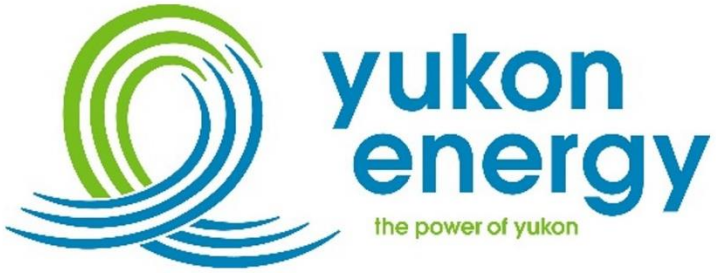

YUKON ENERGY CORPORATION

PHASE II REVIEW AND VARIANCE OF YEC 2021 GRA
ROUND 1 INTERROGATORY RESPONSES FILED

October 20, 2022

Yukon Utilities Board
(YUB)

ISSUE: **Board Order shifting of water-related risks from customers to the utility**

REFERENCE: **YEC R&V Phase II Submission, PDF pages 4, 8, 9, 10, 11, 16 and 17**

Appendix A to Board Order 2018-10, paragraph 323

QUOTE: To draw from the LWRF due to low water levels, YEC will have to submit an application to the Board requesting a drawdown of the fund indicating that the application is due to changes in hydro generation because of changes in water levels from those contained in the last Board approved forecast. YEC will take the forecast risk for incremental generation costs for incremental loads outside of the forecast period with the exception of incremental load covered by the ERA. YEC is directed to amend its DCF term sheet to comply with these directions. Conversely, when the fund requires replenishment, YEC can apply to the Board for rate rider to replenish the LRWF. YEC, in its compliance filing, may submit any potential ceiling for the LWRF rate rider. (Appendix A to Board Order 2018-10, paragraph 323. Footnote removed; underlining added.)

PREAMBLE: YEC Phase II submission mentions numerous times that Board Order 2019-08 shifted water-related risks from customers to the utility.

QUESTION:

a) Please confirm that the Board preserved the principle that the proper apportionment of forecast risk for generation costs for incremental loads was with YEC in Appendix A to Board Order 2018-10.

b) Please confirm that the Board in Board Order 2019-04 confirmed its finding that YEC will take the forecast risk for incremental generation costs for incremental loads outside of the forecast period with the exception of incremental load covered by the ERA.

c) In terms of the LWRF, please confirm that the Board in Board Order 2019-08 determined YEC's compliance with respect to directions from Board Order 2019-04 and gave direction for YEC on the LWRF going forward

ANSWER:

(a)

YEC cannot confirm the statement nor the underlying assumption that is contained in the Information Request (IR).

Contrary to what appears to be assumed in this IR, Appendix A to Board Order 2018-10 *did not direct* a shift of generation cost water risk to YEC for incremental load. In fact, *at no time prior to* Board Order 2019-04, did the Board determine that YEC rather the ratepayers assume the risk for water-related thermal generation. Appendix A to Board Order 2019-04 was the first time that the Board specifically directed this shift of water risk to YEC (see response to (b) below).

To fully understand why YEC cannot confirm what is requested -- a more detailed review of what occurred in 2018 and 2019 is necessary.

It is clear from YEC's February 25, 2019 compliance filing (related to Board Order 2018-10) that YEC did not understand that Board Order 2018-10 was directing a shift of water risk from customers to YEC with regard to incremental load.

The reason why YEC understood the quoted reference in this IR was consistent with prior Board decisions was because 1) YEC continued to bear forecast risks for load changes outside of the forecast period (with the exception of load changes covered by the ERA), and 2) the changes in YEC thermal fuel costs (related to such load changes) would continue (as in prior Board decisions) to be assessed based on approved GRA forecast fuel costs per kWh and long-term average (LTA) hydro generation water conditions.

The Board's reasons in paragraphs 318-323 of Appendix A also contributed to that understanding:

- Paragraph 318 specifically confirmed that customers and not the utility should bear the risk of low water conditions with respect to added costs for thermal generation, concluding as follows:

> "…a utility should neither make a profit nor suffer a loss from variances in forecasting due to water levels. The Board considers that the risk of low water conditions, with respect to added costs for thermal generation, should be borne by the customers of the utility."

- Paragraph 321 then went on to direct YEC:

> "…to create a deferral account that records the variance between actual thermal generation fuel costs (based on volume only) and the GRA forecast thermal generation fuel costs (based on volume only) that are due to changes in water conditions."

Based on that direction YEC understood that GRA forecast thermal generation fuel costs in this regard was to be based, as per prior Board decisions, on approved GRA forecast fuel costs per kWh and long-term average (LTA) hydro generation water conditions.

- Then paragraph 322 confirmed:

> "In other words, the deferral account will be adjusted for changes in hydro generation that are the result of changes in water availability."

Paragraph 322 also went on to say:

> "YEC will adjust the balance in the LWRF on an annual basis for the difference in forecast thermal generation from actual thermal generation based on forecast load and only adjusting for the changes in hydro generation that are the result of changes in water availability."

- Finally, paragraph 323 (as quoted above in this IR) specifically addressed the situation when YEC draws from the LWRF due to low water levels – a situation where paragraph 318 clearly concluded that customers of the utility should bear the added costs for the related thermal generation.

Accordingly, in the context of the prior directions in paragraphs 318, 321 and 322, YEC saw no basis to interpret the underlined statement in paragraph 323 (as quoted above in this IR) to require a shift of water risks from customers to YEC.

Rather YEC understood the underlined statement confirmed, consistent with prior Board decisions, that YEC bears forecast risks for load changes outside of the forecast period with the exception of load changes covered by the ERA – and that the changes in YEC thermal fuel costs related to such load changes would continue (as in prior Board decisions) to be assessed based on approved GRA forecast fuel costs per kWh and long-term average (LTA) hydro generation water conditions.

(b)

YEC cannot confirm this statement because the statement is not correct.

This IR specifically uses the very same quote that is underlined in the preamble to this IR (from paragraph 323 from Appendix A to Board Order 2018-10) i.e. "*that YEC will take the forecast risk for incremental generation costs for incremental loads outside of the forecast period with the exception of incremental load covered by the ERA"* and it asks YEC to confirm that Board Order 2019-04 confirmed this statement.

However, Board Order 2019-04 revised rather than confirmed this statement to read as follows (highlighting added to show revised wording):

> "YEC will take the forecast risk for incremental generation costs for incremental loads **in excess of the approved forecast, recognizing this risk to YEC is partially mitigated through the ERA provision in the approved rate schedules**."
>
> [the revised wording deleted "outside of the forecast period with the exception of incremental load covered by the ERA."]

In fact Board Order 2019-04 rejected YEC's February 25, 2019 compliance filing that YEC had filed based on Order 2018-10 and -- as outlined in the answer to (a) above -- specifically directed (Appendix A, page 9) for the first time as follows:

> "The LWRF is applicable only for loads up to the latest approved forecast level and not for amounts that vary from forecast levels."

This direction -- which was confirmed at page 10 of this same Appendix A for Step C in calculation of the LWRF -- shifted for the first time water risk (including low water level risks) from customers to YEC for incremental loads.

And just as importantly relevant to this R & V -- notwithstanding this material change in risk profile Board Order 2019-04 did not concurrently provide any direction to increase YEC's ROE risk premium to reflect this shift of water risk to YEC for incremental loads.

An additional issue is raised in relation to this material change in risk because the Board believed that YEC had already accepted (in an answer to an IR in a previous proceeding) water risks relating to incremental loads.

YEC emphasizes once again -- YEC has never accepted that -- at any time (until so directed by the Board in 2019) -- it bore water risks related to incremental roads. If the Board interpreted a previous IR response to suggest that -- it did so on a misunderstanding of what YEC said in that response. (This point is discussed in more detail in answer to YUB-YEC 1-2 where a question was asked in relation to the previous IR).

(c)

Board Order 2019-08 accepted YEC's September 23, 2019 compliance filing related to Board Order 2019-04 LWRF directions, subject to two minor changes[1], and gave direction for YEC on the LWRF going forward.

However in the context of the overall issues raised in these IRs (especially in relation to YEC's position on water related risks for incremental loads), it is important to point out once again that the Board in Appendix A to Board Order 2019-08 treated as "inconsistent" YEC's submissions in its September 23, 2019 compliance filing (its second compliance filing related to Board Order 2018-10) made specifically to clarify what was said in its earlier IR responses about water related risks for incremental loads.

[1] Section 3.3.2 of Appendix A to Board Order 2019-08 accepted the LWRF Term Sheet (para 59), subject to removing the Fixed Charge Factor references and reference to "Diesel on the Margin" (para 52 and 54). YEC filed a final LWRF Term Sheet with these changes on December 10, 2019.

- Prior to issuing Board Order 2019-08, the Board Order 2019-06 outlined a process for review of YEC's September 23, 2019 compliance filing that included a technical session, information requests and responses from YEC, Intervenor Argument and YEC Reply.

- Section 3.3.3.5 of Appendix A to Board Order 2019-08 noted several concerns raised by YEC during this process with the direction to limit LWRF determinations only to the forecast load, including the resulting difference in treatment of YEC and AEY as regards ratepayers cost impacts from water availability risks related to any changes from the forecast load – and noted that no review and variance was filed on Board Order 2019-04.

- The Board's response to YEC's concerns in paragraphs 89 to 94 of Appendix A to Board Order 2019-08 relied only on earlier evidence submitted in the proceeding (i.e., the YEC response to AEY during the second compliance filing review appears to not be considered) and confirms that YEC can address its concerns in its next GRA.

- The Board once again referenced (para 90 and 91) YEC's April 6, 2018 response to YUB-YEC-2-1 as the Board's basis for concluding that YEC had stated that it is responsible for thermal generation fuel variances when due to total generation load variances – after stating (para 89) that some of YEC's more recent statements "are inconsistent with prior information submitted to the Board".

- In this regard see also YEC's response to YUB-YEC 2-1.

Accordingly, despite seeking extensive added evidence after Order 2019-04, the final order did not address YEC's evidence on concerns related to Order 2019-04 directions (and the issue of the Board's interpretation of YEC's earlier IR responses) and it deferred dealing with these issues until the next GRA.

ISSUE: **Variances from forecast thermal generation fuel volumes**

REFERENCE: **YEC Round 2 IR responses, YEC 2017-2018 GRA, PDF pages 256 and 258, response to YEC-YUB-2-1(d, e, and f)**

QUOTE: Costs due to variances from forecast thermal generation fuel volumes can arise due to different factors. Ratepayer versus YEC responsibility for these costs during periods between GRAs should vary depending on the factors causing the costs, and whether the "ratepayer" is a utility receiving wholesales versus a retail or industrial customer.

Costs due to variances from forecast thermal generation fuel volumes should be assigned to the utility when due to total generation load forecast variance or thermal generation unit maintenance requirements, and to ratepayers when due to water or wind forecast variance or other specific factors for which the utility is unable to control and/or the regulator has established deferral or contingency fund cost accounts, e.g., DCF or RFID related thermal generation fuel costs.

The DCF and prior contingency funds approved by the Board to assign water-related thermal fuel generation costs to ratepayers in each instance retained YEC responsibility for forecast thermal generation fuel cost variance due to total generation load forecast variance. This cost assignment is common practice in Canadian hydro generation jurisdictions. (Response in part to part (d). Underlining added; footnotes removed.)

And

No. The DCF does not put ratepayers at risk for all thermal generation fuel volume variances (including fuel volume variances not related to water conditions). The DCF clearly retains utility (rather than ratepayer) responsibility for certain thermal generation fuel volume risks.

The DCF as it currently exists applies only to Yukon Energy. As reviewed in response to (d) above, under this DCF Yukon Energy is at risk for thermal generation fuel volume variances that are due to total

generation load variances and ratepayers are at risk for thermal generation fuel volume variances that are related to water and wind variances as determined by the DCF (as well as due to RFID-related factors). (Response to part (f). Underlining added.)

PREAMBLE: The question for YUB-YEC-2-1(d) asked: "Should ratepayers or YEC pay for variances from forecast thermal generation fuel volumes? Please explain. Is this a common practice in Canadian jurisdictions? Please explain."

The question for YUB-YEC-2-1(f) asked: "For the DCF, as it currently exists, are ratepayers at risk for all thermal generation fuel volume variances (including fuel volume variances not related to water conditions)? Please explain."

QUESTION:

a) Has the risk apportionment between YEC and customers as defined by YEC in the above-noted responses to the two changed? Please explain.

b) In the context of the answers given in YUB-YEC-2-1(d and e), how has YEC demonstrated that it has properly accounted for and assigned costs due to variances from forecast thermal generation fuel volumes to the utility in relation to total generation load forecast variance?

c) Has YEC and the LWRF put ratepayers at risk for all thermal generation fuel volume variances (including fuel volume variances not related to water conditions)?

d) Which takes precedent, YEC's risk for costs due to variances from forecast thermal generation fuel volumes or ratepayers risk for water-related thermal generation costs? Please explain in context to your response to parts (b) and (c) of this question.

ANSWER:

(a)

Yes.

As outlined in the answer to YUB-YEC 1-1 in this proceeding -- until Board Order 2019-04 -- ratepayers rather than YEC bore all water related risks including water related risks relating to incremental loads. Therefore, given these responses were provided in April 2018 before Board Order 2019-04 there have been two changes in risk apportionment since then:

1. Board Order 2019-04 directing a shift of water risk to YEC for incremental loads without any related increase to YEC's ROE risk premium;[1] and

2. OIC 2021/16 subsequently restoring the water risk for incremental loads to ratepayers.

To ensure that the Board understands its position in relation to this issue -- once again -- YEC wants to reiterate that at no time did YEC admit or accept that it bore water related risks in relation to incremental loads prior to Board Order 2019-04 – or that any such allocation of water risk to YEC would comply with normal ratemaking principles applicable in Canadian jurisdictions.

The questions in YUB-YEC-1-1 and now this IR (and the Board's statements in other Board orders) assume that YEC admitted or accepted that water related risks for incremental loads are, or should be, borne by YEC. That interpretation of YEC's position appears to arise from the answers to IRs from previous proceedings that are specifically referenced in this IR. As noted in the answer to IR 1(b) this interpretation of YEC's position is not correct.

This misinterpretation started in Board Order 2019-04 where the Board stated that "it was YEC's submission that the utility bore the risks with costs associated with incremental loads". It came to this conclusion referencing the very IRs quoted in this IR -- more

[1] Analysis after Board Order 2019-04, and before Order 2019-08, documented YEC's added cost risks with incremental loads under low water conditions, e.g., October 9, 2019 Technical Session: YEC's Presentation – Background Notes; YEC October 21, 2019 response to YUB-YEC-1-12 and YUB-YEC-1-13.

specifically based on the above first underlined response to YUB-YEC-2-1(d) regarding YEC's 2017-18 GRA DCF proposal.

Given the importance of this misinterpretation to this R&V (and any future court proceeding) -- and also to understand YEC's answers to all of the IRs in this R&V -- it is necessary that the Board fully understand why the Board's interpretation of "YEC's submission that the utility bore the risks with costs associated with incremental loads" is not correct. Once this is properly understood it will become patently obvious why -- in this R&V -- YEC says that the Board erred in law in its ROE determination.

Simply put -- analyzed carefully -- YEC's submission in the 2017-18 GRA cannot accurately be summarized as indicating that the "utility bore the risks with costs associated with incremental loads" without addressing YEC's concurrent submission on water related risks with costs associated with incremental loads.

This is demonstrated by analyzing fully the responses to the previous IRs referenced in the preamble to this IR:

- The first underlined sentence quoted preamble is missing an important part of the answer. The answer goes on (beyond the underlined portion) to state (without any limitations) that costs due to variances from forecast thermal generation fuel volumes should be assigned "…to ratepayers when due to water or wind forecast variance…"

- The second underlined response to YUB-YEC-2-1(d) states that the then proposed DCF and prior contingency funds approved by the Board "…to assign water-related thermal fuel generation costs to ratepayers in each instance retained YEC responsibility for forecast thermal generation fuel cost variance due to total generation load forecast variance." The quote omits the footnote to this sentence referencing the Board "…noting that all parties agree that hydro generation risks related to water lie with the ratepayer (see Section 2.3.1.4 of Appendix A to Board Order 2015-01)".

  This evidence confirms that the referenced DCF assigned YEC responsibility for forecast thermal generation fuel cost variance due to total generation load forecast variance based on (a) long-term average hydro generation consistent with GRA approved forecasts when applied to actual loads and (b) GRA approved forecasts

for thermal fuel costs per kWh when applied to actual loads and that this approach thereby also retained customer responsibility for all water and fuel price related changes from the approved GRA forecasts.

YUB-YEC-2-1 also notes at the end of the second underlined response: "This cost assignment is common practice in Canadian hydro jurisdictions." The cost assignment practice refers to amongst other things that the ratepayers not utilities retain responsibility for all water related risks (including water related risks for incremental loads).

- The first underlined response to YUB-YEC-2-1(f) further clarifies that the then proposed DCF does not put ratepayers at risk for all thermal generation fuel volume variances – for example the response cross-references the prior (d) response with regard to the separation of thermal generation fuel volume variances borne by ratepayers (i.e., variances related to water and wind variances determined by the DCF as well as due to RFID factors) versus the variances (net of the water, wind, and RFID variance) due to total generation load variances.

- It is also important to note that this position was also confirmed in YEC in response to an IR in the second compliance filing filed on October 21, 2019. The response to YUB-YEC-1 clearly stated YEC's position:

> Board Order 2019-04 states (at page 11 of Appendix A) that "it was YEC's submission that the utility bore the risks with costs associated with incremental load". On this specific matter, YEC's responses and submissions have consistently affirmed that cost impacts due to water and wind availability and fuel price risk are borne by ratepayers – and that this principle applies to <u>actual</u> loads supplied by the utility, i.e., costs due load change from GRA forecast that are to be allocated to the utility are based on GRA fuel prices and GRA hydro water conditions (e.g., LTA hydro generation for 2018).[2]

[2] See for example YUB-YEC-2-1, (g and h), which states: "Based on normal regulatory principles, none of the risks related to water variance are borne by the utility."

(b)

In the context of YEC answers given to YUB-YEC-2-1(d) in the 2017-18 GRA, past DCF/LWRF Term Sheets and Annual Filings as approved by the Board demonstrate how YEC has properly accounted for and assigned costs due to variances from forecast thermal generation fuel volumes to the utility in relation to total generation load forecast variance. More particularly, the Term Sheets approved by the YUB determined:

1. The amount of forecast long-term average (LTA) thermal generation expected for any given actual load level;

2. The actual load for a completed fiscal year adjusted for those risks not related to water availability (e.g., RFID events, maintenance or capital related generation); and

3. The difference between this adjusted actual load and the LTA forecast result is the water-related effect that is the responsibility of customers. This difference was debited or credited to the DCF/LWRF (ratepayer account).

In the context of YEC answers given toYUB-YEC-2-1(e) - in the 2017-18 GRA, all isolated off-grid communities are served by AEY, i.e., YEC does not service any of these communities. AEY off-grid communities have been served entirely by diesel generation, and there is no water risk related to hydro generation.

(c)

No. As reviewed in responses to “a” above, the DCF/LWRF as approved by the Board and as proposed by YEC prior to Board Order 2019-04 has never put ratepayers at risk for all thermal generation fuel volume variances (including fuel volume variances not related to water conditions).

(d)

The question poses a choice that does not exist in Yukon and in any event is not relevant to the DCF/LWRF.

As reviewed in responses to the above questions, normal regulatory rate principles for hydro jurisdictions require that costs due to variances from forecast thermal volumes due to water-related variances (as well as other specified variances beyond the utility's control, e.g., thermal fuel price variances) are assigned to ratepayers – and all remaining costs due to variances from forecast thermal volumes are assigned to the utility.

Further, the question implies that YEC may only avoid rather than incur cost risks when water-related thermal generation costs are properly considered. However, under the DCF/LWRF, YEC pays more than applicable actual thermal volumes when water availability is more than long-term average, and only pays less than applicable actual thermal volumes when water availability is less than long-term average. Please see example in response to YUB-YEC-1-3(p and q).

ISSUE: **Establishment of YEC risk premium**

REFERENCE: **YEC R&V Phase II Submission, Section 2.1 – Evidence of YEC risks relative to FortisBC (Electric) risk, PDF pages 8-9**

Appendix A to Board Order 2018-10, paragraphs 246, 257-279, 282 and 283 YEC 2017-2018 GRA, YUB-YEC-3-3, YUB-YEC-3-4, PDF pages 203-211

QUESTION:

a) Please confirm that the British Columbia Utilities Commission (BCUC) benchmark utility is Fortis Energy Inc (FEI).

b) Please confirm that the comparators referenced in Appendix A to Board Order 2018-10 included FortisBC (Electric), PNG-West and AEY.

c) Please confirm that in Appendix A to Board Order 2018-10, the Board did not adjust YEC's risk premium due to the existence of rate stabilization measures.

d) Please confirm that in Board Orders 2018-10 and 2022-03, the Board continued to use the BCUC benchmark as the basis or starting point for determining the ROE for YEC.

e) Please confirm that Board Order 2018-10 awarded YEC a total risk premium of 45 basis points comprised of small size (25 basis points), generation, isolated grid and customer diversity (20 basis points).

f) Please confirm that the Board noted in Appendix A to Board Order 2018-10 that, for YEC, generation risk was low and customer diversity risk was low and that little weight was given to energy price competitiveness.

g) Please confirm that YEC previously requested that its ROE risk premium be based on the midpoint of the risk premiums for FortisBC (Electric) and PNG-West.

h) Please confirm that the BCUC decided that for FortisBC (Electric), size, generation risk and energy price competitiveness were the most pertinent factors in

determining the risk premiums and that the BCUC also looked at operating risk and financial risk.

i) Please confirm that the BCUC did not look at the existence of deferral accounts in assessing a risk premium for FortisBC (Electric). If not confirmed, please explain.

j) Please confirm, in response to YUB-YEC-3-4 in the YEC 2017-2018 GRA, that BC Hydro bears all of the FBC hydro supply risk for water level variances.

k) Please confirm that there is no specific BCUC decision that specifically defers to customers all variances due to water variability and that FortisBC (Electric) does not have a deferral account similar to YEC's LWRF.

l) Please provide the hydro/thermal generation mix for FortisBC (Electric).

m) Does FortisBC (Electric) have enough self-generation to meet its load requirements at all times?

n) Has FortisBC (Electric) stated it takes the forecast risk for incremental generation costs for incremental loads outside of the forecast period? Please explain.

o) Please confirm that FortisBC (Electric)'s protections as highlighted in the response to YUB-YEC-3-4 in the YEC 2017-18 GRA are for energy purchases and not FortisBC (Electric) generation. If not confirmed, please explain.

p) The response to YUB-YEC-3-3 in the YEC 2017-18 GRA indicates that FortisBC (Electric) has a revenue variance deferral account. Does YEC have a similar mechanism?

q) The response to YUB-YEC-3-3 in the YEC 2017-18 GRA states: "The BCUC in its Decision G-139-14 dated September 15, 2014 directed FBC to discontinue the Power Purchase Expense deferral account and its related Revenue Variance deferral account during the PBR term, noting that these expenses and revenues would be flowed through to ratepayers each year through the annual flow-through mechanism." With or without either of the FortisBC deferral accounts does YEC have a similar mechanism?

ANSWER:

(a)

Confirmed, the BCUC uses FortisBC Energy Inc, a gas utility, as a low-risk benchmark utility. The resulting BCUC benchmark ROE of 8.75% applied at the time of YEC's 2017-18 GRA and related Board Orders, and continues to apply today.

(b)

Confirmed. Board Order 2018-10, Appendix A referenced FortisBC, PNG-West and AEY as potential comparators as stated in the question. However, the Board determined that PNG-West was not a strong comparator to YEC based on the fact that there was no evidence on the record for the 2017/18 GRA proceeding that YEC had encountered a similar situation or will encounter a similar situation over the test period as PNG-West. The Board noted that "PNG-West had experienced negative customer growth for nine consecutive years covering the 2003 to 2012 period" and "PNG-West's total system throughput declined by 87 percent over the 2003-2012 time frame".

(c)

Confirmed. Appendix A to Board Order 2018-10 considered risk mitigation through the DCF as proposed in YEC's Application, and did not suggest any need to adjust the ROE risk premium based on this information.

For completeness -- and in keeping with the issues identified in these IRs -- it is important to note that the Board's decision on ROE was consistent with the evidence that confirmed no change in the ROE risk premium related to the DCF as being appropriate given that the FortisBC(Electric) approved comparator has no water-related cost risks (see response to "j" below).

However -- as YEC has stated many times in the answers to the IRs (and in the R&V application) subsequently in Appendix A to Board Order 2019-04 the Board made the explicit decision to shift water risk (including low water level risks) from customers to YEC for incremental loads without a corresponding increase to the risk premium to reflect the added risk borne by YEC relative to the FortisBC(Electric) approved comparator.

(d)

Confirmed. This was implied in Board Order 2022-03, and no evidence was provided in that proceeding of any other basis or starting point for determining the YEC ROE.

(e)

Confirmed (paragraph 283 of Appendix A to Board Order 2018-10).

(f)

Confirmed.

(g)

Confirmed as regards YEC's 2017-18 GRA. For completeness additional points are required to explain the context of the Board's determinations and YEC's answer.

In its 2017/18 GRA Yukon Energy's proposed risk premium was based on the mid-point between the risk premium for FortisBC [Electric], at 40 basis points, and PNG West, at 75 basis points. This was consistent with the Board Order 2005-12 that approved Yukon Energy's proposal to set its fair return at the mid-point between FortisBC Electric and PNG-West. In Appendix A to Board Order 2018-10 the Board did not accept PNG-West as an appropriate comparator to YEC based on there being no evidence that YEC has encountered (or will encounter during the 2017-18 test period) a similar situation to PNG-West's negative customer growth.

In its 2021 GRA YEC did not consider PNG-West as a comparator utility in determining its risk premium, but relied upon the Board Order 2018-10 which awarded YEC 25 basis points for its small size (consistent with the risk premium awarded for AEY) as well as an additional 20 basis points to recognize YEC's higher risk related to generation, isolated grid and customer diversity.

(h)

Confirmed. Board Order 2018-10 in Appendix A (paragraph 268) concluded as follows regarding the BCUC's consideration of factors most pertinent in determining the risk premium for FortisBC (Electric):

> "In summary, the BCUC considered size and customer diversity, energy price competitiveness, energy supply and generation were the most influential factors in setting a risk premium."

However, review of the BCUC decision quoted by the Board in Appendix A to Board Order 2018-10 indicates that operating risk was also looked at.

(i)

Not confirmed. BCUC's risk premium assessment of FortisBC (Electric) took into account the extensive existing deferral accounts for this utility.

Section 3.2.6 of BCUC Decision G-47-14 clearly shows that BCUC did specifically look at risk assessment regarding FortisBC (Electric)'s "short-term risks and deferral accounts", including various new deferral accounts that impacted on the reduction of risk, when it retained that utility's existing 40 basis point risk premium.

Therefore, in the context of this R&V application -- for the purpose of assessing YEC's ROE risk premium -- the evidence before this Board specifically relating to the BCUC decision and its comparator utility confirms that YEC deferral accounts provide no basis for reducing YEC's 45 basis point risk premium.

(j)

Confirmed. YUB-YEC-3-4 in the YEC 2017-18 GRA concluded that "FBC [FortisBC Electric] bears no risk for such water-related power cost variances – and that this results from the combined arrangements for FBC with BC Hydro and with BCUC approved flow through of power supply and other cost variances."

But it is also important to highlight the two key factors specifically identified in YUB-YEC-3-4 relating to this conclusion:[1]

1. FBC arrangements with BC Hydro (Canal Plant Agreement) whereby all of the local BC Hydro, FBC and other party hydro generation goes into a pool and FBC receives an annual entitlement, i.e., BC Hydro bears all of the FBC hydro supply risk for water level variances.

2. To the extent that FBC could still face some purchase power costs that are higher or lower due in part to water level changes (at its facilities or in other places), as well as risks related to water rental cost changes, any such residual risk flows through to FBC customers annually through the mechanism as approved by BCUC in FBC's current annual PBR filing (or in past filings as approved regarding the PPEVDA).

(k)

Confirmed. As described in j), there is no water-variability risk accruing to FBC so no such BCUC order or deferral account would exist for FBC. However, further context is required to understand this YEC confirmation and the issue raised in this question.

In confirming these same points, YUB-YEC-3-4 in the YEC 2017-2018 GRA proceeding went on to state that references to "similarity" for FBC and YEC on these matters goes to the ultimate outcome (i.e., the utility has no cost risk related to water variability) as opposed to the factors or mechanism responsible for this outcome. In summary, FBC has no risk due to water variability based on several linked factors as described in YUB-YEC-3-4 versus a specific BCUC order that addresses water variability risk. The reference to FBC's PPEVDA points to the existence of a specific approved deferral account that does address any residual variance in power supply costs that may occur.

[1] YUB-YEC-3-4 specified that, beyond review of documents, this broad understanding was confirmed through personal communication with Joyce Martin of Fortis on July 25, 2018, who confirmed that FBC is not exposed to water variability risk.

(l) and (m)

FortisBC Inc.'s Annual Review for 2023 Rates[2] notes that it uses a combination of company-owned generation entitlements, firm contracted supply, and market purchases to meet its load requirements.

The Company's firm resources consist of:

- Canal Plant Agreement (CPA) Entitlements associated with the generation facilities owned by FBC. The costs associated with FBC-owned generation are not included in the power purchase estimates, except for the Balancing Pool adjustments, which account for year-to-year timing differences in the entitlement energy storage under the CPA;

- The Brilliant Power Purchase Agreement (BPPA), a 125 MW contract (Order E-7-96), and an amendment to the BPPA which reflects the purchase of 20 MW of Brilliant Upgrade power (Letter L-57-00), and the 5 MW Brilliant Tailrace Capacity agreement (Order E-17-01);

- A power purchase agreement (PPA) with BC Hydro (a 200 MW contract) under BC Hydro RS 3808 (Order G-60-14);

- The Waneta Expansion Capacity Purchase Agreement (WAX CAPA), which is a 40-year purchase agreement with the Waneta Expansion Limited Partnership for capacity entitlements under the CPA (Orders E-29-10 and E-15-12);

- A number of small Independent Power Producer (IPP) contracts; and

- A number of market purchase arrangements.

In response to the BCOAPO IRs 18.2 and 18.3[3] during BCUC's review of FortisBC Inc.'s Annual Review for 2023 Rates, FortisBC Inc. provides the following information regarding the 2021 actuals and 2022 projected volumes of energy supply. The table shows that

[2] Available at https://docs.bcuc.com/Documents/Proceedings/2022/DOC_67371_B-2-FBC-2023-AnnualReview-Application.pdf [accessed on October 13, 2022]
[3] Available at https://docs.bcuc.com/Documents/Proceedings/2022/DOC_68209_B-6-FBC-Resp-BCOAPO-IR1.pdf [accessed on October 13, 2022].

FortisBC Inc. generates about 42% of the total energy needs and about 58% of the energy comes from other purchases.

	2021		2022 Projected	
	GWh	% of total	GWh	% of total
FBC Resources	1,598	42.5%	1,596	42.2%
Brilliant	922	24.5%	911	24.1%
BC Hydro PPA	567	15.1%	729	19.3%
Waneta Expansion	0	0.0%	0	0.0%
Market and Contracted Purchases	589	15.6%	562	14.8%
Independent Power Producers	1	0.0%	1	0.0%
Self-Generators	1	0.0%	0	0.0%
CPA Balancing Pool	75	2.0%	-25	-0.7%
Transmission Service Loss Recoveries	11	0.3%	12	0.3%
Special and Accounting Adjustments	0	0.0%	0	0.0%
Total	**3,764**		**3,786**	

(n)

FortisBC (Electric) does not take forecast risk for incremental generation costs for incremental loads outside the forecast period.

As reviewed in response to questions (j), (l) and (m) above, FortisBC (Electric)'s supply includes Canal Plant Agreement (CPA) Entitlements associated with the generation facilities owned by FBC, which accounts for about 40% of the total supply, and power purchases, which accounts for about 60% of the total supply. The annual entitlement from CPA is based on 50-year historical water flows, i.e., predetermined, therefore, any incremental load has to be supplied through power purchases.

FortisBC Inc.'s Annual Review for 2023 Rates application page 30 notes that "any variances between forecast and actual power supply costs are recorded in the Flow-through deferral account and returned to or recovered from customers in the subsequent year."

(o)

Not confirmed.

As indicated in response to questions (j) and (n), Canal Plant Agreement (CPA) entitlements are associated with the generation facilities owned by FBC. FBC arrangements with BC Hydro (Canal Plant Agreement) provide that all of the local BC Hydro, FBC and other party hydro generation goes into a pool and FBC receives an annual entitlement, i.e., BC Hydro bears all of the FBC hydro supply risk for water level variances.

The Canal Plant Agreement provides FortisBC (Electric) with an annual entitlement based on 50-year historical water flows. As a result, FortisBC (Electric) does not face any business risk related to water level variations at its hydro-electric generation facilities.

(p) and (q)

No, YEC does not have a revenue variance deferral account or other mechanisms similar to FortisBC (Electric) as noted in the question, such as the discontinued Power Purchase Expense deferral account and its related Revenue Variance deferral account. For example, FortisBC Inc.'s Annual Review for 2023 Rates application page 30 notes that "any variances between forecast and actual power supply costs are recorded in the Flow-through deferral account and returned to or recovered from customers in the subsequent year."

In this regard, YEC is exposed to greater risks than FortisBC (Electric).

To provide context for this answer and to focus the discussion on what is relevant to the R&V application (risk premium related to water related risk for incremental loads) the following is noted.

As reviewed to response to (k) above, YUB-YEC-3-4 stated that references to "similarity" for FBC and YEC on water variability matters goes to the ultimate outcome (i.e., the utility has no cost risk related to water variability) as opposed to the factors or mechanism responsible for this outcome.

However, the referenced FortisBC (Electric) revenue variance deferral account goes beyond water variability to address other load-related cost and revenue risks – and YEC does not have the same extensive deferral account coverage of other load-related cost and revenue risks.

It is important to note that YEC continues to bear the risk related to the incremental load as clarified on pages 9-10 of the September 22, 2022 submission as follows (underlining in original text).

> Yukon Energy can clarify its so-called acceptance of incremental load risk. Yukon Energy has consistently stated, based on the requirement for the Board to review and approve rates in accordance with principles established in Canada for utilities, that customers bear <u>all water availability risks, including water availability generation costs and risks related to incremental load</u>.
>
> - YEC accepts the risk of incremental load – but thermal fuel generation costs for incremental load must be determined based on the assumptions approved for setting GRA revenue requirement and rates, i.e., for all recent YEC GRAs, forecast thermal fuel generation costs are based on long-term average hydro generation (which varies with actual load requirements) and on thermal fuel prices per kWh as approved in the last GRA.
>
> - Variances in costs for all loads (including loads higher than forecast) due to variances in water availability or fuel prices are then addressed through the appropriate deferral accounts, i.e., the LWRF for the impact of water availability variances, and the Deferred Fuel Price Variance Account for the impact of diesel and LNG fuel price variances.
>
> - The above approach has been fully accepted by the Board when dealing with fuel price risk impacts on thermal generation costs for all loads (including loads higher than forecast). In a hydro jurisdiction it is essential that the above approach also be fully accepted when dealing with water availability risk impacts on thermal generation costs for all loads (including loads higher than forecasts). To do otherwise results in inconsistent (as well as unfair) decisions regarding rate impacts resulting from these two deferral account measures.

To show YEC's ongoing cost risks related to incremental load with the earlier DCF as proposed in the 2017-18 GRA and the current LWRF with OIC 2021/16 an example is provided (see table below) assuming that the approved forecast load is at 450 GWh and the actual load is at 500 GWh. With this example, the LWRF recalculates "expected" LTA thermal at the actual load of 500 GWh and calculates the required LWRF transfer based

on this amount. In this example with actual thermal at 90 GWh (implies greater than LTA hydro availability), the LWRF assumes YEC's "approved" costs are based on recalculated 115 GWh LTA thermal rather than the forecast 75 GWh LTA thermal (or the actual 90 GWh thermal) which results in YEC paying $4.6 million into the fund rather than withdrawing $2.76 million. This highlights YEC's remaining risk related to the incremental load – this risk considers fully the added load thermal fuel cost assuming LTA hydro availability and forecast thermal fuel prices. This remaining YEC risk is not affected by actual water availability, i.e., YEC would end up with the same thermal fuel cost (after LWRF transfers) if the actual thermal generation was 150 GWh due to drought conditions.

	Forecast Load	Actual Load	
Actual thermal	90		GWh
Load	450	500	GWh
LTA thermal	75	115	GWh
Thermal variance	15	-25	GWh
LWRF Transfer*	2.76	-4.6	$M

* - positive YEC withdraws from the fund
* - negative YEC pays to the fund

ISSUE: **Determination of ROE**

REFERENCE: **OIC 1995/90, Section 2**

QUOTE: Normal return on equity

2.(1) Subject to subsection (2), the Board must include in the rates of Yukon Energy Corporation and the Yukon Electrical Company Limited provision to recover a fair return on their equity used to finance their rate base.

(2) The Board must include in the rates of the Yukon Energy Corporation provision to recover a fair return on the Corporation's equity, less one-half of one per cent (.5%).

PREAMBLE:

QUESTION:

a) Does OIC 1995/90 state that the Board must include in the rates of YEC and YECL provision to recover a fair return on equity and then deduct one-half of one percent (0.5%)?

ANSWER:

(a)

No. The OIC 1995/90 states that the Yukon Utilities Board must include in the rates of YEC and AEY (YECL) provision to recover a fair return on equity. However, the subsequent deduction of 50 basis points per OIC 1995/90 is only applicable to YEC.

ISSUE: **AEY defined benefit pension deferral account**

REFERENCE: **YEC R&V Phase II Submission, PDF page 16**
Appendix A to Board Order 2014-06, PDF pages 39-40

QUOTE: YEC had no basis to consider the defined pension benefit deferral account as having any impact on its fair ROE given Board Order 2014-06 had approved a similar deferral account for ATCO Electric Yukon (AEY, then referred to as YECL) and determined that this deferral account does not affect the utility's ROE risk premium because it meets the criterion that "costs are not under the control of the company and are not reasonably foreseeable."

And

Although the Board recognizes YEC's argument that approval of the deferral account reduces YECL's risk, the Board disagrees with YEC that this is detrimental to ratepayers. Defined benefit funding requirements will be inherently volatile since they are based on actuarial assumptions partial to swings in the financial markets. The market factors that drove the pension into a deficit could just as easily reverse and put the pension into a surplus position. If market forces move in the right direction, ratepayers will benefit from lower contributions. If market forces move in the wrong direction, ratepayers will be adversely affected through higher contributions. Whether future market events will be beneficial or detrimental to the pension plan are not known to the Board, or in the Board's opinion, anyone else. By requesting the defined benefit pension requirement deferral account, YECL has signaled that it does not want to speculate on the financial markets. In the Board's view, neither does the ratepayer.

Accordingly, the Board hereby approves the defined benefit pension deferral account for both special payments and current service payments for the 2014 and 2015 test years.

QUESTION:

a) Please confirm that the Board approved the Defined Benefit Pension Deferral Account for AEY in Decision 2014-06.

b) Please confirm that the Board found that the Defined Benefit Pension Deferral Account will reduce YECL's risk.

c) Please confirm that YECL requested a 46 basis point risk premium relative to the BCUC benchmark rate of 8.75% for the 2013-2015 GRA test years.

d) Please confirm that in Appendix A to Board Order 2014-06, the Board denied YECL's request for a risk premium relative to the BCUC benchmark rate of 8.75%.

ANSWER:

(a) and (b)

Simple confirmations of the items referenced in these two sub questions are neither helpful to the Board nor fair to YEC in the context of what is relevant to this R&V application.

The real substantive issue is not that the Board allowed AEY to establish a pension deferral account but that it did not adjust AEY's risk premium and therefore its ROE because of that determination. This is completely inconsistent with what the Board did in relation to YEC. Further context is therefore required to fairly answer these questions.

First, the Board approved the defined benefit pension plan deferral account for AEY in its Order 2014-06. In section 5.4.2.2 of the Order, the Board noted that the deferral account meets the criterion that "costs are not under the control of the company and are not reasonably forecastable."

Second, in the same section the Board stated that it "recognizes YEC's argument that approval of the deferral account reduces YECL's risk", however, it also noted that the swing in the deferral account could be in both ways, i.e., "if market forces move in the right direction, ratepayers will benefit from lower contributions" or "if market forces move in the wrong direction, ratepayers will be adversely affected through higher contributions."

Notwithstanding these statements - the Board did not discuss the impact of this deferral account in the determination of the risk premiums in AEY's 2013/15 GRA nor in AEY's 2016/17 GRA as reviewed in responses to c) and d) below. It clearly made no adjustment to the risk premium arising from the establishment of the pension deferral account.

For the purpose of the current R&V proceeding, It is also worth noting that YEC's defined benefit pension plan cost is much smaller compared to the AEY's plan.

AEY's defined benefit pension plan cost for 2013, when first approved, was $1.041 million which the Board estimated to be "just under two percent of the Applicant's forecast 2013 tariff — i.e., $1.041 million over $52.7 million" compared to YEC's cost in the 2021 GRA of $0.720 million which is just under one percent of the 2021 test year revenue requirements.

Further, as noted on page 3-29 of YEC's 2021 GRA Tab 3, Yukon Energy inherited its defined benefit pension plan from AEY when YEC was under YECL management and the annual cost is expected to reduce over time as it is applicable only for employees joining YEC before January 1, 2002.

(c) and (d)

Confirmed. Once again to be helpful to the Board and fair to YEC further context is required in response to these questions.

The Board's denial in Order 2014-06 of the 46 basis point risk premium relative to the BCUC benchmark was not due to the Defined Benefit Pension Deferral Account that was approved for the AEY. The Board denied the risk premium stating that in the BCUC's benchmark proceeding "the determination of whether a risk premium should be applied is not clear."

In Order 2014-06 it went on further to state in this regard:

> The Board agrees with the submissions of UCG that no assessment has been provided within this proceeding regarding the comparability of YECL to the BCUC benchmark utility Fortis Energy. The previous risk premium was based on FortisBC, which is an electrical distribution company. BCUC Order G-75-13 — the

> Stage 1 GCOC proceeding decision dated May 10, 2013 — identifies Fortis Energy as a gas distribution utility.
>
> Other than it being a distribution and regulated utility, no other comparisons to YECL can be gleaned from the benchmark decision. As a result, the determination of whether a risk premium should be applied is not clear.
>
> ….
>
> The Board finds that YECL has not established a prima facie case to quantify a risk premium over the BCUC benchmark utility. Therefore, the Board directs YECL, in its compliance filing to use an ROE of 8.75 percent, an ROE equal to that for the BCUC GCOC benchmark utility.

Further, the Board in its Order 2017-01 in relation to AEY's 2016/17 GRA approved a risk premium of 25 basis points over the BCUC benchmark of 8.75%. No adjustment was made to risk premium in relation to the pension deferral account.

In its Order, the Board simply noted that it "concludes that in determining relative risk for AEY, the Board should look at size and generation risk" [para 211] and "the evidence on this record shows that BCUC has set a premium for a small size utility at 25 basis points" and it "accepts that a 25-basis-point premium over the BCUC benchmark utility is reasonable for this jurisdiction." [para 219]