Yukon Electrical Company Limited carrying on business as ATCO Electric Yukon 2023-24 General Rate Application (GRA)

Yukon Utilities Board (YUB) Information Requests (IRs) Round 1 to ATCO Electric Yukon (AEY)

YUB-AEY-01-001
Reference: **2023-24 GRA, Section 1.4, Changes in Accounting Practices and Procedures, PDF pages 11-12**
Issue: **Practices and procedures**
Quote: **1.4 Changes in Accounting Practices and Procedures**

6. Changes in Accounting Practices and Procedures since the 2016-17 GRA are due to (1) implementation of Oracle Financials changed accounting procedures for charging labour; (2) on-going transition to cloud-based IT applications which have different accounting treatment as compared to previous on-premises applications and (3) updated accounting practices related to contributions work in progress to smooth out fluctuations in rate base.

7. In 2018, AEY began utilization of Oracle Financials, which is a cloud-based financial system. As part of that system implementation AEY and its affiliates adopted leading practices utilizing standard labour rates to account for labour costs. Standard labour rates are a fully loaded labour expense inclusive of fringe benefits and based on average cost by job class. As such AEY no longer records and tracks fringe costs separate and distinct from overall labour expenses.

8. AEY previously utilized on-premises business applications for which AEY purchased capitalizable licenses. These licenses were capitalized and amortized over a period of time. As technology advances, more and more systems are cloud-based and AEY and its affiliates are making a concerted effort to transition away from on-premises applications. Cloud based technology is licensed on a subscription basis, which is not capitalizable under IFRS accounting standards. AEY's current and future subscription costs for cloud-based applications are accounted for in operating and administrative expenses.

9. Finally, AEY is proposing removal of contributions related to work in progress from the computation of rate base, consistent with the exclusion of the corresponding construction work in progress. Historically, AEY has included contribution work in progress within rate base computations, which has resulted in a temporary reduction to rate base balances due to the exclusion of the corresponding capital spend lowering revenue requirements. An offsetting amount of AFUDC would be accumulated within the projects to be later added to rate base and collected over the life of the asset in service.

10. Overall, the implications of contributions have historically been negligible to rate base on ordinary course new extension balances; however, with the recent

and projected installation of renewables and the related infrastructure both construction and contribution work in progress balances are expected to be significantly larger than what AEY has previously experienced. This results in high fluctuations in rate base balances and corresponding revenue requirements. Excluding contribution work in progress from rate base smooths out the rate base and revenue requirement trends over the long term, reduces AFUDC accumulated on related projects and more accurately represents AEY's annual returns and rate base balances.

Request:

(a) Please provide copies of all currently approved policies and procedures (for example, policies or procedures for recognizing capital asset additions, retirements, depreciation expense, income tax, reserve for injuries and damages and similar policies and procedures).

(b) For any policy or procedure document to which revisions are proposed in this GRA, please provide a blackline copy of the document.

(c) In reference to paragraph 7 quoted above, please explain the checks and balances that AEY and its affiliates undertake to ensure that fringe benefit costs (now as part of "fully loaded labour expense") are reflected accurately in AEY's actual and forecast labour rates which inform labour expense calculations, regardless of whether the costs are expensed or capitalized.

(d) Has the use of "fully loaded labour expense" had any negative or positive impact on AEY's ability to forecast labour expense calculations, regardless of whether the costs are expensed or capitalized? Please explain.

(e) In reference to paragraph 8 quoted above, please provide a reference to any other authority (accounting or otherwise) supporting AEY's proposal to account for its cloud-based technology subscription costs within operating and administrative expenses.

(f) Please revise GRA Schedule S8.12 - Continuity Schedule of Contributions in Aid of Construction to breakdown Line No. 3 - Additions to Property by project (including a reference to the applicable business case number) such that the total costs for all projects, as shown on Line No. 3, are accounted for in full.

(g) Please explain AEY's current practice for recording contributions in aid of construction specific to when the contributions are received from the customer and the subsequent accounting entries upon project completion. Please ensure that the response addresses contributions as they pertain to both contribution work in progress and contributions that have been capitalized. Please reconcile this explanation with the amounts noted in response to part (f).

(h) Under AEY's proposal respecting contribution work in progress, would the practice where "An offsetting amount of AFUDC [Allowance for Funds Used During Construction] to be accumulated within the projects to be later added to rate base and collected over the life of the asset in service" be eliminated or changed in any way? If so, please clarify how AFUDC would be recorded and at what point during the construction of an asset.

(i) Please prepare a table showing the revenue requirement impact due to AEY's proposal with respect to contribution work in progress. Please include detail for AEY's 2023 and 2024

revenue requirement at the status quo (AFUDC) and compare this amount to AEY's 2023 and 2024 revenue requirement reflecting AEY's proposal to exclude contribution work in progress from rate base calculations. Please state all assumptions used.

YUB-AEY-01-002

Reference: 2023-24 GRA, Section 1.8, Deferral Accounts, PDF pages 13-14 and 20; 2023-24 GRA Schedules, S8.4, Continuity Schedule of No Cost Capital and S 8.8, Continuity Schedule of Deferred Charges & Credits

Issue: Deferral and reserve accounts

Quote:

GRA, PDF pages 13-14:

17. AEY is seeking approval to use the following deferral accounts during the Test Period:

Table 1.3: Deferral Accounts

Board Orders or Legislative Changes	Section 1B
Industrial Rider R Flow Through	Section 2
Purchased Power Flow Through	Section 3
Independent Power Producers (IPP) Flow Through	Section 3
Diesel Fuel Deferral Account	Section 4

GRA, PDF page 20 (excerpt of first two rows of Attachment 1.2:

ATCO Electric Yukon (AEY)
2023 - 2024 General Rate Application (GRA)

Issues List

Issue	Section	Request
Board Orders or Legislative Provisions Deferral	Section 1B	AEY seeks the ability to flow-through (dollar for dollar) costs and savings related to Board Orders or legislative provisions resulting in changes to the rules or parameters under which AEY operates, or that bear on the nature and extent of AEY's obligations as a regulated utility, and which impact its 2023-2024 revenues or revenue requirement.
Independent Power Producers (IPP) Deferral	Section 03	AEY is requesting deferral treatment on both Constraint Payments as well as maintenance costs related to the IPP projects.

GRA Schedule, S8.4, Continuity Schedule of No Cost Capital (excerpt Line Nos. 4-8):

Mid-Year Balance Summary
Other Post Employment Benefits (OPEB)
Defined Benefit Pension
Injuries & Damages
Total No Cost Capital Mid-Year Balance

GRA Schedule, S8.8, Continuity Schedule of Deferred Charges & Credits, (excerpt Line Nos. 11-17):

Deferred Credits Mid-Year Balance Summary
Rate Case Reserve
Watson Lake LNG Study Costs
Demand Side Management Program Costs
Pension Deferral Account
ERA/IPP Legal Costs
Total Deferred Credits Mid-Year Balance

Preamble: The Board requires further information respecting AEY's approved and proposed deferral and reserve accounts.

Request:

(a) Please confirm that the reserve accounts shown on GRA Schedule S8.4 are currently approved and that AEY is not proposing to establish any further reserve accounts during the test period. If not confirmed, please explain fully.

(b) Please reconcile the deferral accounts identified in Table 1.3: Deferral Accounts (PDF page 14) and Attachment 1.2 (PDF page 20) of AEY's GRA with the deferral accounts identified on GRA Schedule S8.8.

In the response, please confirm that the deferral accounts referred to in this IR are currently approved and that AEY is not proposing to establish any further deferral accounts during the test period. If not confirmed, please explain fully.

(c) For each of the deferral and reserve accounts identified in requests (a) and (b), please provide the Operations & Maintenance (O&M) account in which the expense is being recorded or is proposed to be recorded.

(d) Please describe how the Board Orders or legislative provisions deferral account would work. Specifically address whether AEY would come before the Board for permission to address certain shortfalls which may arise in future because of Board Orders or legislative provisions.

(e) Have Board Orders impacted AEY's revenue requirement set for a test year without a new subsequent proceeding? If so, please indicate which order(s) and describe how AEY was impacted.

(f) Have any legislative provisions impacted AEY's revenue requirement set for a test year without a new subsequent proceeding? If so, please indicate which legislative provision(s) and describe how AEY was impacted.

(g) Does an alternative to a deferral account exist in which AEY can mitigate the effect of these types of issues?

YUB-AEY-01-003
Reference: 2023-24 GRA, Section 1.9, Key Assumptions, PDF pages 14-17
Issue: Key assumptions – labour and inflation
Quote:

GRA, Table 1.4, PDF page 14:

Table 1.4: Key Assumptions
(%)

	2023	2024
In-scope Labour Inflation	2.00	2.50
Out-of-scope Labour Inflation	2.90	2.50
Other Inflation	3.80	2.50
Vacancy Rate	3.65	3.65
Long Term Debt Rate	4.56	4.56

GRA, Table 1.4, PDF page 16:

Table 1.4: FTEs

	FTEs
2017 Approved Ending Complement	**68.13**
Program Manager, Renewables & Grid Modernization	1.0
Engineering Technologist, Renewables & Grid Modernization	1.0
Engineers	3.0
Team Lead, Plant	1.0
Field Services Representative	1.0
Supervisor, Business Support Services	0.75
VP and VP Support Services	-0.8
Head Office Personnel	1.18
2024 Forecast Ending Complement	**76.26**

Request:

(a) Please provide details respecting inflation rates either applied for or approved in B.C. or the Northwest Territories for either in-scope or out-of-scope utility labour costs.

(b) Please provide a copy of the referenced Yukon Economic Outlook issued by Yukon Economic Development (March 2023).

(c) Please provide AEY's calculation for determining the vacancy rate of 3.65 percent based on "a five-year historical average normalized for exogenous events." Please ensure that detail addressing the normalization of exogenous events has been provided.

(d) What was AEY's actual 2017 FTE complement? Please explain any variance between the 2017 Approved Ending Complement (68.13 FTEs) and the 2017 Actual Ending Complement.

(e) Referring to Table 1.4: FTEs above, please clarify if the Engineering Technologist, Renewables & Grid Modernization (2016) 1.0 FTE was approved in 2016-17. Please also clarify if any of the other FTEs that make up the difference between 68.13 and 76.26 FTEs were approved in 2016-17.

(f) For any proposed 2023-24 FTE addition that is the result of an allocation, please provide detail that supports the percentage allocation to AEY for that FTE. How does this allocation percentage affect labour costs related to AEY's 2017 approved FTE complement as they pertain to labour costs in its 2023-24 GRA?

YUB-AEY-01-004
Reference: 2023-24 GRA, Section 2, Schedule S2.1, Street Lights and Private Lights
Issue: Number of street and private lights

Preamble: Similar to how the average number of residential customers is determined, the Board would like to know how many street lights and private lights are in AEY's service territory.

Request:
For each of the years in Schedule S2.1, please provide the average (during the year) number of street lights and private lights.

YUB-AEY-01-005
Reference: 2023-24 GRA, Section 2, PDF pages 26-27; Schedule S2.1
Issue: Residential customer UPC
Quote: After experiencing a few years of moderate growth, the Yukon economy was disrupted by the pandemic starting in 2020. The COVID-19 global pandemic impacted Residential and Commercial Usage Per Customer (UPC) in 2020, 2021 and 2022. In 2020, Residential UPC increased significantly as more people were working from home and Commercial UPC decreased as businesses were impacted by COVID-19 restrictions as well as the decrease in employees working in offices. As pandemic restrictions have been lifted, policies and procedures are beginning to normalize, such that the 2023 forecast anticipates UPCs returning to pre-pandemic levels for both Residential and Commercial customers.

Preamble: From Schedule S2.1, the MWh sales per customer has been above 10.73 for five of the seven years preceding the test years.

Request:
(a) AEY has explained increases in MWh sales per residential customer for the pandemic years; however, as many businesses have gone to a hybrid model of allowing people to work from home part of the time, please justify the drop to 10.73 MWh for residential customers in 2023 and the reason for the increase to 10.96 MWh per residential customer for 2024.

(b) AEY has explained decreases in MWh sales per commercial customer for the pandemic years; however, as restrictions have been lifted, there has been growth in the forecast number of residential customers and tourism has returned to pre-pandemic levels, please justify why the 2023 forecast of MWh sales per commercial customer is below that for each of the preceding pandemic years.

(c) Given that AEY has forecast 51.14 MWh per commercial customer for 2023, please explain why the MWh sales per commercial customer increases to 52.09 for 2024.

YUB-AEY-01-006
Reference: **2023-24 GRA, Section 2, PDF page 31**
Issue: **Industrial sales**
Quote: While AEY does not forecast serving any industrial customers over the Test Period, AEY plans to continue its approved Industrial Rider R Deferral, respecting YEC's industrial sales forecast for purposes of calculating AEY's Rider R rate adjustment. AEY proposes to true-up any differences between YEC's actual and approved industrial sales forecast in future rider adjustments. (Footnote omitted)

Request:
(a) Please explain how the Industrial Rider R Deferral will operate and provide a detailed example.

(b) What is the impact to AEY and its customers if industrial load changes from YEC's last approved forecast? (Explain in terms of a new industrial load coming onto the system or an existing mine line leaving the system.)

(c) Please describe the steps AEY took to verify the veracity of the industrial sales forecast.

YUB-AEY-01-007
Reference: **2023-24 GRA, Section 2, PDF page 30; Schedule S2.1**
Issue: **New commercial customers**
Quote: Additionally, six new large commercial customers are anticipated to be added during the Test Period in Whitehorse as well as one new large customer in Carcross.

Request:
(a) Please provide when each of the new large commercial customers is to be added.

(b) Does AEY expect the addition of the large commercial customers to increase the average MWh per commercial customer for each of the test years?

YUB-AEY-01-008
Reference: **2023-24 GRA, Section 2, Schedule S2.2, Miscellaneous Revenue**
Issue: **Carbon Tax Rebate; Other**

Preamble: Schedule S2.2 shows "Carbon Tax Rebate" and "Other" as line items under Miscellaneous Revenue.

Request:
(a) Given a 2022 carbon tax rebate of $832,000 for 2022, please explain how the 2023 and 2024 amounts were forecast for this line item.

(b) For the line item "Other", please provide details on how YEC is charged for billing services.

YUB-AEY-01-009
Reference: 2023-24 GRA, Section 11, Attachment 11.1, PDF page 191
Issue: Summary of Customers, Energy Sales and Revenue

Request:
Referring to PDF page 191 and AEY's Summary of Customers, Energy Sales and Revenue 2013-2022, please provide reasons for the year-over-year changes in Secondary Sales in MWh that can be observed on Line No. 28.

26	**Secondary Sales**										
27	Customers (average during year)	1	2	3	3	5	5	5	5	10	9
28	Sales in MWh	3,959	5,415	7,030	4,835	8,385	258	1	479	4,430	3,439
29	MWh sales per customer	1,979.5	2,707.5	2,812.0	1,511.0	1,705.4	51.6	0.1	97.5	458	382
30	Revenue ($000s)	336	474	532	296	553	21	0	34	361	401
31	Cents per KWh	8.49	8.75	7.57	6.13	6.59	7.99	8.37	7.07	8.15	11.65

YUB-AEY-01-010
Reference: 2023-24 GRA Section 3, PDF page 108
Issue: Fish Lake Hydro
Quote: The forecast Fish Lake Hydro Generation in the Test Period outlined in Schedule 3.21 is based on the recent 2021-22 output, planned maintenance, water availability and is adjusted for any planned decreases in generation due to capital rebuilds. (Footnote omitted)

Request:
(a) What capital rebuilds is the quote referring to and when are they expected to occur?

(b) Does AEY foresee any water availability issues in the test period? Please explain.

YUB-AEY-01-011
Reference: 2023-24 GRA Section 3, PDF page 108; AEY 2016-17 GRA Proceeding, YUB-YECL-47(b); Appendix A to Board Order 2017-01, PDF page 17
Issue: Purchase Power Flow Through Deferral Account (PPFTDA)
Quote:

GRA, PDF page 108:

AEY is of the view that the changes to the wholesale rates (including any ERA charges) continue to meet the criteria for the establishment of a deferral account, and any variance should continue to be included in the Purchase Power Flow Through Deferral Account.

YUB-YECL-47(b):

Consistent with historical practice, under a PPFTDA, AEY would assume risk associated with sales volumes, however AEY would not assume risk associated with changes to the Wholesale purchase rate.

Appendix A to Board Order 2017-01:

The Board accepts the submissions of AEY that the PPFTDA will provide additional margin on sales that are incremental to forecast levels and that the use of a PPFTDA is more efficient. The Board considers the PPFTDA to be a more efficient mechanism for adjusting potential changes in wholesale costs, especially since there are material timing differences between YEC and AEY GRA filings. Therefore, the Board approves the requested AEY PPFTDA, without changes.

Request:

(a) Is the PPFTDA requested by AEY in this application identical to the PPFTDA approved in Board Order 2017-01?

(b) Please confirm whether AEY continues to assume the risk associated with sales volumes as set out in the statement above. Please explain.

YUB-AEY-01-012

Reference: **2023-24 GRA Section 3, PDF pages 109-110**

Issue: **Constraint Payments and Independent Power Producers (IPP) Deferral**

Quote: To ensure the IPPs are not unduly put at risk of poor system availability, Constraint Payments were required. Constraint Payments occur when the IPP is producing power and, due to circumstances outside the IPP's control, an incident occurs that results in the inability of the IPP to access AEY's grid and sell power to AEY. Examples include distribution line outages or a constraint of the Battery Energy Storage System (BESS). In addition, there are legal costs and contracting costs associated with setting up these EPAs.

…

Under the IPP program, the risks and impacts of unplanned events are amplified. If an unplanned event results in an IPP's inability to provide the expected energy to the grid, then the reduced generation is normally made up through the running of diesel plants. This requirement to run diesel plants results in increased fuel usage during the constraint period and AEY must pay for both the increase in fuel costs and the minimum energy purchase.

Request:

(a) Please explain how the BESS can cause a constraint.

(b) Is the BESS referred to in the quote a YEC asset? If the answer is affirmative, why would AEY be responsible for the maintenance of this asset? If the BESS is not a YEC asset, which BESS is AEY referring to?

(c) Please explain the purpose and operation of a microgrid controller. Why is AEY responsible for the microgrid controller and not the IPP?

(d) Are the IPPs referred to or expected in the test period located in the hydro zone? If the answer is yes, then why is diesel generation the assumed replacement for the constrained IPP energy?

(e) Has AEY ever commissioned a new asset and asked for a deferral account because it did not have certainty around maintenance costs? Please explain.

(f) Given AEY's system reliability, what is the probability of a system constraint for reasons other than the BESS or the microgrid controller?

(g) In what year(s) did AEY initially receive energy from IPPs and micro generators?

(h) Generally, is system reliability under the control of management? Please explain.

YUB-AEY-01-013
Reference: 2023-24 GRA, Section 5, Operations and Maintenance (O&M) expenses, PDF pages 113-115
Issue: O&M forecasting

Request:
(a) Please clarify whether AEY has changed any aspect of its methodology for forecasting O&M expenses. Please explain fully.

YUB-AEY-01-014
Reference: 2023-24 GRA Schedules, S5.2 – Breakdown of Operations & Maintenance Expenses – Labour, Other
Issue: Production O&M

Request:
(a) Referring to S5.2, Line Nos. 16, 17, 21 and 23 (Production: 64000 – Supervision and Engineering Diesel), please provide the quantity of FTEs representing the additional engineering resources in each of 2018 ($0.084 million) and 2022 ($0.040 million).

(b) Referring to S5.2, Line Nos. 26, 27, 31, 33, 34 and 38 (Production: 64600 – Diesel Generation), please explain if the vacancies referred to on lines 31 and 34 were filled by the "additional plant maintenance resource" noted on Line No. 38. What is the quantity of FTEs representing the additional plant maintenance resource noted on Line No. 38 in 2023 ($0.070 million)?

(c) Referring to S5.2, Line Nos. 42, 43, 47, 48, 53 and 54 (Production: 82600 – Hydro Maintenance), please provide the quantity of FTEs representing the additional resources in each of 2017 ($0.065 million due to filling vacant positions) and 2023 (approximately $0.050 million due to an additional plant maintenance resource).

(d) Referring to S5.2, Line Nos. 56, 57, 65 and 67 (Production: 84600 – Diesel Maintenance), please provide the quantity of FTEs representing the additional plant maintenance resource noted on Line No. 67 ($0.086 million).

YUB-AEY-01-015

Reference: 2023-24 GRA Schedules, S5.2 – Breakdown of Operations & Maintenance Expenses – Labour, Other;
2023-24 GRA, Section 1B.2 – Grid Modernization, PDF pages 22-23

Issue: Distribution O&M

Request:

(a) Referring to S5.2, Line Nos. 73, 74 and 81 (Distribution: 87000 – Supervision), please provide the quantity of FTEs representing the 2020 vacancy ($0.060 million). Has this vacancy been filled at the time of submitting the response to this IR?

(b) Referring to S5.2, Line Nos. 106, 107, 111, 113, 115 and 124 (Distribution: 87300 – Maintenance - Labour), please provide the quantity of FTEs representing the 2017 vacancy ($0.190 million), the reduction in 2020 vacancy ($0.120 million), the impact in 2019 of the vacancy filled in 2018 ($0.091 million) and the additional resource added in 2023 (0.070 million). Please confirm that the additional resource in 2023 has been added on an actual basis at the time of submitting the response to this IR.

(c) Referring to S5.2, Line Nos. 106, 108 and 121 (Distribution: 87300 – Maintenance - Other), please provide further detail in respect of the 2022 "write off of cancelled projects" in the amount of $0.127 million. Other than the inflationary and cancelled project amounts noted by AEY on Line No. 121 ($0.179 million $0.127 million respectively) as explanations for the total $0.598 million[1] increase in "Other" expenses between 2021 and 2022, please provide an explanation for the remaining increase of approximately $0.292 million in 2022 "Other" expenses.[2]

(d) Referring to S5.2, Line Nos. 126, 127, 130 and 131 (Distribution: 87310 – Service to Outside Parties), please provide details in respect of the most common services AEY provides to outside parties. Please also provide reasons for the increase in these services between 2020 and 2021 in the amount of approximately $0.509 million (calculated as the difference between total costs of $0.120 million in 2020 and $0.629 million in 2021).

(e) Referring to S5.2, Line Nos. 133, 134, 138, 140, 142, 145 and 148 (Distribution: 87400 – Underground Line Maintenance), AEY provides general variance explanations as pertaining to reduced vacancies or filling vacancies. Please provide further details, including quantities of FTEs and the related costs.

(f) Referring to S5.2, Line Nos. 150, 152 and 160 (Distribution: 87500 – Meter and Meter Testing) and the increase of approximately $0.050 million in 2023 in maintenance related to Advanced Metering Infrastructure (AMI) metering functions, please explain why this incremental cost is forecast only for the year 2023. Please also explain in general where it can be observed on S5.2 that AEY's proposed Grid Modernization and AMI program will provide a benefit in terms of reduced costs within Distribution: 87500 – Meter and Meter Testing.

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[1] $0.598 million total "Other" variance was calculated as the difference between $1.310 million (2022) and $0.712 million (2021).

[2] $0.292 million unexplained "Other" variance was calculated as $0.598 million total "Other" variance less the$0.179 million variance due to inflation and $0.127 million variance due to cancelled projects.

(g) Referring to S5.2, Line Nos. 167, 169, 174 and 177 (Distribution: 87800 – Street Light Maintenance), please provide further information respecting AEY's costs related to street light testing. Is AEY's street light testing the result of an organized and scheduled maintenance program? In addition, please also explain why it is reasonable that forecast street light testing costs for 2023 and 2024 ($0.155 million and $0.159 million respectively) are more than double the amount incurred in 2022 ($0.071 million).

YUB-AEY-01-016
Reference: 2023-24 GRA Schedules, S5.2 – Breakdown of Operations & Maintenance Expenses – Labour, Other
Issue: General O&M

Request:
(a) Referring to S5.2, Line Nos. 182, 184 and 187 (General: 88400 – Communication), please explain if the "new radio system" was described in Business Case #14 – Satellite Radios. If not confirmed, please identify the business case to which the "new radio system" relates.

(b) Assuming AEY's response to part (a) is confirmed, please confirm that the annual subscription fee for the 38 satellite radios (which appears to have a total capital cost of $0.157 million as noted in Business Case #14) is in the amount of $0.060 million as noted on S5.2, Line No. 187. What was the annual subscription fee for AEY's previous radio system?

(c) Referring to S5.2, Line Nos. 189, 191 and 196 (General: 88800 – Maintenance Company-Owned Houses), please clarify if the approximate $0.028 million increase in costs noted in 2023-24 to "assess and address deficiencies" includes all repair costs resulting from the assessment. If not confirmed, please identify the account to which the repair costs were recorded.

(d) Referring to S5.2, Line Nos. 198, 200, 204 and 207 (General: 88900 – Maintenance Warehouse and Office), please clarify if the increases in costs in 2021 ($0.094 million to "address drainage issues") and 2022 ($0.102 million to "address deficiencies") includes all assessment and repair or maintenance costs resulting from the assessment. If not confirmed, please identify the account to which the costs not related to an assessment were recorded.

YUB-AEY-01-017
Reference: 2023-24 GRA Schedules, S5.2 – Breakdown of Operations & Maintenance Expenses – Labour, Other
Issue: Public Information O&M

Request:
(a) Referring to S5.2, Line Nos. 216, 218 and 221 (Public Information: 70100 – Public Information Administration), AEY indicates that increases of approximately $0.050 million and $0.063 million in "Other" costs for the years 2021 and 2022 respectively were "mainly due to sponsorships of community events." Please clarify if the Board has historically approved the recovery of costs of this nature through AEY's revenue requirement.

(b) Referring to S5.2, Line Nos. 223, 224, 229, 232 and 234 (Public Information: 70200 – General Public Information), AEY provides general variance explanations as pertaining to reduced vacancies or filling vacancies. Please provide further details, including quantities of FTEs and the related costs.

YUB-AEY-01-018

Reference: **2023-24 GRA Schedules, S5.2 – Breakdown of Operations & Maintenance Expenses – Labour, Other; 2023-24 GRA, Section 5.3, Operations and Maintenance (O&M) Costs by Function, PDF page 122**

Issue: **Customer Accounting O&M**

Quote: Effective July 2021 AEY switched its IT service provider to Kyndryl, a subsidiary of IBM and terminated its contract with its previous provider, Wipro. The change in IT service provider was necessary given the fast-paced requirements to modernize, progression from on-premises to cloud-based services, and transformation of user services to address remote working and in-field solutions. One-time costs associated with the termination of the previous contract and transition to the new service provider were incurred in 2020 and 2021 and were excluded in all determinations of the 2023 and 2024 revenue requirements.

Request:

(a) Referring to S5.2, Line Nos. 247, 249 and 254 (Customer Accounting: 71100 – Customer Applications and Service Orders), please provide further information respecting the 2022 increase in "contractor services to integrate weather stations into Old Crow Control systems" in the amount of $0.070 million. Why do these costs not appear to have continued in either 2023 or 2024?

(b) Please also explain in general where it can be observed on S5.2 within the Customer Accounting function that AEY's proposed Grid Modernization and AMI program will provide a benefit in terms of reduced costs for meter reading. For example, will there be cost savings that can be observed within the Customer Accounting: 71200 – Meter Reading function on S5.2, Line Nos. 259 and 260?

(c) Referring to S5.2, Line Nos. 269, 270 and 271 (Customer Accounting: 71300 – Customer Billing and Accounting), please clarify if any portion of the one-time costs (incurred in 2020 and 2021) associated with the termination of the previous contract and the transition to the new service provider (as quoted above) are reflected in either of the referenced line nos. and, if so, in what amount.

(d) Referring to S5.2, Line Nos. 269, 270, 271, 278 and 280 (Customer Accounting: 71300 – Customer Billing and Accounting), please clarify if the costs at issue (being a full year of CCS billing system subscription fees in the amount of $0.300 million) have been determined as the result of a direct bill to AEY or if are they an allocated amount. If they are an allocated amount, how was AEY's percentage allocation calculated?

(e) Referring to S5.2, Line Nos. 269, 270, 271, 274 and 276 (Customer Accounting: 71300 – Customer Billing and Accounting), AEY provides general variance explanations as pertaining to reduced vacancies or fluctuating vacancies. Please provide further details, including quantities of FTEs and the related costs.

YUB-AEY-01-019
Reference: 2023-24 GRA Schedules, S5.2 – Breakdown of Operations & Maintenance Expenses – Labour, Other
Issue: Administration & General

Request:

(a) Referring to S5.2, Line Nos. 309-334 (Administration & General: 72100 – Administrative), for each of the years 2016 to 2023, please provide a table to reflect a year-over-year breakdown of the O&M costs into the five largest cost categories for each of "Labour" and "Other". Please ensure that, irrespective of whether the following fall into the five largest cost categories, all costs related to each of travel, severance payments due to "ATCO's COVID Vaccination Policy," employee incentives and benefits, transition costs related to a new IT service provider and costs for the early termination of the Master Services Agreement with Wipro are identified as stand-alone cost categories under either labour costs or other costs.

(b) Referring to S5.2, Line Nos. 309-334 (Administration & General: 72100 – Administrative), AEY provides general variance explanations as pertaining to reduced vacancies or higher vacancies. Please provide further details, including quantities of FTEs and the related costs.

(c) Referring to S5.2, Line Nos. 347, 348 and 351 (Administration & General: 72300 – Insurance) and the evident year-over-year increase in insurance costs, please explain AEY's process for examining insurance premiums for the purpose of confirming that a competitive price for the insurance coverage has been negotiated at the time of each renewal period. How has the practice described assisted in the forecast in the current GRA?

(d) Referring to S5.2, Line No. 355 and 356 (Administration & General: 72400 – Injuries & Damages), these amounts can also be observed on S8.4, Line No. 28, identified as negative "Write-off" amounts for the same years in AEY's Continuity Schedule of No Cost Capital for Injuries & Damages. Please provide reasons for the two negative $0.279 million amounts forecast for 2023 and 2024 respectively.

(e) Referring to S5.2, Line Nos. 359, 360, 364 and 366 (Administration & General: 72500 – Employee Expenses), please clarify if the reason the labour costs after 2020 are negative or zero is the result of vacancies or due to transitioning to standard labour rates.

(f) Referring to S5.2, Line Nos. 371, 373, 380 and 382 (Administration & General: 72600 – Training and Safety), please clarify what "PLT training" is.

YUB-AEY-01-020
Reference: 2023-24 GRA Schedules, S5.3 – Affiliate Charges included in Operations and Maintenance Expenses
Issue: Head Office Costs – Administrative Expenses, Financial Reporting and Regulatory Support

Request:
(a) Referring to S5.3, Line No. 11 (Details of Head Office Costs: 72100 – Administrative Expenses, Financial Reporting and Regulatory Support), please clarify the reasons for the Financial Reporting and Regulatory Support cost increases for the years 2023 and 2024 ($0.697 million and $0.792 million respectively) compared to the historical costs for the years 2016 to 2022 which ranged between $0.241 million and $0.494 million.

(b) Please provide general explanations for the costs incurred for each of the years 2016 to 2022.

YUB-AEY-01-021
Reference: 2023-24 GRA, Section 6, Taxes other than income, PDF page 123
Issue: Taxes other than income (Property Taxes)
Quote:

Table 6.1: Taxes Other than Income
($000)

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Actuals							Test Period	
Property Taxes	253	253	264	277	277	267	275	285	292

6.2 Property Taxes

2. Property taxes are paid to the communities annually for AEY's office building, generation facilities, substation properties and power lines. The forecast increases over the Test Period are due to inflation.

Request:
Please clarify if the year-over-year increases and decreases for the years 2017-22, as shown in Table 6.1 above, are due to inflation or are the result of capital projects. If neither, please explain further.

YUB-AEY-01-022
Reference: 2023-24 GRA, Section 8, PDF pages 128 and 130
Issue: Return on equity
Quote:

PDF page 128:

The BCUC is currently undertaking a GCOC proceeding (Stage 1 proceeding) to determine the appropriate benchmark ROE which was previously set at 8.75 percent. A decision is expected to be released either in the third or fourth quarter of this year. (Footnote omitted)
…

PDF page 130:

In accordance with prior Board direction, AEY is requesting to link its ROE for the 2023-24 Test Period to the soon to be determined BCUC GCOC benchmark rate plus a risk premium of 0.75 percent.

In this Application, AEY has utilized the existing 8.75 percent as a placeholder and is proposing to true-up to the benchmark approved by the BCUC in its upcoming GCOC decision as part of AEY's Compliance Filing to this Application. (Footnote omitted)

Request:
(a) If the BCUC GCOC proceeding does not release its decision before the close of the evidentiary record (conclusion of the oral hearing) of this proceeding, what does YECL propose for its ROE?

(b) Should the Board apply the latest BCUC GCOC proceeding decision released at the time the evidentiary record closes for this proceeding as the appropriate benchmark to determine an ROE for AEY for the test years of AEY's 2023-24 GRA?

YUB-AEY-01-023
Reference: 2023-24 GRA, Section 8, PDF page 128
Issue: Return on equity
Quote: AEY submits that the determination of whether a ROE premium is appropriate with respect to AEY should address the relative business risks of AEY compared to the BCUC benchmark utility and other similar utilities across Canada, taking into account the stand-alone principle.

Request:
a) Should YEC be considered as one of the comparable utilities?

b) In terms of relative comparability, would YEC be the utility most comparable to AEY?

c) How has the stand-alone principle been applied in Yukon?

d) In determining an appropriate ROE for a Yukon utility, is the stand-alone principle the preeminent criteria, or are other criteria considered? Please explain.

YUB-AEY-01-024
Reference: **2023-24 GRA, Section 8, PDF page 129**
Issue: **Return on equity**
Quote: Market demand risks relate to the volatility of sales and their impact on ROE. Realization of sales forecasts in AEY's service territory is subject to many variables including the weather and the economic health of the community. AEY's sales are more sensitive to weather than other electric utilities due to the extreme range of temperatures experienced in northern Canada.

Request:
(a) Please explain why AEY's sales are more sensitive to weather than other electric utilities.

(b) Please provide the analysis of other utilities that led to the conclusion that AEY's sales are more sensitive to weather than other electric utilities' due to the extreme range of temperatures experienced in northern Canada.

(c) Please provide examples where other utilities are not affected by extreme weather conditions such as heat, wind, ice, etc.

(d) Please provide an example of any electric utilities which are not impacted by the economic health of the community.

(e) If AEY is concerned about the volatility from its sales forecast, could AEY request deferral account treatment to cover this risk? Please explain.

YUB-AEY-01-025
Reference: **2023-24 GRA, Section 8, PDF page 129**
Issue: **Return on equity**
Quote: AEY also serves a relatively small market with considerably less economic strength and diversity than the service areas of other utilities. Its residential and commercial sales are primarily affected by the general economic activity within the communities served.

Request:
Would the above statement similarly apply to any other electric utility with a rural base? If not, please explain why.

YUB-AEY-01-026
Reference: 2023-24 GRA, Section 8, PDF page 129
Issue: Return on equity
Quote: Since AEY's last GRA, transformational change has started to occur in the electric utility industry with emphasis on decarbonization, increased focus on Environmental, Social and Governance (ESG), the need for grid modernization, and general changes to the way in which customers receive utility service (e.g., self-supply). These changes increase risk and uncertainty for utilities to a level never experienced before, and particularly affect AEY because of the small customer base over which costs can be shared.

Request:
(a) What evidence has AEY reviewed/considered in making its statements noted in the quote?

(b) Are these changes being considered in the BCUC GCOC proceeding to determine the benchmark ROE?
(c) Were such factors considered in YEC's 2021 GRA proceeding?

YUB-AEY-01-027
Reference: 2023-24 GRA, Section 8, PDF pages 129-130
Issue: Return on equity
Quote: Operational cost risks exist due to the potential to under-estimate various cost items including: capital expenditures, financing costs and O&M expenses. The remote locations served by AEY can result in higher than anticipated repair costs for unplanned maintenance of facilities. Also, due to the severe weather conditions that can occur in northern Canada, repair costs can deviate substantially from those forecast in operating budgets which are based on normalized weather conditions. The length of the winter period increases the probability that these severe weather conditions may be experienced.

Based on the above, and as supported by the expert evidence of Concentric, AEY faces greater business risk than the average Canadian or British Columbia benchmark utility and such that a risk premium is appropriate. As such, Concentric has determined an appropriate risk premium to be 75 basis points.

Request:
Can AEY's Yukon experience mitigate some of those operational risks? Please explain.

YUB-AEY-01-028
Reference: 2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), Figure 1, PDF page 141
Issue: Comparables

Preamble: Figure 1 lists utilities compared to AEY.

Request:

(a) Please cite the criteria used, the weightings given and any assumptions made when selecting the utilities compared to AEY.

(b) Why is PNG-West included in the list of comparables?

(c) Would other electric utilities be a stronger comparator to AEY? Please explain.

(d) Why was YEC not included in the list of comparators?

(e) For the column "Risk Compared to AEY", how were those ratings made? Were those relative risk assessments determined by Concentric? If not, please provide the source of those relative risk assessments. Please provide any quantitative evidence used to assess those ratings.

(f) For each of the utilities cited, please provide the year the ROE was determined, the corresponding decision reference from the governing regulatory authority and whether the ROE was an adjudicated result versus the product of a negotiated settlement.

(g) What has this Board previously said regarding the comparators used by Concentric for ROE determinations?

YUB-AEY-01-029

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), Figure 1, PDF page 141; PDF page 143**

Issue: **Generation risk**

Quote: As discussed later in the report, companies that generate a larger percentage of their power supply from company-owned facilities are viewed by investors and credit rating agencies as being a higher risk.

Request:

(a) Does the above quote apply to any generation level contained in a utility or significant levels of generation?

(b) Would a utility whose self-supply of load requirements consists of eight-percent generation be considered a lower risk than a utility whose self-supply of load requirements consists of 45-percent generation? Please explain.

YUB-AEY-01-030

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), Figure 1, PDF page 141; PDF pages 143-144**

Issue: **Recommended risk premium**

Quote:

PDF Page 143:

> The majority of Newfoundland Power's residential customers use electricity for space heating purposes, which increases variability in usage per customer depending on weather conditions, and the company has a weather normalization adjustment clause to account for volumetric risk due to abnormal weather conditions. Newfoundland Power's currently authorized ROE is 8.50 percent, with a deemed equity ratio of 45 percent, as compared to 40 percent for AEY.
> …
>
> Maritime Electric has an authorized ROE of 9.35 percent and a deemed equity ratio of 40 percent. Maritime Electric was allowed to implement a weather normalization variance account in its 2018 rate application, while AEY has no protection against volumetric risk.

PDF page 144:

> At a minimum, the risk premium for AEY should be set no lower than 40 basis points, which is what the BCUC has established for FortisBC Electric, an electric utility company which is much larger than AEY in terms of retail customers served and rate base, has more deferral and variance accounts and full revenue decoupling, and operates in a service territory with a stronger and more diversified economy.

Request:

(a) Is there a generally accepted trade-off between risk premium and equity thickness? If applicable, provide any quantitative analysis and cite any authoritative decisions to support your response.

(b) When a utility prepares its sales forecast, does it use normalization procedures to adjust its forecast? If so, does the use of normalization procedures reduce the variability and any related risk in the forecast?

(c) Has AEY ever requested any deferral account to mitigate volumetric risk from sales? If AEY has not made such a request, can it be interpreted as a risk AEY is willing to accept?

(d) In Appendix A to Board Order 2017-01, if the Board made its risk premium determinations for AEY relative to FortisBC (the benchmark utility) and FortisBC Electric and if AEY's relative size to the two utilities has not materially changed since Board Order 2017-01, then on what basis should the Board now give more weight to a risk premium for AEY based on size?

YUB-AEY-01-031

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence); PDF page 158**

Issue: **Risk premium for size**

Quote: Size is an important consideration for investors in setting their return requirements. According to Morningstar, investors in smaller companies typically require a higher return because returns for smaller companies are more unpredictable.

Request:

(a) Is it standard when choosing comparators to utilities to use size as the dominant criteria for assessing a risk premium for business risk? Please explain.

(b) Please file any information that shows that the returns (ROE) for small regulated electric utilities are more unpredictable.

(c) Please provide examples showing that AEY's returns (ROE) have been unpredictable. Provide AEY's returns for the last seven years.

(d) The BCUC determined and AEY previously noted from the last Stage 2 GCOC decision that an adder of 25 basis points for a risk premium recognized small size. This applied to FortisBC Whistler and PNG Tumbler Ridge. Has the BCUC released a decision that changed that recognition for small size? Why didn't Concentric use either FortisBC Whistler or PNG Tumbler Ridge as a comparator?

YUB-AEY-01-032

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), PDF page 141; PDF page 158**

Issue: **Risk premium for size**

Quote: In addition to contributing to higher investment risk, the small size of AEY magnifies the risk associated with other factors. For example, adverse economic conditions in the territory could result in the loss of a large customer or reduced demand for electricity. Under those circumstances, the small size of AEY means that the Company's fixed costs are spread across a very small customer and revenue base, making it more likely that AEY would be unable to earn its authorized ROE.

Request:

(a) The above example describes a volumetric risk. Can this risk be compensated by frequent regulatory filings or by special applications such as the YEC/YECL application when the Faro mine closed?

(b) Relatively, has size risk materially changed since AEY's last GRA? Please explain.

YUB-AEY-01-033

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), PDF page 141; PDF page 159**

Issue: **Risk premium for size**

Quote: To estimate the magnitude of the size premium, I used data from Kroll (formerly Duff and Phelps) that divides companies into deciles based on market capitalization.

Request:

(a) Does the data from Kroll only look at market capitalization?

(b) What other factors can affect the size premium for a company?

(c) What other factors affect market capitalization?

YUB-AEY-01-034

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), PDF page 141, PDF page 160**

Issue: **Generation risk**

Quote: FBC purchases approximately 55 percent of its electricity supply and generates the other 45 percent of its supply requirements through company-owned hydro facilities.

Request:

(a) FortisBC Electric generates 45 percent of its supply requirements. Does Concentric consider this a significant increase in generation relative to AEY?

(b) Please comment on whether FortisBC Electric would be considered to have higher generation risk than AEY.

YUB-AEY-01-035

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), PDF page 141; PDF page 160**

Issue: **Fuel and purchased power cost risk**

Preamble: AEY has fuel price and purchase power flow through deferral accounts, including the ability to pass on ERA charges to customers.

Request:

(a) In terms of overall business risk assessment, does fuel and purchase power cost risk have a lower weighting than size and generation risk? Please explain.

(b) Regarding fuel and purchase power cost risk, what risk is AEY exposed to?

(c) If the response to part (b) is volumetric risk, please explain and demonstrate through a numeric example how this is a risk to AEY.

(d) Relatively, has this risk materially changed since AEY's last GRA? Please explain.

YUB-AEY-01-036

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), PDF page 141; PDF page 161**

Issue: **Volumetric/demand risk**

Quote: AEY does not have regulatory protection against changes in volume/demand due to weather conditions or DSM and energy efficiency programs.

Request:

(a) In terms of determining overall business risk, please provide the relative weighting of the above-noted risk versus the risks of size, generation, fuel and purchased power risk and the other business risks evaluated in the report.

(b) Relatively, has the risk due to weather conditions materially changed since AEY's last GRA? Please explain.

YUB-AEY-01-037

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), PDF page 141; PDF page 162**

Issue: **Volumetric/demand risk**

Quote: The Company believes that the increased variability in residential use per customer is due in part to customers responding to changes in prices for alternative fuels. For example, when heating oil and propane prices are high, customers are more likely to switch to electricity for space heating. When heating oil and propane prices are lower, customers are less likely to switch to electricity for space heating. Figure 10 below shows that residential use per customer has increased since 2016 as heating oil prices have approximately doubled.

Request:

(a) Has the company filed any studies to support its determination that customers are responding to changes in prices for alternative fuels. If so, please provide those studies. If not, what is the basis for the statement?

(b) In terms of alternative fuel sources, does this mean that most homes will have duplicate sources for heat such as an oil-burning furnaces and electric space heating? Please comment.

(c) In reference to: "… when heating oil and propane prices are high, customers are more likely to switch to electricity for space heating", is this referring to new customers entering the system or existing customers retrofitting their homes? Please explain.

(d) Relatively, has the risk due to prices for alternative fuels materially changed since AEY's last GRA? Please explain.

YUB-AEY-01-038

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), PDF page 141; PDF page 164**

Issue: **Risk from alternative fuels**

Quote: In summary, AEY's residential customers respond to price signals as the relative cost of heating with electricity changes. However, this risk is difficult to quantify and likely does not have a material effect on the risk profile of AEY. It does, however, make it more difficult for AEY to accurately forecast sales, which in turn increases the variability in AEY's cash flows and earnings.

Request:

If the risk of alternative fuels is not material, why is this risk considered?

YUB-AEY-01-039

Reference: **2023-24 GRA, Section 8, Attachment 8.1 (Concentric Energy Advisors, Inc. – Evidence), PDF page 141; PDF pages 165-171**

Issue: **Changes in business risk**

Preamble: The writeup for Section B. Changes in business risk since the last GRA in the Application is surprisingly similar to that in Section B of the Concentric report in the application for AEY's 2016-17 GRA.

Request:

(a) Part 1 of Section B (weather-related risk) states that this risk has not materially changed since 2016 but adds that S&P has commented that climate change is challenging the utility industry's traditional risk management assumptions. Is this something that affects all utilities? If so, is this likely something that is considered in setting the ROE for the benchmark utility, or is this unique to AEY?

(b) Part 2 of Section B discusses power supply risk. Concentric states that this item has not materially changed since the last GRA. The fuel price deferral account has been set by an OIC. Does Concentric agree that the only way the fuel price protection for the utilities can change is by a change in legislation? Is AEY or Concentric aware of whether or not the government intends to make such a change? Please explain.

(c) Part 3 of Section B discusses competition from alternative fuels. Has this risk changed materially since the last GRA? Is this risk unique to AEY, or does it generally apply to all utilities? Please explain.

(d) Part 4 of Section B discusses government policies. Does the growth of the IPP present capacity opportunities for AEY? Please explain. Is this risk unique to AEY, or does it generally apply to all utilities? Please explain.

(e) Although IPPs may remove some generation opportunities for AEY, does the investment in batteries, storage and interconnection facilities somewhat mitigate that effect?

YUB-AEY-01-040
Reference: 2023-24 GRA, Section 8, PDF pages 130-131
Issue: Long-term debt
Quote: AEY used an average Long Canada Bond Rate and applied a spread to determine the forecast debenture rate. The forecast for Long Canada Bonds and credit spreads were based on discussions with ATCO's Treasury Department at the time of the filing.

Request:
(a) Please provide a table showing the forecast issues and spreads (long-term Canada bond rates and spreads) and then the actual issues and spreads for the years 2016 to 2022 inclusive. Include in that table the amounts, dates and final rates for the acquired long-term debt.

(b) Please provide the sources for the Long Canada Bond Rate and spreads.

(c) Please provide any updates to the forecast Long Canada Bond Rates and spreads and the date of that update.

(d) Please provide details of the amounts of long-term debt AEY intends to issue during each of the years 2023 and 2024.

YUB-AEY-01-041
Reference: 2023-24 GRA Schedules, S9.2 – Continuity of Capital Expenditures
Issue: Capital expenditures

Preamble: The Board has been unable to fully cross reference certain capital cost information between the business cases that have been provided and the information in 2023-24 GRA Schedules, S9.2 – Continuity of Capital Expenditures.

Request:
(a) For the following line no. references from S9.2, please provide a reference to the applicable business case where details supporting the capital expenditure have been provided. If no business case had been prepared for the costs at issue, please provide detail supporting the capital expenditures on the noted line no. To the extent that the information requested in this IR has been provided in response to another Board IR, please cross-reference that IR response.

i. Line No. 134 – Renewables – Old Crow (2019, $1.034 million; 2020, $1.147 million; 2021, $1.406 million; and 2022, $0.034 million);

ii. Line No. 161 – Mt. Sima Hill Service (2022, $0.413 million);

iii. Line No. 167 – YG Airport Hangar (2022, $0.562 million; 2023, $-0.030 million);

iv. Line No. 279 – AEY DWCI – New 12.5kV substation (2023, $0.025 million; 2024, $0.792 million);

v. Line No. 282 – AEY Nisultlin Bridge Pole Relocation (2023, $0.380 million; 2024, $0.165 million)

vi. Line No. 315 – Carcross Streetlights (2017, $0.429 million; 2018, $-0.024 million; 2019, $0.111 million);

vii. Line No. 322 – McIntyre Subdivision Streetlight Rebuild (2023, $0.412 million; 2024, $0.155 million);

For Line No. 322, please also explain why AEY had approved 2016-17 costs for this project ($0.175 million and $0.254 million, respectively), but no capital expenditures appear to have been incurred.

viii. Line No. 419 – Unit 136 to Replace Unit 643 Bucket Truck (2017 $0.614 million)

(b) For the following line no. references from S9.2, please provide the requested information.

i. Line No. 183 – General Pole Replacements. Please explain why historical actuals for 2016-2022 (ranging from $0.029 million to $0.112 million each year) are significantly less than approved 2016-17 yearly capital expenditures ($0.297 million and $0.284 million respectively).

Please also justify AEY's proposed increases in capital expenditure forecasts for the years 2023-24 ($0.254 million, $0.211 million, respectively) given the lower actual costs incurred in 2016-2022.

ii. Line No. 186 – General Clearance Upgrades/Fixes. Please explain why historical actuals for 2016-2022 (ranging from $0.00 million to $0.037 million per year) are significantly less than approved 2016-17 capital expenditures ($0.050 million and $0.051 million respectively).

Please also justify AEY's proposed increases in capital expenditure forecasts for the years 2023-24 ($0.084 million and $0.108 million respectively) given the lower actual costs incurred in 2016-2022.

iii. Line No. 189 – T&B Switch Change Out. Given that historical actuals for 2016-2022 range from $0.002 million to $0.036 million per year, please justify AEY's proposed increases in capital expenditure forecasts for the years 2023-24 ($0.119 million and $0.064 million respectively).

iv. Line No. 196 – McCrae Substation Second Feeder Breaker. Please provide a variance explanation for the $0.327 million difference between the actual 2016-17 costs incurred (the total of $0.608 million and $0.133 million) compared to the 2016 approved costs of $0.414 million.

v. Line No. 340 – Replacement of Meters and New Installations. Please explain why the actual capital expenditures for the years 2016-17 ($0.105 million and $0.088 million respectively) were less than the approved capital forecast for this project for the years 2016-17 ($0.199 million and $0.203 million respectively).

Please also address the Board's observation that actual capital expenses for this project continued during 2018-2022 (ranging from $0.032 million to $0.127

million) at amounts significantly less than being recovered through approved 2017 revenue requirement.

vi. Line No. 344 – General Capitalizable Transformers. Please explain why the approved 2016-17 capital expense forecast ($0.090 million and $0.091 million respectively) does not appear to have been incurred.

Please also address the Board's observation that AEY proposes capital expenditures for 2023-24 ($0.218 million and $0.275 million respectively) notwithstanding that, between the years 2016 and 2022, a total of only $0.297 million has been incurred on an actual basis for this project.

vii. Line No. 345 – Spare 10 MVA Transformer. Please explain why the approved 2016 capital expense forecast ($0.219 million) does not appear to have been incurred.

viii. Line No. 346 Spare Padmount Regulator for Shipyards Substation. Please explain why the approved 2016 capital expense forecast ($0.058 million) does not appear to have been incurred.

YUB-AEY-01-042
Reference: 2023-24 GRA, Section 9.1, Capital Additions, PDF page 173, Table 9.1 and paragraphs 2 and 3
Issue: Capital expenditures and additions
Quote:

Table 9.1: Capital Expenditures and Additions
($000)

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Actuals							Test Period	
Capital Expenditures	14,784	10,527	9,491	13,529	13,001	15,147	18,914	31,234	25,073
Capital Additions to Rate Base	12,079	8,393	11,159	9,982	11,893	11,014	15,857	34,734	31,780
Contributions	(1,241)	(2,204)	(3,212)	(5,969)	(4,220)	(5,250)	(2,529)	(10,119)	(16,431)
Net additions	10,838	6,189	7,947	4,013	7,673	5,764	13,328	24,615	15,349

Table 9.1: Capital Expenditures and Additions
($000)

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Actuals							Test Period	
Capital Expenditures	14,784	10,527	9,491	13,529	13,001	15,147	18,914	31,234	25,073
Capital Additions to Rate Base	12,079	8,393	11,159	9,982	11,893	11,014	15,857	34,734	31,780
Contributions	(1,241)	(2,204)	(3,212)	(5,969)	(4,220)	(5,250)	(2,529)	(10,119)	(16,431)
Net additions	10,838	6,189	7,947	4,013	7,673	5,764	13,328	24,615	15,349

…

3. Since the last GRA there has been significant load growth in the Yukon (approximately 40 percent increase since 2014), as a result of the rapidly increasing population. This growth has led to the need for AEY's capital program to keep up with the demand, as can be seen in the steadily increasing capital expenditures. This increase was not only required to maintain safe and reliable service but also to strengthen and grow the power system as the demand continues to rise.

Preamble: In paragraph 2, AEY explains that its actual capital additions for the years 2016-17 ($12.079 million and $8.393 million, respectively) were overall less than the approved amounts ($13.823 million and $12.059 million[3] respectively) "due to the timing of a number of projects which were completed in subsequent years." Further, the Board notes in Table 9.1 that for all years 2018 to 2021, AEY continued to have capital additions that were lower than approved for 2016, notwithstanding its assertion, as quoted above, of a need to strengthen and grow the power system.

Request:

(a) Given that AEY's actual capital additions in each of the years 2016 to 2021 have been lower than its approved 2016-17 capital additions, please explain in detail the basis for AEY's claim that it actively managed its capital program to keep up with the significant load growth since 2014.

(b) Given the large increases in capital expenditures and capital additions forecast for 2023-24, can AEY explain in detail how it will be able to complete all the capital work it has set out for itself given the significantly lower amount of capital work completed in the previous seven years?

YUB-AEY-01-043

Reference: **2023-24 GRA, Section 9.1, Capital Additions, PDF pages 173, paragraph 2, PDF page 174, paragraph 5 and PDF page 181, paragraph 22**

Issue: **Capital additions**

Quote: 2. In this Section, AEY is seeking Board approval of the 2016-2022 actuals on a final basis and approval of its forecasts for 2023 and 2024 additions. Overall, the 2016 and 2017 actuals were below the approved additions mainly due to the timing of a number of projects which were completed in subsequent years.

…

5. … and Business Cases are provided for significant upcoming projects where certain un-capitalized costs are forecast in the Test Period but capitalized expenditures are forecast subsequent to the Test Period.

…

[3] AEY 2016-17 GRA schedules – compliance filing, Schedule 8.6.

22. AEY is providing an additional set of Business Cases for capital projects which will not result in capitalized costs during the Test Period, but which are forecast to result in certain un-capitalized costs during the Test Period [or in the years 2016 to 2022] as well as large capital expenditures subsequent to the Test Period. AEY has included these Business Cases in the Application even though costs incurred during the Test Period will not be capitalized, in an effort to be transparent and to notify the Board and other stakeholders regarding larger upcoming capital expenditures. For the purposes of this Application, AEY is seeking Board approval for the un-capitalized costs forecast during the Test Period that are associated with these projects. Any capital expenditures forecast to occur subsequent to the Test Period will remain subject to the Board's review and oversight in a future GRA proceeding.

Preamble: It is not clear to the Board what type of expenditures are being referred to in the above quote.

Request:

a) Referring to paragraph 5 quoted above, please clarify if AEY's reference to "significant upcoming projects where certain un-capitalized costs are forecast in the Test Period but capitalized expenditures are forecast subsequent to the Test Period" is intended to describe capital expenditures to be accumulated in construction work in progress for projects that will not be recorded as a capital addition until after 2024. If not confirmed, please explain fully.

b) Referring to paragraph 22 quoted above, please confirm that AEY is requesting that the Board approve capital cost expenditures that do not yet qualify as a used and useful asset. Please explain whether it/this? conforms with the Board's mandated requirement to test the prudence of AEY's capital asset additions.

YUB-AEY-01-044

Reference: **2016-17 Business Case #02 – Fish Lake Ditch 1 Failure, PDF page 10, paragraphs 5 and 8**

Issue: **Capital expenditures (Generation)**

Quote: 5. A new structure has been designed with additional loading constraints and non-frost susceptible fill will be used surrounding the spillway. The upgraded structure (betterment) costs will be borne by AEY, while like-for-like costs will be borne by insurance less a $100,000 deductible.

…

8. The project took 12 weeks to complete and cost $262,000, net of the insurance proceeds.

Preamble: In the referenced business case, AEY explains that betterment costs will be borne by AEY, while like-for-like costs will be borne by insurance. AEY further states that the cost of the Fish Lake Ditch 1 Failure was $0.262 million net of insurance but provides no further information respecting the insurance claim and the costs at issue.

Request:
Please provide further detail identifying the project costs "borne by AEY" and those recovered through an insurance claim. In the response, please clarify whether the betterment costs are for AEY shareholders or ratepayers. Please also confirm that this business case and the betterment costs are specific to the Fish Lake Ditch 1 Failure project alone. If not confirmed, please explain fully.

YUB-AEY-01-045

Reference: **2023-24 GRA, Section 9, PDF page 174; AEY 2016-17 GRA Compliance Filing, Schedule 9.2, PDF page 54**

Issue: **Capital Expenditures – Generation**

Preamble: In AEY's 2016-17 GRA compliance filing, AEY submitted forecast generation plant expenditures of $2,529,000 for 2017. Actual capital expenditures for generation were $963,000 in 2017.

Request:
(a) Please explain the variance of this item for both 2016 and 2017.

(b) What work was undertaken in 2017?

(c) Please list all projects included in the 2017 forecast for generation capital expenditures.

(d) Please explain what happened to the forecast but incomplete generation projects for 2017.

YUB-AEY-01-046

Reference: **2023-24 GRA, Section 9, PDF page 174; Schedule 9.2**

Issue: **Capital Expenditures – Generation**

Quote: To support this capital spend, AEY has provided Business Cases related to capital expenditures as follows: Business Cases are provided for 2016-17 where variances from actual to approved were both greater than 100 percent and greater than $100,000; Business Cases are provided for capital expenditures in 2018-2022 that exceeded $100,000; Business Cases are provided for projects planned to be undertaken in 2023-24 where capital expenditures are forecast to be $500,000 or greater; and Business Cases are provided for significant upcoming projects where certain un-capitalized costs are forecast in the Test Period but capitalized expenditures are forecast subsequent to the Test Period.

Preamble: The Board requires a cross-reference between the projects listed in Schedule 9.2 and the business cases provided by AEY.

Request:

(a) Please insert an additional column in Schedule 9.2 providing the business case reference to each of the line items in that schedule.

(b) Please provide a business case regarding all Old Crow plant work (Schedule 9.2 lines 56-69), the Louise Lake Auxiliary Structure Replacement (Schedule 9.2 line 110) and Fish Lake projects (Schedule 9.2 - lines 2-24).

YUB-AEY-01-047

Reference: **2023-24 GRA, Business Case #07 – Replace Watson Lake Generating Units, PDF pages 17-24**

Issue: **N-1-1**

Quote: AEY employs a risk management principle that generating facilities on isolated community grids must have sufficient capacity to meet their peak load despite the loss of one operating unit while another unit is undergoing maintenance (N-1-1 criteria). The capacity that can be met under this N-1-1 criterion is known as the facility's Firm Capacity.

…

Based on this recommendation along with operational experience, AEY believes it is more cost effective and secure to replace these three units rather than overhaul the units with a significant risk that the life extension provided will not last long enough for operations to recover the investment nor provide sufficient reliability for continuing operations.

…

AEY has observed marginal improvements after a major overhaul in operation and reliability of 1200 RPM generating units operating passed the 100,000-hour mark.

Request:

(a) How long has the stated criteria/risk management principle (N-1-1) been in place?

(b) Has the Board previously approved this principle? If so, please provide the reference citing the Board Order and reasons showing this was accepted by the Board.

(c) Please provide a copy of the policy (N-1-1) to which this principle applies.

(d) Please provide the economic analysis regarding the decision to overhaul or replace the Watson Lake generation units.

(e) For each of the Watson Lake units replaced in Business Case #07, provide the availability of each unit for each of the three years prior to replacement and the percentage of that availability that was utilized.

(f) Would other units that operate at a different RPM level be more efficient? Please explain.

(g) Please explain why Watson Lake #5 underwent a major overhaul in 2022 and not a replacement. Please provide your economic analysis.

(h) Since 2018, has AEY put out for tender all work related to either replacement or major overhauls of generation units? Please explain.

YUB-AEY-01-048

Reference: **2023-24 GRA, Business Case #35 – ArcticPharm Yukon's Independent Power Production (IPP) Site, PDF pages 135-137**

Issue: **Customer contribution**

Quote: This is a fully contributed Customer-Driven Interconnection Project. AEY has an obligation to serve customers in (sic) with electrical supply.

Request:

(a) Please confirm that this project will have no net impact on AEY rate base or revenue requirement. If not confirmed, then please explain any impact.

(b) Who is responsible for costs that exceed budget/forecast for the IPP projects? Please explain.

YUB-AEY-01-049

Reference: **2023-24 GRA, Business Case #35 – ArcticPharm Yukon's Independent Power Production (IPP) Site, PDF pages 135-138; 2023-24 GRA, Business Case #36 – Haeckel Hill Customer Connection, PDF pages 139-143**

Issue: **Capital expenditures (New Extensions-IPP)**

Quote:

PDF page 136:

2. ArcticPharm has signed an Electricity Purchase Agreement (EPA) with Yukon Energy Company (YEC), and YEC has directed AEY to complete the required upgrades. AEY's customer for this project is YEC.

PDF page 140:

2. EHLP has signed an Electricity Purchase Agreement (EPA) with YEC, and YEC has directed AEY to complete the required upgrades. AEY's customer for this project is YEC.

Request:

(a) For each of the referenced business cases, please explain the nature of YEC's direction to AEY to complete the required upgrades?

(b) For each of the referenced business cases, please explain if AEY has completed the project in July 2023 as forecast. If not, please summarize the work completed to date and the revised date of completion of each project.

YUB-AEY-01-050

Reference: **2023-24 GRA, Business Case #36 - Haeckel Hill Customer Connection, PDF pages 140-142**

Issue: **Customer contribution**

Quote: This is a customer-driven interconnection project. AEY has an obligation to serve customers in the City of Whitehorse with electrical supply. This (sic) a fully customer contributed project.

Request:

Please confirm that this project will have no net impact on AEY rate base or revenue requirement. If not confirmed, please explain any impact.

YUB-AEY-01-051

Reference: **2023-24 GRA, Business Case #37 – Kluane Wind Turbine Integration, PDF pages 145-146**

Issue: **Customer contribution**

Quote: This is a fully contributed customer-driven interconnection project.

Request:

Please confirm that this project will have no net impact on AEY rate base or revenue requirement. If not confirmed, please explain any impact.

YUB-AEY-01-052

Reference: **2023-24 GRA, Business Case #38 – Beaver Creek Photovoltaic Project, PDF pages 148-149**

Issue: **Customer contribution**

Quote: This is a fully contributed customer-driven interconnection project.

Request:

Please confirm that this project will have no net impact on AEY rate base or revenue requirement. If not confirmed, please explain any impact.

YUB-AEY-01-053
Reference: 2023-24 GRA, 2018-2022 Business Case #18 – New Services Overhead and Underground, PDF page 77, Table 1 and paragraph 4
Issue: Capital expenditures (New extensions)
Quote:

Project Schedule and Cost

Table 1: New Services Overhead and Underground ($000)

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Actuals							Test Period	
New Services Overhead and Underground	1,747	1,600	2,555	2,701	2,483	3,873	2,777	4,219	4,324

4. Customer driven services that are undertaken to meet customer needs. Most of these projects are fully funded. Further explanation is provided below for projects that are not fully funded where the net amount capitalized exceeds $100,000.

Preamble: It is not clear whether the amounts shown in Table 1 are net of contributions.

Request:
(a) Please clarify if the amounts shown in Table 1 are net of contributions. If confirmed, please breakdown Table 1 into rows which will show the total costs, the contribution amount received and the net amount. If not confirmed, please insert a row below Table 1 to provide the total contributions received for AEY's New Services Overhead and Underground.

(b) Referring to Table 1, given the significant increases in capital expenditures forecast for 2023-24 in comparison to the work completed in the prior years, please explain how AEY plans to complete the work associated with this project. Please include an explanation addressing how AEY will prioritize the work associated with this project if faced with competing deadlines from other projects it has asserted are equally or more critical.

YUB-AEY-01-054
Reference: 2023-24 GRA, 2016-17 Business Case #01 – McIntyre Subdivision Rebuild Capital, PDF pages 1-7; 2023-24 GRA Schedules, S9.2, Line No. 191
Issue: Capital expenditures (Distribution Improvement)

Request:
(a) Please explain why the approved 2016-17 forecast capital expenditures shown on S9.2, Line No. 191 ($0.564 million and $0.924 million respectively) do not match approved 2016-17 forecast capital expenditures shown in BC#01, Table 1, for the same years ($0.740 million and $1.186 million respectively).

(b) Please prepare an actual-to-approved variance analysis for the years 2016-17 using the approved 2016-17 forecast capital expenditures shown on S9.2.

(c) Please explain why the 2023-24 forecast capital expenditures shown on S9.2 ($0.109 million and $1.244 million respectively) do not match the capital expenditures shown in BC#01, Table 3, for the same years ($0.521 million and $1.399 million respectively).

(d) Please prepare a life-to-date summary table (2013-2025) for the project and provide the actual capital expenditures incurred each year and the applicable forecast. Please confirm that all costs identified in the summary table remain in "construction work in progress". If not confirmed, please explain. Where applicable for a given year, please identify any costs that were the result of project scope changes.

YUB-AEY-01-055

Reference: **2023-24 GRA, 2016-17 Business Case #03 – 400 Amp Regulators in Logan Substation; 2023-24 GRA Schedules, S9.2, Line No. 214**
Issue: **Capital expenditures (Distribution Improvements)**

Request:
Please provide a variance explanation for the increase in costs from those approved ($0.122 million) and the actual costs ($0.174 million) incurred.

YUB-AEY-01-056

Reference: **2023-24 GRA, 2018-2022 Business Case #12 – Annual right of Way Widening, PDF page 52, paragraph 5; 2023-24 Business Case #26 - Annual Right-of-Way (ROW) Widening, PDF page 83, paragraph 5**
Issue: **Capital expenditures (Distribution Improvements)**
Quote: Currently, AEY does not use any herbicide applications.

Request:
Please explain whether AEY has explored the use of herbicides for its required brushing work. If so, please provide any qualitative and quantitative cost-benefit analysis that was conducted during AEY's research respecting the use of herbicides. If not, please explain why.

YUB-AEY-01-057

Reference: **2023-24 GRA, 2018-2022 Business Case #15 – Line Moves in Highway ROW, PDF page 67, paragraph 4**
Issue: **Capital expenditures (Distribution Improvements)**
Quote: YK 1045669 AEY Powerline Relocation YG Alaska Hwy Crestview Phase 1 of 2;

- 25 kV relocate in Phase 1.
  - Phase 2 was deferred due to YG roadwork delay.

Request:
Please clarify if Phase 2 has been completed and, if so, provide a reference to where all relevant information respecting this project has been provided in AEY's GRA.

YUB-AEY-01-058

Reference: **2023-24 GRA, 2018-2022 Business Case #16 – Dual Rated Transformer Upgrade, PDF pages 69-72, paragraph 2; 2023-24 GRA Schedules, S9.2**

Issue: **Capital expenditures (Distribution Improvements)**

Quote: This is a part of a larger long-term plan to modernize the electrical supply and increase capacity of the system in downtown Whitehorse. This project was initially contemplated in 2013 but due to slower than anticipated load growth it was deferred. It was revisited within the 2016-17 GRA and is an action item identified in appendix 9 to that filing.

Preamble: The Board is unable to confirm costs associated with this business case in AEY's 2023-24 GRA Schedules, S9.2.

Request:

(a) Please provide line number references to where the costs (2016-17 approved, 2016-2022 actual and 2023-24 forecast) for this project are reflected between the years 2016-2024 within GRA Schedules, S9.2.

(b) Please clarify if AEY received approval for the costs for this project as a part of the revenue requirement in a GRA, when it was "initially contemplated in 2013".

YUB-AEY-01-059

Reference: **2023-24 GRA 2023-24, Business Case #25 – New Substations - Mayo Road and Whistle Bend, PDF pages 67-81, paragraph 5**

Issue: **Capital expenditures (Distribution Improvements)**

Quote: Two new substations will be built to support the North 25 kV system. The first – Mayo Road substation – will be near the intersection of Klondike Highway North and Takhini Hot Springs Road. The second – Whistle Bend 2 Substation – will be in the Northwest corner of the Whistle Bend community.

Preamble: The Board requires further detail for Business Case #25.

Request:

(a) AEY's business case forecasts the construction of two substations within a period of less than three years. Please provide a detailed construction timeline noting all approvals required by any person(s) or governmental body(ies) aside from the Yukon Utilities Board in order to proceed with the project at a given stage of the timeline.

(b) Please provide the comparative cost-benefit analysis prepared for each alternative, including the analysis of "previously completed substation projects and the main expected costs for each design."

(c) Please explain AEY's plans for material sourcing and availability with respect to these two substation projects. Please include in the response any unit and unit cost detail currently available by major material component (e.g., transformers, regulators, switches, land, etc.).

(d) Please provide a historical timeline (both forecast and actual timelines achieved) for the construction of AEY's last substation project build.

YUB-AEY-01-060

Reference: **2023-24 GRA, Business Case #29 – Old Crow Voltage Improvement, PDF pages 91-97, paragraph 2**

Issue: **Capital expenditures (Distribution Improvements)**

Quote: During a 2021 system study for the addition of a new health center and 10 plex in Old Crow, it was noted that, after the addition, the voltage would drop below acceptable levels (0.95 p.u.).

Table 1: Voltage Level Analysis

Existing Worst Case Voltage Levels	Va	Vb	Vc
(p.u.)	0.914	0.921	0.933

Preamble: In tables 3 and 7 of this business case, AEY provides existing conditions and worst voltage A, B and C under various alternative solutions. Only Table 7 indicates an existing voltage that is below the acceptable level (0.95 p.u.).

Request:

(a) Please substantiate AEY's claim that the Old Crow Voltage Improvement project will resolve any existing voltage below the acceptable level (0.95 p.u.) by providing further information addressing the Board's observation.

(b) Please provide the comparative cost-benefit analysis prepared for each of the seven alternatives examined.

YUB-AEY-01-061

Reference: **2023-24 GRA, Business Case #30 – 6L19 Voltage Improvement, PDF pages 98-118**

Issue: **Capital expenditures (Distribution Improvements)**

Request:

Please provide the comparative cost-benefit analysis prepared for each of the seven alternatives examined.

YUB-AEY-01-062

Reference: **2023-24 GRA, Business Case #31 – Whistle Bend Subdivision, PDF pages 119-122, paragraph 2; 2023-24 GRA Schedules, S9.2**

Issue: **Capital expenditures (Street and Sentinel Lighting)**

Quote: This is new construction and is fully contributed other than the Board approved $1,240 per street light.

…

Project Schedule and Cost

Table 1: Project Costs and Schedules ($000)

Description	Completion	Distribution Cost	Streetlight Cost
Stage 3D + 3E	2019	567	214
Stage 4	2019	1,910	551
Stage 4D	2020	N/A	159
Stage 5	2020	944	344
Stage 6	2023	718	50
Stage 7A	2023	352	86
Stage 8	2022	140	103
Stage 7B	2023	460	301
Stage 9A	2024	683	186
Stage 9B	2025	458	147

Preamble: The Board requires further detail respecting the "Distribution Cost" and the contribution amounts.

Request:

(a) Referring to Business Case #31, Table 1 (PDF page 121), please reference where the 2019 Street light Cost of $0.214 million for Stage 3D and 3E can be found on 2023-24 GRA Schedules, S9.2.

i. If the response to part (a) indicates Line No. 310 under the years 2019 and 2020 ($0.166 million and $.048 million respectively), please identify the business case associated with all other amounts on Line No. 314.

ii. If the response to part (a) refers to some other line no. on S9.2, please explain any variance between the amount shown on the line no. identified in part (a) and the amount of $0.214 million.

(b) Referring to Table 1 as quoted above, please explain where the amounts shown under the column "Distribution Cost" can be found on AEY's 2023-24 GRA Schedules, S9.2.

(c) Please revise Table 1 to include columns indicating the quantum of units and the total contributed amounts for each of the lines that indicate each of the 10 stages.

(d) Please provide a citation to the "Board approved $1,240 per streetlight" referenced by AEY in the quote above.

YUB-AEY-01-063
Reference: 2023-24 GRA, Business Case #34 – Yukon Government Robert Campbell Highway Streetlights, PDF pages 131-134; 2023-24 GRA Schedules, S9.2
Issue: Capital expenditures (Street and Sentinel Lighting)

Request:
Referring to the Business Case #34, Table 1 (PDF page 132), please reference where the street light project costs of $0.907 million ($0.350 million – Material; $0.557 million - Labour) can be found on 2023-24 GRA Schedules, S9.2.

YUB-AEY-01-064
Reference: 2023-24 GRA, Section 9.5, Streetlights, PDF pages 177; Schedule 9.2
Issue: Street lights

Preamble: The Board requires further information concerning street lights.

Request:
(a) Please provide the capital spend to date (2023) on the new customer, McIntyre, and Whistle Bend Streetlight installation projects.

(b) For New Customer Streetlight Installations (Schedule 9.2 line 311), please explain the material increase in forecast expenditures for 2023 over 2022.

(c) Are there offsetting customer contributions for any of the street light installations? If so, please provide the amount of customer contributions.

YUB-AEY-01-065
Reference: 2023-24 GRA, Section 9.6, Meters, PDF pages 177; Schedule 9.2
Issue: AMI meters

Preamble: The Board requires further information concerning the AMI project.

Request:
(a) Please provide the business case regarding the AMI project.

(b) Please provide the spend to date regarding AMI meters.

YUB-AEY-01-066
Reference: 2023-24 GRA, Sections 9.7 and 9.9, General Property Plant and Equipment, PDF pages 178 and 179-180; Schedule 9.2
Issue: Business Cases

Preamble: The Board requires further information.

Request:

(a) From Schedule 9.2, Line No. 370 (Old Crow bunkhouse replacement), please provide the business case for this project.

(b) From Schedule 9.2, Line No. 407 (Sales force), please provide the business case for this project.

(c) From Schedule 9.2, Line Nos. 353 and 408 (My Account - Technology Project and My Account Enhancements - AEY respectively), please demonstrate the efficiency gains and any cost savings since implementation.

(d) In reference to part (c) of this request, since ATCO has cancelled its contract with Wipro, how is this program being managed?

(e) Please explain the significant increase in forecast expenditures for Miscellaneous Tools and Instruments for 2023.

(f) For Satellite Radios (Line No. 384) in 2022, please provide the economic analysis relative to Alternative 1 (Business Case #14, PDF page 64).

(g) Please explain the forecast increase in AEY SCADA Upgrades (Line No. 383) for 2024.

YUB-AEY-01-067

Reference: 2023-24 GRA, Sections 9.7 and 9.9, General Property Plant and Equipment, PDF pages 178 and 179-180; Schedule 9.2.; Business Case #22, PDF pages 2-6

Issue: ATCO CIS Replacement

Preamble: The Board requires further information.

Request:

(a) What is the expected life of the replacement system?

(b) Is the replacement system a licensed product?

(c) If the replacement system is a licensed product, what do the capital costs represent?

(d) Will AEY have ownership for those capital costs attributed to it? Please explain.

(e) Please explain how increasing demands of electrification and renewable technologies affect the complexity of the billing system.

(f) Please provide the economic analysis that demonstrates that this ATCO CIS Replacement is the lowest cost option.

(g) AEY's parent company is transitioning away from the use of CIS; how were charges to AEY (both capital and operating) determined?

YUB-AEY-01-068
Reference: 2023-24 GRA, Sections 9.7 and 9.9, General Property Plant and Equipment, PDF pages 178 and 179-180; Schedule 9.2.; Business Case #24, PDF pages 13-16
Issue: Asset Management

Preamble: The Board requires further information.

Request:
(a) Table 1 from the BC#24 (PDF page 14) lists five categories where AEY is compared to a peer group. For each of the categories, please describe how AEY has failed to meet any reliability measures, where customer service has been negatively impacted or where AEY has incurred additional costs because it did not implement this Asset Management Program.

(b) The Evaluation of Viable Alternatives (PDF page 15) states: "The Alternative is Status Quo, which will not address any of the issues identified in the METSCO report and will lead to AEY falling further and further behind its peers." Is the appropriate measure where AEY ranks relative to other utilities or is it the level of service AEY provides to its customers? Please explain.

YUB-AEY-01-069
Reference: 2023-24 GRA, Section 10, Schedule S10.1, Line No. 30
Issue: Income taxes

Request:
(a) Are the deductible items and amounts for income tax purposes largely up to the discretion of management? Please explain.

(b) What is "ES&G & Other Deductible Costs"?

(c) How are actual ES&G & Other Deductible Costs determined?

(d) How are ES&G & Other Deductible Costs forecast?

(e) Does the "ES&G" portion of "ES&G & Other Deductible Costs" follow capital expenditures? That is, as capital expenditures increase, so would ES&G costs increase?

(f) If the "ES&G" portion of "ES&G & Other Deductible Costs" follow capital expenditures, should the they increase with the projected capital expenditures for each of the test years 2023 and 2024? Please explain.

(g) For the years 2016 and 2017, please explain why the actual deductible amounts for ES&G & Other Deductible Costs are higher than the approved amounts for that line item.

(h) If actual income tax expense is lower than forecast, is that a benefit to the shareholder?

YUB-AEY-01-070

Reference: **2023-24 GRA, Section 11, Prior Board Directions, PDF pages 11-12, 184-185 and 191**

Issue: **AEY response to Board Order 2017-01, Appendix A, dated April 27, 2017, Direction No. 16, paragraph 278**

Quote:

GRA, PDF page 184-185:

Direction No. 16, Reference: Paragraph 278

Considering the above and AEY's submission that it files KPI reports on an annual basis, the Board directs AEY to file on the record of its next GRA, the KPI reports that have been filed with the Board after the record closed in this proceeding. The Board further directs AEY, in its next GRA, to include with the list of improvement projects the reasons for the system deficiency — supported by the KPI filings — that form the basis of the project and the resulting costs. Moreover, AEY is directed to provide a sample report referred to in the quotation above in its next GRA, and to point out and clarify the project expectations — i.e. the expected system performance improvement(s) — that AEY expects will be affirmed by future KPI filings. (Emphasis added)

Request:

(a) For the five most costly improvement project business cases submitted by AEY in its GRA, please provide references for each project to where AEY has included "the reasons for the system deficiency — supported by the KPI filings — that form the basis of the project and the resulting costs."

(b) For each project (Preventative System Performance, Note 1, and Corrective System Performance, Note 2) identified in Section 11 – Attachment 11.2, Direction No. 16, Reference: Paragraph 278, please provide a reference to the applicable business case number from those submitted by AEY in its 2023-24 GRA and also the corresponding line no. on GRA Schedule S9.2 for that project.