YEC's 2023/24 GRA

Exhibit #____

Undertaking #23

- March 6, 2024 Transcript, page 343, lines 9-18: To provide a point-form summary of all changes specified by YEC in its update and the reasons for the change. Secondly, to provide revised Tabs 2, 3, 5 and 7 and any GRA schedules in those tabs that incorporate the changes specified in the update to show how the changes have affected YEC's applied-for revenue requirement.

YEC Response:

The following response provides the requested point-form summary of all changes specified by YEC in its update (Exhibit 10, Attachment 1) or specified later during the oral hearing that affect YEC's applied-for revenue requirement and the reasons for each such change. Revised tables and schedules for Tabs 2, 3, 5 and 7 are provided as Attachment 1 to this undertaking response. The revised Tab 4 tables are included at the end of this response.

Attachment 1 to Exhibit 10 provided a summary of key updates affecting the Application since its filing in August 2023, including updates that had already been addressed in IR responses. New updates not already addressed in IRs and potentially affecting the applied-for revenue requirement were limited to providing updated information concerning IPP generation and prices, confirmation of current status of labour hires, BCUC Order G-6-24 regarding the benchmark ROE setting process, update to Lewes River Boat Lock Road Access Rebuild (delayed in-service beyond 2024), and the new AH3 Overhaul project ($2.2 million cost to be completed in 2024). Updates during the hearing process include costs for Aishihik Generating Station relicensing and for Mayo-Faro Diesel Infrastructure. Updates to projects remaining in WIP through the test years do not affect YEC's applied-for revenue requirement.

YEC's applied-for revenue requirement is based on forecasts for the 2023 and 2024 test years. No applied-for revenue requirement updates or changes have been provided regarding forecast sales or firm generation requirements, fuel prices, or non-fuel operating and maintenance expenses, e.g., forecast labour expenses are not adjusted for updates confirming hiring for positions and/or actual vacancy rates, and no revenue requirement updates are provided for forecast rented diesel expenses.

The requested point-form summary is provided below under three main headings for all changes specified by YEC in the Attachment 1 to Exhibit 10 update, or specified later during the oral hearing, that affect YEC's applied-for revenue requirement, and the reasons for each such change:

1. **IPP Generation and Purchased Power Costs** – LTA IPP generation and purchased power costs are not under the control of YEC,[1] and therefore updates are appropriate to reflect current forecasts for test year IPP generation and purchase power costs. The update also reduces the needed variance analysis for the proposed IPP Deferral Account.
   a. Exhibit 10, Attachment 1 provided updates on forecast LTA IPP generation and 2024 IPP prices, with related details. Summary IPP changes affecting applied-for revenue requirement are as follows [the updated power purchase costs are provided in Table 3.2 of Tab 3 in Attachment 1 to this undertaking response]:
      i. 2023
         - Forecast LTA IPP Generation reduced by 4,138 MWh, from 6,102 MWh to 1,964 MWh: and
         - Forecast IPP Purchased Power Costs reduced by $0.770 million, from $1.099 million to $0.329 million [total power purchase cost in Table 3.2 reduced to $0.380 million that also includes $0.051 million wholesale purchases].
      ii. 2024
         - Forecast LTA IPP Generation reduced by 2,521 MWh, from 16,811 MWh to 14,289 MWh; and
         - Forecast IPP Purchased Power Costs reduced by $0.377 million, from $3.085 million to $2.708 million [total power purchase cost in Table 3.2 reduced to $2.759 million that also includes $0.051 million wholesale purchases].

   b. The LTA IPP Generation forecast changes will increase the required YEC firm generation (LTA hydro and thermal) as determined in Appendix 2.1 of Exhibit 1. The changes to LTA thermal generation and to related forecast Fuel Costs are summarized as follows [see Attachment 1 to this response, Table 2.2 LTA Generation, Table 3.2 Fuel Costs, and Table 3.2.1 with detailed calculation of LTA fuel costs]:
      i. 2023
         - LTA forecast thermal generation increased by 3,098 MWh, from 74,480 MWh to 77,578 MWh; and
         - Forecast Fuel Costs increased by $0.626 million, from $15.122 million to $15.748 million (no change in blend fuel price for diesel and LNG, and no change in maintenance run-ups fuel costs).
      ii. 2024
         - LTA forecast thermal generation increased by 1,876 MWh, from 68,095 MWh to 69,971 MWh; and

[1] LTA source availability for IPPs is based on available information. This is consistent with OIC 2021/16, which requires LTA renewable source availability for sources other than hydro to be determined using available information. As the number of IPP connections evolvies, the LTA availability from this renewable source will change based on the actual commercial operation date (COD) as compared to the forecast COD. As explained in Exhibit 10, Attachment 1, changes in IPP deliveries are tied to the delay of the CODs for new IPPs.

- Forecast Fuel Costs increased by $0.379 million, from $13.831 million to $14.210 million (no change in blend fuel price for diesel and LNG, and no change in maintenance run-ups fuel costs).

c. Net changes in applied-for Fuel and Purchased Power Costs resulting from the IPP forecast updates are as follows [see Attachment 1 to this response, Tables 3.1 and 3.2):
   i. 2023
      - Reduction of $0.144 million ($0.770 million lower IPP purchase costs offset by $0.626 million increased Fuel Costs); and
   ii. 2024
      - Increase of $0.002 million ($0.377 million lower IPP purchase costs offset by $0.379 million increased Fuel Costs).

2. **Return on Equity (ROE)** – YEC's Application (Exhibit 1) proposes that the approved ROE for YEC's test year revenue requirements continue to be determined based on the current BCUC benchmark utility ROE plus an appropriate risk premium based on BCUC and YUB precedents. This includes ensuring that YEC's approved ROE continues to be higher than AEY's approved ROE to reflect YEC's long-acknowledged higher business risks relative to AEY. Point-form summary of updates for ROE determination is provided below:
   a. Exhibit 10, Attachment 1 reported on the updated BCUC ROE determinations in 2023 for FortisBC Energy (FEI) and FortisBC Electric (FBC), and the January 2024 BCUC determinations that FEI will continue to be the benchmark for ROE-setting for other BC utilities (excluding FBC), and that there could be risk discounts as well as risk premiums relative to the FEI benchmark when determining ROEs for other BC utilities (excluding FBC).
   b. Based on the updated BCUC information, the YEC test year ROE will need to be increased from what was provided in the Application to reflect BCUC's updated benchmark FEI ROE of 9.65% (versus prior FEI benchmark of 8.75%).
   c. This leaves an unresolved issue, pending the YUB's decision on the AEY GRA ROE, as to the basis for determining YEC's risk premium relative to the 9.65% FEI updated benchmark. Two basic criteria are relevant (with YEC's risk premium needing to meet both criteria):
      i. Business risks for YEC and AEY, as electric utilities, would reasonably be assessed relative to FBC rather than FEI, using prior GRA assessments. Assuming that relative business risks have not materially changed for FBC and YEC, YEC's small size, its high level of self-generation, and its relatively high level of industrial customer load are all indicative of the need for a higher risk premium for YEC than for FBC.
      ii. Based on past YUB decisions in the last two YEC GRAs in which the BCUC benchmark was applied, YEC's risk premium would be higher than AEY's [e.g., 20 basis points for generation risk]. This criteria can only be applied, however, after the YUB determines the AEY ROE for its current GRA application, in which AEY has

proposed a material increase in its risk premium to reflect its small size relative to FEI and FBC.

d. In summary, YEC is unable to determine an updated ROE at this time – and therefore the ROE as per the Application cannot be updated for this undertaking.

3. **Capital Costs Affecting Rate Base** - Updates have been provided in IR responses, in Exhibit 10, Attachment 1, and during the oral hearing regarding the forecast capital costs to be added to test year rate base (and therefore impacting depreciation/amortization expenses, long-term debt and interest costs, and return on rate base). The capital cost updates that will affect test year rate base (assuming the Board modifies YEC's forecast capital costs to reflect the updates) and therefore the applied-for revenue requirement are summarized as follows, and are reflected in revised tab tables and schedules provided in Attachment 1 to this undertaking response:
   a. Delays in project in-service dates that shift forecast rate base additions from 2023 to 2024, or from 2024 to a time period beyond that test year (i.e., the project will remains in WIP for test years).
      i. The following further updates on project expected in-service dates were provided in Exhibit 10, Attachment 1:
         - Lewes River Boat Lock Access Rebuild is now expected to be delayed beyond 2024. This project is now included in Table 5.7 and does not impact the 2023/24 GRA revenue requirements.
         - Four major capital projects have been deferred from 2023 to 2024 as outlined in YEC's response to YUB-YEC-1-65(c) (Exhibit 2, PDF p. 522):
            - Whitehorse Stoplog Crane Replacement - the 2023 cost has been updated to actuals and the remaining project cost forecast for 2024; no change in overall project cost at $4.247 million.
            - MH0 Road & Road Slope Stability - the 2023 cost has been updated to actuals and the remaining project cost forecast for 2024; no change in overall project cost at $1.874 million.
            - P&C: S250 Callison Protection, Control and SCADA Upgrade - the 2023 actual cost was at $1.774 million or $0.038 million higher than the 2023 forecast cost of $1.736 million included in the GRA. For the purpose of this response, the forecast cost in the Application is used, therefore, no change in project cost.
            - Schwatka Lake Safety/Debris Boom - the 2023 actual cost was at $0.535 million or $0.019 million higher than the 2023 forecast cost of $0.516 million included in the GRA. For the purpose of this response, the forecast cost in the Application is used, therefore, no change in project cost.
         - DD4 Overhaul ($0.450 million in Application) has been delayed until after 2024. This project is now removed from Tab 5 as it does not impact the 2023/24 GRA revenue requirements.

- The AH3 overhaul described in Exhibit 10, Attachment 1 was not included in the Application, but is now being undertaken in 2024 with expected completion in October at a forecast cost of $2.2 million. That project is now included in Table 5.4 and Table 5.6.

b. Updates to project capital cost forecasts:

   i. Aishihik Generating Station Five-Year Licence Renewal – Exhibit 10, Attachment 1 noted that YUB-YEC-1-61(f) (Exhibit 2, PDF p. 484) providied a corrected total forecast cost at completion of $5.521 million (compared to $4.479 million in the Application); however, during the oral hearing, YEC indicated that only about $0.230 million of this $1.042 million cost increase is related to the five-year renewal, and the balance is related to the long-term licence (Mr. Epp, March 6, 2024 Transcript, volume 3, page 344, lines 19-23). This change was included in YEC's response to Undertaking #31, which shows total costs of $4.708 million attributable to the five-year renewal [with $3.903 million closed in 2022, and the remaining costs to be closed in 2024].[2]

   ii. Lewes Gate Boat Lock – Exhibit 10, Attachment 1 updated the insurance proceeds of approximately $4 million (shown in Application as "Contribution" forecast for this project remaining in WIP), stating that YEC is applying to the Board to account for this insurance amount as deferred revenue to be amortized over 72 years, which is the life of the asset class of the Boat Lock. This project is forecast to remain in WIP at the end 2024, and it therefore has no impact on the 2023/24 GRA revenue requirements.

   iii. 2023 Mayo-Faro Diesel Infrastructure – During the oral hearing, YEC reported that as at December 2023 the budget for this project was increased by $1.4 million, from $4.3 million in the Application to $5.7 million (Mr. Murchison, March 6, 2024 Transcript, volume 3, page 318, lines 3-19). The cost for 2023 was updated from $4.3 million to $5.290 million based on 2023 actuals [the 2023 cost is closed] with forecast spending of $0.410 million in 2024.

The following tables provide updated versions of Tab 4 tables that reflect the impact of the updates included in this undertaking response on revenue requirements and YEC's proposed rate increase, which are summarized as follows:

- The revenue requirement for 2023 is reduced by $0.464 million and the revenue requirement for 2024 is reduced by $0.439 million.
- No changes in other revenues and revenues at existing rates.
- The revenue shortfall for 2023 is $6.203 million and for 2024 is $14.881 million.
- The required rate increase is reduced from 14.11% in the Application to 13.71% as shown in Table 4.2 below.

[2] The response to Undertaking #31 also included updated costs attributable to the 25-year renewal. However, that project is forecast to remain in WIP at the end of 2024, and it therefore has no impact to the 2023/24 GRA revenue requirements.

Table 4.1: Yukon Energy Revenue Required from Rates ($000s)

	Filed		Undertaking #23		Change	
	2023	2024	2023	2024	2023	2024
Revenue Requirement	$81,440	$90,425	$80,976	$89,986	-$464	-$439
Less: Other Revenues	$394	$394	$394	$394	$0	$0
Less: Secondary Sales	$358	$358	$358	$358	$0	$0
Revenue Required from Firm Rates	$80,688	$89,673	$80,224	$89,234	-$464	-$439
Less: Revenues from Firm Sales at Existing Rates [includes Rider J]	$74,021	$74,353	$74,021	$74,353	$0	$0
Additional Firm Rate Revenues Required	$6,667	$15,320	$6,203	$14,881	-$464	-$439

Table 4.2: Calculation of Required 2023 and 2024 Rate Increases and Rider J

Line #			Forecast 2023	Forecast 2024
1a	Consolidated Firm Retail Sales Revenues - Base Rates[1]	$000	64,471	67,298
1b	Consolidated Firm Industrial Sales Revenues - Base Rates	$000	9,718	8,771
2a	Consolidated Rider J Revenues[2]	$000	26,265	26,183
2b	AEY Rider R Revenues[3]	$000	6,158	6,314
3=1+2	**Total Consolidated Firm Sales Revenues at existing rates**	$000	106,611	108,566
4=Table 4.1	Retail Revenue increase required in 2023	$000	6,203	
5a=4/3	Required Rate Increase on total Consolidated Revenues	%	5.82%	
5b=4/(1a+1b)	Rider J Increase Required	%	8.36%	
6=3 * 5a	**Total Consolidated Firm Sales Revenues with 2023 Increase**	$000	112,814	114,883
7=Table 4.1	Retail Revenue increase required in 2024	$000		14,881
8=6-3	To Be Recovered from 2023 Increase	$000		6,317
9=7-8	Net Retail Revenue increase required in 2024	$000		8,564
10a=9/6	Required Rate Increase on total Consolidated Revenues	%		7.45%
10b=9/(1a+1b)	Rider J Increase Required	%		11.26%
11=6 * 10a	**Total Consolidated Firm Sales Revenues with 2024 Increase**	$000		123,447
12=5a*(1+10a)+10a	Total Cumulative 2023 and 2024 Rate Increases (compounded)			13.71%
	Rider J Required			
13=5b and 10b	Rider J Increase Required	%	8.36%	11.26%
14	Existing Rider J - non-industrial	%	34.84%	43.20%
15	Existing Rider J - industrial	%	31.19%	39.55%
16=13+14	Total Rider J with increases - non-industrial	%	43.20%	54.46%
17=13+15	Total Rider J with increases - industrial	%	39.55%	50.81%

Notes:

1. Total Consolidated Retail Revenues at existing Base Rates include revenues from YEC and AEY's residential, general service and streetlight sales.
2. Consolidated Rider J revenues at existing rates include YEC's Rider J at 34.84% for firm YEC and AEY retail sales and at 31.19% for firm industrial sales based on YUB Order 2023-05.
3. AEY Rider R Revenues at existing rates include AEY's Rider R at 8.30% for firm retail and industrial base rate sales of YEC and AEY.