

**Yukon Energy Corporation
Power Purchase Agreement Between
Yukon Energy Corporation and Victoria Gold Corp. and StrataGold
Corporation**

**Yukon Utilities Board Information Request
Round 1 to YEC**

For all quotes cited in these Information Requests, the footnotes contained within the quotes were omitted.

YUB-CW-01

Reference: Application, page 1.

Issue/sub-issue: Parties to the PPA

Quote: “Yukon Energy Corporation (“Yukon Energy” or “YEC”) is seeking an Order from the Yukon Utilities Board (“YUB” or “the Board”) for required approvals related to the implementation of the Power Purchase Agreement (“PPA”) that Yukon Energy has recently concluded with Victoria Gold Corp (“VGC”) and StrataGold Corporation (“StrataGold”) (VGC and StrataGold are collectively the “VGC Group”).”

Request:

- (a) Please explain the reason for a tripartite agreement between YEC, VGC and StrataGold.
- (b) Are the officers or directors of VGC and StrataGold the same persons? Please explain.

YUB-CW-02

Reference: Application, page 2.

Issue/sub-issue: Mine Facilities Spur

Quote: “VGC Group’s environmental permitting for the Mine includes provision for a 69 kV transmission line (the “Mine Facilities Spur”) that, pursuant to the PPA, VGC Group will develop and own to connect the Mine Facilities to a substation (the “McQuesten Substation”) to be located along YEC’s existing 69 kV transmission line between Mayo and Keno City at approximately the junction of the South McQuesten Road and the Silver Trail Highway.”

Request:

Please confirm that VGC Group will be responsible for all future maintenance activities and the maintenance costs of the mine facilities spur.

YUB-CW-03

Reference:

Application, page 2 and page 15

Issue/sub-issue:

Stewart Keno City Transmission Project (SKTP).

Quote:

“YEC has completed environmental review and permitting for the McQuesten Substation, as an element of the successfully completed Stewart Keno City Transmission Line Project (“SKTP”) environmental review and permitting.”

...

“YEC to complete Initial YEC System Improvements on YEC’s existing power system to accommodate the sale of Grid Electricity for the Mine as provided for in Schedule C;”

...

“In order to accommodate VGC Group’s timing for development, Grid Electricity will be supplied initially by YEC to the Mine from the existing Transmission Facilities located between Mayo and McQuesten Substation. The Parties recognize in the PPA that these existing Transmission Facilities are at, or near, their end of life and must be upgraded (the “Transmission Facilities Development”) within approximately the next three years in order for YEC to reliably deliver Grid Electricity to the Mine Facilities.”

...

“YEC’s annual Transmission Facilities Fixed Cost forecast for the existing Transmission Facilities for 2019, including depreciation and return for YEC’s transmission assets, is \$118,621 as calculated in Attachment B of this Application based on forecasts for 2017.”

Request:

- (a) Upon completion in whole or in part of the SKTP, and assuming no external funding for the project, will any of the costs related to the SKTP be used in the calculation of the fixed charge to VGC Group? Please explain.
- (b) If the answer to (a) is yes, will any adjustments to the fixed charge occur, as work is capitalized, or will any adjustment have to wait for a subsequent YEC general rate application? Please explain.

YUB-CW-04

Reference:

Application, page 2

Issue/sub-issue:

Upgraded transmission facilities

Quote:

“In order to accommodate VGC Group’s timing for development, Grid Electricity will be supplied initially by YEC to the Mine from the existing Transmission Facilities located between Mayo and McQuesten Substation. The Parties recognize in the PPA that these existing Transmission Facilities are at, or near, their end of life and must be **upgraded** (the “Transmission Facilities Development”) within approximately the next three years in order for YEC to reliably deliver Grid Electricity to the Mine Facilities.” [Bold font added]

Request:

Please explain what is meant by an upgrade “to the existing Transmission Facilities located between Mayo and McQuesten Substation”. Will these transmission facilities be replaced with transmission facilities to be operated at 69 KV or 138 KV? If the latter, please explain whether VGC would be responsible for incremental costs to convert the line to 138 KV and why.

YUB-CW-05

Reference:

Application, page 2; VGC PPA, Schedule B, Memorandum of Understanding, Workplan Assumptions, 1. Funding

Issue/sub-issue:

McQuesten Substation capital costs

Quote:

“Except as otherwise specified in the PPA, VGC Group is responsible for all capital costs related to the McQuesten Substation development.”¹

“The PPA provides in Section 6.1 for YEC to recover from VGC Group its reasonably incurred YEC Capital Costs for the following:

...

YEC’s **capital** costs for the McQuesten Substation development (“YEC’s Owners Costs”) as specified in Table B-1 of Schedule B to the PPA;” [Bold font added]²

“Except as set out below VGC will fund all the full fees, costs, and expenses, including YEC’s non-executive labour costs, external fees, costs, and expenses of the design, engineering, procurement, construction, project management, site supervision, SCADA changes, operations orientation and commissioning of the Substation. Notwithstanding the foregoing YEC will be responsible for all **incremental** fees, costs, and expenses associated with Substation being able to operate at 138 kV voltage, which amount will be payable by YEC to VGC at the time the Substation is transferred to YEC under Section 7 below.” [Bold font added]³

Request:

- (a) Please explain why YEC is responsible for incremental fees, costs and expenses associated with the McQuesten Substation being able to operate at 138 kV. Why is VGC not responsible for all substation costs?
- (b) Please explain why the line from Stewart Crossing to Keno City is to be converted to 138 kV.
- (c) Does the provision of a 69 kV transmission line provide enough Grid Electricity to the McQuesten Substation for the mine to operate with the Alexco load?
- (d) With respect to the McQuesten Substation, in addition to the mine spur, will the substation provide electricity for the remainder of the line from the substation to Keno City at 69 kV?

¹ VGC PPA Application, page 2.

² VGC PPA Application, page 3.

³ VGC PPA, Schedule B, Memorandum of Understanding, Workplan Assumptions, 1. Funding.

YUB-CW-06

Reference:

Application, page 3.

Issue/sub-issue:

New 138 kV transmission facilities

Quote:

“If such external funding cannot be committed by September 30, 2018, YEC will seek approval for plans to provide the required Transmission Facilities Development by June 30, 2020 with new 138 kV Transmission Facilities connecting Mayo and the McQuesten Substation, to be operated at 69 kV until such time as 138 kV operation becomes feasible, i.e., a 138 kV line is developed to connect Mayo with Stewart Crossing.”

Request:

- (a) Please describe any impacts or effects of operating a 138 kV line at 69 kV.
- (b) When operating a 138 kV line at 69 kV, what is the impact on line losses? Please provide documentation in support for your response.
- (c) If operating a 138 kV line at 69kV results in higher line losses than operating a 69 kV line at 69 kV, then how would YEC account for those additional losses? How and to whom would those incremental losses be attributed? Specifically, would any particular rate class or customer pay for the incremental line losses?

YUB-CW-07

Reference:

Application, page 3, Board Order 2010-13 Appendix A, paragraph 29.

Issue/sub-issue:

Transmission Facilities Fixed Cost

Quote:

“The PPA provides for VGC Group to pay the Firm Mine Rate as approved by the Board from time to time, including a Fixed Charge that is adjusted on an ongoing basis to equal 85% of the Transmission Facilities Fixed Cost as approved by the Board from time to time to reflect changes in YEC rate base costs for the Transmission Facilities.” (Application, page 3)

...

“29. The Board notes that the last COS study approved by the Board was completed in 1997. The Board does not accept the COS study as filed by the Companies. The Board agrees with the City of Whitehorse’s view that an updated COS study approved by the Board is essential to establishing a future rate restructuring process. Therefore, the Board directs the Companies to file a joint COS study within six months of the expiry of OIC 2008/149. The Board further directs the Companies to incorporate all findings and directions of this Decision into the next COS study.” (Appendix A to Board Order 2010-13, underlining added)

Request:

- (a) Please describe how the 85% threshold was determined.
- (b) If the threshold was determined in the past (for example, when the Faro mine was operating), please explain why that level continues to be applicable today.

- (c) How does the 85% threshold level account for the development of the Carmacks-Stewart Transmission Project (CSTP) Phases 1 and II?
- (d) How does the 85% threshold level account for the development of the Stewart-Keno Transmission Project (SKTP).
- (e) When was the last Board-approved COS study?
- (f) Given your responses to the above, and if the last approved COS study was completed prior to 1999, please explain why the Board should accept the 85% threshold as stated in the PPA.
- (g) If the Board does not accept the 85% threshold and suggests a different threshold, what is the impact on the PPA?

YUB-CW-08

Reference:

Application, page 6.

Issue/sub-issue:

Allocated costs

Quote:

“The last cost of service analysis for Yukon, which was developed jointly by YEC and YECL for the 2009 GRA test year, indicated that major industrial customers were paying rates considerably in excess of allocated costs of service determined in accordance with OIC 1995/090 (including treating the whole Yukon as a single rate zone) and in accordance with normal regulatory principles applicable to similar regulated electricity utilities in Canada.”

Request:

- (a) Did the Board reject the Phase II portion of the 2009 GRA for the reasons set out in Appendix A to Board Order 2010-13?
- (b) In light of your response to (a), how can the statement that “major industrial customers were paying rates considerably in excess of allocated costs of service” be verified?
- (c) If a cost of service study was rejected by the Board, how can the Board rely on a statement that revenues exceed costs for any given rate class?
- (d) Given that the Phase II portion of the 2009 GRA was completed before the CSTP (both phases), SKTP currently being contemplated, the Mayo B Project and the Aishihik Third Turbine Project, please explain how YEC can rely on the 2009 cost of service study and rate design.
- (e) With respect to the rates that VGC will pay for electricity, please provide support for the statement that rates to be charged will be in excess of allocated costs of service.

YUB-CW-09

Reference:

Application, page 7 and footnote 12.

Issue/sub-issue:

Mayo-Dawson Transmission Line

Quote:

“In the early 1990s, Yukon Energy noted that the line was significantly deteriorated and needed to be rebuilt or abandoned due to safety and reliability concerns;”

...

“In its 1992 Resource Plan, Yukon Energy noted that ‘it was recognized for many years, by both NCPC and YEC, that the Mayo-Elsa-Keno City transmission line urgently needed to be either re-built or abandoned.’ At the time, it was noted that ‘this project just could not continue to be deferred indefinitely,’ and ‘essential work had to be performed to ensure the safety of the line.’ The option of abandoning the transmission line was considered and discarded at the time for the following reasons: (1) Additional loads are also supplied from this line, via Keno City, CBC and NWTel tower sites, Silver Trail Lodge and a number of YTG Highways heat traces in culverts; and (2) The cost of diesel generation would be at least \$250,000 per annum based on approximately 2.5 kWh consumption at 10 cents per kWh by UKHM.” (footnote 12)

Preamble:

To test the base numbers used for the calculation of the fixed charge to VGC.

Request:

- (a) Please provide the annual costs for maintaining the Keno City transmission line from 1992 to 2017. Identify and categorize the annual amounts into capital and O&M expense.

YUB-CW-10

Reference:

Application, page 8

Issue/sub-issue:

SKTP

Quote:

“Substation development at McQuesten (S258) as well as at Stewart Crossing South (S251) to accommodate the new line and an SVC/Statcom; and at Mayo (S249) for fibre tie in.

“Other elements including PT sites and structures and First Nation benefits.” (bullet points omitted)

Request:

- (a) Please identify who is responsible for carrying out the work for the Stewart Crossing South substation (S251) and Mayo substation (S249) and its costs, as well as, explain the need for this work.
- (b) Please explain how a fibre tie in relates to the proposed PPA.
- (c) Do the other elements, including PT sites and structures and First Nation benefits of the SKTP, relate to any of the initial work to meet the requirements of the PPA?

YUB-CW-11

Reference:

Application, page 8.

Issue/sub-issue:

YESAB

Quote:

“Initial engineering, planning and assessment activities required to prepare and submit a Yukon Environmental and Socio-economic Assessment Act (YESAA) project proposal to YESAB were undertaken in Q3 and Q4 2015. A YESAA Project Proposal was filed before the end of 2015, with a YESAA Screening Report issued May 31, 2016. A Land Use application was submitted to the Yukon government and authorizations required to proceed with geo-technical and survey work to complete detailed engineering were obtained in September 2016.”

Preamble:

The Board notes the following submission respecting the Stewart Keno City Transmission Line Project in YEC’s GRA, page 5-32, line 24 to page 5-33, line 2: “Initial engineering, planning and assessment activities required to prepare and submit a Yukon Environmental and Socio-economic Assessment Act (YESAA) project proposal to YESAB were undertaken in Q3 and Q4 2015. A YESAA Project Proposal **for a 138 kV transmission line (with related substation infrastructure) between Stewart and Keno City** was submitted to YESAB before the end of 2015, with the YESAB screening completed in May of 2016. A Land Use application was submitted to the Yukon government and authorizations required to proceed with geo-technical and survey work to complete detailed engineering were obtained in September 2016.” [Bold font added]

Request:

- (a) Has a final approval been received for the above-noted YESAA project proposal from YESAB?
- (b) If not, when does YEC expect a final approval?
- (c) Please confirm that the line (between Stewart Crossing and Keno City) is to be converted from 69kv and to be operated at 138 kV (as stated in the above quote), while the line to Dawson City from Stewart Crossing is to remain operating at 69 kV.
- (d) Please explain what the term “(with related substation infrastructure) between Stewart and Keno City” is referring to.

YUB-CW-12

Reference:

Application, Section 4.3, page 8

Issue/sub-issue:

SKTP components

Quote:

“Yukon Energy is pursuing the SKTP at this time to improve the electrical transmission infrastructure in central Yukon between Stewart Crossing and Keno City; reinforce and strengthen the grid between Stewart Crossing and Mayo; and replace and remove deteriorated and ‘end of life’ transmission infrastructure between Mayo and Keno City. The project is being planned to ensure continued safe and reliable service and to facilitate future economic development within the territory.

- The SKTP as **defined for environmental review and permitting**, and/or for the **engineering/costing work**, included the following components:
 - o 138 kV H-frame transmission line development involving the following segments:
 - L179 Stewart to Mayo (58 km) [the existing new 69 kV line would remain as well for this segment];
 - L180 Mayo to McQuesten (31 km) [to be operated at 138 kV]; and
 - L250 McQuesten to Keno City (20 km) [this segment would initially be operated at 69 kV].
 - o Substation development at McQuesten (S258) as well as at Stewart Crossing South (S251) to accommodate the new line and an SVC/Statcom;13 and at Mayo (S249) for fibre tie in.
 - o Other elements including PT sites and structures and First Nation benefits.” [Bold font added]

Request:

- (a) Please explain why the above description of the SKTP project development from Stewart to Keno City was not included in YEC’s current General Rate Application.
- (b) Please explain why it is necessary to operate L180 (Mayo to McQuesten) at 138 kV, when McQuesten to Keno City would be operated at 69 kV.
- (c) Please explain why the line from Stewart to Keno City is not to operate at 138 kV, as noted in the previous IR?
- (d) With respect to the above quote, why is YEC proposing that the line from Mayo to McQuesten operate at 138 kV instead of from Stewart to McQuesten? Please explain.
- (e) Please explain what PT sites are. Who would be responsible for PT sites and structure costs?
- (f) Please specify what First Nation benefits were provided in relation to the above-noted project?
- (g) Please provide single line diagrams in respect of the existing line and proposed alternatives.
- (h) Please explain why a project for future economic development is the responsibility of YEC and a cost that should be borne by ratepayers.

YUB-CW-13

Reference:

Application, footnote 15, page 9; Application, Section 5.4, YEC Capital Costs Recovered from VGC Group, pages 13-14

Issue/sub-issue:

McQuesten Substation all-in costs

Quote:

“The all in-costs estimated for the McQuesten Substation in this option is \$9.869 million, with \$8.939 million estimated to be funded by VGC Group under the PPA (includes \$6.715 million estimate for initial substation, \$0.884 million risk contingency, and future Step Down transformer cost estimate of \$1.34 million); the balance of the McQuesten Substation costs of **\$0.930 million are to be funded by YEC** under the PPA to facilitate initial development prior to the Transmission Facilities Development.”⁴ [Bold font added]

“Section 6.1(d) of the PPA identifies YEC McQuesten Substation Costs of \$930,563, as set out under Section B.4 of Schedule B, associated with the McQuesten Substation as initially developed being able to operate in future (if and when so required) at 138 kV. YEC funding of VGC Group costs for these added facilities for 138 kV service recognizes that these facilities are not required at the outset for delivery of Grid Electricity to the 69 kV Mine Facilities Spur line, **but are required as part of any planned Transmission Facilities Development option**. YEC will retain these costs in WIP until the Transmission Facilities Development Operation Date, after which time these costs will be added to rate base and included in the Transmission Facilities Fixed Cost that determine the Fixed Charge for VGC Group and any Other Industrial Customer using the Transmission Facilities. **In the event that 138 kV operation occurs**, VGC Group will pay YEC’s actual costs for the required Step Down Transformer at the McQuesten Substation.”⁵ [Bold font added]

Request:

- (a) Please provide a table with items that make up the McQuesten Substation all-in costs totalling \$9.869 million. The table should include costs for the items as well as an explanation for each. Also in the table, please provide who is responsible for funding each cost item and the reasoning underpinning who is responsible.
- (b) Please confirm that the \$0.930 million referred to in the above-noted quote, are the McQuesten Substation costs noted in Table B-2 of Schedule B, in the VCG PPA. If not confirmed, please provide the costs making up \$0.930 million.
- (c) Please confirm that “planned Transmission Facilities Development option” is related to VGC Group mine development.
- (d) If part (c) is confirmed, please explain the difference between the phrases “but are required as part of any planned Transmission Facilities Development option” and “In the event that 138 kV operation occurs”, i.e. it appears that the first phrase stipulates that future mine operation

⁴ VGC PPA Application, footnote 15, page 9.

⁵ VGC PPA Application, Section 5.4, YEC Capital Costs Recovered from VGC Group, pages 13-14.

will require 138 kV operation, while the phrase “in the event that 138 kV operation occurs” appears to suggest that operation at 138 kV is not necessary.

YUB-CW-14

Reference:

Application, page 9.

Issue/sub-issue:

SKTP development costs

Quote:

“Class 2 cost estimates (+15%, -10%) are as follows for the two options relevant to the PPA (each option includes \$6.6 million estimate for SVC/Statcom at Stewart Crossing South substation):

1. Full SKTP development: \$90.96 million, including costs that VGC Group and/or YEC will fund for the McQuesten Substation pursuant to the PPA.
2. L180 Mayo to McQuesten 138 kV line (assumed to be operated at 69 kV): \$32.2 million, including costs that VGC Group and/or YEC will have funded for the McQuesten Substation pursuant to the PPA.”

Request:

Please provide an explanation regarding the difference of close to \$60 million for the two options regarding SKTP development project. In your explanation, provide a table with underpinning costs items and explanations regarding the differential of \$60 million.

YUB-CW-15

Reference:

Application, page 10.

Issue/sub-issue:

Conditions Precedent to the Agreement

Quote:

“VGC Group Demonstrates to YEC ability to Proceed by February 15, 2018.”

Request:

YEC has requested that the Board issue a decision on this matter before February 28, 2018. If the Board does not issue a decision on the PPA Application by February 15, 2018, will YEC place on the record of this proceeding a letter by February 16, 2018 stating whether or not the VGC has provided evidence satisfactory to YEC, that this condition has or has not been met?

YUB-CW-16

Reference:

Application, page 11.

Issue/sub-issue:

Requirements for achieving Commencement of Delivery by March 2019.

Quote:

“Yukon Energy and VGC Group are working together to design, engineer, procure, construct and commission the McQuesten Substation [as set out in Schedule B of the PPA]. Yukon Energy and VGC Group have entered into the McQuesten Substation MOU provided in Schedule B to the PPA (the “MOU”) to establish the formal relationship between the Parties and the commitments to enable the Parties to work together on tendering, procurement, construction, commissioning and eventual turnover of the McQuesten Substation to YEC.”

Request:

- (a) Please confirm that YEC will recover all costs identified in the above quote from VGC Group. If not confirmed, please explain.
- (b) When does YEC anticipate that the MOU is to be finalized?

YUB-CW-17

Reference:

Application, Section 5.2, page 12

Issue/sub-issue:

Transmission Facilities Development, default option

Quote:

“Transmission Facilities Development expected to be completed by June 30, 2020 – This development option, which is the default option, assumes completion of Transmission Facilities Development that includes only new Transmission Facilities located between McQuesten Substation and the existing Mayo Substation (L180) that are to be operated at 69 kV. Costs for this option are assumed to be funded by Yukon Energy and to be recovered through rates as approved by the Board.”

Request:

- (a) Respecting the above quote, please explain what facilities make up the “new Transmission Facilities located between McQuesten Substation and the existing Mayo Substation (L180) that are to be operated at 69 kV”. Are the facilities only transmission-line related ones?
- (b) Does line L180, referred to above, parallel the existing line between Mayo and Keno City? Please explain.
- (c) Considering the need for the McQuesten Substation is triggered by VGC mine development, please explain why the costs for the above-noted option are “to be funded by Yukon Energy and to be recovered through rates as approved by the Board.”

YUB-CW-18

Reference:

Application, page 12.

Issue/sub-issue:

Power Factor requirement

Quote:

“Section 5.1 of the PPA provides for the Grid Electricity to be delivered by YEC to VGC Group, subject to the Maximum Electric Demand amounts specified before and after the Transmission Facilities Development, and a load Power Factor requirement of 96% leading.”

Request:

Please explain what is meant by a load Power Factor requirement of 96% leading.

YUB-CW-19

Reference:

Application, page 14.

Issue/sub-issue:

Firm Mine Rate & Fixed Charge

Quote:

“The existing Industrial Primary Rate (Rate Schedule 39) is set out in Schedule A of the PPA for approval of the Board (the Firm Mine Rate). The Firm Mine Rate is amended: (1) to revise the wording for the Fixed Charge to be applied to Alexco mine; (2) to provide a new Fixed Charge applicable to the VGC Group; and (3) to edit the “Available” section as needed to reflect today's Yukon Integrated Grid. The determination of the Fixed Charge for the VGC Group is outlined in Section 7.7 of the PPA and summarized below.”

Request:

Would any changes to a rate schedule, including a change to a fixed charge, be compliant with the existing OIC that govern changes to existing rates? Please explain.

YUB-CW-20

Reference:

Application, page 14.

Issue/sub-issue:

Fixed Charge Applicable to Industrial Customers

Quote:

“Yukon precedent for industrial grid connections establishes that industrial customers are required to make contributions towards existing and new transmission infrastructure built specifically to provide them with industrial service.”

...

“In 2010, prior to Alexco receiving grid service as an industrial customer, a Fixed Charge was established and included in the YUB-approved Alexco PPA. This ensured that Alexco paid its share of costs for transmission facilities maintained in service to serve future industrial customers after the closure of the UKHM mine. This also established a precedent that industrial customers connecting to the existing Mayo-Keno transmission facilities would collectively be assigned, through a fixed charge included in Rate Schedule 39, an 85% share of annual depreciation and return costs related to these transmission facilities.”

Request:

- (a) Please explain how the contributions from VGC Group contribute towards existing transmission infrastructure, including the WAF, Carmacks-Stewart and Mayo-Dawson transmission lines.
- (b) Did the Alexco PPA precede the second phase of the CSTP?
- (c) If the answer to (b) is yes please explain how the 85% of annual depreciation and return costs related to the transmission facilities was determined.
- (d) Should the 85% only relate to transmission facilities related to the Mayo-Dawson line? Please explain.
- (e) Should a portion of fixed generation costs be included in the fixed charge? Please explain.
- (f) What other alternatives did YEC consider in setting the 85% threshold? Please explain.

YUB-CW-21

Reference:

Application, page 15, Footnote 22 and Appendix A to Board Order 2010-14.

Issue/sub-issue:

Fixed charge

Quote:

“The basis for the fixed charge applicable for the Mayo-Keno Transmission Facilities was initially reviewed and approved by the YUB in 2010 as part of the Alexco PPA;”

...

“Allocating 85% of annual costs of the line to the industrial customer is considered reasonable based on similar treatment of Faro Mine in the past”

...

²² The 85% share of fixed costs included in the approved Alexco PPA is based on the NEB 1985 NCPC Report finding regarding the Faro Mine which was subsequently retained by the YUB to set the fixed charge for the Faro Mine under Rate Schedule 39.” (footnote 22)

...

“YEC cited several decisions allowing that 85% of transmission line costs to be directly allocated to an industrial customer. Board Order 2007-5 was also cited as support for the 85% allocation of transmission line costs to industrial customers. In Appendix A to YUB Board Order 2007-5, the Board said:

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. 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.

The Board later said that it accepted Rate Schedule 39 on an interim basis and that it had concerns about the sufficiency of the current COS presented by YEC.

The Board concludes that the precedents cited by YEC provide some support for the direct transmission allocation (85%) as applied for. Most of the cases cited refer to cost of service and not the fundamental basis or appropriateness for the establishment of fixed charges to industrial customers. The Board notes that no other alternatives have been presented (in terms of allocation of transmission costs through fixed charges) in this proceeding. The comparison to the Faro situation when determining fixed charges for transmission line costs is the best available evidence for this proceeding. Furthermore, the Board accepts the information with respect to calculations provided by YEC in Attachment B to YUB-YEC-1-3(b) and approves the fixed charge to Alexco of \$7,289 per month.” (Appendix A to Board Order 2010-14, page 5 of 11)

Request:

- (a) If the Board were to direct a direct transmission allocation other than 85%, would this have any impact on existing PPAs such as for Minto and Alexco?
- (b) Please provide the detailed calculation of how the fixed charge of \$8,402/month (for VGC Group) is determined (include a version in electronic format stating all assumptions).

YUB-CW-22

Reference:

Application, page 16.

Issue/sub-issue:

Alexco Fixed Charge

Quote:

“The PPA provisions will require amendment to the Alexco fixed charge at such time as the VGC Group receives Grid Electricity from YEC.”

...

“With regard to securing any required YUB approvals related to Fixed Charge amounts, including amounts related to the VGC Group Share or the Transmission Facilities Fixed Cost, YEC will provide the YUB pursuant to Section 7.7 (c)(iii) with such supporting documentation as required by the YUB, and will use commercially reasonable efforts to obtain the approval of the YUB.” (underlining added)

Request:

- (a) Does the Alexco PPA allow for such changes? Please explain.
- (b) Do any changes to fixed charge amounts require YUB approval?
- (c) Please explain what is meant by “commercially reasonable efforts to obtain the approval of the YUB”? Why has this limitation been added to the VGC Group PPA?
- (d) Please provide your estimate, in terms of order of magnitude, as to what the amendment to the Alexco fixed charge will be.

YUB-CW-23

Reference: Application, Attachment B, Page B-1

Issue/sub-issue: Total Assets at Cost

Request:

- (a) Please describe what is included in the total assets at cost (for example, what transmission lines, substations, etc.).
- (b) For incremental transmission developments, when would the annual transmission fixed cost be updated? Would it be the year following capitalization or following a YUB decision on a YEC general rate application?
- (c) Would total assets at cost include any capital replacements and upgrades to the identified assets?

YUB-CW-24

Reference: Power Purchase Agreement, Schedule D, (h)

Issue/sub-issue: YEC Inspections

Quote: “YEC will have access to the Mine equipment for periodic testing and verification of the SPS/RAS functionality.”

Request:

How will the costs of YEC inspections be recorded, and which party is responsible for those costs as incurred?

YUB-CW-25

Reference: Power Purchase Agreement, Table C-2

Issue/sub-issue: YEC Capital Costs

Preamble: Table C-2 does not identify any costs for pole replacement or reconductoring of transmission line between Mayo and Keno.

Request:

Should any of the line improvement, replacement costs of the Mayo-Dawson transmission line be attributed to VGC Group? Please explain.

YUB-CW-26

Reference:

Minto PPA Section 6.2, Minto PPA Application page 15.

Issue/sub-issue:

Minimum Take-or-Pay Contract

Quote:

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

Request:

- (a) Does the VGC Group PPA have a similar take-or-pay provision?
- (b) Would a similar take-or-pay provision expose YEC and YEC ratepayers to lower risk? Please explain.

YUB-CW-27

Reference:

VGC Group PPA, PDF page 38 of 58.

Issue/sub-issue:

Memorandum of Understanding (MOU)

Preamble:

Parts 3, 4 and 5 of the MOU refer to ATCO and VGC.

Request:

Please explain the role of ATCO in the MOU and in regards to this PPA.

YUB-CW-28

Reference:

Application, page 19.

Issue/sub-issue:

Ratepayer impact analysis

Quote:

The following analysis is intended to provide a reasonable indication of likely ratepayer impacts from the PPA and YEC delivery of Grid Electricity to the Mine. For simplicity, the analysis focuses on three years (calendar 2020, 2021 and 2025) to provide an indication of potential utility revenue and cost impacts after the initial year of power delivery and in year six of power delivery.

Request:

Please update the analysis to show all six years of operations based on VGC forecasts plus the five years of closure activities.

YUB-CW-29

Reference: Application, Section 4.1, page 4.

Issue/sub-issue: Summer Storage

Quote: The YIS has 92 MW of installed YEC hydro generation, of which approximately 70.5 MW can be relied upon for the winter peak.

Request:

- (a) Will VGC Group be a summer or winter peaking load customer? Please explain.
- (b) If VGC is a summer peaking load customer, please explain the impact on YEC's ability to store water over the summer months to produce a reliable winter peak capacity of 70.5 MW with the addition of VGC Group as a customer.