



EMRYDIA

EMRYDIA CONSULTING CORPORATION PRESENTATION TO THE
MANITOBA PUB ON MANITOBA HYDRO 2023/24-2024/25 GRA
NON-DEPRECIATION MATTERS – JUNE 2, 2023
TESTIMONY ON BEHALF OF THE GSS/GSM CUSTOMER CLASS
REPRESENTATIVES

Dustin Madsen, CPA, CA, CPA (IL,
USA), CDP, CRRA

ABOUT EMRYDIA CONSULTING CORPORATION

OFFICES IN
CANADA AND THE
UNITED STATES

ACCESS TO MORE
THAN 20 EXPERTS
IN THE UTILITY
INDUSTRY

PROVIDING EXPERT
CONSULTING,
ADVISORY AND
TEACHING SERVICES

QUALIFICATIONS OF DUSTIN MADSEN

Bachelor of
Commerce – Edwards
School of Business –
Great Distinction

Canadian Chartered
Accountant

Canadian Chartered
Professional
Accountant

United States
Certified Public
Accountant (Illinois)

Certified
Depreciation
Professional

Certified Rate of
Return Analyst

EXPERIENCE OF DUSTIN MADSEN

Senior Auditor – Deloitte

IFRS Project Manager/Sponsor – FortisAlberta

Manager Forecasting & Budgets/Regulatory – FortisAlberta

Experienced Online Facilitator – CA School of Business

IFRS online and in-person course teaching – IASeminars

Vice Chair – Canadian Electrical Association Accounting and Finance Subcommittee

Senior Consultant – Finance and Regulatory – AltaLink

President Emrydia Consulting Corporation (including previous entities)

SCOPE OF PRESENTATION

- Operating and administrative costs
 - ❖ Overall increase in costs and expected evidentiary standard
 - ❖ Zero-based budgeting
 - ❖ Labour costs
 - ❖ Consulting costs and digital & technology costs
- Other costs and deferrals
 - ❖ SAP S4/HANA
 - ❖ Cloud-computing arrangement
- Part 2 Rate Design matters

OPERATING AND ADMINISTRATIVE COSTS INFORMATION THAT COULD ASSIST THE BOARD

- Detailed cost benefit analysis to support incremental costs (i.e., business cases for new staff or needs assessments for consulting projects).
- Reconciliations of activity levels (volumes) and pricing (rates).
- Benchmarking studies.
- Tracking and reconciliation of position and full-time equivalent (FTE) changes across periods.
- Detailed zero-based budgets that trace the forecast costs to the base level of work required to support the business.

OPERATING AND ADMINISTRATIVE COSTS

GENERAL PRINCIPLES

- Utilities generally have a significant degree of control over forecast O&A costs (i.e., monthly budgeting and scrutiny of actual and forecast costs at the line item and transaction level of detail by department).
- Expectation that efficiency gains from prior periods should be maintained as long as possible, where sustainable. In Order No. 9/22, the PUB stated:
 - The Board notes that O&A cost savings realized to date ought not to be considered temporary savings. With Manitoba Hydro currently researching the future implementation of initiatives related to its now-finalized new corporate strategic plan ('Strategy 2040'), Manitoba Hydro is provided with an opportunity to solidify existing savings and find further efficiencies.
- Changes not driven by inflationary pressures are isolated and explained when material, including both increases and decreases.
- Manitoba Hydro controls its own costs and should support and manage its costs.

OPERATING AND ADMINISTRATIVE COSTS KEY FINDING #1

1. Costs are rising significantly:

- 11.6% in 2023/24
- 4.6% in 2024/25
- Flat or declining from 2016/17 to 2019/20.
- Some of the increase is due to cloud-computing arrangement costs.

Figure 11 – Manitoba Hydro’s summary of O&A expenses from 2016/17 to 2024/25

Figure 6.1 O&A Expenses, 2016/17 – 2024/25



Madsen evidence – PDF page 63, Figure 11.

OPERATING AND ADMINISTRATIVE COSTS

KEY FINDING #2

2. Lack of detailed evidence to support rising costs:

- No headcount information.
- Does not report or track information by position.
- Rolling forward of budgets from prior years.
- No activity-based information.
- Per Table 3 of my evidence, some increases are significant (i.e., 91% for consulting and professional fees).
- Many cost increases by cost element exceed the inflation expectations.

Manitoba Hydro has provided the information it has available to support the O&A changes. Certain cost elements, such as Materials & Tools, Consulting & Professional Fees and Office Expenses, are comprised of numerous individual items with varying rate/volume impacts thus making a rate/volume analysis at a cost element level challenging due to the volume within each category.⁴⁸

GSS-GSM/MH II 3b (as cited in Madsen evidence – PDF page 67, lines 10 to 15.)

OPERATING AND ADMINISTRATIVE COSTS KEY FINDING #3

3. Simplified forecasting practices likely create inaccurate forecasts that are difficult to manage to.

10 Mr. Madsen has described a turnover or attrition rate, which is not completely in line
11 with what Manitoba Hydro has factored into its vacancy rates. As Manitoba Hydro is
12 still in the process of realigning and rebuilding based on the Business Model review
13 that has been described in this Application, the base FTEs included in the budget
14 consider the positions identified through the business model reviews conducted to
15 date. To align with the top-down O&A budget set by executive, the vacancy factor
16 reduced FTEs for both attrition and to maintain FTE levels at an agreed upon increase
17 identified by Manitoba Hydro's executive. As Manitoba Hydro completes all levels of
18 the business model review through the enterprise and prioritizes enterprise
19 initiatives, FTE levels will be budgeted accordingly. Total FTE growth is monitored
20 regularly at various levels within the organization, including management, Finance
21 and HR.

Manitoba Hydro rebuttal evidence – PDF
page 22, lines 10 to 21.

ZERO-BASED BUDGET SIMPLIFIED

1. Define key areas of activity for reporting actual and forecast amounts.

2. Begin tracking actual results at a detailed level to support identification of activities driving those costs.

3. Commence a bottom-up exercise that aligns the defined activities with quantities and rates.

4. Review the forecast against actual costs and identify further known and expected efficiencies.

5. Track those efficiencies and revise the forecasts for newly identified efficiencies as an iterative process.

6. Rinse, repeat, refine.

PRACTICAL APPLICATION OF ZERO-BASED BUDGETING

- Labour costs
 - Detailed position-based forecast in excel
 - Each position aligned to planned activities to support the need for the full “FTE”, or if not, the partial FTE.
 - Work performed by the FTE for assigned business unit and all other business units is defined by hours of effort.
 - All specific employee related costs are detailed as well, including specific training costs, benefits, etc.
 - All new and removed positions are supported by a detailed business case.
 - Vacancy rate is informed by the specific known vacancy by position plus a further estimate.
- Consulting costs
 - Comprehensive listing of consulting costs by vendor by year, and further broken down by activity by vendor if necessary.
 - Explanations and business cases for all new or incremental costs, as well as cost-benefit analysis where consultants are used in place of internal resources.

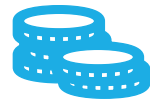
ZERO-BASED BUDGETING



What is not tracked is not managed and what is not managed is not tracked.



Zero-based budgeting is a concept that can be implemented in its entirety or certain elements of the process can be adopted. It is both a budgeting and tracking tool.



The primary benefits of a zero-based budget are as follows:

Enhanced detail, transparency and support for the forecast costs.

Better ability to manage and track actual costs against the budget.

Provides for an opportunity to scrutinize areas of the business to better identify efficiency gains and work optimization efforts.



The primary downside of a zero-based budget is the increased level of effort and cost to implement the process.



ZERO-BASED BUDGETING (CONT'D)

Observations:

- Given the lack of detail supporting many of the increases in costs, a zero-based budgeting approach would provide enhanced transparency and accountability to future Manitoba Hydro forecasts.
- Simplified adjustments to the process including tracking actual and reporting forecast costs at a greater level of detail would provide progressive adjustments and improvements to build upon over time (i.e., tracking and managing).

Recommendations:

- Manitoba Hydro would benefit from at least a focused adoption of elements of a zero-based budgeting methodology at this time.
- Full transition to a detailed zero-based budgeting methodology should also be adopted over a transitional period (3-5 years).
- In the short-term I recommend reporting enhancements, including tracking and reporting actual and forecast costs at a greater level of detail. For example, consulting fees should be tracked and forecast at a program/activity level of detail (i.e., audit fees, regulatory legal fees, corporate legal fees, depreciation consulting fees, etc.) This level of detail will provide for increased transparency into the drivers of cost increases or decreases going forward. Position based forecasting should also be adopted in addition to FTE forecasting.

LABOUR COSTS

- FTE levels are forecast to increase from 2021/22 to 2024/25 by 447 FTEs or 9%.
- No business units are forecast to remain stable.
- A key driver of increased FTEs is Operations.

	Increase (2021/22 to 2024/25)	% Increase (2021/22 to 2024/25)
President & CEO	11	110%
Customer Solutions & Experience	49	16%
Asset Planning & Delivery	71	6%
Operations	212	9%
Digital Technology	36	15%
HR & Safety, Health and Environment	55	36%
Chief Financial Officer	23	7%
External & Indigenous Relations and Communications	14	13%
Business Unit Total	471	10%
Other segments/corporate adjustments	- 25	-15%
Total Corporation	446	9%

Madsen evidence – PDF page 76, Table 5

LABOUR COSTS (CONT'D)

Care must be taken to ensure Manitoba Hydro has sufficient resources to provide safe and reliable service to customers.

Costs must also be controlled and necessary.

This is particularly the case for labour costs. Once staff are hired the costs to remove those staff if not necessary can be significant.

LABOUR COSTS – ESCALATION



Forecast salary increases in the test periods appear reasonable and supported.



The increases are in line with or slightly below inflation.



Labour costs are potentially misstated due to the exclusion of any general wage increase in 2022/23.

Figure 7 Wages & Salaries Analysis from 2020/12 to 2024/25

Wages & Salaries Analysis (2020/21 to 2024/25)

	2020/21 Actual	2021/22 Actual	2022/23 Forecast	2023/24 Preliminary Budget	2024/25 Preliminary Budget
Gross Wages & Salaries	440,808	448,464	508,482	554,490	569,166
Vacancy Allowance	-	-	(49,679)	(71,652)	(64,157)
Wages & Salaries	440,808	448,464	458,803	482,838	505,009
Wages & Salaries Analysis:					
Prior Year Balance		440,808	448,464	458,803	482,838
GWI for Previous Years - IBEW		(3,471)			
Merit/Progression		4,942	6,121	5,958	6,764
GWI and Provisions for GWI		4,835	-	5,724	7,593
Change in Vacancy Allowance		-	(49,679)	(21,972)	7,495
FTE Normal Operating Changes & Other		1,349	53,897	34,326	319
Wages & Salaries	440,808	448,464	458,803	482,838	505,009

Manitoba Hydro rebuttal evidence – PDF page 19, Figure 7.

LABOUR COSTS — VACANCY

- Forecast vacancy rates are high relative to historical levels and peers.
- A higher base level of positions relative to the level of FTEs will naturally result in a higher vacancy rate.
- FTEs and positions should only be forecast when they are needed and expected to be filled.
- The high vacancy rates suggest this is not what Manitoba Hydro has done.



LABOUR COST RECOMMENDATIONS

Accept	Approve	Consider
Accept applied for merit and progression increases as well as GWI.	Approve a net increase in FTEs of 1% to provide further support primarily for operational needs.	Consider the need for a further GWI to be added for 2022/23.

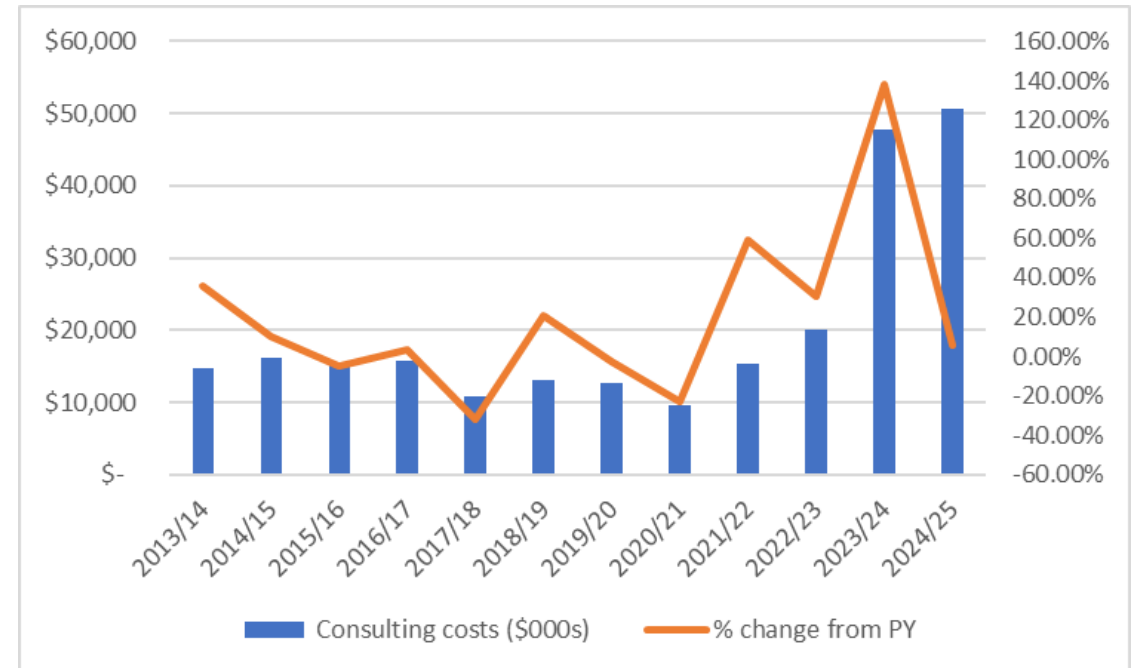
Table 9 – Summary of recommended labour changes (2023/24 and 2024/25)

(\$ 000s)	2023/24	2024/25
Prior year balance	458,803	475,073
Merit/Progression (@ applied for rate)	5,958	6,655
GWI and provisions for GWI (@ applied for rate)	5,724	7,471
Net increase in FTEs (FTE additions - vacancy)	4,588	4,751
Recommended wages & salaries	475,073	493,950
Applied for wages & salaries	482,838	505,009
Difference	(7,765)	(11,059)

Madsen evidence – PDF page 83, Table 9.

CONSULTING COSTS

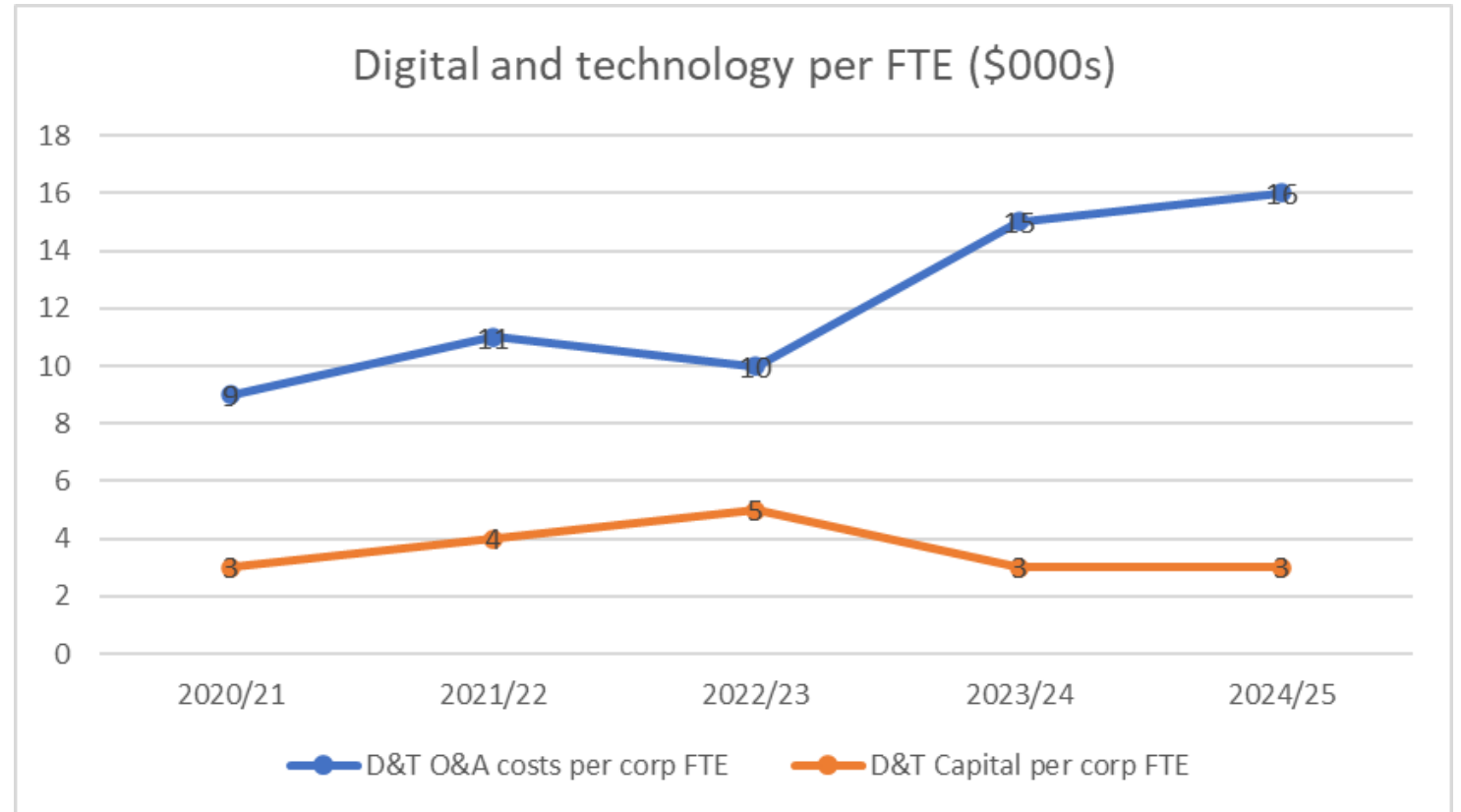
- Actual consulting costs increased on average 0.83% per year from 2012/13 to 2020/21.
- Actual costs increased by 58.95% in 2021/22 due in part to inflationary pressures.
- Increases in 2022/23 (30.12%), 2023/24 (138.45%) and 2024/25 (5.76%)
- Costs are forecast to steadily rise from 2022/23 to 2024/25, with a portion of the increase due to SAP S/4 HANA.



Created using Table 10 from Madsen Evidence, PDF page 83.

DIGITAL AND TECHNOLOGY COSTS

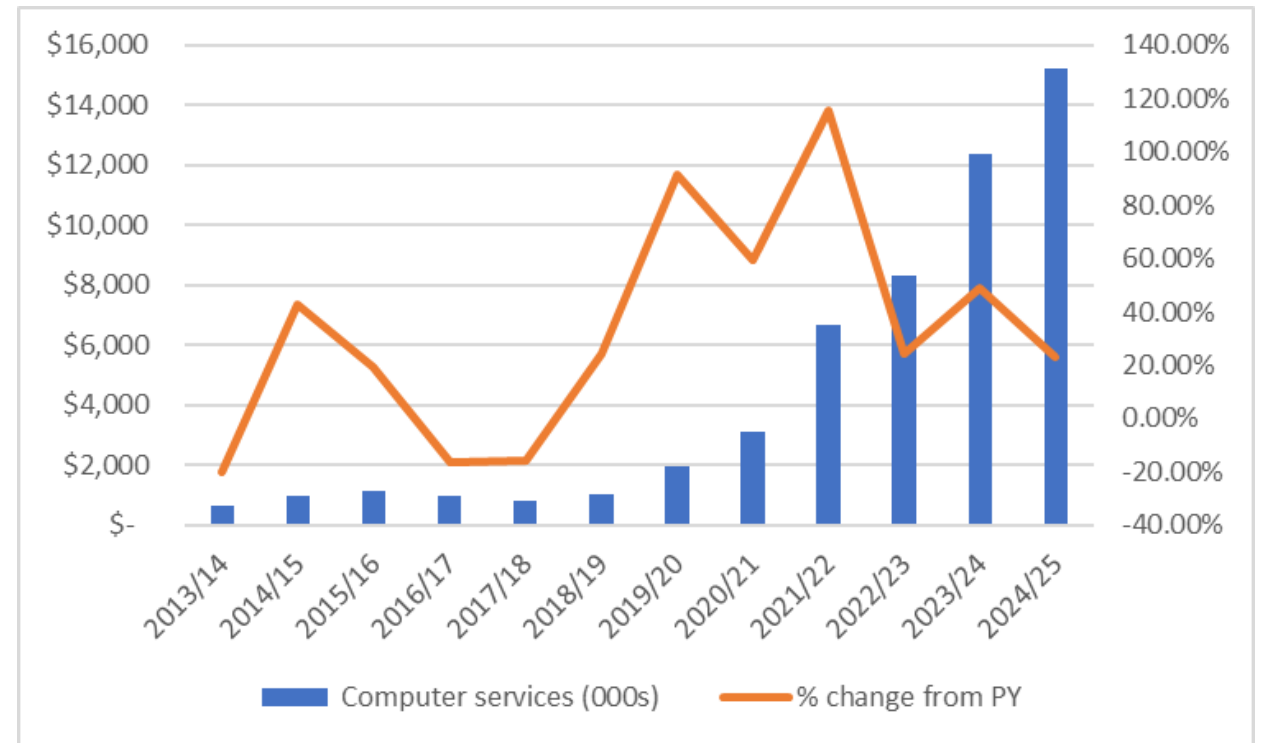
- Both consulting and D&T costs are increasing due to cloud-computing and the forecast implementation of SAP S/4HANA.
- Computer services costs are increasing from \$6.7 million in 2021/22 to \$15.2 million in 2024/25.
- Total D&T costs per FTE are increasing related to O&A and slightly decreasing for capital.
- Increasing FTEs = increasing D&T.



Created using Table 13 from Madsen Evidence, PDF page 87.

COMPUTER SERVICES

- Actual computer services costs increased on average 23.13% per year from 2012/13 to 2020/21.
- Actual costs increased by 115.60% in 2021/22 due in part to inflationary pressures.
- Increases in 2022/23 (24.31%), 2023/24 (48.98%) and 2024/25 (23.21%)
- Costs are forecast to steadily rise from 2022/23 to 2024/25, with a portion of the increase due to cloud computing arrangement costs.



Created using Table 10 from Madsen Evidence, PDF page 83.

CONSULTING AND COMPUTER SERVICES RECOMMENDATIONS

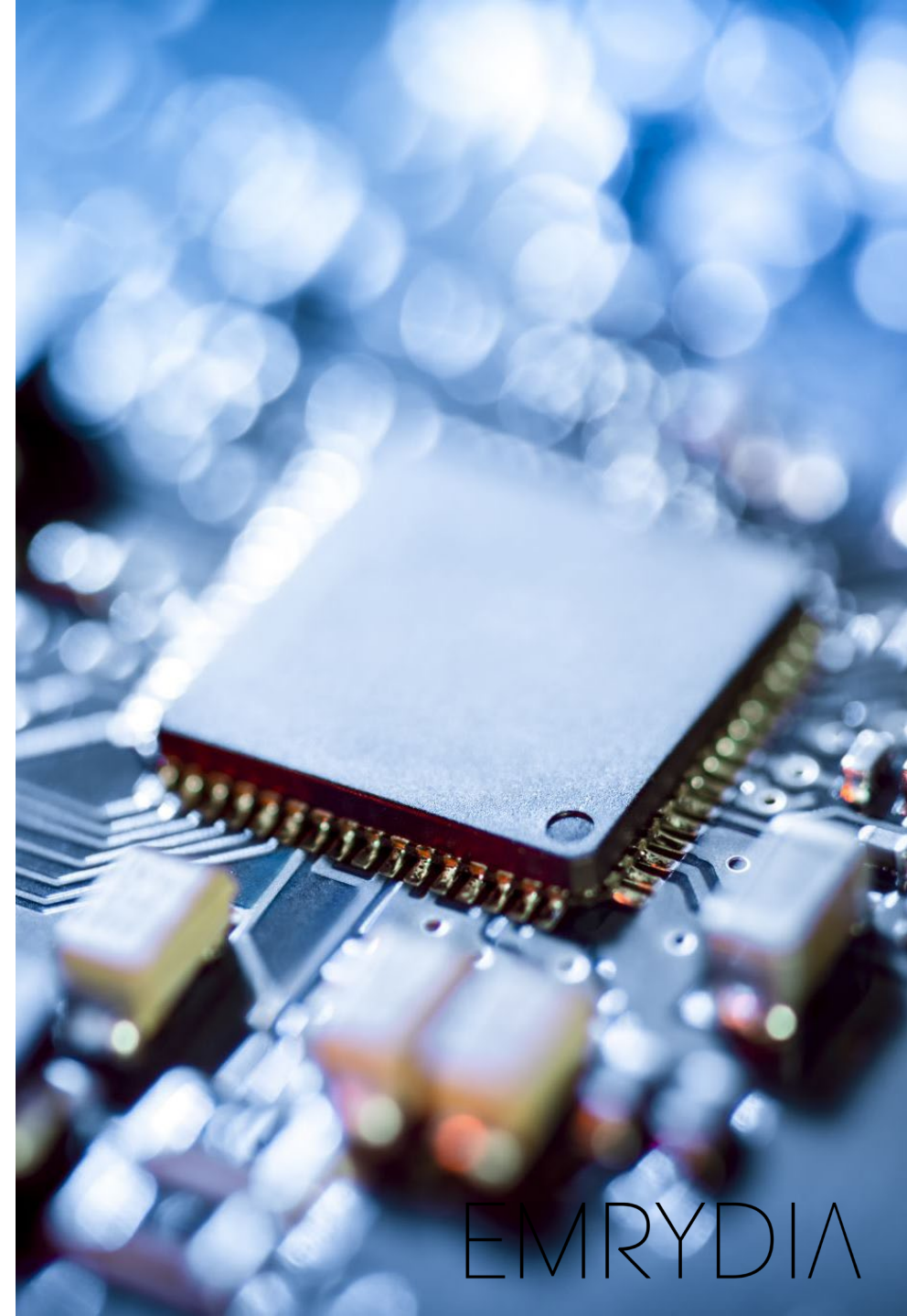
- My recommendations for these areas are interlinked as both are driven by cloud-computing costs.
- Fundamentally, my recommendation for these costs are as follows:
 - Adjust for the removal of all cloud-based computing costs.
 - Using 2021/22 actual as a starting point, approve an incremental increase in costs per year of 4% or less.
- These recommendations provide for a reasonable level of forecast base costs and should fund initiatives such as the IRP and other projects.
- Note: this does not imply the cloud-based computing forecasts are reasonable and I agree with Mr. Rainkie that increasing IT costs should result in cost savings.

SUMMARY ON OPERATING AND ADMINISTRATIVE COSTS

- Manitoba Hydro manages its budgets, but direction from the PUB is unlikely to be ignored.
- Clear direction on cost restraint is important at a discrete rather than high level, as once certain costs begin to be incurred it becomes difficult and costly (i.e., severance) to back track.
- “Small” O&A increases today will snowball and grow into the future. The inverse is also true.
- Need a win-win around optimization of costs and maintaining/improving reliability. This begins with evidence to support the decision on trade-offs.
- Recommended increase to labour is 3.5% in 2023/24 and 4.0% in 2024/25, which is generous given forecast moderation in inflation through 2023 to 2025.
- Consulting and D&T increase is 4% from 2021/22 levels excluding cloud-computing and SAP. This is reasonable and above inflation forecast for the latter half of 2023 and into 2024 and the next test period.

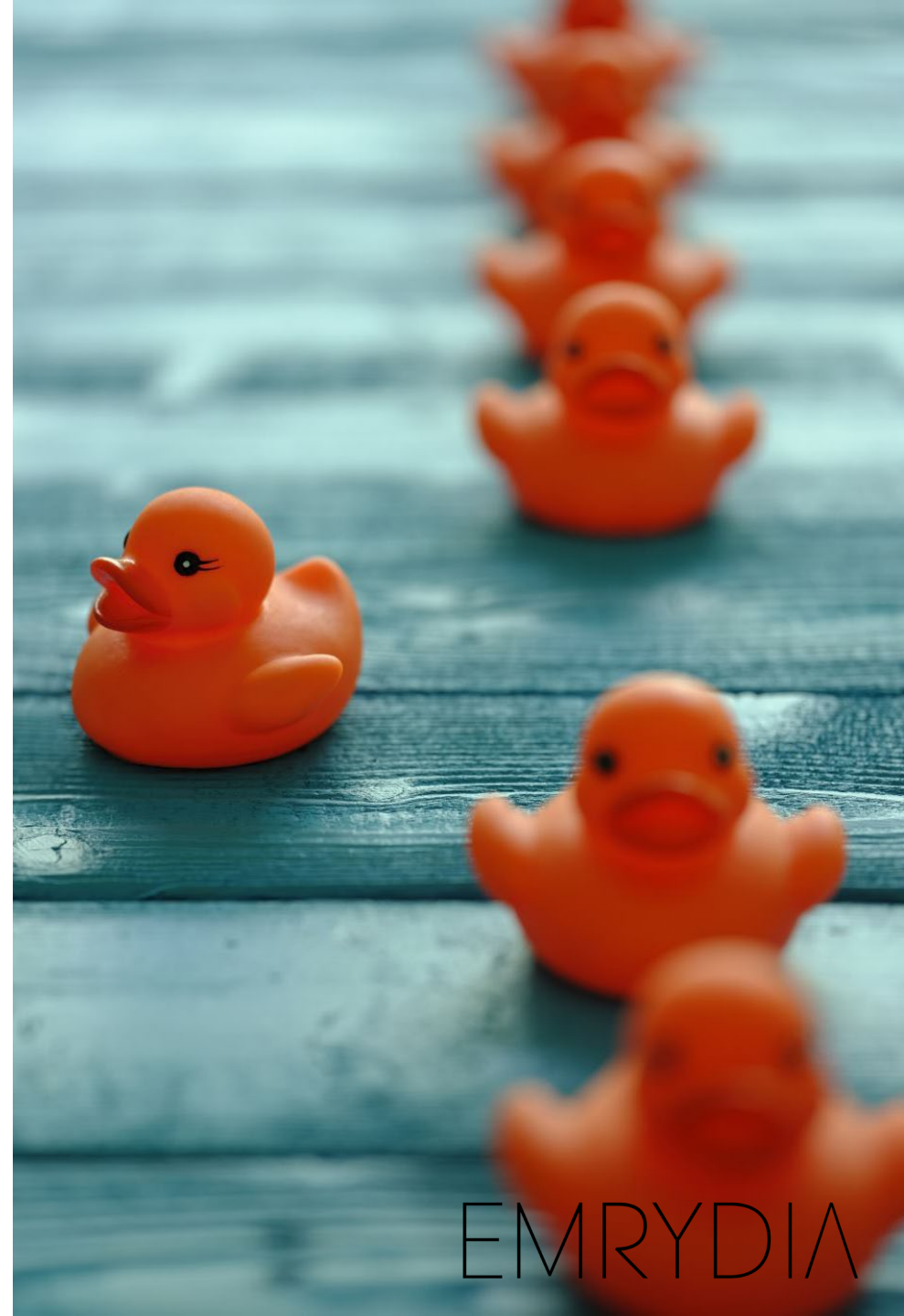
SAP/S4 HANA

- Whether to proceed with SAP S/4 HANA is a **major** business decision, and it will be transformative and disruptive.
- Highly probable that the adoption of a new Enterprise Resource Planning System will be over budget.
- A detailed plan and business case is critical before a decision is made.
- Alternatives to SAP S/4 HANA exist.
- Other Canadian regulators have expressed concerns regarding similar proposals.
- Recommendations:
 - All costs should be denied until a full business case is completed.
 - Deferral account treatment should be approved in principle for all potential solutions including the status quo, transition to a new on-premise system, or adoption of SAP S/4 HANA. Stage 0 costs can be included as actuals within the deferral.



DEFERRAL OF “SMALL” CLOUD-COMPUTING ARRANGEMENT COSTS

- If it quacks like a duck and looks like a duck...
- Consistency of cost treatment is preferred over disparate treatment.
- Cloud-computing costs are forecast to be minor but could increase particularly as FTEs are forecast to increase, more systems are moved to the cloud, and more licensing fees are paid per FTE or position.
- Deferral aids in addressing forecast inaccuracies due to a lack of business cases for all smaller cloud-computing costs.



RATE DESIGN

- I am supportive of Manitoba Hydro's cost of service proposals related to the GSS/GSM rate classes.
- Manitoba Hydro has proposed potential future improvements to the design of the GSS-ND, GSS and GSM rate classes.
- I am supportive of pursuing innovations in the future to address the balance of fixed and variable costs, including further consideration of the declining block energy structure.
- Such design changes are complex and warrant a detailed discussion and assessment over time. Collaboration between Manitoba Hydro and the GSS/GSM rate class representatives is encouraged.
- In order to continue to support bringing the GSS-ND rate class into the zone of reasonableness I support active management of revenue to cost coverage ratios (RCC) as proposed by Manitoba Hydro.