

April 8, 2022

Mr. Richard Buchan, Chair  
Yukon Utilities Board  
Box 31728  
Whitehorse, Yukon Y1A 6L3

Dear Mr. Buchan:

**Re: Yukon Energy Corporation Rate Schedule 39 Fixed Charge Adjustment for Service to VGC Group Mine Site and Alexco Mine and Mill Sites - Limited Scope Application**

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In accordance with the VGC Power Purchase Agreement (“VGC Group PPA”)<sup>1</sup>, Yukon Energy requests the Yukon Utilities Board (the “YUB”, or “Board”) approve an interim Fixed Charge effective May 1, 2022 that adjusts the Rate Schedule 39 Industrial Primary (“Rate Schedule 39”) Fixed Charge applicable to the VGC Group mine and the Alexco Resource Corp. (“Alexco”) mine and mill to include costs for the SVC Statcom that is now in service and other adjustments as required by Order 2022-03.

This limited scope application is made pursuant Board Order 2018-04 to amend the mine firm rate within 60 days of in-service date of relevant new transmission facilities. The SVC Statcom came into service October 28, 2021 however this application was delayed until the Board provided its Order on the YEC’s 2021 GRA costs and rates (Board Order 2022-03, March 15, 2022).

The application requests approval of an interim Rate Schedule 39 Fixed Charge rate as at May 1, 2022.

Final Board determinations regarding Rate Schedule 39 and the Fixed Charge will be made when the Board approves YEC’s 2021 Compliance Filing.

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<sup>1</sup> The Power Purchase Agreement (PPA) dated November 9, 2017 between YEC, Victoria Gold Corp., and StrataGold Corporation (Victoria Gold Corp. and StrataGold Corporation are collectively, the VGC Group) for transmission connection to the mine site.

## Context and Background

Pursuant to Rate Schedule 39, a Fixed Charge is assigned to industrial customers that use the Mayo-Keno transmission facilities<sup>2</sup>; the Fixed Charge assigns to these customers an 85% share of annual costs for depreciation and return on rate base related to these transmission facilities. The basis and premise for the Fixed Charge was initially reviewed as part of the Alexco Power Purchase Agreement (Alexco PPA) approved in 2011 by Board Order 2011-01, and confirmed in the VGC Group PPA approved in 2018 by Board Order 2018-04.

On March 17, 2021 Yukon Energy informed VGC Group that the new transmission facility to replace the Mayo to McQuesten substation segment of YEC's 69 kV Mayo to Keno City transmission facilities has been completed and is in service to provide electricity. Pursuant to YUB directive in its Order 2018-04, on March 23, 2021 Yukon Energy filed a limited scope application with the Board seeking approval, on interim basis, of changes to the Fixed Charge effective April 1, 2021 to reflect the cost share of the new transmission facility put in service.

The March 17, 2021 application included the costs related to:

- Transmission Costs that were already in place prior of development of the new transmission facilities;
- YEC's McQuesten Substation Costs - these are defined in the VGC Group PPA as the costs that VGC Group recovered from YEC, related to YEC substation upgrades to accommodate 138 kV transmission if developed in the future which was completed in 2019; and
- Transmission Facilities Development Costs - YEC net costs, forecast at that time, after federal government contributions [75% of eligible costs] for the new transmission between Mayo and McQuesten Substation that was completed in March 2021.

The Board in its Order 2021-09 approved the changes to the Fixed Charge on an interim basis effective April 1, 2021. The Board also approved YEC's request to include following paragraph to

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<sup>2</sup> This was established in the 2010 Alexco PPA to ensure that Alexco mine paid its share of costs for transmission facilities maintained in service to serve future industrial customers after the closure of the UKHM mine.

Rate Schedule 39 which provides ability for YEC to adjust the Interim Fixed Charges between VGC Group and Alexco based on actual loads:

Within 60 days of calendar year end, YEC will adjust Fixed Charges for Alexco and VGC Group based on each mine's actual share of the Major Industrial Customer MWh load on the Mayo to McQuesten segment of YEC's Mayo to Keno City transmission facilities.

The SVC/Statcom was closed to rate base effective October 28, 2021. The limited scope application to include SVC Stacom costs in the Fixed Charge was delayed until the Board provided its Order on the YEC's 2021 GRA costs and rates.

Board Order 2022-03 issued March 16, 2022 included the following directions affecting the Rate Schedule 39 Fixed Charge:

1. YEC is directed (paragraph 340) to reflect the changes in depreciation parameters for calculating the fixed charges as directed in this Board Order in its future application to finalize Rate Schedule 39 fixed charges. These charges are to be effective January 1, 2021.
2. YEC is directed (paragraph 195) to create a separate sub-transmission asset account as Substation "VGC Group – gold mine" for those assets to which the \$10.688 million contribution relates and to amortize these substation costs over a period of 12 years consistent with a 12-SQ.<sup>3</sup> The Board further directed (paragraph 196) that all assets constructed for the purpose of servicing the VGC Group mine, regardless of whether there was a related contribution, should similarly be amortized over 12 years. For each asset category (account) affected, YEC is further directed (paragraph 196) to update its amortization of the reserve differences mechanism to effect a true-up of this amount in its compliance filing to this Board Order.

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<sup>3</sup> As noted in paragraph 184 of the Board Order, the total substation cost of \$11.619 million included \$10.688 million for the VGC project requirements at the outset "for delivery of Grid Electricity to the 69 kV Mine Facilities Spur line" and \$0.931 million that was built with the capability to accommodate future connection of 138-kV transmission from Stewart Crossing or from Mayo by way of certain system improvements. The \$0.931 million portion of the substation is not included in the separate sub-station asset account designated as Substation "VGC Group-gold mine", and continues to be amortized over its expected life of 54 years.

3. The Board further directed (paragraph 259) that “all assets associated with the mine are amortized over 12 years, which includes the Statcom device. This means that the costs of the STATCOM device will be paid for over the lifetime of the mine, thereby limiting the exposure of costs to non-industrial ratepayers even if the life of the STATCOM device exceeds the life of the mine.”
4. The 12 year period specified in the Board’s directions is to align amortization of contributions and costs over the period that the assets are expected to serve the VGC Group mine customer (paragraphs 193 and 194).

This limited scope application for a revised interim Fixed Charge takes into account where feasible the above Board Order 2022-03 directions in addressing the added costs for SVC Statcom, on the understanding that final adjustments and true-ups of the Fixed Charge will be addressed in YEC’s compliance filing to Board Order 2022-03.

### **Fixed Charges Effective May 1, 2022**

Table 1 provides YEC transmission facilities costs in rate base (net costs after contributions and related depreciation) for 2021 and 2022 updated to include the costs for SVC/Statcom as well as updates required to reflect YEC’s 2021 GRA approvals related to weighted average cost of capital and depreciation rates. The table includes the costs related to:

- **Existing Transmission Costs** - these costs for the assets that were already in place prior of development of the new transmission facilities. These costs are updated to reflect retirement of the portion of the existing transmission line that is replaced by new transmission line.<sup>4</sup>
- **YEC’s McQuesten Substation Costs** - these are defined in the VGC Group PPA as the costs that VCG Group recovered from YEC, related to YEC substation upgrades to

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<sup>4</sup> The new transmission line replaced about 32 km of the total 52 km existing transmission line which is about 62% of the affected transmission assets retired in 2021 [about 87% of the existing transmission facility are affected by new transmission line, while 13% are not affected, therefore, 62% for retirements applies to 87% of the total existing transmission assets]. The cost for the existing transmission facilities reflects costs after retirements.

- accommodate 138 kV transmission if developed in the future which was completed in 2019 [net cost of \$0.931 million].
- **Transmission Facilities Development Costs** - YEC net costs after federal government contributions [75% of eligible costs] for the new transmission between Mayo and McQuesten Substation that was completed in March 2021; and
  - 5. **SVC/Statcom Costs** - YEC net costs after federal government contributions [75% of eligible costs] for the SVC/Statcom that was completed in late October of 2021. These costs are amortized over remaining life of the mine (10 years) consistent with the direction in the Board Order 2022-03, paragraph 259 where the Board noted “the costs of the STATCOM device will be paid for over the lifetime of the mine, thereby limiting the exposure of costs to non-industrial ratepayers even if the life of the STATCOM device exceeds the life of the mine.”<sup>5</sup>

As provided in Table 2, the 2022 cost related to existing and new Mayo-Keno transmission facilities (including the SVC/Statcom) are \$929,755 based on the weighted average cost of capital (WACC) at 5.04% for the 2021 GRA (Board Order 2022-03 Compliance Filing), resulting in a revised Fixed Charge (85% of the Transmission Facilities Fixed Cost) of \$65,857.64 per month. The Fixed Charge is allocated between VCG Group and Alexco based on forecast sales for 2022 and will be adjusted annually based on actual sales as indicated in Rate Schedule 39.

### Future Adjustments to Fixed Charges

In addition to year end adjustments based on actual sales, final adjustments and true-ups of the Fixed Charge will be addressed in YEC’s compliance filing to Board Order 2022-03. Costs for any future work required for the relevant facilities will be addressed as required after the work is concluded (some remaining work is expected during 2022 on the SVC/Statcom).

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<sup>5</sup> Board Order 2022-03 also directs that all assets associated with the mine are to be amortized over 12 years, based on the VGC Group expected mine life in the VGC Group PPA, i.e., mining activity expected to close in 2031 after starting in 2019. The 12 year life applies to the relevant McQuesten Substation costs funded by VGC Group, given that this facility was completed in 2019 at the start of the mine operation. The SVC/ Statcom facility was only completed two years later (October 2021) – and therefore the remaining mine life applicable for this facility’s costs is 10 years. The publicly available information continues to note that open pit mining and loading of the heap leach facilities at the VGC Group mine will be completed in Q2 of 2031. [Source: [Eagle Gold Mine |Victoria Gold Corp. \(vitgoldcorp.com\)](http://Eagle Gold Mine |Victoria Gold Corp. (vitgoldcorp.com)), accessed on April 3, 2022]

**Table 1: YEC Year-End Transmission Facilities Fixed Costs in Rate Base**

|             |   | <u>2021</u> | <u>2022</u>      |
|-------------|---|-------------|------------------|
|             | <b><u>Existing Transmission net costs</u></b>               |             |                  |
| 1           | Year End Net Cost*  | 1,155,849   | 1,155,849        |
| 2           | Annual Depreciation*  | 18,069      | 18,069           |
| 3           | Accumulated Depreciation*                                   | 288,640     | 306,709          |
| 4=1-3       | Year End Net Book Value                                     | 867,209     | 849,140          |
| 5           | Mid-Year Rate Base  |             | <b>858,175</b>   |
|             | <b><u>Total New Transmission Facilities Fixed Costs</u></b> |             |                  |
|             | <b>YEC's McQuesten Substation Costs**</b>                   |             |                  |
| 6           | Year End Net Cost [net of contributions]                    | 930,563     | 930,563          |
| 7           | Annual Depreciation   | 17,233      | 17,233           |
| 8           | Accumulated Depreciation                                    | 45,655      | 62,887           |
| 9=6-8       | Year End Net Book Value                                     | 884,908     | 867,676          |
| 10          | Mid-Year Rate Base  |             | <b>876,292</b>   |
|             | <b>Transmission Facilities Development***</b>               |             |                  |
| 11          | Year End Cost   | 15,719,005  | 15,719,005       |
| 12          | Year End Contributions                                      | -11,441,795 | -11,441,795      |
| 13=11+12    | Year End Net Cost   | 4,277,211   | 4,277,211        |
| 14          | Annual Depreciation   | 53,446      | 66,807           |
| 15          | Accumulated Depreciation                                    | 53,446      | 120,253          |
| 16=13-15    | Year End Net Book Value                                     | 4,223,765   | 4,156,958        |
| 17          | Rate Base   |             | <b>4,190,361</b> |
|             | <b>SVC/Statcom Costs***</b>                                 |             |                  |
| 18          | Year End Cost   | 13,219,598  | 13,219,598       |
| 19          | Year End Contributions                                      | -9,622,487  | -9,622,487       |
| 20=18+19    | Year End Net Cost   | 3,597,111   | 3,597,111        |
| 21          | Annual Depreciation   | 64,058      | 359,711          |
| 22          | Accumulated Depreciation                                    | 64,058      | 423,769          |
| 23=20-22    | Year End Net Book Value                                     | 3,533,053   | 3,173,342        |
| 24          | Mid-Year Rate Base  |             | <b>3,353,197</b> |
|             | <b><u>Total New Transmission Facilities Fixed Costs</u></b> |             |                  |
| 25=10+17+24 | Rate Base   |             | <b>8,419,851</b> |
| 26=7+14+21  | Depreciation  |             | <b>443,751</b>   |

**Notes:**

\* The cost and depreciation for the existing assets reflect retirement of portion of the transmission line as new transmission line replaced about 32 km of 52 km of existing line.

\*\* VGC Group PPA Section 7.7 (b) notes Fixed Charge will include YEC's McQuesten Substation Costs. As per section 6 (d) YEC's McQuesten Substation Costs after VGC Group contributions at \$930,563.

\*\*\* The completion date for Transmission Facilities is March 15, 2021; for SVC/Statcom is October 28, 2021.

**Table 2: Adjusted Rate Schedule 39 Fixed Charge Calculation**

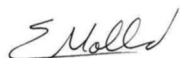
|   | <u>2022</u>             |                  |
|---|-------------------------|------------------|
| <b>Existing Transmission Facilities</b>                   |                         |                  |
| Rate Base   | \$858,175               | Table 1, Line 5  |
| Average Cost of Capital (2021 GRA Compliance Filing)      | 5.04%                   |                  |
| Return on Rate Base                                       | <u>\$43,282</u>         |                  |
| Depreciation  | <u>\$18,069</u>         | Table 1, Line 2  |
| <b>Subtotal existing facilities</b>                       | <b><u>\$61,351</u></b>  |                  |
| <b>New Transmission Facilities [net of contributions]</b> |                         |                  |
| Rate Base   | \$8,419,851             | Table 1, Line 25 |
| Average Cost of Capital (2021 GRA Compliance Filing)      | 5.04%                   |                  |
| Return on Rate Base                                       | <u>\$424,653</u>        |                  |
| Depreciation  | <u>\$443,751</u>        | Table 1, Line 26 |
| <b>Subtotal new facilities</b>                            | <b><u>\$868,404</u></b> |                  |
| <b>Total Transmission Facilities Fixed Cost</b>           | <b><u>\$929,755</u></b> |                  |
| Fixed Charge at 85% of annual costs                       | <u>\$790,292</u>        |                  |
| Fixed Charge per month                                    | <u>\$65,857.6</u>       |                  |
| Major Industrial Use of Transmission Facilities           | Sales, MW.h             |                  |
| Victoria Gold   | 43,147                  |                  |
| Alexco  | 9,794                   |                  |
| <b>Monthly Fixed Charges, \$/month</b>                    | <b><u>01-May-22</u></b> |                  |
| Victoria Gold   | \$53,674.48             |                  |
| Alexco  | <u>\$12,183.16</u>      |                  |
| Total   | <u>\$65,857.64</u>      |                  |

**Updated Rate Schedule 39 – Industrial Primary**

Appendix 1 to this Application provides the proposed Rate Schedule 39 to be effective May 1, 2022 with the updated Fixed Charge for the VGC Group mine and Alexco mine and mill.

If you have any questions regarding the above, please call.

Yours truly,



Ed Mollard  
Vice President Finance & CFO