ATCO Electric YUKON

September 28, 2023 AEY-YUB-001

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.
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> 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.
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> 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.

Response:

(a) In general, AEY follows International Financial Reporting Standards as well as US Generally Accepted Accounting Principles for regulatory accounting practices for Adjusted Earnings. Income taxes are in accordance with legislation under the Income Tax Act. Please refer to AEY-YUB-001(a) Attachment 1 for internal accounting policies.

(b) Please refer to AEY-YUB-001(b) Attachment 1.

(c) This is a change in mechanics for accumulating and allocating fringe benefit costs. It does not change how such costs are managed and reviewed, nor does it affect the accounting outcome. In prior practices, fringe benefit costs were accumulated in a Fringe Benefit Pool and allocated to capital and O&M, based on the determined fringe rates.

AEY continues to accumulate fringe costs and allocates these costs to O&M and Capital, based on pre-determined fully loaded labour cost rates. The fringe costs continue to be approved and reviewed through accounts payable controls and processes and are reviewed annually to ensure these costs have been appropriately allocated. The fully loaded labour rates are also reviewed annually, and any required rate changes administered to the system, are reviewed and approved by the appropriate levels in the organization.

(d) The shift to Standard Labour Rates enables AEY to forecast labor costs at a less granular level with reasonable accuracy and has streamlined the review process, since the rates are applied across job classes, as opposed to at the individual employee level. Standard Labour Rates also improves the overall efficiency of the forecasting process and aligns with AEY's strategy to minimize burdensome customization of its IT systems.

Standard Labour Rates are reflective of the total cost of an employee and enable better project estimates, as components of labour costs are not missed when looking at fully loaded costs. In addition, this process protects the privacy of AEY's employees and enables broader access to labour information across the organization as it is not employee specific. AEY has not been negatively impacted by tracking these costs in a single account, as opposed to the old practice of tracking labour costs across various accounts.

(e) AEY and its affiliates have worked closely with their external auditors in determining the appropriate accounting treatments as more software applications are shifting towards cloud-based platforms as opposed to older on-premises applications. AEY accounts for these costs under the guidelines of IFRS accounting standards, specifically under IAS 38 (Intangible Assets) paragraph 68 which stipulates:

> Expenditure on an intangible item shall be recognized as an expense when it is incurred[1]

The accounting guideline goes on to provide further clarification:

> In the case of the supply of good, the entity recognizes such expenditure as an expense when it has a right to access those goods. In the case of the supply of service, the entity recognizes the expenditure as an expense when it receives the services.[2]

Ongoing license costs for cloud-based applications are akin to subscription costs and allow the licensee access to the platforms owned by providers, such as Oracle or IBM. AEY and its audit firm have interpreted the expensing of these costs in the year they are incurred to be the appropriate accounting treatment.

(f) Please refer to AEY-YUB-001(f) Attachment 1.

(g) The process for recording contributions in aid of construction initially involves recognizing contributions received during the project as part of work in progress. Upon project completion, these contributions are capitalized and then removed from contribution work in progress and added to net property, plant, and equipment, once capitalized contributions are depreciable.

1 IAS 38, para.68.
2 IAS 38, para.69.

(h-i) AFUDC is accumulated in projects that are in work in progress (WIP) based on the weighted average cost of capital (WACC) applied to balances in WIP.

Under the previous methodology for determining rate base and the funds used during construction, the customer contributions received for projects not yet in service were applied to rate base, reducing the balance required for short term debt and equity financing until the related capital was in service. The related capital costs included in WIP accumulate funds used during construction, as the customer contribution received is funding rate base, not the related capital work in progress.

The proposed methodology, which is consistent with the methodology approved by the Alberta Utilities Commission, removes customer contributions included in WIP from rate base and instead applies the funding directly to the related capital work during construction. Under this methodology, customer contributed capital would not accumulate funds used during construction.

Please refer to AEY-YUB-001(h) Attachment 1 for an illustrative example of both methodologies assuming a $1.0 million fully contributed project that is 75 percent complete in Year 1 and in-service in Year 2.

Due to the volume of customer contributed work within the Test Period, AEY's proposal increases revenue requirement for the Test Period, but decreases cumulative revenue requirement over the life of the contributed capital assets. Please refer to the table below:

Table 1: Impact of Excluding Contribution Work In Progress from Rate Base ($000)

	Per 2023-2024 GRA		**Previous Methodology**	
	2023	2024	2023	2024
Capital Revenue Requirement	14,820	17,174	14,420	16,297
Cumulative Incremental AFUDC	-	-	600	1,103

This policy is intended to describe the accounting treatment involved in the capitalization of fixed assets.

Note that transition to International Reporting Standards (IFRS) on January 1, 2010 resulted in significant changes to revenue recognition and treatment of rate-regulated assets and liabilities. As a result, ATCO Electric Yukon now applies certain accounting policies to its financial statements for IFRS reporting and in some cases another policy for regulatory reporting and rate-making purposes. Where accounting treatment differs between the two measures, these are identified below.

1) Fixed Asset

A unit of property which can be physically identified and has a useful life in excess of one year. The value of the assets should include any non-recurring costs which are relative to its creation. Included in the cost of a fixed asset would be materials, direct and indirect labour, expenses, fringe benefits and an appropriate proportion of administrative overhead. For IFRS reporting purposes, the value of the asset will include interest capitalized during construction; whereas for Regulatory purposes the value of the asset will include an allowance for funds used during construction. The total cost of the asset is significant, relative to the total capital cost of the particular asset. In the case of new assets, the cost must exceed $300.

2) Capital versus O&M Expenditures

3) Capital

An expenditure is capital in nature if it involves: constructing or purchasing a new asset or upgrading it, rehabilitating or replacing an existing asset.

a. Constructing or purchasing a new asset

i. Outright purchase of fixed assets, such as land, a building, a vehicle, machinery, standby equipment, office furniture, etc.

ii. The entire cost of constructing new additions to physical assets such as transmission lines, substations, etc.

iii. All startup and commissioning costs

b. Upgrade existing assets

i. An enlargement of existing structures or facilities

ii. To increase the capacity of an existing asset

iii. A substantial improvement in the facility affecting quality of output or reduces operating costs

c. Rehabilitate existing assets

ii. To ensure achievement of life of an asset

iii. To extend the life of an asset beyond its normal service life

d. Replace existing assets

i. The substitution of new for existing facilities that are worn out, irreparably damaged, or have become inadequate in service.

ii. The substitution having substantially no greater capacity than the facility for which it is substituted.

4) Operation and Maintenance

a. Operational Expense

i. The cost of labour, expense and consumable materials used to start up or turn on a system and monitor its operations.

b. Maintenance Expense
   i. The cost of labour, materials and expense to keep all parts of the system in a safe operating condition.

This policy is intended to describe the accounting treatment involved in the retirement of the Company's fixed assets when they have been replaced and/or removed from service, sold, decommissioned or destroyed due to accident.

Note that transition to International Reporting Standards (IFRS) on January 1, 2010 resulted in significant changes to revenue recognition and treatment of rate-regulated assets and liabilities. As a result, ATCO Electric Yukon now applies certain accounting policies to its financial statements for IFRS reporting and in some cases another policy for regulatory reporting and rate-making purposes. Where accounting treatment differs between the two measures, these are identified below.

Topics and Definitions

1) Fixed Asset

A unit of property which can be identified and has a useful life in excess of one year. The value of the assets should include all costs necessary to bring the asset to work condition for its intended use.

2) Cost of Retirement

The cost incurred to retire facilities from service and is comprised of the expenditures involved to disassemble and transport the assets.

IFRS – Amounts collected from customers in rates are recorded as revenue in the period these amounts are billed. Actual costs of retirement incurred are recorded as O&M in the period incurred.
Regulatory – An allowance is built into the monthly depreciation expense to allow for the cost of retiring an asset. Therefore, these costs do not constitute a capital expenditure but rather should be charged to the accumulated depreciation – net salvage pool.

3) Gross Salvage

Gross salvage represents the value of material recovered from the asset retired or sale proceeds if sold.

IFRS – Gross salvage is recorded as an offset to cost of retirement expense in the period received/receivable.

Regulatory – Gross salvage is applied to accumulated depreciation – net salvage.

4) Normal Retirements

In the normal course of business and under the mass/group property accounting process, assets are deemed to be fully consumed for utility services and therefore fully depreciated upon retirement. Gains or losses are not recorded on ordinary course retirements. 100% of the original cost value of the asset being retired is removed from the fixed assets cost and accumulated depreciation – life.

5) Gains or Losses on Sales

For disposal of assets outside of normal course of business, land and non-regulated assets, the difference between the net book value (original cost less accumulated depreciation - life) plus cost of disposal and the disposal proceeds is accounted for as gain or loss in the statement of earnings.

6) Retirement Methods

a) Deflation Values
For some assets, the original cost is not readily available. In those cases, the current value of the replacement part will be deflated back using tables formulated on the Utility Handy Whitman tables and Consumer Price Indexes.

b) Original Costs

Where the historical records lend themselves to determining accurate original asset values, these will be used for retirements. This is obviously the most accurate method and is preferred if the information is available.

DEPRECIATION OBJECTIVE

ATCO Electric Yukon's depreciation objective is to allocate 100%, no more no less, of the depreciable portion of each fixed asset's capital cost to operating expense as evenly as possible; that is, on a straight line basis over the expected useful life of each fixed asset. The depreciation portion of the capitalized cost is the capitalized cost less gross salvage plus cost of retirement.

Note that transition to International Reporting Standards (IFRS) on January 1, 2010 resulted in significant changes to revenue recognition and treatment of rate-regulated assets and liabilities. As a result, ATCO Electric Yukon now applies certain accounting policies to its financial statements for IFRS reporting and in some cases another policy for regulatory reporting and rate-making purposes. Where accounting treatment differs between the two measures, these are identified below.

DEPRECIATION STUDIES

ATCO Electric Yukon conducts depreciation studies periodically to review and determine the appropriate depreciation parameters (service life and net salvage) to use in calculating depreciation rates, expense and accumulated depreciation. The recommended depreciation rates along with the supporting depreciation study are generally submitted to the Yukon Utilities Board as a component of general rate applications.

DEPRECIATION RATES

ATCO Electric Yukon's annual depreciation rates are developed using YUB approved service lives (average service life and IOWA curves) and net salvage percentages. The approved depreciation parameters are applied to account vintage surviving dollars as at the previous year-end. The depreciation rates are calculated in accordance with the Straight-Line method, the Equal Life Group procedure and applied using the Whole Life technique.

DEPRECIATION EXPENSE

Depreciation expense for an account is calculated on a monthly basis by multiplying the previous month closing account plant balance by the depreciation rate. Depreciation expense is calculated in two components: life and net salvage.

IFRS – only the life component of depreciation is booked as depreciation expense. Costs of retirement are expensed as incurred which can result in large O&M fluctuations from year to year.

Regulatory – both the life and any net salvage components, as approved by the YUB, are booked to depreciation expense. In this manner the impact of costs of retirement to the customer are smoothed. Per Board Orders 2009-2 and 2014-06, the YUB suspended collection of depreciation net salvage and currently only life depreciation is being recorded in the regulatory ledger. AEY has applied for reinstatement of collection of depreciation net salvage in this application.

AMORTIZATION OF DIFFERENCES

In each depreciation study, the book accumulated depreciation is measured against the calculated accumulated depreciation using YUB approved depreciation parameters for the study accounts by life and net salvage separately. The difference between the book accumulated depreciation and the calculated accumulated depreciation is called reserve difference. If the reserve difference for an account exceeds +/- 5% tolerance level, the difference is amortized over the composite remaining life of that account. The amortization of reserve difference is part of the annual depreciation expense and amount remains unchanged between depreciation studies.

ACCUMULATED DEPRECIATION

IFRS - Accumulated Depreciation Life is determined by adding monthly account depreciation expense – life to the previous month closing balance, subtracting account retirements and adding any adjustments recorded during the month.

Regulatory - Accumulated Depreciation Life is calculated as above for IFRS. Accumulated Depreciation – Net Salvage is similarly determined by adding monthly account depreciation – net salvage to the previous month account closing balance, adding account gross salvage, subtracting account cost of retirement and adding any adjustments recorded during the month.

CONTRIBUTION IN AID OF CONSTRUCTION

Contributions are amortized using the composite Distribution life depreciation rate.

When property, plant and equipment is retired at a location a pro rata share of any contributions at the location are also retired. That is the proportion of dollars of plant retired to dollars surviving at the location results in the same proportion of contributions retired.

IFRS – amortization of contributions is recorded as revenue and contributions in aid of construction are classified as deferred revenue.

Regulatory – amortization of contributions is recorded as a credit to depreciation expense and contributions in aid of construction are shown as part of the net book value of property, plant and equipment.

ATCO ELECTRIC YUKON ACCOUNTING POLICY MANUAL	*Reserve for Injuries and Damages*
	Date: December 1994 **Number:** E.5
PREPARED BY: **B. Packianayagam**	**APPROVED BY:** K. Trunzo
	UPDATED: September 2023

INTRODUCTION

The charges made against the Reserve for Injuries and Damages fall into two main categories. The first category is insured losses and the second is uninsured or uninsurable losses.

Insured Losses:

With respect to insured losses, the item in question must be covered by insurance. Charges against the reserve include the deductible portion of insured losses as well as any portion of the claim not paid by the insurance company.

Uninsured or Uninsurable Losses:

An uninsured loss is one where insurance coverage could have been obtained except that the exposure risk was minimal or the cost of the insurance was prohibitively high.

An uninsurable loss is one where insurance coverage was not available as a result of very high-risk exposure.

PURPOSE OF THE RESERVE

The reserve serves as a protection against uninsured and uninsurable losses and the deductible portion of insurance claims. Maintaining the reserve will mitigate rate fluctuations by smoothing out the charges to O&M with respect to these types of losses. The establishment of such a reserve provides financial advantages over paying significantly higher insurance premiums in order to reduce deductibles or to insure items which carry prohibitively high premiums.

The reserve is established for the payment of:

1. The deductible portion of insured losses including any portion of a claim not paid by the insurance company.

2. Uninsured and uninsurable losses resulting from but not limited to design error, failure to supply (blackout, brownout), professional liability and pollution liability.

ATCO ELECTRIC LIMITED **ACCOUNTING POLICY MANUAL**	***Capitalization***
	Date: December 2010 **Number:** D.1.a
PREPARED BY: K. Trunzo	**APPROVED BY:** D. Freedman

This policy is intended to describe the accounting treatment involved in the capitalization of fixed assets. Immediately following this policy, additional policies can be found which cover more specific topics.

Note that transition to International Reporting Standards (IFRS) on January 1, 2010 resulted in significant changes to revenue recognition and treatment of rate-regulated assets and liabilities. As a result, ATCO Electric Yukon now applies certain accounting policies to its publicly released financial statements for IFRS reporting and in some cases another policy for regulatory reporting and rate-making purposes. Where accounting treatment differs between the two measures, these are identified below.

1) Fixed Asset

A unit of property which can be physically identified and has a useful life in excess of one year. The value of the assets should include any non-recurring costs which are relative to its creation. Included in the cost of a fixed asset would be materials, direct and indirect labour, expenses, fringe benefits and an appropriate proportion of administrative overhead. For IFRS reporting purposes, the value of the asset will include interest capitalized during construction; whereas for Regulatory purposes the value of the asset will include an allowance for funds used during construction. The total cost of the asset is significant, relative to the total capital cost of the particular asset. In the case of new assets, the cost must exceed $300. There are numerous items (e.g. office furniture, loose tools, etc.) that are too small to capture in individual projects therefore blanket projects are utilized to capture these costs.

2) Capital versus O&M Expenditures

3) Capital

An expenditure is capital in nature if it involves: constructing or purchasing a new asset or upgrading it, rehabilitating or replacing an existing asset.

a. a. Constructing or purchasing a new asset

i. Outright purchase of fixed assets, such as land, a building, a vehicle, machinery, standby equipment, office furniture, etc.

ii. The entire cost of constructing new additions to physical assets such as transmission lines, distribution facilities, substations, etc.

iii. All startup and commissioning costs

b. Upgrade existing assets

i. An enlargement of existing structures or facilities

ii. To increase the capacity of an existing asset

iii. A substantial improvement in the facility affecting quality of output or reduces operating costs

c. Rehabilitate existing assets

i. As a general guideline, to determine if a cost falls into this category, one must consider if the expenditures were planned to be incurred at the time if purchasing the asset.

~~If the expenditures were planned at the time of purchase to occur in the future, they will be expensed to O&M when they are incurred.~~ii.

~~1. When extraordinary, material unplanned items are incurred in the future, they will be considered capital.~~

To ~~insure~~ensure achievement of life of an asset

iii. To extend the life of an asset beyond its normal service life

d. Replace existing assets

i. The substitution of new for existing facilities that are worn out, irreparably damaged, or have become inadequate in service.

ii. The substitution having substantially no greater capacity than the facility for which it is substituted.

4) Operation and Maintenance

a. Operational Expense
   i. The cost of labour, expense and consumable materials used to start up or turn on a system and monitor its operations.
b. Maintenance Expense
   i. The cost of labour, materials and expense to keep all parts of the system in a safe operating condition.

~~I. **Specific Accounting Treatment**~~

~~Following is~~

This policy is intended to describe the accounting treatment ~~of some of the more common capitalization questions which are encountered.~~

~~1) **Transformers – Capital/O&M**~~
~~All transformers 50 KVA and under will be purchased under inventory and charged to~~ involved in the retirement of the Company's fixed assets when ~~installed and if~~ they have been replaced~~, returned to inventory and credited to fixed assets. Transformers greater than 50 KVA are charged directly to fixed assets. For policy on burnouts, planned and unplanned increases and shop repairs see D.1.a.10 in this manual.~~

~~2) **Refurbishing & Installing Vehicle Service Bodies – Capital**~~
~~This expenditure is eligible because it extends the~~ and/or removed from service ~~life of an asset.~~

~~3) **First Time Painting of Street Lights – Capital**~~
~~Considered a cost of installing a street light.~~

~~4) **Switch Number Plates & Installation – Capital**~~
~~Required for the safe operation of transmission facilities.~~

~~5) **5 kV Underground Replacement – Capital**~~
~~Considered as a distribution rebuild.~~

~~6) **Brushing – Capital**~~
~~Capitalize if brushing at time of construction, first time spraying to kill remaining root system, line widening (i.e. the removal of entire trees) along right of ways for trees not previously cleared at time of construction or hazard tree removal for trees either on an existing right of way which has not been previously cleared~~, sold, decommissioned or ~~those trees outside the existing right of way~~destroyed due to accident.

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Topics and Definitions

1) **Fixed Asset**
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2) **Cost of Retirement**
The cost incurred to retire facilities from service and is comprised of the expenditures involved to disassemble and transport the assets.

IFRS – Amounts collected from customers in rates are recorded as revenue in the period these amounts are billed. Actual costs of retirement incurred are recorded as O&M in the period incurred.
Regulatory – An allowance is built into the monthly depreciation expense to allow for the cost of retiring an asset. Therefore, these costs do not constitute a capital expenditure but rather should be charged to the accumulated depreciation – net salvage pool.

3) Gross Salvage

Gross salvage represents the value of material recovered from the asset retired or sale proceeds if sold.

IFRS – Gross salvage is recorded as an offset to cost of retirement expense in the period received/receivable.

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4) Normal Retirements

In the normal course of business and under the mass/group property accounting process, assets are deemed to be fully consumed for utility services and therefore fully depreciated upon retirement. Gains or losses are not recorded on ordinary course retirements. 100% of the original cost value of the asset being retired is removed from the fixed assets cost and accumulated depreciation – life.

5) Gains or Losses on Sales

For disposal of assets outside of normal course of business, land and non-regulated assets, the difference between the net book value (original cost less accumulated depreciation - life) plus cost of disposal and the disposal proceeds is accounted for as gain or loss in the statement of earnings.

6) Retirement Methods

a) Deflation Values

For some assets, the original cost is not readily available. In those cases, the current value of the replacement part will be deflated back using tables formulated on the Utility Handy Whitman tables and Consumer Price Indexes.

b) Original Costs

Where the historical records lend themselves to determining accurate original asset values, these will be used for retirements. This is obviously the most accurate method and is preferred if the information is available.

DEPRECIATION OBJECTIVE

ATCO Electric Yukon's depreciation objective is to allocate 100%, no more no less, of the depreciable portion of each fixed asset's capital cost to operating expense as evenly as possible; that is, on a straight line basis over the expected useful life of each fixed asset. The depreciation portion of the capitalized cost is the capitalized cost less gross salvage plus cost of retirement.

Note that transition to International Reporting Standards (IFRS) on January 1, 2010 resulted in significant changes to revenue recognition and treatment of rate-regulated assets and liabilities. As a result, ATCO Electric Yukon now applies certain accounting policies to its financial statements for IFRS reporting and in some cases another policy for regulatory reporting and rate-making purposes. Where accounting treatment differs between the two measures, these are identified below.

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DEPRECIATION RATES

ATCO Electric Yukon's annual depreciation rates are developed using YUB approved service lives (average service life and IOWA curves) and net salvage percentages. The approved depreciation parameters are applied to account vintage surviving dollars as at the previous year-end. The depreciation rates are calculated in accordance with the Straight-Line method, the Equal Life Group procedure and applied using the Whole Life technique.

DEPRECIATION EXPENSE

Depreciation expense for an account is calculated on a monthly basis by multiplying the previous month closing account plant balance by the depreciation rate. Depreciation expense is calculated in two components: life and net salvage.

IFRS – only the life component of depreciation is booked as depreciation expense. Costs of retirement are expensed as incurred which can result in large O&M fluctuations from year to year.

Regulatory – both the life and any net salvage components, as approved by the YUB, are booked to depreciation expense. In this manner the impact of costs of retirement to the customer are smoothed. Per Board Orders 2009-2 and 2014-06, the YUB suspended collection of depreciation net salvage and currently only life depreciation is being recorded in the regulatory ledger. AEY has applied for reinstatement of collection of depreciation net salvage in this application.

AMORTIZATION OF DIFFERENCES

In each depreciation study, the book accumulated depreciation is measured against the calculated accumulated depreciation using YUB approved depreciation parameters for the study accounts by life and net salvage separately. The difference between the book accumulated depreciation and the calculated accumulated depreciation is called reserve difference. If the reserve difference for an account exceeds +/- 5% tolerance level, the difference is amortized over the composite remaining life of that account. The amortization of reserve difference is part of the annual depreciation expense and amount remains unchanged between depreciation studies.

ACCUMULATED DEPRECIATION

IFRS - Accumulated Depreciation Life is determined by adding monthly account depreciation expense – life to the previous month closing balance, subtracting account retirements and adding any adjustments recorded during the month.

Regulatory - Accumulated Depreciation Life is calculated as above for IFRS. Accumulated Depreciation – Net Salvage is similarly determined by adding monthly account depreciation – net salvage to the previous month account closing balance, adding account gross salvage, subtracting account cost of retirement and adding any adjustments recorded during the month.

CONTRIBUTION IN AID OF CONSTRUCTION

Contributions are amortized using the composite Distribution life depreciation rate.

~~7)~~ **When ~~Brushing – O&M~~**
~~Mowing the regrowth of trees which were previously cleared and also the second and subsequent sprayings are O&M.~~

~~8) Moving Expense – Capital/O&M~~
~~The individual's moving expenses should be allocated to capital or O&M, or a combination of both, based on the type of work the individual is doing.~~

~~9) Underground Splice Replacements – O&M~~
~~There is no increase in capacity or life extension of the primary asset.~~

~~10) Loose Tools and Office Furniture – Capital/O&M~~

The key determinant is the $300 minimum cost which will decide if an item should be capitalized or expensed.

11) Ground Rod Testing and Replacement – Capital / O&M

Testing would be charged to O&M unless it leads to immediate major site specific replacement which would qualify the costs as a major capital item. Replacement costs would be capitalized if the work order is for a major replacement done at a specific site.

12) Pole Inspection or Testing – O&M

The work involved in inspecting or testing a pole to see if treatment is required.

13) Pole Treating – Capital/O&M

Any major pole treating program involving 50 poles or more would be considered capital. Programs of less than 50 poles will be charged to O&M.

14) Temporary Generation – Capital/O&M

The cost of renting a temporary generating station to supply load in an isolated fashion to allow a line to be rebuilt would be expensed for IFRS reporting purposes. For Regulatory purposes this cost would be capitalized.

15) Gang Switch Maintenance – O&M

Since the refurbishing of gang switches involves only the replacement of insulators in the gang switch assembly, this item should be charged to O&M. The intent is to keep the switch in operating condition.

16) Substation Regravelling – O&M

The costs should be charged to O&M as the substation life is not extended, nor is the asset value increased.

17) URD Elbow & Insert Replacement – O&M

Costs should go to O&M as essentially the underground system is being maintained in operating condition.

18) Pedestal Replacement – Capital

The associated costs should be capitalized and the pedestal being replaced, retired.

19) Accreditation Manuals – Capital/O&M

The costs to initially set up the manuals should be capitalized. However a revision to the manual should be expensed.

20) Panel Upgrades – Capital

Due to capacity increases, these costs would be eligible for capital.

21) Pole Replacement – Capital/O&M

All poles replaced on a pre-planned basis due to decay should be charged to capital and the old pole and labour to install them should be retired. Poles replaced on an emergency basis due to mechanical damage by vehicles or during storms should be expensed whether or not there is some evidence of wood decay.

~~22) Pole Stubbing – Capital/O&M~~

~~Stubbing of transmission lines on a pre-planned basis should be charged to capital as the intent to increase the service life of the poles. Unplanned pole stubbing would be expensed.~~

~~23) Conductor Replacement – Capital/O&M~~

~~Replacement of a conductor on a transmission or sub transmission line would be charged to capital if the length of the line is one mile or greater (three miles for a 3 phase line) regardless of the size of the conductor being replaced. Replacement of conductors on distribution lines will be charged to capital if the new conductor is of a larger size or insulation rating compared to the one being replaced. This applies to underground, aerial spaced and overhead conductors.~~

~~24) System Spares – Capital/Inventory~~

~~The cost of spares that are designated to support specific fixed assets are initially capitalized and depreciated. If the spare part turns over on a regular basis, consideration would be given to setting it up in inventory.~~

~~25) Leasehold Improvements – Capital~~

~~Leasehold improvements are capitalized where a lease agreement is in place. It is amortized using the straight-line method over the life of the lease plus one renewal period.~~

~~26) Postponed Projects – WIP~~

~~Costs incurred to date would remain in work-in-progress and reviewed periodically for appropriateness.~~

~~27) Properties Removed From Service (i.e. not disposed of)~~

~~Original cost would remain with assets in service and depreciated until disposed of.~~

~~28) Leases – Capital~~

~~Will be capitalized depending on the terms and conditions of the lease, particularly the issue of transfer of ownership at the conclusion of the lease. The lease obligation is included with long-term debt and the original cost is included in fixed assets.~~

property, plant and equipment is retired at a location a pro rata share of any contributions at the location are also retired. That is the proportion of dollars of plant retired to dollars surviving at the location results in the same proportion of contributions retired.

IFRS – amortization of contributions is recorded as revenue and contributions in aid of construction are classified as deferred revenue.

Regulatory – amortization of contributions is recorded as a credit to depreciation expense and contributions in aid of construction are shown as part of the net book value of property, plant and equipment.

~~THE~~ATCO ELECTRIC YUKON ~~ELECTRICAL COMPANY LIMITED~~ ACCOUNTING POLICY MANUAL	*Reserve for Injuries and Damages*
	Date: ~~94-12-08~~December 1994 **Number:** E.5
PREPARED BY: ~~K. Trunzo~~B. Packianayagam	**APPROVED BY:** ~~David Freedman~~K. Trunzo
	UPDATED: ~~December 15, 2010~~September 2023

INTRODUCTION

The charges made against the Reserve for Injuries and Damages fall into two main categories. The first category is insured losses and the second is uninsured or uninsurable losses.

Insured Losses:

With respect to ~~incurred~~insured losses, the item in question must be covered by insurance. Charges against the reserve include the deductible portion of insured losses as well as any portion of the claim not paid by the insurance company.

Uninsured or Uninsurable Losses:

An uninsured loss is one where insurance coverage could have been obtained except that the exposure risk was minimal or the cost of the insurance was prohibitively high.

An uninsurable loss is one where insurance coverage was not available as a result of very high-risk exposure.

PURPOSE OF THE RESERVE

The reserve serves as a protection against uninsured and uninsurable losses and the deductible portion of insurance claims. Maintaining the reserve will mitigate rate fluctuations by smoothing out the charges to O&M with respect to these types of losses. The establishment of such a reserve provides financial advantages over paying significantly higher insurance premiums in order to reduce deductibles or to insure items which carry prohibitively high premiums.

The reserve is established for the payment of:

1. The deductible portion of insured losses including any portion of a claim not paid by the insurance company.

2. Uninsured and uninsurable losses resulting from but not limited to design error, failure to supply (blackout, brownout), professional liability and pollution liability.

~~Also, effective with events charging to the reserve after January 1, 1999, only those that are significant and of low probability shall be charged to the reserve.~~

~~All events will be considered on a case by case basis and will be reviewed and approved by the Manager, Insurance and by a representative from the company's insurance adjusters.~~

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

Continuity of Contribution in Aid of Construction
($000)

Line No.	Project Name	Cross Ref.	Actuals 2016	2017	2018	2019	2020	2021	2022	Test Period 2023	2024
1	**Renewables**										
2	Renewables - Old Crow		-	-	-	2,045	418	1,002	-	-	-
3	Kluane Wind Project	Business Case No. 37	-	-	-	-	-	-	1,952	2,056	-
4	Beaver Creek PV Project	Business Case No. 38	-	-	-	-	-	75	205	5,794	1,686
5	**Renewables Total**		**-**	**-**	**-**	**2,045**	**418**	**1,077**	**2,157**	**7,850**	**1,686**
6											
7											
8	**Generation**										
9	WL - Waste Heat Cathodic Protection		-	-	-	-	-	-	-	150	-
10	WL – Replace HRS pumps/motors		-	-	-	-	-	-	-	75	-
11	**Generation Total**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**225**	**-**
12											
13											
14	**New Extensions**										
15	New Services Overhead and Underground	Business Case No. 18	275	709	749	724	789	1,206	3,284	4,101	3,243
16	Mt Sima Pumphouse		-	-	-	-	-	175	-	-	-
17	Brookside Phase 2B		-	143	27	-	(67)	-	-	-	-
18	Schmidt, Harold & Savanah		-	-	-	115	-	-	-	-	-
19	TSL/Ketza Old Crow Health & Housing		-	-	-	-	-	210	-	-	-
20	VGFN Houses on North Rd		247	-	-	-	-	-	-	-	-
21	VoT Connector Road Subdivision		-	-	-	143	-	-	-	-	-
22	Loft 2240 2nd Avenue		-	-	-	-	-	105	-	-	-
23	Whistle Bend Stage 3	Business Case No. 31	226	337	530	223	(2)	-	-	-	-
24	Whistle Bend Stage 4	Business Case No. 31	-	455	706	805	-	-	-	-	-
25	Whistle Bend Stage 5	Business Case No. 31	-	-	-	582	360	-	-	-	-
26	Whistle Bend Stage 9	Business Case No. 31	-	-	-	-	-	-	-	870	458
27	Whistle Bend Stage 8	Business Case No. 31	-	-	-	-	-	-	-	-	-
28	Whistle Bend Stage 6	Business Case No. 31	-	-	-	-	-	-	-	-	-
29	Whistle Bend Stage 7	Business Case No. 31	-	-	-	-	-	140	-	-	-
30	Whistle Bend - Future Stages	Business Case No. 31								727	309
31	Yukon Lot 503		-	-	-	102	-	-	-	-	-
32	YG Airport Hangar		-	-	-	-	-	-	-	235	-
33	CAFN Marshall Creek Rd Subdivision, HJunction		-	-	-	-	-	-	-	-	-
34	Hammerstone Lots off Tlingit Street		-	-	-	-	24	162	-	-	-
35	New Extensions< -$20,000		304	349	442	744	740	829	462		-
36	**New Extensions Total**		**1,051**	**1,994**	**2,454**	**3,438**	**1,844**	**2,828**	**3,746**	**5,933**	**4,011**
37											
38	**New Extensions-IPP**										
39	Arctic Pharm IPP	Business Case No. 35	-	-	-	-	-	-	117	523	-
40	Sunergy YEC HJ IPP		-	-	-	-	-	-	237	340	-
41	Haeckel Hill	Business Case No. 36	-	-	-	-	-	710	1,576	-	-
42	YEC Mayo Road IPP Interconnection		-	-	-	-	-	135	9	-	-
43	Other New Ext IPP		-	-	-	-	-	-	-	-	-
44	THELP		-	-	-	-	-	233	55	-	-
45	**New Extensions - IPP Total**		**-**	**-**	**-**	**-**	**-**	**1,078**	**1,993**	**863**	**-**
46											
47	**Distribution Improvements**										
48	AEY YG Nares River Bridge		-	31	-	-	-	-	-	-	-
49	YG Toyota Access, Intersection & Frontage Road Upgrades		-	-	-	4	302	-	-	-	-
50	McIntyre Subdivision Rebuild	Business Case No. 01	-	-	-	-	-	-	-	-	155
51	Distribution Improvements< -$20,000		-	-	15	9	7	-	1	4	-
52	**Distribution Improvements Total**		**-**	**31**	**15**	**13**	**309**	**-**	**1**	**4**	**155**
53											
54	**Street and Sentinel Lighting**									-	-
55	New Customer Streetlight Installations	Business Case No. 34	167	157	162	14	874	183	295	1,285	346
56	General Streetlight Replacements		-	-	32	-	-	-	-	-	-
57	Alaska Highway North Klondike Highway Intersection		-	-	-	-	321	-	-	-	-
58	Car Cross Streetlights		-	-	316	-	81	-	-	-	-
59	Street Lights Burns Road to Range Road Intersection		-	-	-	-	-	-	142	-	-
60	YG Nisutlin Bridge Streetlights		-	-	-	-	-	-	-	83	88
61	Whistle Bend Street Lights - Stage 3		-	-	161	18	-	-	-	-	-
62	Whistle Bend Street Lights - Stage 4	Business Case No. 31	-	-	51	376	148	-	-	-	-
63	Whistle Bend Street Lights - Stage 5	Business Case No. 31	-	-	-	42	186	-	-	-	-
64	Whistle Bend Street Lights - Stage 8	Business Case No. 31	-	-	-	-	-	-	-	136	-
65	Whistle Bend Street Lights - Stage 6	Business Case No. 31	-	-	-	-	-	-	-	-	-
66	Whistle Bend Street Lights - Stage 7	Business Case No. 31	-	-	-	-	-	62	-	-	-
67	Whistle Bend Street Lights - Stage 9	Business Case No. 31	-	-	-	-	-	-	-	159	119
68	YG Lighting Stewart Crossing		-	-	-	-	-	-	-	-	-
69	Village of Carmacks Street Lights		-	-	-	-	-	-	-	-	-
70	C of W Cook St Street Lights		-	-	-	-	-	-	-	-	-
71	YG Street Lights Lodestar to Philmars Phase 1		-	-	-	-	-	-	-	-	-
72	Street and Sentinel Lights< -$20,000		23	22	21	23	39	22	28	-	-
73	**Street and Sentinel Lighting Total**		**190**	**179**	**742**	**473**	**1,649**	**267**	**465**	**1,662**	**554**
74											
75	**Grand Total**		**1,241**	**2,204**	**3,212**	**5,969**	**4,220**	**5,250**	**8,362**	**16,538**	**6,405**
76											
77	Opening Contribution Work in Progress	Note 1	**-**	**-**	**-**	**-**	-	-	-	5,833	12,252
78	Ending Contribution Working in Progress	Note 1	306	1,354	2,727	3,615	3,898	4,278	5,833	12,252	2,226
79											
80	**Contribution Additions**	Note 2	**1,241**	**2,204**	**3,212**	**5,969**	**4,220**	**5,250**	**2,529**	**10,119**	**16,431**

Note 1: Amounts from 2016 to 2021 are there for illustrative purposes, they were included in the additions each year until 2022. In 2022 , per the proposed methodology, contributions included in work in progress (WIP) were removed. 2023 and 2024 continue with this proposed methodology and a continuity of contributions in WIP is shown.

Note 2: ATCO Electric Yukon (AEY) 2023-2024 General Rate Application, Schedule 8.12, Line 3

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

Illustrative Example - Contribution Funding Relative Capital

Line No.	Assumptions:		
1	Depreciation Rate	3.00%	
2	WACC	6.50%	

Line No.		Original Cost	Accumulated Depreciation	Net Book	Mid Year	Contributions	Accumulated Depreciation	Net Book	Mid Year	Net Rate Base	Return	Depreciation	Revenue Requirement
5	Year 1	-	-	-	-	-	-	-	-	-	-	-	-
6	Year 2	1,000,000.00	15,000.00	985,000.00	492,500.00	(1,000,000.00)	(15,000.00)	(985,000.00)	(492,500.00)	-	-	-	-
7	Year 3	1,000,000.00	45,000.00	955,000.00	970,000.00	(1,000,000.00)	(45,000.00)	(955,000.00)	(970,000.00)	-	-	-	-
8	Year 4	1,000,000.00	75,000.00	925,000.00	940,000.00	(1,000,000.00)	(75,000.00)	(925,000.00)	(940,000.00)	-	-	-	-
9	Year 5	1,000,000.00	105,000.00	895,000.00	910,000.00	(1,000,000.00)	(105,000.00)	(895,000.00)	(910,000.00)	-	-	-	-
10	Year 6	1,000,000.00	135,000.00	865,000.00	880,000.00	(1,000,000.00)	(135,000.00)	(865,000.00)	(880,000.00)	-	-	-	-
11	Year 7	1,000,000.00	165,000.00	835,000.00	850,000.00	(1,000,000.00)	(165,000.00)	(835,000.00)	(850,000.00)	-	-	-	-
12	Year 8	1,000,000.00	195,000.00	805,000.00	820,000.00	(1,000,000.00)	(195,000.00)	(805,000.00)	(820,000.00)	-	-	-	-
13	Year 9	1,000,000.00	225,000.00	775,000.00	790,000.00	(1,000,000.00)	(225,000.00)	(775,000.00)	(790,000.00)	-	-	-	-
14	Year 10	1,000,000.00	255,000.00	745,000.00	760,000.00	(1,000,000.00)	(255,000.00)	(745,000.00)	(760,000.00)	-	-	-	-
15	Year 11	1,000,000.00	285,000.00	715,000.00	730,000.00	(1,000,000.00)	(285,000.00)	(715,000.00)	(730,000.00)	-	-	-	-
16	Year 12	1,000,000.00	315,000.00	685,000.00	700,000.00	(1,000,000.00)	(315,000.00)	(685,000.00)	(700,000.00)	-	-	-	-
17	Year 13	1,000,000.00	345,000.00	655,000.00	670,000.00	(1,000,000.00)	(345,000.00)	(655,000.00)	(670,000.00)	-	-	-	-
18	Year 14	1,000,000.00	375,000.00	625,000.00	640,000.00	(1,000,000.00)	(375,000.00)	(625,000.00)	(640,000.00)	-	-	-	-
19	Year 15	1,000,000.00	405,000.00	595,000.00	610,000.00	(1,000,000.00)	(405,000.00)	(595,000.00)	(610,000.00)	-	-	-	-
20	Year 16	1,000,000.00	435,000.00	565,000.00	580,000.00	(1,000,000.00)	(435,000.00)	(565,000.00)	(580,000.00)	-	-	-	-
21	Year 17	1,000,000.00	465,000.00	535,000.00	550,000.00	(1,000,000.00)	(465,000.00)	(535,000.00)	(550,000.00)	-	-	-	-
22	Year 18	1,000,000.00	495,000.00	505,000.00	520,000.00	(1,000,000.00)	(495,000.00)	(505,000.00)	(520,000.00)	-	-	-	-
23	Year 19	1,000,000.00	525,000.00	475,000.00	490,000.00	(1,000,000.00)	(525,000.00)	(475,000.00)	(490,000.00)	-	-	-	-
24	Year 20	1,000,000.00	555,000.00	445,000.00	460,000.00	(1,000,000.00)	(555,000.00)	(445,000.00)	(460,000.00)	-	-	-	-

Under this scenario - Contributions for Capital that is work in progress is used to fund the capital work in progress. The relative capital does not accumulate AFUDC.

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

Illustrative Example - Contribution Funding Existing Rate Base

Line No.														
1	Assumptions:													
2	Depreciation Rate	3.00%												
3	WACC	6.50%												
4		Original Cost	Allowance for Funds During Construction	Accumulated Depreciation	Net Book	Mid Year	Contributions	Accumulated Depreciation	Net Book	Mid Year	Net Rate Base	Return	Depreciation	Revenue Requirement
5	Year 1	-	-	-	-	-	(1,000,000.00)	-	(900,000.00)	(450,000.00)	(450,000.00)	(29,250.00)	-	(29,250.00)
6	Year 2	1,000,000.00	48,750.00	15,731.25	1,033,018.75	516,509.38	(1,000,000.00)	(15,000.00)	(985,000.00)	(942,500.00)	(425,990.63)	(27,689.39)	731.25	(26,958.14)
7	Year 3	1,000,000.00	48,750.00	47,193.75	1,001,556.25	1,017,287.50	(1,000,000.00)	(45,000.00)	(955,000.00)	(970,000.00)	47,287.50	3,073.69	1,462.50	4,536.19
8	Year 4	1,000,000.00	48,750.00	78,656.25	970,093.75	985,825.00	(1,000,000.00)	(75,000.00)	(925,000.00)	(940,000.00)	45,825.00	2,978.63	1,462.50	4,441.13
9	Year 5	1,000,000.00	48,750.00	110,118.75	938,631.25	954,362.50	(1,000,000.00)	(105,000.00)	(895,000.00)	(910,000.00)	44,362.50	2,883.56	1,462.50	4,346.06
10	Year 6	1,000,000.00	48,750.00	141,581.25	907,168.75	922,900.00	(1,000,000.00)	(135,000.00)	(865,000.00)	(880,000.00)	42,900.00	2,788.50	1,462.50	4,251.00
11	Year 7	1,000,000.00	48,750.00	173,043.75	875,706.25	891,437.50	(1,000,000.00)	(165,000.00)	(835,000.00)	(850,000.00)	41,437.50	2,693.44	1,462.50	4,155.94
12	Year 8	1,000,000.00	48,750.00	204,506.25	844,243.75	859,975.00	(1,000,000.00)	(195,000.00)	(805,000.00)	(820,000.00)	39,975.00	2,598.38	1,462.50	4,060.88
13	Year 9	1,000,000.00	48,750.00	235,968.75	812,781.25	828,512.50	(1,000,000.00)	(225,000.00)	(775,000.00)	(790,000.00)	38,512.50	2,503.31	1,462.50	3,965.81
14	Year 10	1,000,000.00	48,750.00	267,431.25	781,318.75	797,050.00	(1,000,000.00)	(255,000.00)	(745,000.00)	(760,000.00)	37,050.00	2,408.25	1,462.50	3,870.75
15	Year 11	1,000,000.00	48,750.00	298,893.75	749,856.25	765,587.50	(1,000,000.00)	(285,000.00)	(715,000.00)	(730,000.00)	35,587.50	2,313.19	1,462.50	3,775.69
16	Year 12	1,000,000.00	48,750.00	330,356.25	718,393.75	734,125.00	(1,000,000.00)	(315,000.00)	(685,000.00)	(700,000.00)	34,125.00	2,218.13	1,462.50	3,680.63
17	Year 13	1,000,000.00	48,750.00	361,818.75	686,931.25	702,662.50	(1,000,000.00)	(345,000.00)	(655,000.00)	(670,000.00)	32,662.50	2,123.06	1,462.50	3,585.56
18	Year 14	1,000,000.00	48,750.00	393,281.25	655,468.75	671,200.00	(1,000,000.00)	(375,000.00)	(625,000.00)	(640,000.00)	31,200.00	2,028.00	1,462.50	3,490.50
19	Year 15	1,000,000.00	48,750.00	424,743.75	624,006.25	639,737.50	(1,000,000.00)	(405,000.00)	(595,000.00)	(610,000.00)	29,737.50	1,932.94	1,462.50	3,395.44
20	Year 16	1,000,000.00	48,750.00	456,206.25	592,543.75	608,275.00	(1,000,000.00)	(435,000.00)	(565,000.00)	(580,000.00)	28,275.00	1,837.88	1,462.50	3,300.38
21	Year 17	1,000,000.00	48,750.00	487,668.75	561,081.25	576,812.50	(1,000,000.00)	(465,000.00)	(535,000.00)	(550,000.00)	26,812.50	1,742.81	1,462.50	3,205.31
22	Year 18	1,000,000.00	48,750.00	519,131.25	529,618.75	545,350.00	(1,000,000.00)	(495,000.00)	(505,000.00)	(520,000.00)	25,350.00	1,647.75	1,462.50	3,110.25
23	Year 19	1,000,000.00	48,750.00	550,593.75	498,156.25	513,887.50	(1,000,000.00)	(525,000.00)	(475,000.00)	(490,000.00)	23,887.50	1,552.69	1,462.50	3,015.19
24	Year 20	1,000,000.00	48,750.00	582,056.25	466,693.75	482,425.00	(1,000,000.00)	(555,000.00)	(445,000.00)	(460,000.00)	22,425.00	1,457.63	1,462.50	2,920.13
25														
26	*Under this scenario - Contributions for Capital that is work in progress is applied against rate base, reducing the required debt and equity financing for a short term. The capital work in progress accumulates AFUDC as*													
27	*the relative contributions are funding existing rate base.*													

ATCO Electric YUKON

September 28, 2023 AEY-YUB-002

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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):

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?

Response:

(a) Confirmed. AEY notes that not all accounts included in No Cost Capital (Schedule 8.4) are reserve accounts; they are differentials between accrual and cash-based accounting which are net with AEY's equity and debt financing.

(b) (i) Please refer to AEY-YUB-002(b) Attachment 1 for a reconciliation between deferral accounts identified in Table 1.3: Deferral Accounts, Attachment 1.2 and Schedule 8.8.

- Table 1.3 was intended to summarize where information on certain deferral accounts is located in the Application narrative and is not a comprehensive listing of all deferrals. Previously approved deferrals that have no incremental cost within this Application were not included in Table 1.3.
- Attachment 1.2 was intended to identify the material changes, including new deferral accounts requested since the 2016-2017 GRA for ease of review.
- Schedule 8.8 includes all deferrals and reserve accounts, which are settled through the amortization of deferred charges.

(ii) Not all deferrals have been approved. AEY is seeking approval for the Board Orders or Legislative Changes and the Independent Power Producers (IPP) Flow Through Deferrals, which are outlined further below.

Board Orders or Legislative Changes: AEY seeks the ability to flow-through (dollar for dollar) incremental costs and/or savings related to Board Orders or legislative provisions resulting in changes to the rules or parameters under which AEY operates, or that impact the nature and extent of AEY's obligations as a regulated utility, and which impact its 2023-2024 revenues or revenue requirement. Please refer to the response to parts (e)

and (f) below for the impact that these changes can have on AEY's revenue requirement.

Independent Power Producers (IPP) Flow Through: The IPP deferral account is necessary as it is intended to capture cost variances associated with the significant uncertainty related to the startup phases of IPPs, including the costs recoverable under OIC 2019/25, legal and contracting expenses, costs of system constraint, and maintenance expenses. AEY incurs these costs to support the Yukon Government's Our Clean Future strategy.[1] In AEY's experience, IPP projects in off-grid communities involve considerable technical, commercial, legal, and operational complexity, which makes the associated costs difficult to forecast and material, necessitating deferral treatment. Please refer to AEY-YUB-002(b) Attachment 1, column I, for the Operations & Maintenance (O&M) activity in which the expense is being recorded or is proposed to be recorded for deferral and reserve accounts identified in requests (a) and (b). As outlined in the attachment, not all reserve or deferral expenses are recorded in O&M.

(c) AEY is not requesting that this deferral account provide blanket ability to flow through costs without seeking Board approval. Any balance(s) as a result of a Board order or legislative change would be put in the deferral account and brought forward by AEY for consideration in AEY's next GRA or in a limited scope Deferral Application. Within those proceedings, the Board would have the opportunity to test and review the proposed deferral for prudency and eligibility for recovery or refund. Amounts approved by the Board would be included in AEY's revenue requirement for recovery from or refund to customers and balances disallowed would be removed from revenue requirements.

[1] From Page 48 of Our Clean Future: "Our target is to have an operating independent power production project in all off grid communities by 2030 in order to reduce diesel use for electricity generation by 30 percent by 2030."

(d) Board Orders have typically not impacted AEY's revenue requirement in the past. However, as programs related to Our Clean Future and the overarching energy transition mature, there is potential that Board Orders may be issued which impose requirements on utilities regarding the Yukon's EV charging network, IPPs and Micro-generation. In addition, Board Orders may be issued as grid modernization efforts are realized, and technology allows more complex demand side management practices. Accordingly, having a deferral account in place would provide AEY with the opportunity to seek recovery in an unprecedented time of change and transformation across the entire industry. This deferral would support business decisions and enable quicker response time as transformational changes occur.

(e) The Yukon Government has been introducing policies geared towards transitioning the energy industry through increased electrification and reducing carbon emissions, as seen with the "Our Clean Future" initiative. The impact of these changes, as outlined in Section 1B of the Application and the Concentric Report included in the Application, include impacts related to Grid Modernization, Independent Power Production (IPP) legislation, the expansion of the Electric Vehicle (EV) Charger Network and Micro-Generation, which are outlined further below.

Not all costs associated with these initiatives are being tracked separately, nor have they been realized as some of these programs are in the very early stages. Therefore, the impact they will have on AEY's revenue requirement is not completely known. AEY notes that legislative or policy changes can result both in higher costs as well as relief from rising costs, such as the legislated carbon tax credits.

Programs such as those identified above can impact AEY through a variance related to either sales or costs. Furthermore, AEY is unsure if Federal or Territorial

grants will cover any of these costs. AEY generally has no control over these policies or programs, has no way to forecast with certainty the impact related to these programs and, therefore, considers it appropriate to seek deferral account treatment for these items.

Grid Modernization: Grid Modernization is increasingly recognized within the utility industry as a necessary response to changing Government policies, technologies, and customer behaviors, since these factors will fundamentally alter the future operation of the distribution grid. As outlined in the Application, one of the Grid Modernization programs that AEY is initiating in this Test Period is the Advanced Metering Infrastructure (AMI) program in Whitehorse, which AEY has estimated will cost approximately $0.4 million. For additional information on AMI, please refer to AEY-YUB-065.

Independent Power Production (IPP) Policy The IPP Policy was adopted by the Yukon Government in October 2015 and provides opportunities for non-utility entities to generate new power that can assist the utilities in meeting the demand for affordable, reliable, flexible and clean electrical energy. Costs related to IPP projects, specifically the establishment of Electricity Purchase Agreements with IPPs, which are captured in the EPA/IPP Deferral Account on Schedule 8.8, lines 54 through 60. Costs related to constraint payments are captured in Schedule 3.1, line 23. As outlined in Section 3.4 of the Application, in addition to constraint payments, AEY is responsible for the maintenance of the Battery Energy Storage System (BESS), Microgrid Controller (MGC) and distribution and generation interconnections of the IPP projects. As this is a new area, there is a degree of uncertainty regarding the quantum of work and effort required to maintain the BESS, MGC and other system integration components required for the IPP projects to successfully operate.

Electric Vehicle (EV) Charger Network: Demand for electricity is expected to increase for electric vehicles, making it more challenging for AEY to accurately forecast demand growth and the timing of when these changes will occur.[2] In "Our Clean Future", the Yukon Government has outlined a goal of expanding the EV Charger Network.[3] The proposed expansion of the EV network is expected to result in a number of new connection points to the grid in AEY's service area. In addition, the Federal Emissions Reduction Plan has set a mandatory target that 100 percent of new light-duty vehicles and passenger trucks are zero-emission by 2035. This will have a significant impact on remote grids and utilities, and regulators and governments will be required to respond accordingly. Due to the uncertainty of this program and the grants that may be available, AEY is unable to quantify the expected impact on revenue requirement.

Micro-Generation (MG): In "Our Clean Future", the Yukon Government has outlined a goal of reducing diesel use for electricity generation by 30 percent in Off-Grid communities by 2030[4] by establishing community-based renewable electricity projects in order to reduce diesel use for electricity generation by 30 percent. As outlined in the Application, AEY's isolated communities are at peak capacity for MG based on the reliability restrictions of the program. Though the community MG peak capacity is reached, and as the energy transition continues, there is consistent demand to review or expand the reliability restrictions for MG in the isolated communities. There is concern that this increased demand may lead to policy changes in the MG program that will lead to changes to the electrical grid. Due to the uncertainty of this program and the grants that may be available, AEY is unable to quantify the impact on revenue requirement.

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2 2023-2024 AEY GRA, Section 8, Attachment 8.1, PDF p.169.

3 "Our Clean Future", p. 35. https://yukon.ca/en/our-clean-future-yukon-strategy-climate-change-energy-and-green-economy.

4 "Our Clean Future", p. 20. https://yukon.ca/en/our-clean-future-yukon-strategy-climate-change-energy-and-green-economy.

(g) The proposed deferral accounts were considered as part of the recommended risk premium in AEY's proposed ROE. In the absence of these deferrals, it would be appropriate to apply a risk premium on the higher end of the range (40-100 basis points), identified on page 33 of the Concentric Report.

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

Deferral and Reserve Accounts

Line No.		Reserve / Deferral Account	Table 1.3[1]	Attachment 1.2[2]	Schedule 8.8	Regulatory Schedule	O&M Activity Name & Number	Approved
2	**Reserve Accounts**	Injuries & Damages	Not Included	Not Included	Not Included	Schedule 8.4 Line No 26-32	72400 - Injuries & Damages Schedule 5.1, Line No. 41	Yes
3		Rate Case Costs	Not Included	Not Included	Included	Schedule 8.8 Line No. 19-26	72100 – Administrative	Yes
4	**Deferral Accounts**	Industrial Rider R Flow Through	Included	Not Included	Not Included	Schedule 13.1	Not included in O&M	Yes
5		Purchased Power Flow Through	Included	Not Included	Not Included	Schedule 3.1	Not included in O&M	Yes
6		Diesel Fuel Deferral Account	Included	Not Included	Not Included	Schedule 4.1	Not included in O&M	Yes
7		Watson Lake LNG Study Costs	Not Included	Not Included	Included	Schedule 8.8 Line No. 28-35	Not included in O&M. No costs have been or will be incurred, once all balances have been settled this account can be discontinued.	Yes
8		Demand Side Management (DSM)	Not Included	Not Included	Included	Schedule 8.8 Line No. 37-44	Not included in O&M	Yes
9		Pension Deferral Account	Not Included	Not Included	Included	Schedule 8.8 Line No. 46-52	Embedded in labour costs within multiple activities in Schedule 5.1	Yes
10		Board Orders or Legislative Changes	Included	Included	Not Included	Not included	Will depend on the nature of the costs	No
11		Independent Power Producers (IPP) Flow Through	Included	Included	Included	Schedule 8.8 Line No. 54-60	Will depend on the nature of the costs	No

12
13
14 (1) 2023-2024 AEY GRA, Section 1.9, PDF p. 14.
15 (2) 2023-2024 AEY GRA, Section 1.11, PDF p. 20.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-003

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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?

Response:

(a) FortisBC has applied for a blended labour/non-labour rate of 4.517 percent for 2023[1] and 4.080 percent for 2024.[2] For Northwest Territories, the in-scope rate applied for is 3.5 percent, and the out-of-scope rate is 4.0 percent.[3]

(b) Please refer to AEY-YUB-003(b) Attachment 1.

1 https://docs.bcuc.com/documents/proceedings/2022/doc_67371_b-2-fbc-2023-annualreview-application.pdf, PDF p. 22.
2 https://docs.bcuc.com/documents/proceedings/2023/doc_72776_b2fbc2024annualreviewratesapplication.pdf, PDF p. 23.
3 https://www.nwtpublicutilitiesboard.ca/sites/nwtpub/files/supporting/2023%2003%2007%20Northland%20Utilities%20%28NWT%29%20Limited%202023%20Amended%20General%20Rate%20Application.pdf pp. 1-6, para.18.

(c) Please refer to Table 1 below. Please note that the actual FTE excludes exogenous events, such as vacancies driven by vaccine policies. These exogenous events have been normalized for in the vacancy rate calculation below.

Table 1: Vacancy Rate

	FTE				
Year	**Actual**	**Forecast**	**+/-**	**Vacancies**	**%**
2018	63.80	68.17	(4.37)	4.37	6.4
2019	65.21	67.17	(1.96)	1.96	2.9
2020	65.80	67.67	(1.87)	1.87	2.8
2021	66.30	68.67	(2.37)	2.37	3.5
2022	68.80	70.67	(1.87)	1.87	2.7
5 Year Average				**2.49**	**3.65**

(d) AEY's actual FTE complement in 2017 was 64.13, it was below the approved 68.13 due to unplanned vacancies.

(e) No, the Engineering Technologist, Renewables & Grid Modernization was not approved in 2016-2017. All of the FTEs noted in Table 1.4 are changes from what was approved in 2016-2017.

(f) AEY confirms that there are no proposed 2023-2024 FTE additions resulting from allocations. All FTE are direct charged to AEY.

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Introduction

The 2023–24 Fiscal and Economic Outlook presents the territory's current fiscal and economic position and expectations for the medium term. The Government of Yukon is moving the territory toward a sustainable and prosperous future while ensuring responsible fiscal management across all government programs and services. The Yukon is recovering from the impacts of the pandemic and the economic outlook is positive.

Despite the recent challenges created by higher rates of inflation, expectations are that the Yukon will build on 2022's robust economic growth, with further real Gross Domestic Product (GDP) gains and an outlook highlighted by a strong labour market and additional population growth. The government remains committed to working closely with partners in the public and private sectors, including First Nations governments, to ensure a strong, diversified and sustainable economy for all Yukoners. Overall, the territory's economy is well-positioned to address the challenges ahead and continue growing in the coming years.

Part 1: The Yukon's finances

In the 2023–24 Budget, the Yukon government is delivering on its longstanding commitment to growing the economy while ensuring strong, sustainable fiscal management. The government projects a surplus of $48.2 million in 2023–24 and projects to remain in a surplus position throughout the duration of this fiscal outlook. A surplus of 2-3 per cent of the total budget is a prudent fiscal management tool and demonstrates the ability of the government to address unforeseen events without going into deficit. Maintaining a surplus position lessens the government's potential need to borrow funds and reduces the net debt position. The expected fiscal position in 2023–24 reflects a focus on strategically allocating resources to the ongoing priorities of Yukoners.

Table 1. Fiscal summary

($ millions)	2022–23 Main Estimates	2022–23 Supplementary Estimates #2	2023–24 Main Estimates	2024–25 Plan	2025–26 Plan
Revenue[1,2]	1,460.2	1,504.5	1,575.4	1,663.5	1,719.2
Expense[3]	(1,644.6)	(1,683.8)	(1,642.4)	(1,716.5)	(1,769.1)
Contingency for Anticipated Expenses	(10.0)	(10.0)	(50.0)	(50.0)	(50.0)
Accounting Adjustments[4]	233.9	233.2	165.2	161.7	144.9
Surplus/(Deficit)[5]	39.5	43.9	48.2	58.8	45.1
Net Financial Assets/(Debt), end of year[6]	(207.5)	(298.5)	(374.8)	(453.0)	(528.0)

Source: Department of Finance. Numbers may not add due to rounding.

1. To align with the presentation in the Yukon's Public Accounts, revenues and recoveries do not include those collected by the Yukon Housing Corporation, which are included in the Accounting Adjustments in this table.

2. Figures for revenue, contingency for anticipated expenses and surplus (deficit) are found on Pages S-8 of the 2023–24 Main Estimates, and equivalent pages of budget documents for other periods.

3. Figures for expense and accounting adjustments are found on Pages S-18 of the 2023–24 Main Estimates and equivalent pages of budget documents for other periods.

4. Accounting Adjustments are the sum of "Tangible Capital Assets (net)," "Investment in Land Development," "Expenditures on Loan Programs," and "Other Adjustments (net)," on Page S-9 of the 2023–24 Main Estimates, and equivalent pages of budget documents for other periods.

5. Surplus/(Deficit) is the sum of Revenue, Expense, Contingency for Anticipated Expenses, and Accounting Adjustments.

6. Found on Page S-9 of the 2023–24 Main Estimates.

Net financial debt, or net debt as it is often known, is expected to increase by $76.3 million in 2023–24 to a total of $374.8 million. Recent increases to the government's net financial debt position were incurred to fund ongoing maintenance of the territory's infrastructure and to invest in new projects that will benefit Yukoners now and well into the future. In standard accounting, net financial debt is a measure of how much the government would need to pay if all of its liabilities were due immediately. It does not mean government needs to borrow those funds. Most of the government's net debt position is for long-term liabilities that will not be realized all at once.

Part of the changes to net debt reflect a new accounting standard that came into effect in April 2022. These new rules require the government to record and measure future financial obligations to retire government assets from service, such as buildings or equipment, once they are no longer of productive use. The estimated future costs to retire an asset are then recognized over an asset's productive life. The increase to net debt from 2022–23 includes an additional $54.3 million to reflect accounting changes to align with the new standard. The new standard is also expected to increase net debt by approximately $1.6 million annually.

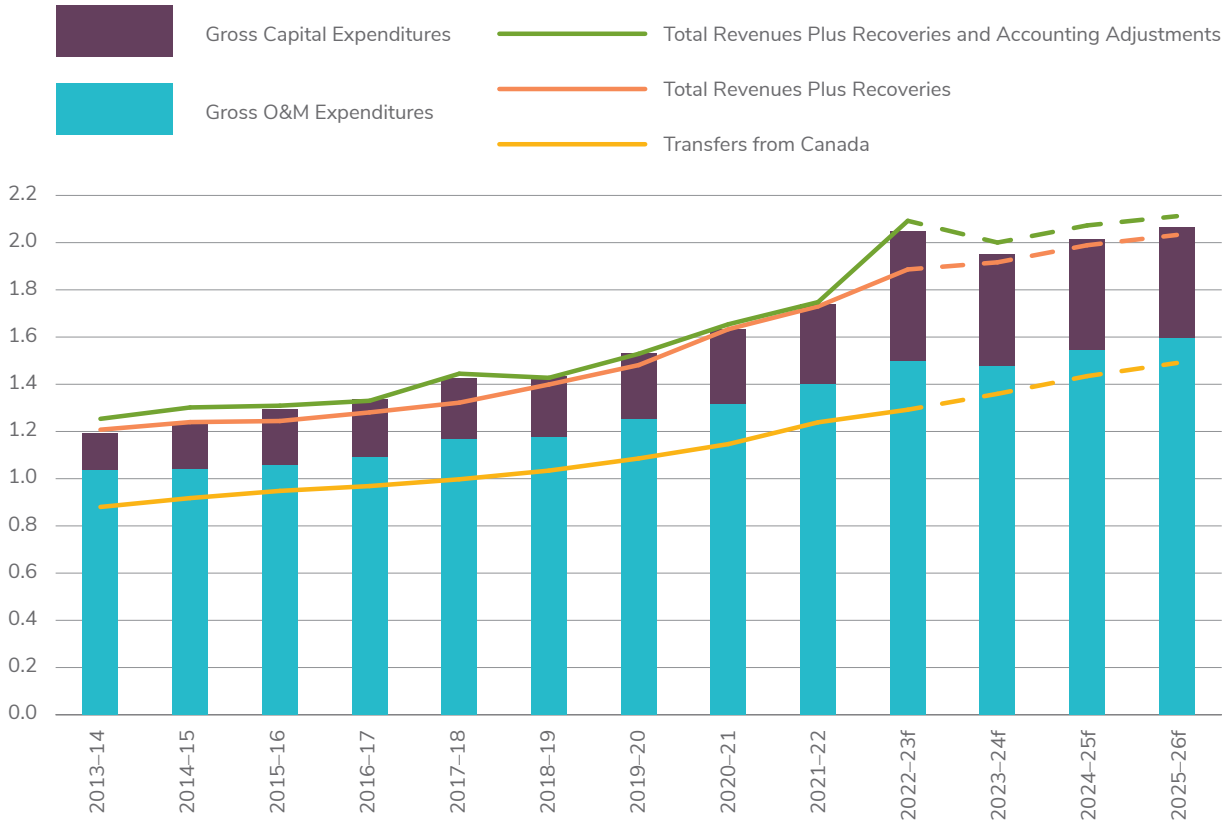
The government is committed to maintaining fiscal sustainability. To achieve this, the government has reviewed spending commitments to ensure expenditures are effectively being used within the framework of expected revenues. These measures will help to ensure that the government is able to meet its spending commitments while maintaining a healthy fiscal position. Capital expenditures are forecast to decrease by $35.2 million or 9.9 per cent, net of recoveries, from the 2022–23 Main Estimates to preserve the government's strong fiscal standing and address increasing inflation while continuing to invest in priority areas. The decrease to capital spending is partially offset by an increase to the forecast for Operations and Maintenance (O&M) expenditures of $33.0 million or 2.6 per cent, net of recoveries, from the 2022–23 Main Estimates.

The government's fiscal summary for 2023–24 also includes a $50 million contingency for areas of expected, but presently undefined, expenditures. The government has benefitted from this realistic approach to budgeting in recent years for COVID-19 spending and we are continuing this approach for expected cost pressures. These costs are not presented in departmental budgets in the coming fiscal year as the expenditures are not yet known. They are included in the overall financial framework so that they will not affect the Yukon's forecast fiscal position, should they be needed. This allows the government to remain transparent about potential pressures and would require legislative authority.

In Chart 1, forecast spending and revenue for the Yukon, including recoveries, from 2022–23 through 2025–26, are compared to historical spending as reported in the Yukon's Public Accounts. In recent fiscal years, growth in government spending has increased in line with revenue growth. For the fiscal years between 2013–14 and 2022–23, O&M expenditures have grown by 5.1 per cent annually and revenues have grown by 5.0 per cent annually, on average. For 2023–24 to 2025–26, expenditures and revenues are expected to change at a similar pace, with expenditures growing by an annual average of 2.3 per cent, while government revenues are expected to grow at an average of 2.5 per cent annually.

Chart 1. Government of Yukon fiscal indicators[7,8]

Expenditures and revenues ($ billions)



Source: Department of Finance *f = forecast*

7. Fiscal years 2013–14 to 2021–22 represent actuals as reported in the Yukon's Public Accounts. For comparability, forecasts for fiscal years 2022–23 to 2025–26 use the same methodology, which differs from the presentation in Table 1 above.

8. To align with the presentation in the Yukon's Public Accounts, revenues and recoveries do not include those collected by the Yukon Housing Corporation, which are netted-out of the gross expenditures presented in this chart.

Revenue

Government revenues rely heavily on transfers from the Government of Canada, supplemented by own-source revenues that are mostly driven by economic activity. The Yukon government's revenue is critical to ensuring that the government has the resources needed to meet its spending commitments. As shown in Table 2, total revenue, excluding recoveries, is expected to be $1.58 billion in 2023–24. This represents an increase of $70.9 million, or 4.7 per cent, from the most recent estimates in the 2022–23 Supplementary Estimates #2. This increase is primarily driven by the territory's economic position and a changing fiscal situation across Canada, which affects federal transfers.

Table 2. Revenue by type[9,10]

($ millions)	2022–23 Main Estimates	2022–23 Supplementary Estimates #2	2023–24 Main Estimates	2024–25 Plan	2025–26 Plan
Transfers from Canada	**1,244.4**	**1,261.4**	**1,327.0**	**1,400.3**	**1,454.7**
Tax revenue	**157.7**	**175.0**	**170.9**	**177.2**	**182.2**
Personal income tax	89.9	100.7	98.4	102.4	105.6
Corporate income tax	24.4	32.0	27.4	27.8	28.4
Property tax	7.0	7.0	7.2	7.6	7.7
Fuel oil tax	9.7	8.7	8.8	8.8	8.9
Tobacco and alcohol taxes	18.6	18.4	20.0	20.7	21.1
Insurance premium tax	8.1	8.2	9.0	9.9	10.6
Other revenue	**58.1**	**68.1**	**77.5**	**85.9**	**82.3**
Liquor profit	9.4	7.5	8.8	8.8	9.1
Licenses, fees, registrations and permits	17.6	17.1	18.3	18.7	19.2
Sale of land	19.2	20.8	32.3	34.2	31.3
Other revenue	12.0	22.8	18.1	24.2	22.6
Total revenue	**1,460.2**	**1,504.5**	**1,575.4**	**1,663.5**	**1,719.2**

Source: Department of Finance. Numbers may not add due to rounding.

9. All revenue figures are found on Pages S-14 and S-15 of the 2023–24 Main Estimates, and equivalent pages of budget documents for other periods.

10. To align with the presentation in the Yukon's Public Accounts, revenues do not include those collected by the Yukon Housing Corporation.

Transfers from Canada

Transfers from Canada, which includes the Territorial Formula Financing grant, represent about 84 per cent of the Yukon's total revenue in 2023–24. Territorial formula financing helps to reduce the gap between the Yukon's ability to raise revenue and its spending needs for core services.

The grant is responsive to changing economic and demographic circumstances in the territory compared to the rest of the country. This includes changes in public spending across the country, which are increasing due to the high inflationary environment and associated inflation relief programs. The growth in spending for other provinces and territories have an upward impact on the Yukon's Territorial Formula Financing grant. However, the improved outlook on the grant is being offset somewhat by growth in resource revenues. Resource revenues in the territory are expected to increase as royalties increase, which would have a downward impact on revenue from the Territorial Formula Financing grant. Under the Devolution Transfer Agreement with Canada, the Yukon's grant is reduced dollar for dollar of resource revenues in excess of $6 million in any given year. Resource revenues subject to offset were $10.2 million in 2021–22, meaning the grant in 2023–24 will be reduced by $4.2 million.

At the time that the 2023–24 Main Estimates were prepared, the Yukon government, along with other provinces and territories, were discussing increases to the Canada Health Transfer that could strengthen the healthcare system for the benefit of all Canadians. The Canada Health Transfer forms part of the overall transfers from Canada. Increases to the Canada Health Transfer have not yet been included in expected revenues for 2023–24.

Taxation revenue

The Yukon's own-source revenue from taxation is forecast to decrease in 2023–24 from the 2022–23 Supplementary Estimates #2. Personal and corporate taxation revenues are expected to be strong in 2023–24, but are forecast to be lower than current estimates for 2022–23 primarily due to a non-recurring adjustment for the 2021 tax year in 2022–23. Adjustments for prior tax years are common due to the timing of final reconciliations of tax assessment information. Corporate income tax projections for 2022–23 have been revised upward from stronger than expected corporate profits but are expected to return to trend in 2023–24.

Personal income tax revenues are expected to continue to be strong due to high inflation and the territory's strong labour market performance, which is increasing individual taxable incomes. Business performance continues to be strong in the territory, but corporate income tax revenue can see large variations from year-to-year. The outlook for corporate taxation, while still expected to increase, has also been reduced from projections in previous years due to a change in federal tax provisions that increases the scope of businesses eligible for the small business tax rate. In the Yukon, the small business tax rate is zero per cent.

The forecast for tax revenue from tobacco products has increased. The *Tobacco Tax Act* links changes to the tax rate to changes in the Consumer Price Index (CPI), so the tax rate increased from 31 cents to 32 cents per cigarette as of January 1, 2023. Under the current outlook for inflation, the tax rate for tobacco products is expected to increase to 37 cents per cigarette by the end of 2027.

Expectations for fuel tax revenue in 2023–24 are lower than in the 2022–23 Main Estimates. Fuel tax revenues have not returned to pre-pandemic levels, which could be partly explained by the tourism industry continuing to operate below levels experienced prior to the start of the pandemic. The ongoing outlook for fuel taxes is expected to be mostly flat as more Yukoners adopt electric vehicles and make other transportation choices that are consistent with the Yukon's *Our Clean Future* strategy.

Aside from changes to the tobacco tax, there are no changes to tax rates proposed as part of the 2023–24 budget.

Other revenue

In addition to transfers from Canada and taxation revenue, the government also generates revenue from other sources. These include liquor profit, licenses, fees, registrations, permits and proceeds from land sales. Revenue from these sources are expected to exceed recent levels, in part due to elevated revenue from land sales.

Operations and maintenance expense

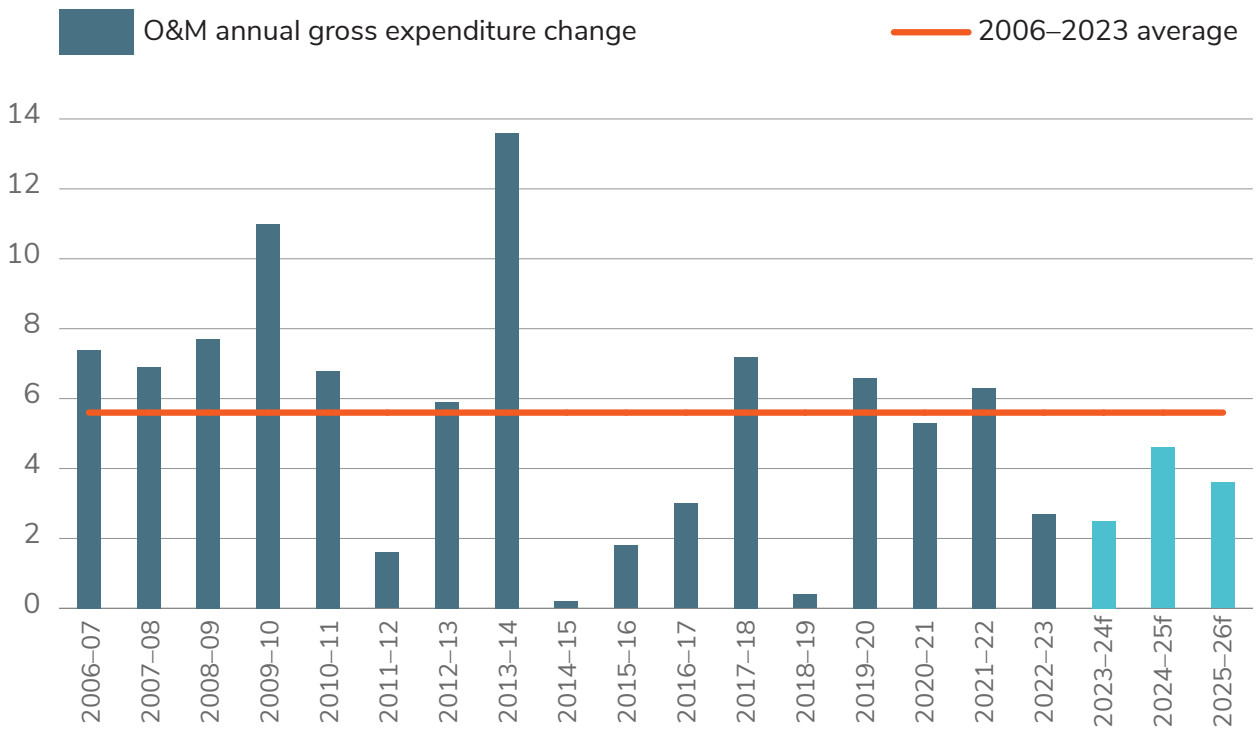
O&M spending for 2023–24 is budgeted at $1.45 billion, which reflects a $35 million, or 2.5 per cent, increase over the previous year's Main Estimates. The increase in spending is primarily for:

- making day-to-day life more affordable for Yukoners;
- investing in the Yukon's health and social system;
- addressing the substance use health emergency;
- improving sustainability and preserving the territory's environment;
- investing in housing and related services, particularly for the most vulnerable; and
- continuing to build relationships and foster reconciliation with Yukon First Nations.

Chart 2 compares forecast gross O&M spending from 2022–23 through 2025–26 to actual historical O&M spending as reported in the Yukon's Public Accounts. The average annual growth in O&M spending between 2006–07 and 2022–23 was 5.6 per cent. Forecast O&M spending growth in 2024–25 and 2025–26 is anticipated to remain below the average at approximately 4.5 per cent and 3.5 per cent, respectively.

Chart 2. Annual growth in O&M budgets

Change in Government of Yukon gross O&M spending (per cent)



Source: Department of Finance *f = forecast*

Higher rates of inflation continue to be the reality for Yukoners, and family budgets are becoming tighter. The government continues to take steps to provide targeted inflationary relief to families, especially the most vulnerable. The government continues to assess how inflation is impacting Yukoners. In 2023–24, the government is extending the Inflation Relief Rebate Program, which provides a $50 per month rebate on ATCO Electric and Yukon Energy utility bills for the April and May billing periods, along with an additional three months later in the year. Other measures in the 2023–24 Budget to help make life more affordable for Yukoners include funding for food in Yukon schools, the timber harvesting incentive to boost fuelwood supply, a quarterly top-up of $150 to eligible recipients of the Yukon Senior Income Supplement and a $100 monthly increase to eligible Social Assistance recipients.

With the COVID-19 State of Emergency coming to an end in March 2022, the Yukon is now adapting to living with the risks from COVID-19 while continuing to support Yukoners' well-being. However, healthcare systems across Canada, including the Yukon, continue to be strained following the pandemic. Healthcare workers are experiencing stress and burnout, and people seeking health services are experiencing long wait times due to staff shortages. The 2023–24 Budget includes funding to improve supports for critical staff, including recruitment and retention bonuses for nurses, negotiated increases with the Yukon Medical Association, a human resources strategy to improve health care worker recruitment and adding nursing positions in rural locations. The government also continues to act on the recommendations from the *Putting People First* report. This includes funding for the territory's dental plan, early learning and childcare.

In 2023–24, the government will continue to support the needs of individuals and communities impacted by the substance use health emergency. This includes additional funding to address the harms of substance use, combat the supply of harmful substances through additional RCMP supports, and help youth with substance use challenges. Together, these initiatives support people who are struggling with addiction and mental health issues and help to reduce the harm caused by substance use in communities.

Many areas across Canada are facing housing shortages and challenges with housing affordability. In 2023–24, the government will continue working to meet the housing needs of Yukoners, including partnering with the private sector on lease costs and supportive services for seniors at the new Normandy Living facility in Whitehorse. The Budget also includes funding to ensure the Yukon Housing Corporation's housing stock remains safe and well maintained.

The government remains fully committed to supporting reconciliation and respectful partnerships with Yukon First Nations governments. The government is working in partnership with Yukon First Nations on key priorities in 2023–24. This includes funding for Community Safety Officers and policing initiatives in communities, and support for the community safety planning priorities of Yukon First Nations governments in their communities.

The government continues to make progress on the implementation of *Our Clean Future* and protect the environment. The Yukon government is working in partnership with the Government of Canada to advance land use planning and species-at-risk protection in the Yukon through the *Bilateral Nature Agreement*. Through this, government will advance work towards the federal government's mandate to conserve and protect 25 per cent of land by 2025, and 30 per cent by 2030.

Five-Year Capital Plan update

With the 2023–24 Main Estimates, the Yukon government is publishing its sixth annual plan for its capital investment priorities over the next five years. The plan helps drive transparency, certainty and coordination with businesses, First Nations governments and municipalities.

Table 3. *Five-Year Capital Plan* gross expenditures by category

($millions)	2023–24	2024–25	2025–26	2026–27	2027–28	Totals
Climate change, energy and green economy	36	43	47	42	29	197
Land development, housing, education and health	133	84	78	81	93	470
Community and First Nations infrastructure	78	75	75	60	65	352
Transportation infrastructure	160	177	197	123	123	779
Real property and asset management	33	46	46	51	35	211
Information technology	45	51	18	17	14	146
Totals	**484**	**475**	**462**	**374**	**359**	**2,155**

Source: Capital Planning Office. Numbers may not add due to rounding.

The 2023–24 *Five-Year Capital Plan* includes approximately $2.15 billion in capital spending over the next five years. These investments will focus on improving access to stable and affordable housing, increasing accessibility to healthcare services, providing modern school facilities and advancing the territory's climate change goals. The government continues to leverage funding from the federal government and other partners to find offsets for over one-third of the capital spending in the plan.

The capital budget for 2023–24 is projected to be $483.8 million, a modest decrease from the 2022–23 Main Estimates. The government remains committed to robust and steady investments in the territory's infrastructure. However, it is prudent for the government to carefully consider how it is investing in capital projects to address increasing inflation by reducing previously planned capital spending in its *Five-Year Capital Plan*. The government has reviewed planned projects in the Plan to ensure it is maintaining its current assets while delivering on the new critical infrastructure that Yukoners need. For certain capital projects, the government is exploring innovative ways to deliver these projects, including partnering with municipalities or First Nations governments in the development of new infrastructure. This approach has resulted in a lower total spend in the next few years compared to earlier projections, while creating a more stable outlook for capital spending.

The government remains committed to robust and steady investments in the territory's infrastructure.

The government is making priority capital investments across six main areas in the 2023–24 *Five-Year Capital Plan*:

- $197 million for climate change, energy and green economy projects to continue to advance the *Our Clean Future* strategy and invest in sustainable jobs in the territory. In 2023–24, this includes investing in renewable energy projects, such as solar installations and biomass, through the Green Infrastructure Program; and helping Yukoners increase the energy efficiency of their homes and businesses through the Better Buildings energy retrofit loans program.
- $470 million for land development, housing, education and health projects to ensure the territory can meet the housing, educational and healthcare needs of a growing population and economy. In 2023–24, this includes completing the Old Crow 10-unit mixed-use housing project and work on the Kêts'ádań Kų School in Burwash Landing.
- $352 million for community and First Nations infrastructure to meet infrastructure needs in communities across the territory, including working in partnership with Yukon First Nations and municipal governments on their priorities. In 2023–24, this includes work on a new Fire Hall building in Carmacks; upgrades to the existing Public Works building in Carmacks; and upgrades to the Teslin Tlingit Council community hub.
- $779 million for transportation infrastructure to invest in the territory's transportation system to keep Yukoners and the economy moving and advance the sustainability of supply chains critical to the Yukon. In 2023–24, this includes ongoing work on critical components of the Yukon's transportation infrastructure like the Nisutlin Bay Bridge project, Erik Nielsen Whitehorse International Airport runways and upgrades to the North Klondike Highway.
- $211 million for real property and asset management projects to build and maintain assets that are essential to the delivery of government services. In 2023–24, this includes continuing to retrofit the Old Territorial Administration Building in Dawson City and work on conceptual designs for potential expansions and recreational activities at several campgrounds across the territory.
- $146 million for information technology projects to enhance the territory's vital technological links to Canada and the world. In 2023–24, work will continue on the Dempster Fibre project, which will provide redundancy, increase reliability and reduce the risk of outages in the territory's critical telecommunications infrastructure.

In recent years, the government has made substantial capital investments to help sustain and build upon critical infrastructure for the benefit of Yukoners now and for generations to come.

Some important recently-completed projects include:

- $22 million, along with funding from Canada, for the Mayo to McQuesten Transmission Line replacement project, which came online in 2021 and is improving the quality and reliability of electricity infrastructure in the area;
- $22 million, in partnership with Canada, for the Faro Public Works & Fire Hall Building and the Watson Lake Municipal Services Building, which combine public works and fire services into a single shared space, saving money on both construction and long-term operating costs; and
- $21 million for the 47-unit residential housing complex at 401 Jeckell Street, completed in January 2023 in partnership with the Canada Mortgage and Housing Corporation. It is providing affordable homes of various sizes for low-income and vulnerable families, seniors and individuals.

In recent years, the government has made substantial capital investments to help sustain and build upon critical infrastructure for the benefit of Yukoners now and for generations to come.

Part 2: Economic overview

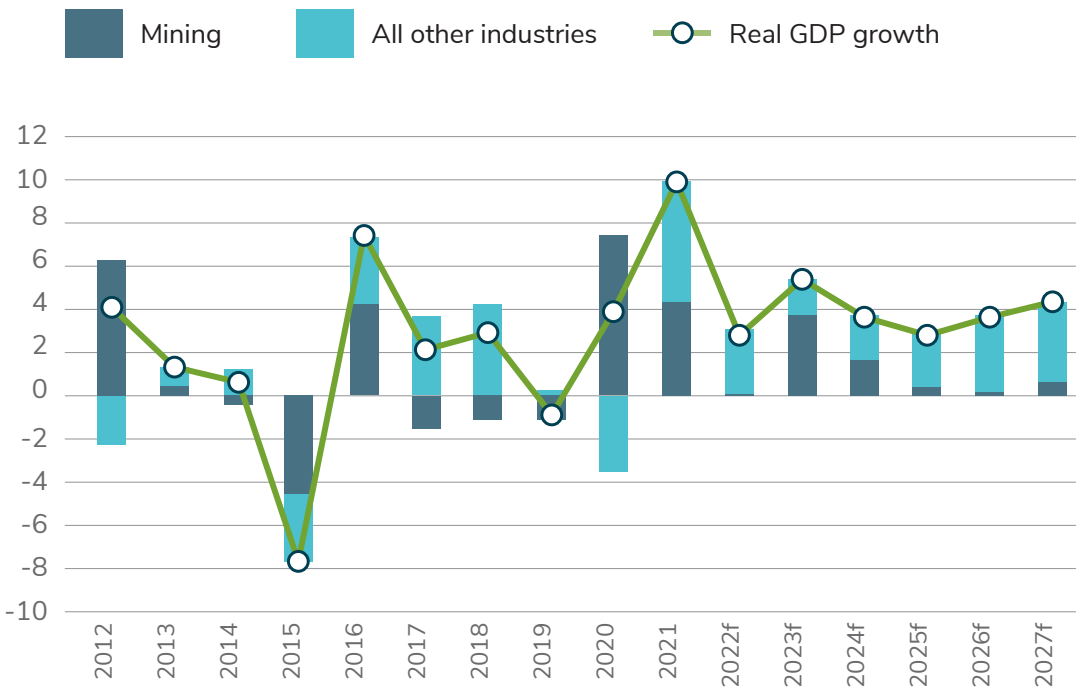
Positive outlook for real GDP growth

The outlook for the Yukon's economy remains positive. A strong labour market is leading to job growth and low unemployment. Tourism is coming back to the territory and the construction sector is busy. Inflation remains higher than anticipated but is expected to moderate with the stabilization of energy prices, improvements to global supply chains and an increase in interest rates that is beginning to absorb excess demand in the Canadian economy.

The Yukon's real GDP is expected to continue to expand. The Yukon led the country in real GDP growth in both 2020 and 2021, with 2021's increase of 10 per cent being the strongest in 13 years. The pace of this expansion returned to more normal levels in 2022 with estimated real GDP growth of 3.1 per cent, close to the Canadian growth estimate of 3.5 per cent. Last year's performance was impacted primarily by the mining sector with disruptions at the Eagle Gold mine and a temporary suspension of operations at the Keno Hill mine.

Chart 3. Further gains in real GDP expected in all years of the forecast

Contribution to real GDP growth (percentage points)



Source: Statistics Canada, Department of Finance *f = forecast*

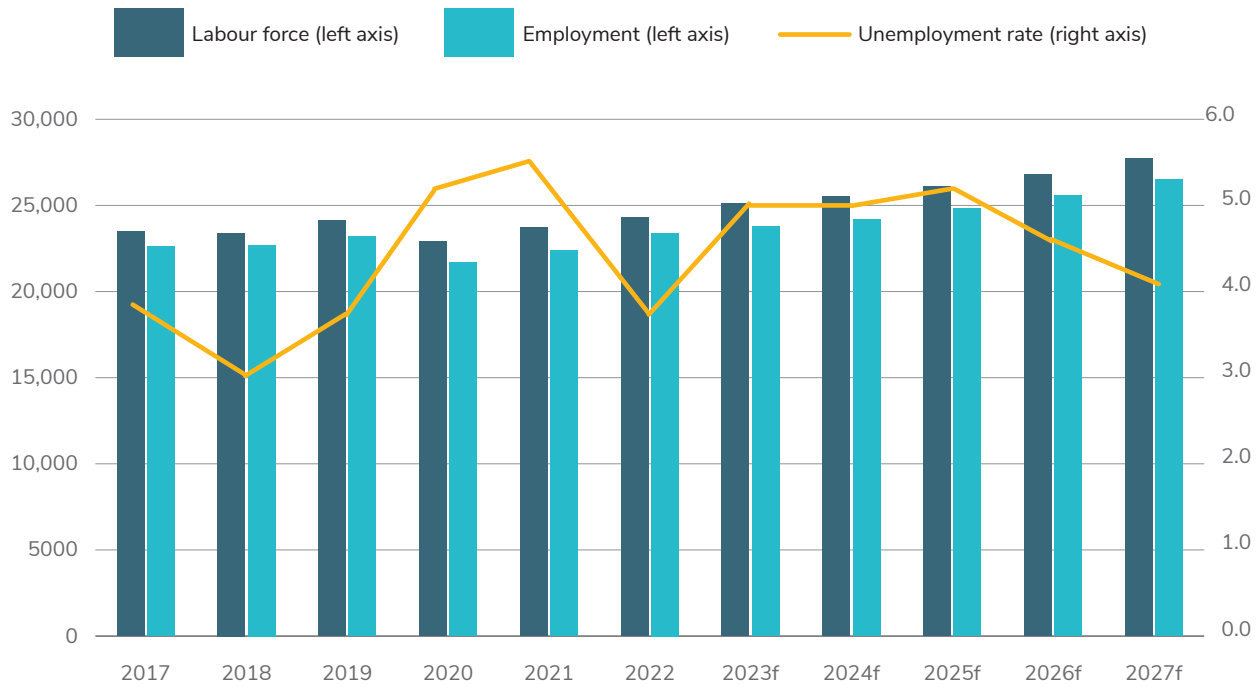
Production at Eagle Gold is expected to ramp up this year and operations at the Keno Hill mine are expected to resume in the third quarter. Higher mineral production and continued recovery of the tourism sector are expected to result in real GDP growth of 5.4 per cent in 2023 followed by 3.7 per cent growth in 2024. Further growth is projected throughout the remainder of the forecast, averaging 3.7 per cent growth through 2025 to 2027.

Further gains in the labour force and employment expected over the medium term

Strong demand for labour and increased economic activity spurred growth in the size of the labour force and employment as both reached record highs in 2022. Employment growth of 4.5 per cent last year outpaced the increase in the labour force and translated into a substantial decline in the territory's unemployment rate. At 3.7 per cent for the year, the Yukon's unemployment rate matched 2019's level and was the lowest in Canada.

Chart 4. Growth in employment and the labour force

Labour force (persons), employment (persons), unemployment rate (per cent)



Source: Statistics Canada, Department of Finance *f = forecast*

Many employers in the Yukon and across the country have had difficulty finding workers. Job vacancies have been elevated in the territory throughout 2022, with the Yukon's job vacancy rate[11] among the top two highest rates in the country for all but one month. Like the experience of many jurisdictions in Canada, the job vacancy rate for the Yukon has recently been higher than the unemployment rate[12], further evidence of a tight labour market (Chart 5).

Chart 5. 2022 has seen tightness in the labour market return

Labour market indicators (per cent)



Source: Statistics Canada

11. The job vacancy rate is the number of job vacancies expressed as a percentage of labour demand, defined as all occupied and vacant jobs.

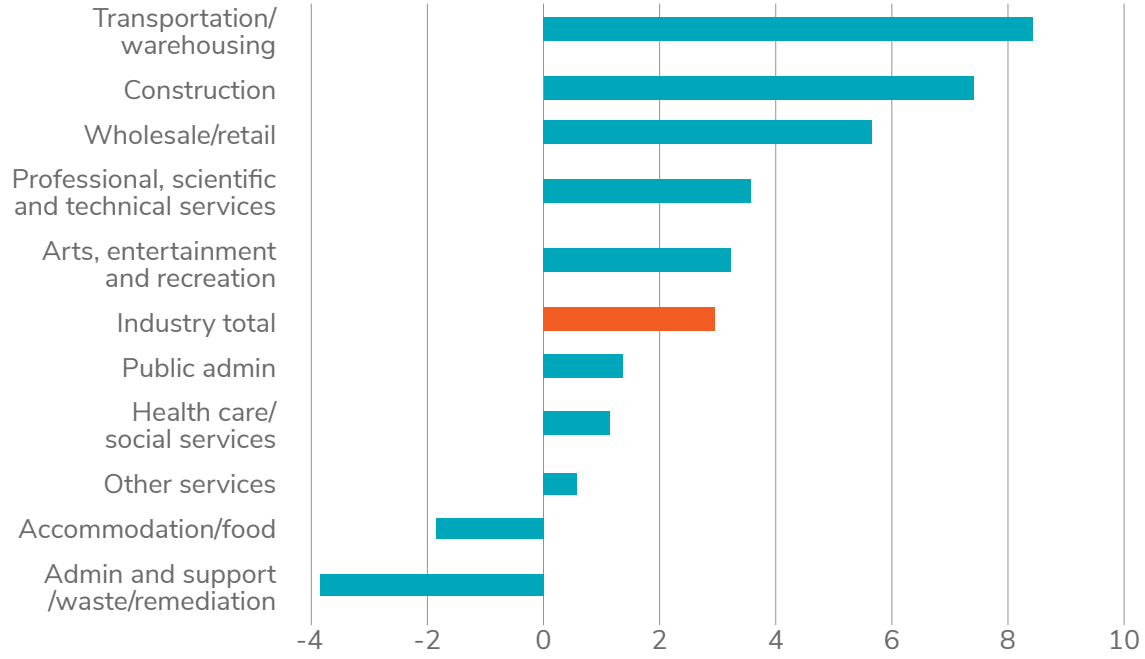
12. When the job vacancy rate exceeds the unemployment rate, this means there are proportionally more jobs seeking workers than workers seeking jobs.

Strong demand for workers at a time when supply is tight is placing upward pressure on wages and earnings. The average offered wage for vacant positions in the Yukon was the third highest in the country at $26.20 per hour in the third quarter of 2022[13], well above the national average of $24.20 per hour and up almost 10 per cent from 2021.

The recent increase in weekly earnings was not as pronounced as the increase in offered wages, but earnings are up across most industries (Chart 6). The average worker in the territory earned $1,334 per week through the first eleven months of 2022, up 2.9 per cent from the same period in 2021. Average weekly earnings for the Yukon ranked third in the country, behind only Nunavut and the Northwest Territories, and were well above the national average of $1,166 per week. While in some cases wages are not keeping pace with inflation, rising incomes have helped to mitigate the inflationary impacts being felt.

Chart 6. Wage pressures reflected in higher earnings across most industries

Average weekly earnings, seasonally adjusted, Jan–Nov 2022 change from Jan–Nov 2021 (per cent)



Source: Statistics Canada

Over the medium term, higher earnings are expected to draw more people into the labour force. The Yukon's labour force is projected to grow slightly faster than employment over the forecast period. This results in a higher projected unemployment rate in the neighbourhood of five per cent. While up from historic lows in recent years, the unemployment rate is projected to remain relatively low, and continue to be one of the lowest in Canada.

13. Average offered wage data is from Statistics Canada table 14-10-0325-01 and is available on a quarterly basis starting with the first quarter of 2015.

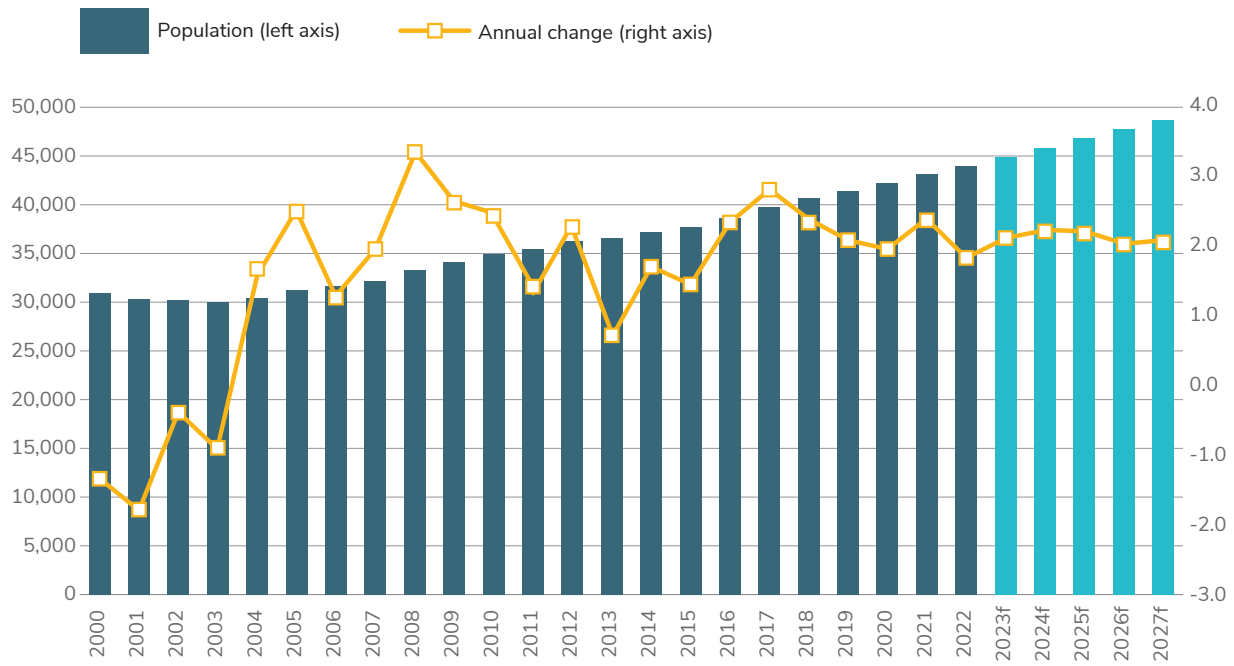
Further population gains anticipated in 2023

At 43,964 on June 30, 2022, the Yukon's population was up 1.8 per cent from 2021.[14] Growth in 2022 was driven primarily by net international migration of 550, which was the highest ever reported.[15] Over the last 20 years, the Yukon's population has grown just over 44 per cent. This growth was second only to Alberta (45.2 per cent) among all provinces and territories and was well ahead of the national growth of 24 per cent. A positive outlook for the territory's economy and labour market is expected to support strong migration into the Yukon and population growth over the medium term.

The federal government is targeting nearly 1.5 million new permanent residents over the 2023 to 2025 period.[16] High levels of immigration should increase the local supply of labour and help alleviate some of the tightness in the labour market. While helping on the labour front, more people moving to the territory has the potential to place further strain on the Yukon housing market, as supply has struggled to keep pace with demand in recent years.

Chart 7. Population is forecast to approach 49,000 by 2027

Population (persons), annual change (per cent)



Source: Yukon Bureau of Statistics *f = forecast*

14. June 30 estimates are considered annual estimates.

15. Statistics Canada's table 17-10-0005-01 reports data for population estimates by age and sex as of July 1.

16. *Government of Canada's Immigration Levels Plan for 2023–2025*. Immigration, Refugees and Citizenship Canada (November 1, 2022).

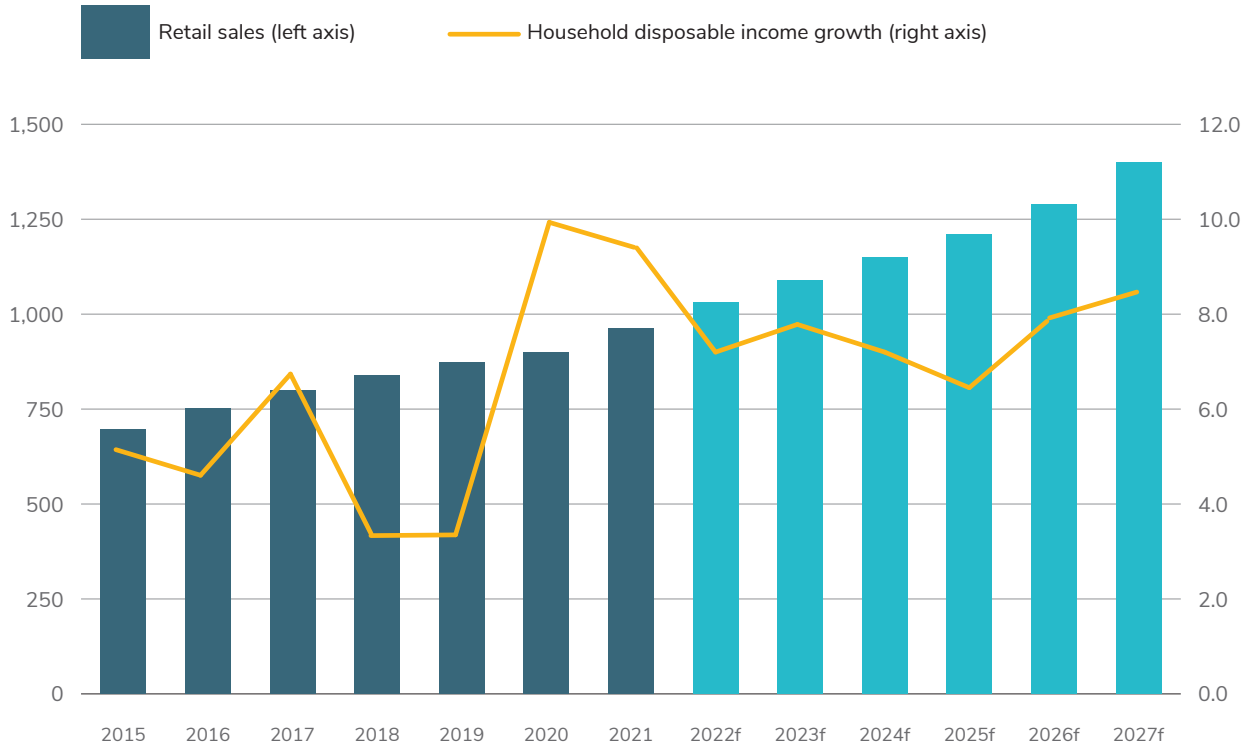
Countering some of the gains in international migration in 2022 was a net outflow of interprovincial migration resulting in 83 fewer residents. This was the first time net interprovincial migration was negative since 2013. Population is projected to increase in every year of the current forecast with growth averaging 2.1 per cent per year. By 2027, the last year of the forecast, the Yukon's population is expected to be near 49,000.

Retail sales exceeded $1 billion in 2022

Retail sales exceeded one billion dollars for the first time in 2022. Estimated growth of 6.8 per cent in 2022 is more than double the growth rate from the previous year. Prices were the primary driver of last year's growth in retail sales, with the estimated percentage increase in retail sales equivalent to the 6.8 per cent increase noted in the Whitehorse CPI. The current forecast has retail sales growing every year by an average of 6.3 per cent per year, significantly higher than the projected CPI increases over the same time span.

Chart 8. Income growth a key driver of retail sales growth

Retail sales ($ millions), Household disposable income growth (per cent)



Source: Statistics Canada, Department of Finance *f = forecast*

By 2027, the last year of the forecast, the Yukon's population is expected to be near 49,000.

Inflation has increased globally

Global supply chain disruptions and the war in Ukraine contributed to higher food and energy prices in 2022 and added to inflationary pressures noted all over the world. In Canada, domestic factors, including excess demand for labour and other inputs, have also fueled price growth, with the national inflation rate touching levels in 2022 not seen since the early 1980s.

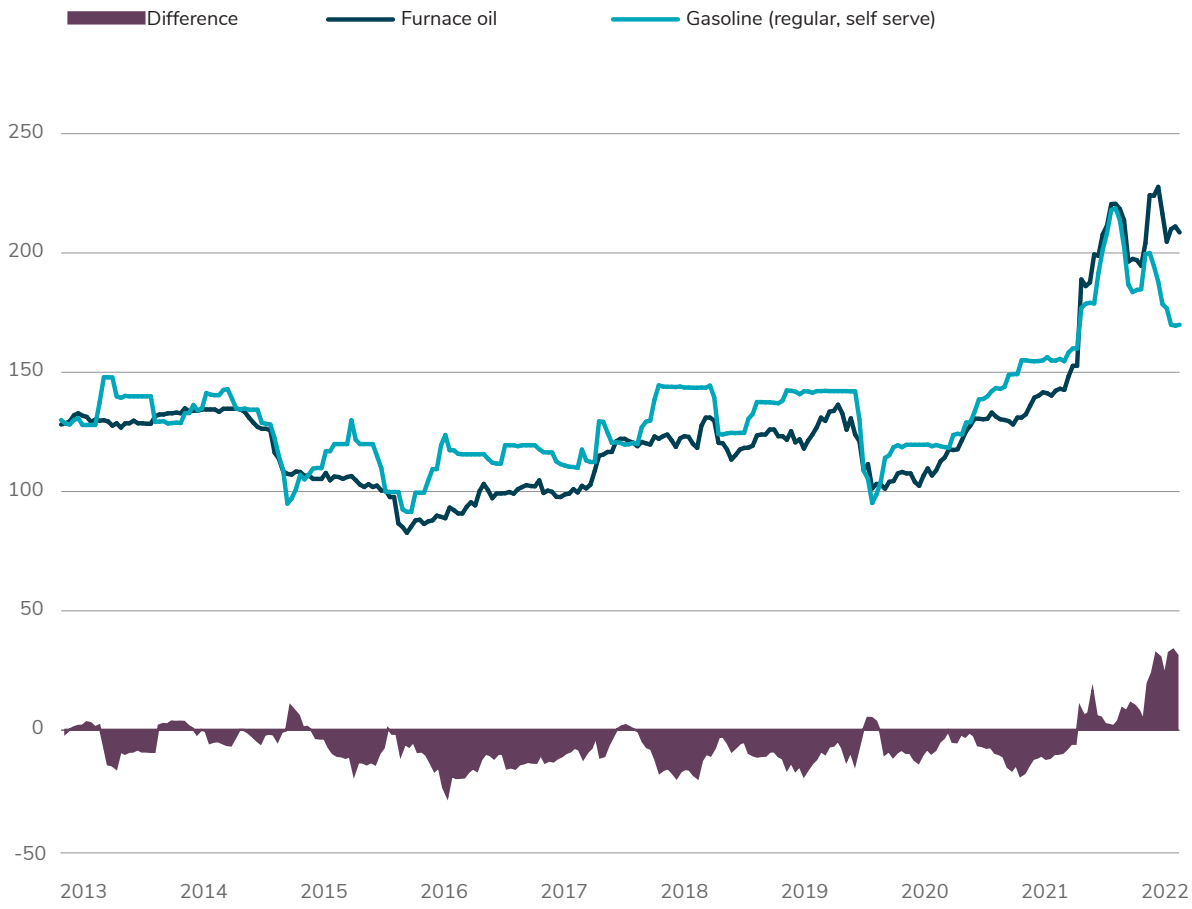
Rapid appreciation of prices for a large variety of consumer goods and services has also been the reality for Yukoners. The inflation rate in Whitehorse[17] averaged 6.8 per cent in 2022, the highest rate for the Whitehorse CPI since records began in 1982. Prices were up across most categories.

Higher fuel prices in 2022 were a prominent driver of overall inflation, with the price of gasoline up 29 per cent, and the price of fuel oil up 47 per cent compared to 2021. While gasoline prices have fallen by over 20 per cent from the peak in June, the price of fuel oil has remained elevated (Chart 9). This reflects global trends. US inventories of distillate fuels, including home heating oil and diesel, are at multi-year lows. Sanctions on Russia have led to Europe shifting towards non-Russian imports. While prices have stabilized, futures prices suggest that diesel and fuel oil prices are likely to remain at a hefty premium to gasoline in the near term.

17. Data are not available for the Yukon, only Whitehorse.

Chart 9. Gap between gasoline and other fuels has widened due to distillate shortage

Whitehorse fuel prices (cents per litre)



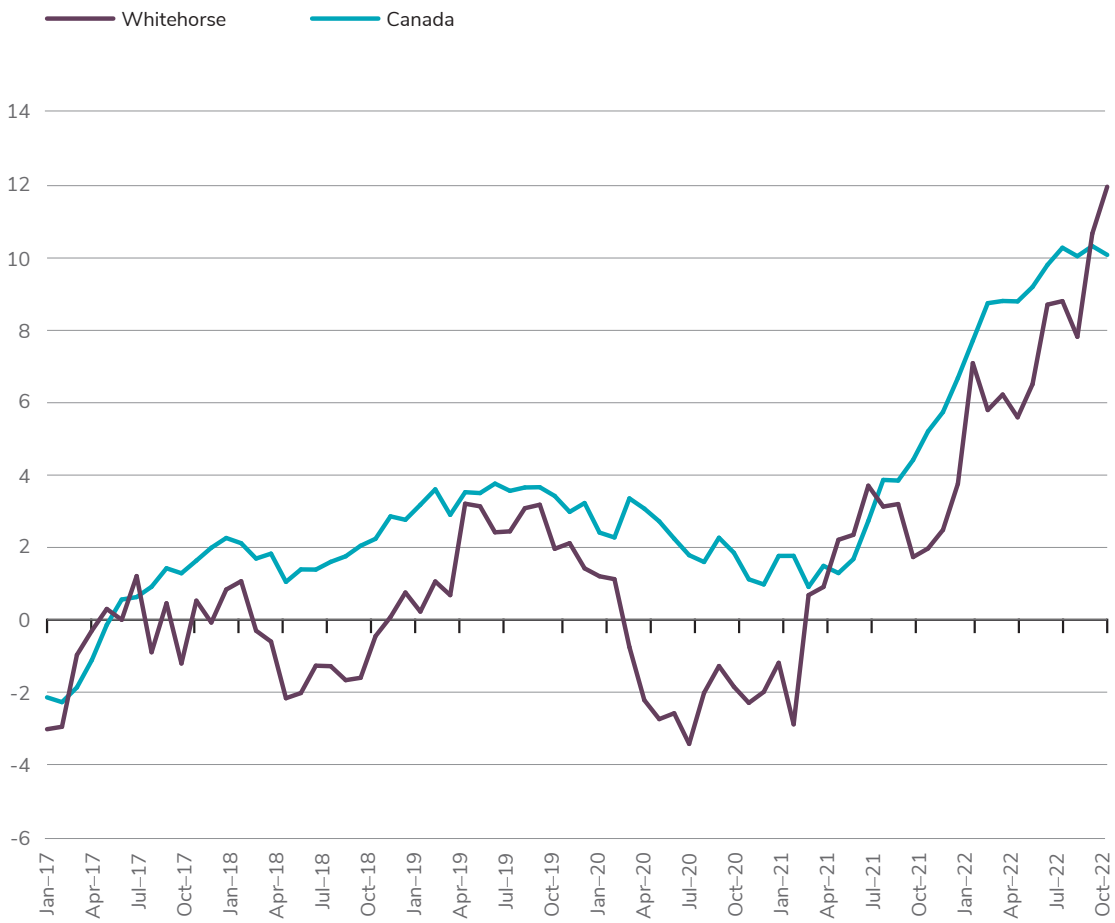
Source: Yukon Bureau of Statistics

Fuel oil is weighted heavier in the Whitehorse CPI than in the national index, because a substantially higher share of Yukoners use fuel oil for heat. This higher weighting is one of the reasons why inflation of 8.1 per cent in Whitehorse as of December was higher than the national rate of 6.3 per cent.

Another factor is that price pressures on food were slower to materialize in the Yukon than in the rest of Canada (Chart 10). Food prices in Canada rose throughout the pandemic, whereas in Whitehorse, they did not start to increase in earnest until later. Ultimately, prices in Whitehorse follow national trends closely and food prices have started to catch up. Inflation in Whitehorse was lower at the beginning of the year and higher at the end, averaging out over the course of the year with annual inflation for both Canada and Whitehorse coming in at 6.8 per cent.

Chart 10. Food price inflation was slower to materialize in Whitehorse

Year-over-year per cent change in the food component of CPI



Source: Statistics Canada

On January 25, 2023, the Bank of Canada increased its policy interest rate to 4.5 per cent to try to reduce the excess demand in the economy. The Bank signaled that it expects to "hold the policy rate at its current level while it assesses the impact of the cumulative interest rate increases."[18] The Bank has increased the policy rate by 4.25 percentage points since last March, the most in such a short span since the Bank began targeting interest rates in the early 1990s.

18. News release – *Bank of Canada increases policy interest rate by 25 basis points, continues quantitative tightening*. Bank of Canada. (January 25, 2023).

Most forecasters expect inflation in Canada will move towards historic norms over the next couple of years as supply chain problems subside and the effect of higher interest rates move through the economy. Canadian inflation is expected to decline from near 7 per cent in 2022, to between 3.5-4.0 per cent in 2023, and many forecasts are calling for inflation in 2024 to approach the midpoint of the Bank of Canada's target range of 1-3 per cent. Similarly, the average annual rate of inflation for Whitehorse is projected to fall from 6.8 per cent in 2022 to 3.8 per cent in 2023 and 2.5 per cent in 2024.

The housing market remains relatively strong but there are signs of cooling

Locally, housing prices have been strong for several years, driven in part by high demand. A generally strong economy has drawn people to the territory. Housing supply has struggled to keep pace with demand, and this has been reflected in upward pressure on housing prices. Prices in Whitehorse across all housing types have seen notable growth in recent years. The average weighted price of single detached homes, duplexes and mobile homes all reached record highs in 2022. Condominium prices in 2022 were down slightly from the 2021 record high.

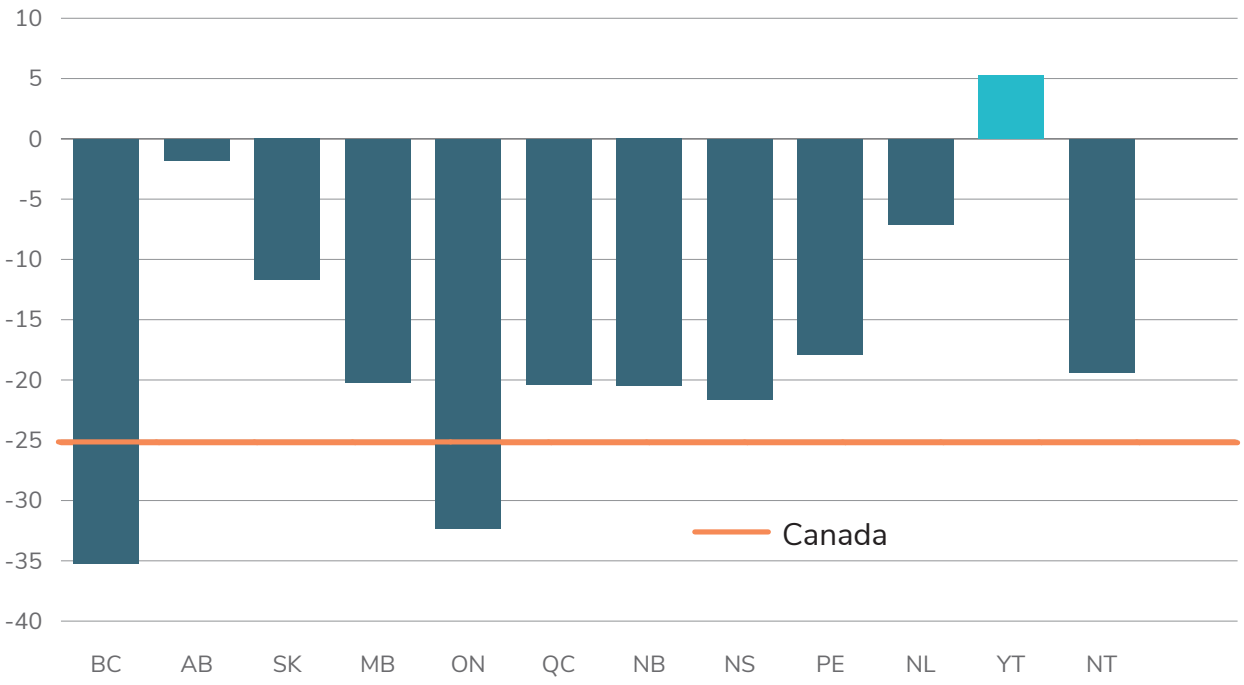
Even during an extended period of very low interest rates and growing household earnings, housing affordability has been eroding due to higher prices. More recently, rapid growth in interest rates has increased borrowing costs for new homebuyers and those on variable rate mortgages. Higher costs will filter through to fixed rate mortgages as they come up for renewal.



Higher interest rates took steam out of housing markets across the country. Average home prices in most Canadian markets fell over the second half of 2022. This effect was slower to materialize in the Yukon, which was the only jurisdiction that saw higher home sales in 2022 than in 2021 (Chart 11). It wasn't until the fourth quarter that signs of cooling showed in the Yukon data.[19] While increasing on average in 2022, average sales prices were down in the fourth quarter of last year across all housing types. Compared to the fourth quarter of 2021, prices were down by 1.2 per cent for single-detached, 3.9 per cent for duplexes, 11.4 per cent for condominiums and 1.6 per cent for mobile homes.

Chart 11. The Yukon experienced growth in the number of residential sales in 2022[20]

Residential sales, 2022 change from 2021 (per cent)



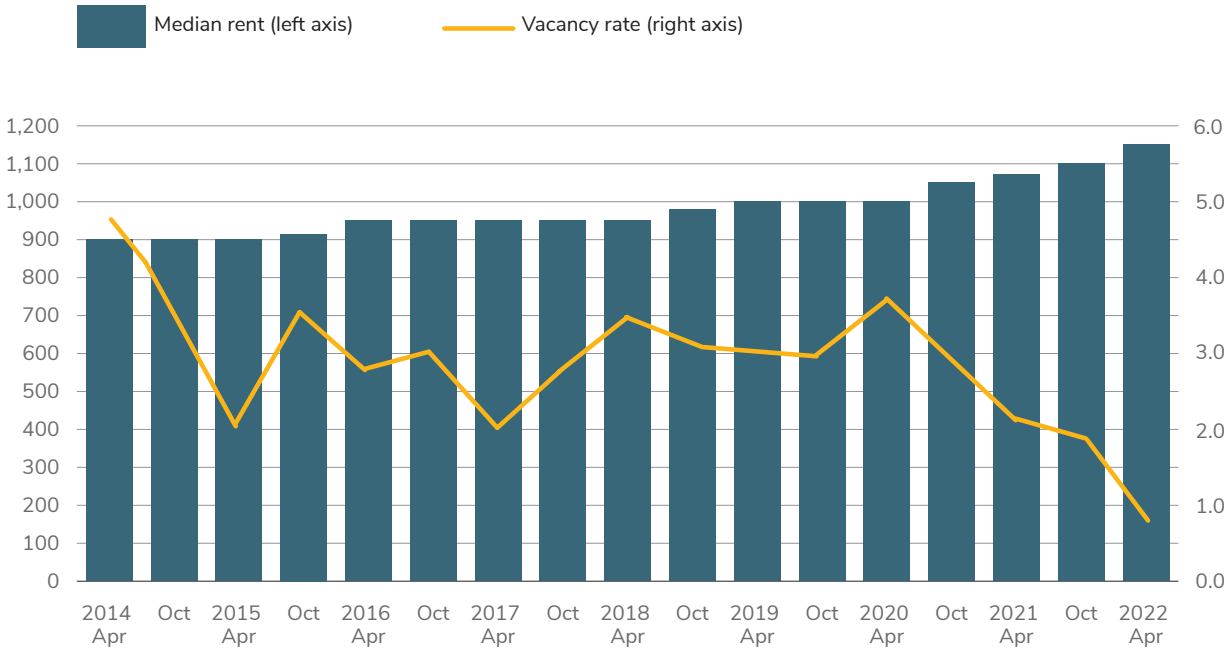
Source: The Canadian Real Estate Association

19. *Yukon Real Estate Report Fourth Quarter, 2022*. Yukon Bureau of Statistics. (February 2023).
20. The Canadian Real Estate Association does not publish data for Nunavut.

On the rental side, the market in recent years has been one of limited supply and increasing rents. The vacancy rate in buildings with three-or-more units fell to 0.8 per cent in April 2022, well below the 1.9 per cent reported in October 2021.[21] High demand and a lack of vacant units has translated into higher rents, with a median rent of $1,150 in April of last year, up 4.5 per cent from the October 2021 figure and 7.4 per cent higher than the April 2021 figure.

Chart 12. Recent history of rental market is one of few vacancies and increasing rents

Whitehorse median rent ($) and vacancy rate (per cent), units in buildings with 3+ rental units



Source: Yukon Bureau of Statistics

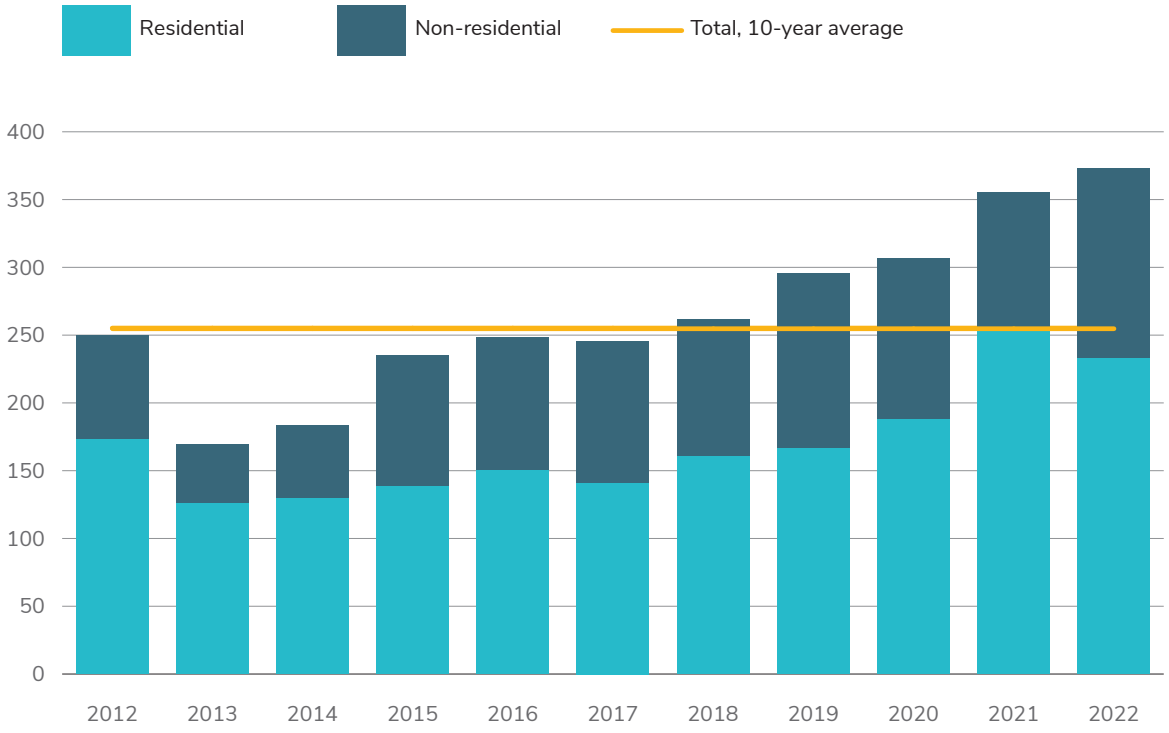
21. *Yukon Rent Survey April 2022*. Yukon Bureau of Statistics. (August 2022).

Residential investment remained strong in 2022

While below 2021's record level, investment in residential construction in 2022 continued to exceed investment on the non-residential side. Residential construction investment totalled $232.6 million in 2022, 62 per cent of the total $373.2 million in building construction reported for the period, and well above the ten-year average of $163 million for residential construction (Chart 13). The recent approval of phases 10 to 13 of the Whistle Bend subdivision will contribute to housing supply going forward.[22]

Chart 13. 2022 was another strong year for building construction

Investment in building construction ($ millions)



Source: Statistics Canada

22. *More phases of Whistle Bend subdivision approved* (January 19, 2023). Whitehorse Star.

Construction sector supported by commercial and government projects

The decline in residential spending from record highs was more than offset by increased non-residential spending. Investment in non-residential building construction totalled $140.6 million in 2022 and was up nearly 39 per cent from 2021 (Chart 13). Similarly, building permits for non-residential work were up substantially in 2022, growing 61 per cent to $150.7 million.

Government-related activities continue to be a primary driver of activity on the non-residential side. Growth was noted in both investment in building construction and building permits associated with institutional and governmental projects, up 83 per cent and 13 per cent, respectively. On the building permits side, construction of a new elementary school in Whitehorse's Whistle Bend subdivision and renovation of the Elijah Smith School were prominent contributors to last year's gains. Commercial permits also showed strong growth in 2022, more than doubling from $44.1 million to $97.0 million. Permit value was supported by construction of a three-storey office building in Whitehorse, renovation of the Old Territorial Administration building in Dawson City and work related to the Whitehorse Battery Energy Storage project.

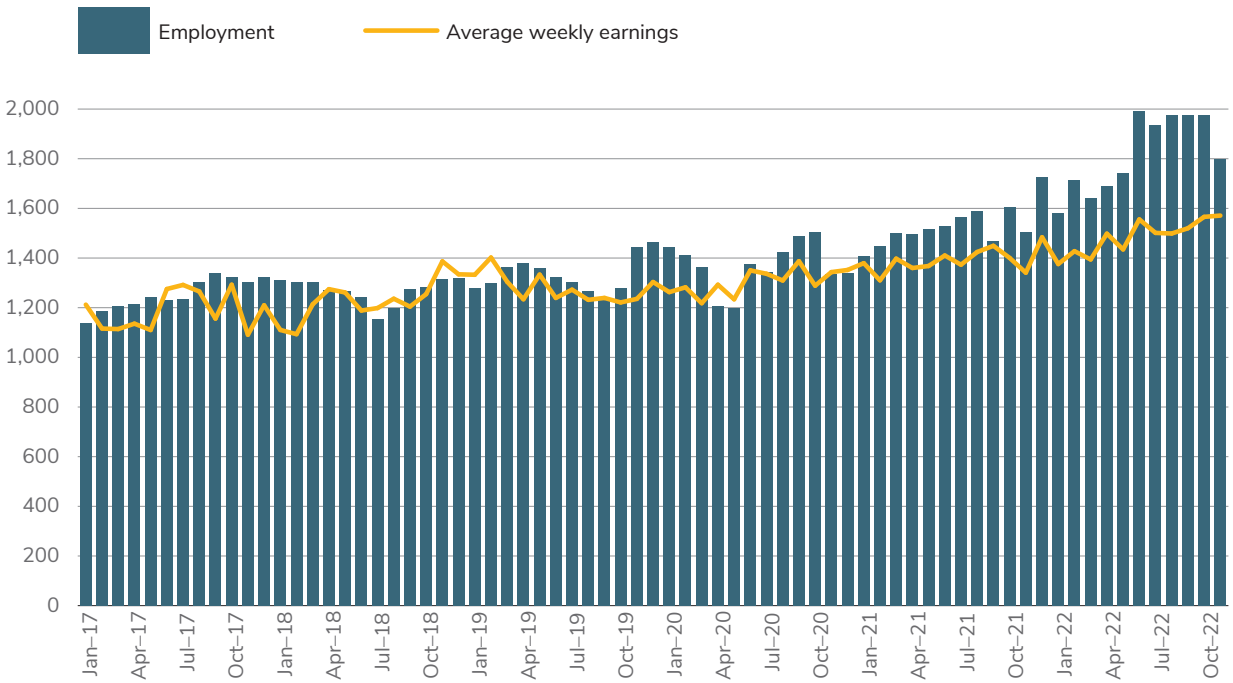
Higher input and labour costs continue to factor into some of the recent gains in building construction investment, due in part to supply chain constraints and stiff competition for tradespeople. Nationally, residential construction costs, on average, were 19 per cent higher and non-residential costs 13 per cent higher in 2022 compared to 2021.[23]

Increased activity created jobs in the construction sector and boosted wages. Construction employment reached an all-time high of 1,993 in June 2022 (Chart 14), up more than 50 per cent versus June 2019. Through the first eleven months of 2022, construction workers earned $1,486 per week on average, an increase of 7.4 per cent from 2021.

23. National figures are based on a composite of 11 census metropolitan areas.

Chart 14. Busy construction sector reflected in growth in construction employment and earnings

Employment (persons), Average weekly earnings ($)



Source: Statistics Canada

The Government of Yukon's *Five-Year Capital Plan* outlines spending to the end of fiscal year 2027–28 of $2.15 billion and includes significant spending in several priority areas such as 'transportation infrastructure', 'land development, housing, education and health' and 'community and First Nations infrastructure'. Projects such as the Nisutlin Bay Bridge, the Dempster Fibre project and the new elementary school in Whistle Bend are examples of investment in critical infrastructure included in the latest Capital Plan. In addition to Government of Yukon projects, the City of Whitehorse also factors into expectations of construction activity with over $130 million in planned spending on capital projects over 2023 to 2026.[24]

24. Spending figure is from the City of Whitehorse's *Capital Expenditure Program 2023–2026* released on November 14, 2022. Figure includes all approved spending, including spending of approximately $75 million that is subject to external funding approval.

Mineral production forecast to be strong over the medium term

The Yukon's mining industry has remained resilient in the face of major headwinds in 2022. High winter precipitation resulted in a heavy spring thaw that hindered mineral production, as both the Eagle Gold and Minto mines lost a month of operations and the sluicing season for placer miners was delayed. The sector has been facing a shortage of workers coming out of the pandemic, hampering some operations. High fuel prices and supply chain issues also presented challenges in 2022.

In addition to disruptions during the spring thaw, operation at Eagle Gold was stalled for three weeks in the third quarter due to the failure of the belt on the overland conveyor. These operational issues caused gold production to fall to 150,182 ounces in 2022, below the previous year's production of 164,222 ounces. With production from Keno Hill underperforming expectations, Alexco Resource Corporation halted operations in June 2022 to focus on mine development. Operations remained suspended following the acquisition of Alexco by Hecla Mining Company in September.

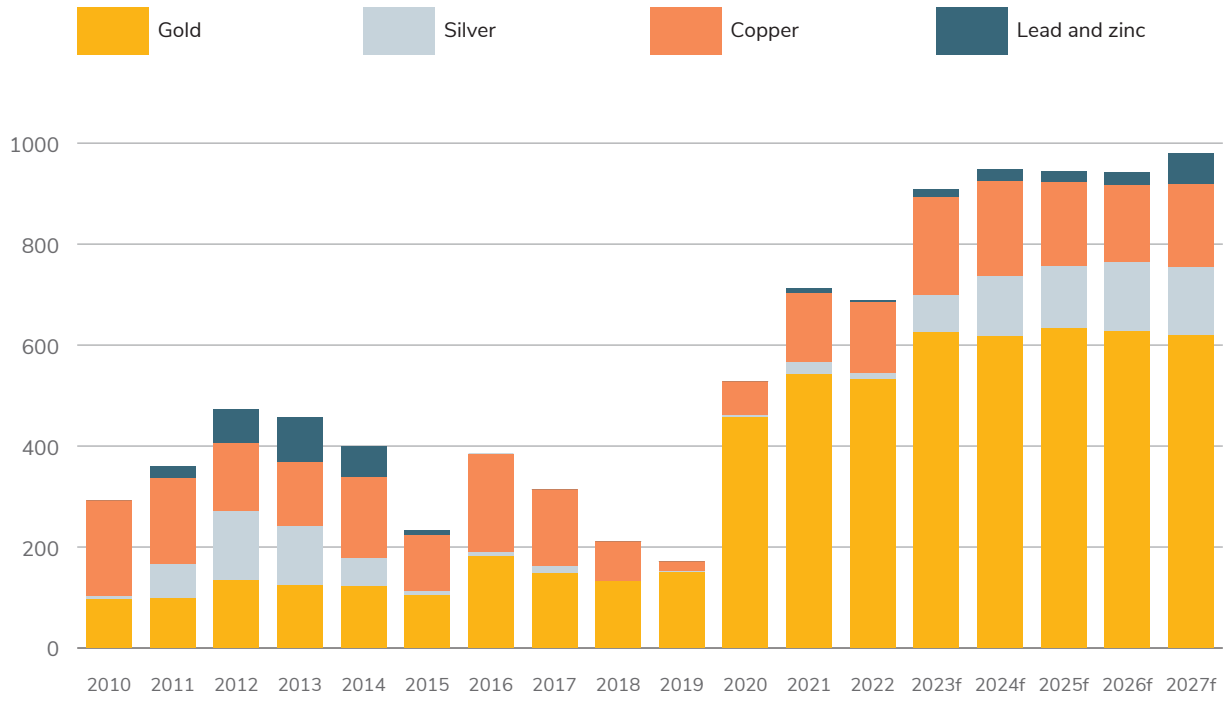
Production for the fourth quarter for the Minto mine was unavailable at the time of writing, but public statements from the President of Minto Metals Corporation in November 2022 noted that the expectation was that annual production would fall within their 2022 production guidance of 28-31 million pounds of copper.[25]

Placer miners also saw higher production. Placer gold production, according to export tax reporting, was 82,420 crude ounces (65,936 fine ounces), up from production of 80,484 crude ounces (64,387 fine ounces) in the previous year. At $154 million, the value of placer gold production accounted for about 22 per cent of 2022's total estimated mineral production.

25. News release – *Minto Metals announces 2022 third quarter results, revenue increased by 17% over the same quarter in previous year.* Minto Metals Corporation (November 17, 2022).

Chart 15. Mineral production value forecast to approach $1 billion[26]

Value of metal production in the Yukon ($ millions)



Source: Natural Resources Canada, Department of Energy, Mines and Resources, Department of Finance *f = forecast*

The Yukon's quartz miners expect to recover from the various setbacks that hindered 2022 production. Victoria Gold expects production at Eagle Gold to rebound in 2023 with production well above 2022's output as the project operator continues to work towards its annual target of 250,000 ounces. Hecla Mining Company announced earlier this year that mine development is ahead of schedule and that they plan to resume operations at Keno Hill in the third quarter of 2023. This, along with anticipated higher production at the Minto mine and sustained placer production, is expected to lead mineral production to rebound to $910 million in 2023 and exceed $900 million in all subsequent years of the forecast (Chart 15).

26. Due to data suppression of Statistic Canada's estimates, data presented for 2019, 2020 and 2021 are based on internal estimates.

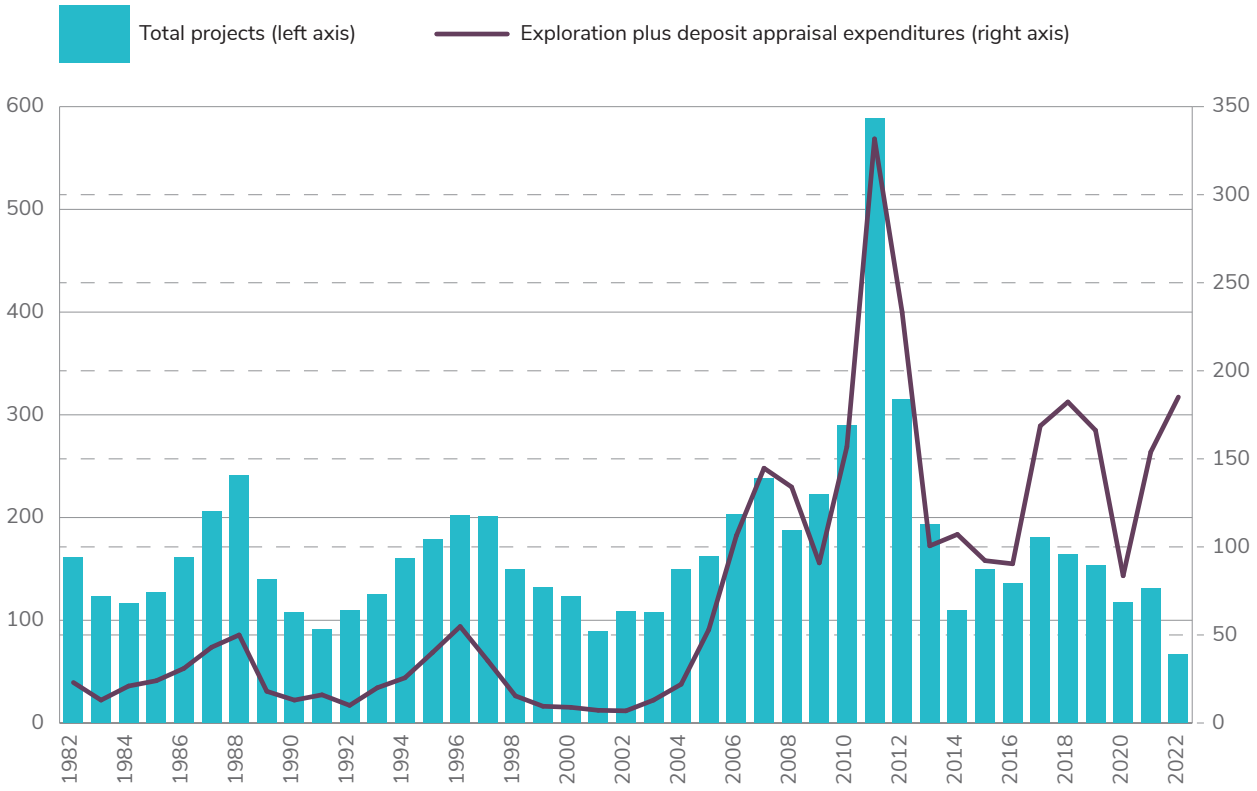
Mineral prices remain supportive of future development

Metals prices rallied to close out 2022 and, though down from earlier highs, remain well above pre-pandemic levels. This could spur development over the medium term for projects such as BMC Minerals Limited's Kudz Ze Kayah mine, Newmont Corporation's Coffee Gold project and Sabre Gold Mine Corporation's Brewery Creek project. Over the longer term, the advancing of the Casino project, a major global copper resource, may attract interest due to the pivotal role copper will play in the green economy and global electrification.

Higher metal prices offer investors the potential of better returns from the discovery of new deposits and exploration activities on current mining plays. Exploration spending has rebounded from pandemic lows. Revised spending intentions from Natural Resources Canada noted exploration spending in 2022 of about $185 million, up 20 per cent from $154 million in 2021 (Chart 16).

Chart 16. Number of active exploration projects trending down even as overall exploration spending has rebounded

Number of active projects, Exploration expenditures ($ millions)



Source: Department of Energy, Mines and Resources, Natural Resources Canada

Recent spending has been increasingly concentrated in a smaller set of mature projects, rather than early-stage projects. The number of exploration projects has fallen over the last several years to a 40-year low in 2022, despite overall spending rebounding.

Spending on exploration for precious metals accounted for 70 per cent of exploration spending in 2022, with the remainder on exploration for base metals. Precious metals are expected to continue to draw most of the interest in exploration activity over the forecast. This mix may eventually be impacted by Canada's critical minerals strategy (see Box 1), which seeks to increase the output of minerals deemed critical to the transition to green energy.

Box 1: Critical minerals a potential opportunity for the local mining industry and for the Yukon's energy goals

The release of *The Canadian Critical Minerals Strategy* in December 2022, along with an almost $4 billion commitment in Budget 2022, is a clear signal of the interest the federal government has in developing the country's critical minerals.

Ultimately, minerals noted as 'critical' reflect societal needs and values at a point in time. Canada's critical minerals strategy notes critical minerals as the building blocks of the green and digital economies, highlighting that "there is no energy transition without critical minerals: no batteries, no electric cars, no wind turbines and no solar panels."

Most of the 31 minerals that the Canadian government has published as being "critical" to Canada have known deposits or documented occurrences in the Yukon. While the territory's current production of critical minerals is quite modest, limited to copper production from the Minto mine and recent production of zinc and indium as a by-product at the Keno Hill mine, there is potential for production from existing identified deposits. Critical minerals are identified as prominent outputs of several potential mines including, Kudz Ze Kayah (zinc, copper); Casino (copper, molybdenum); Nickel Shäw (nickel, cobalt, platinum, palladium, copper) and Mactung (tungsten).

Given commitments by Canada and the Yukon to reduce carbon emissions, as well as the need to ensure future energy security, there is clear motivation to develop a reliable supply of critical minerals. With climate change and economic opportunity acting as strong motivators for development, critical minerals have the potential to be a prominent contributor to the local mining industry and the broader economy over the coming years.

Signs of a solid rebound in tourism activity, but a return to pre-pandemic levels will take time

The tourism sector has proven to be resilient in the face of what was an historic disruption to global travel.

Several key tourism metrics for the territory show significant improvement from the worst of the pandemic. The number of international border crossings into the Yukon totalled just over 168,000 in the first eleven months of 2022, almost five and a half times the number of crossings in the same period of 2021, and well above the 63,657 crossings reported for all of 2020 and 2021 combined when COVID-19 related travel restrictions weighed on visitation.

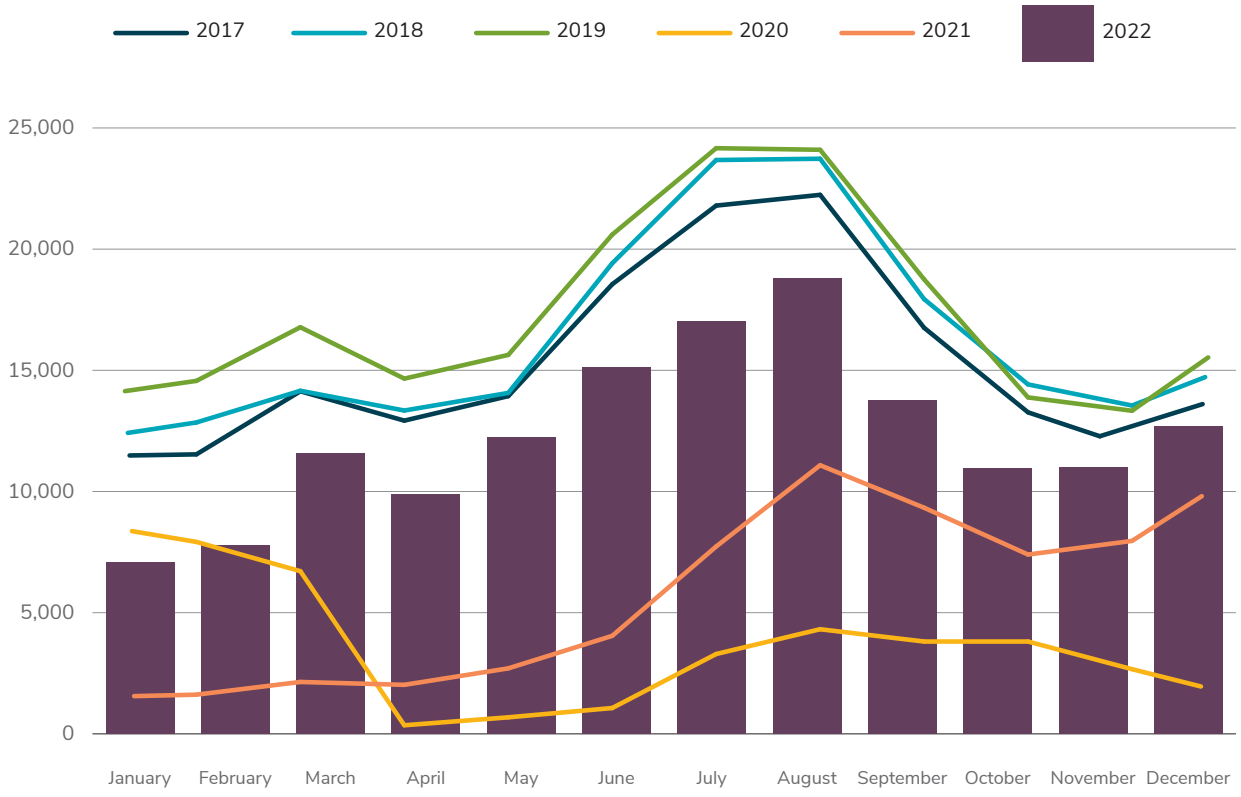
The tourism sector has proven to be resilient in the face of what was an historic disruption to global travel.

Like international border crossings, other indicators of performance are much improved from recent lows but continue to underperform pre-pandemic levels. Data for the first nine months of 2022 show international overnight visitation to be more than double the same period of 2021, but nearly 30 per cent lower than the five-year average.[27] Increased visitation is also reflected in increased hotel occupancy in 2022,[28,29] with data published by CBRE Hotels showing much higher occupancy rates in every month from January to November with the average of 56 per cent over this period, well ahead of the 41 per cent reported for the same period of 2021.[30]

An increased number of air arrivals in 2022 are another sign of the return of travel. Arrivals at Erik Nielsen Whitehorse International Airport were 2.2 times the number of arrivals from 2021 (Chart 17).

Chart 17. Air arrivals much improved from the last two years

Arrivals (deplaning passengers, thousands) at Erik Nielsen Whitehorse International Airport



Source: Statistics Canada

27. *Yukon Tourism Visitation Report, January to September 2022*. Department of Tourism and Culture. (December 22, 2022).
28. Occupancy rate is the percentage of occupied rooms expressed as percentage of the total available rooms at a given time.
29. Figures for the occupancy rate do not capture all hotel rooms in the Yukon, with about 600 rooms captured in this calculation.
30. Data taken from various CBRE Hotels monthly reports: *Trends in the Canadian Hotel Industry – National Market Report*.

Even with strong growth in 2022, air arrivals came in at only 72 per cent of arrivals in 2019, suggesting that there is still more room for recovery from the COVID-19 pandemic.

Tourism activity is increasing, but a variety of headwinds are slowing the recovery. Inflation is running at, or near, many decade highs, and is expected to remain elevated throughout much of 2023. Higher fuel costs have eaten into the bottom-lines of some service providers, particularly those that are fuel intensive such as providers of charter flights and tours.[31] Local tourism-service providers also continue to struggle with finding staff. Labour shortages in the accommodation and food services sector are more severe in the Yukon than they are in the rest of the country. Demand could also be impacted as higher interest rates lead to less discretionary spending.

Further improvement in key tourism metrics is expected. The Conference Board of Canada's latest Travel Markets Outlook supports this improving outlook for tourism, noting an expectation that visitation to the territory will reach pre-pandemic levels by 2024 or 2025, and that overnight visits will recover by 2024.[32] In addition, positive news, like White Pass Railroad's resumption of service to Canada in the summer of 2023, provides further evidence of a return to normalcy for the tourism sector.[33]



31. *Travel Exclusive Winter* 2022/23 Travel Intentions Survey. Canadian Tourism Research Institute. The Conference Board of Canada (December 2022).

32. *Emerging from the Wilderness – Yukon's Travel Markets* Outlook to 2026. The Conference Board of Canada. (January 24, 2023).

33. *White Pass Railroad to resume service to Canada this summer* (January 13, 2023). KHNS FM.

Appendix:
Key economic indicators

	2021	2022	2023f	2024f	2025f	2026f	2027f
Gross Domestic Product (GDP)							
Real GDP by Industry (2012$ millions)	3,045	3,138 (f)	3,308	3,431	3,534	3,666	3,831
Per cent change	10.0	3.1	5.4	3.7	3.0	3.7	4.5
Nominal GDP ($ millions)	3,704	4,049 (f)	4,432	4,795	5,093	5,480	5,948
Per cent change	14.3	9.3	9.4	8.2	6.2	7.6	8.5
Mineral Production *							
Metal production ($ millions)	710	690 (f)	910	950	950	940	980
Labour market							
Labour force *	23,700	24,300	25,100	25,500	26,100	26,800	27,700
Employment *	22,400	23,400	23,800	24,200	24,800	25,600	26,500
Unemployment rate	5.5	3.7	5.0	5.0	5.1	4.5	4.1
Participation rate	72.3	72.8	73.0	72.4	72.1	72.2	72.6
Income							
Household income ($ millions)	2,440	2,664	2,849	3,029	3,210	3,463	3,760
Per cent change	11.4	9.2	6.9	6.3	6.0	7.9	8.6
Consumers							
Consumer price inflation^	3.3	6.8	3.8	2.5	2.0	2.0	2.0
Retail sales ($ millions) *	963	1,030 (f)	1,090	1,150	1,210	1,290	1,400
Population							
Population*	43,190	43,964	44,900	45,900	46,800	47,700	48,700
Per cent change	2.3	1.8	2.1	2.2	2.1	1.9	2.0
Key Assumptions							
Gold (USD/t oz)	1,800	1,809	1,760	1,670	1,650	1,650	1,650
Silver (USD/t oz)	25.15	22.16	21.85	21.68	22.00	22.00	22.00
Copper (USD/lb.)	4.23	3.99	3.48	3.71	3.55	3.55	3.55
Zinc (USD/lb.)	1.36	1.58	1.33	1.25	1.23	1.15	1.15
Lead (USD/lb.)	1.00	0.97	0.91	0.91	0.93	0.93	0.93
Can/US exchange rate	0.80	0.77	0.75	0.77	0.78	0.78	0.78

f = forecast

^ = CPI available only for Whitehorse, annual average.

** = Forecasts are rounded. Annual per cent change based on unrounded figures.*

Source: Statistics Canada, Bank of Canada, Yukon Bureau of Statistics.

Population projections are produced by Yukon Bureau of Statistics. Metal prices forecasts are informed by prominent forecasters. All other forecasts are produced by the Department of Finance's Economic Research branch based on data available as of February 13, 2023.




Yukon

ATCO Electric YUKON

September 28, 2023 AEY-YUB-004

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

Please refer to the table below for the annual average site counts for Street Lights and Private Lights.

Table 1: AEY Average Annual Lights

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Actuals							Test Period	
Street Lights	5,443	5,511	5,609	5,635	5,783	6,143	6,240	6,306	6,411
Private Lights	810	806	803	794	773	767	785	772	751

ATCO Electric YUKON

September 28, 2023 AEY-YUB-005

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) AEY is using the Board-approved methodology to forecast Usage Per Customer (UPC), which has two main drivers:

- Compound Annual Growth Rate (CAGR); and
- Monthly actual/normalized UPC from the previous year.

For 2023, the decrease in residential UPC is attributable to two factors:

- Three months (January to March) of actual UPC included in the 2023 forecast being 2.3 percent lower than the same first three months in 2022; and
- The 2022 normalized residential UPC for the period April to December being lower than actual usage.

For 2024, the overall year over year impact of the CAGR for residential is an increase of 0.4 percent, explaining the increase in 2024.

(b) AEY anticipates the commercial UPC to continue trending towards pre-pandemic levels and, while UPC for 2023 is down, it is still above the UPC for 2020 and 2021, when normalized for weather.

(c) AEY has included the addition of seven new large commercial customers in its sales forecast during the Test Period. AEY has included three large commercial customers in December 2023, three in June 2024 and one in September 2024. The addition of these new large commercial customers, layered on top of the approved methodology, results in increased commercial UPC in 2024.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-006

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) YEC provided AEY with a forecast of industrial sales and revenue. Once a Board Order is received on AEY's 2023-2024 GRA, AEY will calculate the approved expected Rate Adjustment Rider R revenue for industrial customers and track expected and actual Rider R revenue. The difference between expected and actual Rider R revenue will be included in the deferral balance.

A hypothetical example of how the Industrial Rider R Deferral will operate is provided below:

January 2024
Forecast: $56,000
Actual: $60,000
Difference: +$4,000 (refund to customers) will be included in the deferral

February 2024
Forecast: $56,000
Actual: $55,000
Difference: -$1,000 (collection from customers) will be included in the deferral

As per Board Order 2022-13, the YUB directed AEY as follows: "Once the balance in the deferral account accumulates to $0.25 million, AEY will make an application to the Board to dispense with the balance in that deferral account…the balance in the deferral account may apply solely to residential and commercial non-government customers".

(b) If Rider R revenue is higher than forecast, as may be the case if additional industrial load unexpectedly comes onto the system, this will cause the deferral balance to increase. Alternatively, if an existing mine unexpectedly leaves the system, this will cause the deferral balance to decrease. Once the deferral balance reaches plus or minus $0.25 million, AEY will apply to the YUB to refund/collect the balance to/from AEY residential and commercial non-government customers using the Rate Relief Rider.

(c) AEY received an industrial sales forecast from YEC staff on April 20, 2023. AEY followed up with YEC after it was announced that the Minto Mine was ceasing operations and received an updated industrial sales forecast from YEC on May 25, 2023. Accordingly, AEY considers that it has included YEC's most current and representative sales forecast while preparing its GRA.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-007

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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?

Response:

(a-b) Please refer to the response to AEY-YUB-005(c). AEY has included three large commercial customers in December 2023, three in June 2024 and one in September 2024. AEY expects that the addition of the new large commercial customers will increase the average MWh per commercial customer for the 2024 forecast year.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-008

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) Note that the 2022 carbon tax rebate of $832,000 included the 2019-2021 carbon tax rebate amount which was previously unclaimed. Please refer to table below for the breakdown of the $832,000:

Table 1: Carbon Tax Rebate
($000)

Year	Carbon Tax Rebate
2019	33
2020	115
2021	123
2022	561
Total	**832**

The prior year carbon tax rebate calculation was based on the Schedule 444 - Yukon Business Carbon Price Rebate on the Canada Revenue Agency website.[1] The forecast Carbon Tax Rebate is based on AEY's forecast Eligible Undepreciated Capital Costs (UCC). Please refer to the table below for the calculation of AEY's forecast Carbon Tax Credit at the rates prescribed in Schedule 444.

Table 2: Forecast Carbon Tax Credit

	2023	2024
	Test Year	
Forecast Eligible UCC ($000)	15,273	13,561
Rebate Factor (per $1000)	21.89	21.89
Carbon Tax Rebate ($000)	334	297

(b) The charges are based on the estimated proportionate operational, administrative, and capital costs of providing billing services for YEC customers. The terms are agreed upon through a Customer Billing Services Agreement between AEY and YEC.

[1] https://www.canada.ca/content/dam/cra-arc/formspubs/pbg/t2sch444/t2sch444-23e.pdf.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-009

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-009

Reference: 2023-24 GRA, Section 11, Attachment 11.1, PDF page 191

Issue: Summary of Customers, Energy Sales and Revenue

Request:

(a) 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

Response:

(a) Secondary energy is available at certain times, as determined by YEC based on the availability of surplus energy. This surplus has historically only been available in summer months and only if surplus hydro is available. There have been long periods in which surplus hydro was not available (e.g., years of low water levels).

ATCO Electric YUKON

September 28, 2023 AEY-YUB-010

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) The capital rebuild referred to is for the Fish Lake Unit 2 wickets replacement and bypass automation, which commenced on August 4, 2023 and is expected to be complete in mid-October 2023.

(b) AEY does not foresee any water availability issues in the Test Period.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-011

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-011

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.

Response:

(a) Yes.

(b) Confirmed. AEY would still assume the risk associated with sales volume, but AEY would not assume the risk associated with changes to the Wholesale purchase rate.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-012

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) Any event or protection which limits or stops the operation of the BESS will impact the IPP's ability to generate energy onto the grid. For example, this could be a component failure or internal temperature alarms both high and low. The operation of the BESS, due to the limitation of isolated systems, is essential to allow for safe and reliable delivery of the IPP's energy generation onto the distribution system. The BESS can fail or be disconnected like any other electrical infrastructure on a power system.

(b) No, the referenced BESS is not a YEC asset. The referenced BESS are those fully contributed by the IPP and owned and operated by AEY in the isolated communities. The role of the BESS for intermittent renewables is to ensure proper grid operation which is solely the responsibility of the utility.

(c) The microgrid control is responsible for the overall operation of the remote electrical system comprised of both AEY's and the IPP's generation, distribution feeders, and the BESS. As this device controls the overall electrical system, which is the responsibility of the utility, it is owned and operated by AEY.

(d) No, these IPPs are not located in the hydro zone. The referenced IPPs are in AEY's isolated communities.

(e) A deferral account is needed for the maintenance costs of the BESS and Microgrid Controller (MGC) required for the IPP projects as well as for the constraint payments. It is not typical, and there is no precedent, for a particular AEY asset, to have a deferral account for electrical infrastructure in a power system. This is not typical utility infrastructure as the Old Crow Solar Project is the first of its kind in northern Canada. AEY has worked with the community as well as territorial and federal governments to integrate this renewable energy system into AEY's isolated grid to the best of its abilities. AEY does not have extensive experience with this new technology, nor experience at integrating an intermittent source of power that can displace 100% of community diesel generation for periods of time. AEY believes these maintenance costs meet the criteria for deferral as previously accepted in AEY's 2016-2017 Phase I GRA. The criteria are as follows:

- Costs are not under the control of the company and are not reasonably forecastable; or
- A variance in forecasting could produce a loss or gain of a substantial magnitude.

(f) The probability of a system constraint, for reasons other than a BESS or microgrid controller, is low for those circumstances under AEY control. The system reliability, if the new BESS and IPP facility are isolated on the electrical grid, would remain comparable to recent reliability reports absent events such as wildfires.

(g) In isolated generation communities, AEY began receiving electrical energy from the IPP facility in Old Crow in 2021 and from micro-generation in Burwash Landing in 2013. On AEY's distribution system attached to the Yukon Integrated System, the first micro-generation received was in the Annie Lake area in 2014.

(h) Yes, system reliability is generally under control of management. This is managed through AEY's ongoing preventative maintenance work throughout the system, capital improvements and regular inspections. However, there are events outside

the utility's control that cause outages such as third-party contacts, extreme weather events, and animal contacts.

September 28, 2023 AEY-YUB-013

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) AEY has not changed any aspect of its methodology for forecasting O&M expenses.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-014

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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).

Response:

(a) The quantity of FTEs representing the additional engineering resources in 2018 is 0.4 and the quantity of FTEs representing the additional engineering resources in 2022 is 0.18.

(b) Yes. The quantity of FTEs representing the additional plant maintenance resource noted on line No. 38 in 2023 is 0.38.

(c) The quantity of FTEs representing the additional resources in 2017 ($0.065 million due to filling vacant positions) is 0.4.

The quantity of FTEs representing the additional resources in 2023 (approximately $0.050 million due to an additional plant maintenance resource) is 0.3.

(d) The quantity of FTEs representing the additional plant maintenance resource noted on line No. 67 ($0.086 million) is 0.5.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-015

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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]

[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.

(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.

(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).

Response:

(a) The quantity of FTEs representing 'Distribution: 87000 – Supervision' vacancy in 2020 is 0.3. The vacancy has been filled at the time of submitting this response.

(b) The quantity of FTEs representing the 2017 vacancy ($0.190 million) is 1.0. The quantity of FTEs representing the reduction in 2020 vacancy ($0.120 million) is 0.64. The quantity of FTEs representing the impact in 2019 of the vacancy filled in 2018 ($0.091 million) is 0.5 and the quantity of FTEs representing additional resources added in 2023 (0.070 million) is 0.4 FTEs. AEY confirms, that the additional resource in 2023 has been added at the time of submitting this response.

(c) The expenditures for "write off of cancelled projects" relate to, contract services to be provided by vendors for the customers' projects. However, the customers decided not to proceed with the projects and the cancelled projects were deemed to not meet the capitalization criteria. The contract services cost and customer contributions had both been moved to O&M expense and the expenditures for "write off of cancelled projects" represents the net amount of write-offs in this Activity group.

Other than the inflationary and cancelled project amounts noted by AEY on Line No. 121 ($0.179 million and $0.127 million, respectively) as explanations for the total $0.598 million[3] increase in "Other" expenses between 2021 and 2022, there is a remaining increase of approximately $0.292 million in 2022 "Other" expenses. This increase is due to catch up on maintenance work deferred due to the pandemic and the breakdown is outline in Table 1 below.[4]

Table 1: Incremental Costs in 2022 ($000)

Incremental Cost	Total
Vehicle Charges	120
Business Travel	75
Freight	32
Equipment Rentals	15
Materials	3
Safety Expense	2
Other	45
Total	**292**

[3] $0.598 million total "Other" variance was calculated as the difference between $1.310 million (2022) and $0.712 million (2021).

[4] $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.

(d) The increase in services to outside parties between 2020 and 2021 is due to labour support provided to ATCO's project to rebuild Puerto Rico's Electrical grid (LUMA Energy). Incremental costs within the service to outside parties and affiliate services are fully recoverable (no element of profit is received), therefore, there is no impact on revenue requirement.

(e) Please refer to the table below for further details respecting labor cost year-over-year variances (Distribution: 87400 – Underground Line Maintenance), including quantities of FTEs and related costs.

Table 2: 87400 – Underground Line Maintenance FTEs

2016 vs. 2017	Labour cost decreased by $0.03 million in 2017 (0.15 FTE)
2017 vs. 2018	Labour cost increased by $0.066 million in 2018 (0.3 FTE)
2018 vs. 2019	Labour cost decreased by $0.039 million in 2019 (0.19 FTE)
2019 vs. 2020	Labour cost decreased by $0.03 million in 2020 (0.15 FTE)
2020 vs. 2021	Labour cost decrease by $ 0.015 million in 2021 (0.08 FTE)
2021 vs. 2022	Labour cost increased by $0.058 million in 2022 (0.28 FTE)
2022 vs. 2023	Labour cost decreased by $0.012 million in 2023 (0.06 FTE)

(f) The incremental costs were forecast for AMI testing during the transition period. Once AMI is implemented, the need for traditional meter readers will likely decrease, however it is too early to predict the cost savings now. Therefore, savings in terms of reduced costs have not been incorporated into the test period.

(g) AEY has an ongoing street light testing program. This program was implemented in 2021 and will follow an eight-year testing schedule. AEY will complete the testing within the test period which is included in the forecast. This forecast is based on the scheduled number of streetlights and their estimated costs. This forecast also includes streetlights in relation to system growth as newer streetlights still require monitoring and inspection to prevent failure.

ATCO Electric
YUKON

September 28, 2023 AEY-YUB-016

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) Confirmed.

(b) Confirmed, the annual subscription fee for 38 satellite radios is $0.06 million. The annual subscription fee for the original radio system was $4,000, which AEY will discontinue in 2024.

(c) Confirmed.

(d) Confirmed.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-017

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) Yes.

(b) AEY had a vacancy position for Senior Corporate Communication advisor (0.6 FTE) during the period 2018-2021. Head office Marketing had been providing affiliate services to support AEY when that position was vacant. The position was filled in November 2021, shared between AEY, Northland Utilities (Yellowknife) and Northland Utilities (NWT). The labour cost forecast in 2023 and 2024 is $0.079 million in 2023 and $0.082 million in 2024.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-018

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) The incremental cost in 2022 was one time contract services for integrating weather stations into Old Crow Control systems, so this was not forecast in 2023.

(b) Reduced costs for meter reading are not reflected in this test period as the AMI program is just being initiated. Please also refer to the response to AEY-YUB-015(f).

(c) There are no one-time costs included in these referenced line numbers.

(d) The CCS billing system is shared between AEY, Northland Utilities (Yellowknife) and Northland Utilities (NWT). These CCS subscription fees are allocated between these three entities and AEY's allocation is based on its number of customers as a percentage of the total customers of all three entities.

(e) Please refer to following table for detailed Year-over-year quantities of FTEs and the related costs for Customer Accounting: 71300 – Customer Billing and Accounting:

Table 1: Customer Billing and Accounting Labour Costs
($000)

	Actuals						
	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
FTEs	1.8	2.0	2.0	2.5	2.7	2.8	3.3
Labour Costs	178	193	189	251	295	290	334

ATCO Electric YUKON

September 28, 2023 AEY-YUB-019

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) Please refer to the following table for the breakdown of the O&M costs for 72100 – Administrative.

Table 1: Breakdown of 72100 – Administration & General ($000)

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Actuals							Test Period	
Employee Labour & Benefits	612	684	722	648	678	997	767	867	878
Total Labour Cost	**612**	**684**	**722**	**648**	**678**	**997**	**767**	**867**	**878**
Head Office Services	642	721	573	614	597	567	359	818	904
IT Charge	290	393	325	294	325	354	419	472	472
IT Services	160	162	163	165	140	145	162	173	179
Contract Services & Consultants	96	162	166	272	249	274	208	276	278
Telephone	35	54	57	54	58	62	79	86	89
Travel	105	97	78	53	36	43	47	78	79
IT Termination	-	-	-	-	467	-	-	-	-
IT Transition Costs	-	-	-	-	-	294	-	-	-
Severance – Covid Vaccine Policy	-	-	-	-	-	-	410	-	-
Other	109	115	111	93	98	75	129	67	89
Total Non-Labour	**1,437**	**1,704**	**1,473**	**1,546**	**1,969**	**1,814**	**1,813**	**1,970**	**2,090**
Total	**2,049**	**2,388**	**2,195**	**2,194**	**2,647**	**2,811**	**2,580**	**2,837**	**2,968**

(b) Regarding the variances mentioned in S5.2, Line Nos. 309-334 (Administration & General: 72100 – Administrative), please refer to the detailed changes including quantities of FTEs and the related costs.

- Costs increase in 2017 mainly due to reduced administrative and head office vacancies ($174 thousand) which was for 1.4 FTEs.
- Costs decrease in 2018 mainly due to higher head office vacancies ($112,000) which was for 0.8 FTEs.
- Costs decrease in 2019 mainly due to vacancies for 0.6 FTEs ($74,000).
- Cost decreased in 2022 due to lower head office costs due to high vacancy ($295,000) for 2 FTEs.
- Cost increased in 2023 mainly due to filling head office vacancies ($327,000) for 2 FTEs.

(c) During each renewal period, ATCO's Risk & Insurance team prepares updated insurance underwriting information and circulates this submission to Aon (ATCO's insurance broker). Aon's experienced brokers and account executives then leverage their industry expertise to present this information to the insurance marketplace and obtain competitive quotes.

We select the most competitive quotes based on a thorough evaluation of pricing and favorable Terms and Conditions, ensuring that we negotiate the best possible insurance coverage.

ATCO also participates on the Canadian Electrical Risk Managers (CERM) committee. The CERM is comprised of risk and insurance professionals representing power and utility companies from across Canada. We convene on an annual basis to benchmark the outcomes of our respective renewals (to ensure competitive pricing) and to discuss and ensure that our limits and deductibles are in line with those of our peers'. AEY utilizes the benchmarks established through this process as a foundation for forecasting insurance costs in the upcoming years. This includes factoring in inflation rates to provide an accurate estimate of insurance expenses in the GRA. By following this process and benchmarking against industry peers through CERM, AEY ensures that competitive prices are

negotiated for insurance coverage during each renewal period. The benchmarking data and inflation adjustments derived from this practice significantly contribute to the accuracy of AEY's forecasts, helping AEY plan for and manage insurance costs effectively.

(d) The RID provision has accumulated to a refund position as of 2022. In each of the Test Years, AEY plans to refund the credits to the consumers which is $0.279 million each year. The refund of the accumulated RID balance is through the O&M Schedule 5.1, line 41.

(e) The labour cost was negative in 2021 due to a correction of a miscode in 2020 and zero after 2021 due to the transition to standard labour rates. These costs are now included in the standard labour rates and are charged as part of the employee's labour costs to the O&M activities or Capital projects in which the employees perform work.

(f) PLT is Power Line Technician training.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-020

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a-b) The Financial Reporting and Regulatory support costs are related to labour and costs for staff that support AEY's regulatory and finance functions, as well as travel costs, excluding the time-period when travel restrictions were in place. Increased workload is the main driver for the increase in costs, in addition to filling previously vacant positions. AEY also notes that the Corporate Accountant position that was previously based in Whitehorse was back-filled in Head Office when that position became vacant. Specific tasks for each function and the driver for increase in costs for the years 2023 and 2024 are mainly as follows:

- The Financial Reporting group is responsible for preparing monthly, quarterly, and annual financial information, for both internal reporting

purposes and for supporting external reporting requirements, as well as providing financial support for the regulatory team. This group's responsibilities include: completing business plans and forecasts, corporate planning, filing tax information, implementing new reporting standards preparing Financial Statements and Management reports, supporting audit and assurance functions, and improving processes and procedures. The Financial Reporting group has experienced a high level of turnover due to the increase in workload. Additional resources are required to ensure that there is enough manpower to prevent overburdening existing staff and to ensure that business objectives are achieved.

- Additional Regulatory Support is required due to increased workload and complexity associated with regulatory filings and commercial matters including, but not limited to, rates and riders administration, rate applications, calculations for the terms of Electricity Purchase Agreements, managing customer complaints and ad hoc matters. AEY has experienced increasing volumes of workload and complexity with IPP and microgrid programs and, therefore, requires resources to meet these growing demands. Without an increase in manpower in the Regulatory functional group, legal and consulting costs will increase and there will be inefficiencies in the regulatory process as additional extensions would be required in order to complete the current workload. Due to the increase in regulatory requirements, capacity building, grid modernization initiatives, aging infrastructure and regulatory implications of changes in Government policies and legislation, AEY does not anticipate a decrease in the level of support needed from the Regulatory group.

- Government Relations & Initiatives support is required for building relationships with government representatives, participating and prioritizing cross-functional policy discussions, and providing support for businesses, as required. Coordinated government relations activities are important in ensuring impacts to AEY and its customers are broadly considered and understood by policymakers, as various levels of government develop policies and regulations that affect the reliability, affordability, and sustainability of electricity. This position ensures that AEY is aware of government initiatives that can directly impact AEY and its customers and so that AEY can proactively participate in the development of these initiatives.

- A portion of the cost increase in 2023, compared to 2022, is due to the filling of vacancies.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-021

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

Actual property tax increases from 2016-2022 were due to inflation.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-022

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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?

Response:

(a) The BCUC GCOC released its Stage 1 GCOC Decision (Decision and Order G-236-23) on September 5, 2023. For FBC (Electric), a deemed equity component of 41.0 percent (up from 40.0 percent) and an ROE of 9.65 percent (up from 9.15 percent) have been determined. For FEI, the previous benchmark utility, a deemed equity component of 45.0 percent (up from 41.0 percent) and an ROE of 9.65 percent (up from 8.75 percent) have been determined. The BCUC has not determined which (or if both) of these utilities will serve as the benchmark as part of its Stage 1 determination; however, for the purpose of this Proceeding the outcome is the same for AEY's proposed ROE.

(b) Yes. AEY submits that the Board should use the latest benchmark established in BCUC Decision and Order G-236-23, as detailed in part (a).

ATCO Electric YUKON

September 28, 2023 AEY-YUB-023

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a-b) Concentric does not believe that YEC should be considered a comparable utility because it is primarily a generation and transmission utility and serves a few commercial customers. AEY is mainly a distribution utility and owns limited generation. Additionally, YEC is a crown corporation rather than being owned by a publicly-traded holding company that raises debt and equity capital in public markets. Lastly, YEC's ROE is also set by this Board and would not provide an independent comparator. As discussed in the Concentric Report, Concentrics view

is that smaller, publicly-traded electric and gas utilities in Canada are the most appropriate comparators to AEY for the purposes of determining whether a risk premium above the benchmark utility is justified.

(c) Concentric is aware that the YUB has not recognized the stand-alone principle. However, this principle is consistently recognized by other utility regulators across Canada, including the Alberta Utilities Commission (AUC), Ontario Energy Board and the British Columbia Utilities Commission. The standalone principle is well accepted in developing a fair return, as outlined by the AUC in Decision 22570-D01-2018 (2018 Generic Cost of Capital), paragraphs 217 and 218:

> 217. The stand-alone principle has been applied by the Commission to treat a regulated utility as a distinct entity for the purposes of determining the costs to be borne by ratepayers for the service of the regulated utility. As noted by the Alberta Court of Appeal in ATCO Electric Ltd. v Alberta (Energy and Utilities Board), "The purpose of the stand-alone principle is to notionally isolate and categorize – for accounting and rate-making purposes – the costs incurred in the operation of a discrete business function of a utility. "The principle has been applied to allocate costs between regulated and non-regulated activities of an integrated utility, with the theory being that regulated utility customers should only pay for the costs of the regulated service. It has also been applied to allocate costs incurred by an integrated utility amongst its various business functions, so that just and reasonable rates can be set for each business function. In the context of a GCOC proceeding, the stand-alone principle has been applied to determine an ROE and deemed equity structure for each regulated utility as if it were a stand-alone entity.
>
> 218. The stand-alone principle arises with respect to municipal utilities when the Commission considers what regard, if any, should be had for the fact that the utility is ultimately owned by a municipality. A municipality possesses certain unique traits that distinguish it from a nonmunicipal corporation. For example, a municipality has access to low cost ACFA financing and the ability to use an equity funding rider, which it may pass on to the regulated utility. Additionally, a municipally owned utility is exempt from paying income taxes.

Because AEY's parent company is regulated subject to the standalone principle, incremental risk associated with owning a small-sized utility in a northern

jurisdiction is not contemplated in its fair returns. In AEY's view that risk should be accounted for within the fair returns of AEY.

(d) As discussed in the Concentric Report, the most important criterion is the Fair Return Standard as established by the Supreme Court of Canada in Northwestern Utilities v. City of Edmonton where the Supreme Court found as follows:

> By a fair return is meant that the company will be allowed as large a return on the capital invested in its enterprise (which will be net to the company) as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise.

The stand-alone principle, however, is also important because the YUB should consider the company-specific business and financial risks of AEY and not those of its parent company, Canadian Utilities Ltd., when determining the aforementioned fair return.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-024

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a-c) Neither Concentric nor AEY have completed extensive analyses on a large sample of other utilities, and Concentric Report does not state that other utilities are also

not affected by extreme weather conditions. The distinguishing factor for AEY is that the Company's service territory is characterized by extreme weather conditions to a greater degree than most other electric and gas utilities in Canada. As a result, the Company's sales are more sensitive than most utilities to weather conditions, while at the same time AEY is smaller, meaning that the Company has fewer resources to respond to weather-related service disruptions and outages that may occur in the remote locations served by AEY.

AEY has reviewed the weather sensitivity of AEY's residential sales compared to its affiliate electric companies. AEY's regression of UPC and weather shows that AEY has a significantly higher HDD coefficient than ATCO Electric Distribution (AED), Northland Utilities Yellowknife Limited (NUY) and Northland Utilities (NWT) Limited (NWT). These findings are also consistent with the fact that AEY has higher residential average use and a higher proportion of customers using electric heat.

Table 1: Select HDD and UPC data

	HDD Coefficient	2022 Actual Annual UPC (kWh)
AEY (Whitehorse)[1]	0.7376	11,065
AED[2]	0.2769	6,969
NUY[3]	0.2612	7,071
NWT (Hay River)[4]	0.2242	5,955

1. AEY 2023-2023 GRA, Section 02 – Attachment 2.1.
2. ATCO Electric 2023 COS Compliance Filing.
3. NUY 2011-2013 GRA.
4. NWT 2023 GRA, Section 02 - Attachment 1.

(d) While every electric and gas utility is impacted by the economic health of the community to some degree, as discussed on pages 20-21 of the Concentric Report, the distinguishing factor for very small utilities like AEY is that adverse economic conditions have a more significant effect on the utility's sales and the

Company's ability to recover its revenue requirement and earn its authorized return. This is because reduced demand for electricity due to economic conditions or the loss of a large customer have a much greater effect on a company such as AEY than on a larger utility that has a more diversified customer base.

(e) While there are risks to AEY's sales, due to the impacts from weather (as discussed in parts (a) to (c) above), changes in the economy, and customer behavior, AEY does not consider that a deferral on sales is required, at this time. AEY does have an approved deferral respecting YEC's Industrial sales forecast. However, this deferral account is strictly for purposes of calculating AEY's Rider R adjustment.

In AEY's view, a deferral account related to its sales forecast would not meet the criterion related to risk. As supported by the Concentric Report, AEY's capital structure is the appropriate mechanism to compensate for these risks. AEY notes that, currently, it is uncommon for electric utilities to have sales deferrals as this process adds additional complexity and administrative and regulatory burden respecting further regulatory submissions to true-up deferrals.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-025

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

Most electric utilities primarily serve large urban areas, while also serving customers in rural areas that are more remote and sparsely populated. While other utilities may face similar risk, the distinguishing factor is the extent to which this operating risk applies to AEY's service territory. While the risk associated with serving a rural base may apply to other electric utilities, this risk is higher for AEY because the Company serves a larger percentage of customers in very remote communities and locations. In addition, AEY has greater than average operating risk due to severe weather conditions because the Company serves customers within these very remote areas.

The costs associated with addressing issues, outages and/or implications of inclement weather are higher in remote, rural communities as opposed to urban centers. As such, AEY has a higher risk of a higher negative impact to its returns due to the higher proportion of rural and remote customers that it serves.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-026

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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?

Response:

(a) The Federal government and many Canadian provinces and territories have passed legislation in the past two years regarding decarbonization of the economy by 2050 with interim targets in 2030. Government policy has only intensified influencing customer behaviors, which includes rebates on new technology such as solar panels and Electric Vehicles, government grants for renewable generation, and mandates on the auto industry by 2035. While this provides opportunity, this transition also introduces risk and challenges to electric utilities,

in particular small electric utilities providing service in remote locations. Electric utilities must respond to these influences as the way the system is used is changing, creating new challenges such as technical issues with intermittent generation from renewables, new peak loads and higher demand loads. It is clear that the traditional and technical operations of the system, especially in remote locations, will not withstand the changes in customer behaviors. The utility must modernize the grid, while navigating challenges such as predicting customer behaviors, modernizing regulations and policy, supply chain and resourcing issues as this transition occurs across the globe. These challenges and the transition creates risk for investors not seen in the past.

The credit rating agencies have taken notice of these changes and starting in or about 2018, S&P Global Ratings, Moody's Investors Service, and DBRS added ESG criteria to their rating methodologies for regulated electric and gas utilities. Many pension funds and institutional investors are also prevented from investing in companies that do not meet certain ESG criteria. However, Concentric's recommended risk premium for AEY does not depend on a finding from the YUB that AEY's risk related to these industry trends has increased since 2017.

(b) The BCUC considered how the energy transition (specifically the effect of decarbonization on the gas distribution business) is affecting the risk of the gas LDC, FortisBC Energy, Inc. (FEI). In September 2023, the BCUC issued an Order in which they determined that FEI's overall business risk had increased since 2016, particularly with regard to the energy transition. As a result, the BCUC raised the common equity ratio of FEI from 38.5 percent to 45.0 percent to reflect that higher risk. In addition, FEI's authorized ROE was increased from 8.75 percent to 9.65 percent. FEI serves over 1 million gas distribution customers in British Columbia, compared to AEY's much smaller customer base.

(c) The YUB's findings on the return on equity included in revenue requirement in Appendix A to Board Order 2022-03, issued in March 2022, and Appendix A to Board Order 2023-01, issued in January 2023, do not address the effects of ESG, decarbonization, the energy transition, customer self-supply, or grid modernization on the risk profile of YEC, and rather focused on water-related risk, small size, and generation-related risk. Further, YEC did not present any evidence in that proceeding that its business risk had changed.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-027

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

Yes, AEY's experience and expertise is undoubtedly valuable in helping the Company plan for and manage these operational risks as they arise. However, that does not change the fact that the operational cost risks are greater in such a service territory where winters are long, weather conditions are severe, and wildfires have become more frequent in summer. AEY operates multiple, isolated, remote grids in communities that do not support

or accommodate the need for full time employees. In the event of an unplanned outage, our employees are dispatched at all hours to drive or fly into the community to diagnose and repair and restore power to the community or customer. Travel to these isolated communities in severe weather conditions can be slow, delayed or all together impossible, which makes an unplanned event take longer than normal to respond to. The experience of our employees mitigates the amount of time it takes to repair infrastructure, but it does not mitigate the risk of an unplanned event occurring.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-028

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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?

Response:

(a) The companies in the comparison group meet the following criteria: i) smaller operating utilities that provide distribution service in British Columbia (in the case

of FortisBC Electric and PNG West); ii) smaller operating utilities that provide electric distribution service and own limited generation assets (in the case of Newfoundland Power and Maritime Electric); and iii) smaller electric distribution utility of ATCO Electric (in the case of ATCO Electric Distribution). No particular weighting was assigned to any specific criteria. In totality, these companies represent smaller investor-owned distribution utilities in Canada that have similar business and financial risks as AEY.

(b) PNG-West was chosen as a comparator utility because it is very similar in size to AEY, both on a customer count and rate base basis. PNG-West had approximately 21,000 customers at the end of 2021, compared to 20,000 for AEY, and a regulated rate base of $172 million at the end of 2021, compared to $109 million for AEY, both of which represent the closest metrics to AEY, proportionally speaking, of all Canadian utilities considered. PNG-West's authorized ROE includes a risk premium of 75 basis points over the benchmark utility in British Columbia.

(c) Concentric believes that from a business risk perspective, electric utilities are generally an appropriate comparator for AEY. However, AEY is smaller than any of the other investor-owned electric distribution utilities in the comparator group. AEY has higher investment risk than those other electric utilities due to its extremely small size . In addition, the small size of AEY magnifies risks associated with other factors such as adverse economic conditions and severe weather conditions. Lastly, the small size of AEY limits its financial flexibility in terms of raising capital. For all of these reasons, it is appropriate to reflect this additional risk for AEY through a risk premium above the benchmark utility.

(d) Please refer to the response to AEY-YUB-023(a).

(e) These were qualitative comparisons made by Concentric based on the evidence in its report and its knowledge and experience in the industry. These relative

rankings reflect how Concentric believes investors would perceive the risk of AEY compared to each utility in the peer group.

(f) Please refer to the table below for Comparator Utilities' ROE and Decision references.

Table 1: Comparator Utilities ROEs and Decision References

Comparator Utility	Authorized ROE	Year ROE Determined	Decision Reference	Adjudicated or Settlement?
FortisBC Energy	9.65%	2023	BCUC 2021 Generic Cost of Capital Stage 1 Decision, issued Sept. 2023	Adjudicated
FortisBC Electric	9.65%	2023	BCUC 2021 Generic Cost of Capital Stage 1 Decision, issued Sept. 2023	Adjudicated
Ontario Electric Distributors	9.36%	2022	OEB 2023 Cost of Capital Parameters Update, issued 10-20-22	Formula-based
Newfoundland Power	8.50%	2022	NL BCPU Decision & Order No. P.U. 3 (2022), issues 2-16-22	Settlement
Maritime Electric Company Ltd	9.35%	2023	IRAC Docket UE20946, Order UE23-04, issued 4-24-23	Settlement
ATCO Electric Distribution	8.50%	2022	AUC Decision 27084-D01-2022, issued 3-31-22	Adjudicated
Pacific Northern Gas-West	9.50%	2014	BCUC 2014 Generic Cost of Capital Stage 2 Decision, issued 3-25-14	Adjudicated

(g) In the prior Board Order 2017-01, the YUB reviewed the similarities and differences between AEY and the prior comparable utilities group without opining on the makeup of the comparable utilities group. In addition, although the YUB concluded that AEY was not "directly comparable" to FortisBC Electric, Maritime Electric, or PNG-West, due to certain differentiating factors, including generation asset

ownership, power procurement, and other market factors,[1] Concentric believes that it is still necessary and appropriate to compare AEY to these other distribution utilities to determine if a risk premium is justified.

[1] Board Order 2017-01, Appendix A: Reasons, for Decision pp. 43-44.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-029

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) As a general premise, Concentric's view is that companies that derive a higher percentage of their electricity supply from company-owned generation have higher generation risk than those companies that derive a lower percentage. In addition, this risk pertains to companies with significant ownership of generation assets, rather than companies which own generation as backup supply but purchase most power from another source, such as Maritime Electric or Newfoundland Power.

(b) All else being equal, Concentric agrees that a utility that derives eight percent of its load requirements from company-owned generation would have less generation risk than a utility that derives 45 percent of its load requirements from company-owned generation. That is but one of many factors; however, that determine utility business risk, and financial risk must also be considered.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-030

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

September 28, 2023 AEY-YUB-030

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?

Response:

(a) Yes, there is a relationship between the authorized ROE and the deemed equity thickness. Specifically, as financial leverage increases, investors require a higher ROE to compensate for the higher financial risk. Many Canadian regulators adjust for differences in business risk through the equity ratio rather than the authorized ROE. As discussed in the Concentric Report, AEY's deemed equity ratio is 40 percent. Several utilities shown in Figure 1 of the Concentric Report have deemed equity ratios greater than 40 percent. For example, FortisBC Energy, Inc. (the benchmark utility) now has an approved equity ratio of 45 percent, FortisBC, Inc. (the electric utility) has an equity ratio of 41 percent, and Newfoundland Power has a deemed equity ratio of 45 percent. Both the authorized ROE and the deemed equity ratio must meet the Fair Return Standard.

(b) Yes, most utilities provide a weather normalized sales forecast. However, there is an important distinction between a utility that weather normalizes its sales forecast and a utility that is allowed to recover revenues that were lost due to abnormal

weather. In the former case, it depends on the ability of the utility to accurately forecast the effect of weather on sales. In the latter case, the utility is allowed to recover revenues if actual sales are different than forecast sales due to the effect of abnormal weather. Weather normalizing the sales forecast does not protect the utility's earnings and cash flows in the event of abnormal weather.

(c) AEY had sought deferral treatment on sales volumes respecting industrial load as part of its 2013-2015 GRA which was denied in Board Order 2014-06. In 2022, as part of AEY's Rate Relief Application, AEY sought deferral treatment on revenues related to industrial load which was approved in Board Order 2022-13. AEY is seeking continuation of that deferral as part of this Application.

(d) Concentric is not suggesting that the YUB should give more weight to the size premium for AEY than in 2017, when the Board determined that the small size of AEY was an important factor supporting a risk premium for the Company. In this proceeding, Concentric has provided additional evidence from Kroll to quantify the risk premium that investors require for smaller companies including utilities. This evidence shows that the risk premium for companies with market capitalizations similar to AEY is approximately 400 basis points. This is substantially higher than the risk premium determined by the YUB for AEY in 2017, and well above the risk premium of 75 basis points that Concentric is recommending for AEY in this GRA.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-031

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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?

Response:

(a) Given the extremely small size of AEY, Concentric considers that to be the most important risk factor for purposes of establishing an appropriate risk premium for AEY. In order to select a comparator group that was reasonably risk comparable, Concentric thought it was important to select smaller investor owned electric and

gas distribution companies. Other regulators have accepted the importance of small size in setting the risk premium for regulated utilities. For example, the BCUC's Stage 2 Generic Cost of Capital decision states that small size relative to the benchmark utility was a factor in awarding FortisBC Electric a risk premium of 40 basis points (at page iv), that FortisBC Whistler was awarded an additional 25 basis points (for a total of 75 basis points above the benchmark) "in recognition of risks related to its small size" (at page iii), and that PNG-Tumbler Ridge was awarded an additional 25 basis points above the 50 basis point risk premium given to PNG-West due to "greater weight on factors related to size" among other things (at page iv).

(b) As support for the premise that investors require higher returns for small regulated utilities, Concentric relied on a 1995 article published in Public Utilities Fortnightly by Michael Annin, an analyst for Ibbotson and Associates, the firm which publishes historical market return data. A copy of that article is provided as AEY-YUB-031(b) Attachment 1. That article demonstrates that the small size effect also pertains to regulated utility companies such as AEY.

(c) Please refer to the table below for the requested information.

Table 1: AEYs Actual Return on Equity
(%)

2016	2017	2018	2019	2020	2021	2022
10.44	12.72	12.63	13.00	13.19	12.35	11.88

The fact that AEY has generally been able to earn at least the Board determined ROE since 2016 does not guarantee that the Company will be able to do so in the future as operating risks and business conditions change.

In AEY's view the ROE's earned are reflective of unpredictability, AEY did not anticipate the incremental industrial load in the Yukon, nor did it have insight into

reductions in statutory tax rates and carbon relief added to tax legislation, which were significant factors that contributed to AEY's returns since 2016.

(d) Confirmed, with regard to the risk premium of 40 basis points for FortisBC Electric and the risk premium of 25 basis points for FortisBC Whistler and PNG-Tumber Ridge in the BCUC's Stage 2 GCOC 2014 decision. FortisBC Whistler was not included as a comparator to AEY because the company was amalgamated into FortisBC Energy, Inc. in 2014 and has not had its own authorized ROE or capital structure since 2014.

PNG-Tumbler Ridge was not included as a comparator to AEY because Concentric did not believe it was necessary to include each PNG affiliate in its risk analysis. Further, at the time of the BCUC's 2014 GCOC decision, the deemed equity ratio for FortisBC Whistler was 41.5 percent. The deemed equity ratio for PNG-Tumbler Ridge has been 46.5 percent every year since 2013. Both are higher than the deemed equity ratio for AEY of 40.0 percent. The BCUC generally accounts for greater business risk through the deemed equity ratio rather than the authorized ROE.

Equity and the small-stock effect
Annin, Michael
Public Utilities Fortnightly; Oct 15, 1995; 133, 19; ABI/INFORM Global
pg. 42

Financial News

By Michael Annin

Equity and the Small-Stock Effect

The capital asset pricing model shows risk inherent in return on equity. But something goes wrong when it's used for small-sized companies.

Does the size of a company affect the rate of return it should earn? If smaller companies should earn a higher return than larger firms, then small utilities, because of their size, should be allowed to adjust the rates they charge to customers.

By far the most notable and well-documented apparent anomaly in the stock market is the effect of company size on equity returns. The first study focusing on the impact that company size exerts on security returns was performed by Rolf W. Banz. Banz sorted New York Stock Exchange (NYSE) stocks into quintiles based on their market capitalization (price per share times number of shares outstanding), and calculated total returns for a value-weighted portfolio of the stocks in each quintile. His results indicate that returns for companies from the smallest quintile surpassed all other quintiles, as well as the Standard & Poor's 500 and other large stock indices. A number of other researchers have replicated Banz's work in other countries; nevertheless, a consensus has not yet been formed on why small stocks behave as they do.

One explanation for the higher returns is the lack of information on small companies. Investors must search more diligently for data. For small utilities, investors face additional obstacles, such as a smaller customer base, limited financial resources, and a lack of diversification across customers, energy sources, and geography. These obstacles imply a higher investor return.

The Flaw in CAPM

One of the more common cost of equity models used in practice today is the capital asset pricing model (CAPM). The CAPM describes the expected return on any company's stock as proportional to the amount of systematic risk an investor assumes. The traditional CAPM formula can be stated as:

$$R_s = [\beta_s \times RP] + R_f$$

where:

- R_s = expected return or cost of equity on the stock of company "s"
- β = the *beta* of the stock of company "s"
- RP = the expected equity risk premium
- R_f = expected return on a riskless asset.

Table 1: The Size Premium in CAPM
(By Decile Portfolio in NYSE, 1926-94)

Decile	*Beta*	Arithmetic Mean Return	Actual Return in Excess of Riskless Rate**	CAPM Return in Excess of Riskless Rate**	Size Premium (Return in Excess CAPM)
1	0.90	11.01%	5.88%	6.33%	–0.44%
2	1.04	13.09	7.97	7.34	0.63
3	1.09	13.83	8.71	7.70	1.01
4	1.13	14.44	9.32	7.98	1.33
5	1.17	15.50	10.38	8.22	2.16
6	1.19	15.45	10.33	8.38	1.95
7	1.24	15.92	10.79	8.75	2.05
8	1.29	16.84	11.72	9.05	2.67
9	1.36	17.83	12.71	9.57	3.14
10	1.47	21.98	16.86	10.33	6.53

*Betas are estimated from monthly returns in excess of the 20-year government bond income return, January 1926-December 1994.
**Historical riskless rate measured by the 69-year arithmetic mean income return component of 20-year government bonds.
Source: SBBI 1995 Yearbook

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Table 2: CAPM vs. CAPM w/ Size Premium

(By Percentile for Electric, Gas, and Sanitary Services Utilities)

	CAPM	CAPM with Size Premium
90th Percentile	16.42%	18.92%
75th Percentile	12.56%	14.72%
Median	10.89%	12.58%
25th Percentile	9.86%	11.39%
10th Percentile	8.63%	10.65%

(Weighted by Market Capitalization)

	CAPM	CAPM with Size Premium
Industry Composite	11.76%	12.33%
Large Company Composite	12.05%	12.07%
Small Company Composite	13.93%	17.95%

Source: Cost of Capital Quarterly '95 Yearbook by Ibbotson Associates
Note: Public utilities include electric, gas, and sanitary services companies.

Table 1 shows *beta* and risk premiums over the past 69 years for each decile of the NYSE. It shows that a hypothetical risk premium calculated under the CAPM fails to match the actual risk premium, shown by actual market returns. The shortfall in the CAPM return rises as company size decreases, suggesting a need to revise the CAPM.

The risk premium component in the actual returns (realized equity risk premium) is the return that compensates investors for taking on risk equal to the risk of the market as a whole (estimated by the 69-year arithmetic mean return on large company stocks, 12.2 percent, less the historical riskless rate). The risk premium in the CAPM returns is *beta* multiplied by the realized equity risk premium.

The smaller deciles show returns not fully explainable by the CAPM. The difference in risk premiums (realized versus CAPM) grows larger as one moves from the largest companies in decile 1 to the smallest in decile 10. The difference is especially pronounced for deciles 9 and 10, which contain the smallest companies.

Based on this analysis, we modify the CAPM formula to include a small-stock premium. The modified CAPM formula can be stated as follows:

$R_s = [\beta_s \times RP] + R_f + SP$

where:

SP = small-stock premium.

Because the small-stock premium can be identified by company size, the appropriate premium to add for any particular company will depend on its equity capitalization. For instance, a utility with a market capitalization of $1 billion would require a small capitalization adjustment of approximately 1.3 percent over the traditional CAPM; at $400 million, approximately 2.1 percent, and at only $100 million, approximately 4 percent.

Again, these additions to the traditional CAPM represent an adjustment over and above any increase already provided to these smaller companies by having higher *betas*.

Implications for Smaller Utilities

These findings carry important ramifications for relatively small public utilities. Boosting the traditional CAPM return by a full 400 basis points for small utilities translates into a substantial premium over larger utilities.

Table 2 shows the results of an analysis of 202 utility companies that calculated cost of equity figures. Composites (arithmetic means) weighted by equity capitalization were also calculated for the largest and smallest 20 companies. The results show the impact size has on cost of equity.

For the traditional CAPM, the large-company composite shows a cost of equity of 12.05 percent; the small company composite, 13.93 percent. However, once the respective small capitalization premium is added in, the spread increases dramatically, to 12.07 and 17.95 percent, respectively. Clearly, the smaller the utility (in terms of equity capitalization), the larger the impact that size exerts on the expected return of that security. ▼

Michael Annin, CFA, is a senior consultant with Ibbotson Associates, specializing in business valuation and cost of capital analysis. He oversees the Cost of Capital Quarterly, *a reference work on using cost of capital for company valuations.*

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ATCO Electric YUKON

September 28, 2023 AEY-YUB-032

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) While more frequent regulatory filings might be useful in terms of adjusting the sales forecast in future years, they do not provide the utility with a better opportunity to earn its awarded ROE in a previous year. If adverse economic conditions occur during a year in which there is no rate case, the utility has no way to go back and recover any lost revenues or earning shortfall after the fact. In addition, more frequent regulatory filings and special applications also can result

in less regulatory efficiency and higher costs for both the customer and the regulatory agency.

(b) The risk associated with small size has not materially changed since the prior GRA, when the YUB found that it was an important risk factor for AEY that supported a risk premium above the BCUC benchmark utility. In its report, Concentric has provided additional evidence from Kroll to quantify how small size affects the return that investors require. Please also refer to the response to AEY-YUB-030(d).

ATCO Electric YUKON

September 28, 2023 AEY-YUB-033

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

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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?

Response:

(a) Yes, the data that Concentric used from Kroll that divides companies into deciles and assigns a size premium to each decile solely relies on market capitalization to determine the decile cut-offs. To estimate the magnitude of each decile's assigned size premium, Kroll uses historical return data; specifically, the actual historical excess return, which is the annual average return of the decile less the annual average risk-free rate, and the excess return predicted by the CAPM, which is the beta of the decile multiplied by the equity risk premium.

(b) Please refer to the response to subpart (a). Kroll defines the "size premium" as "the difference between the actual historical excess return and the excess return predicted by beta that is attributed to the risk implied by the size of the subject

company."[1] Size, as used in this context by Kroll, is solely measured by market capitalization. In general, size usually refers to market capitalization, although Kroll has also used other measures of size in other contexts, including in its Risk Premium report study,[2] e.g., book value of equity, five-year average net income, market value of invested capital, total assets, five-year average EBITDA, sales, and number of employees.

(c) Market capitalization is the number of shares outstanding times the share price and represents the total market value of a company's shares of stock. Certain factors, including changes to the stock price, driven by supply and demand of the stock as well as public sentiment of future growth potential, and company issues or repurchases, may affect market capitalization.

1 Source: Kroll Cost of Capital Navigator: Glossary
2 Source: Kroll U.S. Cost of Capital – Size Premium Methodology

ATCO Electric YUKON

September 28, 2023 AEY-YUB-034

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

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AEY-YUB-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.

Response:

(a-b) Concentric agrees that FortisBC Electric (FBC) has greater generation risk than AEY. That higher risk; however, is offset by FBC's larger size compared to AEY in terms of both customers and rate base and by FBC's fuel and purchased power adjustment clause which eliminates FBC's risk related to fuel cost recovery. In September 2023, the British Columbia Utilities Commission issued an Order in the 2021 Generic Cost of Capital (Stage 1) proceeding in which FBC's authorized ROE was raised to 9.65 percent from 9.15 percent and its common equity ratio was increased to 41 percent from 40 percent. Please also refer to the response to AEY-YUB-029(b) for further discussion on generation risk.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-035

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AEY-YUB-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.

Response:

(a) While fuel and purchase power cost risk is important, most utilities are able to pass through those costs directly to customers and, therefore, are not at risk for cost recovery if actual costs are higher/lower than forecast. Risk differences occur when the utility is not allowed to pass through 100 percent of these costs, or when the variance accounts expire. As a general premise, Concentric agrees that fuel and purchase power cost risk is not as important as small size and generation risk.

(b) Consistent with historical practice, AEY is proposing continuation of its existing purchase power and fuel deferral accounts where costs related to price variances

are flowed through to customers. AEY continues to assume risk for costs related to forecast volumes.

(c) AEY has forecast fuel and purchase power assuming 2.5 percent of its supply is self-generated through Fish Lake Hydro Generation and 0.03 percent of supply is self-generated through standby diesel generation. AEY has also forecast 0.2 percent of supply from Independent Purchases.

Since 2016, AEY's Fish Lake Hydro generation has been as low as 1.3 percent of supply. If AEY were to experience the same low levels of generation due to low water or mechanical issues, AEY would incur incremental costs of approximately $360,000 (or, approximately a 70 basis point reduction in returns) due to the higher volume of wholesale purchases required.

Also, since 2016, AEY has required as high as 0.09 percent of its supply being sourced through its standby generation. Similarly, load constraints or outages that require running standby diesel for as much as 0.10 percent of total supply, would result in AEY incurring net costs of approximately $80,000 (or, approximately a 10 basis point reduction in returns) due to higher consumption of diesel fuel, partially offset by lower wholesale purchases.

The IPP program is relatively new. As such, AEY does not have enough historical supply data to analyze. If supply from renewables, owned by independent power producers in Old Crow, is 50 percent lower than what AEY has forecast, this reduction would result in incremental net costs of approximately $121,000 (or, approximately a 25 basis point reduction in returns). If AEY's requested IPP deferral is not approved and renewables supply is constrained due to outages on the utilities infrastructure, this reduction in supply would result in an increase in AEY's costs of approximately $345,000 (or, approximately a 68 basis point reduction in returns) for incremental supply and constraint payments.

(d) No, this risk has not materially changed since AEY's last GRA, assuming that the continuation of AEY's deferral accounts for purchase power and fuel prices are approved by the YUB. If the IPP deferral account requested in this Application is not approved, however, AEY's risk would be materially higher than in 2016.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-036

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

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AEY-YUB-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.

Response:

(a) Concentric has not assigned relative weights to the risk factors that are discussed in the report. Risk assessments are generally more qualitative than quantitative. The most important considerations are whether the utility faces the specific risk, the magnitude of the risk on earnings and cash flows, and whether the utility has some form of regulatory protection that mitigates the effect of the risk. In summary, Concentric takes a holistic approach to evaluating risk. No specific risk factor is more important than another from the perspective of investors.

(b) Risk due to weather conditions has not materially changed since 2016. However, the frequency of severe weather events has generally increased in the past

decade, and credit rating agencies such as S&P have commented that climate change is challenging the utility industry's traditional risk management assumptions.[1] For this reason, it is very important that AEY has the financial flexibility to respond to these events as they arise.

[1] S&P Global Ratings, "Can U.S. Utilities Weather the Storm," November 8, 2018.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-037

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

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AEY-YUB-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.

Response:

(a) Concentric is not aware of any studies performed by AEY in this regard. The statement is based on anecdotal evidence from AEY employees and individuals in the communities served by AEY that confirms "fuel switching" between heating sources is common.

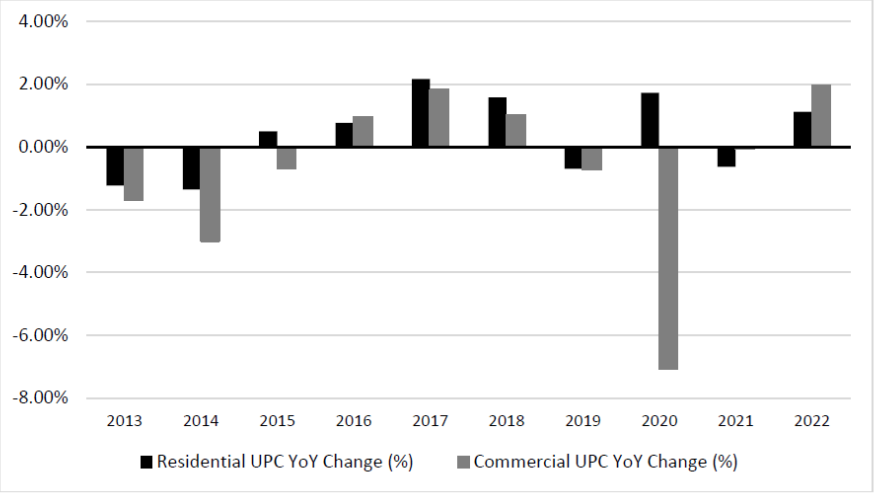
(b) The statement recognizes customers have a choice with regard to fuel, and that to the extent they prefer one fuel source over another, it affects the risk profile of AEY. Some houses may have both primary (e.g., oil, propane) and secondary (e.g., wood stoves, portable electric heaters) heating sources.

(c) The statement refers to houses with primary and secondary heating sources, new customers signing up for electric service, and existing customers converting space or water heating equipment to electric from another fuel source.

(d) As shown in Figure 9 from the Concentric Report (also provided below), the year-over-year changes in AEY's residential and commercial weather-normalized Use per Customer (UPC) has seen a slight uptick since AEY's last GRA in 2016.

Figure 9: Variability in Use Per Customer

Residential and Commercial: Year to Year Percent Change



The average absolute magnitude of YoY changes from 2013-2016 was 1.0 percent for residential and 1.6 percent for commercial, whereas the average YoY change from 2017-2022 was 1.3 percent for residential and 2.1 percent for commercial. Increases in fuel switching could be a cause for these increases in UPC variability, thereby increasing the probability that sales differ from forecasts and that AEY may not fully recover its costs.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-038

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

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AEY-YUB-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?

Response:

Concentric has considered the principal business risks relevant to a regulated utility from an investor's perspective. As part of assessing this risk, Concentric determined: (i) if the utility has this risk; (ii) if the risk is material to the stability and predictability of the earnings and cash flows of the company; and (iii) if the utility has a way to mitigate the risk through regulatory protections. In the case of competition from alternative fuels, Concentric determined that this risk exists but is not material for AEY, at this time.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-039

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

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AEY-YUB-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?

Response:

(a) Concentric agrees that climate change is an operating risk that affects all utilities, including FortisBC, Inc. (FBC), the benchmark utility, to some degree. However, the magnitude of climate change risk varies depending on the location of the utility's service territory and the number and type of customers served. This is another area where the size of the utility is an important risk factor. Smaller companies have less ability to respond to climate change related events such as service disruptions and outages, as discussed on page 27 of the Concentric Report, because they have fewer financial and human resources. In recent years, credit rating agencies and investors have become more aware of climate change risk for regulated utilities and are factoring it into their assessment of the utility's operating risk profile.

(b) Confirmed. The fuel price deferral mechanism is legislated through OIC 1995/90, Rate Policy Directive (1995). Neither AEY nor Concentric are aware of any upcoming or intended changes to this legislation.

(c) This risk only applies to jurisdictions where consumers have access to alternative heating fuels (heating oil, propane, wood pellets etc.), such as AEY's residential consumers. The risk to AEY's forecast has not materially changed since 2016. While there has been significant growth in the proportion of dwellings fit for electric heat over the last several years, there is uncertainty for whether this trend will continue at this rate. As such, there is increased risk as penetration rises that the growth trends will level off or decline, resulting in variability in AEY's sales volume assumptions, which could have a material impact.

(d) No, the growth of IPPs does not present capacity opportunities in the short term. In AEY's experience, IPP generation has been limited to intermittent sources which require full thermal generation redundancy as well as a battery and microgrid controller, which are fully-contributed at the time of connection. Following the

connection, AEY's costs to maintain or replace equipment or infrastructure necessary to accommodate the IPP are recoverable, per OIC 2019/25. In other words, in the short term, AEY has limited opportunity to invest in new capacity (like batteries). Presumably, AEY will have the opportunity to invest in battery replacement at the end of the life-cycle. In the interim period; however, AEY is presented with increased risk associated with operating the grid, due to the technical complexity of integrating the battery.

This risk is not unique to AEY; however, the risk is exacerbated and intensified for AEY due to:

1) the number of small, off-grid communities it serves, each with its own load profiles, generation capabilities, and staffing capacity; and

2) the proportion of rate base and revenue AEY receives from these communities relative to its overall operations.

Please refer to the response to AEY-YUB-035 for further discussion around the risks associated with increased intermittent generation.

(e) As discussed in response to part (d) above:

1) The investment in batteries, storage, and interconnection facilities is not directly correlated with IPP growth, as these items are typically fully-contributed in the short term.

2) Because IPPs have typically been intermittent generation sources, AEY must still maintain full thermal generation redundancy in the off-grid communities to ensure ongoing safe and reliable service.

ATCO Electric YUKON

September 28, 2023 AEY-YUB-040

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

Information Responses Round 1 to:
The Yukon Utilities Board (YUB)
Received: September 6, 2023

AEY-YUB-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.

Response:

(a) Please refer to the following table of actual debt rates for 2016-2022 and approved debt rates for 2016-2017. AEY did not have new debt issued in 2021.

Table 1: Issues and Spreads for 2016 to 2022

	2016 Approved	2016 Actual	2017 Approved	2017 Actual
Issue Date	2016-11-17	2016-11-17	2017-11-01	2017-11-22
Maturity Date	2046-11-17	2046-11-17	2057-11-01	2047-11-22
Long Canada Bond	2.04%	2.04%	2.18%	2.18%
Issue Spread	1.72%	1.72%	1.37%	1.37%
Debenture Rate	3.75%	3.76%	3.77%	3.55%
Debenture Amount	5,400,000	7,400,000	6,900,000	6,400,000

	2018 Actual	2019 Actual	2020 Actual	2022 Actual
Issue Date	2018-11-21	2019-09-07	2020-09-28	2022-09-14
Maturity Date	2048-11-21	2049-09-07	2050-09-28	2052-09-14
Long Canada Bond	2.41%	1.48%	0.98%	3.14%
Issue Spread	1.54%	1.48%	1.63%	1.63%
Debenture Rate	3.95%	2.96%	2.61%	4.77%
Debenture Amount	2,600,000	4,600,000	4,200,000	3,000,000

(b) The Long Canada Bond Rate and spreads information was obtained from the Bank of Canada website. Please refer to AEY-YUB-040(b) Attachment 1.

(c) As per the September 11, 2023, Consensus Forecast (provided in AEY-YUB-040(c) Attachment 1) forecast debt rates for 2023 and 2024 are as follows:

Table 2: Forecast Debt Rates for 2023 and 2024

	2023	2024
Long Canada Bond Rate	3.40%	3.10%
Credit Spread	1.55%	1.55%
Debenture Rate	4.95%	4.65%
Issue Costs	0.05%	0.05%
Recommended All-In Rate	**5.00%**	**4.70%**

(d) Details of the debt included in the Application are as follows:[1]

Table 3: Long-term Debt Forecast Issuance for 2023 and 2024

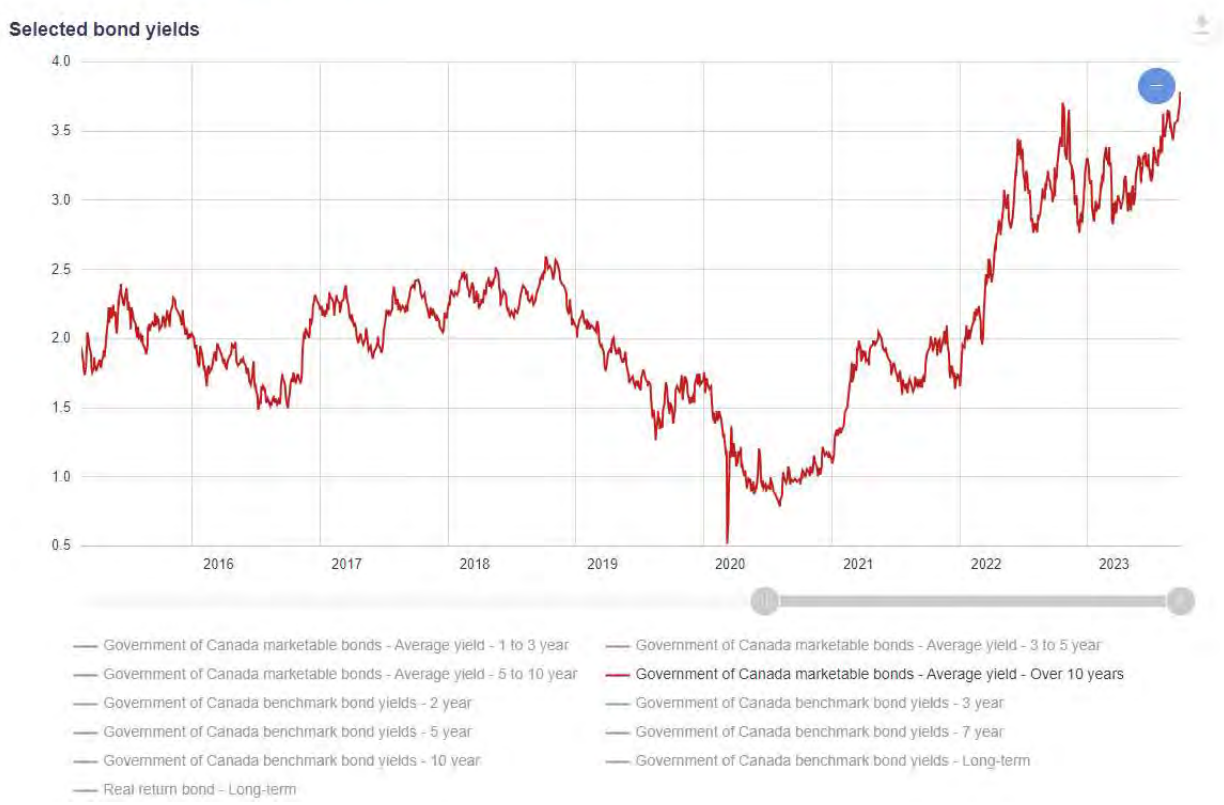
	2023	2024
Long Canada Bond	2.50% - 3.00%	2.50% - 3.00%
Issue Spread	1.55%	1.55%
Debenture Rate	4.56%	4.56%
Debenture Amount	$7,000,000	$9,000,000

[1] 2023-2024 AEY GRA, Section 8, PDF p. 131, Table 8.2.

Source of interest rates on Canadian Bonds

https://www.bankofcanada.ca/rates/interest-rates/canadian-bonds/

Data available as: **CSV**, **JSON** and **XML**



	CDN.AVG.OVER.10.AVG	Over 10 ye	Government of Canada marketable bonds - Average yield		
	OBSERVATIONS				
	date	CDN.AVG.	CDN.AVG.	CDN.AVG.	CDN.AVG.OVER.10.AVG
98	2016-11-17	0.67	0.88	1.31	2.04
51	2017-11-22	1.43	1.59	1.79	2.18
00	2018-11-21	2.2	2.28	2.33	2.41
98	2019-09-06	1.5	1.36	1.29	1.48
53	2020-09-28	0.23	0.31	0.47	0.98
52	2022-09-14	3.72	3.39	3.19	3.14
06					

SEPTEMBER 2023 CANADA

Year Average		Annual Total		Fiscal Years (Apr-Mar)		Rates on Survey Date 5.0%		3.7%	
Unemploy-ment Rate (%)		Current Account (C$ bn)		Federal Govt Budget Balance (C$ bn)		3 month Treasury Bill Rate (%)		10 Year Government Bond Yield (%)	
Taux de Chômage (%)		*Balance Courante (C$ md)*		*Balance Budgétaire (C$ md)*		*Rendement sur les Bons du Trésor de 3 mois %*		*Rendement des Obligat-ions d'État de 10 ans %*	
2023	2024	2023	2024	FY 23-24	FY 24-25	End Dec.'23	End Sep.'24	End Dec.'23	End Sep.'24
5.3	5.9	-21.3	-63.5	-34.9	-27.8	5.0	4.0	3.2	3.1
5.5	6.2	-17.1	-23.9	na	na	na	na	na	na
5.3	6.3	-25.0	-32.0	na	na	5.0	3.8	3.3	3.0
5.4	6.4	-22.0	-34.7	-39.9	-35.0	5.0	4.0	3.3	3.2
5.4	5.7	na	na	na	na	na	na	na	na
5.4	5.9	na	na	na	na	na	na	na	na
5.5	5.8	na	na	na	na	5.1	4.1	3.7	3.2
5.2	5.7	-7.7	-6.7	na	na	4.5	3.5	3.5	3.2
5.5	6.5	-25.0	-28.9	na	na	5.0	4.4	3.0	2.8
5.4	6.0	-25.3	-23.3	na	na	na	na	na	na
5.4	6.1	na	na	na	na	5.1	3.9	3.5	3.1
5.4	6.0	-30.0	-42.0	-39.8	-35.0	5.1	4.6	3.5	3.1
5.4	6.0	-27.5	-40.0	-40.0	-45.0	5.1	4.6	3.7	3.2
5.5	7.1	-30.5	-59.6	-41.5	-40.6	4.9	2.9	3.6	2.8
5.5	5.9	na	na	na	na	na	na	na	na
5.4	6.3	-31.6	-51.2	na	na	5.0	3.8	3.6	3.7
5.4	6.4	-35.0	-37.0	na	na	5.0	4.2	3.5	3.3
5.6	7.1	-29.6	-45.6	na	na	4.7	4.7	3.5	3.4
5.4	6.2	-25.2	-37.6	-39.2	-36.7	4.9	4.0	3.4	3.1
5.4	6.1	-31.2	-45.5	-40.8	-35.2				
5.4	6.0	-29.4	-36.1	-38.9	-33.2				
5.6	7.1	-7.7	-6.7	-34.9	-27.8	5.1	4.7	3.7	3.7
5.2	5.7	-35.0	-63.5	-41.5	-45.0	4.5	2.9	3.0	2.8
0.1	0.4	7.1	15.5	2.5	6.5	0.2	0.5	0.2	0.2
5.2	5.7								

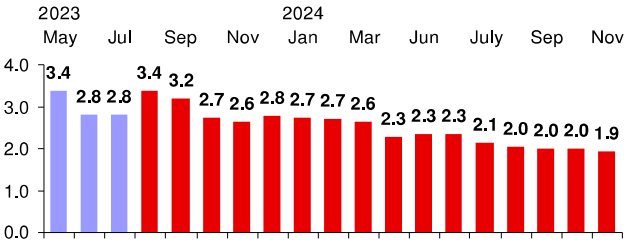
Bank of Canada Pauses and Assesses Landscape

The Bank of Canada (BoC) kept its overnight rate at 5.00% on September 6 but suggested hawkishness with regards to underlying inflation. The headline CPI moderated during the H1 2023, from +5.1% (y-o-y) in Q1 to +3.5% in Q2. However, the July outturn ticked up to 3.3% (y-o-y) from 2.8% in June, as the base-year effect from a big fall in gasoline prices in July 2022 dropped out of the index. Summer demand for electricity, especially in Alberta, alongside the phasing out of energy caps and rebates earlier in the year, boosted the electricity component. Meanwhile, core price pressures are currently around 3.5%, above the BoC's 2% inflation target. Monthly CPI forecasts (below) point to stickiness in the y-o-y numbers over 2023 and early 2024. The central bank is wrestling with bringing inflation down but is also mindful of the impact of higher interest rates on the economy. The expenditure-based GDP release for Q2, for example, cited a fifth straight contraction in housing investment and sharp curtailment in new construction across many provinces (both are particularly sensitive to interest rates and mortgage approvals). The lagged impact of previous rate hikes also has further to run.

GDP growth ground to a halt in Q2, following an upbeat 0.6% (q-o-q) outturn in Q1. As mentioned, interest rates impacted the housing sector, while slower inventory build-up and reduced export growth were also a factor. After a +1.2% (q-o-q) surge in Q1, household expenditure slowed to +0.1% in Q2. On an output-based monthly basis, GDP in June dropped by -0.2% (m-o-m) following a +0.2% rise in May. Both goods production and services output fell. Wildfires dented activity in several sectors, specifically mining in Quebec, which led to mining & quarrying contracting by -5.7% (m-o-m), their largest monthly decline since November 2021. Energy, however, rebounded following Alberta wildfires in May.

Monthly CPI Outturns and y-o-y Consensus Forecasts

(% change on the same period of the previous year)



Canada Overnight Lending Rate – Sep. 11, 2023 = 5.00%

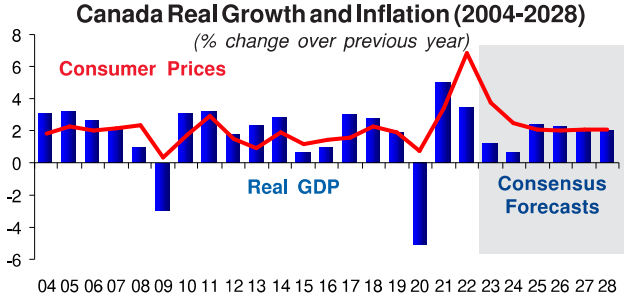
Average probabilities of a change in the Lending Rate on **October 25:**

Increase = 17.3% **No change =** 71.6% **Decrease =** 0.1%

Consensus Forecasts	End Sep '23	End Dec'23	End Mar '24	End Jun '24	End Sep '24	End Dec '24	End Mar '25
Mean Average:	5.03 %	5.03 %	4.95 %	4.63 %	4.25 %	3.88 %	3.50 %
Mode (most frequent):	5.00 %	5.00 %	5.00 %	4.75 %	4.50 %	4.00 %	4.00 %

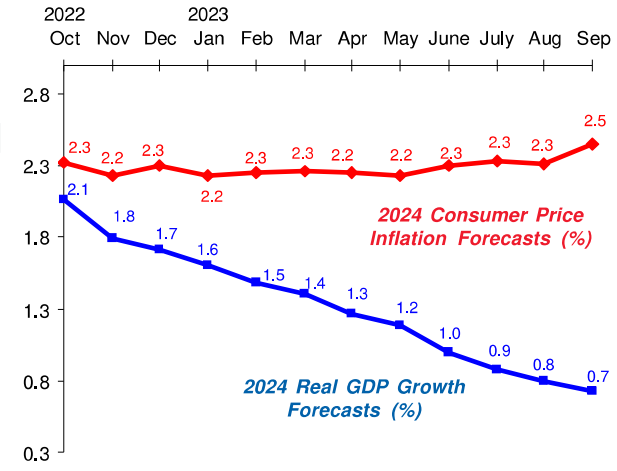
Canada Real Growth and Inflation (2004-2028)

(% change over previous year)



2024 GDP Growth and Inflation Forecasts

Consensus Forecasts from Survey of:



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