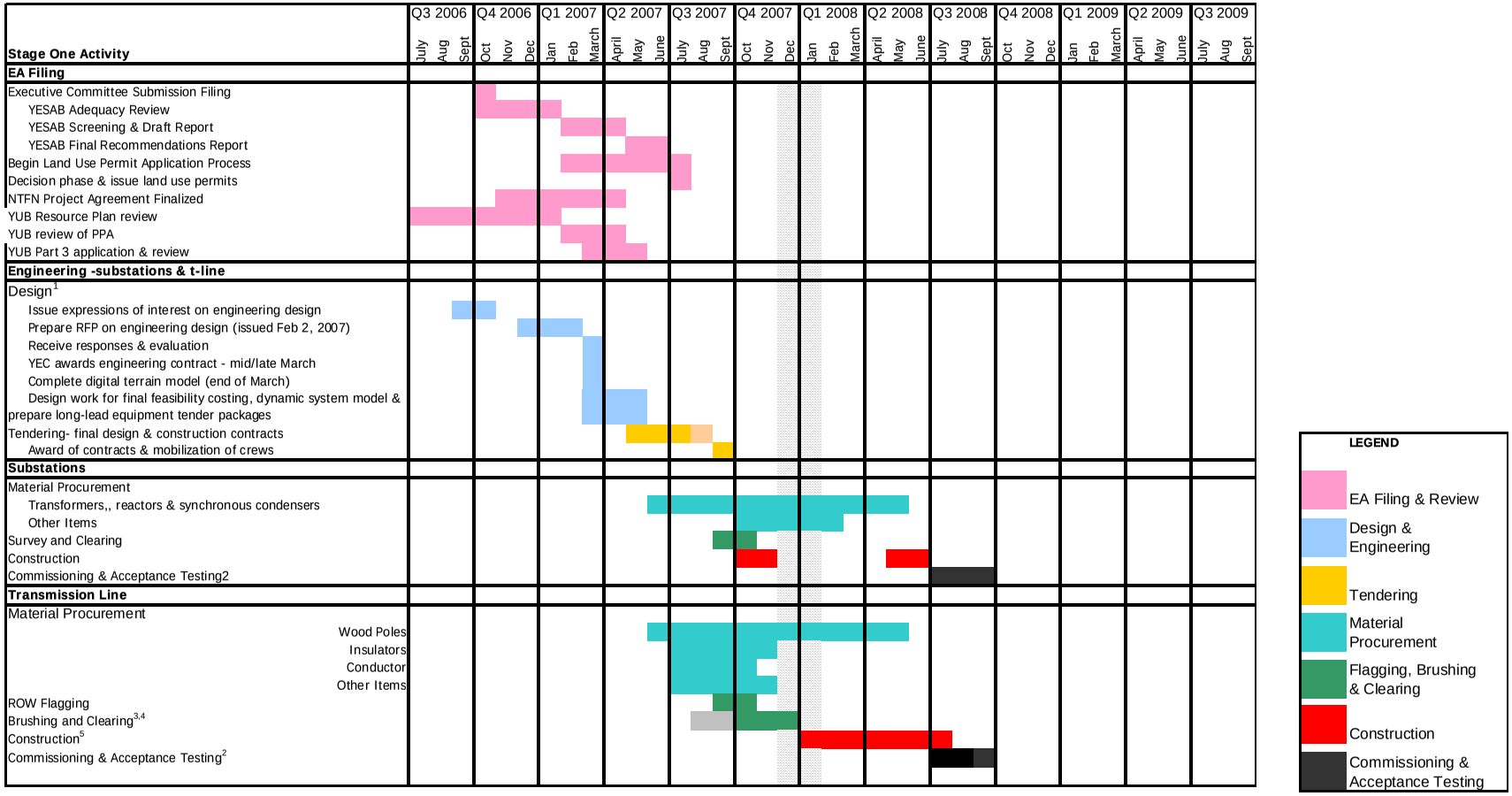
- **An RFP for engineering services** was released in February, 2007 and an award of contract to Wardrop Engineering was completed in March 2007.
- **Long-lead equipment ordering** is provided for in May/June, as required, after provision of required preliminary engineering and costing (along with construction schedule review) as well as PPA approval by the YUB.
- **Final construction contract tendering** is provided for during the late summer, after completion of final engineering design and tender documents; and
- **Final YEC Board of Directors award decision** (targeted in summer/fall 2007) to be based on the receipt, review and acceptance of a tendered contract price as well as receipt of all required permits and approvals.

- **Separation of Design and Construction Contracts**: The proposed approach separates the design and construction contracts, and ensures that the final YEC decision (targeted in summer/fall 2007) to proceed with Stage One construction is based on the ability at that time to award a firm construction contract price to complete the Project as designed.

As stated in Chapter 5 (Project Description) of the YESAB Project Proposal Submission, timing of ROW clearing and brushing will be subject to physical and biophysical sensitivities such as spring nesting season for birds in May and June, and avoidance of wet/rainy seasons. The anticipated project schedule in Figure 3.2-1 incorporates these sensitivities in addition to timing updates. Based on planning assumptions to date, meeting the target in-service date for Stage One would require the following (for greater detail, please see Section 5.4 of the YESAB Submission, pages. 5-5 through 5-10):

- Regulatory and First Nation approvals by approximately July 2007
- ROW flagging and harvesting of merchantable timber and fuel wood – fall 2007
- Brushing & clearing – Q4 2007 through to Feb/08
- Line construction – Q1 2008 through to early Q3 2008 (subject to long-lead equipment)
- Substation construction – clearing & civil work Q4 2007 (Carmacks substation work may need to begin in August 2007 to ensure civil works completed before winter); electrical equipment in late Q2 2008 (timing subject to long-lead procurement time necessary for equipment such as transformers, reactors and synchronous condensers –12 months assumed in Figure 3.2-1)
- Commissioning & acceptance testing – end of Q3 2008.

Figure 3.2-1
Carmacks-Stewart Transmission Project Updated Timetable for Stage One



[1] Preliminary design work for Stage One is anticipated to be done in Q2 2007. [2] Commissioning is done by the contractor; Acceptance Testing is done by Yukon Energy. [3] The grey part of the clearing schedule could accommodate advance permits for cutting fuel wood and merchantable timber. Once this time frame has past the ROW is brushed and cleared to the standard required for the transmission line. It is important that any sections of the corridor used for fuel wood or timber harvesting be surveyed and flagged prior to issuing any permits. [4] The months of May and June are not used for brushing and clearing of the ROW to reduce the impact on nesting birds (Yukon Energy, 2005) and spring break-up. [5] Line construction must occur after brushing and clearing is well in hand. Line construction over the small number of wetland sites will occur primarily in winter to minimize the impact on wetlands and permafrost soils.

3.3 NEW OR EXPANDED PUBLIC WORKS DESCRIPTION

Stage One and Stage Two of the CSTP do not require any new or expanded public works, undertakings or infrastructure beyond what has been described above.

3.4 SUMMARY OF ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS

Chapter 8 of the YESAB Project Proposal Submission provides a detailed explanation of the expected environmental and socio-economic impacts of the project.

In summary, the Project Proposal Submission indicates that the specified CSTP is expected to cause no likely significant adverse effects on the biophysical environments (e.g., land, water and air environments and associated terrestrial and aquatic life) or on the socio-economic components (e.g., resource and other land use, economy, and social components including infrastructure and services, aesthetics, cultural/heritage sites, traditional lifestyle, human health and social well being). This conclusion reflects careful routing of the transmission lines and the consideration of mitigation measures that would reduce or eliminate remaining potential adverse effects. Planned mitigation includes an Environmental Protection Plan to be finalized following the YESAB Screening Process, which will be designed to provide direction to contractors regarding the requirements of Yukon Energy and the regulator. Some residual adverse effects are anticipated (e.g., the physical presence of the facilities result in an altered landscape and other changes as long as the facilities are in place, and improved access in some areas may create concerns about potential conflicts with existing resource users), but these residual adverse effects are not expected to be significant based on criteria relevant to the YESAB assessment.

The Project Proposal Submission also indicates the positive environmental and socio-economic effects that are likely to result from Stage One of the CSTP as it improves the use of existing WAF grid power resources (including existing surplus hydroelectric generation) and consequently displaces diesel generation emissions at the Minto Mine and at Pelly Crossing. The total CO_2 emissions savings at the Minto Mine are expected to be approximately 23,000 tonnes per year[15]. This is almost one and a half times the amount of CO_2 produced by all of YECL's diesel generators in one year (16,480 tonnes). In addition, Pelly Crossing will have savings of about 1,100 tonnes per year of CO_2[16]. The development of Stage One of the CSTP would thus reduce total output of CO_2 by close to 24,100 tonnes per year.

It is anticipated that the Stage One CSTP development will create associated benefits for Yukon electric utility ratepayers[17] (including enabling electricity to be supplied to households and communities in the

[15] As discussed in the Project Proposal Submission pages 6-19 and 6-20, the estimated magnitude of displaced diesel generation during operation of the Minto Mine approximates 32.5 GW.h/yr, of electrical energy, which exceeds current total utility diesel generation in Yukon (estimated at less than 25 GW.h/yr). Using diesel generators at the Minto Mine, this power load would require about eight to nine million litres of diesel fuel each year. Based on an average production of 2.73 kg/l of CO_2 for diesel fuel, the total output of CO_2 would be approximately 23,000 tonnes per year.

[16] Pelly Crossing uses 1.5 GW.h/yr of energy or approximately 563,000 litres of diesel fuel per year.

[17] Utility net benefits resulting from enhanced sales of surplus hydro generation and displaced high cost diesel generation will be shared by Yukon ratepayers in all rate zones, and not only those served in the NTFN region, pursuant to rate directive OIC 1995/90.

NTFN region on a more reliable and less expensive basis), enhance the feasibility and economics of new mining developments and improve conditions for other economic activity in the NTFN region, and provide opportunities for local jobs and business activity during construction and subsequent periodic ROW clearing and maintenance[18].

Full CSTP development to connect the two existing power grids will provide long-term benefits and better utilization of available hydro-electric generation facilities, encourage economic development along this transmission corridor, and enhance overall Yukon power system reliability and flexibility. The Stage One CSTP development serves to put in place over half of the facilities, and all of the basic land-related permits and approvals and preliminary engineering, needed for this major transmission connection to be completed at the earliest feasible opportunity.

4.0 PROJECT JUSTIFICATION

4.1 NEED FOR THE PROJECT

The Resource Plan Hearing provided information confirming the technical, economic and financial feasibility of proceeding at this time with Stage One of the CSTP, subject to negotiation and approval of the PPA with Minto. Based on the information available to the Board in the Resource Plan Hearing, after an oral hearing and submissions by interested parties, the Board recommended "that YEC's proposed first stage of the Carmacks-Stewart line should proceed as applied for by YEC" (YUB Report to Commissioner in Executive Council re YEC 20-Year Resource Plan Jan 15, 2007 page 32)[19]. The Board's recommendation noted that the finalized PPA would be submitted to the Board for review and approval.

As discussed in the 20 Year Resource Plan, the WAF system can provide significant surplus hydro electric generation over at least the next 12 years under expected non-industrial load growth. This surplus hydro generation capability provides the near term opportunity to support Stage One development of the CSTP to connect the Minto Mine and Pelly Crossing to the WAF grid and thereby displace diesel generation levels in excess of all current utility diesel generation in Yukon. The overall positive net economic benefits expected from Stage One CSTP development, as summarized in Schedule 1, show net present value benefits (2007$) of $19.7 million at the mid-point cost estimates.

[18] This understanding is reflected in a fundamental premise of the MOU between YEC and the NTFNs.

[19] "In the absence of an approved PPA, the Board cannot make a firm recommendation on the Carmacks-Stewart line. However, based on the information before it, the Board is of the view that YEC's proposed first stage of the Carmacks-Stewart line should proceed as applied for by YEC. This view is based on the fact that the Minto Mine is under construction, the mine owners have secured financing to complete the mine, key terms of a PPA have been agreed to by YEC and the mine owners, and YEC has asserted that ratepayers would not be adversely affected by the expenditures required to implement this project. The latter was an instrumental premise applied by the Board in the economic comparison, presented in Section 5.2, and used by the Board to favour YEC's plan over the alternative plan. " (YUB Report to Commissioner in Executive Council re YEC 20-Year Resource Plan Jan 15, 2007 page 32)

Prior to commitment of the new Yukon Government funding (see Attachment D), overall ratepayer impacts (positive or negative) were expected to be minimal until the end of the life of the Mine due to operation of the Mine Net Revenue Account; however, with or without the Mine Net Revenue Account, the PPA and the Stage One CSTP were expected to provide positive net benefits to Yukon ratepayers (see PPA IR YUB-YEC-1-6(a) and YUB-YEC-1-4). Attachment C to the PPA Application sets out projected operation of this deferral account with the Stage One CSTP prior to the commitment of the Yukon Government's new funding, projecting an accrued balance in this account at the end of 2016 of $10.7 million (which is higher than the not yet depreciated Stage One CSTP cost of $8.3 million projected as at that same date).

Attachment C to this Application sets out updated projections of the Mine Net Revenue Account (as previously presented in Attachment C to the PPA Application) to reflect the PPA provisions with the Yukon Government's new funding. In summary, under the assumptions adopted in this analysis ratepayers will now benefit throughout the Mine's life from offsets to YEC's regulated rate base[20] and the Mine Net Revenue Account is now projected at $15.6 million by the year 2016 under the 32.5 GWh/yr Mine load (rather than $10.7 million in Table C-1 of the PPA Application).

If the PPA is approved by the YUB, Stage One CSTP development means that a major Yukon infrastructure development can now be undertaken which will ultimately lead to interconnection of YEC's two power grids.

Alternatives to the Stage One development of the CSTP and the Mine Spur include either (a) a 35 kV transmission line to service the Minto Mine Project only, and foregoing any long-term transmission infrastructure development (i.e. a 35 kV line would not have any capability to contribute to future connection of the two grids and would also likely be decommissioned and removed at the end of the Mine's live); or (b) not proceeding with the Project, resulting in continued reliance on diesel by the Minto Mine and community of Pelly Crossing (as well as other future developments in the region). These alternatives are discussed in section 5.2.1 of the Project Proposal Submission (pages 5-3 and 5-4), in Resource Plan Hearing Exhibit B-16 (pages 7 and 8), and in response to PPA IR UCG-YEC-2-26(d).

As stated previously in Section 3.1 of this Application, and as recognized in the Board's January 15, 2007 Report, Stage One development of the CSTP is very sensitive to timing considerations. The sooner that Stage One of the CSTP and the Mine Spur are built and can start delivery of power to the Minto mine, the longer that ratepayers can capture the benefits of these new firm sales of surplus WAF hydro generation over the limited life of this Mine. Thus, timely completion of this review process is critical as delays in the delivery of power to Minto will provide fewer benefits to ratepayers and could affect YEC risks regarding full recovery of its costs as discussed in PPA IRs YUB-YEC-1-4 and UCG-YEC-2-1. It is expected that each month the project is delayed will result in at least $250,000 less ratepayer benefits and 2,000 tonnes more of CO_2 emissions; the ratepayer impact figure does not consider the additional economic impacts

[20] An offset acts to reduce Rate Base return included in annual YEC revenue requirements, e.g., an offset of $1.0 million will reduce return/year by $70,000 if YEC's average weighted cost of capital is 7.0%.

that would arise under the terms and conditions of the PPA if Commencement of Delivery is delayed beyond September 30, 2009 (see PPA IR UCG-YEC-2-1).

Stage Two of the CSTP has been anticipated to proceed when Carmacks Copper joins the WAF grid and/or such development is funded by government infrastructure grants. At such time as appropriate conditions exist, and if the Mayo-Dawson System continues to have surplus hydro generation, the Resource Plan Hearing evidence indicated that Stage Two would then likely make economic sense but would need to be re-evaluated by YEC and the YUB.[21] The Board agreed with YEC's strategy as stated in their recommendations:[22] "With respect to the second stage of the Carmacks-Stewart line, the Board concurs with YEC's strategy not to pursue this project unless there is a firm commitment to connect the Carmacks Copper Mine, if and when this mine is built, and under the same condition that ratepayers would not be adversely affected." (YUB Report to Commissioner in Executive Council re YEC 20-Year Resource Plan Jan 15, 2007 page 32).

The Yukon Government has committed to provide new funding for Stage Two and to work with YEC and industry to ensure that Stage Two can also be constructed in the future without any direct cost to other ratepayers (see Attachment D). Schedule 1 shows net economic present value benefits (2007$) of $10 million for Stage Two at the mid-point cost estimates. Schedule 1 assumes that new mine developments and Yukon Government funding will enable potential in-service of Stage Two by the fall of 2009, and that the projected surplus hydro generation on the Mayo-Dawson grid during the next several years is not absorbed by new mine operation on that system.

Relationships to Other Projects

Full analysis of the expected capacity and load requirements (demand and energy) of the Yukon systems under various load scenarios is discussed in Chapters 4 and 5 of the Resource Plan and these capacity and load requirements were fully reviewed by the YUB at that time.

[21] As discussed in the Resource Plan Hearing, Stage Two connection of the two grids in combination with a Carmacks Copper Mine connection would potentially provide added net ratepayer benefits associated with Carmacks Copper power use and access to surplus MD hydro generation (up to 15 GWh/yr in 2012) plus surplus MD diesel capacity (up to 5.6 MW in 2012); however, ratepayer benefits associated with Stage Two are subject to the assumption of surplus generation resources on Mayo Dawson (MD) system, which would not be available to the extent that new industrial development (e.g., UKHM) occurs concurrently on the MD system. (Osler, Resource Plan Hearing transcript page 253, lines 4 to 14: "The thing we are most worried about, at that stage [bring on Carmacks Copper and proceed with Stage 2], is whether or not the energy that we are assuming is there from Mayo-Dawson is really there, or whether there are some things happening up in Mayo-Dawson that have used that energy for some other purposes, such as United Keno Hill Mine." Also Osler, transcript page 240, lines 15 to 25 and page 245, line 24 to page 246, line 6.) Without new near-term hydro energy generation supplies assumed in the Plan from MD as well as Aishihik 3rd Turbine (and Marsh Lake in the initial Plan), the Plan indicated that serving both Minto and Carmacks Copper mines would lead to new baseload WAF diesel generation even at earlier lower Minto mine loads (see references to Resource Plan Appendix C, Exhibit B-1: transcript, Bowman notes new diesel of up to 40 GWh/yr by 2016 at page 56, lines 14 to 18; Osler references specific tables in Appendix C for review at page 513, line 11 to page 514, line 3).

[22] See PPA IR UCG-YEC-1-22. YEC supports the YUB January 15, 2007 Report recommendation (page 41) for a review of Stage Two of the CSTP at such time as YEC proposes to proceed with this stage. It is anticipated that such review may be associated with YUB review and approval of a Power Purchase Agreement required for the Carmacks Copper Mine connection to the WAF grid.

The impact that Minto mine would have on the WAF system is discussed in Attachment B of the PPA Application. The Minto mine uses up the surplus energy on the WAF grid and is forecast to require in 2016, 1.8 GW.h/yr of Baseload diesel under the 32.5 GW.h/yr Minto sales and 6.6 GW.h/yr of Baseload diesel under the 42 GW.h/yr Minto Sales.

Bringing the Aishihik 3rd Turbine on line earlier (2010 compared with 2013) in conjunction with only Stage One of the CSTP results in less diesel usage and 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)[23]. The Board has recommended proceeding with the Aishihik 3rd Turbine in service in 2013 unless YEC can justify an earlier in service date[24].

On March 30, 2007, Canada announced $5 million in funding for the Yukon as part of a trust fund set up to help reduce greenhouse gas emissions and air pollutants, and the Yukon Government announced that the funds will be used for the Aishihik 3rd Turbine project. These new government funds will allow this project to proceed on an accelerated basis to provide net ratepayer benefits without waiting until new mine connection arrangements are confirmed.

As a result of the PPA and the acquisition of the Minto Mine Diesel units, the timing of the Mirrlees Life Extension project will need to be reassessed as discussed in PPA IR YUB-YEC-1-8. These diesel units will add capacity to the WAF system and will be used for peaking and baseload diesel generation requirements. For more detail on the diesel units including stacking order see YESAB-YEC-2-5 (d) as well as PPA IRs YUB-YEC-1-8, YCS-YEC-1-3, and YECL-YEC-1-9.

4.2 RISKS

The CSTP (including Stage One) involves a range of complexities and risks, including risks related to regulatory approval schedule delays with the new YESAB process, capital cost escalations due to tight construction and commodity markets, negotiation of PPAs with mines and a Project Agreement with the NTFN, security for any PPA arrangements that are made with mines, the timing and scope of any YUB process needed to review the PPA and/or the rates applicable to any mines, and specific risks related to

[23] The available evidence confirms the economic and technical feasibility of the Aishihik 3rd Turbine, which is already fully licensed. As discussed in footnote 7 in Attachment B to the PPA Application, "the Resource Plan assumes Aishihik 3rd Turbine capital costs at about $7 million (2005$); 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)." (page B-4)

[24] See PPA IR UCG-YEC-1-6 which review YUB January 15, 2007 Report recommendations on the Aishihik 3rd Turbine timing, and confirms YEC's support for the Board's recommendation for a brief YEC proceeding to review timing of the Aishihik 3rd turbine if YEC would like to proceed with an in-service date before 2013 (for economic reasons). Accelerating development prior to 2013 will be facilitated by any additional near-term industrial mine load (e.g., Carmacks Copper) and/or any government grant assistance to facilitate such infrastructure development.

the timing and magnitude of any net ratepayer benefits assumed to flow from Stage Two connection of the grids.

The PPA and YEC's overall approach as set out in the Resource Plan, the YESAB Project Proposal and this Application include comprehensive measures to manage and mitigate these risks and to protect ratepayers against adverse rate impacts.

The Schedule 1 project economics update provides a range of potential line-related capital cost estimates (2007$) to reflect uncertainties regarding the impact of tight labour market conditions in Western Canada and other factors (e.g., raw material cost increases), and Yukon Energy submits that it has addressed uncertainty with regard to such cost estimates to the extent feasible prior to completion of final design and costing, and potentially prior to completion of actual tendering.

Based on the Project Proposal Submission filed with YESAB (Resource Plan Hearing, Exhibit B-13), YEC does not anticipate material risks of major design modifications resulting from the regulatory approvals and review process for Stage One or Stage Two of the CSTP. The major regulatory risk with regard to the Stage One CSTP remains material delays in schedule which could adversely affect project costs and benefits.

The Resource Plan Hearing addressed risks related to YEC contracting policies and project management, including consideration of the Auditor General's report on the Mayo-Dawson line and the update that YEC has carried out to its contracting procedures since the Mayo-Dawson project. The Board in its January 15th Report (Section 12) reviewed the evidence and submissions on these issues and recommended that YEC adhere to all outstanding recommendations as outlined in the Auditor General's report and, in addition, in any subsequent major project YEC should detail how it has adhered to the direction in the Auditor General's report.

Stage One Risks

Notwithstanding the comprehensive mitigation and management measures adopted in the PPA Application, YEC has acknowledged that some degree of risk remains for Stage One of the CSTP under certain extreme scenarios where the Mine permanently closes prematurely in its initial years of operation and Minto defaults on the YEC Security (see PPA IRs YUB-YEC-1-14/32/34). The Mine Net Revenue Account acts to protect ratepayers in this regard by ensuring that net incremental revenues are retained in order to provide a cushion, to the extent feasible at any time, against risk related to the Mine operation as well as against the balance of YEC's Stage One capital costs not yet depreciated.

The recent commitment of the Yukon Government's new funding acts to reduce further ratepayer risks related to the Stage One development of the CSTP (see Attachments C and D as well as Schedule 1); nonetheless, as indicated in Tables C-3 and C-4 (Attachment C), risks remain during the Stage One development with the Yukon Government's new funding. These risks reflect YEC's financing of the Minto Capital Cost Contribution. Table C-3 shows, with the Yukon Government's new funding and the mid-point estimated Stage One CSTP costs, that the Mine Net Revenue Account will exceed YEC's total capital

costs at risk by the fourth year of Mine operation (2012). Table C-4 shows, with the Yukon Government's new funding and the high estimated Stage One CSTP costs, that the Mine Net Revenue Account will exceed YEC's total capital costs at risk by the fifth year of Mine operation (2013).

Balanced against these risks, Stage One of the CSTP provides for a major infrastructure development that facilitates future interconnection of the WAF and Mayo-Dawson grids combined with near term benefits to ratepayers and the environment through the sale of YEC's surplus hydro to the Mine at the Mine Firm Rate to displace diesel generation emissions. Overall, YEC considered that the Stage One CSTP development presented an opportunity to both reduce risk and provide ratepayer benefits that made it prudent to conclude the PPA with its terms and conditions (see PPA IR YUB-YEC-1-34).

Section 3.1 of the PPA with Minto includes a list of conditions that one or both of the Parties to the PPA must complete, waive or extend, within certain timelines, in order for the PPA not to be terminated.

- YEC is working with regulators to achieve key targets set for April 30, 2007, i.e., the approval by the YUB of the terms and conditions of the PPA Agreement will facilitate YEC's ability to order (with cancellation provisions) long-lead equipment well before securing final project permits and approvals, thereby materially enhancing YEC's ability to secure the earliest possible in-service date for the project.
- The consequences of delay in Commencement of Delivery are reviewed in UCG-YEC-2-1, YUB-YEC-1-30 and YUB-YEC-1-4.
- Timely completion of Stage One CSTP and Minto Spur Project will yield material ratepayer benefits of approximately $250,000 per month of avoided delay and save 2,000 tonnes of CO_2 emissions per month, ignoring additional impacts that arise under the PPA if delay extends beyond September 30, 2009 (see UCG-YEC-2-1).
- The PPA timeline conditions in Section 3.1, particularly as regard securing needed permits and approvals by certain dates, are generally for the benefit of YEC and Yukon ratepayers and protect YEC from any obligation to proceed with construction if such permits or approvals are unduly delayed. YEC has indicated that, if necessary, and if it is in the best interest of YEC, such timelines can and would be extended by YEC, subject to such extensions not seriously undermining the viability of the project or exposing YEC to new and unacceptable risks. (See PPA IR YCS-YEC-1-1.)

The PPA review process has addressed (among other considerations) the following Stage One Capital Cost Contribution and power purchase payment risk issues:

- Minto's responsibility for the Mine Spur capital costs (YUB-YEC-1-7),
- the Capital Cost Contribution that Minto will provide towards the Stage One CSTP line capital costs (PPA Application section 5.1.1, YUB-YEC-1-7);
- the issues and rationale related to YEC financing of the Minto Capital Cost Contribution (YUB-YEC-1-34);
- Minto's Minimum Take-or Pay Amount obligations (PPA Application 5.1.3 and YUB-YEC-1-16)
- the security that the Mine will provide YEC with respect to these capital cost contribution commitments (PPA Application 5.1.4 and YUB-YEC-1-29, YUB-YEC-1-32 and YUB-YEC-1-34);
- the level and life of its firm purchase power needs (PPA Application section 5.2), and

- the provisions with respect to rates applicable to the Mine. (In YUB-YEC-1-20 YEC submits that the Cost of Service (COS) analysis set out in Attachment A of the PPA Application is sufficient for the YUB to approve a Firm Mine Rate for 2008 and YUB-YEC-1-10 establishes that the proposed rate clearly meets OIC 1995/90 requirements to at least recover the cost of service.)

YEC is assuming risk during Stage One of the CSTP with regard to the up front capital cost payments for the Mine Spur (the rationale for this is discussed in PPA IR YUB-YEC-1-34)[25]. Based on precedent from another jurisdiction[26], YEC provided for upfront capital cost financing to be paid back in equal monthly amounts of principal and interest over slightly less than the expected life of the Mine. This financing was enhanced further with provisions designed to mitigate risk including minimum take or pay contributions, special security, the implementation of a mine net revenue account and the purchase of the diesel units at the mine on similar payment terms as the capital cost contribution for the Mine Spur.

During the PPA Interrogatory process, it was noted that the greatest material risk to ratepayers due to the PPA with Minto would be an extreme "worst case scenario" where the Mine permanently closes in the early years of the Mine life, causing Minto to default on the YEC Security. (YUB-YEC-1-14 and PPA Application section 5.2) However, a default by Minto by itself does not necessarily mean that provision of Grid Electricity to the Mine and payments pursuant to the PPA will cease and net costs will be imposed on ratepayers. (YUB-YEC-1-32) Negotiated terms to the Direct Agreement between YEC, Minto and Macquarie Bank provide that in the case of a default by Minto during the period of the Macquarie Bank financing, the bank may elect to step in and honour Minto's commitments to YEC until the Mine's financial issues are resolved. YEC also has available Miner's Lien rights to ensure that amounts due and owing to YEC for power supplied (including ongoing payments for the Capital Cost Contribution) will have priority to the Current Bank Financing.

Stage Two Risks

Stage Two is included in this Application based on the Yukon Government's new funding commitment (see Attachment D).This funding commitment by Yukon, in combination with industry-related funding, will enable Stage Two to proceed without direct costs to non-mine ratepayers as soon as industrial energy demands are sufficient to warrant this development. In this regard, the Yukon Government funding for Stage Two is assumed to address the specific risks related to other concurrent mine developments on the Mayo-Dawson system (e.g., UKHM) combined with the potential impact of new added mine loads on renewed baseload diesel generation requirements.

[25] As reviewed during the PPA IR process, (in YUB-YEC-1-34 and YECL-YEC-1-4), it has been Minto's consistent position throughout the PPA negotiation process that it is unable to obtain conventional debt financing or pay at the outset or provide a letter or credit for the capital costs of interconnection with the grid. During the negotiation process the matter of an up front capital contribution was rigourously pursued by YEC but it became apparent that without YEC financing the Mine would not connect with the grid.

[26] The Duck Pond Mine example from Newfoundland and Labrador that the capital cost financing for the Minto Spur was based on is discussed in PPA Interrogatory Response YUB-UCG-1-34.

Securing Stage Two CSTP development at no direct cost to non-mine ratepayers will enable connection of the two grids to enhance overall Yukon system flexibility and reliability, and move one step closer to the goal of a Yukon-wide electrical grid.

4.3 EFFECT ON RATEPAYERS

The Resource Plan reviewed the effects of the various near-term projects (including the CSTP) on rates at section 4.4.4 of the Plan (Resource Plan Hearing, Exhibit B-1) and updated for most near-term projects in Undertaking #12 (Exhibit B-24), noting that rate impact considerations as they are addressed in resource planning are markedly different matters with respect to "opportunity" projects, such as Aishihik 3rd Turbine and Carmacks-Stewart, compared to "capacity-related" projects (Mirrlees Life Extension, or alternatives including an Aishihik 2nd Transmission Line or a Whitehorse Diesel Replacement/Expansion Project). Opportunity projects are pursued solely based on the ability to make the most of existing assets, and to have long-term beneficial impacts on ratepayers. In the event such positive rate benefits cannot be secured, these projects would not be pursued.

Ratepayer impact issues were reviewed in the Resource Plan Hearing, and the Board (in its January 15th Report) stated (page 46) that it is convinced that the CSTP would result in net benefits to ratepayers based on the sale of surplus hydro electricity, as well as additional economic and environmental benefits from connection to the predominantly hydro WAF grid of isolated communities and mines currently supplied by diesel generation.

Since Stage One of the CSTP is proposed as an opportunity project, YEC committed that the project will not be developed unless YEC can establish that no adverse impacts are expected for existing ratepayers (Resource Plan Hearing transcript page 511 lines 13-20). Thus, one of the key principles underlying the PPA was that the cost of the Transmission Project required to provide grid electricity to the Mine would not adversely impact other ratepayers in Yukon. Section 5 of the PPA Application summarizes the terms and conditions that were included in the PPA to address this principle and protect Yukon ratepayers in both the near and longer term.

The Mine Net Revenue Account[27] is one of the key measures included in the PPA to ensure that there would be no impacts (adverse or beneficial) on ratepayers due to the Stage One CSTP or the Mine Spur. YEC believes that this deferral account provision is a sound and principled method to address basic concerns about the Stage One CSTP and related PPA risks, as well as potential rate instabilities that may otherwise be associated with such a project.

With or without the Mine Net Revenue Account, the PPA and the Stage One CSTP (combined with the Mine Spur) were expected to provide positive benefits to ratepayers even without the Yukon Government's new funding; however, the Mine Net Revenue Account would also operate to protect ratepayers from rate instability and ensure that ratepayers receive the long-term infrastructure benefits to be realized from this development. Section 3.6 of the PPA specifies that ratepayer benefits with this

[27] For more detail on how the Mine Net Revenue Account works see PPA IR YUB-YEC-1-6 and Attachment C to the PPA Application.

account can occur as soon as accrued amounts are sufficient to offset CSTP Stage One Undepreciated Capital Costs; further options to pass benefits to ratepayers occur under the PPA in any event when the YEC Security is discharged, as well as when the Mine ceases commercial operations (when the account will be terminated and all benefits can flow to ratepayers).

Attachment C to this Application sets out updated projections of the Mine Net Revenue Account to reflect the PPA provisions with the Yukon Government's new funding. In summary, under the assumptions adopted in this analysis, accrued amounts in this deferral account will be sufficient from the outset (year one of YEC service) to offset CSTP Stage One Undepreciated Capital Costs and ratepayers will now benefit throughout the Mine's life from offsets to YEC's regulated rate base. In addition, the Mine Net Revenue Account is now projected at $15.6 million by the year 2016 under the 32.5 GWh/yr Mine load (rather than $10.7 million in Table C-1 of the PPA Application). [28]

In summary, the Mine Net Revenue Account provides rate stability for Yukon ratepayers during the Mine life while ensuring that in the future Yukon ratepayers are eligible to receive any positive net benefits that do in fact remain as a result of the PPA and the Stage One CSTP, i.e., with or without the Mine Net Revenue Account, Yukon ratepayers will ultimately receive all of the direct net benefits that arise from these activities.

5.0 CONSULTATION

The CSTP has undergone extensive consultation under the direction of three different review processes - YEC's 20 Year Resource Plan hearing, the PPA Application hearing and the YESAB Screening of the Project Proposal Submission. The majority of public consultation has been conducted within the YESAB framework, as discussed below.

The CSTP was identified as one of the key near-term projects to be undertaken by YEC in its Resource Plan. This Resource Plan was filed on June 13, 2006 and became the focus of a public consultation process during the summer of 2006. Leading up to the YUB's oral hearing Resource Plan review in mid-November 2006 in Whitehorse, the public was kept informed through media briefings, public consultations and the option to obtain a copy of the Resource Plan and accompanying documents[29].

The public was also kept apprised of the negotiations on a PPA between YEC and Minto. When a Term Sheet on the key terms and conditions to be included in the PPA was agreed to on December 21, 2006 it was publicly released. Likewise on February 8, when the PPA was signed, YEC filed its PPA Application

[28] Assuming a 7% weighted average cost of capital, this increase in the no cost capital use of this deferral account in 2016 would yield a revenue requirement reduction of $343,000 per year. This impact would be increased if the same funds were used as a contribution towards outstanding YEC capital costs.

[29] For more information on the role of public involvement in the Resource Plan hearing see Resource Plan IR YUB-YEC-1-17 and Attachment B to Exhibit B-8, (a supplement to YUB-YEC-1-17).

with the YUB. All interested parties have been provided an opportunity to participate in the YUB's PPA hearing including interrogatories on both the PPA and the Direct Agreement[30].

YESAB Process

Public Consultation prior to YESAB Submission Filing

Section 3.1 previously indicated that consultation with Yukoners, especially those living in proximity to the proposed Project, played an integral role in the evaluation of route alternatives, and the selection of the preferred route and associated mitigation measures outlined in the YESAB Project Proposal Submission. Yukon Energy developed a Public Involvement Plan (PIP) to allow for multiple opportunities and forums (i.e., community meetings, targeted group meetings, personal communications and written commentary) for potentially affected stakeholders to voice their concerns and perspectives. Yukon Energy also distributed a newsletter (May, 2006) during the initial rounds of consultation, and a second newsletter (March 2007) to update those individuals/organizations involved in consultation on the Project Proposal and on-going YESAB process. (The March 2007 newsletter is included as Attachment A.)

There were three rounds of PIP consultation activities for the CSTP and Mine Spur. Consultation activities were conducted with affected NTFN communities[31], community members from Carmacks, Pelly Crossing, Stewart Crossing and Mayo, major customers, private land owners, resource users including trappers, the various Renewable Resources Councils in the region, non-government organizations, private enterprises, and various government departments. (See Chapter 4 of the YESAB Submission for a detailed description of consultation activities, along with Attachment B-1 of this Application for further explanation). YEC did not file the Project Proposal with YESAB until meeting with the NTFN steering committee to review and gain agreement on the preferred route[32].

Yukon Energy is continuing to consult with the NTFNs on topics which include specific route finalization and route impact mitigation issues (i.e., access management and buffers), as well as trap line mitigation. Yukon Energy will also be concluding discussions with the NTFNs on a Project Agreement as provided for in the MOU.

[30] Over 350 interrogatories were completed by YEC on both the PPA and the Direct Agreement on March 8, 2007 and March 9, 2007 respectively.

[31] Prior to commencing in depth discussions regarding route selection for the CSTP, YEC entered into an MOU with NTFN.

[32] Appendix 7-C of the Project Proposal contains these letters from each of the NTFN agreeing to the route as outlined in the document. In two letters (namely the letters dated October 4th from Little Salmon Carmacks First Nation and Selkirk First Nation), areas that still need to be resolved are identified. LSCFN raised concerns in the Tatchun Creek area (Project Proposal, Page 7-52, regarding the Stage One CS preferred route), and the need to address potential access management concerns. SFN raised concerns about the Lhutsaw area (Project Proposal, page 7-53, regarding the Stage One CS preferred route) and the Minto area between the Klondike Highway and Yukon River (Project Proposal, page 7-54, regarding the Mine Spur preferred route). For the latter, SFN indicated that they were unable to declare a specific preference, but were in agreement for "a route in the vicinity of options 1 and 2" (the Project Proposal proposes Option 1A within this Minto area for the Mine Spur, noting the need for further discussion with SFN).

YESAB Consultation Process

After completing Round Three of consultation, Yukon Energy submitted a Project Proposal to the Executive Committee of YESAB on October 13, 2006, whereby YESAB initiated its Pre-Screening process which reviewed the adequacy of the Project Proposal and included requests for supplementary information.

After the filing of the Project Proposal, the NTFN on November 24th sent a letter to YESAB with their comments on the submission's adequacy and reconfirming their support of the project[33].

A major milestone was achieved on December 13, 2006, when YESAB informed YEC that public consultation by YEC with relevant First Nations and community residents had been completed in accordance with subsection 50(3) of *YESAA*.

A second milestone was achieved on February 2, 2007, when the YESAB Executive Committee announced that the Proposal had successfully completed their Adequacy Review and could begin the Screening and Public Review phase.

A public notice was posted on the YESAB On-Line Registry to inform the general public of a 30 day public review period from February 12 through to March 14, 2007. Public comments could be submitted through the online registry or by contacting the YESAB Head Office.[34] LSCFN subsequently requested an extension of 30 days to the public review period to complete their community consultations. YESAB posted a Notice of Extension for submission of public comments to April 4th (an additional 21 days).

The Project Proposal, supplementary filings, Project-related announcements from YESAB, along with any public comments received, are all available on the YESAB Online Registry (YOR) at http://www.yesab.tzo.com/wfm/launch/YESAB. The Project Proposal is also available on the Yukon Energy website (www.yukonenergy.ca).

6.0 OTHER APPLICATIONS AND APPROVALS

6.1 LIST OF APPROVALS, PERMITS, AND LICENCES

Regulatory permits and approvals are required for land use (Crown lands and settlement lands), river and stream crossings and other activities related to the Project's development.

[33] NTFN retained a coordinator to assist in this review. Concluding comments in this letter include the following: "We would like to see this project proceed in the coming year. The comments provided in this letter are not meant to require a lengthy supplementary submission or a substantive delay in the project screening." (November 24, 2006 letter from NTFN to YESAB, page 6)

[34] Generally positive comments were submitted by Yukon Development Assessment Branch (summarizing Yukon government departmental comments), Environment Canada's Environmental Protection Operations (concerning migratory birds and fisheries), Yukon Salmon Committee, and Yukon Conservation Society.

Table 6.1-1 lists the regulatory permits and approvals that have been identified during the YESAB process. Construction of the Project is planned to be in conformance with Fisheries and Oceans Canada (**DFO**) "Overhead Line Construction Operational Statement, Version 2 2006", and accordingly no DFO permit requirement is included in Table 6.1-1.[35] In addition, YEC requires the Certificates referred to in OIC 2007/50 and approvals required by YDC under OIC 1993/108.

Table 6.1-1
Regulatory Permits and Approvals Required for the CSTP

Activity	Permit Required	Regulation
• Clearing or installing a utility ROW • Conducting geotechnical studies (for substations)	Land Use Permit Land Use Permit	*Territorial Lands (Yukon) Act, Lands Act, Land Use Regulations*
• Clearing or installing a utility ROW on settlement lands	First Nation access for construction approval	*N/A*
• Tenure for Land Lease of transmission line ROW • Tenure for Land Lease of Carmacks substation	Application for Land	*Territorial Lands (Yukon) Act, Lands Act, Land Use Regulations*
• Tenure/easement for Land Lease on settlement land	As-built easement or equivalent for ROW on settlement lands; land lease for Pelly Crossing substation	*N/A*
• Construction of new road access • Construct road access on highway ROW • Use of land within highway ROW • Perform work within highway ROW • Erect a sign within highway ROW	Above, and Permit under Highways Act Section 7(2) Access Permit License of Occupation Work in ROW Permit Sign Permit	*Highways Act, Highways Regulation*
• Permission to obtain gravel/sand from quarry	Quarry Permit (submitted along with Land Use Permit)	*Quarry Regulations, Territorial Lands (Yukon) Act, Quarry Regulations, Lands Act*

[35] Among other considerations, this Operational Statement requires that the overhead lines do not require the construction or placement of any temporary or permanent structures (e.g. islands, poles, crib works, etc.) below the high water mark, restrictions are incorporated on clearing of riparian vegetation (area within minimum 15 m from top of bank or high water mark of any watercourse) and the stipulated "Measures to Protect Fish and Fish Habitat" are incorporated when constructing overhead lines.

Activity	Permit Required	Regulation
• Timber cutting – if less than 1000 m^3 per year • Timber cutting – if greater than 1000 m^3 per year	Commercial & Personal Use Permit Timber Permit or Timber Harvest Agreement	*Territorial Lands (Yukon) Act, Timber Regulation*
• Burning refuse (wood)	Burning Permit	*Forest Protection Act, Forest Protection Regulation, Territorial Lands (Yukon) Act*
• Work over or across any navigable water	Application for Approval of Proposed Works under the Navigable Water Protection Act, plus the Lands Act of Yukon	*Navigable Water Protection Act* *Territorial Lands (Yukon) Act, Lands Act, Land Use Regulations*
• Storage and handling of Petroleum Products	Storage Tank Systems Permit, Land Use Permit	*Environment Act, Storage Tank Regulation* *Territorial Lands (Yukon) Act, Lands Act, Land Use Regulations*
• Handling, Disposal, Generation or Storage of Special (Hazardous) Wastes	Special Waste Permit (Environment Act)	*Environment Act, Special Waste Regulation*
• Construction of buildings outside a municipality (substations)	Building Permit	*Building Standards Act*
• Work within 4 km of aerodrome property	Transport Canada Obstacle Clearance Form	*Canadian Aviation Regulation* *TP 312 Standards and Recommended Practice*
• Approvals for construction and development of the Transmission Project	OIC 1993/108	*Yukon Development Corporation Act, Financial Administration Act, Yukon Development Corporation Regulation*
• Approvals for an Energy Project Certificate and an Energy Operation Certificate	OIC 2007/50 OIC 2007/51	*Public Utilities Act, Energy Project Certificate and Energy Operation Certificate Application Regulation*

Before any Yukon, federal or First Nation permit or approval can be issued, YESAB must complete its report and make recommendations to the relevant Decision Bodies under the YESAA. Further, unless delays are to occur, all of these Decision Bodies must also issue Decision Documents agreeing with the YESAB recommendations before any permits or approvals can proceed.

The CSTP project is subject to a YESAB Executive Committee screening pursuant to Section 5 and Section 22 of Schedule 3 of the YESAA regulations[36] as the Project components will involve the construction of an electrical transmission line with a voltage that is at least 138 kV. In accordance with Section 1(1) of the YESAA regulations, a "power line" includes the transmission line and related transformers and switching stations.

[36] The *Assessable Activities, Exceptions and Executive Committee Projects Regulations* (SOR/2005-379) ("*Assessable Activities Regulations*"), established under Section 47 of YESAA.

YESAB's Final Recommendations Report on the CSTP will be submitted to two sets of Decision Bodies[37]:

- Yukon Government Development Assessment Branch of Executive Council for issuance of a Decision Document for Ministerial approval; and
- as this Project will cross LSCFN and SFN settlement land, each of these First Nations will also be a Decision Body and will need to issue a Decision Document.

The First Nation of Nacho Nyak Dun is considered an "Interested Body" under *YESAA* as regards the CSTP Project and, as such, does not issue a Decision Document.

To facilitate moving quickly through the final decision and permitting phases, steps are being taken well in advance of the YESAB's Final Recommendations Report being issued to initiate actions by relevant decision and permitting bodies well in advance of even a draft YESAB screening report. Timely completion of the draft YESAB screening report is also critical to the overall planning approach since it will provide the Decision Bodies as well as YEC with an opportunity for early review of YESAB's assessment and draft recommendations. This initial review will provide the opportunity for any significant issues or differences between various decision and assessment parities to be resolved prior to the issuance of the final YESAB recommendations report[38].

As noted earlier, YEC has already submitted Land Use Permit Applications to the Yukon Government Lands Branch and is working with Little Salmon Carmacks First Nation and Selkirk First Nation on the initial application for similar access rights as required for settlement land for the CSTP and Mine Spur projects.

Federal and Yukon government bodies have now provided comments on the Project Proposal.

A March 13, 2007 letter from Environmental Protection Operations of Environment Canada to YESAB, that provides commentary on the CSTP, states "the project proposal should not result in introduction of deleterious substances since the project description indicated that…there will be no work done in streams, …any stream crossing by equipment would only be done with prior approval of DFO, selective clearing methods (hand clearing with chain saws) are typically used in … sensitive riparian areas, decommissioning [activities] require the same sensitivity… to mitigate potential adverse environmental effects, and Yukon Energy will follow its own EMS best practices near Water Bodies, Wetlands, Stream Crossings and in Permafrost areas."

[37] As noted earlier, it is anticipated that the nature of the federal permit requirements is such that YEC can proceed using established best practices without the need for a federal Decision Document. No settlement land requirements exist for the CSTP with regard to NND.

[38] Section 75(1) of YESAA provides that a decision body must issue a decision document within the period prescribed by the regulations after the executive committee has makes a recommendation. The decision document may accept, reject or vary the recommendation. However, under section 76(1) of YESAA, where an executive committee makes a recommendation, the decision body must within the prescribed time periods

(a) issue a decision document accepting the recommendation or

(b) refer the recommendation back to the executive committee or panel for reconsideration unless that recommendation was made in response to a previous referral under this section.

The Manager of the Yukon Development Assessment Branch, in a March 13, 2007 letter to YESAB summarizing Yukon Government comments, stated "…the proponent avoided most concerns in planning the preferred route and that regulatory mechanisms routinely implement mitigations that minimize remaining effects. …Yukon government does not expect this project to have a significant adverse effect on social conditions in the project area or Yukon."

6.2 CONDITIONS AFFECTING APPROVALS

As indicated in YEC Final Argument in the Resource Plan Hearing YEC does not anticipate material risks of major design modifications resulting from the regulatory approvals and review process for this specific project.[39] Accordingly, no special added costs are anticipated at this time to be required for the CSTP to comply with anticipated material conditions in the approvals and permits.

The major regulatory risk for Stage One CSTP remains material delays in schedule which could adversely affect project costs and benefits[40]; and the inability to successfully conclude agreements with SFN and LSCFN for access rights needed on settlement lands.

[39] YEC Final Argument in the Resource Plan hearing was based on information in the Project Proposal Submission filed with YESAB (Exhibit B-13).

[40] YEC risks regarding full recovery of costs was previously discussed in Section 4.1 of this Application.

ATTACHMENT A

March 2007

PROPOSED CARMACKS-STEWART/MINTO SPUR TRANSMISSION PROJECT

YUKON ENERGY

What is involved in the project?

Yukon Energy is proposing to develop the Carmacks-Stewart/Minto Spur Project to connect the Whitehorse-Aishihik-Faro and the Mayo-Dawson power grids. The Project includes a new 138 kV transmission line generally along the Klondike Highway from Carmacks to Stewart Crossing, a 35 kV spur line from Minto Landing to the Minto Mine Site, new transmission substations at Carmacks, Pelly Crossing, and Minto Landing, and expansion to the existing substation at Stewart Crossing.

Regulatory Approvals and Reviews

No decisions have been made at this time to proceed with the project. Regulatory permits/approvals for land use, river crossings and other activities are required for the project. Before such permits/approvals can be issued, an environmental and socio-economic assessment is required under the Yukon Environmental and Socio-Economic Assessment Act.

After completing several rounds of consultation with various stakeholders, Yukon Energy submitted a Project Proposal to the Executive Committee of the Yukon Environmental and Socio-Economic Assessment Board (YESAB) on October 13, 2006. The Project Proposal was reviewed by YESAB, and on February 2, 2007 was determined as adequate for assessment. A public review period is scheduled for February 12 through March 14, 2007 (30 days).

A draft report from YESAB with recommendations to the Decision Bodies is currently targeted for spring 2007. Regulatory approvals are targeted for July 30, 2007 after YESAB renders its Final Report.

In addition to this process, the Yukon Utilities Board (YUB) has reviewed Yukon Energy's 20-Year Resource Plan (January 15, 2007) and generally recommended proceeding with the development of the Carmacks-Stewart/Minto Spur Transmission Project.

A 138 kV H-Frame Transmission Pole
Whitehorse-Aishihik-Faro Transmission Line

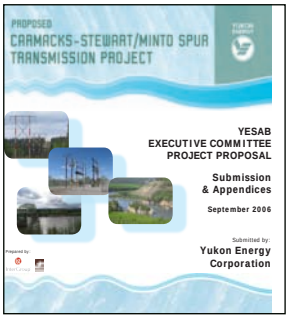
What are the benefits?

If developed as currently planned, the Project will enable the Minto Mine to access current surplus grid power rather than rely on diesel generation. This will benefit all Yukon ratepayers, Minto Mine, governments and others. The line will allow Pelly Crossing, a community relying on diesel generation, to have access to grid power. Connecting the two existing power grids will provide long-term benefits, encourage economic development along the corridor, and enhance overall system reliability and flexibility.

A Power Purchase Agreement (PPA) was signed with Minto Explorations Ltd. on February 8, 2007. Yukon Energy has submitted an application to the YUB to approve this PPA, which is currently on-going.

Project Proposal to YESAB Executive Committee

Yukon Energy has submitted the Carmacks-Stewart/Minto Spur Transmission Project Proposal to the Executive Committee of YESAB. The document is organized in the following way:



Chapter 1:	Project Introduction and Overview
Chapter 2:	Project Location
Chapter 3:	Assessment Approach
Chapter 4:	First Nation and Community Consultation
Chapter 5:	Project Description
Chapter 6:	Description of Existing Environmental and Socio-Economic Conditions
Chapter 7:	Evaluation of Alternative Routes
Chapter 8:	Environmental and Socio-Economic Effects Assessment
Chapter 9:	Acknowledgement and Certification
Chapter 10:	Appendices
Addendum:	January 2007 Response to YESAB for Supplementary Information Requests

Selecting a Preferred Route

The route presented in the Executive Committee Project Proposal was carefully selected to avoid potentially significant adverse environmental and socio-economic effects. The route selection process relied heavily upon public consultation along with professional judgement to identify and evaluate potential route options before selecting a preferred route.

This process began by researching the current environment to understand the physical, terrestrial, aquatic and socio-economic environments in the Project region. Preliminary meetings were held with government departments and the Northern Tutchone First Nations to identify initial opportunities and constraints and create a series of route alternatives.

These route alternatives were presented in the May 2006 newsletter through the use of maps and descriptive text. These route alternatives formed the basis for additional consultation activities with Little Salmon/Carmacks First Nation, Selkirk First Nation, First Nation of Nacho Nyak Dun, other Project area residents, Renewable Resource Council members, government departments and other publics to understand key issues and perspectives on the route options. This led to further route refinement (in an iterative process) and the determination of a preferred route.

The route selection process provided measures for avoidance, minimization and mitigation of potential adverse effects. The technical feasibility of options and overall cost of alternatives were also taken into consideration.

Public Influence on Route Selection

Many route refinements and alignments were made to address public perspectives and concerns.

- Buffer – wildlife related concerns expressed by various parties resulted in an 'at least' 30 metre buffer between the highway ROW and transmission line ROW, wherever feasible.
- Trapping – route design was refined to avoid traplines and associated camps/cabins wherever possible. Additional discussion with trappers on access management and mitigation is on-going.
- Aesthetics – concerns raised about potential visual effects the transmission line may have on valued viewscapes were considered, and where feasible, routing was designed to minimize the effect on valued viewscapes.
- Future Development Plans – suggestions were made to routing that provided the opportunity to optimize development in the future, by taking steps today.

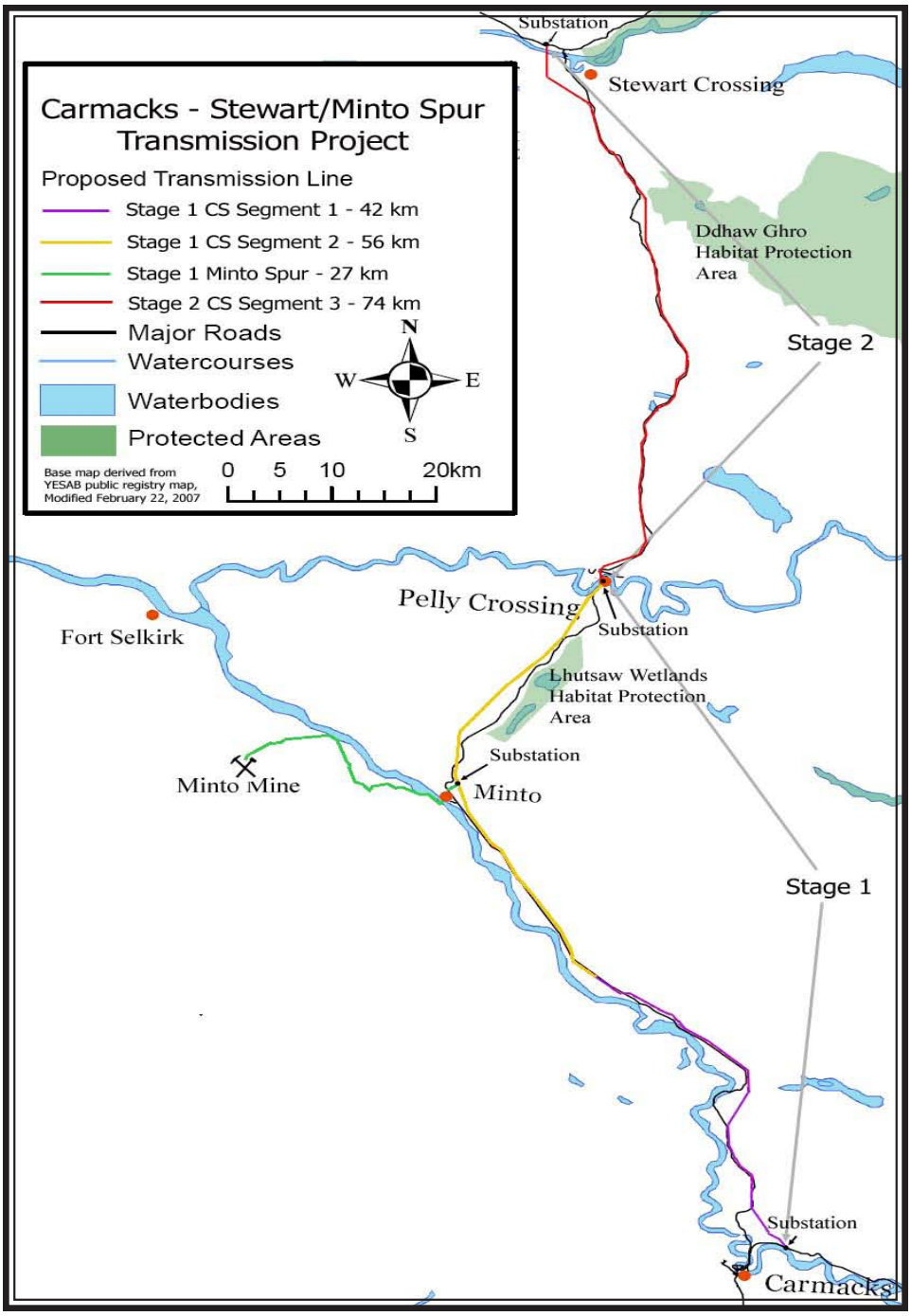
Project Stages

The Project will be developed in stages. Stage One includes development of the transmission line from Carmacks to Pelly Crossing and the Minto Spur transmission line, along with the Carmacks, Minto Landing and Pelly Substations. Stage Two includes the transmission line from Pelly Crossing to Stewart Crossing, and the expansion of the Stewart Crossing substation.

The 138 kV line from Carmacks to Stewart Crossing will require a 60 metre right of way, with a cleared area of 30 to 40 metres. The 35 kV Minto Spur line will require a 30 metre right of way, with a cleared area of 15 – 20 metres. Trees and vegetation will initially need to be cleared before construction can start. Occasional brushing will occur every 5 – 10 years to ensure the safety and reliability of the line.

The Northern Tutchone First Nations will have the opportunity to provide, on a sole source basis, all route clearing and brushing activities related to the project. Clearing will typically be done by mechanical methods, although hand clearing will be used in areas with senstive terrain, such as near rivers and wetlands.

Distribution line from the Stewart Crossing substation to the community



Key Route Features

Detailed maps of the entire Project route are available in the proposal submitted to YESAB. The proposal also describes in detail the considerations made in evaluating route alternatives.

Some of the key features of the preferred route are as follows:

- Generally follows the Klondike Highway and Minto Mine access road
- 30 metre vegetative buffer is provided between the highway and the transmission line right of way where feasible
- New substations at Carmacks, Minto Landing and Pelly Crossing. Expansion to the substation at Stewart Crossing
- Routed to avoid viewscapes at locations such as Five Finger Rapids and Yukon Crossing
- Spans rivers and creeks such as Tatchun and McGregor Creeks to ensure no harmful effects to fish or fish habitat
- Avoids protected areas
- Avoids areas of critical habitat for moose and caribou
- Avoids areas with potential heritage resources

Important Project Dates	
2005	Initial information provided to First Nations and other publics
2006	
Spring	MOU signed with the Northern Tutchone First Nations. Beginning of consultation activities
Summer	Consultations with First Nations, government and other publics
Fall	Submission of Project Proposal to YESAB for screening assessment
2007	
January	Yukon Utilities Board reveiws Yukon Energy's 20-Year Resource Plan and recommends proceeding with the Project
February	YESAB's Executive Committee completes pre-screening process. Assessment begins
	A Request for Proposals is sent to a short-list of engineering firms to develop the project
	A Power Purchase Agreement (PPA) is completed with Minto Explorations Ltd.
	Yukon Energy files an application with the Yukon Utilities Board to approve the PPA
	YESAB's public review process begins
March - May	Completion of Project Agreement with the Northern Tutchone First Nations
	Awarding of preliminary design engineering contract
	Land use permit application process begins
	Approval from the Yukon Utilities Board on the Yukon Energy's PPA with Minto Explorations Ltd.
	Targeted date for draft screening report from YESAB
	Long-lead equipment will be tendered
June - July	Targeted date for final report from YESAB with recommendations to Decision Bodies
	All regulatory approvals and land use permits in place
Fall - Winter	First stage of construction activities from Carmacks to Pelly Crossing and the Minto Spur to commence
2008	
Fall	Targeted date for Stage One of the project to be in operation
After 2008	
	Construction of second stage from Pelly Crossing to Stewart Crossing

Where to find more information

A copy of the Project Proposal is available through the YESAB online registry (www.yesab.ca/registry), the Yukon Energy website (www.yukonenergy.ca), at public librairies in Whitehorse, Carmacks, Pelly Crossing, and Mayo, and at the YESAB offices in Mayo and Whitehorse.

Comments? Questions?

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Further Consultation

Yukon Energy and the Northern Tutchone First Nations are currently working towards the development of a Project Final Agreement targeted to be concluded in the Spring of 2007. This agreement will include provisions for NTFN participation in construction and maintenance of the transmission project, providing employment opportunities for local people. Yukon Energy will also be discussing trapper compensation with each trapper affected by the proposed transmission line.

ATTACHMENT B

ATTACHMENT B:
OVERVIEW OF CHAPTER 4 OF THE PROJECT PROPOSAL TO YESAB

As discussed in section 5.0 on Consultation, Chapter 4 of the Project Proposal Submission to YESAB provides the primary source of information on consultation activities. Table B-1 below provides a summary of the contents of Chapter 4, including a description of how consultation activities were approached, guiding principles, methods used, key meeting dates, and the public's influence on the Project.

Table B-1
Overview of the Contents of Chapter 4

Section	Contents	Page
4.0 First Nations and Other Publics Consultation	4.0 Brief overview of the PIP activities	4-1
4.1 Overview of the PIP Activities and Affected Publics	4.1 Brief description of the regulatory requirements and involved publics	4-1
	4.1.1 Rounds of Consultation – describes the four rounds of consultation activities	4-1
4.2 PIP Principles and Consultation Methods	4.2.1 Guiding Principles – Describes the principles used throughout the PIP process	4-4
	4.2.2 Consultation Methods – An overview of the methods used during the PIP.	4-5
	4.2.2.1 Face-to-face interactions	4-6
	4.2.2.2 Electronic and paper communication	4-7
	4.2.2.3 NTFN Self-directed consultation activities	4-8
	4.2.2.4 Connections to the consultation on the 20-Year Resource Plan	4-9
4.3 Detailed Activities of Each Round of Consultation	4.3.1 Round One – Introducing the Project, route selection and environmental assessment process	4-10
	4.3.1.1 First Nation Consultation – Key meeting dates, the Memorandum of Understanding	4-10
	4.3.1.2 Government Consultation – Key meeting dates	4-12
	4.3.2 Round Two and Round Three – Key issues and perspectives on route alternatives	4-13
	4.3.2.1 First Nation Consultation – Key meeting dates	4-14
	4.3.2.2 Government Consultation – Key meeting dates	4-15
	4.3.2.3 Other Publics Consultation	4-16

Appendices and Supporting Reference Materials

The Appendices to Chapter 4 provide supporting documentation to the main text in Chapter 4, including a list of the consulted stakeholders, materials used throughout the PIP process, and records of personal communications. Chapter 4 Reference Materials include supporting materials used during the consultation process, items such as meeting agendas, materials and notes, and any additional materials used during the PIP. This information is available in CD format as a part of the submission to YESAB.

Rounds of Consultation

There were three rounds of PIP consultation activities for the CSTP and Mine Spur. **Round One** was designed to:

- initiate dialogue and advise the public about the proposed Project, the PIP and the anticipated schedule for the route selection and assessment process;
- provide a description of the Project based on what was known at the time; and,
- identify and confirm initial perspectives or concerns.

It also sought technical engineering and cost advice, as well as initial input from First Nations and government departments with interests in the area.

Round Two was directed at all interested publics (with particular emphasis on NTFNs) and focused on key perspectives and issues regarding preliminary route alternatives. **Round Three** provided another opportunity to examine route refinements and identify potential Project-related effects influencing route

selection, including possible mitigation strategies. Information received during Round Three aided in the final determination of a preferred route for the Project.[41]

Yukon Energy is continuing to conduct consultation with the NTFNs on such topics as route finalization (3 specific areas), route mitigation (i.e., access management and buffers), and trap line mitigation. Yukon Energy will also be entering into discussions with the NTFNs on a Project Agreement during the spring of 2007.

[41] While initially scheduled to occur separately, Round Three activities overlapped with Round Two activities in some communities as seasonal resource harvesting activities became a local priority.

ATTACHMENT C

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). This analysis updates the PPA Application Attachment C to reflect the Yukon Government's new funding commitments (see Attachment D).

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.[42]

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 with Stage One development with the Yukon Government's new funding commitments:

- **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. Minto payments for the Capital Cost Contribution are not considered in this analysis.
- **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 of the PPA Application (Tables B-2 and B-3 respectively),

[42] 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.

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 to the PPA Application (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 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)[43].
- **CS (column 11):** Estimated depreciation and return annual costs related to the CSTP, after consideration of capital contributions by the Minto mine, YDC and YTG (see Attachment A to the PPA Application for more detailed review of the initial assumptions; the Yukon Government's new funding for Stage One (see Attachment D to this Application) is assumed in this analysis).
- **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 CSTP or for any new generation infrastructure developed by YEC on an accelerated basis

[43] 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.

due to the Minto mine or the CSTP. 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 CSTP 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). The net effect of the Yukon Government's new funding is that contributions fully offset mid-point estimate capital costs for Stage One of the CSTP and the balance in column 15 is zero in all years.

Table C-1 estimates an accrued balance in the Mine Net Revenue Account at the end of 2016 of $15.6 million (which is higher than the $10.7 million estimated in Attachment C of the PPA Application for the accrued balance in the Mine Net Revenue Account at that same date).

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 $16.1 million.

Tables C-3 and C-4 provide an overview of YEC capital cost risk over the Minto Mine life as assumed in Table C-1, based on the mid-point cost estimates (Table C-3) and the high cost estimates (Table C-4) from Schedule 1 of this Application. These tables reflect the following:

- **Total Capital Costs at Risk at each year end**: This equals principal outstanding on the Minto Capital Cost Contribution, plus the CS Stage One Undepreciated Capital Costs. This is the YEC capital cost at risk.
- **Mine Net Revenue Account at each year end**: As shown in Table C-1 (and modified as needed for high cost CSTP estimates), the balance in this deferral account at each year end reflects the net incremental income benefits secured from the Mine operation.

Table C-3 shows, with the Yukon Government's new funding and the mid-point estimated Stage One CSTP costs, that the Mine Net Revenue Account will exceed YEC's total capital costs at risk by the fourth year of mine operation (2012).

Table C-4 shows, with the Yukon Government's new funding and the high estimated Stage One CSTP costs, that the Mine Net Revenue Account will exceed YEC's total capital costs at risk by the fifth year of mine operation (2013).

Table C-1 - Mine Net Revenue Account Example: Minto at 32.5 GWh/yr ($000) with Yukon Government's New Funding

		Mine Loads GWh/y 32.5	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 $							
Mine Year	Year starting	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	2007															
2	2008	-	-	-	-	-	-	-	-		-	-	-	-	-	
3	2009	32.5	3,250	40	170	130	1,282	1,282	-	102	516	-	192	2,515	2,515	-
4	2010	32.5	3,250	65	229	164	1,308	1,308	-	102	482	-	267	2,438	4,953	-
5	2011	32.5	3,250	94	307	213	1,334	1,334	-	102	447	-	259	2,433	7,386	-
6	2012	32.5	3,250	132	410	278	1,361	1,117	244	102	384	-	251	2,244	9,630	-
7	2013	32.5	3,250	182	543	361	1,388	803	585	102	277	-	242	2,004	11,634	-
8	2014	32.5	3,250	251	709	458	1,416	488	928	102	177	-	234	1,741	13,375	-
9	2015	32.5	3,250	343	884	541	1,444	162	1,282	102	83	-	225	1,477	14,852	-
10	2016	32.5	3,250	467	1,630	1,163	1,473	-	1,473	102	(3)	-	217	796	15,648	-

Notes:

1. Commercial operations are expected to commence in Q2, 2007. Table assumes YEC commences delivery Jan 1, 2009, and mine operations cease Dec 31, 2016.
2. Diesel Generation with Operating and Maintenance costs, as well as Secondary Sales, are from PPA Application Attachment B.
   PPA Application 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).
   PPA Application Attachment B reflects YEC and YECL secondary sales - YEC's share as required for Mine Net Revenue is estimated at 80% of the amounts shown in columns 6, 7 and 8.
3. Pelly Crossing diesel saving assumes only YEC portion of diesel saving at $.068 per kWh.
4. Assumes 0% interest per annum earned on the account to fund YEC's regulated rate base because the account is greater than CS Stage One Undepreciated Capital Cost.
5. Other costs such as those related to the PPA hearing, and YEC net earnings on financing Minto's Capital Cost Contribution (7.5% interest exceeds YEC's WACC), would also be included in the Mine Net Revenue Accou

Table C-2 - Mine Net Revenue Account Example: Minto at 42 GWh/yr ($000) with Yukon Government's New Funding

		Mine Loads GWh/y 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 $							
Mine Year	Year starting	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	2007															
2	2008	-	-	-	-	-	-	-	-		-	-	-	-	-	
3	2009	42	4,200	40	236	196	1,282	1,282	-	102	664	-	192	3,250	3,250	-
4	2010	42	4,200	65	314	249	1,308	1,061	247	102	601	-	267	2,987	6,237	-
5	2011	42	4,200	94	416	322	1,334	775	559	102	483	-	259	2,790	9,027	-
6	2012	42	4,200	132	547	415	1,361	478	883	102	371	-	251	2,559	11,587	-
7	2013	42	4,200	182	698	516	1,388	159	1,229	102	264	-	242	2,297	13,884	-
8	2014	42	4,200	251	1,355	1,104	1,416	-	1,416	102	163	-	234	1,668	15,552	-
9	2015	42	4,200	343	2,670	2,327	1,444	-	1,444	102	70	-	225	525	16,077	-

Notes:

1. Commercial operations are expected to commence in Q2, 2007. Table assumes YEC commences delivery Jan 1, 2009, and mine operations cease Dec 31, 2016.
2. Diesel Generation with Operating and Maintenance costs, as well as Secondary Sales, are from PPA Application Attachment B.
   PPA Application 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).
   PPA Application Attachment B reflects YEC and YECL secondary sales - YEC's share as required for Mine Net Revenue is estimated at 80% of the amounts shown in columns 6, 7 and 8.
3. Pelly Crossing diesel saving assumes only YEC portion of diesel saving at $.068 per kWh.
4. Assumes 0% interest per annum earned on the account to fund YEC's regulated rate base because the account is greater than CS Stage One Undepreciated Capital Cost.
5. Other costs such as those related to the PPA hearing, and YEC net earnings on financing Minto's Capital Cost Contribution (7.5% interest exceeds YEC's WACC), would also be included in the Mine Net Revenue Account

Table C-3 - YEC Capital Cost Risk Overview - Minto Mine at 32.5 GWh/year (million $)

Mid-Point Capital Cost Estimates - With Yukon Government Funding Contribution

	Minto Capital Cost Contribution		YEC Costs		Mine Net Revenue Account			Risk
Year End	Mine Spur Principal Outstanding	CS $7.2 million Principal Outstanding	CS Stage One Undepreciated Capital Costs	Total Capital Costs at risk	Mine Revenues	Mine Net Revenue Attachment C	Mine Net Revenue Account	Net Capital at Risk
	1	2	3	4	5	6	7	8
In-service Cost	**3.83**	**7.2**	**22.58**					
Less Contributions			**(22.58)**					
Initial Net Cost Risk	**3.83**	**7.20**	**0**	**11.03**				
2009	3.39	7.20	0.00	10.59	3.25	2.51	2.51	8.08
2010	2.93	7.20	0.00	10.13	3.25	2.44	4.95	5.17
2011	2.42	7.20	0.00	9.62	3.25	2.43	7.39	2.24
2012	1.88	7.20	0.00	9.08	3.25	2.24	9.63	(0.55)
2013	1.30	4.97	0.00	6.27	3.25	2.00	11.63	(5.36)
2014	0.67	2.58	0.00	3.25	3.25	1.74	13.38	(10.13)
2015	(0.00)	(0.00)	0.00	(0.00)	3.25	1.48	14.85	(14.85)
2016	-	-	0.00	0.00	3.25	0.80	15.65	(15.65)

Notes: General assumptions per PPA Application, Attachment C, Table C-1 - Minto at 32.5 GWh/year.

1. Table assumes YEC commences delivery Jan 1, 2009, and mine operations cease Dec 31, 2016.
2. Minto Capital Cost Contribution is financed by YEC at 7.5% per year cost of capital as per the PPA. Table shows principal outstanding at year end. Table ignores extent to which Diesel Units purchase by YEC offsets Mine Spur principal outstanding ($2.24 million cost financed on same terms).
3. Net Capital at Risk equals column 4 less column 7.

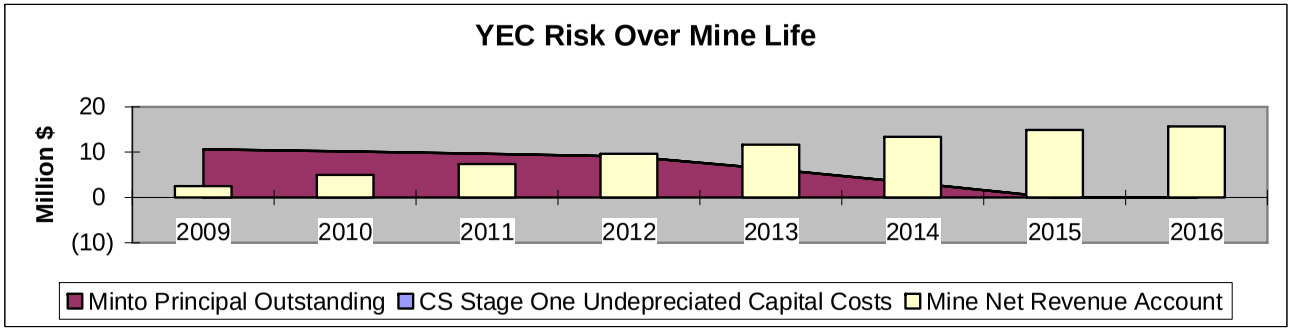


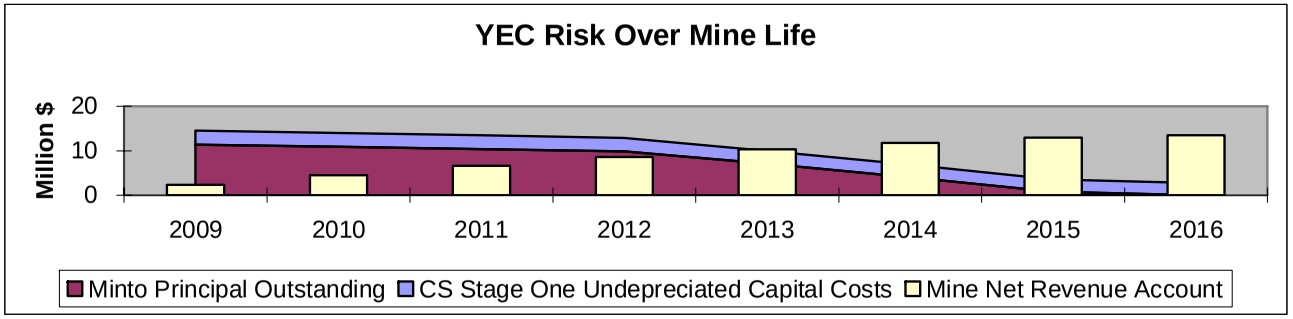
Table C- 4 - YEC Capital Cost Risk Overview - Minto Mine at 32.5 GWh/year (million $)

High Capital Cost Estimates - With Yukon Government Funding Contribution

	Minto Capital Cost Contribution		YEC Costs		Mine Net Revenue Account			Risk
Year End	Mine Spur Principal Outstanding	CS $7.2 million Principal Outstanding	CS Stage One Undepreciated Capital Costs	Total Capital Costs at risk	Mine Revenues	Mine Net Revenue Attachment C	Mine Net Revenue Account	Net Capital at Risk
	1	2	3	4	5	6	7	8
In-service Cost	**4.6**	**7.2**	**25.9**					
Less Contributions			**(22.65)**					
Initial Net Cost Risk	**4.6**	**7.20**	**3.25**	**15.05**				
2009	4.16	7.20	3.19	14.55	3.25	2.33	2.33	12.22
2010	3.70	7.20	3.12	14.02	3.25	2.14	4.47	9.54
2011	3.19	7.20	3.06	13.45	3.25	2.14	6.61	6.84
2012	2.65	7.20	2.99	12.84	3.25	1.95	8.57	4.28
2013	2.07	4.97	2.93	9.96	3.25	1.72	10.28	(0.32)
2014	1.44	2.58	2.86	6.88	3.25	1.46	11.75	(4.87)
2015	0.77	(0.00)	2.80	3.56	3.25	1.20	12.95	(9.38)
2016	-	-	2.73	2.73	3.25	0.53	13.47	(10.74)

Notes: General assumptions per PPA Application, Attachment C, Table C-1 - Minto at 32.5 GWh/year.

1. Table assumes YEC commences delivery Jan 1, 2009, and mine operations cease Dec 31, 2016.
2. Minto Capital Cost Contribution is financed by YEC at 7.5% per year cost of capital as per the PPA. Table shows principal outstanding at year end. Table ignores extent to which Diesel Units purchase by YEC offsets Mine Spur principal outstanding ($2.24 million cost financed on same terms).
3. Net Capital at Risk equals column 4 less column 7.



ATTACHMENT D

Yukon
Office of the Minister
Box 2703, Whitehorse, Yukon Y1A 2C6

April 2, 2007

Mr. Willard Phelps
Chair of the Board
Yukon Energy Corporation
2 Miles Canyon Road
Box 5920
Whitehorse, YT Y1A 6S7

Dear Mr. Phelps:

Re: Funding of Carmacks-Stewart Transmission Project to Reduce Greenhouse Gas Emissions

The Yukon government is committed to the long-term efficiency and reliability of the territory's hydroelectric system as part of our Climate Change Strategy. To this end, the government, in partnership with industry and the Yukon Energy Corporation (YEC), will be participating in a number of projects aimed at reducing greenhouse gas emissions, reducing the territory's dependence on diesel-generated electricity and developing sustainable energy projects.

Stage One of the Carmacks-Stewart Transmission Project (CSTP), from Carmacks to Pelly Crossing with concurrent development of the spur line to the Minto Mine, will enable YEC to displace diesel generation at the Minto Mine and at Pelly Crossing, reducing CO_2 emissions in Yukon by up to 24,100 tonnes per year. This amount is one and a half times the amount of CO_2 currently produced by all of the YEC and Yukon Electrical Corporation Limited diesel generators.

Stage Two of the CSTP will interconnect the Whitehorse-Aishihik-Faro and Mayo-Dawson grids resulting in better utilization of the hydro-electric generation facilities on both grids. This will encourage economic development along this transmission corridor, enhance overall Yukon power system reliability and flexibility, and enable Yukon to increase its hydroelectric capacity.

I am writing to inform you that the Yukon government will provide YEC with a contribution of up to $10 million for Stage One of the CSTP. This commitment is subject to YEC securing the Yukon Utilities Board approval of the Power Purchase Agreement with Minto Explorations and receiving all necessary permits and approvals, including Energy

Certificates obtained under the *Public Utilities Act*. These funds will be applied to those Stage One capital costs not already committed from Yukon Development Corporation and the Minto Mine.

The Yukon government will work with YEC and industry to ensure that Stage Two can also be constructed in the future without any direct cost to other ratepayers.

This new funding initiative will promote the Yukon government's Climate Change Strategy to reduce green house gas emissions, reduce ratepayer risks, and ensure long-term rate stabilization

Please ensure Yukon Energy's application for Energy Certificates under Part 3 of the *Public Utilities Act* reflects these new Yukon government infrastructure funding commitments to the CSTP.

Sincerely,

Archie Lang
Minister of Energy, Mines and Resources