



2021 General Rate Application

Online Public Workshop

January 8, 2021



Acknowledgement

Yukon Energy recognizes that we
live and work on the Traditional
Territories of Yukon First Nations

Agenda

Section 1: Providing context

- Yukon electricity rates 101
- Yukon electricity landscape

Section 2: Our 2021 application

- Highlights
- Key rate drivers
- Other matters

Section 3: Summary

- Rate strategy
- Bill impacts
- Regulatory process



Yukon electricity rates 101:

Regulated. Postage Stamp. Lowest in the North.

Regulation in Yukon

- Franchised utilities are regulated by the Yukon Utilities Board under the authority of the Public Utilities Act.
 - All proposed rate changes must be approved by the Yukon Utilities Board before being applied to bills
 - “Postage Stamp” rates for base consumption
 - Prudency test



Yukon electricity landscape:

Aging assets. Growing load.



Yukon Energy

- We are Yukon-based; owned by Government of Yukon and operated at arms-length.
- We generate the majority of electricity in Yukon and deliver it to communities.
- We sell the majority of electricity we generate to ATCO Electric Yukon.
- We deliver electricity directly to about 10% of homes and businesses in Yukon.
- We sell electricity to mines directly connected to the grid.

Aging assets

- Legacy hydro assets have contributed to low rates in Yukon, but...
- System components installed in the 50s and 60s are reaching end-of-life

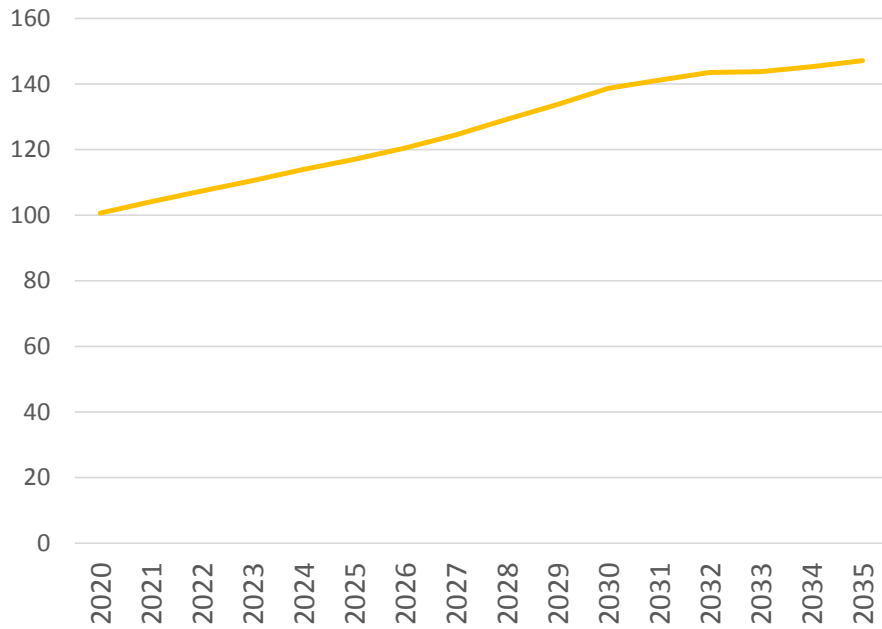


One of four penstocks at the Whitehorse Rapids Generating Station.

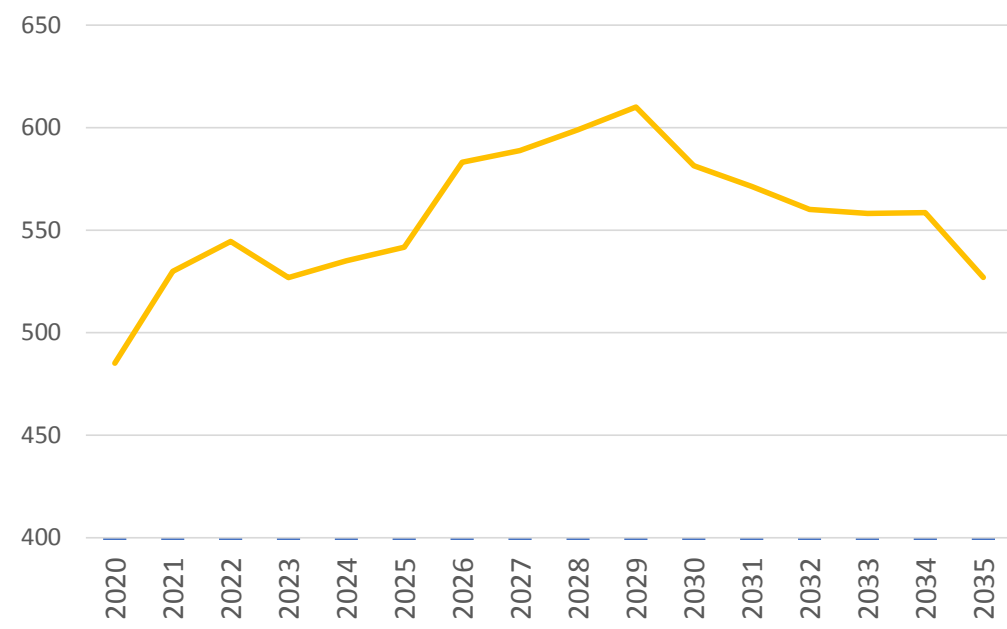
Growing load



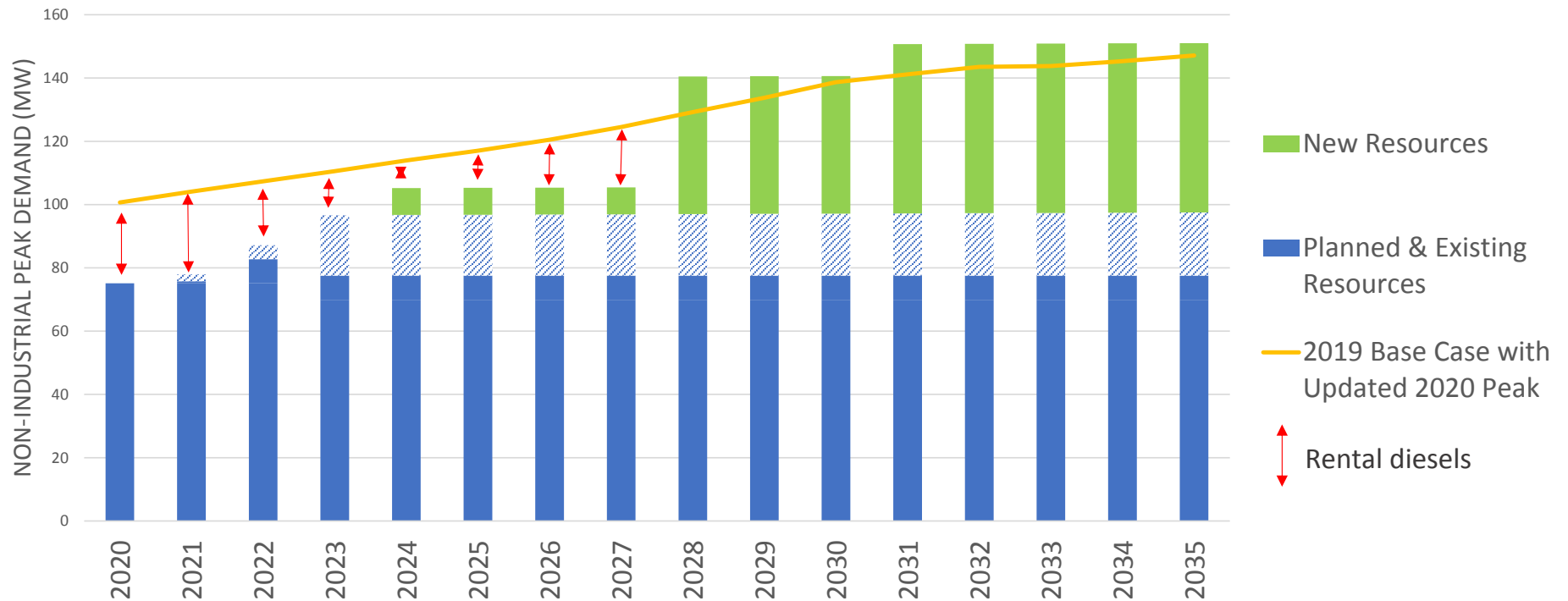
Non-Industrial Peak Demand (MW)



Total Energy (GWh/yr)



Dependable capacity required



10 * Dependable capacity during an emergency; less 37 MW at Aishihik



Discussion Period 1



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Highlights of our 2021 Application:

A proposed 11.5% rate increase in 2021.

A nearly zero impact on electricity bills.

Our 2021 application

Approval we're seeking:

- A forecast revenue requirement of \$75.135 M in 2021

Approval at this level = 11.5% rate increase in 2021

Restoring earnings

Earnings in one year are used to invest in researching and planning projects in subsequent years.

	Actual ROE
2021 forecast (no GRA)	3.10%
2020 forecast (no GRA)	3.88%
2019	3.81%
2018	6.25%

YUB Approved ROE in 2018: 8.70%

Proposed rate implementation

Interim rates: July 1, 2021

- Rider F (fuel) expected to reduce to zero
- Implement interim 2021 increase

Final rates: December 1, 2021

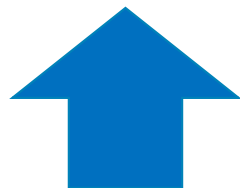
- YEC 2017/18 True-Up Rider expected to come off
- Implement final 2021 increase

Objective:

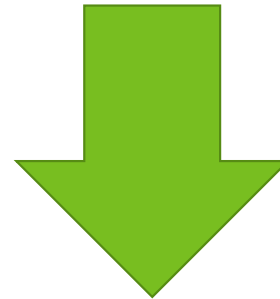
Minimize the impact of the rate increase on ratepayers

Anticipated bill impacts

Net impact to average monthly electricity bills at the end of 2021:



About a 70 ¢ increase
to residential bills ¹



About a \$2 decrease
to commercial bills ²

1. Based on 1000 kWh energy use each month
2. Based on 2000 kWh energy use and 5 kW demand each month

Rate drivers:

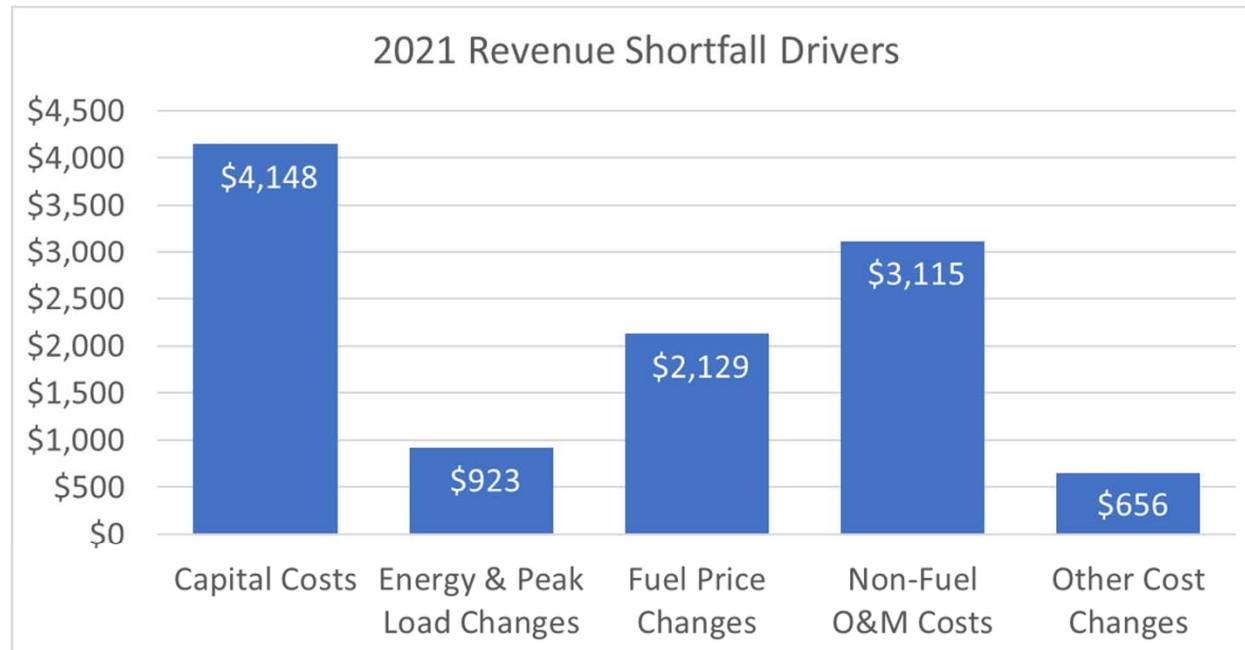
Critical capital investments.

Permanent cost escalations.

Changes from 2018 Approved GRA

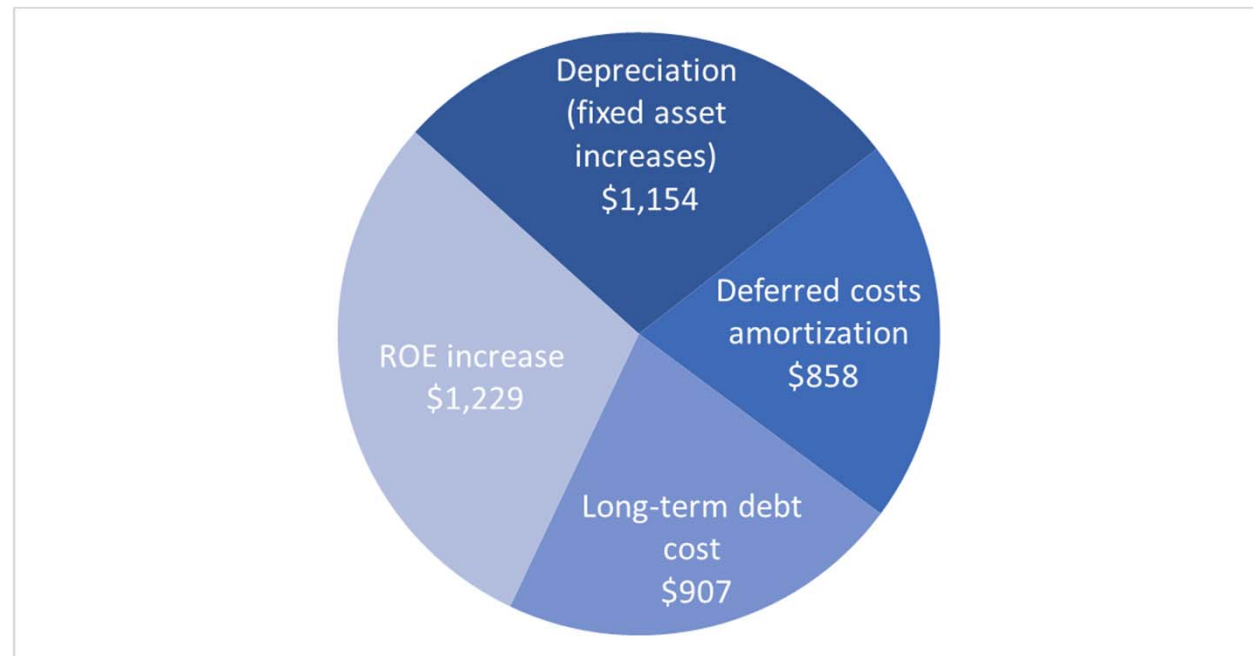


- 3.10% ROE
- \$10.97 M shortfall

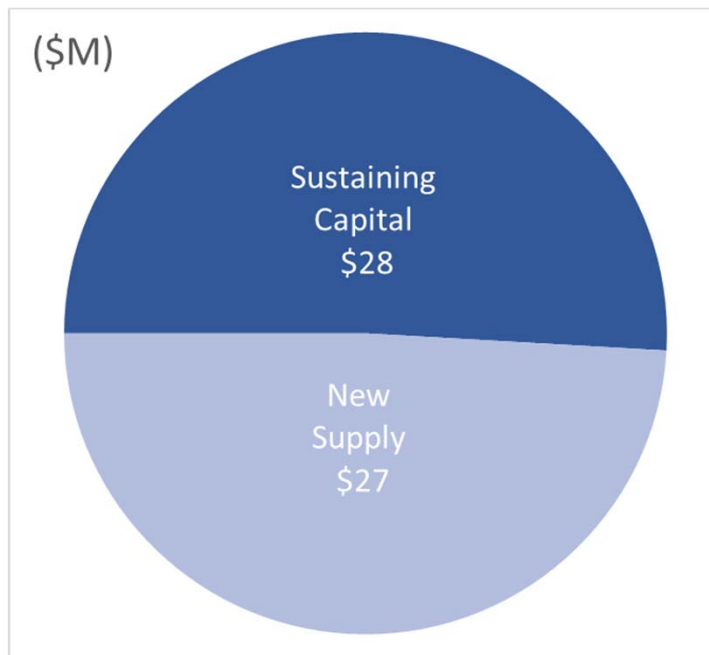


Capital costs: impact of capital costs

Net Increase:
\$4.148 M



Capital costs: capital program



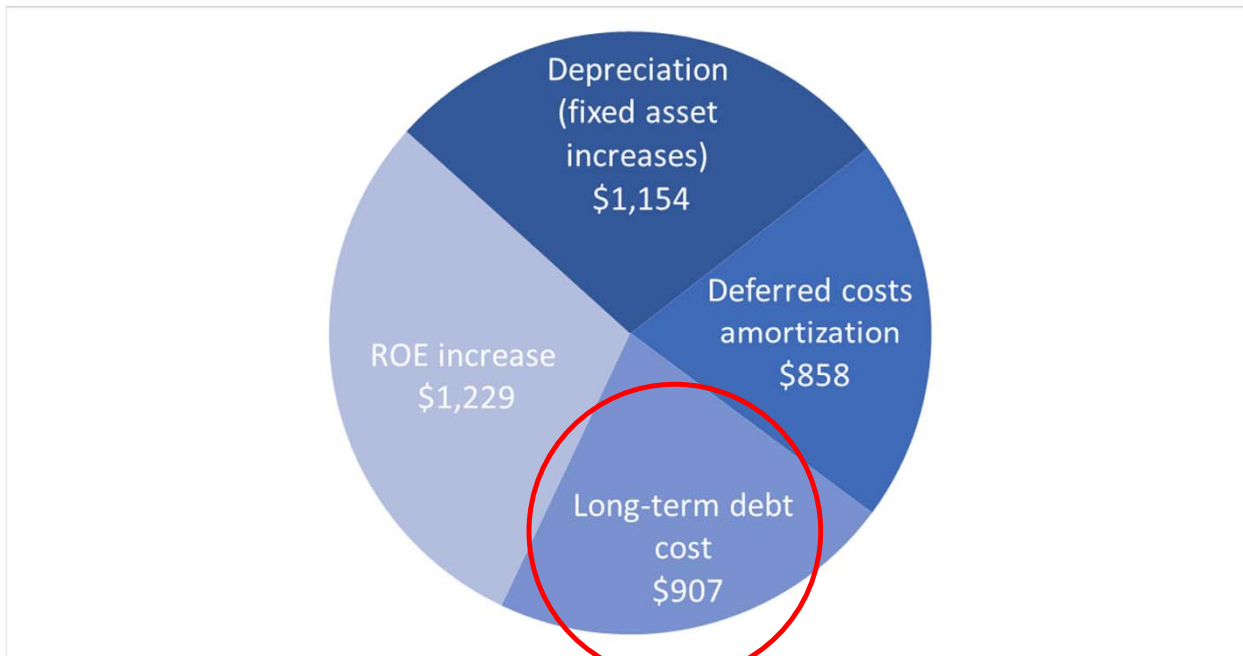
Sustaining Capital:

Replacing and upgrading existing aging assets

New Supply:

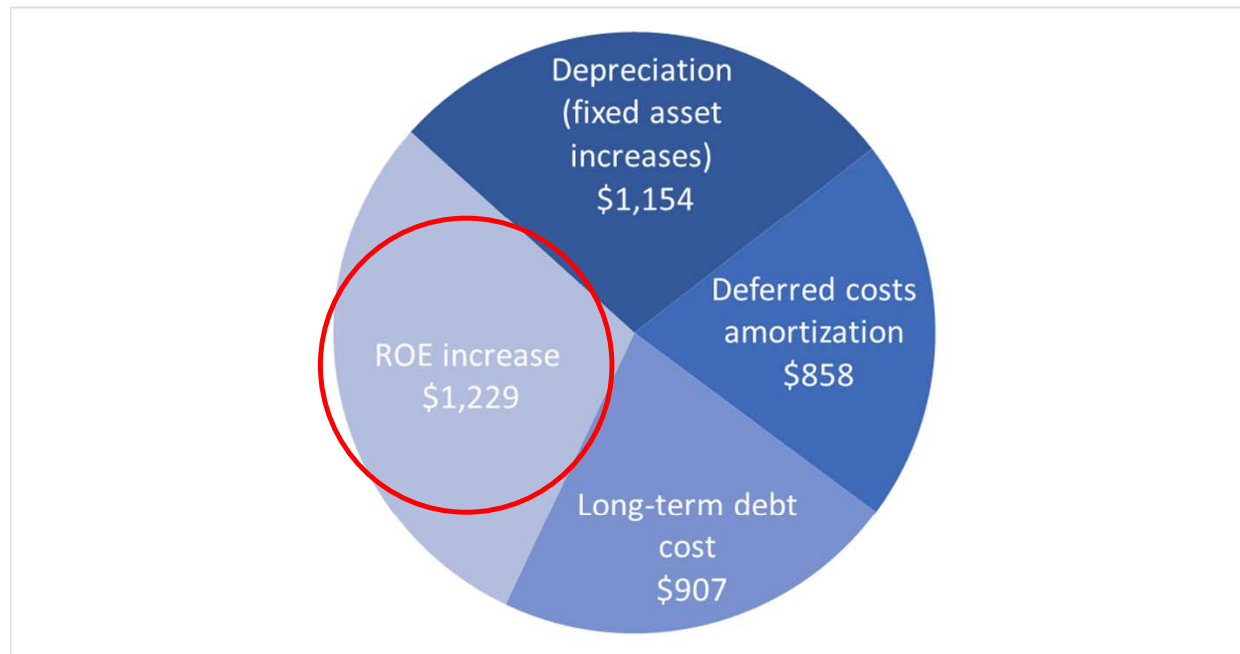
Plan and construct new generation supply projects for energy and capacity

Capital costs: impact of capital costs



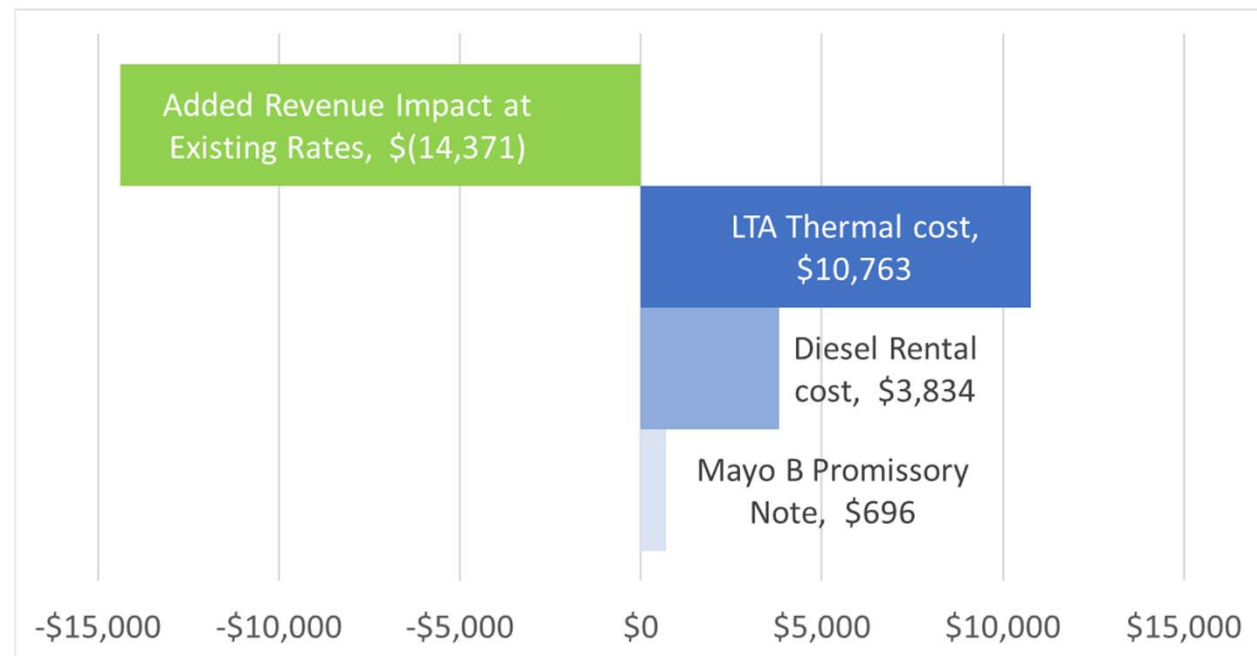
Average Cost of Debt	
2018 Approved	2.23%
2021 Forecast	2.81%

Capital costs: impact of capital costs

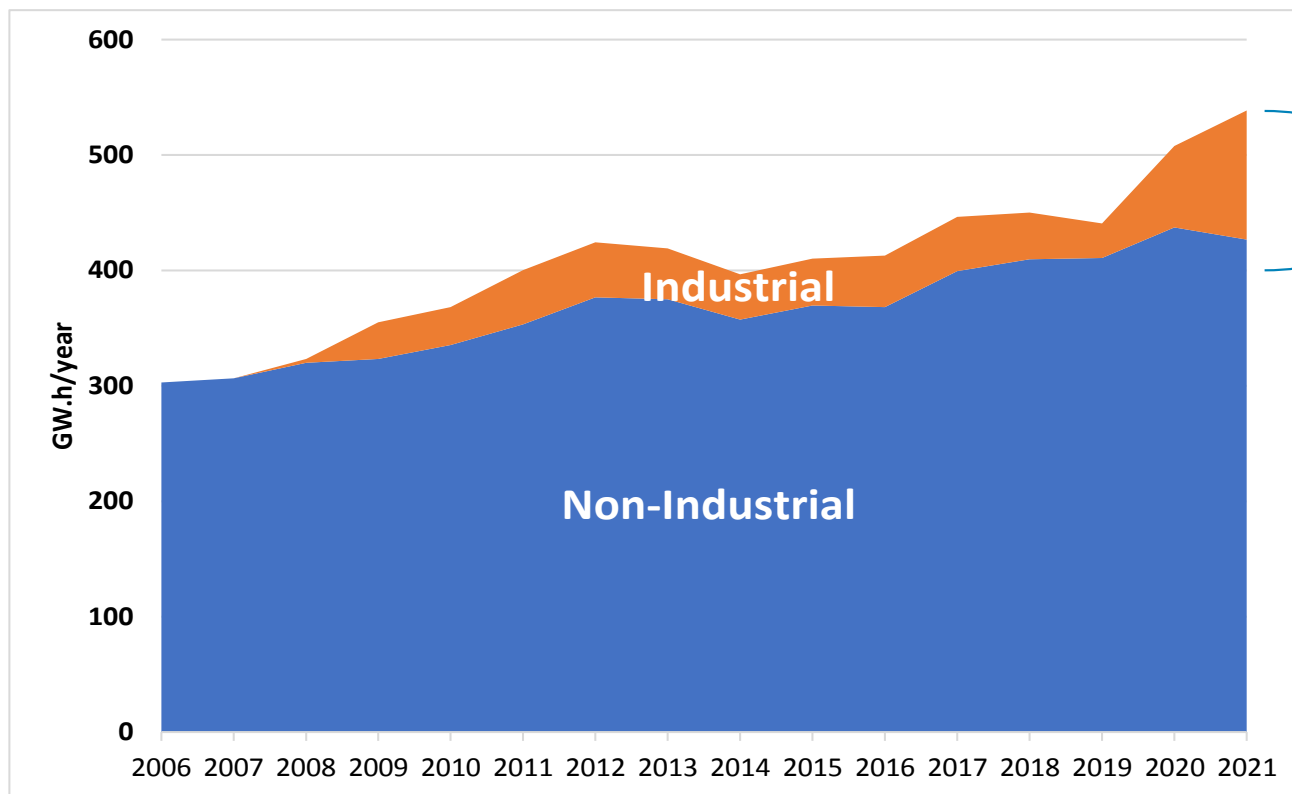


Energy and peak load changes

**Net Increase:
\$0.923 M**

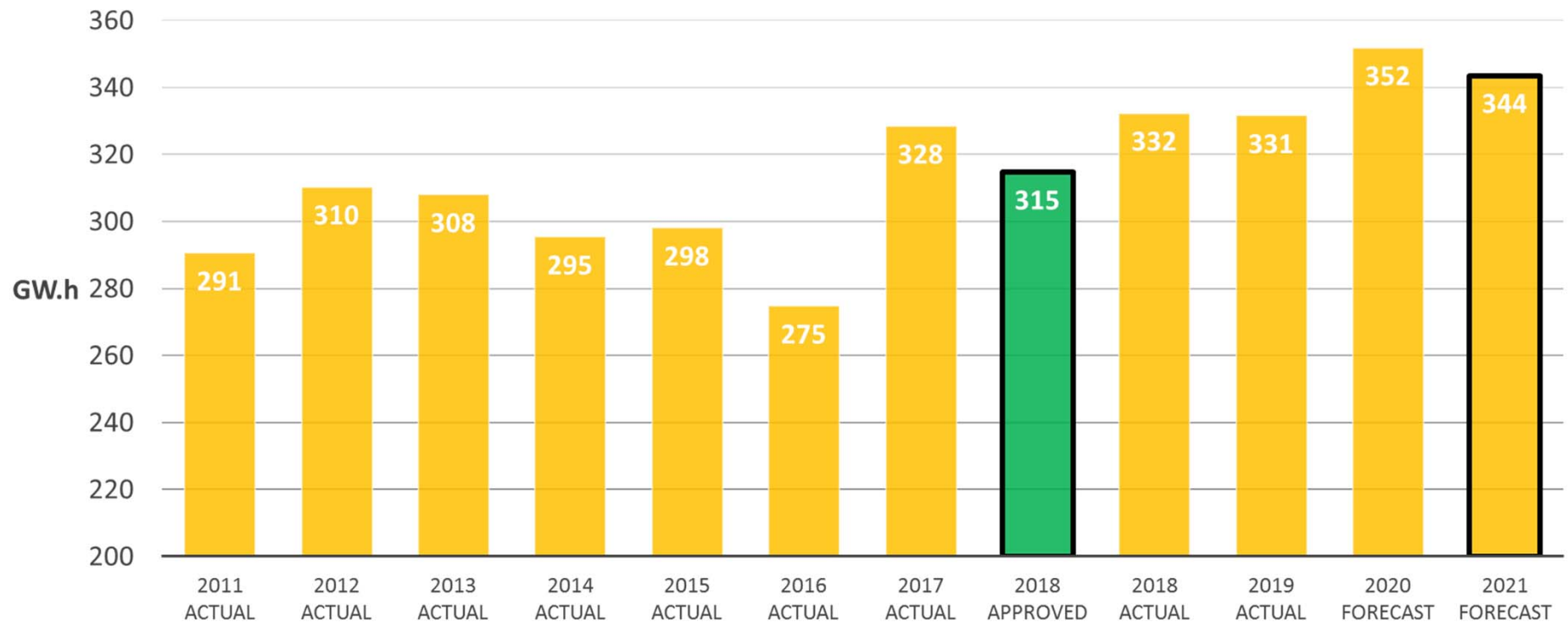


Energy & peak load changes: changing load / profile

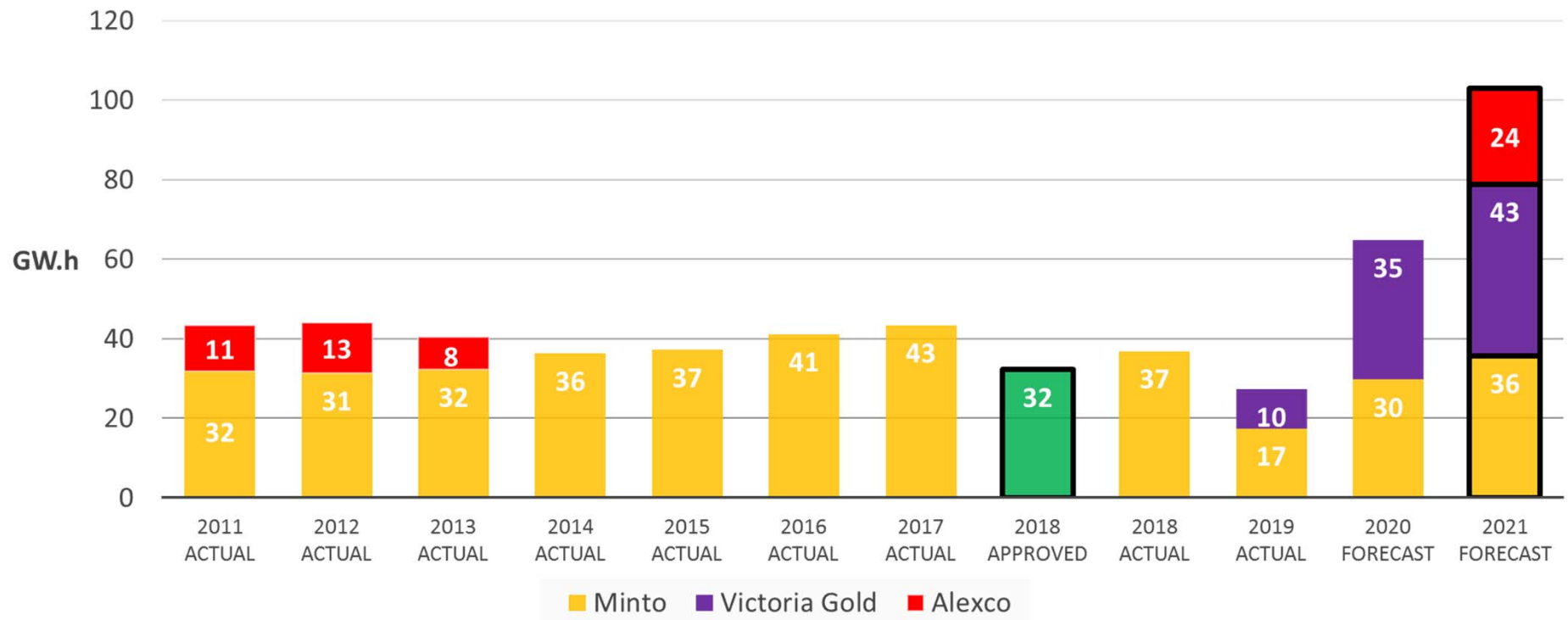


28%
increase in
total load
over
2018
approved

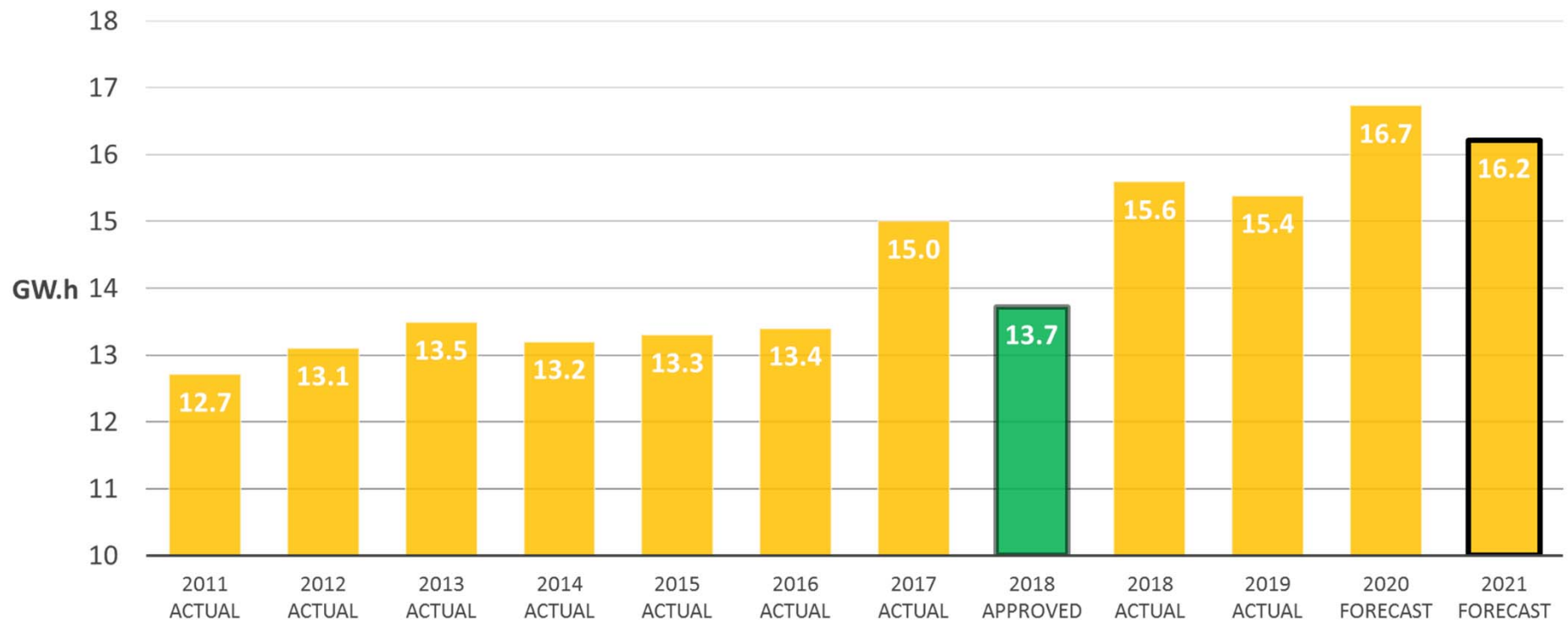
Energy & peak load changes: sales – wholesales



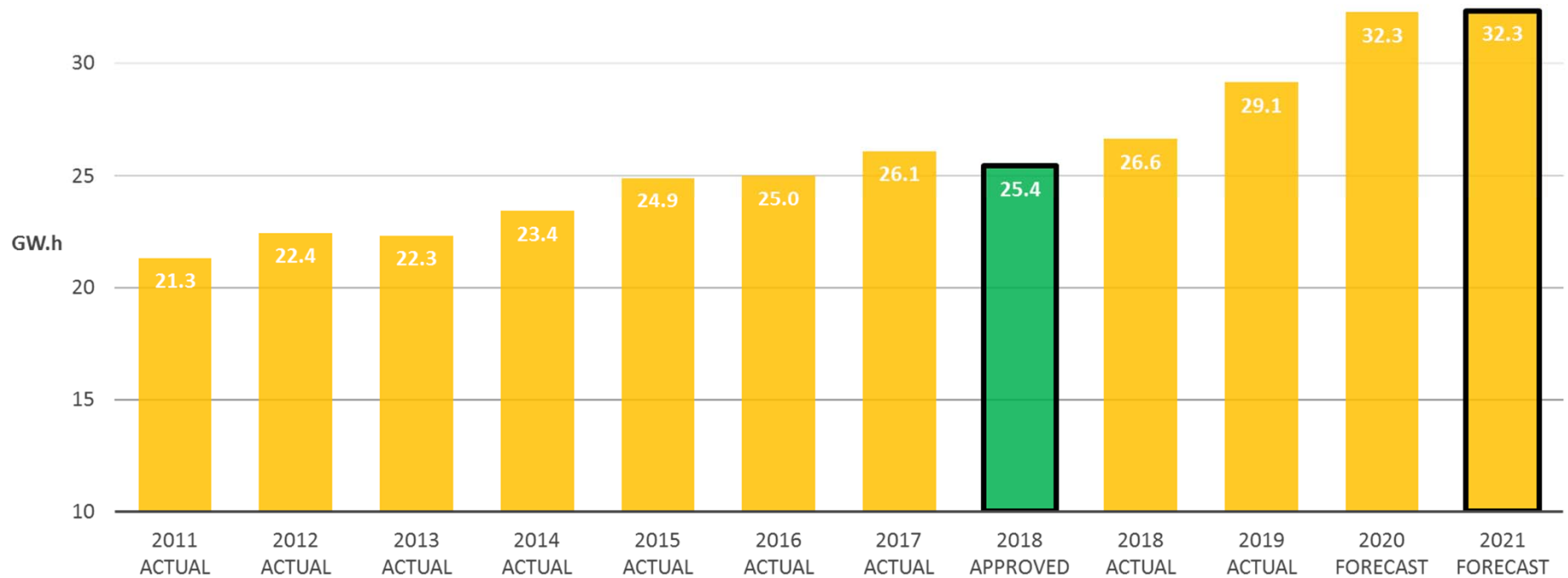
Energy & peak load changes: sales – industrial



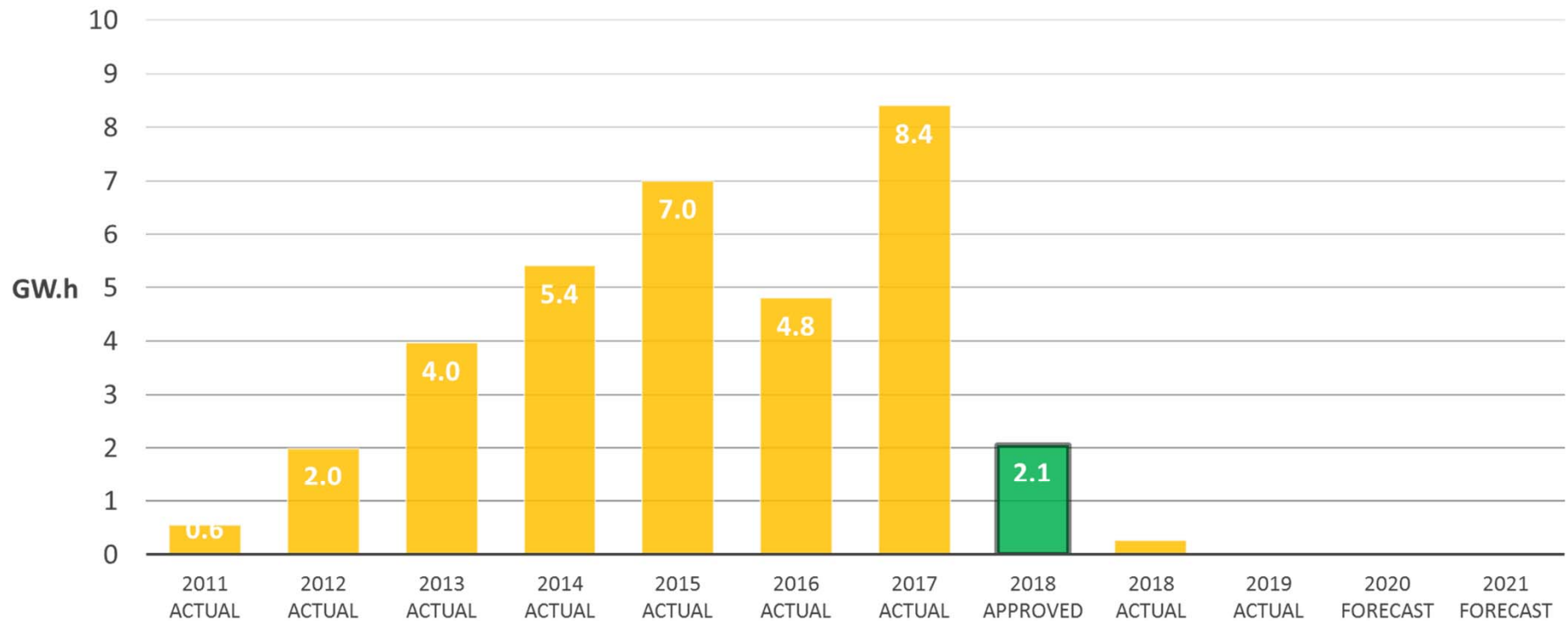
Energy & peak load changes: sales – residential



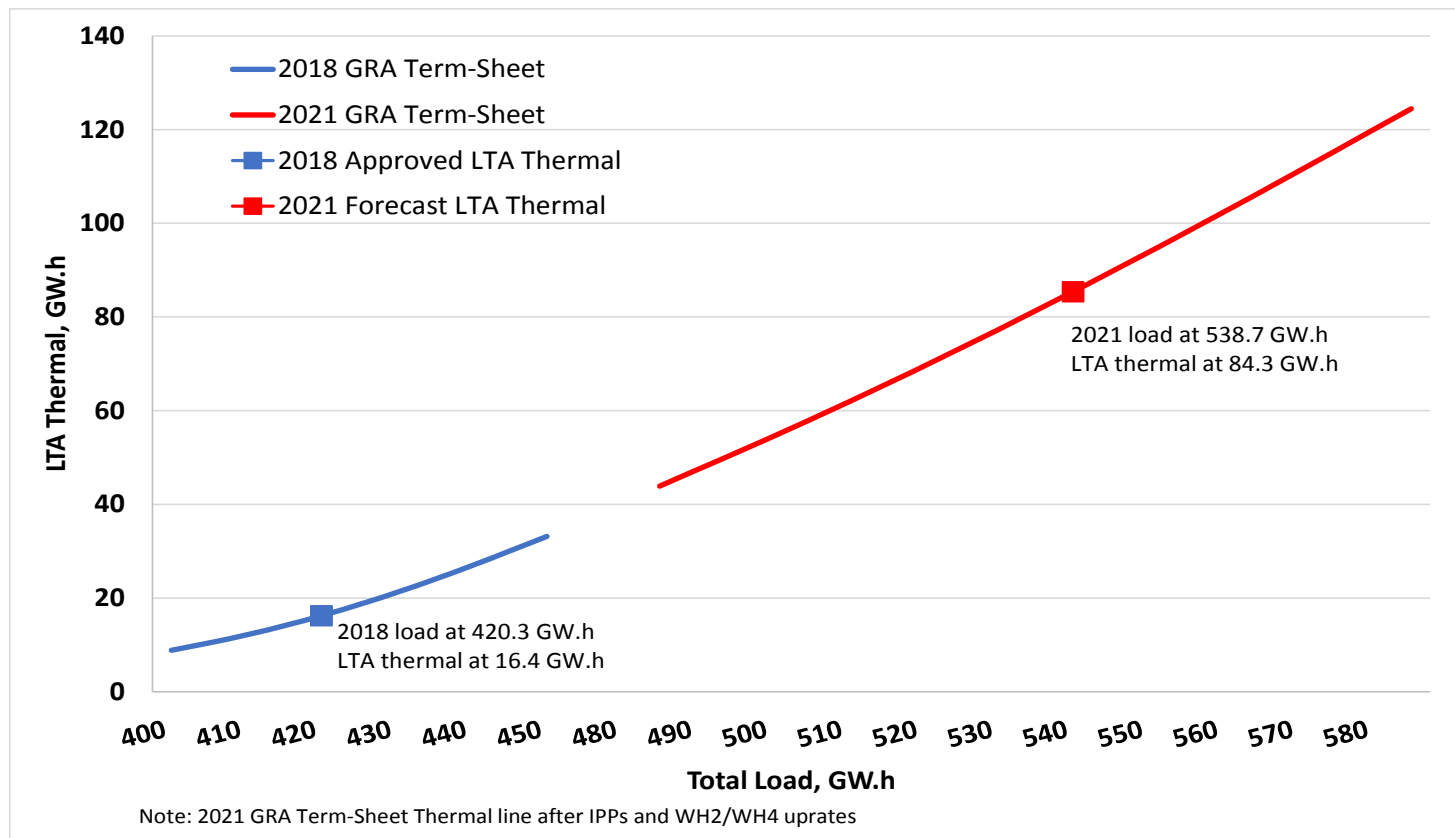
Energy & peak load changes: sales – commercial



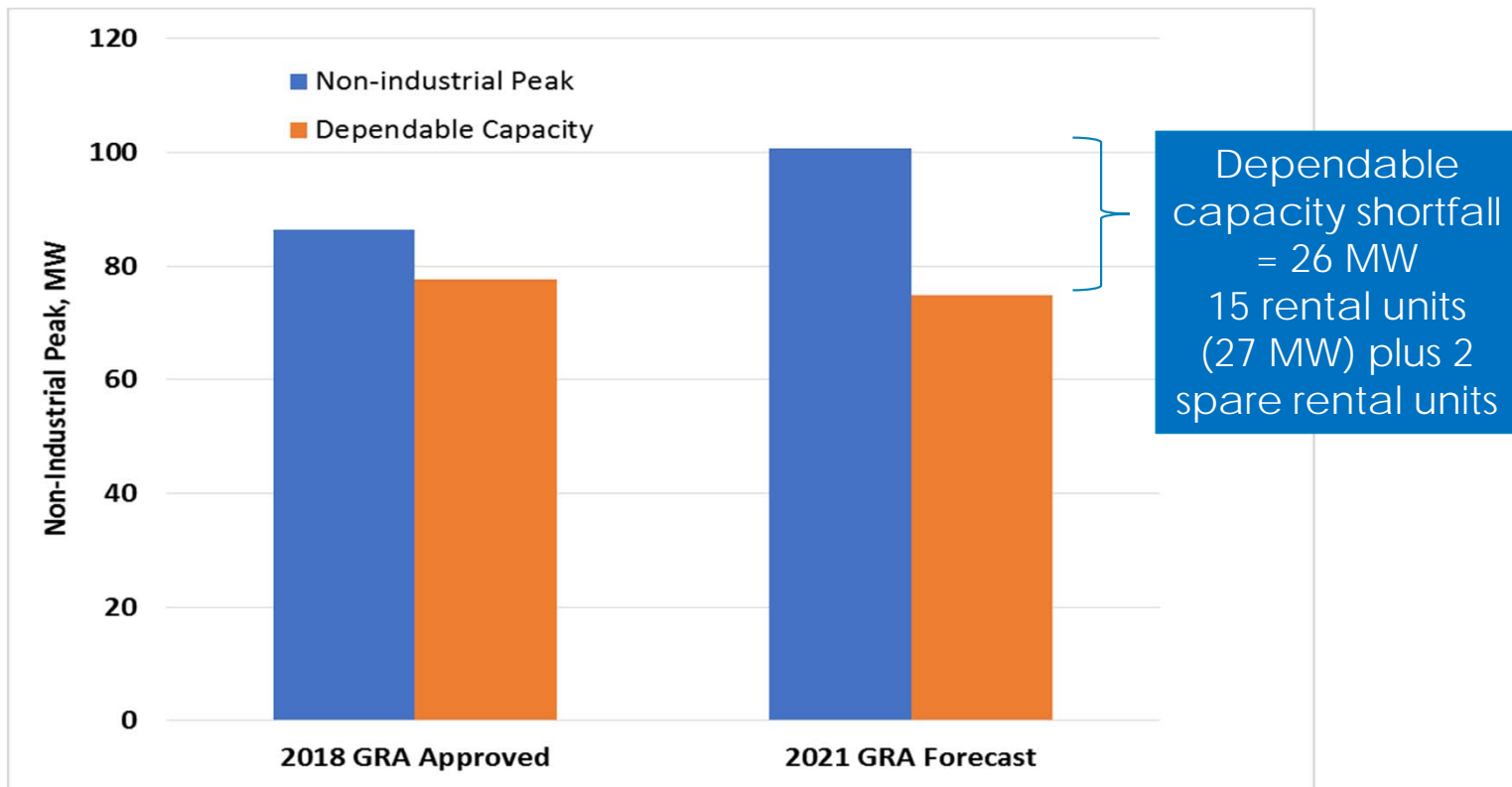
Energy & peak load changes: sales – secondary sales



Energy & peak load changes: impact of growth on thermal generation



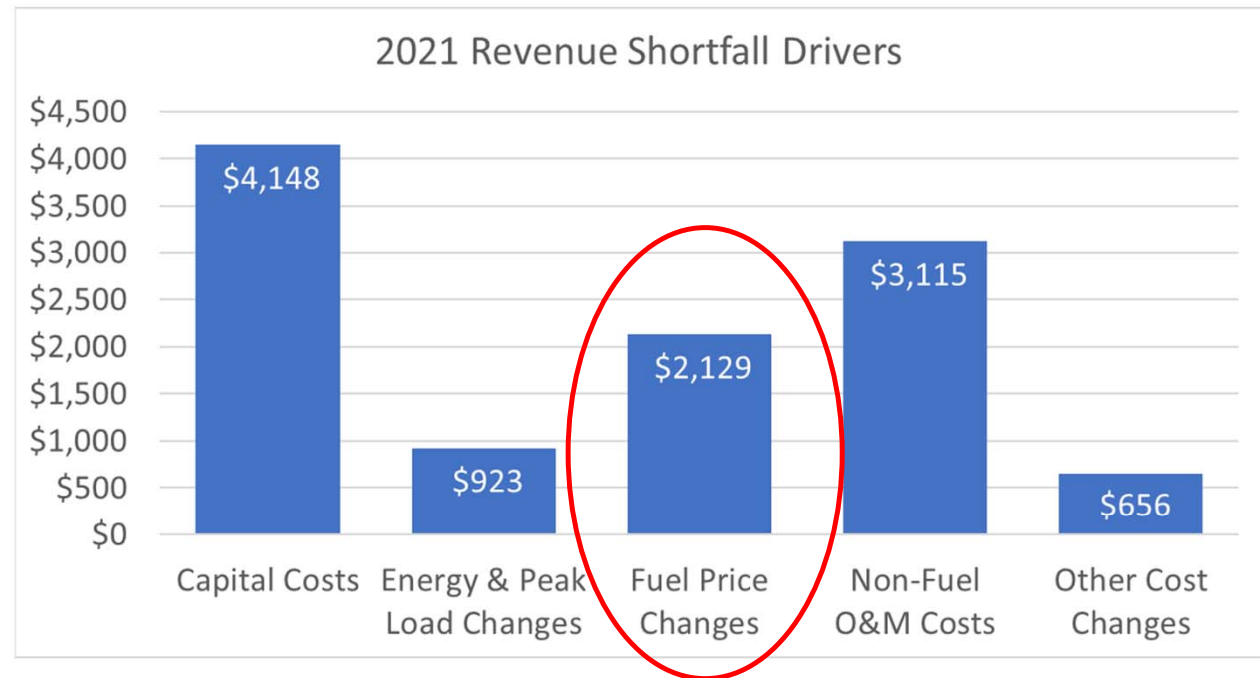
Energy & peak load changes: increased peak; capacity shortfall



Fuel price changes:

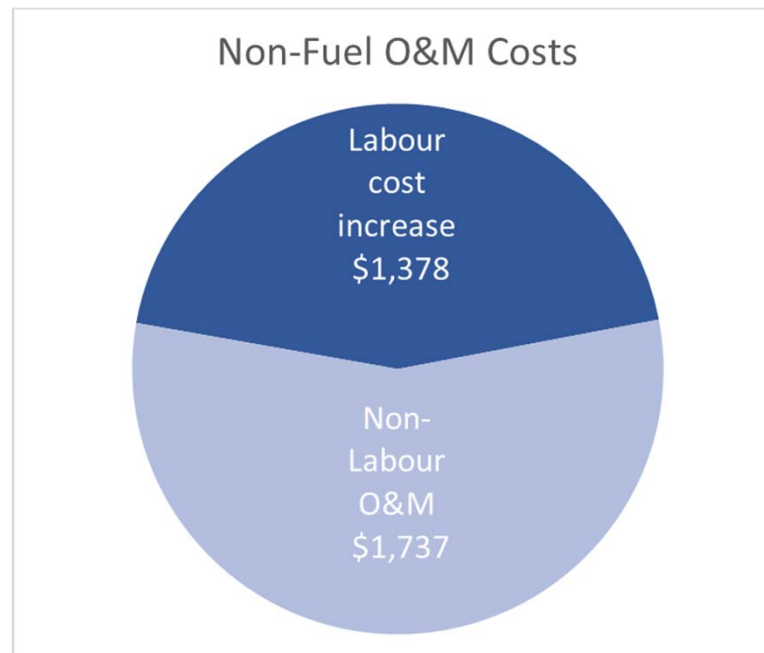
Impact of Fuel Price Changes (\$/kWh: 2021 vs 2018)

- LNG 0.1814 vs 0.1467
- Diesel 0.2051 vs 0.2635



Non-fuel O&M costs:

**Net Increase:
\$3.115 M**



Labour Cost:

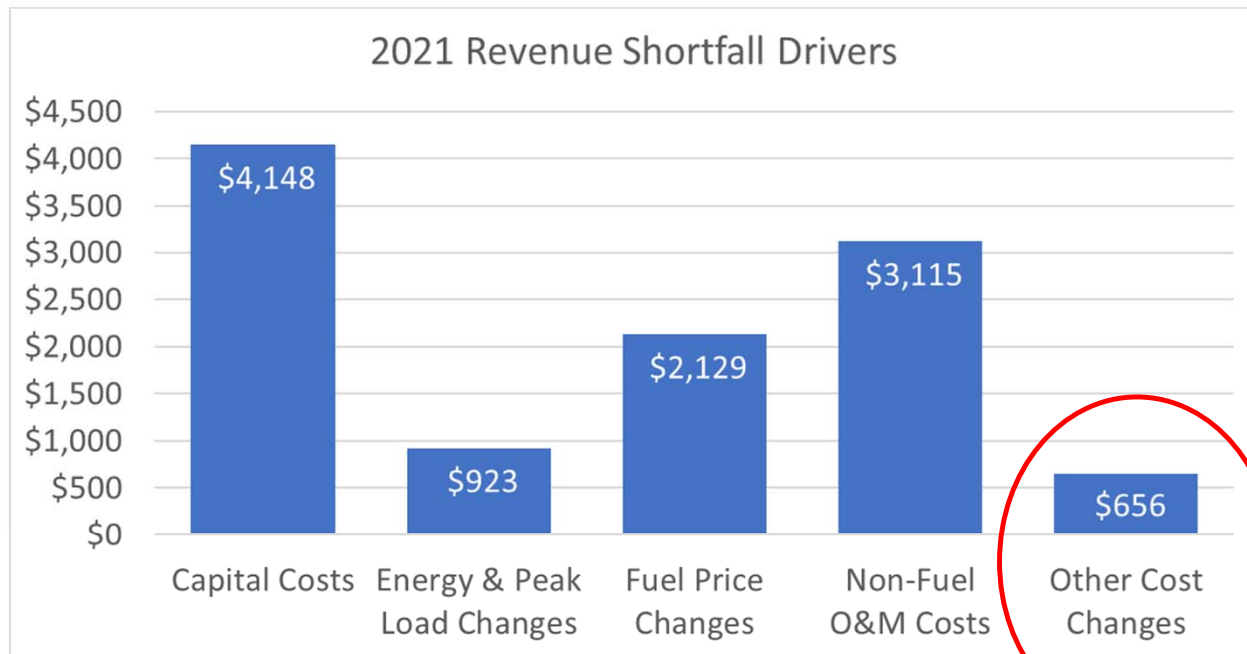
50% - increases in union salaries
50% - headcount

Non-Labour O&M:

Three main drivers:

- Insurance
- Thermal maintenance
- Compliance with water licensing

Other cost changes:



- Three main drivers:
- IPPs
 - RFID
 - Depreciation study

Other matters - regulatory

- VGC Group and Alexco Fixed Charge
 - Filing for amended Transmission Facilities Fixed Cost (Mayo-McQuesten)
 - Update to existing RS39 Fixed Charge to VGC Group & Alexco
- Defined Benefit Pension Deferral Account
 - Variances to defined pension benefit plan contributions due to actuarial evaluations
 - Consistent with approval for AEY by Board Order 2014-06



Discussion Period 2



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Summary:

Rate strategy. Bill impacts. Regulatory process.

Rate strategy

- Have legitimate cost increases that require rate increases as prescribed by normal regulatory principles in Canada
- Recognize that cost increases ultimately affect ratepayer bills
- Opportunity to tie rate increases to rider changes
 - Rider F – Fuel Price Rider
 - Rider J1 – GRA 17/18 true up rider

Bill impacts



Residential Non-Government, Whitehorse		Nov-20		Jul-21		Dec-21	
850 kWh/month consumption	\$	176.48	\$	176.70	\$	177.31	
change from November 2020			\$	0.22	\$	0.84	
				0.1%		0.5%	
1000 kWh/month consumption	\$	204.00	\$	204.00	\$	204.72	
change from November 2020			\$	-	\$	0.71	
				0.0%		0.3%	

Commercial Non-Government, Whitehorse		Nov-20		Jul-21		Dec-21	
2000 kWh/month consumption [5 kW demand]	\$	358.84	\$	355.30	\$	356.54	
change from November 2020			\$	(3.54)	\$	(2.30)	
				-1.0%		-0.6%	
3500 kWh/month consumption [15 kW demand]	\$	753.00	\$	755.81	\$	758.45	
change from November 2020			\$	2.81	\$	5.45	
				0.4%		0.7%	

YUB process



Process Step	Date
Interveners register with the Board	December 30, 2020
YEC Workshop	January 8, 2021
Information Requests (IRs) to YEC	January 29, 2021
IR Responses from YEC	February 18, 2021
Further Process	To be determined

