

# Appendix A to YUB Board Order 2007-5

## Reasons for Decision

### A. Background

The Yukon Utilities Board (YUB or Board) received an Application dated February 8, 2007, from Yukon Energy Corporation (YEC) seeking approval for the Purchase Power Agreement (PPA) between YEC and Minto Exploration Ltd. (Minto).

The PPA Application stems from a commitment made by YEC during the review of YEC's 20-Year Resource Plan: 2006-2025 (Resource Plan) and in the submission of a PPA Term Sheet to the Board on December 21, 2006. The commitment by YEC was to file an Application seeking Board approval of the PPA for the supply of electricity by YEC to Minto through what is described as Stage One development of the Carmacks-Stewart Transmission Project (CSTP). Stage One of the CSTP is a 138kV transmission line from Carmacks to Pelly Crossing, with a spur line to the Minto mine. In the Application, YEC is seeking approval of:

- Firm Mine Rate: Approval of the Firm Mine Rate as set out in Schedule C of the PPA and Section 3.5 of the PPA with respect to any future adjustment of the Firm Mine Rate after 2008.
- Low Grade Ore Processing Secondary Energy Rate: Approval of the Low Grade Ore Processing Secondary Energy Rate as set out in Schedule D of the PPA.
- Mine Net Revenue Account: Approval of provisions respecting the Mine Net Revenue Account as set out in Section 3.6 of the PPA.
- Capital Cost Contribution: Approval of provisions respecting the Capital Cost Contribution as set out in Part 5 of the PPA.
- Take-or-Pay and YEC Security: Approval of provisions respecting the Minimum Take-or-Pay Amount and the YEC Security as set out in Part 6 of the PPA.
- YEC Purchase of the Diesel Units: Approval of provisions respecting the YEC purchase of the four diesel units as set out under Part 10 of the PPA.
- Decommissioning Costs: Approval of provisions respecting Decommissioning costs as set out in Part 11 of the PPA.

Section 3.2 of the Application provides a summary of the Timing Requirements and Conditions of the project and the PPA. Section 3.2 also states, "If any of the above conditions are not either fulfilled or waived on or before the date specified the PPA will be terminated." YEC requested a decision of the YUB by April 30, 2007, as one of these conditions is YUB approval of the PPA by that date.

The Board through Board Order 2007-01 set up the following process for this Application:

- February 16: Intervenor Applications due
- February 26: Information Requests to YEC due
- March 8: Responses to Information Requests from YEC due
- March 15: Intervenor Arguments due
- March 22: YEC Reply Argument due

In its letter of February 15, 2007, to the Board, the Utilities Consumers' Group (UCG) requested clarification as to the scope of this proceeding and expressed concerns, based on the schedule for the proceeding, about opportunity for follow-up if information sought is either refused or incompletely answered. UCG was further concerned that without the establishment of an issues list, it would be difficult to judge the appropriateness of Information Requests (IRs). Yukon Electrical Company Ltd. (YECL) requested clarification of the process on February 16, 2007, and stated that regulatory efficiency would dictate that this process should be held jointly with any Part 3 Review ordered by the Minister.

The YUB provided a response on February 21, 2007, to the concerns expressed by UCG and YECL. In the Board correspondence of that date the Board stated that it expected YEC would not to take advantage of the fact there is no follow-up process and will provide complete responses in the first instance. The Board further stated that while related, it did not view the PPA Application as a part of the Resource Plan proceeding. The Board stated it was considering YEC's Application like any other application in that it would adjudicate on the matters requested by YEC.

The Direct Agreement between YEC, Minto, and Macquarie Bank Limited was submitted by YEC on February 22, 2007. On March 5, 2007, the Board approved a second round of IRs in response to requests from UCG and Peter Percival.

The Board received a Notice of Motion from UCG on March 12, 2007, outlining a list of Responses to IRs that in UCG's view were not adequately responded to by YEC. A Notice of Motion was also filed by Mr. Percival on March 15, 2007. YEC provided further clarification to its responses on March 13, 19 and 20, 2007.

On March 26, 2007, the Board issued Board Order 2007-03 which ruled on the Notices of Motion and updated the schedule for the remainder of the PPA as follows:

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|--------------------------------|----------------|
| Directed IR responses from YEC | March 28, 2007 |
| Argument (simultaneous)        | April 4, 2007  |
| Reply (simultaneous)           | April 10, 2007 |

## **B. Issues**

### **1. Firm Mine Rate**

Section 4.1.1 of the Application states:

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

It is also noted that:

Pursuant to Order-in-Council 1995/90, YUB approval of any firm rate applicable to this customer must be sufficient to recover the costs of service to that customer class based on treating all of Yukon as one rate zone and pooling costs for both YEC and the Yukon Electrical Company Ltd. (YECL).<sup>1</sup>

Cost of service (COS) methods and principles were outlined in Schedule E of the Application, and in argument YEC stated that the “proposed rates were set according to rate making principles and methods that have been adopted and previously applied by the YUB”.<sup>2</sup> YEC said that both YEC and Minto required “certainty regarding the nature of, and basic levels for, the rates that would be in effect for the Minto mine in 2008 when delivery of Grid Electricity is assumed to commence. Without that certainty Minto was not willing to commit to being responsible for the obligations it has undertaken under the PPA, and without those commitments YEC could not proceed with development of Stage One of the CS project”<sup>3</sup>.

YEC stated during the negotiations that “Minto required some assurance that should the current environment with regard to the rate setting and rate regulation materially change to the extent that the cost of Grid Electricity, due to such a change, was less attractive than diesel generation, there was some measure of relief available to mitigate any significant losses suffered by Minto”<sup>4</sup>.

Section 3.5 of the PPA provides that if the YUB alters terms and conditions of the PPA (including issuing increasing the Firm Mine Rate in a manner inconsistent with the COS principles and methods set out in Schedule E of the PPA) and this materially adversely affects the cost savings to Minto under the PPA, then YEC and Minto will reduce the Minimum Take or Pay amount to offset the loss of cost savings to Minto, and remove the YEC Security with regard to the Take or Pay amount.<sup>5</sup>

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<sup>1</sup> YEC Application to Approve Minto PPA, page A-1.

<sup>2</sup> YEC Argument, page 3.

<sup>3</sup> YEC Argument, page 3.

<sup>4</sup> YEC Argument, page 5.

<sup>5</sup> YEC PPA Application, Attachment E.

YEC submitted that the COS is reasonable in the absence of current General Rate Application (GRA) filings and joint COS studies prepared on a Yukon-wide basis by YEC and YECL<sup>6</sup>. YEC acknowledged the Board's responsibility to set rates and determine COS methods and that Rate 39 was not a Minto-only rate but applicable to all primary industrial customers.

UCG stated that YEC failed to comply with OIC 1995/090 [Rate Policy Directive (1995)] by not obtaining information from YECL for an accurate determination of a Yukon-wide revenue requirement and by not completing a comprehensive COS study.

Mr. Percival echoed many of the points the UCG brought up and in addition suggested a re-imposition of fuel adjustment rider, Rider F.

YECL noted that the fundamental premise of a COS study is cost causation. In YECL's view, cost causation stems from planning the needs of the system and requested clarification from the Board as to whether industrial load such as Minto is included in the Loss of Load Expectation (LOLE) and N-1 planning criteria. This is discussed further and addressed in s. 9(a) (Other Matters – Capacity Planning Criteria).

YEC stated that the proposed Firm Mine Rate and the inclusion of s. 3.5 of the PPA was because Minto sought stable rates. In response to this position, UCG submitted that Minto should face the same regulated rate risk as any other regulated rate customer, otherwise Minto would have an unfair advantage over other customers.

YEC's responded to Intervenors' submissions by suggesting that no evidence was presented to counter the COS as proposed. YEC also took the position that the Firm Mine Rate for 2008 is more than sufficient to cover the estimated COS for 2008.

### Views of the Board

The Board considers there are two choices available to serve Rate 39 (Industrial Primary): one option is to use the existing rate (the rate approved in the last filed COS study), another is to utilize a new rate, which YEC has applied for in this Application. The existing rate, which is based on Faro mine assumptions and submitted 10 years ago, is not a practical option. Therefore, the Board must look at the new rate applied for by YEC. This rate is a result of negotiations with a single mine customer. It did not include data from or consider the ramifications to the other regulated Yukon utility, YECL.

Section 6(1) of OIC 1995/090 states: "The Board must ensure that the rates charged to major industrial power customers, whether pursuant to contracts or otherwise, are sufficient to recover the costs of service to that customer class; those costs must be determined by treating the whole Yukon as a single rate zone and the rates charged by both utilities must be the same."

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<sup>6</sup> YEC Argument, page 6.

The Yukon regulatory environment is one that prefers a direction of standardized utility practice in regard to rates. Such standardized utility practice includes providing a full COS calculation when designing new rates. The process to complete the necessary studies for the cost of service calculation, prepare the application and obtain regulatory approval for new rates can be protracted. The Board understands that YEC has faced strict time constraints with respect to the CSTP.

YEC acknowledges “[t]he Board alone has the power to set rates and determine COS methods used for rate setting purposes pursuant to its constituent legislation and regulations.”<sup>7</sup> However, while YEC recognizes the jurisdiction of the YUB, the timing YEC has requested presented challenges for the Board and Intervenors in establishing and participating in the proceeding. Recognizing the time constraints faced by YEC, the Board has endeavored to meet these timelines; however, as a result, YEC’s evidence in some areas is not as complete as the Board would normally expect, in particular, with respect to COS.

The Board agrees with Intervenor concerns regarding the lack of a complete COS study. The Board is of the view that due to the articulating nature of a COS study, rates cannot be developed in isolation. Therefore, the Board reiterates its earlier direction that YEC and YECL must provide a complete COS study and rate design with their next GRA.<sup>8</sup> The COS is to include updated studies on allocators, and will look at the feasibility of direct assigning assets, where applicable to certain rate classes. Further, the Board expects to see justification on the allocation of transmission assets.

In addition, the Board questions the rationale of defining the CSTP project as one of diesel displacement in light of YEC’s comments that the project is to serve system requirements<sup>9</sup>. The Board would like to explore the COS evidence in this regard when it is filed in YEC’s next GRA.

Therefore, until such time as a decision is rendered in the next GRA, the Board will accept Rate 39 on an interim basis as proposed by YEC. The interim Rate Schedule 39 will be applicable throughout Yukon. Due to the concerns expressed about the sufficiency of the current COS presented by YEC, the Board is not prepared to accept Section 3.5 of the PPA. The Board does not consider that there should be a link between Board approved rates which are deemed fair, just, reasonable and within the public interest (based on accepted COS principles) and the security provisions to protect Yukon ratepayers. The practice in Yukon is to follow cost causation for COS purposes as a fundamental building block to proper rate design. Minto and any other customer can take comfort in knowing that the regulatory environment in Yukon is based on standardized practices.

The Minimum Take-or Pay Amount is intended to protect Yukon ratepayers when there is significant investment in new facilities. The Take-or-Pay Amount is partially driven by

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<sup>7</sup> UCG-YEC-1-15.

<sup>8</sup> Report to Executive Commissioner Yukon Energy Corporation 20-Year Resource Plan, page 50.

<sup>9</sup> YEC Argument, pages 11-12, inclusive.

the requirement to serve the Minto load, and of which Minto is expected to receive significant benefit. Based on regulatory practice in the Yukon, the Board's view is that Yukon rates are stable and built based on sound practice and a link to the Minimum Take-or Pay provision is not necessary to provide stable rates to Minto. Further, the Board agrees with UCG that Minto should be treated the same as all other customers in terms of any risk associated with regulated rates.

## **2. Low Grade Ore Processing Secondary Energy Rate**

Section 4.1.3 of the Application presented the Low Grade Ore Processing Secondary Energy Rate (Rate Schedule 35). This is an interruptible rate and is to only be supplied from surplus hydro to Industrial Primary customers (who are supplied under Rate Schedule 39). As defined, this rate is to be limited to the processing of low grade copper ore. YEC proposes that unlike Rate Schedule 32 (Secondary Energy), where the rate is adjusted quarterly (based on changes in heating oil prices), Rate Schedule 35 will remain fixed. YEC indicated that energy use under this rate would not be separately metered, but it would rely on reporting from such customers to determine appropriate charges. Energy purchased under Rate 35 will not contribute to Whitehorse-Aishihik-Faro (WAF) winter peak or require the use of diesel generation.

In argument YEC summarized the concerns raised in the interrogatory process about Rate 35 as follows:

- 1) Concerns on how use of Rate 35 would be measured and audited
- 2) How this rate would impact other secondary energy users on the WAF grid
- 3) Would there be sufficient surplus energy available to other industrial customers<sup>10</sup>

YEC, in YUB-YEC-1-11(2), indicated that appropriate auditing and control measures are not currently in place for accurate measurement of Rate 35 usage, but described what those measures would likely involve.<sup>11</sup> YEC stated that auditing and control measures would be required before Minto could use this rate. In addition, reporting to enable YEC to determine which portion of the recorded Demand and Energy in any billing month that relates to Rate 35 is a prerequisite before YEC will allow usage of Rate 35. YEC submitted that these were sufficient safeguards to allow approval of Rate Schedule 35.

YEC addressed the second concern by stating that service to Rate 32 customers precedes service to Rate 35. Having a rate available such as Rate 35 provides such benefits as:

- Less water at dam sites spilled and wasted
- Incremental revenues to YEC
- Economic Processing of Low Grade Ore<sup>12</sup>

For the third point, YEC stated that Rate 35 would not be immediately applicable to other potential mine customers but would consider rewording some of the terms in Rate

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<sup>10</sup> YEC Argument, p 9.

<sup>11</sup> YEC Argument, page 10 - footnote 31.

<sup>12</sup> YEC Argument, page 11

Schedule 35 to allow availability to other mines.<sup>13</sup> Additional firm mine loads concurrent with the Minto load implied that surplus hydro would not be available and hence Rate 35 would not be available.

UCG submitted that a cost-based rate should be used for secondary energy, and that any final decisions on this proposed rate should be delayed until the filing of the next GRA.

Mr. Percival recommended that "...any and all large industrial electrical customers can have an equal opportunity to purchase such seasonally available surplus hydro power on a non-discriminatory and non-favored basis."<sup>14</sup>

YECL requested that the approval of Rate Schedule 35 be deferred until the audit and control measures have been determined. This position was supported by UCG in reply.

In reply, YEC stated it "sees no reason for the Board to defer approval of Rate Schedule 35, but is willing to report to the Board with any proposed auditing methodology developed between YEC and Minto in order to ensure that it is reasonable and that fulfils the requirements of Rate Schedule 35. It is noted that not approving Rate Schedule 35 as it is currently set out at this time would require that both Parties to the PPA agree to an amendment."<sup>15</sup>

### Views of the Board

The three issues with respect to Rate Schedule 35 are:

- 1) The quantum of the interruptible rate
- 2) The ability to measure the quantity of interruptible energy consumed
- 3) The broader applicability of the rate

Upon review of the negotiated rate, the Board observes that it is close to the level set for Rate 32. This does provide some comfort to the Board, as Rate 32 is a rate previously approved by the YUB. However, as discussed under s. 1 (Firm Mine Rate), the Board is concerned about the lack of a complete COS study by YEC and YECL. The Board has the same concerns with respect to Rate 35 and therefore will only approve Rate 35 on an interim basis. For the next GRA (Phase II), the Board directs both YEC and YECL to provide their electronic COS models and to distinctly show costs as being related to generation, transmission and distribution. Further, generation costs are to be separated based on each generation type (i.e. hydro, diesel, wind etc.). This will enable testing of costs to serve all rate classes, including Rate 35.

For the second issue, the Board is persuaded by the arguments of the Intervenors that insufficient systems are in place to accurately measure usage for Rate 35. Should Minto pursue Rate 35, proposed audit and control measures and reporting requirements must

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<sup>13</sup> YCS-YEC-1-2(d)

<sup>14</sup> Percival Argument, page 2.

<sup>15</sup> YEC Reply, page 28.

be established between YEC and Minto, and then YEC is to file these with the Board. YEC is not to implement Rate Schedule 35 until such approval has been granted.

Finally, the Board is persuaded by the reply of YEC that it is willing to amend the terminology for Rate Schedule 35 if and when other industrial loads present opportunities for use of such a rate. Generic wording, instead of wording specific to one customer, is a preferred approach for rate schedules. Therefore, the Board directs YEC to amend the wording for Rate Schedule 35 at such time as the opportunity arises for other industrial loads to make use of Rate 35.

### **3. Peak Shaving Rate Option**

The Peak Shaving Rate Option was described in section 4.1.2 of the Application and further in Schedule C of the PPA (Attachment E). The concept for this option is that, by providing a specified credit on the firm demand billing rate, Minto is provided incentive to limit its ability to affect peak winter loads on the WAF system. The winter peak contract load can be no less than two-thirds of the mine's maximum firm contract load.

In argument, YEC stated "that peak shaving, as proposed in the PPA, is a DSM [demand-side management] measure that should help to avoid the need for diesel fuel by contributing to a reduction of peak winter load requirements on WAF if, and when, sufficient additional mine loads are added to the WAF system."<sup>16</sup>

The Peak Shaving Rate Option was supported by Mr. Percival.

#### Views of the Board

The Board supports DSM measures that are beneficial to Yukon ratepayers. The Peak Shaving Rate Option is seen as a measure to manage peak winter demand. The Board accepts YEC's evidence that peak demand increases by 400 kW per degree Celsius when temperatures are below -24 to -44 degrees Celsius. Given these factors, the Board approves the Peak Shaving Rate Option as applied for. YEC and Yukon ratepayers will benefit from this option if it lowers the need to plan for and run peaking diesels.

### **4. Mine Net Revenue Account (MNRA)**

YEC requested approval of provisions respecting the MNRA as set out in Section 3.6 of the PPA. The position of YEC is that "this deferral account, which continues to address annual Mine Net Revenue at least for so long as Minto continues to provide the YEC Security, is one of the key measures to ensure that there are no adverse rate impacts on other ratepayers in Yukon due to the PPA".<sup>17</sup>

Mine Net Revenue (MNR) is described as:

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<sup>16</sup> YEC Argument, page 9.

<sup>17</sup> YEC Application to Approve Minto PPA, page 3.



Mine Net Revenue in each fiscal year equals Minto Power Bills (plus any take-or-pay payment) less incremental YEC costs in the year (i.e., incremental YEC expenses and return on rate base in that year due to the supply of Electricity to Minto by YEC), including any added WAF diesel generating costs, lost income due to displaced interruptible secondary sales, incremental amounts due to the CS Project or the Mine Diesels, or other incremental costs resulting from the PPA.<sup>18</sup>

YEC requested that the MNRA not form part of YEC's earnings in that year and stated it will invest the amounts in the account at 6.5 percent interest per annum. When the amount equals or exceeds the CSTP Stage One Undepreciated Capital Cost, YEC will use the accrued MNRA to reduce the YEC regulated rate base.

The intent of the MNRA is to shield YEC rate base and Yukon ratepayers from any rate impact due to mine operations. In argument, YEC stated that the MNRA addresses rate instability during and after the mine life due to a variety of factors including instability caused by temporary events, increasing incremental YEC costs related to mine load, the eventual loss of Mine revenue and the need for other ratepayers to pay for the remaining Stage One CSTP undepreciated capital costs<sup>19</sup>. The recent Government of Yukon announcement that it will provide \$10 million in funding for the CSTP<sup>20</sup> is expected to enhance ratepayer benefits and reduce ratepayer risks, although YEC noted this will not eliminate risk.

UCG likened the MNRA to the previously proposed Income Stabilization Trust (IST) and noted that the Board deemed such an account as unnecessary and did not approve it.

Mr. Percival agreed with UCG that the need for the MNRA had not been adequately established. Mr. Percival characterized the account as "a fund that will be used at some future date for further utility investments in infrastructure"<sup>21</sup>.

On page 6 of his reply argument, Mr. Percival also noted that with the Government of Yukon's commitment of up to \$10 million toward the CSTP, there is no need for the MNRA. His position was that YEC ratepayer risks would be substantially reduced if YEC collected the customer contribution from Minto up front.

YECL took the position that the PPA does not guarantee "no adverse impact to ratepayers"<sup>22</sup> and in the end the MNRA promotes rate stability over intergenerational equity. YECL continued by stating that parallels drawn with the Faro mine are overstated as the energy consumption at the Faro mine represented 40 percent of Yukon energy, whereas Minto's consumption will only represent 12 percent<sup>23</sup>.

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<sup>18</sup> YEC Application to Approve Minto PPA, page 14.

<sup>19</sup> YEC Argument, page 22.

<sup>20</sup> April 2, 2007, letter from the Minister of Energy, Mines and Resources to the Chair of the Board, Yukon Energy Corporation.

<sup>21</sup> Percival Argument, page 5.

<sup>22</sup> YECL Argument, page 12.

<sup>23</sup> YECL Argument, page 13.

YECL in its reply stated it would prefer to see benefits concurrent with costs and future rate impacts addressed at the time they occur. YECL went on to argue that the mine is only viable as long as commodity prices are high. With the proposed MNRA, ratepayers would not see the benefit of the \$10 million YTG funding until such time as the MNRA is disposed.

In reply, YEC acknowledged that the MNRA promotes rate stability but disputed that intergenerational equity was being greatly sacrificed. YEC added that the definition of incremental costs was broad enough to include all reasonable incremental costs and recognized the Board's jurisdiction and mandate to control the MNRA and ensure the benefits are retained for all ratepayers.

YEC disagreed with the IST analogy proffered by UCG, as UCG's argument did not account for the ratepayer rate stability risks outlined in the Application. YEC reiterated these points in reply to Mr. Percival and said that there is no basis to say that the account will be used only for future investment in infrastructure.

### Views of the Board

The Board acknowledges that for regulatory purposes utilities are sometimes required to deviate from Generally Accepted Accounting Principles (GAAP) and that deferral accounts are sometimes required within the regulatory arena. In general, deferral accounts are required when there is a certain level of uncertainty around specific elements. It may be that a price cannot be determined until after a prolonged period of time or a quantity cannot be determined until a final reconciliation occurs. Deferral accounts are sometimes set up due to an unwillingness of a utility to take on forecast risk for specific elements of their revenue requirement.

The MNRA does not take on any of these characteristics. On the surface, the MNRA appears to violate the revenue recognition criteria of GAAP. The Board is of the view that for the MNRA, based on the above criteria, there is no justification to deviate from GAAP. While the Board recognizes that the MNRA is designed to increase rate stability, the Board is persuaded by the position of Mr. Percival that, with the Government of Yukon contribution to the project, the need for the MNRA to reduce ratepayer risk is minimal. The Board does not advocate a policy of deferring revenues or costs outside of the appropriate recognition period for the purpose of keeping rates stable. Nor is the Board supportive of the YEC proposed option of using the fund for future investment projects<sup>24</sup>. The Board does support the view that revenues collected from rates should be applied to the COS that derived those rates. Hence if the revenues exceed the revenue requirement, then the rates should be reduced. As the Board does not consider there to be adequate justification for the MNRA, nor does it consider that the MNRA is required, the MNRA is denied.

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<sup>24</sup> YUB-YEC-1-6(2): "The account does provide, however, for its use to fund annual Incremental YEC costs that the Board approves to include in revenue requirements of YEC for the CS Project and potentially other future generation projects".

## 5. Capital Cost Contribution

The PPA requires that Minto contribute \$7.2 million to the construction of the CSTP plus the actual costs for the Mine Spur. The terms of the Capital Cost Contribution are:

- Mine spur contribution to be paid in equal blended monthly payments of interest at 7.5 percent per year and principal over the first 7 years of YEC service.
- Carmacks-Minto Landing Capital Costs Contribution of \$7.2 million to be paid in equal monthly payments of interest at 7.5 percent per year for the first 4 years of YEC service, and in equal blended monthly payments of interest and principal over the next 3 years of YEC service.<sup>25</sup>

The PPA contained other provisions based on in-service date, service interruption, new mine loads and reserve levels.<sup>26</sup>

YEC stated that during the negotiations, it was apparent that without YEC financing for the customer capital cost contribution, the Mine would not connect to the grid.<sup>27</sup> In negotiating this aspect, YEC used an existing precedent from Newfoundland (Duck Pond) for financing customer capital cost contributions and enhanced the provisions found in that example with further security provisions.

UCG in argument said that any customer contribution should be flexible and reconcile to actual costs<sup>28</sup>. UCG also questioned the estimate, provided on a cost per kilometer \$/km basis, for calculating Minto's contribution.

Mr. Percival noted three issues with respect to the Capital Cost Contributions:

1. Reasonableness of the contribution and methods of calculation.
2. Fixed amount of contribution versus fixed percentage of contribution.
3. Risk and prudence of financing the customer capital cost contribution<sup>29</sup>.

With respect to the first point, Mr. Percival considered accurate cost estimates of the project to be necessary to determine the appropriateness as to the quantum of the costs. For the second point Mr. Percival submitted that the Board reserve judgment on the quantum or set the customer contribution as a fixed percentage of the costs. If the YUB approves the financing of the customer contribution, Mr. Percival argued the Board would be setting a precedent, with an unacceptable level of risk to YEC and its ratepayers.

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<sup>25</sup> YEC Application to Approve Minto PPA, page 13.

<sup>26</sup> PPA, pages 22-23 inclusive.

<sup>27</sup> YUB-YEC-1-34

<sup>28</sup> UCG Argument, page 12.

<sup>29</sup> Percival Argument, page 3.

YECL had considerable comment in its argument, questioning the quantum of the capital contribution.<sup>30</sup> YECL stated it would expect that, in an instance where a fixed customer contribution is proposed, a detailed design estimate would be available to support the estimated capital cost of the project and the fixed contribution proposal.

YECL in its reply reiterated that the quantum of the contribution (\$7.2 million) has not been sufficiently supported, and stated “YECL remains of the view that the level of capital actually spent on facilities should drive the appropriate customer contribution”.<sup>31</sup>

Not having detailed engineering completed, in YECL’s view, has increased the risks as opposed to having mitigated the risks. YECL did not oppose having customer contributions based on the least costly technically feasible alternative but argued Minto should share in the construction risk of the transmission line.

YECL agreed with UCG and Mr. Percival that an upfront contribution does not shift risk to YEC and Yukon ratepayers. YECL and UCG submitted that Minto’s inability to obtain conventional financing for its contributions should be seen as a significant risk, and YEC should not assume this risk. YECL concluded by stating that if the Board approves YEC’s financing of the contribution, then it should follow the Duck Pond example and receive blended principal and interest payments upon commencement of service. YECL also suggested that a broader principle should be developed, specifically, a policy for maximum utility investment (MUI) for industrial customers, as such a policy would lead to consistency.

Mr. Percival shared the UCG view that to mitigate ratepayer risks, Minto should front all costs for its contributions to the transmission line, the Mine Spur and decommissioning costs. Mr. Percival reiterated his points that the contribution should not be a fixed amount but rather a fixed percentage and based upon actual costs.

YECL, UCG and Mr. Percival all were of the view that YEC’s proposal to finance Minto’s contribution should not be accepted.

YEC stated that approval of the PPA is a requirement for continued work on the CSTP. YEC disputed all assertions made by YECL regarding the MUI. Other than the Mine Spur, YEC claimed that the CSTP was a system extension and would therefore be a cost shared by all ratepayers.

As to the quantum of the amount, in reply, YEC de-linked separated the amount of the contribution from any regulatory requirement, stating it was a negotiated amount based on the mutual interests of the parties. Other than the Mine Spur, the CSTP is planned to serve system requirements<sup>32</sup> and other customers and as such would not require any customer contribution.

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<sup>30</sup> YECL Argument, pages 2-3.

<sup>31</sup> YECL Reply, page 3.

<sup>32</sup> The CSTP is to primarily connect the two grids (WAF and M-D), provide grid access to local first Nations customers as well as serve new loads. (YEC Reply, page 13).

YEC rejected YECL's and Mr. Percival's arguments pertaining to YEC's financing of the capital cost contributions and restated its points in relation to the Duck Pond precedent, Minto not otherwise willing to connect to the grid, and other security enhancements from its argument.

### Views of the Board

The Board agrees with Mr. Percival's observation that capital cost contributions can be separated into three issues:

- i. Reasonableness of the Contribution and Methods of Calculation
- ii. Fixed Amount of Contribution versus Fixed Percentage of Contribution
- iii. Risk and Prudence of Financing the Customer Capital Cost Contribution

#### **i. Reasonableness of the Contribution and Methods of Calculation**

Based on the forecast of costs presented by YEC in Schedule 1 (page 4) of its Application, the Board is satisfied with the quantum of the contribution to the CSTP as it exceeds the contribution level based on the MUI model. The fact that Minto will be responsible for 100 percent of the costs of the Mine Spur further supports this position. The Board accepts all the points brought forward by YEC in response to YUB-YEC-1-7. The determination of the \$7.2 million for the CSTP contribution representing the mid-point cost estimate for a 35 kV line for service from Carmacks to Minto Landing is a prudent estimate to recover the cost of the additional transmission facilities to provide service to Minto. In essence, by using this minimum plant estimate and the costs as forecast, YEC is not making any investment in transmission facilities to serve Minto.

#### **ii. Fixed Amount of Contribution Versus Fixed Percentage of Contribution**

In its argument, YEC stated that the CSTP is a system project to serve system requirements, provide service to other customers and hence it would not normally require any customer contribution. Yet the economics for this project are driven by new load, namely the addition of Minto. If a connection to Minto was not to happen, the project would not proceed. As a result, the Board views the CSTP as a hybrid - a project to supply new load and a project to serve system requirements.

The Board has considered the positions of the Intervenors and YEC with respect to the quantum of the contribution by Minto. In general, given the highly inflationary nature of the construction industry, the Board prefers to see a contribution based on a fixed percentage versus a fixed amount. Noting that the Board views this project as a project to supply new load and a project to serve system requirements, the Board is of the view that the contribution to the CSTP should be indexed to the detailed cost estimates for the line. That is, if the final tendered cost exceeds the high estimate as shown in Schedule 1 of the Application, then the contribution should be indexed for the equivalent

construction of a 35 kV line for the appropriate segments accordingly. To be clear, for example, if the final tendered costs exceed the high estimate by 10 percent, then the contribution by Minto to the CSTP should increase by 10 percent.

With respect to MUI, the Board is of the view that the arguments presented by YECL have merit. The Board would like to see a consistent approach when it comes to determining levels of investment by utilities into new facilities. The Board directs both YEC and YECL to review and refine their investment policies for industrial customers and to include recommendations within their next GRA, which is expected to be filed by October 31, 2007. The policies should clarify to potential industrial customers what the utility will invest in new facilities and provide consistency in the approach when constructing facilities to serve new loads.

Based on the YEC response to YUB-YEC-1-7, the Board is persuaded that the approach used to calculate the portion of the CSTP that is funded by Minto is appropriate. The method is described as follows:

In the context of the above ESR terms and conditions, the PPA in effect assigns to Minto 100% of the estimated costs of the facilities needed to be constructed to serve the Mine in the event that all such facilities were to be built solely to serve the Mine at 35 kV from Carmacks to the Mine, i.e., YEC is not proposing any utility investment be planned toward the expected costs for such an extension<sup>33</sup>.

Nonetheless, based on the foregoing, if the costs of the project exceed the high estimate, the Board directs that the contribution by Minto for a 35 kV equivalent transmission line be adjusted accordingly. While this could increase the contribution required from Minto, any increase is expected to be significantly less than the \$18 million in benefits Minto will receive from grid connection. Given these benefits, the Board would not expect Minto would consider it a prudent investment decision to walk away from the PPA.

### **iii. Risk and Prudence of Financing the Customer Capital Cost Contribution**

While each case must be decided on its merits, the Board generally does not consider the utility financing of customer contributions to be appropriate. This activity presents a different and higher risk structure to Yukon ratepayers. The costs for such agreements (for example, legal, financial and management due diligence costs) bring about increased costs that may be more appropriately handled by entities that are in the business of financing, rather than being handled by a regulated utility. The only precedent cited for this (Duck Pond)

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<sup>33</sup> YUB-YEC-1-7, page 3 of 4.

deviates materially from this circumstance in that payment of the contributions commenced when the service was connected.

In line with the position that Stage 1 of the CSTP is partially driven as a system requirement, this part falls outside of the MUI concept advocated by YECL. Hence, the Board accepts that Minto is willing to provide development funding to see the project go forward. The quid pro quo Minto will receive for this development funding includes potential benefits in excess of \$18 million from reduced energy costs and financing for the Mine Spur. The calculation of this \$18 million in savings is based on an expected mine life of nine years. If the mine life were extended, the savings to Minto would be even greater.

The Board views the receipt of \$7.2 million in development funding in exchange for providing financing for approximately \$3.8 million of Mine Spur costs as an arrangement that is beneficial to Yukon ratepayers over the long term.

However, the Board views providing this type of funding as being beyond the scope of regulated activities of a utility and imposing an additional level of risk on ratepayers that the Board does not consider appropriate and is not prepared to accept. The Board is only prepared to approve this section of the PPA if any losses YEC may suffer due to the financing of the contributions are on account of YEC shareholders, that is, any losses incurred will not be allowed into YEC's revenue requirement. The Board is concerned about the level of risk associated with this financing and is of the view that this condition is necessary to protect ratepayers.

The Board reiterates that it does not generally consider utility financing of customer contributions to be appropriate, and YEC should not have the expectation that such an arrangement in the future would be approved.

## **6. Take-or-Pay and YEC Security**

On page 3 of its Application YEC seeks approval of provisions respecting the Minimum Take-or Pay Amount and the YEC Security as set out in Part 6 of the PPA.

These provisions are discussed on pages 15 and 16 of the Application. Section 6.2 of the PPA provides that Minto will pay YEC a minimum aggregate amount of \$24 million for Grid Electricity regardless of the amount of Grid Electricity actually delivered by YEC. Provisions exist for minimum cumulative annual payments averaging \$3 million per year. The terms are subject to the Firm Mine Rate as described in Section 3.5 and availability of Grid Electricity as described in Section 6.3.

The YEC security involves a charge over all assets of Minto, including the mine, only subordinate to the Current Bank Financing. This YEC Security is to cover the payment of the Capital Cost Contribution plus any interest outstanding, the Minto Power Bills, the Minimum Take-or-Pay obligations, the Decommissioning Cost Payment and Minto

Payments to Caterpillar.<sup>34</sup> Discharging the YEC Security can only occur when Sections 5.2, 11.2(b) and the Minimum Take-or-Pay obligations have been satisfied.

In argument, YEC identified the normal risks associated with projects of this magnitude and the PPA specific risks. It further identified the risk issues as follows:

- The issues and rationale related to YEC financing the Minto Capital Cost Contribution
- Minto's Minimum Take-or-Pay obligations
- The security that Minto will provide YEC for its Capital Cost Contribution
- The level and duration of Minto's firm purchase power commitments and the risk of Minto defaulting.<sup>35</sup>

YEC acknowledged that not all PPA related risks can be avoided or completely mitigated. The financing of the Capital Cost Contribution and the possibility of early shutdown of the Mine are risks that cannot be fully covered. YEC's position is that the risk of this event happening is extremely low and therefore should not prevent the PPA from proceeding nor the project from going ahead.

YEC consistently maintained that without YEC financing of the Capital Cost Contribution, Minto would not agree to interconnect to the grid. The position of YEC was summarized as follows:

In the end, YEC's agreement to finance Minto's capital cost contribution was based on Minto's special circumstances, the overall magnitude of expected ratepayer benefits related to the PPA, and the negotiated terms and conditions established in the PPA to protect YEC and YEC ratepayers. Although it is not without risk, YEC strongly believes that the ability to facilitate a major infrastructure development for the Yukon (interconnection of the MD and WAF grids) using YEC's surplus hydro especially given Minto's commitment to contribute \$7.2 million to the capital costs of the CS Project presented an exciting opportunity for YEC and Yukon ratepayers.<sup>36</sup>

UCG had concerns about the relationship between the Minimum Take-or-Pay Amount, the YEC Security, and the connection to the Firm Mine Rate. In argument, UCG submitted that there was no justification for extinguishing the Take-or-Pay Amount in the event the Firm Mine Rate changes to the detriment of Minto: "That the savings may be less than projected do not mitigate the need for security related to the Take or Pay Amount by YEC in order to make the Project feasible (sic)."<sup>37</sup> In reply, UCG stated that Minto's inability to find conventional financing for its Capital Cost Contribution should be viewed as an indication of significant risk.

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<sup>34</sup> YEC Application to Approve Minto PPA, page 16.

<sup>35</sup> YUB-YEC-1-14 and YUB-YEC-1-32.

<sup>36</sup> YEC Argument, page 20.

<sup>37</sup> UCG Argument, page 13.



Mr. Percival's position was that if the Customer Cost Contribution was received up front, then Minimum Take-or-Pay provisions would not be necessary. It was also Mr. Percival's submission that the level of security held by YEC was inadequate and under distressed conditions, and YEC's position is tantamount to being virtually unsecured. Mr. Percival was of the view that as YEC is a regulated public utility, not a financial institution, the YUB should not approve YEC's taking on such risks.

YECL noted that based on Table D-1 of the Application, the Net Present Value (NPV) of the cost savings to Minto are estimated at \$18.7 million. If there should be a material change to Minto's cost savings due to a change in the Firm Mine Rate or the underlying COS principles and methods in Schedule E, YECL noted that the Minimum Take-or-Pay Amount is reduced to offset the loss of cost savings and the YEC Security no longer provides security for the Minimum Take-or-Pay amount. Further, YECL stated that should Minto realize increased savings, no benefit was conferred to YEC or Yukon ratepayers.

YEC in its reply pointed out that only under Force Majeure conditions is the Mine released from its Take-or-Pay obligation.

#### Views of the Board

As discussed in s. 5 of this decision, the Board agrees with the views of the Intervenors that by not collecting the customer Capital Cost Contribution up front, that YEC and ratepayers face increased risk. The Board also agrees that the Minimum Take-or-Pay Amount should not be tied to the Firm Mine Rate as discussed in s.1 of this Decision.

In response to YUB-YEC-2-1, YEC submitted:

The primary purpose of the Direct Agreement from YEC's perspective is to provide certainty to YEC and its ratepayers, regarding Macquarie Bank's and YEC's respective rights when it comes to each Party's security interest.

The response further stated:

Under the Direct Agreement, Minto has agreed under Article 2.3 to a subordinated position to that of the Finance Parties; however, under 2.4 it is recognized that YEC shall retain the priorities that may be accorded to YEC by the Miner's Lien Act (sic) from time to time with respect to (a) the amount owing for any electricity delivered to Minto by YEC under the PPA and (b) the amount of any portion of the Capital Cost contribution (as defined in the PPA) which is due and owing by Minto to YEC under the PPA and interest thereon which is due and owing by Minto to YEC under the PPA.

It was YEC's position that as long as the mine remains viable using electricity delivered by YEC, YEC and its ratepayers are protected. YEC is satisfied that the Direct Agreement is an acknowledgement by the Macquarie Bank of the priority of YEC claims through the *Miners Lien Act*.

With the exception of YEC's not receiving up-front the customer Capital Cost Contribution, the Board is satisfied with the Security and Direct Agreement that YEC has put in place. Although not a guarantee, the Board finds the security measures put in place by YEC, such as the Direct Agreement, the Minimum Take-or-Pay Amount, and security as afforded by the *Miners Lien Act* are reasonable.

## **7. YEC Purchase of Diesel Units**

Page 10 of YEC's PPA Application states:

The PPA requires YUB approval of provisions respecting the YEC purchase of the four Diesel Units (each with a continuous rating of at least 1.6 MW) as set out under Part 10 of the PPA for \$2.24 million, with YEC to provide payments to Minto in this regard on the same basis as Minto's Mine Spur Capital Costs Contribution payments, i.e. in equal blended monthly payments of interest and principal over the first seven years of YEC service.

YEC stated the benefits to the WAF system and to the Mine associated with the YEC acquisition of the Diesel Units are as follows:

- The units provide a comparatively low cost addition to WAF peak winter capacity (at a price not exceeding \$350 per kW, the cost is competitive with the Mirrlees life Extension Project) at a time when YEC is actively examining options to enhance WAF firm winter peak capacity.
- The units provide added security to YEC and Minto as regards reliable supply at the Mine; in YEC's case, the purchase payment arrangements for this asset enhance YEC's security with regard to the Minto obligation to pay the Mine Spur Capital Cost Contribution.
- When WAF diesel operation is required, YEC operation of at least two of the Diesel Units at the Mine Site (especially for baseload operation) is expected to be cost effective (due to the minimization of line losses and related additional diesel generation requirements).
- In the near term these units provide cost effective contingency protection until such time as other potential major mine loads (Carmacks Copper) as well as capacity supply options are better clarified.<sup>38</sup>

Part 10 of the PPA describes the Conditions of Assignment, how payments for the Diesel Units are to occur, how the Diesel Units will operate and who is responsible for the operation of the Diesel Units, under what conditions the Diesel Units can be removed from the Mine Site and the closing of the Sale of the Diesel Units.

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<sup>38</sup> YEC Application to Approve Minto PPA, page 11.

UCG took the position that if YEC were to assume ownership of the Diesel Units, their future deployment should not be limited to the WAF grid. More generally, Mr. Percival and UCG questioned the need for the units in light of the Government of Yukon's commitment to provide funding for the Aishihik Third Turbine development. Mr. Percival submitted that in light of the Government of Yukon's announcement the need to acquire units from Minto was no longer necessary and there were other more viable options available.

Mr. Percival disagreed with the purchase of the Diesel Units. His position was that if Minto provided its customer contribution up front then additional security would not be necessary. YECL also argued this point. Mr. Percival further stated that if Minto failed "in its spur line obligations, it is unlikely additional winter peaking will be necessary on the WAF grid."<sup>39</sup>

YECL took the position that YEC has not provided an appropriate business case to support the purchase of the Diesel Units, nor had YEC confirmed whether the Diesel Units were already "used equipment" prior to their use at the Minto mine. YECL further commented that YEC has not provided evidence to support that the price for the Diesel Units is indeed competitive. Further, YEC should not be financing the Minto customer contribution in which case the security argument about Minto's obligations is moot. YECL also argued that YEC provided no evidence to support the statement the line loss reductions will offset other incremental costs.

In reply, YEC noted UCG-YEC-2-14 and YUB-YEC-1-8 provided evidence as to the reasonableness of the purchase price and submitted that section 10.2 of the PPA provides safeguards to YEC with respect to the condition of the Diesel Units. YEC further commented that these diesel units would rank high in the stacking order reflecting cost effective operations. With respect to UCG's argument, YEC affirmed that the Diesel Units are mobile and could be moved or sold at any time after the terms and conditions set out in section 10.5 of the PPA are satisfied<sup>40</sup>. YEC generally rejected the premises of Mr. Percival's arguments and suggested that there was no evidence on the record to support Mr. Percival's position.

### Views of the Board

With respect to some of the concerns expressed about the purchase of the Diesel Units, the Board is of the view that section 10.2 of the PPA provides adequate protection for YEC and Yukon ratepayers as to the condition of the units. The Board accepts that the price for the units as determined in the PPA and as further noted in UCG-YEC-2-14 and YUB-YEC-1-8 is reasonable. The Board also accepts the terms as to the mobility of the units. However, the Board is not convinced the units are needed. Other than a parenthetical notation late in the Resource Plan process, YEC has not demonstrated a need for the units nor provided an adequate business case supporting this option. Given

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<sup>39</sup> Percival Argument, page 6.

<sup>40</sup> YEC Reply, page 32.

the new capacity planning criteria employed by YEC, YEC has not furnished evidence that these units are needed based on those criteria, nor where this capacity addition stacks with the other projects identified within the Resource Plan.

Further, the new funding available for the third turbine at Aishihik from the Government of Yukon also brings into question the need for the units and whether they would be a least cost option. The Board agrees with YECL that no evidence has been offered to support the statement that line loss reductions will offset other incremental costs. The Board also agrees with Mr. Percival and UCG's argument that if YEC did not agree to finance the customer contribution from Minto, the use of the units as security would not be necessary. In the event that YEC had to use the units as security for collection from Minto, it is questionable that the units would be in the condition stated in section 10.2 as under those circumstances the units are more likely to be in a distressed condition. Based on the foregoing, the Board does not accept the purchase of the Diesel Units as part of the PPA.

YEC is free to purchase the units; however, at this time the Board cannot provide any assurance to YEC that the units would be approved as an addition to rate base. However, it is open to YEC to develop an appropriate business case supporting the need for the Diesel Units and include it for consideration in its next GRA.

## **8. Decommissioning Costs**

The PPA requires YUB approval of all Decommissioning Costs for the removal of the spur servicing the Minto mine to be incurred by YEC. YEC estimates these costs to be 25 percent of the capital costs to construct the spur. An Accrued Decommissioning Fund account will be set up by YEC and the final amount will be adjusted to actuals based on Section 11.2(c) of the PPA.

The Decommissioning Cost Payment will be paid to YEC by Minto:

- When Minto pays the outstanding balance of the Capital Cost Contribution under Section 5.2(d) at the end of the fourth year of service by YEC; or
- Within 180 days after Minto otherwise pays the outstanding balance of the Capital Cost Contribution; or
- In any event on or before the date on which Minto provides notice of the Commercial Operation Cessation Date.<sup>41</sup>

The PPA contains terms for YEC to collect any shortfall in decommissioning costs in excess of those in the fund from Minto; or conversely if the amount in the fund exceeds the actual decommissioning costs, that amount will be refunded to Minto.<sup>42</sup>

Mr. Percival commented that without knowing what the detailed construction costs of the line are, it is difficult to determine what the salvage costs will be. His estimate was that the salvage costs would be approximately 35 percent of the costs of constructing

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<sup>41</sup> Section 11.2 of PPA.

<sup>42</sup> Section 11.3 of PPA.

the spur line. Mr. Percival suggested the terms of the PPA be revised to reflect his estimate and that the salvage costs be either collected up front or in four equal annual installments commencing at the end of the first year of service.

YEC summarized its position on Decommissioning Costs as follows:

The ultimate aim of the decommissioning provisions under Section 11 of the PPA is to ensure that Minto pays all costs required to decommission the full Mine Spur and that at the time of decommissioning these costs have accrued in a fund and are available to pay the total cost of decommissioning after the Mine shuts down and YEC commences decommissioning activities. As noted in UCG-YEC-1-9 (4) the YEC Security provisions under section 6.5 of the PPA cover the decommissioning cost payment and the YEC Security cannot be discharged until that payment has been paid in full pursuant to section 11.2(b) of the PPA.<sup>43</sup>

YEC submitted that there was no basis for the Board to accept the 35-percent estimate for salvage costs from Mr. Percival. YEC stated that the 25-percent estimate for decommissioning costs was derived from its last depreciation study which set salvage costs for transmission components.<sup>44</sup> YEC stated that it was able to secure a one-time \$850,000 Decommission Cost payment that would be placed in to an Accrued Decommissioning Fund and invested at 6.5 percent per annum and allowed to compound until such time as decommissioning costs were incurred. Further, there is a provision for a final true-up between Minto and YEC when all decommissioning costs are finally determined.<sup>45</sup>

### Views of the Board

The Board recognizes that it is difficult to precisely determine the decommissioning costs when construction costs for the Minto Spur have not been fully determined. Given that the actual decommissioning costs cannot be determined at this time, the Board is satisfied that through Section 11 of the PPA, YEC has provided sufficient safeguards to ensure that Minto is responsible for all decommissioning costs. Further, the Board finds the set-up and use of the Accrued Decommissioning Fund to be an acceptable method to provide for these future salvage costs and that the liability of each party (YEC and Minto) is clearly set out in the final reconciliation. Regarding the decommissioning costs, the Board accepts YEC's percentage of 25 percent over that proposed by Mr. Percival as YEC's estimate is based on a prior depreciation study that set salvage costs. Therefore the Board approves the provisions respecting Decommissioning costs as set out in Part 11 of the PPA.

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<sup>43</sup> YEC Argument, page 35.

<sup>44</sup> YECL-YEC-1-19.

<sup>45</sup> YEC Application to Approve Minto PPA, page 16.

## 9. Other Matters

Through the course of the proceeding additional matters arose:

### a) Capacity Planning Criteria

Based on YEC's response to YECL-YEC-1-2, YECL stated that there is a misunderstanding between YEC and the Board with respect to YEC's capacity planning criteria. YECL noted that if YEC purchases the Minto diesel units, Minto will no longer have onsite backup supply, and so the Minto load should be included in the N-1 and LOLE criteria. YECL notes that this would require new generation sooner under the criteria. YECL submitted that these consequences need to be considered prior to the PPA moving forward. YECL sought clarification on whether the LOLE includes or excludes industrial load (Minto). YECL's understanding is that industrial load is not included in the N-1 criteria.

YEC responded stating that serving Minto at the firm loads provided in the PPA will have no impact on YEC planning capacity requirements under either the LOLE or N-1 criteria. The LOLE criteria included industrial loads and the N-1 criteria did not. Minto is to retain emergency back-up diesel generation units at the mine. YEC summarized its position as follows:

- As per the Resource Plan submission, the WAF system is designed to incorporate mine loads and the LOLE criteria is based on the principle that the system will be planned to ensure reliable service to all customers including mines and other industrials:
  - The LOLE criteria is comparable to criteria in other Canadian grid systems, and it ensures that all firm loads (including industrial customers such as Minto) receive reasonable utility-grade supply from the system.
  - The N-1 is included as an added "emergency criteria" to address the seriousness of sustained outages in Yukon of a critical system component (eg., the Aishihik transmission) during the period of peak winter loads; it is calculated to include firm loads, excluding major industrial loads. The Resource Plan noted that major industrial loads in Yukon (i.e., mines) "typically" have their own on-site diesel generation for emergency purposes.
- As reviewed in YECL-YEC-1-2, under the above criteria, mines will be served as firm customers (not as interruptible customers). Because secondary energy sales customers are interrupted based on lack of surplus hydro capability, they are interruptible customers and therefore are not taken into account in N-1.
- The PPA was negotiated based on YEC's currently adopted capacity planning criteria as reviewed above, and the following points are noted:
  - The service to the mine provided by YEC under the Firm Mine Rate is intended to be firm service that would be provided to Minto in all

- hours of the year, whether from hydro or from diesel, to a utility standard (long-term average LOLE of two hours per year).
- The four diesel Units that Minto will use at the Mine until Commencement of Delivery by YEC, when Grid Electricity will be provided by YEC, will not at any time be considered “emergency backup” generation supply at the Mine. Minto will at all times have approximately 500 kW of additional backup power (of the type assumed in the Resource Plan Hearing) at the Mine to meet needs in emergency circumstances.<sup>46</sup>

### Views of the Board

The Board notes that in s.3.2 of the YUB Report on the Resource Plan it states:

Therefore, the Board recommends that, in order to ensure that no new generating capacity is added for the purpose of ensuring reliable supply to major industrial customers and to ensure consistency with the N-1 criterion, major industrial loads should not be included in the LOLE calculation.

The Board considers that the recommendation made in that Report speaks for itself and no further clarification is required.

### **b) Material Adverse Impact to Minto Savings**

YECL noted that Minto’s forecast cost savings (NPV) are estimated at \$18.7 million. In argument, YECL requested the Board direct YEC and Minto to develop a more balanced approach to the factors affecting the Minto savings.<sup>47</sup>

YEC responded that the Take-or-Pay obligation and the YEC security is removed only if the Board materially alters the terms and conditions of the PPA, increases Rate 39 based on a COS that differs from the methods used in Schedule E, and either action materially adversely affects the cost savings to Minto from grid connection.

### Views of the Board

The Board is not persuaded by the views of YECL. COS is the foundation upon which rates are based. It is cost causation that will determine a rate and not the deemed, perceived, or actual benefit to the recipient.

However, the Board has already determined that the COS provided by YEC is insufficient. The Board will not approve a rate structured to provide a certain level of benefit to any customer; rates are to be based on cost causation. As discussed in s. 1 of this decision, the Board has only approved the Firm Mine Rate on an interim basis, pending YEC’s next GRA, in which a COS study will be filed.

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<sup>46</sup> YEC Reply pages 4-5.

<sup>47</sup> YECL Argument, page 14.

### **c) Rate Modifications**

#### ***Rider F***

YECL stated that in accordance with Section 6(1) and Section 8 of OIC 1995/090 that Rider F should continue to apply to all rate classes. For the 2008 rate, YECL did state that this rider should be set to \$0.0 as Rate 39 already contains current diesel price information.

YEC responded that it was only seeking approval for the 2008 rate and that the rate could be amended later.

#### Views of the Board

The Board agrees with YECL. For consistency, the Board directs that a Rider F be included for Rate 39 and that for 2008 the rider charge be set to \$0.0 for rate class 39.

#### ***Billing Demand***

Mr. Percival requested the demand charge be increase to \$16.00/kV.A from \$15.00/kV.A. He also requested that the summer ratcheting provision be re-inserted into Rate Schedule 39.

YEC responded that there was no COS basis to change the demand rate and that the ratchets were applicable to system peak (winter months).

#### Views of the Board

The Board agrees with the position of YEC that the ratchets are intended to cover system peaks and that there is no current basis to change the demand rate. However, the Board agrees with Mr. Percival that these issues should be addressed in YEC's next GRA.

### **d) Applicability of Rates to YECL Service Territory**

UCG and YECL stated that according to s. 6(1) of OIC 1995/090, rates must apply to all customers in the Yukon, so Rate 39 must apply to both utilities.

YEC acknowledged the comments of YECL and UCG but determined that currently there is only one planned Rate Schedule 39 customer (a YEC customer). If another such customer were to connect in YECL territory, then the rate schedule could then be modified accordingly.

#### Views of the Board

While the Board accepts that currently there is only one Rate 39 customer, given the direction in s. 6(1) of OIC 1995/090, the Board directs YEC to change the wording in Rate Schedule 39 accordingly.



## **C. Conclusion**

The Board acknowledges that the PPA has not been approved as applied for and directs YEC to revise the PPA based on the foregoing and file the revision with the Board by May 31, 2007. However, given the upcoming Board hearing directed by the Government of Yukon on the CSTP that starts May 15, 2007, the Board requests that YEC endeavor, by May 9, 2007, to reach an agreement in principle with Minto on the changes required by the Board in order for the Board to approve the PPA, and advise the Board of the status by that date.

## **D. Summary of Board Findings**

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

- 1.0 Until such time as a decision is rendered in the next GRA, the Board will accept Rate 39 on an interim basis as proposed by YEC. The interim Rate Schedule 39 will be applicable throughout Yukon. Due to the concerns expressed about the sufficiency of the current COS presented by YEC, the Board is not prepared to accept Section 3.5 of the PPA.
- 2.0 Based on regulatory history, there is sufficient assurance to Minto that Yukon rates are stable and built upon sound practice, and therefore a link to the Minimum Take-or Pay provision is not necessary.
- 3.0 The Board reiterates its earlier direction that YEC and YECL to provide a complete COS study and rate design with their next GRA. The COS is to include updated studies on allocators and to look at the feasibility of direct assigning assets, where applicable to certain rate classes. Further, the Board expects to see justification on the allocation of transmission assets. The Board questions the rationale of defining the CSTP project as one of diesel displacement in light of YEC's comments that the project is a project to serve system requirements. For the next GRA (Phase II), the Board directs both YEC and YECL to provide their electronic COS models and to distinctly show costs as being related to generation, transmission and distribution. Further, generation costs are to be separated based on each generation type (i.e. hydro, diesel, wind etc.). This will enable testing of costs to serve all rate classes, including Rate 35.
- 4.0 Upon review of the negotiated rate, the Board observes that it is close to the level set for Rate 32. This does provide some comfort to the Board as Rate 32 does not appear discriminatory. The Board is prepared to approve, on an interim basis, the level of Rate 35 as applied for by YEC.
- 5.0 Should Minto pursue Rate 35, proposed audit and control measures and reporting requirements must be established between YEC and Minto, and then YEC is to file these with the Board. YEC is not to implement Rate Schedule 35 until such approval has been granted.
- 6.0 The Board directs YEC to amend the wording for Rate Schedule 35 when such an opportunity arises.

- 7.0 The Board approves the Peak Shaving Rate Option as applied for.
- 8.0 As the Board does not consider there to be adequate justification for the MNRA, nor is it required, the MNRA applied for is denied.
- 9.0 The Board is satisfied with the quantum of the contribution to the CSTP as it exceeds the contribution level based on the MUI model. That Minto will be responsible for 100 percent of the costs of the Mine Spur further supports this position. The Board accepts all the points brought forward by YEC in response to YUB-YEC-1-7. The determination of the \$7.2 million for the CSTP contribution representing the mid-point cost estimate for a 35 kV line for service from Carmacks to Minto Landing is a prudent estimate to recover the cost of the additional transmission facilities to provide service to Minto. The Board prefers to see a contribution based on a fixed percentage versus a fixed amount. Noting that the Board views this project as a hybrid — a project to supply new load and a project to serve system requirements — the Board is of the view that the contribution to the CSTP should be indexed to the detailed cost estimates for the line. That is, if the final tendered cost exceeds the high estimate as shown in Schedule 1 of the Application, then the contribution should be indexed for the equivalent construction of a 35 kV line for the appropriate segments accordingly. To be clear, if the final tendered costs exceed the high estimate by 10 percent, then the contribution by Minto to the CSTP will increase by 10 percent.
- 10.0 The Board directs both YEC and YECL to review and refine their investment policies for industrial customers and to include recommendations within their next GRA, which is expected to be filed by October 31, 2007. The policies should clarify to potential industrial customers what the utility will invest in new facilities and provide consistency in the approach when constructing facilities to serve new loads.
- 11.0 If YEC suffers any losses due to the financing of the contribution, such losses shall be on account of YEC shareholders. While each case must be decided on its merits, the Board generally does not consider the utility's financing of customer contributions to be appropriate.
- 12.0 The Board views the receipt of \$7.2 million in development funding in exchange for providing financing for approximately \$3.8 million of Mine Spur costs as an arrangement that is beneficial to Yukon ratepayers.
- 13.0 As discussed in s. 5 of this decision, the Board agrees with the views of the Intervenors that by not collecting the customer Capital Cost Contribution up front, that YEC and ratepayers face increased risk. The Board also agrees that the Minimum Take-or-Pay Amount should not be tied to the Firm Mine Rate as discussed in s.1 of this Decision.
- 14.0 Other than not receiving upfront the customer Capital Cost Contributions, the Board is satisfied with the Security and Direct Agreement that YEC has put in place. Although not a guarantee, the security measures such as the Direct Agreement, the Minimum Take-or-Pay Amount, and security as afforded by the *Miners Lien Act*, put in place by YEC are reasonable.

- 15.0 The Board does not accept the purchase of the Diesel Units as part of the PPA. YEC is free to purchase the units; however, at this time the Board cannot provide any assurance to YEC that the units would be approved as an addition to rate base. However, it is open to YEC to develop an appropriate business case supporting the need for the Diesel Units and include it for consideration in its next GRA.
- 16.0 The Board approves the provisions respecting Decommissioning costs as set out in Part 11 of the PPA. The Board accepts the estimated percentage of 25 percent for decommissioning costs as it is based on a prior study.
- 17.0 The Board recommends that, in order to ensure that no new generating capacity is added for the purpose of ensuring reliable supply to major industrial customers and to ensure consistency with the N-1 criterion, major industrial loads should not be included in the LOLE calculation.
- 18.0 The Board agrees with YECL and, for consistency, the Board directs that a Rider F be included for Rate 39 and that for 2008 the rider charge be set to \$0.0 for rate class 39.
- 19.0 The Board agrees with the position of YEC that the ratchets are intended to cover system peaks and that there is no current basis to change the demand rate. However, the Board agrees with Mr. Percival that these issues should be addressed in YEC's next GRA.
- 20.0 The Board confirms the direction of s. 6(1) of OIC 1995/090 and directs YEC to change the wording in Rate Schedule 39 accordingly.