

# Yukon Utilities Board

Board Order 2025-08

Appendix A: Reasons for Decision

April 24, 2025

## 1 INTRODUCTION

1. On February 28, 2025, Yukon Energy Corporation (YEC) filed correspondence with the Yukon Utilities Board (Board) titled “2024 Low Water Reserve Fund Report and Energy Reconciliation Adjustment Filing”. The submission was filed pursuant to YEC’s LWRF Term Sheet as approved in Board Order 2024-13.
2. On March 12, 2025, the Board issued Board Order 2025-05 which considered the YEC submission as an application to be decided by way of a written proceeding, pending Ministerial approval. Board Order 2025-05 provided process steps for interested parties to provide comments on the application and YEC to provide reply comments. For regulatory efficiency, the Board did not require registration from interested parties.
3. The Board received comments from the UCG by March 22, 2025 and reply comments from YEC On March 27, 2025 in accordance with the process schedule.
4. The Board received approval from the Minister of Justice for this proceeding on April 7, 2025.
5. In making its decision, the Board has considered all relevant materials comprising the record of this proceeding. Accordingly, references to specific parts of the record in this *Appendix A: Reasons for Decision* are intended to assist the reader in understanding the Board’s reasoning related to a particular matter and should not be taken as an indication that the Board did not consider all relevant portions of the record.
6. The Board considers the record of this proceeding closed as of April 7, 2025.

## 2 OVERVIEW OF THE APPLICATION

7. In its application, YEC sought approval of the following two proposals:
  - approval of the Low Water Reserve Fund (LWRF) transfers as well as LWRF balances as provided in Attachment 1 of the filing. The transfer amount calculated by YEC to be removed from the LWRF for 2024 is \$3.067 million. The interest calculated on the balance of the LWRF for 2024 is \$1.012 million. These two transactions (the 2024 LWRF transfer and the interest) provide a closing balance in the LWRF, as at December 31, 2024, of \$14.186 million (in favour of customers). As the balance in the LWRF at the end of 2024 does not exceed the +/- \$16 million threshold, YEC has stated that there is no excess to be refunded to customers, nor is there a deficit to be collected from customers via a Rider E rebate or collection. YEC noted that, through Board Order 2024-15, the Board

approved a Rider E rebate of 0.128 cents/kWh for the period November 1, 2024 to March 31, 2025. That rebate will be set to 0 cents/kWh April 1, 2025.

- YEC noted that actual wholesale sales to AEY were higher than forecast wholesale sales<sup>1</sup> to AEY resulting in incremental thermal costs for YEC. However, YEC stated that incremental revenues from the higher wholesales to AEY offset YEC's incremental thermal costs. The result of this situation is that no ERA payments are required for 2024.

## 2.1 LWRP Calculations and Balance updates for 2024

8. YEC provided Attachment 1: LWRP Calculations and Balance as of December 31, 2024 containing Table 1-1 LWRP Calculations and Table 1-2 LWRP Continuity Schedule. The schedules were also provided in Excel format. Table 1-1 calculated an incremental YEC Thermal Generation Cost which shows that actual thermal generation exceeds LTA thermal generation for the 2024 actual load. Thus, YEC transferred a previous collection from the LWRP of \$3.067 million for the year 2024. Table 1-2 provides the balance in the LWRP as at December 31, 2024 after all LWRP transactions have been recorded, including earned interest (the earned interest was \$1,012,000) on the LWRP balance (\$14,186,000).

## 2.2 2024 ERA Filing

9. YEC provided Attachment 2: 2024 ERA Filing containing Table 2-1 ERA Determination for 2024. Table 2-1 calculated an ERA charge to AEY of \$0.

# 3 VIEWS OF THE PARTIES

10. The UCG was the only party to provide comments on YEC's 2024 LWRP and ERA application. In its corrected March 22, 2025 submission, the UCG commented on three issues: use of the YECSIM model and term sheet; the allocation of thermal generation between Liquid Natural Gas (LNG) and diesel; and the Aishihik plant shut down.

## 3.1 YECSIM Model and Term Sheet

11. The UCG stated that it does not understand the LWRP term sheet and that YEC has not adequately explained the validation for utilizing this method (YECSIM and the Term Sheet) for determining Long-term Average (LTA) and transactions affecting the LWRP.

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<sup>1</sup> YEC approved 2024 Forecast wholesale sales to AEY of 362,365 GW.h. Actual 2024 wholesales from YEC to AEY were 374,831 and the Fish Lake adjustment was at 0.704 GW.h.

12. The recommendation of the UCG is that the Board order YEC to go back to the drawing board in regard to YECSIM model and the term sheet. Specifically, the UCG concern is that the method confuses outcomes by utilizing forecasts from the YECSIM model and by using actuals in other areas of the term sheet. A discrepancy was noted in thermal generation source amounts between the GRA forecast and the term sheet. The UCG used a reference to information request (IR) YUB-YEC-1-7 from YEC's 2023-2024 GRA proceeding to support its position.

13. The UCG submitted that: "The appearance is that these methodologies use what the YEC perceives delivers the best outcome for their bottom line. We understand that this problem exists because the YEC has to forecast to receive a revenue requirement for any test year and that this LWRF concept is an attempt to remedy the discrepancy with their actuals."<sup>2</sup>

### 3.2 Allocation of Thermal Energy

14. On this issue, it is unclear to the UCG how YEC determines the allocation of total thermal generation into the subparts of diesel and LNG for LWRF calculations. After reviewing the thermal LNG:diesel fuel mix for LWRF purposes for the years 2018 forward, the UCG noted the ratios were not consistent. Those thermal fuel mix ratios were different from the thermal fuel mix ratios used for GRA forecast purposes.

### 3.3 Aishihik Plant Shut-Down

15. The UCG expressed a concern about how "YEC will process the extra use of thermal costs in their books for 2024."<sup>3</sup> Specifically, the UCG stated that YEC needs to demonstrate that additional thermal costs incurred by YEC due to the Aishihik plant shut-down are not reflected in the LWRF calculations.

### 3.4 Conclusion

16. The UCG concluded that the models used by YEC are not infallible and discrepancies occur between model predictions and actual records. The UCG asked for continued validation and refinement of the models or replacement with a simpler, easy-to-follow model. The UCG also submitted that the Board should review the data from all term sheets before rendering a decision on this proceeding.

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<sup>2</sup> UCG submission, March 22, 2025, paragraph 3.

<sup>3</sup> UCG submission, March 22, 2025, paragraph 11.

## 4 YEC REPLY

17. YEC provided its reply to the UCG comments on March 27, 2025. General comments were provided before YEC directly responded to each of UCG's three issues.

### 4.1 General comments

18. YEC stated that the LWRP is to smooth the impact on rates due to changes in water conditions. As an example, YEC noted that for 2024, when reservoirs experienced low water conditions, there were no direct rate impacts on rates even though there was an incremental thermal cost to the LWRP. This is an example of the LWRP operating as it should.

19. YEC did not dispute that the annual LWRP transfer calculations appear complex but stated that it was necessary in order to provide transparency and to isolate changes in thermal generation due to non-water-related conditions or events from LWRP calculations.

### 4.2 YECSIM Model and Term Sheet

20. YEC replied that the UCG's recommendations to replace the YECSIM model and the LWRP term sheet are outside the scope of this proceeding. YEC added that the LWRP term sheet was subject to Board review in the YEC 2023-24 General Rate Application, and that the UCG was an intervener in that proceeding. Further, the UCG did not provide any alternatives to the LWRP term sheet and, therefore, the Board should reject the UCG recommendation.

21. In response to the UCG's comments on discrepancies, YEC responded that the UCG was comparing 2024 GRA approved LTA thermal generation of 68,095 MW.h to the thermal generation for 2024 in response to YUB-YEC-1-7(a), (56,636 MW.h). Firstly, YEC noted that the UCG referenced the wrong IR<sup>4</sup> and, secondly, the UCG did not account that YEC clarified that, in the IR response, the forecast was not an LTA forecast, and that forecast was not used to determine revenue requirements. YEC noted that, for LWRP purposes, it is following established methods according to the approved term sheet.

### 4.3 Thermal Generation Allocation

22. YEC responded that the calculation of the LNG:diesel fuel mix for LWRP transfers is based on the LWRP term sheet and, for transparency purposes, the MS Excel file, and

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<sup>4</sup> The UCG referenced YUB-YEC-1-17 when the correct IR was YUB-YEC-1-7(a).

added that there is no opportunity for manipulation. YEC explained the determination of the LNG:diesel fuel mix as follows:

The LWRF Term Sheet clearly illustrates the fuel mix where it notes that “YEC’s final fiscal year expense for the total expected thermal generation (i.e., YEC expense after all transfers) equals the last GRA approved LTA fuel mix”, subject to the constraints. And the constraints are: (a) when actual thermal > LTA thermal, LNG not exceeding total LTA thermal less estimated diesel (LTA thermal times actual diesel percent of actual thermal); and (b) when actual thermal < LTA thermal, LNG not exceeding total LTA thermal less actual diesel. These constraints reduce the LNG share of YEC’s final LTA thermal to less than 90% when actual diesel share exceeds 10% (if actual thermal > LTA thermal) or when actual diesel generation exceeds 10% of LTA thermal (if actual thermal < LTA thermal). In summary, these constraints ensure that LNG’s share of YEC’s final LTA thermal generation does not exceed 90% when actual diesel generation exceeds 10%, so the sum of LNG and diesel is not higher than the total thermal.<sup>5</sup>

23. YEC concluded this issue by stating that the LNG:diesel fuel mix are in accordance with the LWRF term sheet and that any reference to previous years’ calculations are outside the scope of this proceeding.

#### 4.4 Aishihik Plant Shut-Down

24. YEC responded to the Aishihik issues from the UCG in two parts. First, if the UCG is referring to the Aishihik impact on the LWRF calculations due to low water conditions, then YEC’s response is that the LWRF is operating as it should. Impacts of low water levels at the Aishihik facility are incorporated into the LWRF calculations as the fund is designed to operate to “smooth customer rate changes from thermal generation cost impacts caused by the fluctuation of renewable generation due to changes from long-term average annual renewable source availability, including water availability.”<sup>6</sup>

25. Secondly, in terms of the Aishihik plant Unit 1 outage, YEC stated:

... the failure of one of the Aishihik units does not impact the overall hydro generation at the plant [i.e., hydro generation just shifts from one period to another as the unused water is stored; although it may impact the thermal generation mix requiring diesel generation if the LNG units are maxed out]. This is especially true when the reservoir is experiencing low inflows. As the Aishihik Lake reservoir experienced low water conditions in 2024, with or without Aishihik Unit #1, the total

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<sup>5</sup> YEC submission, March 27, 2025, PDF page 3.

<sup>6</sup> YEC submission, March 27, 2025, PDF page 4.

hydro generation would have been similar. Therefore, no adjustments were made in the LWRF related to Aishihik hydro plant Unit #1.<sup>7</sup>

26. Further, YEC added that the issues at the Mayo hydro plant intake required additional thermal generation. YEC deducted 6.9 GWh of diesel generation and 7.0 GWh of LNG generation from the LWRF transfer calculations as these amounts relate to insurance claims and would be recorded under the Reserve for Injuries and Damages account and not be considered part of the LWRF.

27. YEC concluded that no evidence has been provided that the LWRF calculations and transfers are not in accord with the approved LWRF term sheet and should be approved as submitted.

## 5 Board Findings

### 5.1 Scope

28. In considering the scope of this application, the Board notes that the relief requested is for approval of the 2024 LWRF transfers (including interest), the 2024 LWRF balance at the end of 2024, and the 2024 ERA charge from YEC to AEY of \$0.00.

### 5.2 LWRF

29. The Board is concerned with YEC's use of LTA for Fish Lake Hydro. In note 1 to the MS Excel spreadsheet, entitled "Table 1.1 – LWRF 2024", YEC states that OIC 2021/16 requires use of LTA average renewable resource energy for generation forecasting used to set rates. However, the OIC only refers to YEC and not AEY. Therefore, the Board questions whether the LTA attributed to AEY Fish Lake generation is to be included in the LTA calculations. Further, the LTA YEC applies to AEY's Fish Lake Generation is from Board Order 2014-06 and was a historical average before the replacement and upgrades of Fish Lake unit 1. The Board stated "Considering the long-term averages submitted by YECL and the lack of clarity respecting the efficiency gains related to the installation of new equipment, the Board for purposes of this application accepts the 8.73 GW.h annual generation output for the test period."<sup>8</sup> The Board considers that the use of Fish Lake hydro (either as a LTA forecast, a GRA near term forecast or as an offset to YEC's wholesale sales) is an issue to be addressed by YEC in its next GRA.

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<sup>7</sup> YEC submission, March 27, 2025, PDF pages 4-5.

<sup>8</sup> Appendix A to Board Order 2014-06, PDF page 18,

30. Despite the issue noted above and the concerns from the UCG regarding the complexity of the LWRF term sheet, the Board approved the YEC LWRF terms sheet presented as Appendix 2.2 of the compliance filing to YEC's 2023-2024 GRA (starting at PDF page 52) through Appendix A to Board Order 2024-13, PDF page 9). The Board acknowledges that the LWRF and its term sheet is complex. However, the LWRF and its term sheet have been scrutinized in every GRA proceeding since it was reestablished.

31. In addition, the Board has reviewed the application, has verified the calculations contained in Tables 1-1 and 1-2 of the application, reviewed YEC's responses to the UCG comments, and finds that the 2024 LWRF calculations are consistent with the approved LWRF term sheet.

32. Accordingly, the Board approves the 2024 LWRF report as filed.

### 5.3 ERA

33. The UCG did not provide any comments regarding the ERA calculations as submitted by YEC. YEC stated that since no comments were received on the ERA, it should be approved as submitted. The Board has reviewed the application and verified the calculations contained in Table 2-1 of the application. The Board finds the ERA calculations appropriate and approves the 2024 ERA charge of \$0.00 from YEC to AEY as requested.