

2024/2025 OVERVIEW



Accomplishments & Business Plan

City of
NELSON

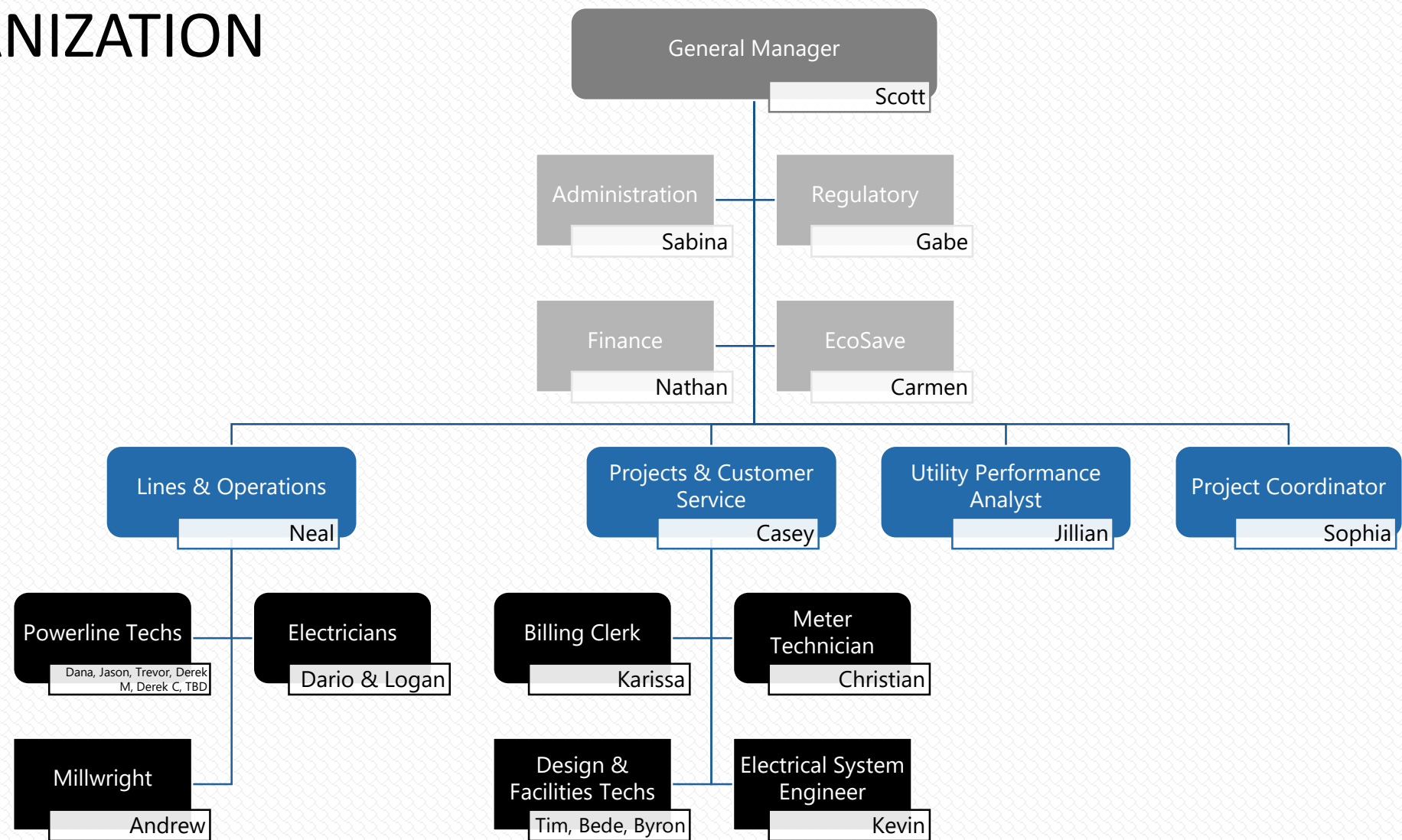
October 25, 2024

AGENDA

- | | |
|---|---------|
| 1. Introduction | Scott |
| 2. Budget and Rates | Scott |
| 3. Regulatory | Gabe |
| 4. Generation, Transmission, Distribution | Neal |
| 5. Projects and Customer Service | Casey |
| 6. Key Performance Indicators | Jillian |
| 7. EcoSave Program | Scott |
| 8. General Management | Scott |
| 9. Closing Remarks | Scott |



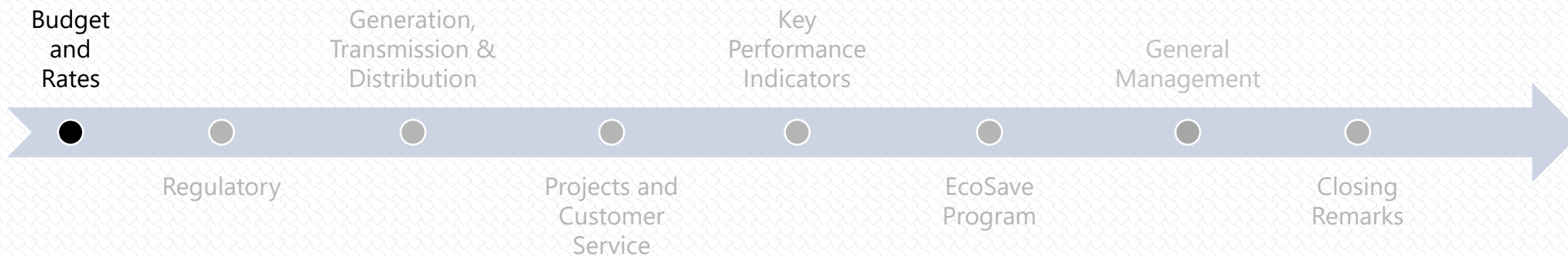
ORGANIZATION





Budget and Rates

Nathan Russ



2024 OPERATING BUDGET HIGHLIGHTS

Revenue:

Residential customer consumption less than budgeted.

Power Purchases:

Low freshet compared to average resulted in increased power purchases required to meet demand.

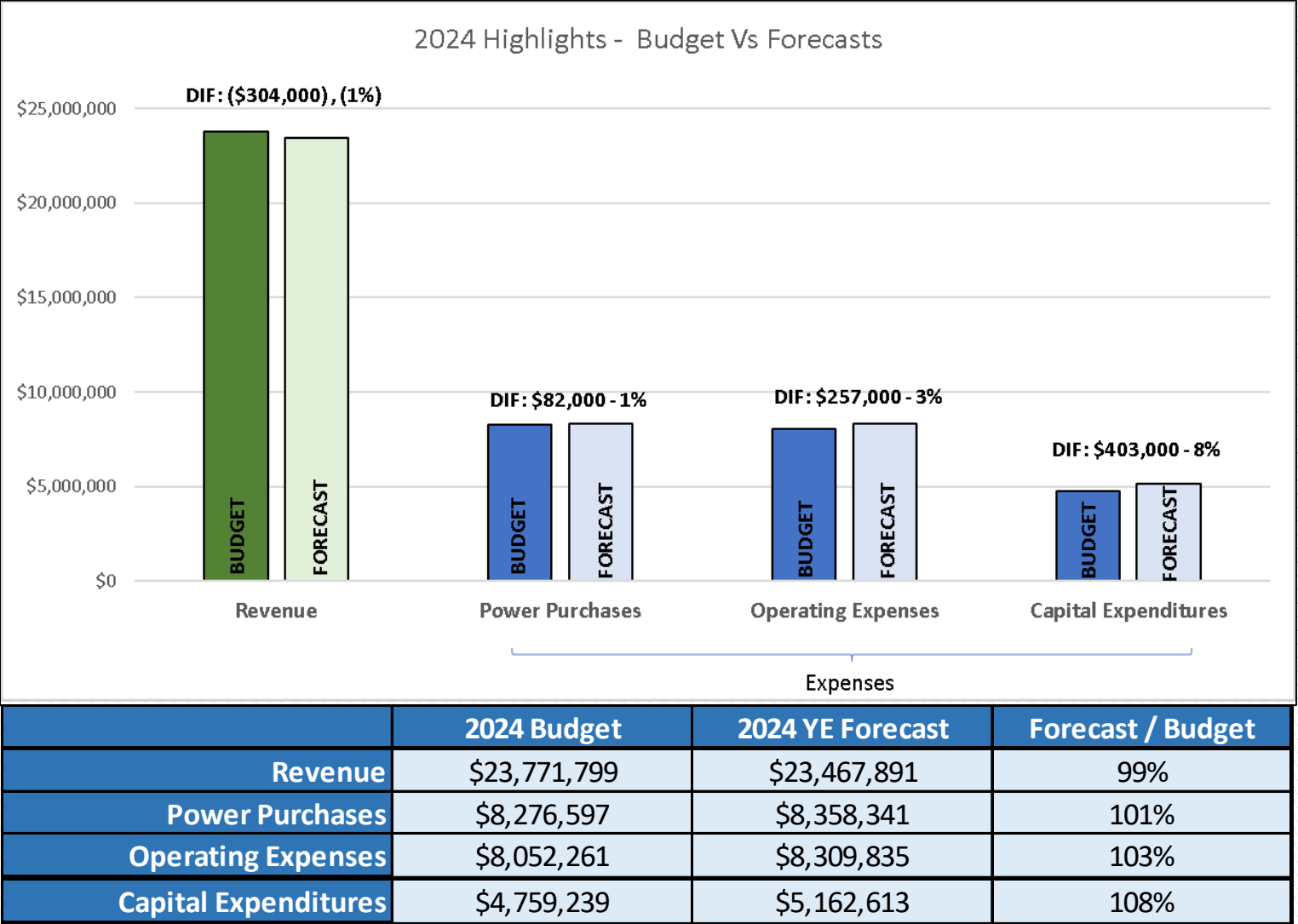
Higher demand charges due to weather event.

O&M:

Higher than budgeted Vegetation Management: high vegetation growth year

Capital:

Mill Street costs forecast exceed initial budget by 4.9% (within reasonable threshold given scope and multi-year timeline of project)



2024 OPERATING BUDGET HIGHLIGHTS – CONT.

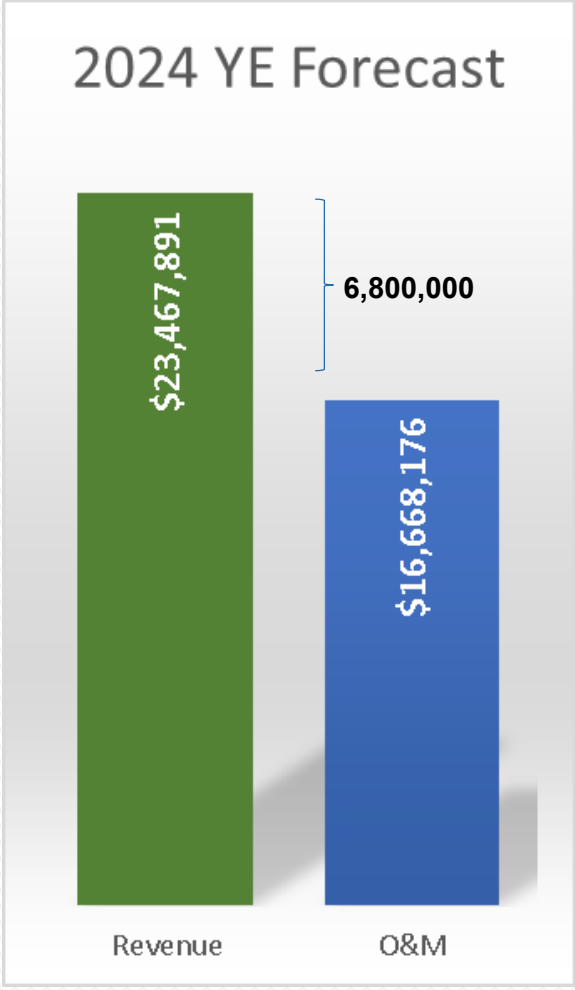
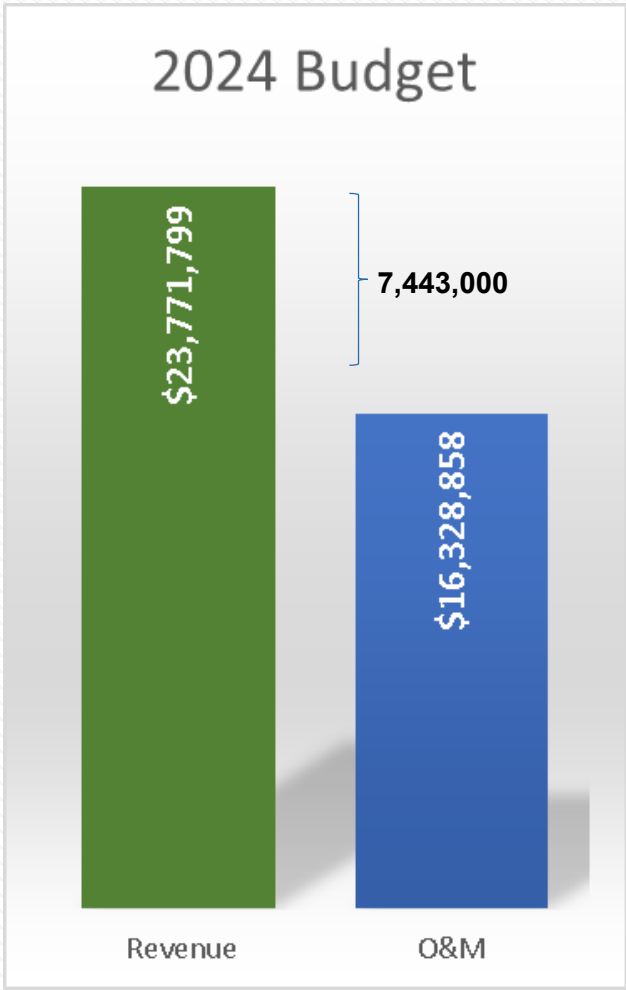
Impact:

Reduced revenue and increased expenses can lead to less contribution to reserves and return on equity than originally projected

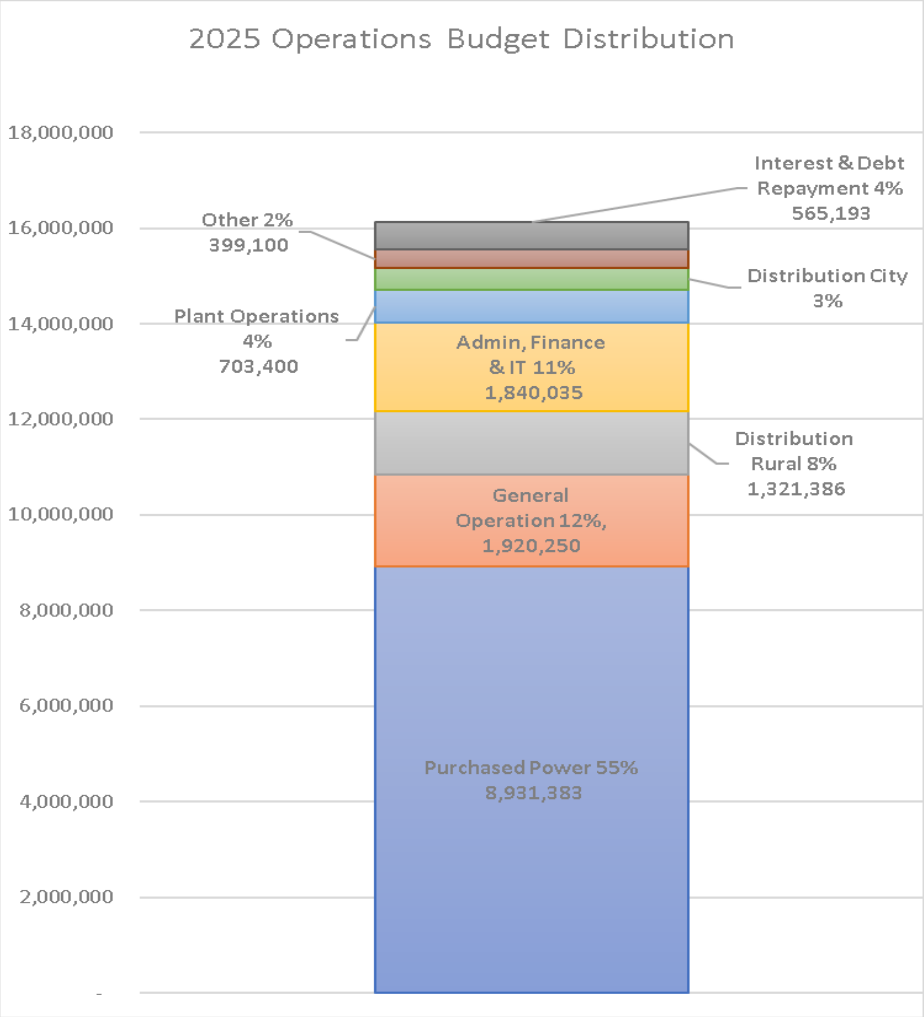
Risk Mitigation:

Rural Variance Deferral Accounts allow for recovery of \$230K of revenue and \$96K of expenses (estimated) or 50% of shortfall between budget and forecast.

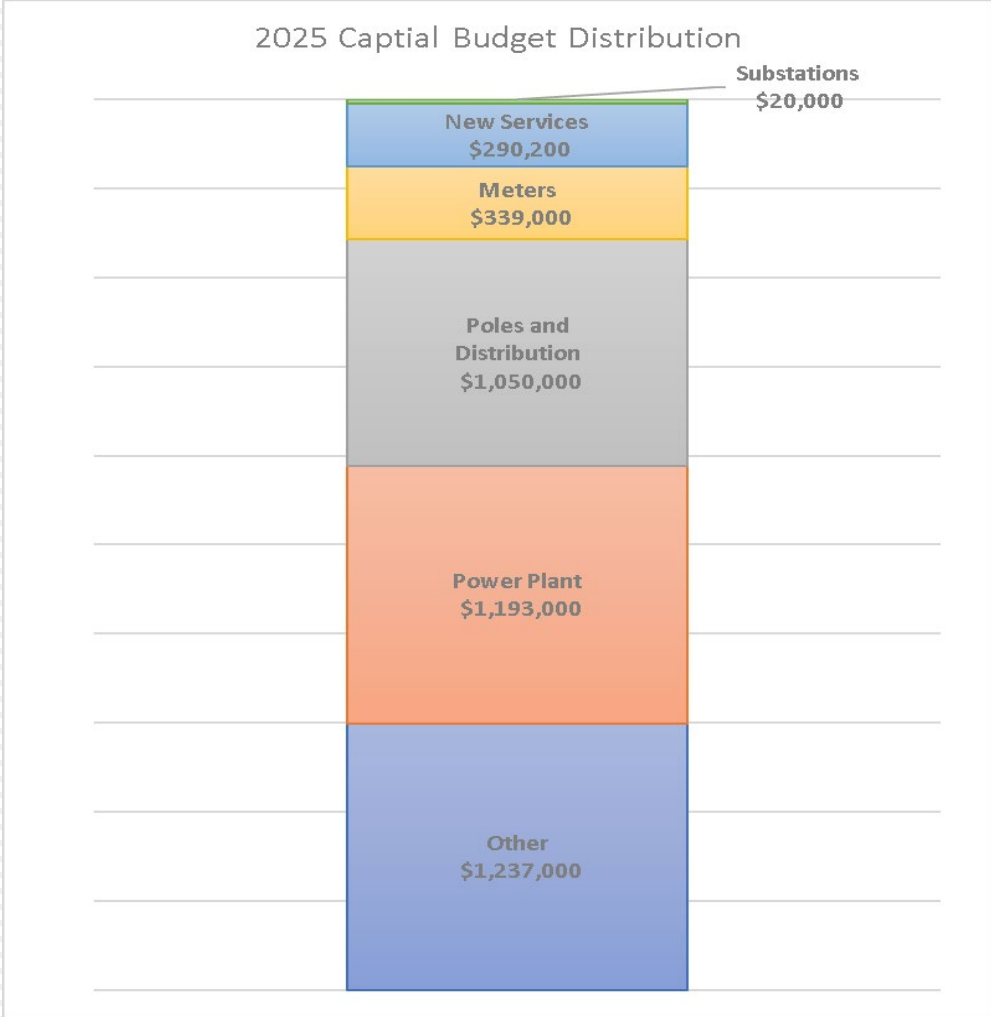
The remaining shortfall is managed with the Hydro reserve balance and rate adjustments as required.



O&M AND CAPITAL COST DISTRIBUTION 2025



Does not Include Water License Costs



2025 BUDGET COMPARISON

Revenue:

Increased Revenue Requirement to:

- Offset increased Power Purchase costs
- Return on asset base (rural)
- Ensure capital reserve health

Power Purchases:

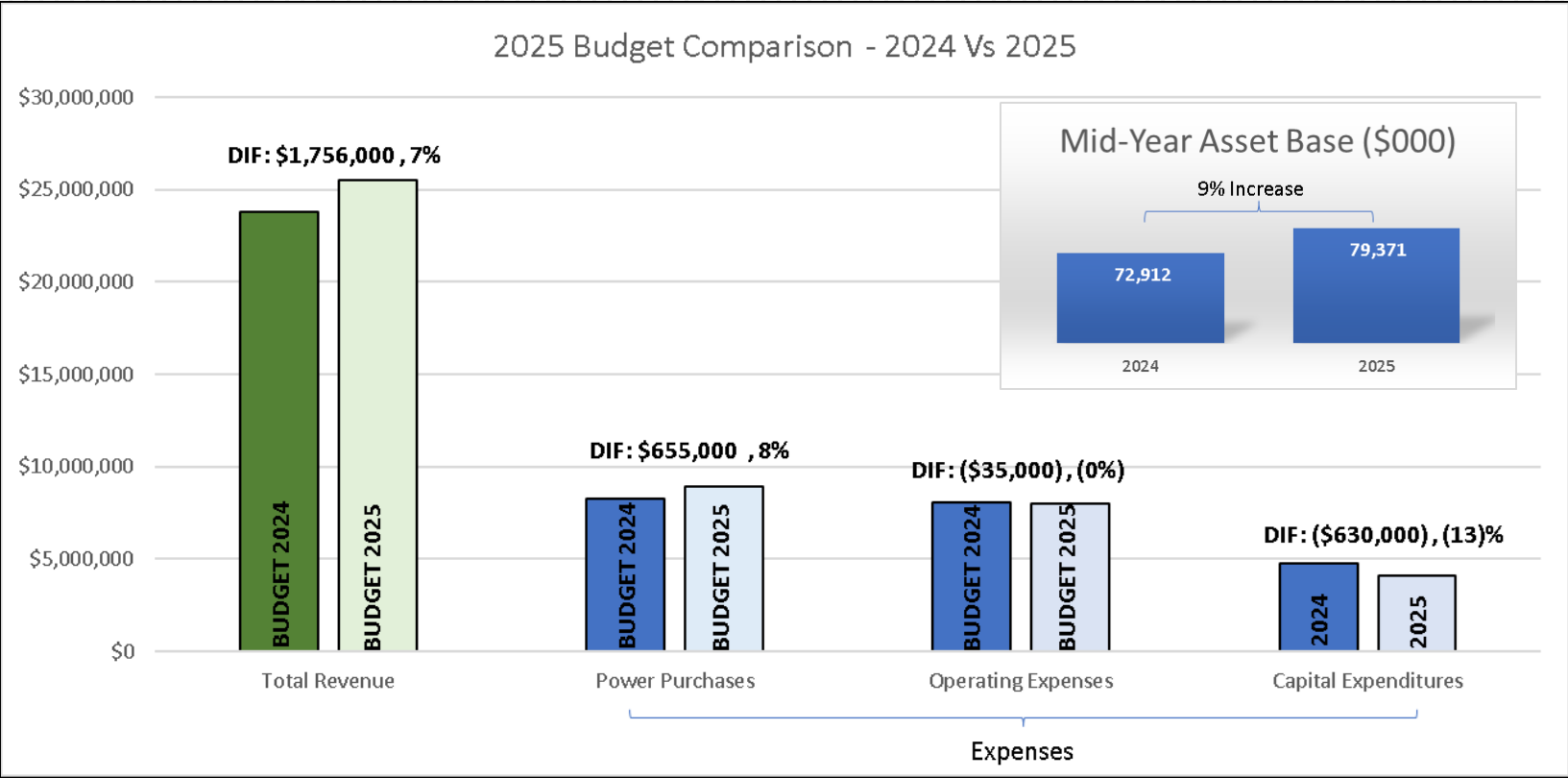
- 5.3% rate increase from FortisBC expected
- Higher demand charges than budgeted in 2024

O&M:

- Optimized budget to ease rate burden
- Fewer non-capital maintenance activities planned

Capital:

- Mill Street project completion in 2024, fewer Capital project costs anticipated for 2025



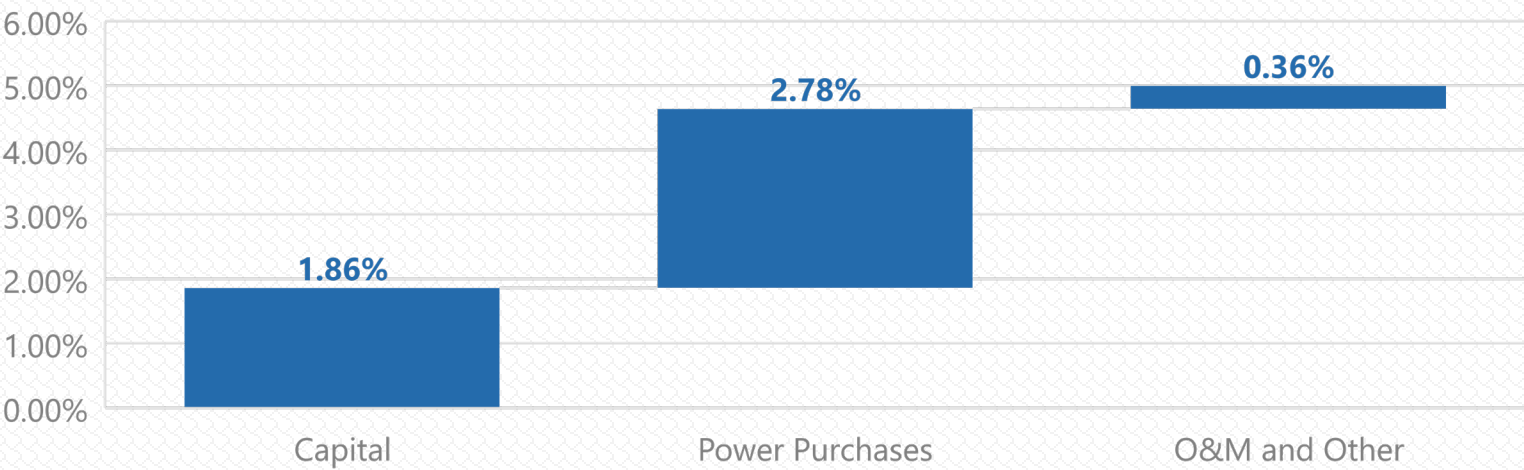
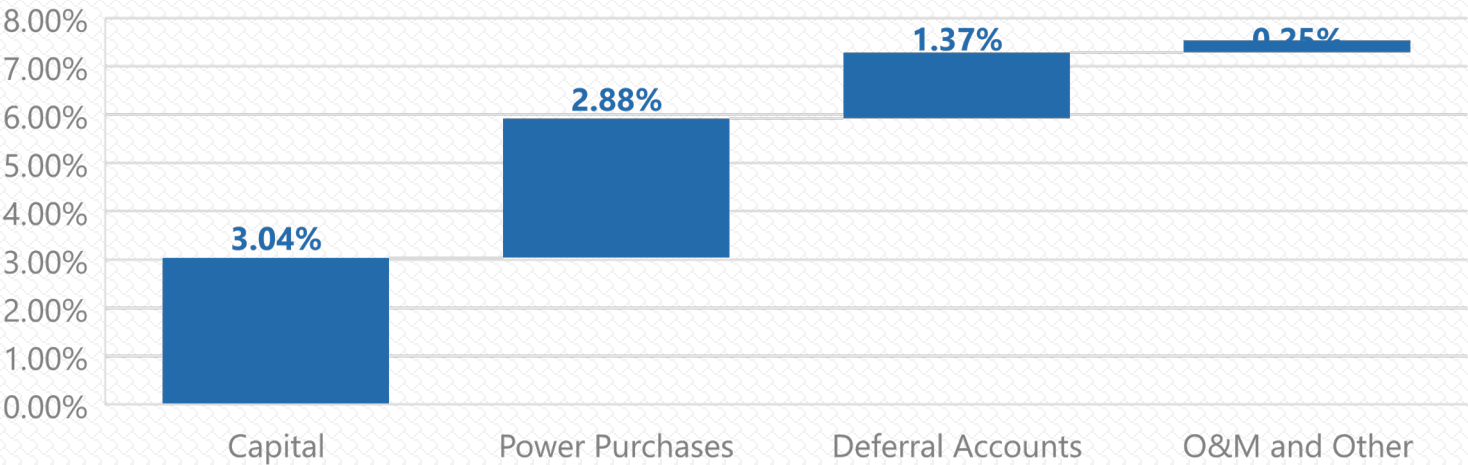
	2024 Budget	2025 Budget	2024 Fcst. Vs 2025 Budg.
Total Revenue	\$23,771,799	\$25,528,259	107%
Power Purchases	\$8,276,597	\$8,931,383	108%
Operating Expenses	\$8,052,261	\$8,016,817	100%
Capital Expenditures	\$4,759,239	\$4,129,282	87%



2025 RATE INCREASE BREAKDOWN

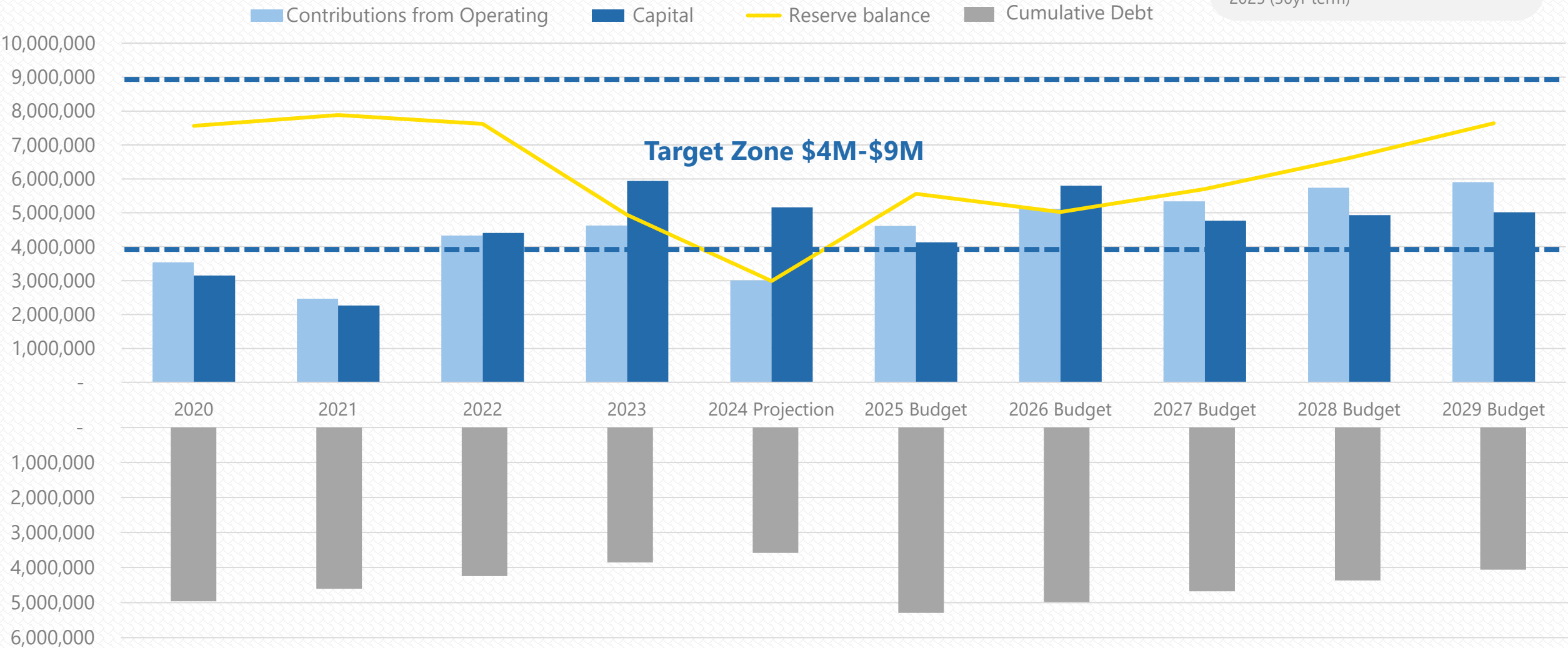
Rural Rate Increase: 7.54%
or
\$10.55/month (1,000kWh)

Urban Rate Increase: 5.00%
or
\$6.56/month (1,000kWh)



HYDRO CAPITAL RESERVE

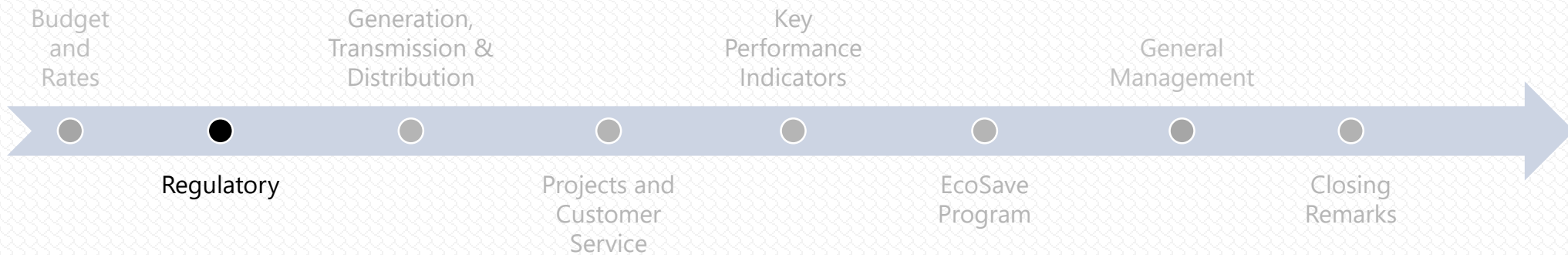
Rural Rate Increase: 7.54%
Urban Rate Increase: 5.00%
Dividend: Return on Equity (\$3.90M)
Scenario includes \$2M of new debt in 2025 (30yr term)





Regulatory

Gabe Bouvet-Boisclair



BCUC APPLICATIONS & PROCEEDINGS – CURRENT/COMPLETED

- 2024 Revenue Requirements Application – Completed
- Regulatory Efficiency Initiative – Completed
- Terms and Conditions of Service – Completed
- Generic Cost of Capital (GCOC) Phase 2 – Ongoing
- FortisBC 2025-27 Rate Setting Framework – Ongoing

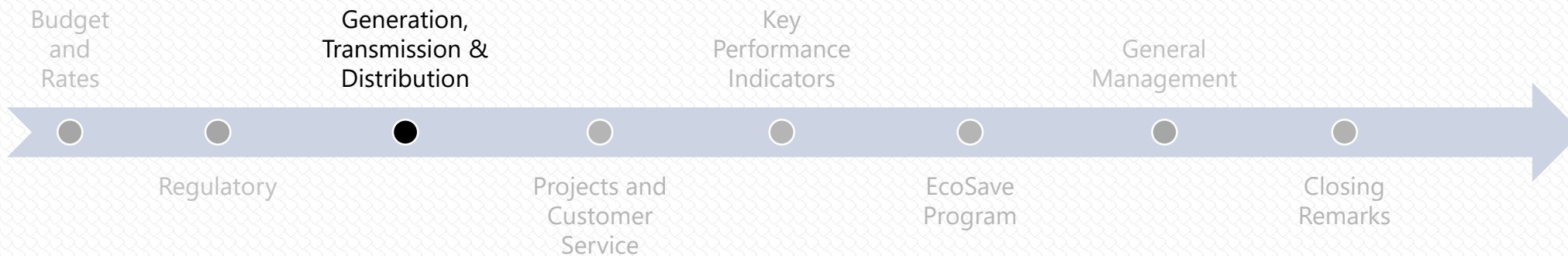


bcuc
British Columbia
Utilities Commission

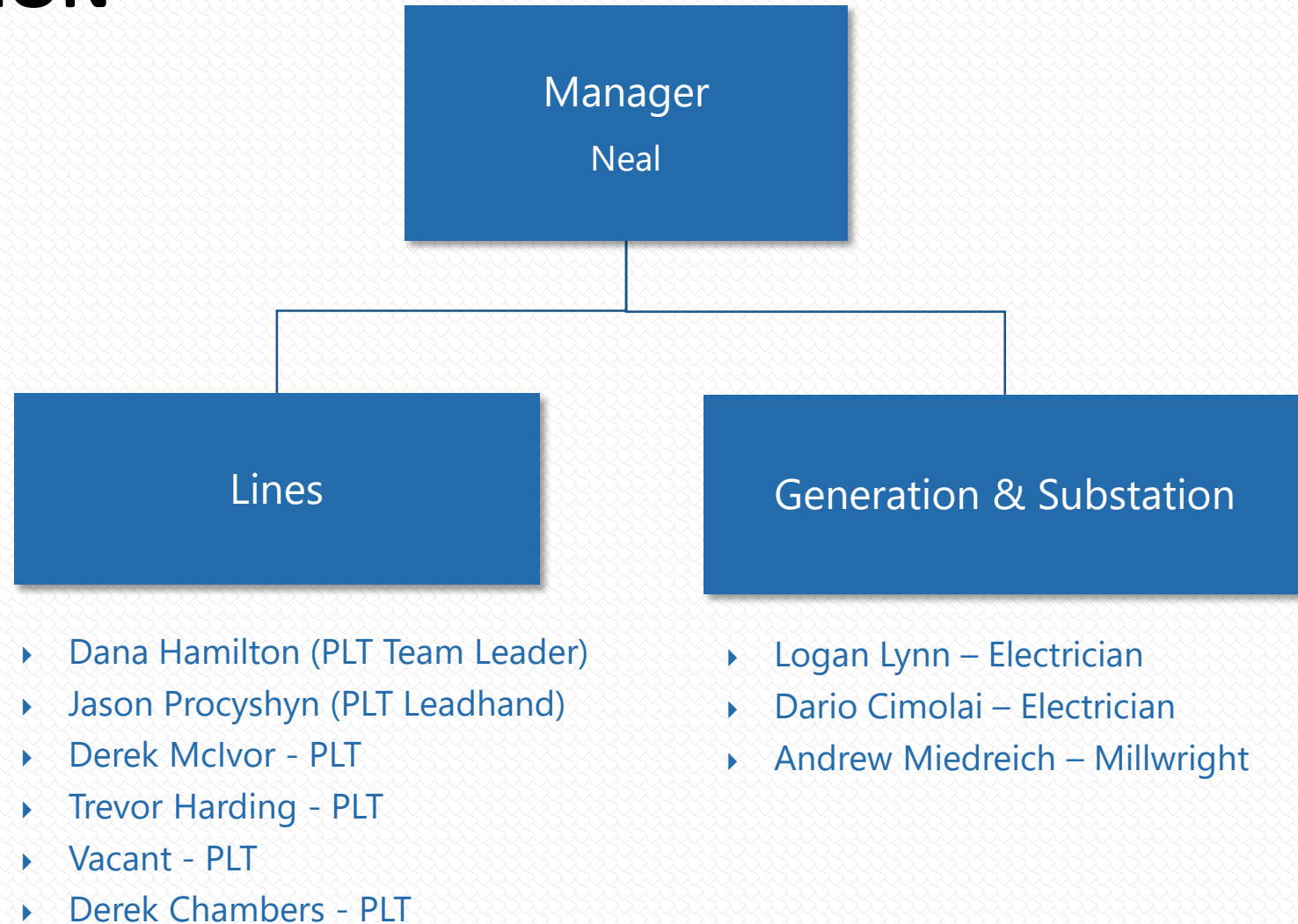


Generation, Transmission and Distribution

Neal Dermody



ORGANIZATION



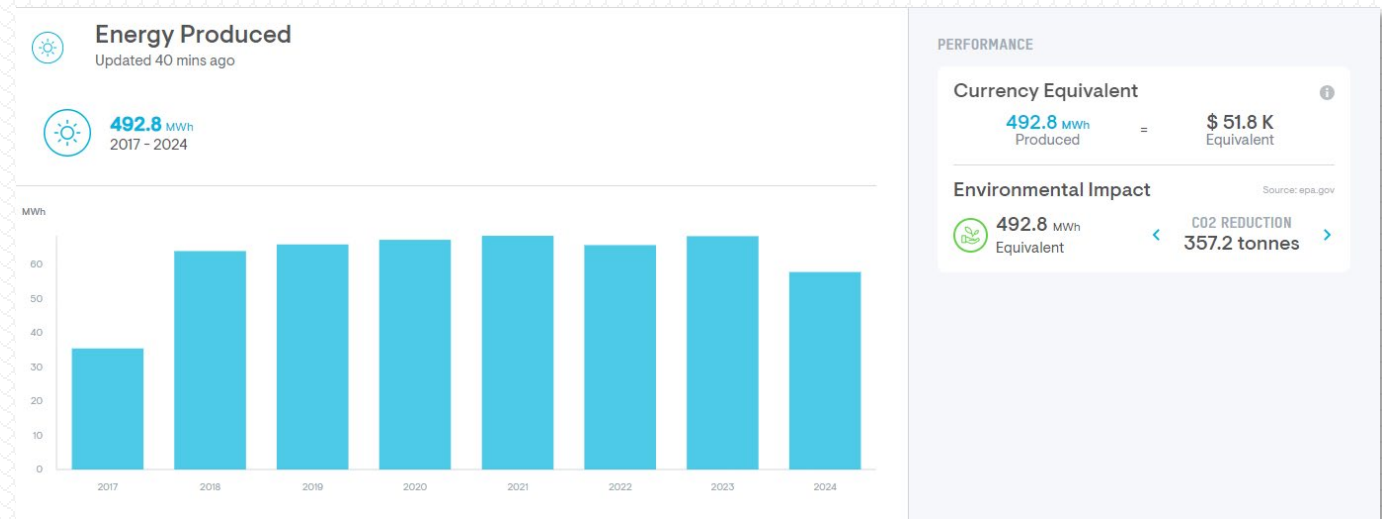
SAFETY

- 3 Lost Time Incidents
- Dam Safety Review - completed and submitted to province
- Dam Safety Management Plan – capital projects started
- Safety Audit Deficiencies – ongoing work
- Electrical Safety Program - implementation
- System Safety and Lock-out (SSL) – completed and rolled out to staff

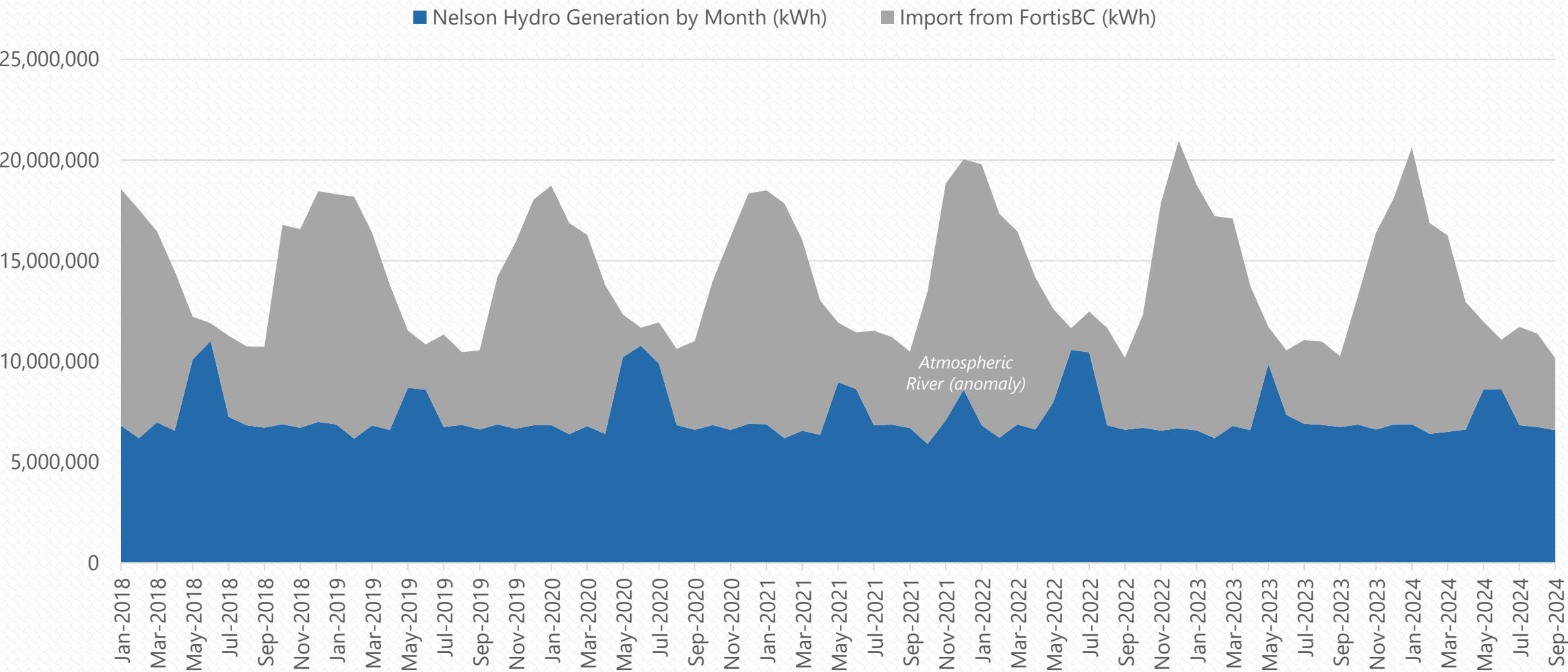


SOLAR GENERATION

- Solar Energy Production in June 2024 well below 2023 due to a Gateway Failure.
- Required maintenance is increasing.
- Structural frames holding panels will require attention due to wood deformation.



HYDRO GENERATION & IMPORT



VEGETATION MANAGEMENT – 2024 WORK COMPLETED



5 YEAR VEGETATION MANAGEMENT PLAN (2025-2029)

Year	Northshore (Rural)	Southshore (Rural)	City (Urban)	Common (60kV)
2025	\$451,250	\$175,000	\$131,250	\$87,500
2026	\$495,688	\$180,250	\$135,188	\$90,125
2027	\$510,558	\$185,658	\$139,243	\$92,829
2028	\$525,875	\$191,227	\$143,420	\$95,614
2029	\$541,651	\$196,964	\$147,723	\$98,482

POWER PLANT

- Generation annual maintenance complete for G5. G2, G3, and G4 upcoming in the Fall.
- Fabricating machine guards and railings to meet WSBC requirements.
- Power plant vegetation subscription complete for rock face. Ready for 2025.



LINES & SUBSTATION

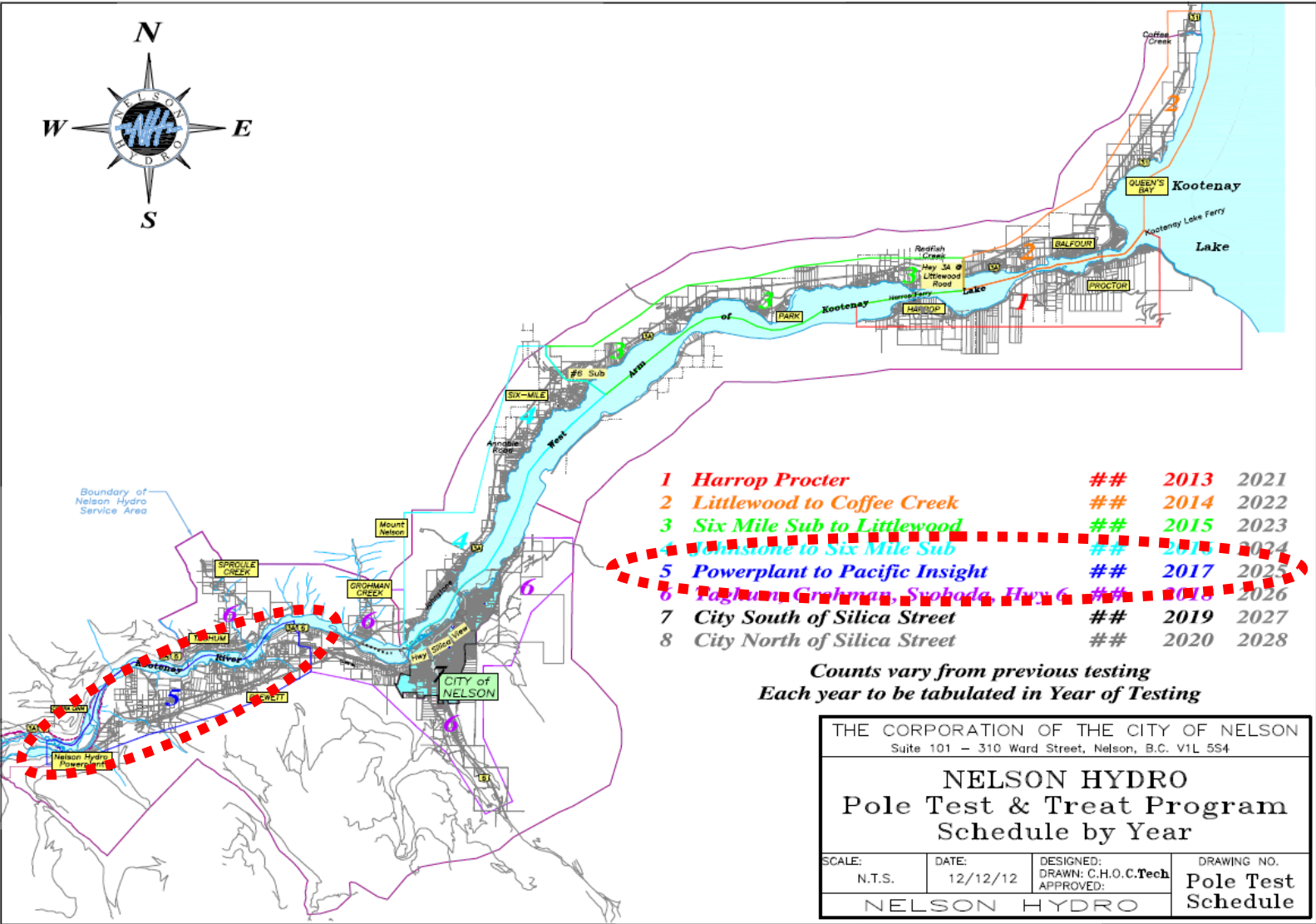
- 619 poles tested for Test & Treat
- 72 poles scheduled for replacement before December 31
- 1 vacant PLT position. Offer pending
- Planned Maintenance completed 6-Mile, Taghum, and Bonnington



TEST & TREAT ⇒ POLE REPLACEMENT (2025)

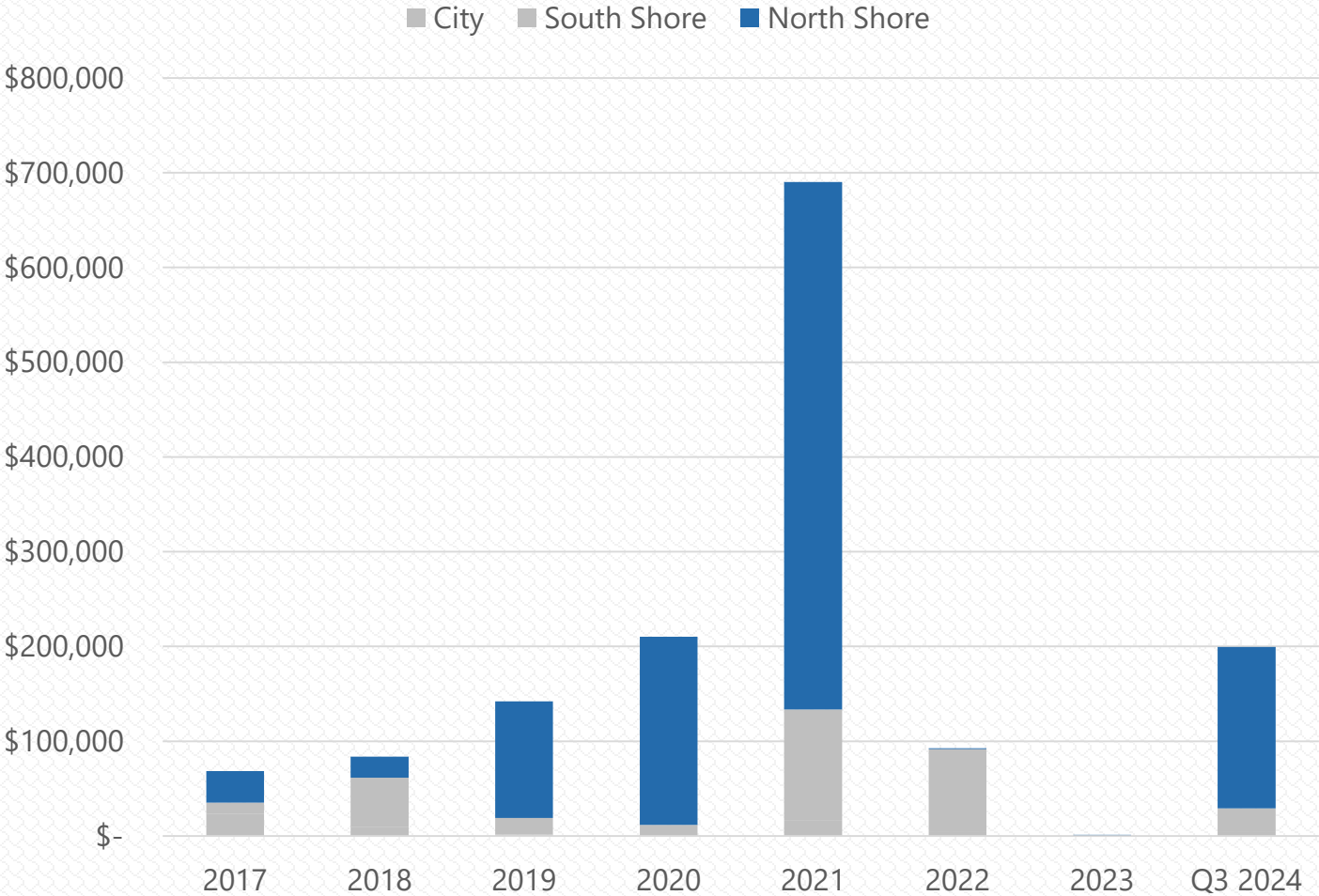


Nelson Hydro Pole Count - Feb. 8 2023			
Region	Test Area	Poles by Area	Poles by Region
NS	Area 1	709	
NS	Area 2	883	
NS	Area 3	852	
NS	Area 4	873	3317
SS	Area 5	941	
SS	Area 6	1012	1953
CITY	Area 7	999	
CITY	Area 8	969	1968
		TOTAL	7238

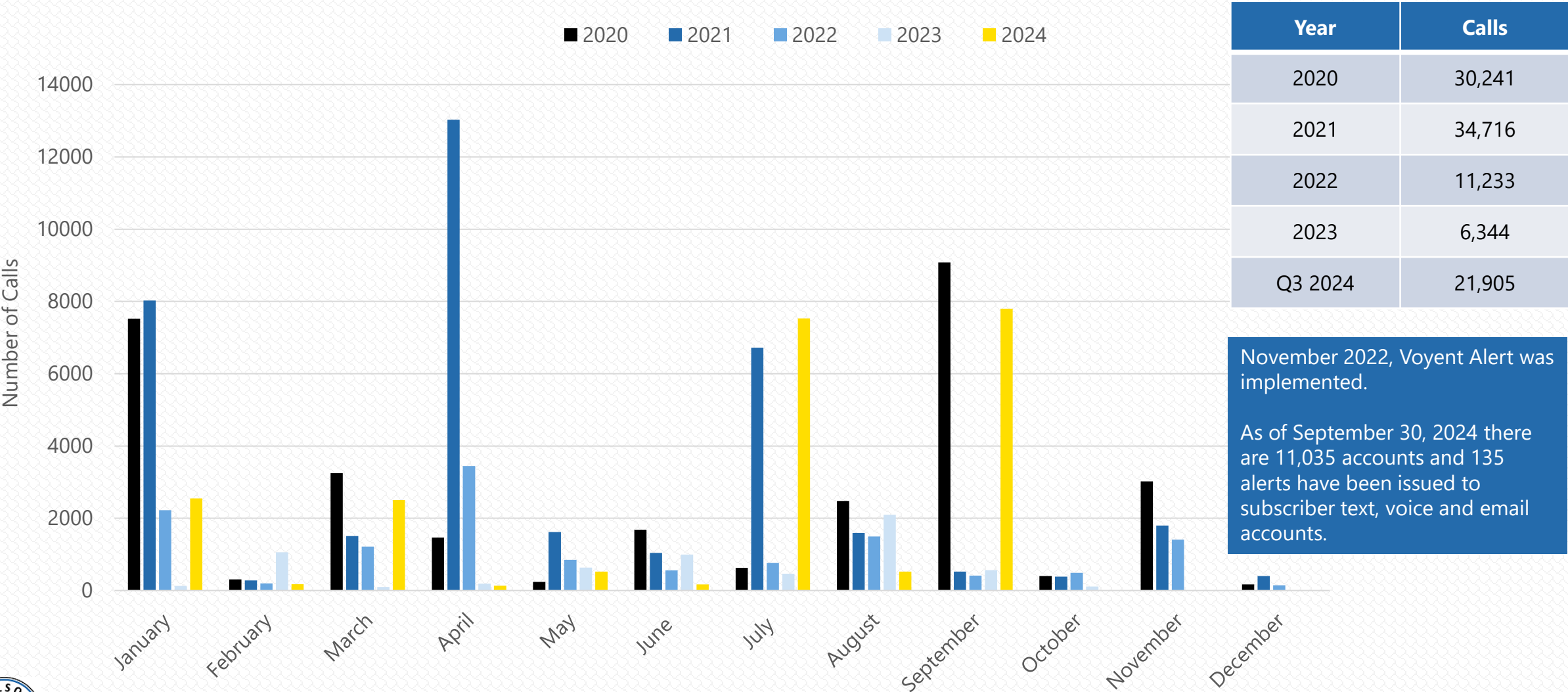


MAJOR STORM EXPENSE

- 2024 three major storms (Jul 25, Sep 25, Sep 29).
- As the Vegetation Management Program becomes more mature, it should maintain the current CEA metrics which are trending positively.



CALLS TO OUTAGE INFORMATION LINE



2025 OPERATIONS & LINE

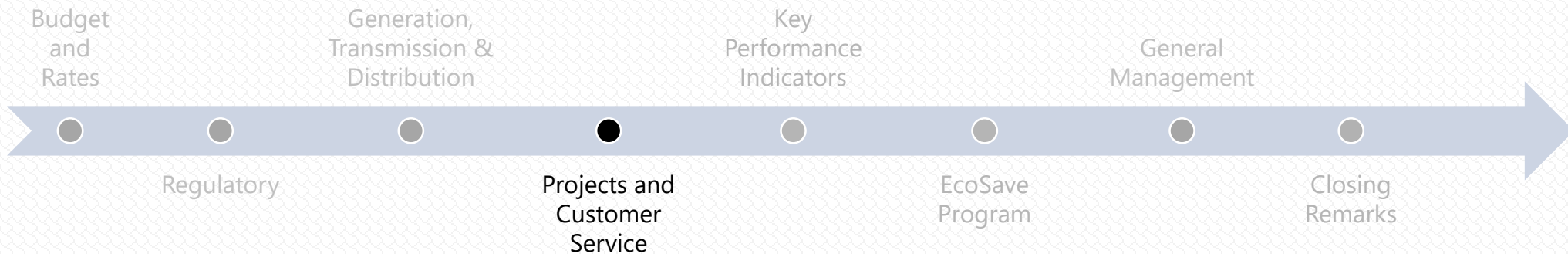
- Asset Management Framework aligns:
 - Dam Emergency Plan (DEP), Operations, Maintenance and Surveillance Plan (OMS), and Dam Safety Management Plan (DSMP) -> **COMPLETED**
 - Preventative Maintenance (PM), Computerized Maintenance Management System (CMMS), Equipment Health Rating, and Reliability Centered Maintenance. -> **ONGOING**
- Rollout Training for the CoN Electrical Safety Program Policy, Tools, System Safety & Lockout Program



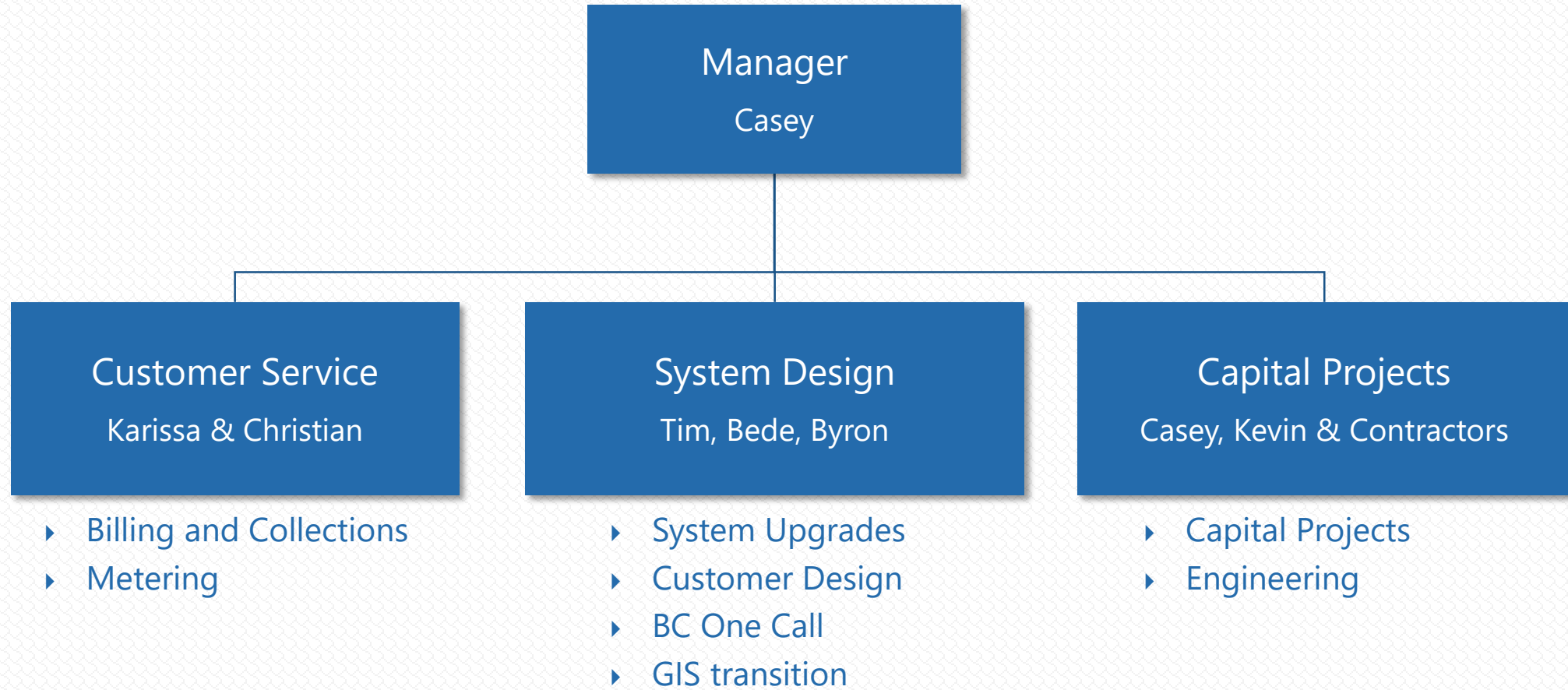


Projects and Customer Service

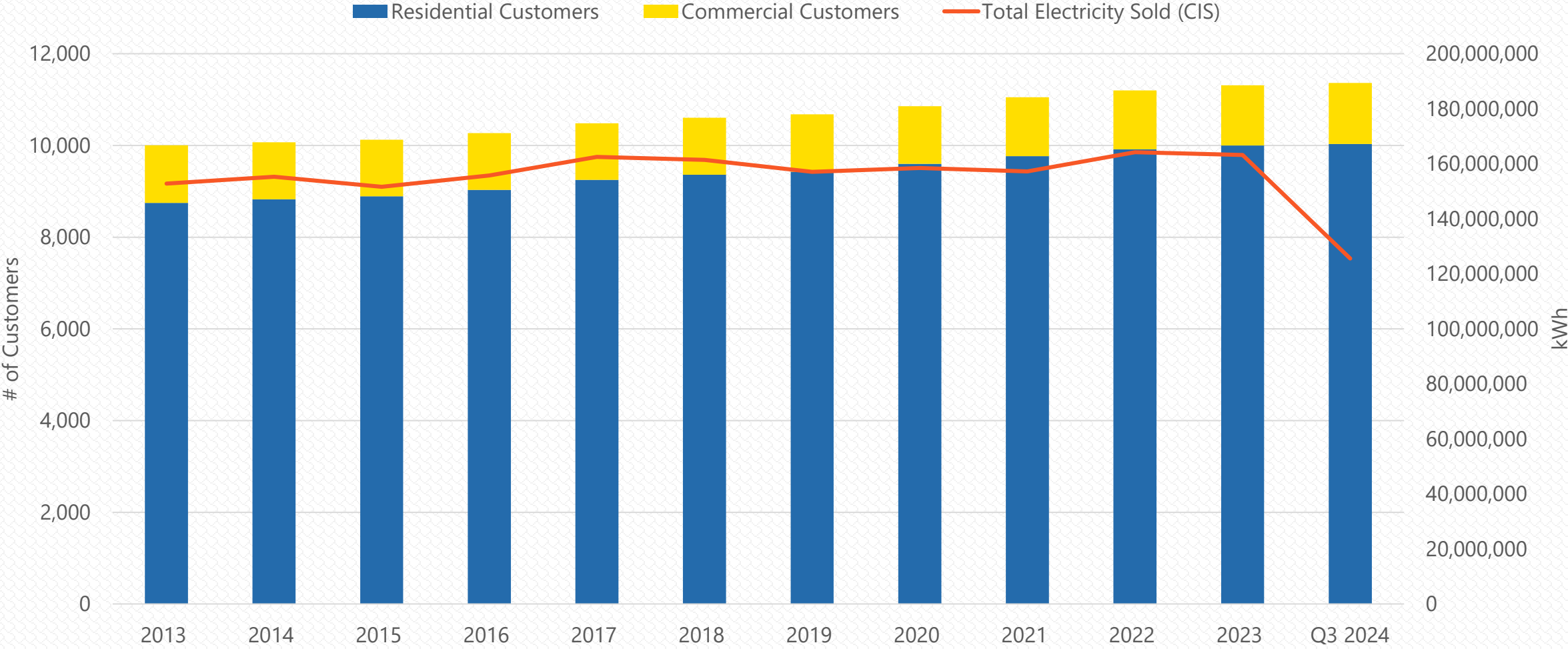
Casey Smit, P.Eng., PMP, MBA



ORGANIZATION

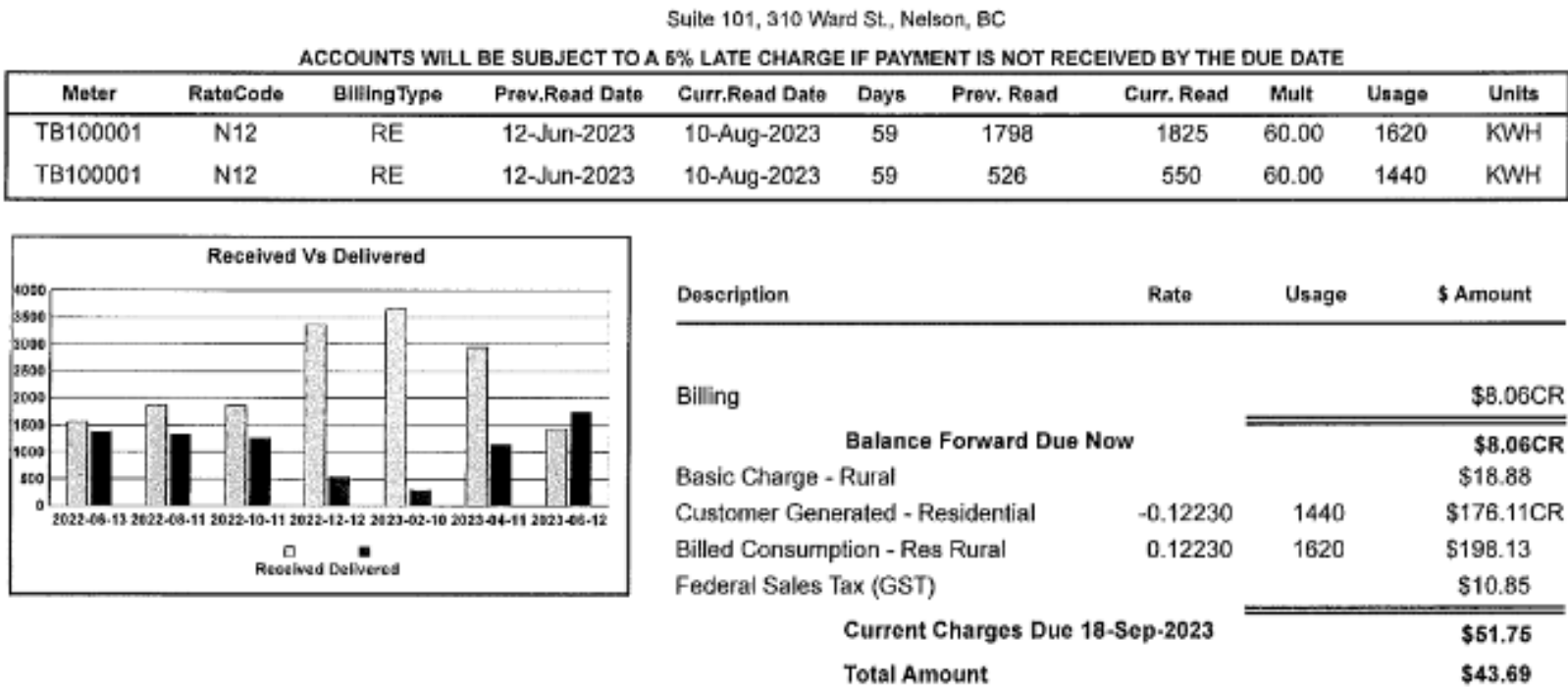


CUSTOMER GROWTH

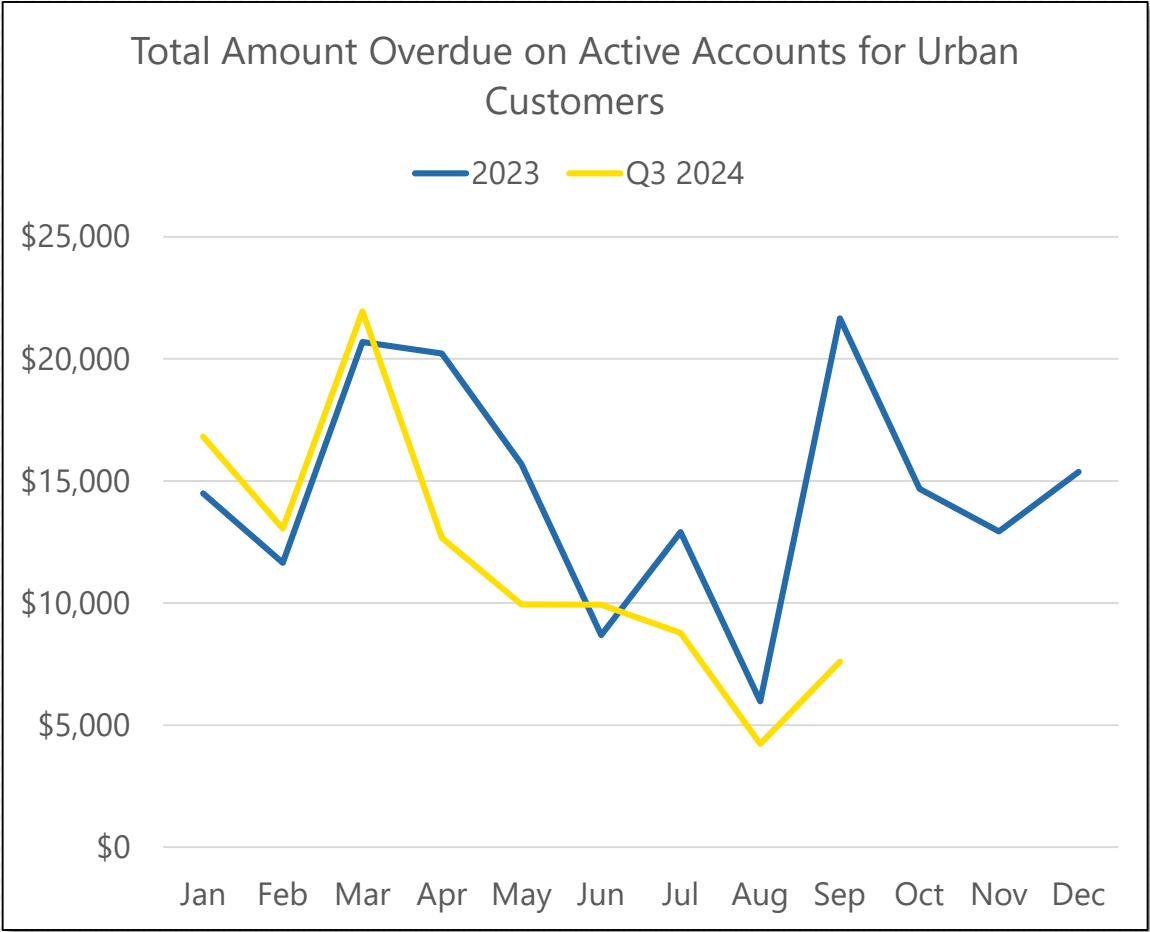
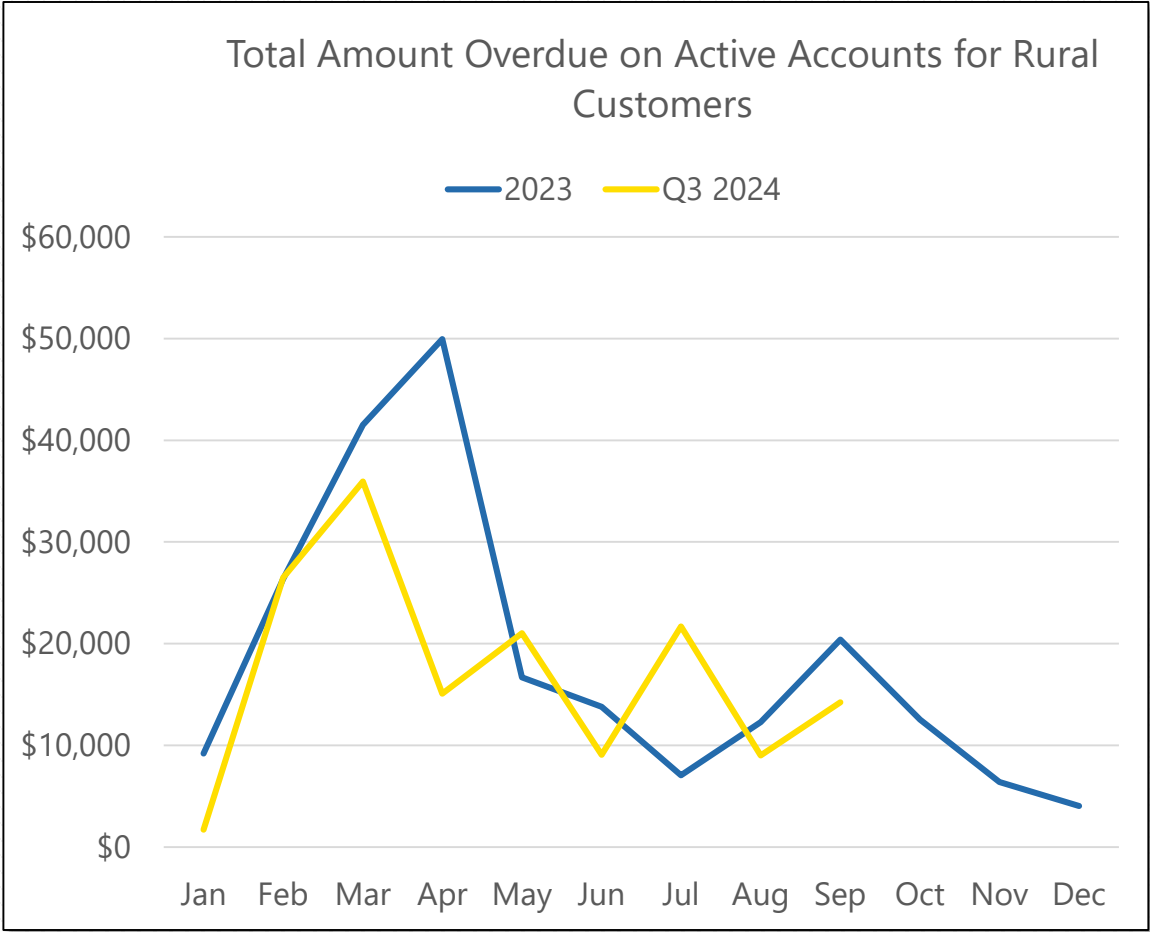


BILLING

- Cost-of-living credit disbursement
- 32% E-billing enrollment (+4%)
- By-law update
- Service and metering guide
- Residential demand monitoring



BILLING



CUSTOMER PROJECTS

- 390 standard inquiries and projects
- 1,000 BC One Call requests
- 611 Vernon St. (125 residential)
- 902 11th Street (Institutional)
- 900 Lakeside Dr. (Multi phase, 125 units)
- Kootenay Lake Ferry electrification
- Granite Point Redevelopment
- Railtown housing (59 units)



CAPITAL PROJECTS

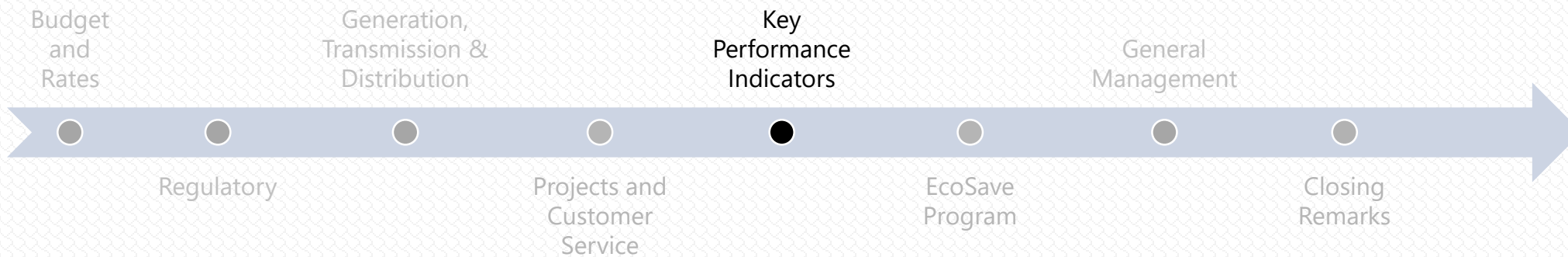
- Mill St. Substation upgrade
- Geographic Information System (GIS)
- SCADA
- Dam safety projects
- Mt. Nelson line replacement
- Pressure vessel replacements
- Generating Station / BON asset updates
- Transmission maintenance planning





Key Performance Indicators

Jillian MacKay



BALANCED SCORECARD

Key Performance Indicators (KPIs) measure business performance. All data is to the end of Q3 2023.

FINANCIAL

Measures our financial performance comparing actual spend to budget.



CUSTOMERS

Measures new job inquiries and our response time as well our progress on capital projects.



Measures our outage duration and frequencies and availability factor for each of the generating units.



OPERATIONS

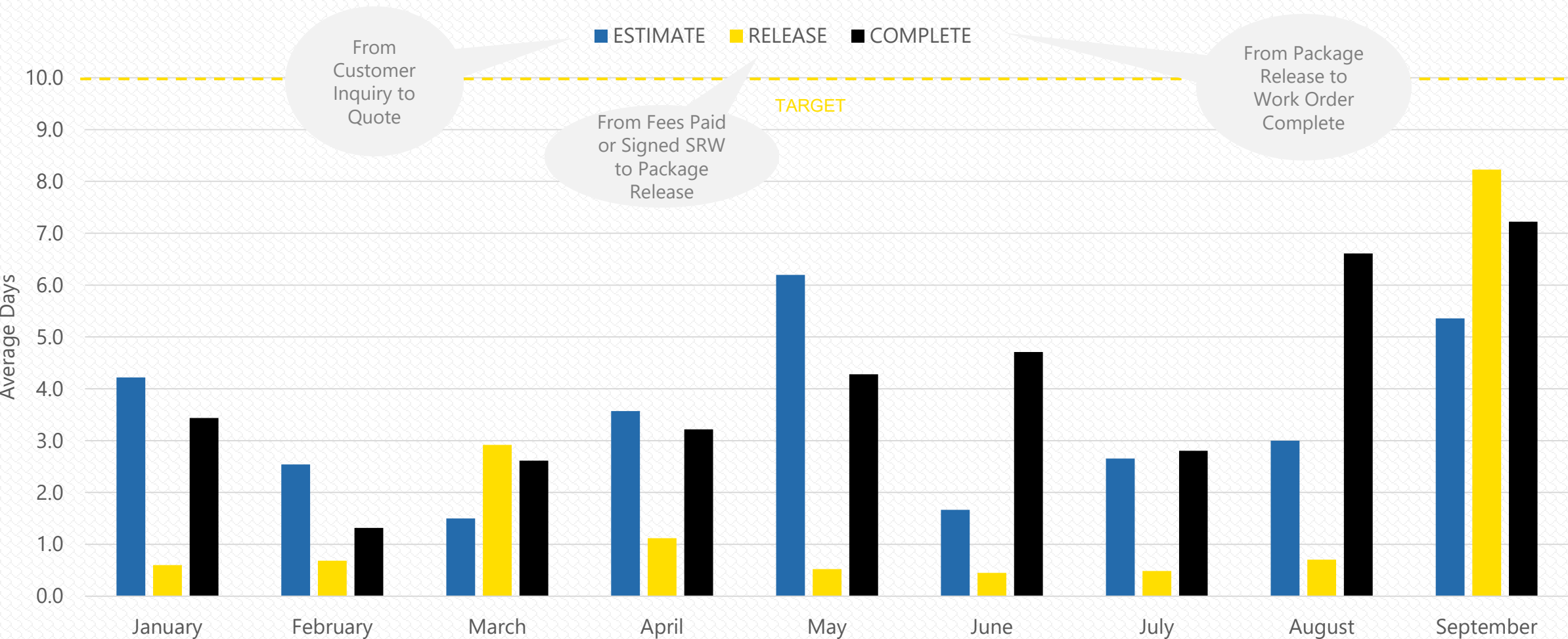
Measures our number of incidents, near misses, and compliance to regulations.

SAFETY & COMPLIANCE



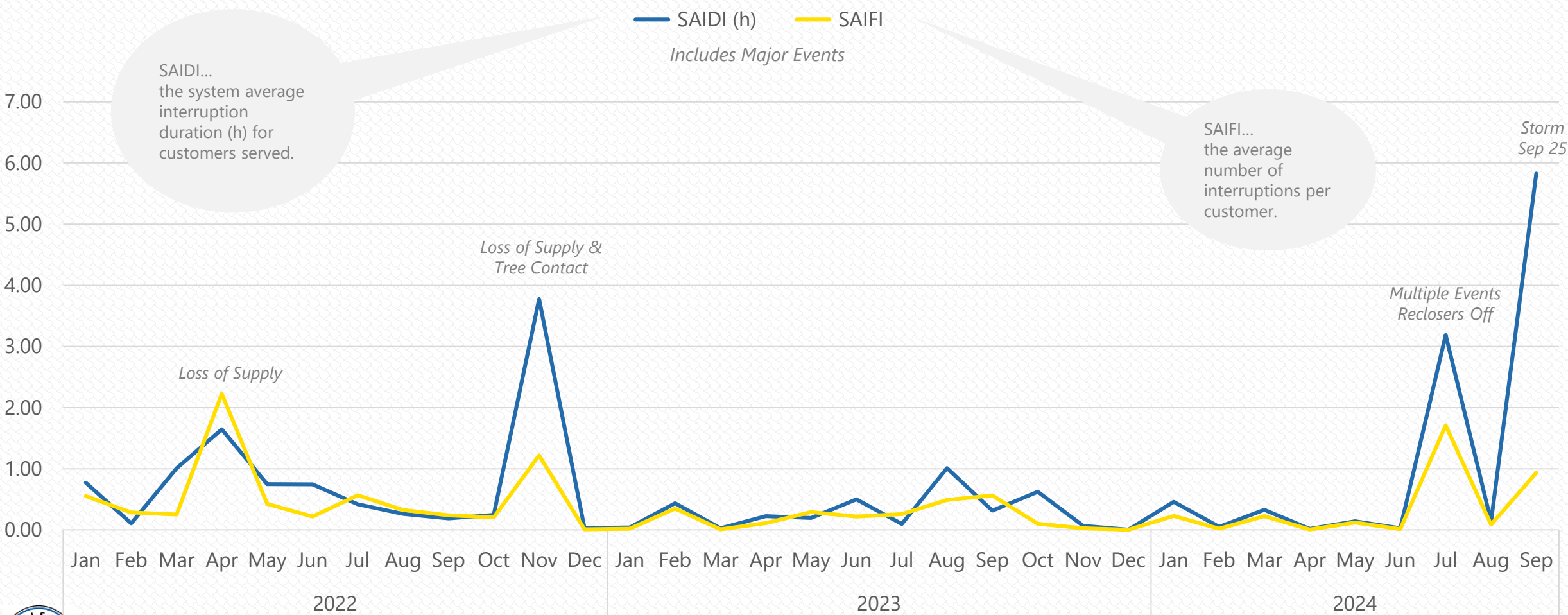
CUSTOMER PERSPECTIVE

Nelson Hydro assists customers with new or changes to existing electrical services within its service territory.



OPERATIONS PERSPECTIVE

SAIDI and SAIFI are Reliability Indicators used by Electric Power Utilities across North America.

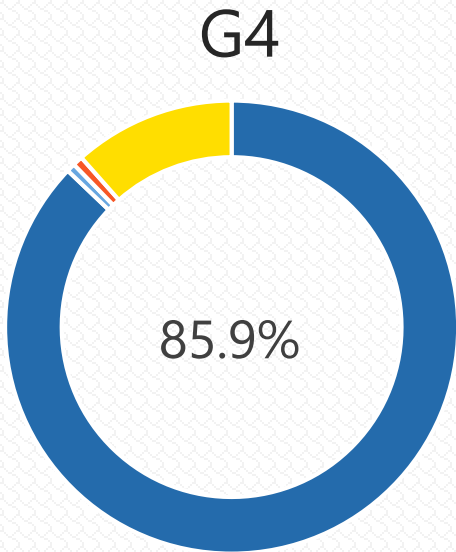
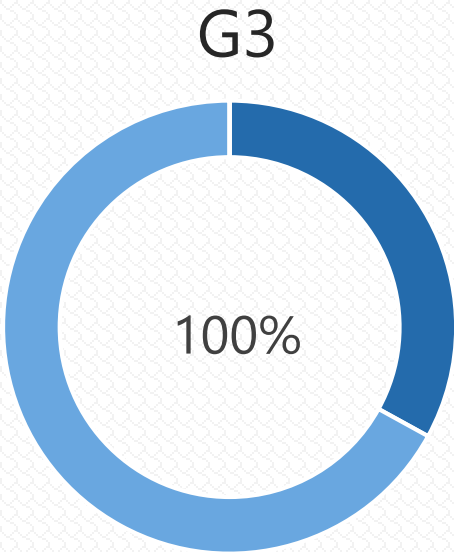
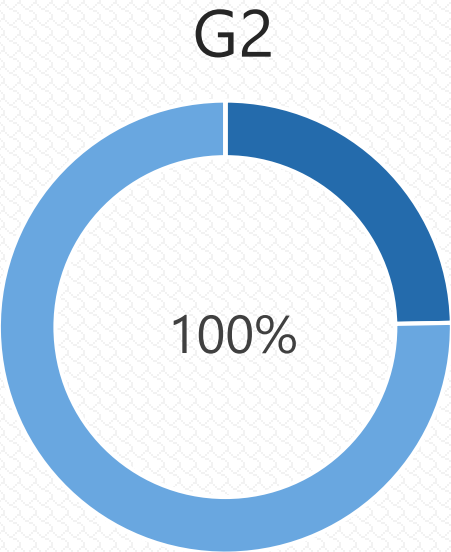


OPERATIONS PERSPECTIVE

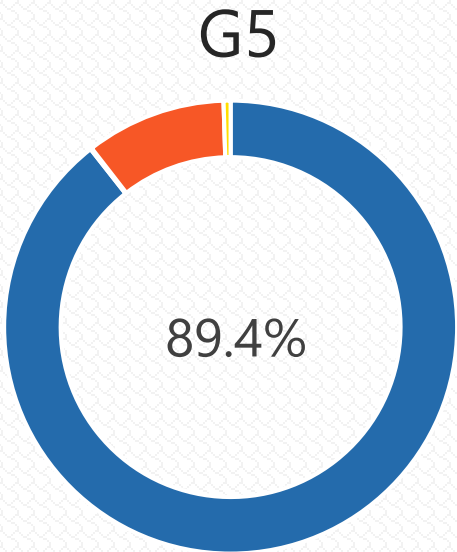
Generating Station Availability Factor helps us monitor the health of our generating assets.

Availability Factor (%) =
Total Available Hours /
Total Number of Hours
in Period

Available (Running) Available (Not Running) Scheduled Out Forced Out



Exciter Installation



Bearing Over Temperature

2024 data is to September 30th.

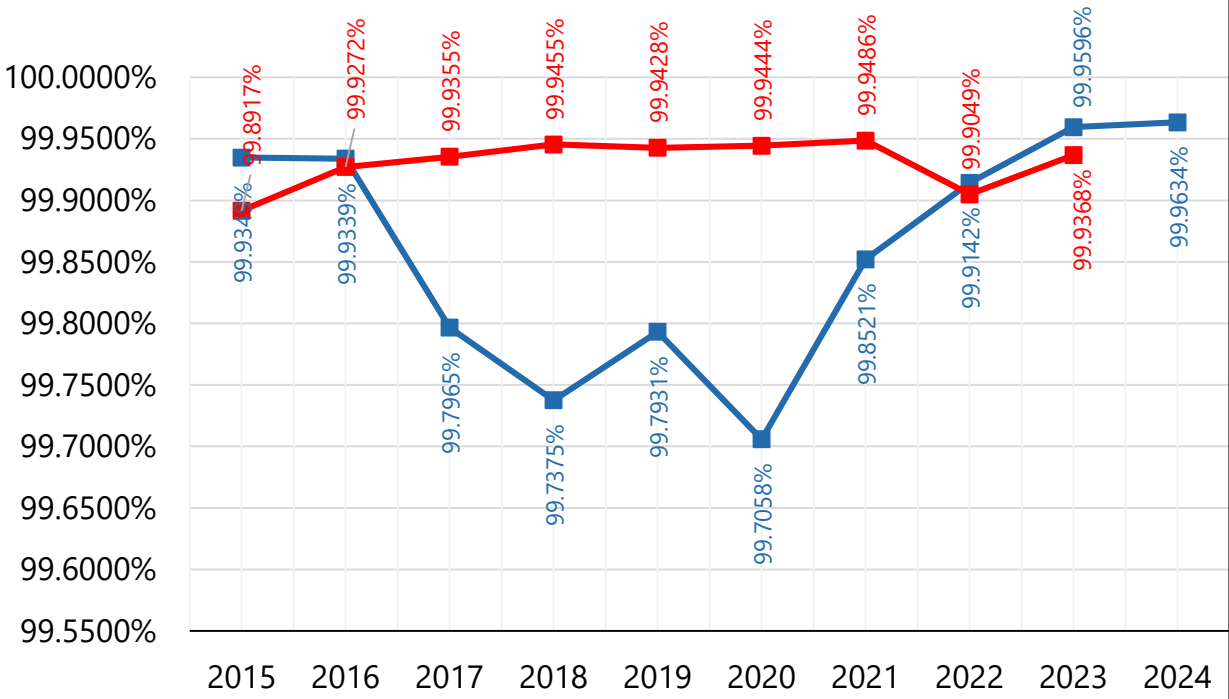


INDEX OF RELIABILITY & SAIDI/SAIFI

Nelson Hydro Index of Reliability

Some Years Contain Major Events

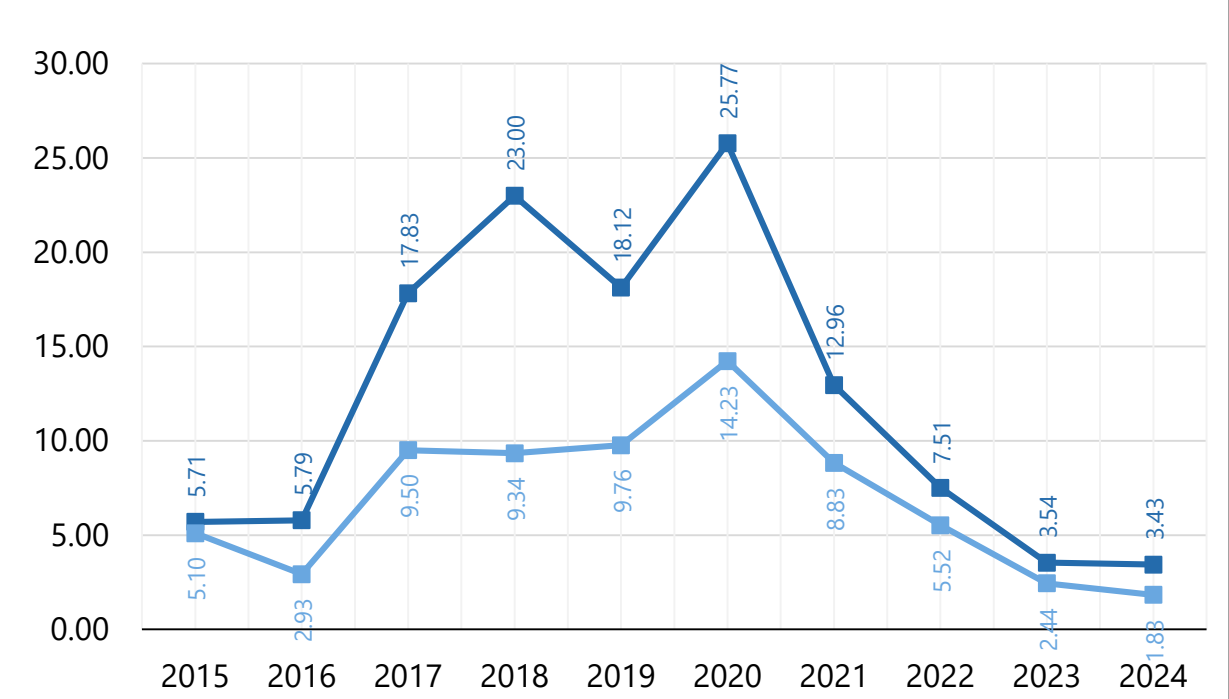
■ NH IOR ■ CEA IOR



Nelson Hydro SAIDI and SAIFI

Some Years Contain Major Events

■ NH SAIDI ■ NH SAIFI



2024 data is to September 30th.



CANADIAN ELECTRICAL ASSOCIATION DEFINITIONS

Adverse Environment

Customer interruptions due to equipment being subjected to abnormal environment such as salt spray, industrial contamination, humidity, corrosion, vibration, fire or flooding.

Adverse Weather

Customer interruptions resulting from rain, ice storms, snow, winds, extreme ambient temperatures, freezing fog, or frost and other extreme conditions.

Equipment Failure

Customer interruptions resulting from equipment failures due to deterioration from age, incorrect maintenance, or imminent failures detected by maintenance.

Foreign Interference

Customer interruptions beyond the control of the utility such as birds, animals, vehicles, dig-ins, vandalism, sabotage and foreign objects.

Human Element

Customer interruptions due to the interface of the utility staff with the system such as incorrect records, incorrect use of equipment, incorrect construction or installation, incorrect protection settings, switching errors, commissioning errors, deliberate damage, or sabotage.

Lightning

Customer interruptions due to lightning striking the Distribution System, resulting in an insulation breakdown and/or flash-overs.

Loss of Supply

Customer interruptions due to problems in the bulk electricity supply system such as under frequency, load shedding, transmission system transients, or system frequency excursions.

Scheduled Outage

Customer interruptions due to the disconnection at a selected time for the purpose of construction or preventive maintenance.

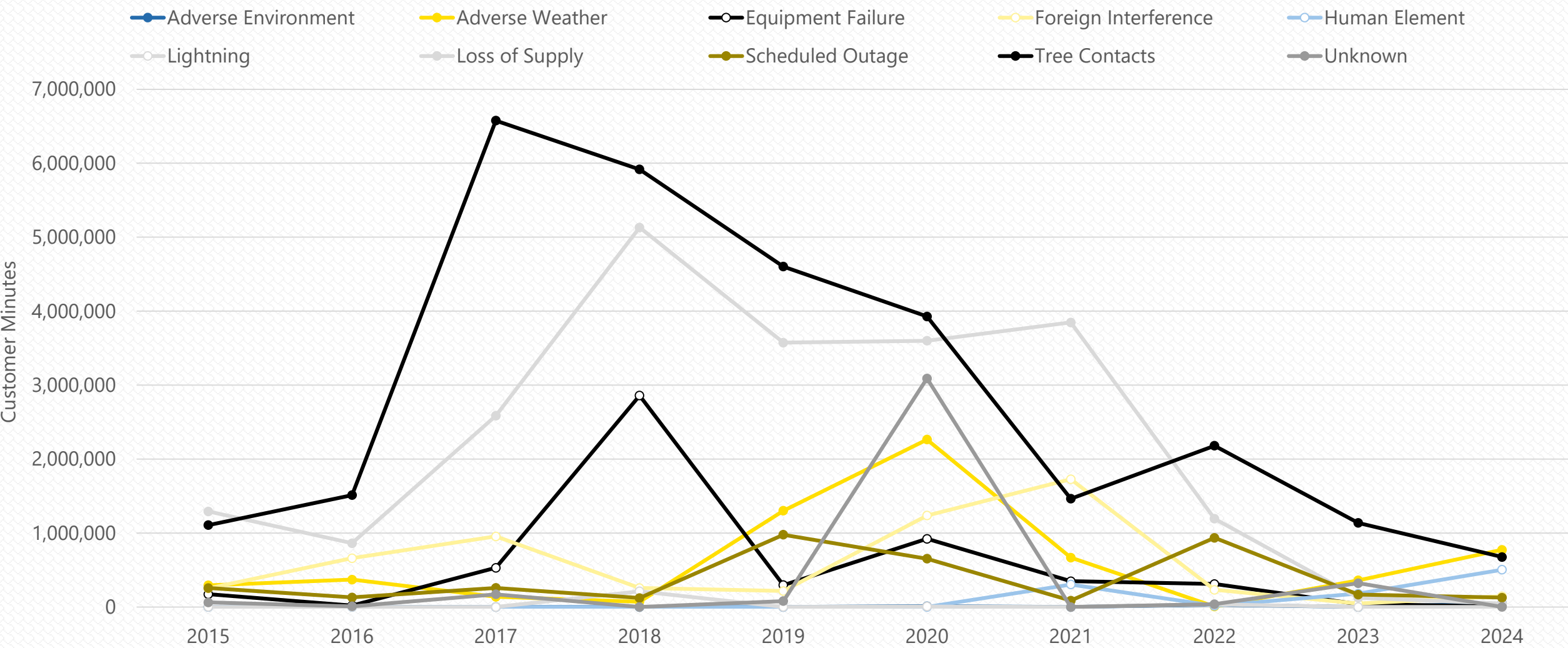
Tree Contacts

Customer interruptions caused by faults due to trees or tree limbs contacting energized circuits.

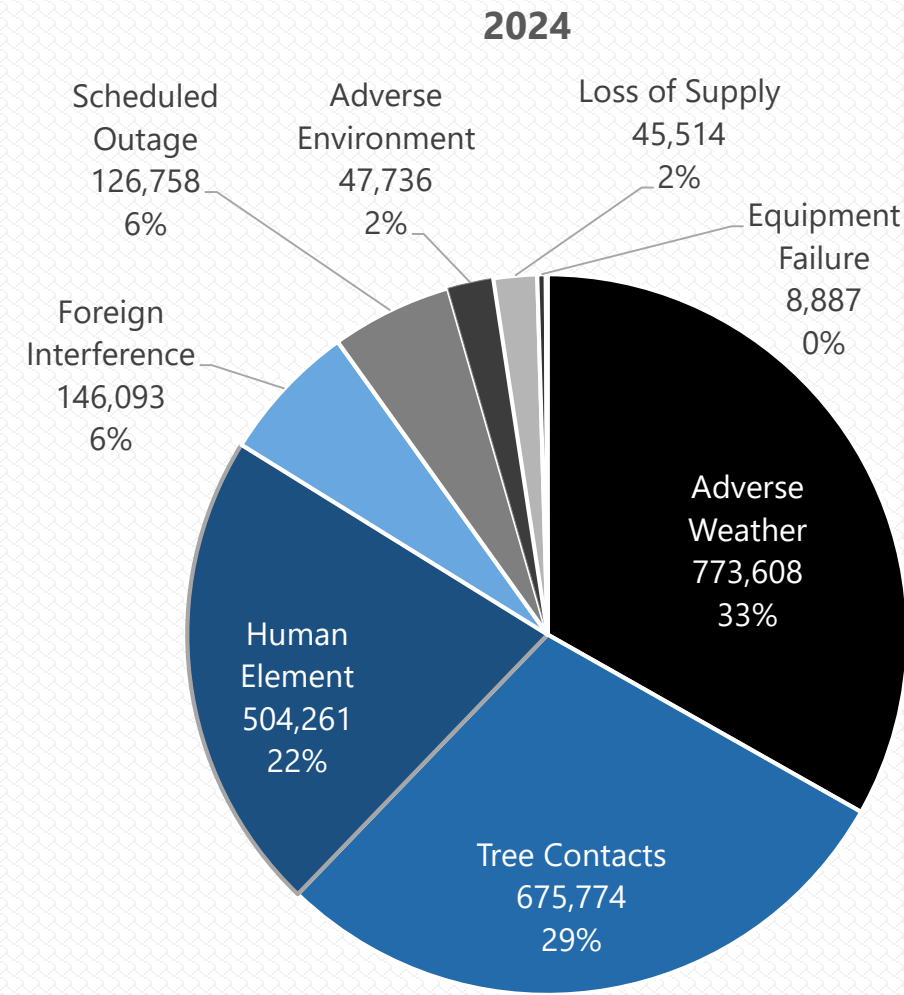
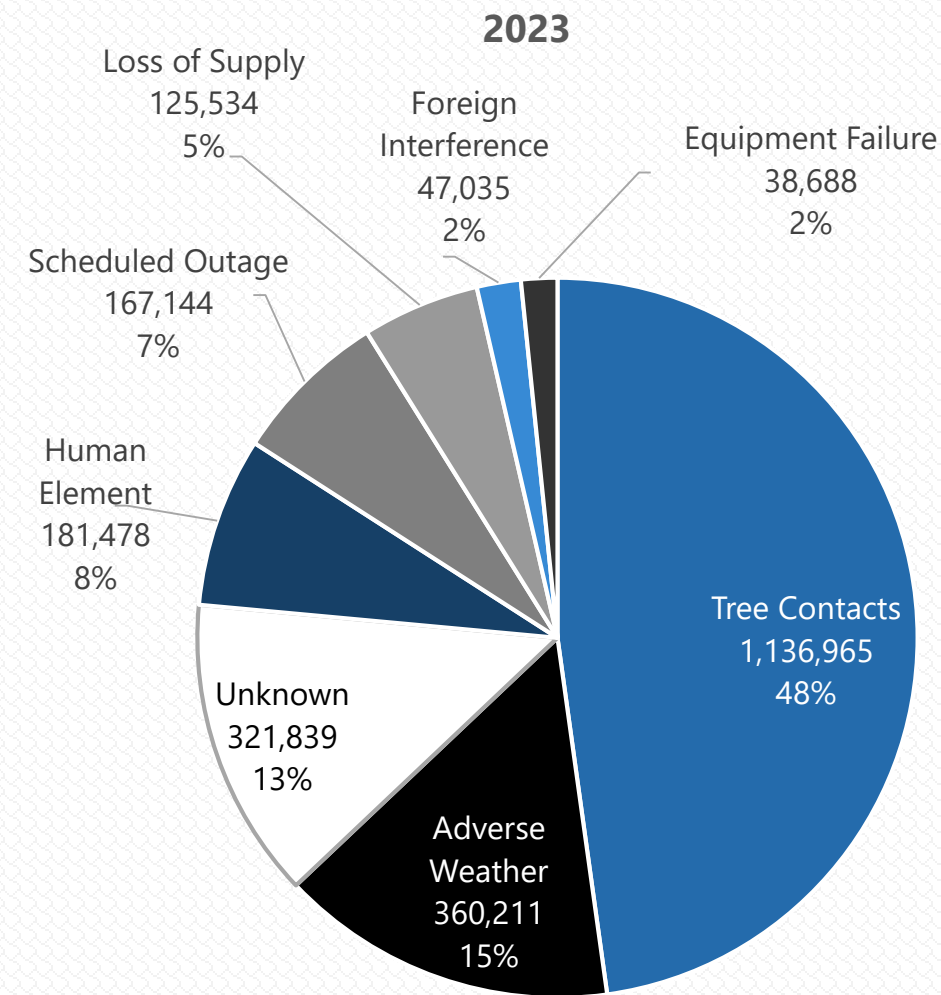
Unknown

Customer interruptions with no apparent cause or reason could have contributed to the outage. Only to be used when all other reasons do not apply or the cause is legitimately unknown.

OUTAGES BY CAUSE WITH CUSTOMER MINUTES



OUTAGES BY CAUSE WITH CUSTOMER MINUTES



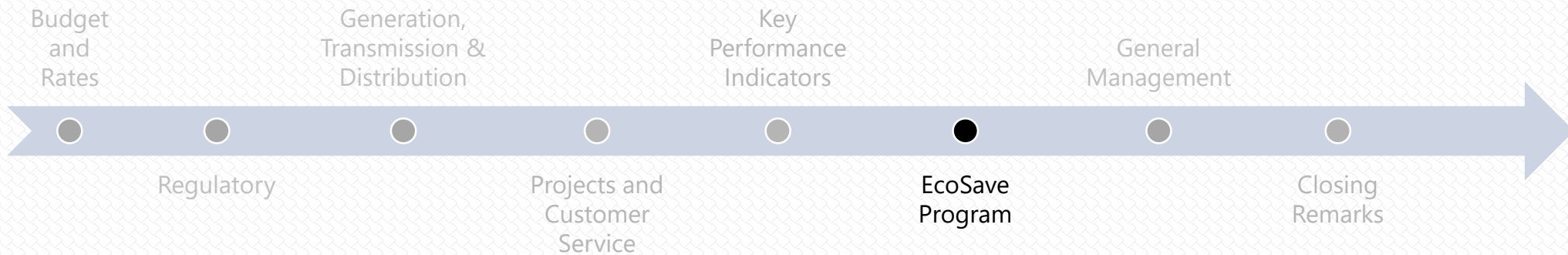
2024 data is to September 30th.





EcoSave Program

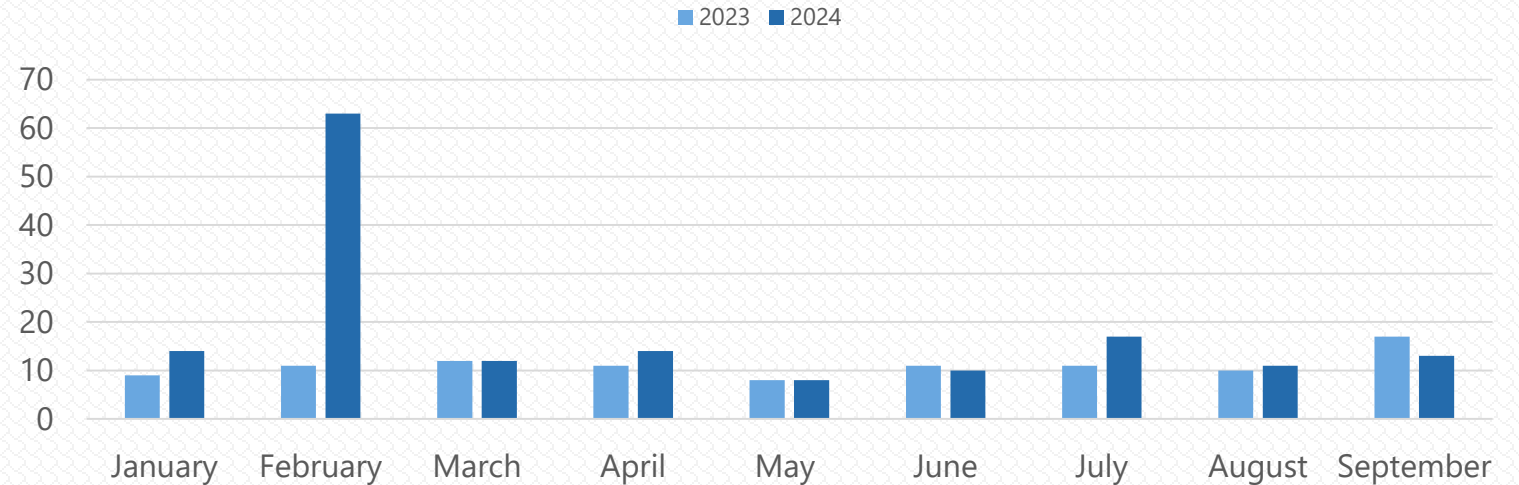
Scott Spencer



REGIONAL ENERGY EFFICIENCY PROGRAM

- 2024 February increase result from Canada Greener Homes program ending
- Working to increase participation and funding.
- Higher rebates available to those who install heat pumps.

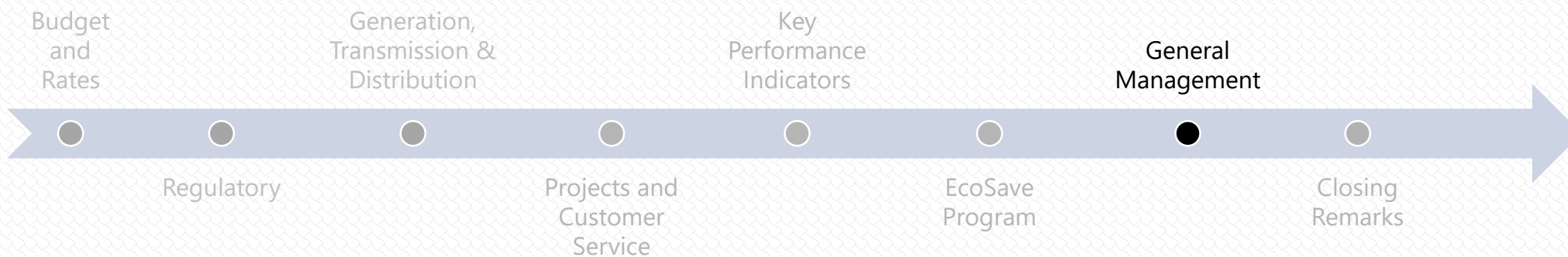
REEP Registrations to end of Q3 2024
for Nelson Hydro Customers





General Management

Scott Spencer



MANAGEMENT HIGHLIGHTS

- Regulatory proceedings more streamlined
- BC Hydro Water Rights Agreement Arbitration
- Dam Safety Projects progressing
- Telus Joint Use Agreement signed
- Engaging with local First Nations
- Collaborating with other BC Municipal Electric Utilities

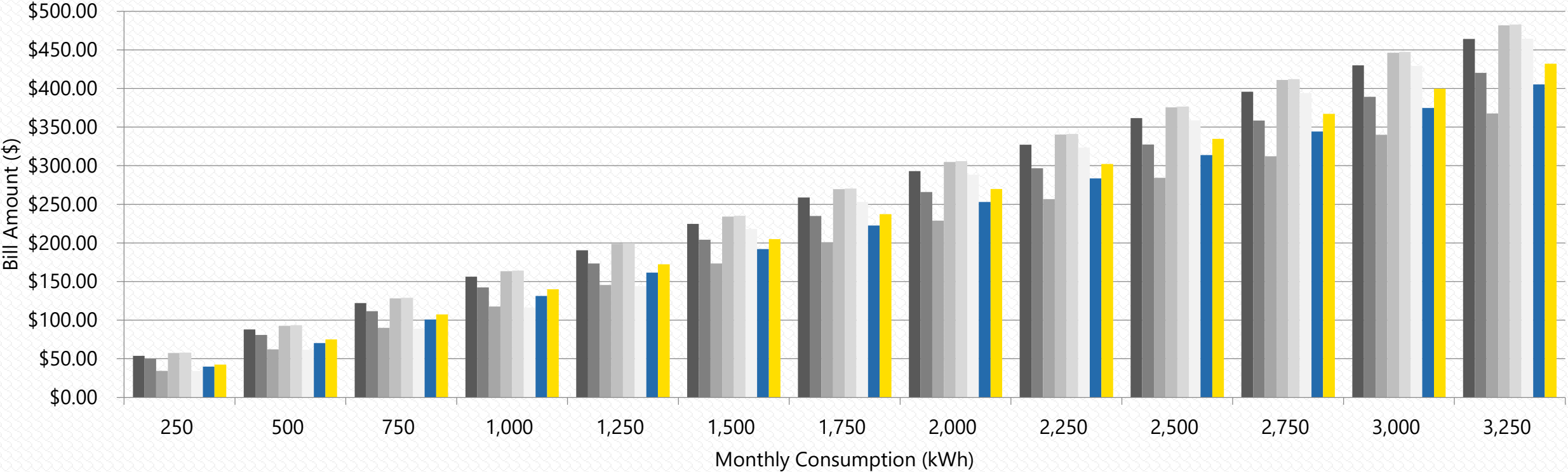


RATE INCREASE COMPARISON



2024 RESIDENTIAL RATE COMPARISON

■ Summerland 2024 ■ Penticton 2024 ■ New Westminster 2024 ■ Grand Forks 2024
■ FortisBC 2024 ■ BC Hydro 2024 ■ Nelson Hydro Urban 2024 ■ Nelson Hydro Rural 2024



RECOMMENDATIONS

- Approve the 2025 Operations and Capital Budgets as presented
- Support the BCUC Revenue Requirements Application for a 7.54% Rural General Rate Increase
- Support a 5.00% Urban General Rate Increase



CLOSING REMARKS

- Great Team
- Customer Service Focus
- Good Communications
- Better Reliability
- Process Efficiency



