

**Yukon Energy Corporation
2012 ERA Proceeding**

**Yukon Utilities Board Information Request Round 1 to
Yukon Energy Corporation (YEC)**

YUB-YEC-1

Reference: YEC ERA Part 1 Application, Part 1, page 1-3, Table 1-1.
YEC 2017-18 GRA, Appendix 3.5, Table 1, page 3.5-4.

Issue/sub-issue: Actual wholesales

Preamble: Table 1-1 shows 2012 Actual wholesales of 310,264 MW.h

Request:

- (a) Please state the source of 2012 actual wholesales and show all calculations as to how the amount is determined. Does line A1 in Table 1-1 include any line losses? Please explain.
- (b) YEC ERA Part 1 Application, page 1-3, Table 1-1, shows a Fish Lake generation adjustment of 992 MW.h and refers readers to Table 1 of the DCF Annual Filing for 2016 found in Appendix 3.5 of YEC's 2017-18 GRA at page 3.5-4. Please provide how the 992 MW.h were determined for this adjustment and explain the meaning of "expected LTA" and "actual" generation.
- (c) From Table 1 of Appendix 3.5 to YEC's 2017-18 GRA, which is referred to in the YEC ERA Part 1 Application, please explain what is meant by "Assumed Actual Generation Sources". How were the assumed actual generation sources amounts determined?
- (d) Line 10 of Table 1 in Appendix 3.5 of YEC's 2017-18 GRA is titled "YECL Fish Lake (expected)". Please explain what this term means and how the 2012 quantity was determined for that line.
- (e) Section B of Table 1-1 from the YEC ERA Application shows line losses of 8.80%. The note refers to Table 2.2. Does this refer to YEC's 2012-13 GRA? If so, what filing is it referring to — the initial application or the compliance filing? If it does not refer to the compliance filing, are these forecast losses? Please explain.
- (f) If the losses referred to in part (e) above are forecast, please explain the applicability of using forecast line losses in conjunction with actual wholesales as referenced in Line A1 of Table 1-1 of the YEC ERA Part 1 Application.
- (g) In response to YUB-YEC-1-6(b) of the of the VGC Group Power Purchase Agreement, YEC stated the following with respect to a question on line losses: "The difference in line loss for the Mayo to McQuesten Substation transmission segment between 138kV and 69kV operation with the same 138 kV capable transmission conductor required for the planned load is marginal at around 0.4%. There is not a significant difference in losses in part because the distance is short, at around 35km. (Footnote removed)." With respect to line losses determined with regards to the 2012 ERA calculation please clarify the following:
 - i) What year and what date did the Carmacks-Stewart Transmission Project (CSTP) Phase 1 come into service?
 - ii) Was the 138 kV CSTP Phase 1 line initially energized at 69 kV or at 138 kV?

- iii) If the CSTP Phase 1 line was energized at 69 kV, at what date was it fully energized at 138 kV?
 - iv) If the CSTP Phase 1 line was originally energized at 69 kV, please provide a table showing the incremental line losses from operating that line at 69kV instead of 138 kV for each month that the line operated at 69 kV.
 - v) If the CSTP Phase 1 line was operational in 2012 and if that line was energized at 69 kV during 2012, please explain and demonstrate how YEC factored in the operation of the CSTP Phase 1 line in determining line losses of 8.80% with respect to the calculation of the 2012 ERA amounts.
- (h) Line B2 of Table 1-1 of the YEC ERA Part 1 Application refers to Table 1 of Attachment 1 to Appendix 3.5 of YEC's 2017-18 GRA. Does YEC's actual generation net of secondary, LTA wind & FL refer to line 12 of Table 1 of Attachment 1 which is titled "YEC Grid load net of expected Fish Lake and Wind"? If so, please explain the difference between "actual" and "expected". With respect to line B2, please explain what "actual generation" refers to (i.e. metered generation?) and how the "secondary LTA wind & FL (MW.h) was determined.
- (i) In the context of the YEC ERA Part 1 Application, please explain what YEC means when it uses the word "actual". Does YEC ascribe similar meaning to the words "expected" and "assumed"?
- (j) Line B3 of Table 1-1 refers to YEC's compliance filing to Board Order 2013-01. Please provide the schedule number, a copy of the schedule, and the line number that shows the 405,314 depicted in line B3. If not shown on a schedule, please explain and show the derivation of the number provided in line B3. Please explain why YEC in line B3 did not net out the expected FL (MW.h) in addition to the netting out of expected wind (MW.h). Please explain the difference between "LTA" and "expected".
- (k) To clarify, what is included in line B5 of Table 1-1 entitled "YEC's actual LTA Thermal Generation (MWh)"? Is this amount influenced by any operational decisions during that year? Please explain. What other events or operational considerations are not included in the derivation of that amount? Please provide the derivation of this amount.
- (l) Line B6 of Table 1-1 entitled "GRA LTA Thermal Generation (MWh)" references note 1 which refers to Board Order 2013-03. Please provide the document and the derivation of the 7,926 MW.h.
- (m) In line C2 of Table 1-1 entitled "Average YEC rider applicable to AEY retails (\$/kWh wholesales)", why is an average used? Can YEC identify in what month, day or hour that the AEY wholesale purchases took place? Can YEC identify by month, day or hour the GRA forecast of wholesale purchases by AEY? If yes, file the information for 2012. If no, please explain.

YUB-YEC-2

Reference:

YEC ERA Part 1 Application, Part 1, page 1-4.

Issue/sub-issue:

YEC revenue Impact per kW.h Changes in Wholesales

Quote:

b. \$0.00663 per KW.h of incremental wholesales based on Yukon Energy's average Rider J revenues from AEY retail customers of \$0.00924 per kW.h of firm wholesales in last six months of 2012 when Rider J was applicable, times 71.8% to reflect the portion of the 2012 wholesale change of 13,272 MW.h that occurred in the last six months of 2012 (this revenue change applies to wholesale changes net of Fish Lake hydro generation variances from long-term average; Rider J charges in 2012 of 6.4% applied from July 1 to December 31).

Request:

- (a) Please explain why the "average Rider J revenues" is used.
- (b) Please explain and provide the derivation of the 71.8%.
- (c) Please explain how it was determined that 71.8% of the change in wholesales occurred in the last 6 months of 2012. How was the timing of that change verified?

YUB-YEC-3

Reference:

YEC ERA Part 1 Application, Part 1, page 1-5.

Issue/sub-issue:

Change in ERA amount for 2012

Quote:

The increase of \$62,000 from the \$439,000 amount estimated in YEC's April 7, 2015 ERA filing, and referenced in the Yukon Court of Appeal Order, is entirely due to refinements in the revenue impact assessments.

Request:

- (a) Why was the April 7, 2015 amount of \$439,000 an estimate? Please explain.
- (b) What refinements were needed in "the revenue impact assessments"?
- (c) How long after a fiscal year-end does YEC determine final ERA amounts?

YUB-YEC-4

Reference:

YEC ERA Part 1 Application, Part 1, page 1-6.

Issue/sub-issue:

Change in ERA amount for 2012

Quote:

Revenue impacts on incremental wholesales resulting from Fish Lake hydro generation impacts: overall revenue reduction from earlier estimate by \$10 thousand for 2012...

Request:

If Fish Lake hydro is above or below forecast it will ultimately impact the level of wholesale purchases (assuming load is constant). If you have accounted for the changes in wholesales, then please explain why a Fish Lake adjustment is necessary. Please explain whether such an adjustment results in double counting.

YUB-YEC-5

Reference:

YEC ERA Part 1 Application, Part 1, pages 1-6 to 1-7.

Issue/sub-issue:

Concerns noted in Order 2017-08

Quote:

In summary, Yukon Energy's response to the above direction is that no adjustments are needed to the ERA amount of \$501,000 for 2012 payable by AEY to YEC to account for the concerns noted in Order 2017-08. (Page 1-6)

...

1. Yukon Energy's actual diesel generation costs for 2012 were determined based solely on the DCF Term Sheet table as approved by the Board for determining expected diesel generation for the actual grid load in 2012.

...

2. Any variances in actual diesel generation in 2012 from YECSIM forecasts as approved by the Board for the specified 2012 water and load conditions and the DCF Term Sheet table (including all such potential variances noted in the Board's Appendix A: Reasons for Decisions to Order 2017-08) had no impact on the final diesel generation costs incurred by Yukon Energy in 2012.

- YEC's final diesel generation costs for 2012 at GRA approved fuel prices per kW.h were fully determined according to the expected diesel generation as estimated using the approved DCF Term Sheet.
- While actual diesel generation affected the payment to the DCF for 2012, it did not affect the total diesel generation cost incurred by YEC as determined by the DCF Term Sheet. In short, the sum of actual diesel generation and the DCF payment always must equal the DCF Term Sheet expected total thermal generation for the actual 2012 grid load.

Request:

- (a) Given the above-noted response, how are such activities as enhancing winter storage and changes due to actual system operations accounted for?
- (b) If the response to part (a) of this question is that those variance are accounted through the DCF, then does this mean that the DCF includes items other than changes in forecast water levels?
- (c) Please confirm whether for 2012, actual diesel generation costs and final diesel generation costs for 2012 are one and the same. Moreover, please confirm that the second bullet could be rewritten as "YEC's **actual or final diesel generation costs** for 2012 at GRA approved fuel prices per kW.h, were fully determined according to the expected diesel generation as estimated using the approved DCF Term Sheet for the actual grid load in 2012."
- (d) If (c) is not confirmed, please explain what these terms refer to.

- (e) With respect to the second bulleted item under 2 in the above quote, please confirm that actual diesel generation equals total thermal generation for 2012.
- (f) The second bulleted item under 2 in the above quote, states that the “**sum of actual diesel generation and the DCF payment always must equal the DCF Term Sheet expected total thermal generation for the actual 2012 grid load.**” If the actual diesel generation for 2012 equals the DCF Term Sheet expected total thermal generation for the actual 2012 grid load, please explain the rationale for a DCF payment.

YUB-YEC-6

Reference: YEC ERA Part 1 Application, Part 1, pages 1-8.
Issue/sub-issue: Efficiencies and inefficiencies related to actual operation of its hydro generation facilities

Quote: Any efficiencies or inefficiencies related to actual YEC operation of its hydro generation facilities had no impact on Yukon Energy’s final thermal generation cost or net income for 2012, even if such factors affect the amounts for YEC’s transfers into or out of the DCF.

Request:

- (a) Please confirm that YEC’s operation of its hydro generation facilities has no impact on YEC’s final thermal generation cost nor net income. If confirmed, please explain.
- (b) To clarify, based on the above quote, can items other than changes in forecast water levels affect the DCF? Please explain.
- (c) As provided for 2013 in tables 2.1¹ and 2.2² of YEC’s 2017-18 General Rate Application, please provide forecast and actual values for 2012, 2014, 2015 and 2016.

YUB-YEC-7

Reference: YEC ERA Part 1 Application, Part 1, pages 1-9 to 1-12.
Issue/sub-issue: ERA for the years 2013-2016 inclusive

Request:

- (a) Is it YEC’s position that the ERA amounts that it has included in Table 1-2 for each of the years 2013-2016 inclusive are final and not subject to further change?
- (b) If the Board approves the amounts in Table 1-2, is it YEC’s position that all ERA matters for the period 2013-2016 are closed? If not, then please explain what remains outstanding.

¹ Summary of Customers, Energy Sales and Revenues

² Summary of Energy Balance, Losses, and Peak