REVIEW OF SASKENERGY'S PROPOSED NATURAL GAS DELIVERY FOR TEST YEARS 2022/23, 2023/24, AND 2024/25 AND COMMODITY RATES FOR TEST YEAR 2022/23

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Saskatchewan Rate Review Panel

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EXECUTIVE SUMMARY

The Saskatchewan Rate Review Panel (the Panel) is a ministerial advisory committee established by the Minister of Crown Investments (the Minister). On referral by the Minister, the Panel conducts reviews and provides opinions on the fairness and reasonableness of rate changes proposed by a Saskatchewan Crown corporation. The Minister provided the Panel with Terms of Reference for the review of SaskEnergy's 2022 Delivery Service and Commodity Rate Application (the Application). The Panel engaged InterGroup Consultant's Ltd (the Consultant) to assist in the review of SaskEnergy's Application and to prepare an independent report together with a summary of their observations and recommendations to the Panel.

SaskEnergy is applying to increase its commodity rate by 31% effective August 1, 2022; and is also seeking an 8% increase in delivery rates effective August 1, 2022; a 5% increase in delivery rates effective June 1, 2023; and a further 5% increase in delivery rates effective June 1, 2024.

- The proposed commodity rate will increase the existing rate of 12.78 c/m^3 ($3.20/GJ) to 16.74 c/$m^3$ ($4.20/GJ). The Application notes the Gas Cost Variance Account (GCVA) as at October 31, 2022 is forecast to have a balance of $34.3 million owing from customers to SaskEnergy. SaskEnergy is seeking to clear the balance over the test period.
- SaskEnergy is seeking a three-year delivery rate increase that will provide $43.3 million in additional revenues over the period to address projected revenue shortfalls and to achieve a return on equity (ROE) of 2.3% in 2022-23, 4.7% in 2023-24, and 6.9% in 2024-25 (compared to target ROE of 8.3%). This is an unprecedented three-year delivery rate application. SaskEnergy notes that test year rates are in part driven by the need to support public safety, as well as the need to meet increasing environmental and social responsibilities.

While delivery and commodity rate increases were implemented effective August 1, 2022, the Terms of Reference indicate that prior to implementation of delivery rate changes in 2023 and 2024, current financial statements and an update on any material changes to business factors vital to the rate application are to be provided by SaskEnergy for the Panel's review. This information will be provided for review by February 15 of 2023 and 2024, with updated recommendations from the Panel expected no later than April 28, 2023 and April 29, 2024.

Commodity Rate

A Mid-Application Market Update was provided by SaskEnergy on September 29, 2022. Material changes were noted in the Mid-Application Market Update – relating to: (1) ongoing market price increases and volatility in 2022/23; and (2) increases in gas volumes related to a significant portion of gas retailer load returning to SaskEnergy. This additional load is expected to drive material costs for SaskEnergy that will adversely impact other existing customers due to the requirement to purchase additional gas at market prices.

The Mid-Application Market Update also updated the forecast heat value (from 39.9 MJ/m^3 to 39.5 MJ/m^3). The lower heat value results in higher sales volumes in m^3 (and related revenue) compared to forecasts used in the Application filed on July 11, 2022 (the Original Application).

Proposed commodity rate calculation appears consistent with previous applications. However, the GCVA balance is expected to decline and be discharged by May 2023. In light of this, SaskEnergy should be encouraged to submit an application to reduce the commodity rate as soon as SaskEnergy is assured that the GCVA balance will be discharged, in order to provide relief to ratepayers.

Delivery Rate

Review of recent trends in SaskEnergy delivery service forecasts indicate an ongoing pattern of actual expenses being lower than forecast, while actual revenues tend to be higher than forecast. SaskEnergy has also routinely achieved a higher than forecast net income and ROE – the actual average ROE for the last five years was 14.2%, and the actual average ROE for the last 10 years was 10.7% (well above the target ROE of 8.3%).

The Mid-Application update for the 2022/23 test year (provided September 29, 2022) indicates significant variances from the forecasts provided in the Original Application. Key variances compared to the Original Application related to O&M expense ($2.1 million lower), depreciation expense ($3.1 million lower), other revenues ($7.2 million higher) and net income ($15.1 million higher). These variances were offset by $1.0 million higher tax expense and $2.2 million higher interest expense. The overall impact of these variances results in a higher overall ROE for 2022/23 compared to the Original Application (5.8% in the Mid-Application versus 2.3% in the Original Application).

Overall, the significant changes to the 2022/23 forecast (as noted in the Mid-Application Update) raise material concern regarding the accuracy of 2023/24 and 2024/25 forecasts; and highlight the need for careful review of any updated information provided by SaskEnergy for the Panel's review in February 2023 and February 2024 prior to making any recommendations regarding the 2023/24 and 2024/25 delivery service rates.

In summary, the impact of the current rate proposals must be considered in light of the current economic context - and its impact on both residential and small commercial customers struggling to recover from recent economic turmoil. Further, while the focus of the current review is on the test years the current application should be considered in light of prior rate increases, and with consideration of potential future applications and rate increases. Consideration must also be given to the fact that customer bills are materially affected by other factors, including carbon taxes and municipal surcharges.

Continued delivery rate increases are expected to be required to support SaskEnergy's integrity and growth requirements – that will continue to put pressure on consumers. Additionally, a number of factors that materially impact the revenue requirement are either outside the scope of the Panel's review (e.g., capital expenditures, return on equity, and transportation and storage rates) or are flow through items (e.g., cost of gas). In this context there are limited measures available to reduce and mitigate adverse rate impacts on ratepayers outside of continuing to focus on productivity and efficiency measures and measures to reduce operation and maintenance costs and other expenditures.

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1.0 INTRODUCTION

1.1 CONSULTANT'S MANDATE

On July 11, 2022, SaskEnergy filed the 2022 Delivery Service and Commodity Application (the Application) with the Saskatchewan Rate Review Panel (the Panel) seeking to increase the commodity rate by 31% to 16.74 cents per cubic meter ($4.20/gigajoule) effective August 1, 2022. SaskEnergy is also applying for a three-year rate increase by an average 8% effective August 1, 2022; 5% effective June 1, 2023; and 5% in effective June 1, 2024 for its delivery service.

The Panel was given terms of reference through an Order from the Minister of Crown Investments (the Minister). The Terms of Reference state, in part, that:

> *"The Panel shall provide an opinion of the fairness and reasonableness of the rate changes proposed by SaskEnergy having consideration for the following:*
>
> - *The interests of SaskEnergy, its customers and the public;*
> - *Consistency with SaskEnergy's mandate, objectives and methodologies;*
> - *Relevant industry practices and principles; and*
> - *The effect of the proposed rate changes on the competitiveness of SaskEnergy related to other jurisdictions."*

A copy of the Minister's Order is included in Appendix A to this report.

The Panel engaged InterGroup Consultants Ltd. (the Consultant) to assist in the review of SaskEnergy's Application and prepare an independent consultant's report summarizing observations and recommendations. This report summarizes the Consultant's analysis of the Application; observations on the reasonableness of forecasts, proposed revenue requirements, rate design and other matters; and recommendations to the Panel.

1.2 REVIEW PROCESS AND TIMELINE

In preparing this report, the following information was reviewed by the Consultant:

- SaskEnergy's 2022 delivery service and commodity rate application;
- Responses to two rounds of information requests (IRs) to SaskEnergy;
- Mid-Application update provided on September 29, 2022;
- Recordings from the October 11, 2022 (Saskatoon) and October 12, 2022 (Regina) public meetings held by the Panel;
- Submissions made by the public to the Panel and responses provided by SaskEnergy; and

- Other publicly available material from previous delivery rate applications and other regulatory tribunals.

Key activities undertaken as part of the review process are summarized in Table 1-1.

Table 1-1: Timeline and Milestones

Review Process Activity	Date
SaskEnergy files Application.	July 11, 2022
The Consultant provided 1st Round IRs to SaskEnergy on behalf of the Panel.	August 5, 2022
SaskEnergy response to 1st Round Commodity & Delivery IRs.	August 24, 2022
Chair, Vice Chair and Consultants met with SaskEnergy to review 1st Round IR Responses.	August 31, 2022
Meeting between Consultant and Panel to review 1st Round IR Responses.	September 1, 2022
Consultant provided draft 2nd Round IRs to Panel for review.	September 6, 2022
The Consultant participated in a conference call with the Panel to review 2nd Round IR topics.	September 8, 2022
The Consultant provided 2nd Round IRs to SaskEnergy.	September 15, 2022
SaskEnergy filed responses to 2nd Round IRs.	September 29, 2022
SaskEnergy provided Mid-Application Update	September 29, 2022
Conference Call with Panel Re: 2nd Round IR Responses.	October 12, 2022
Submissions from Stakeholders.	October 12, 2022
Consultant Delivers Draft Report to Panel and Writer.	October 25, 2022
Abridged Report (minus Recommendations) provided to SaskEnergy for review.	October 26, 2022
The Consultant participated in a meeting with the Panel to discuss the draft report.	November 1, 2022
Comments on abridged draft report provided by SaskEnergy.	November 1, 2022
The Consultant submitted its final report to the Panel.	November 7, 2022
The Panel expects to deliver its report to the Minister.	December 16, 2022

2.0 APPLICATION OVERVIEW

SaskEnergy in its 2022 Delivery Service and Commodity Rate Application ("Application") is applying to increase its commodity rate by 31% effective August 1, 2022; and is also applying to increase delivery service rates over a three year period – seeking an 8% increase in delivery rates effective August 1 2022; a 5% increase in delivery rates effective June 1, 2023; and a further 5% increase in delivery rates effective June 1, 2024.

The commodity and delivery rate changes effective August 1, 2022 result in the following average bill increases for customers for 2022/23:

- Average annual commodity bill increase of 13.7%;
- Average annual delivery bill increase of 4.5%; and
- Total average annual bill impact of 18.2%.

Average annual total bill increases for both 2023/24 and 2024/25 would be 2.6%.

Commodity Rate

SaskEnergy has requested a commodity rate increase effective August 1, 2022. The proposed rate will increase the existing rate of 12.78 c/m^3 ($3.20/GJ) to 16.74 c/$m^3$ ($4.20/GJ). The Application notes the Gas Cost Variance Account (GCVA) as at October 31, 2022 is forecast to have a balance of $34.3 million owing from customers to SaskEnergy. SaskEnergy is seeking to clear the balance over the test period. Commodity bill impacts are summarized below:

	Commodity Rate % Increase	$/Month*	Annual Bill % Increase
Residential	31%	$8.39	11.80%
Commercial Small	31%	$42.15	16.20%
Commercial Large	31%	$528	19.20%
Small Industrial	31%	$1,949	22.90%

*The average monthly increase is based on an average customer's annual consumption and will vary depending on customer usage.

Factors underlying the commodity rate increase are reviewed in detail in sections 11 to 16 of this Report.

Delivery Rate

SaskEnergy is seeking a three-year rate increase that will provide $43.3 million in additional revenues over the period to address projected revenue shortfalls and to achieve a return on equity (ROE) of 2.3% in 2022-23, 4.7% in 2023-24, and 6.9% in 2024-25 (compared to target ROE of 8.3%). SaskEnergy notes

that test year rates are in part driven by the need to support public safety, as well as the need to meet increasing environmental and social responsibilities.

Delivery bill impacts based on the proposed delivery rate increases are summarized below:

	2022/23			2023/24			2024/25		
	Delivery Rate Impact %	Total Bill Impact Annual % Change	Average Monthly Increase	Delivery Rate Impact %	Total Bill Impact Annual % Change	Average Monthly Increase	Delivery Rate Impact %	Total Bill Impact Annual % Change	Average Monthly Increase
Residential	8.10%	5.00%	$3.57	5.10%	2.90%	$2.43	5.10%	3.00%	$2.53
Commercial Small	7.80%	3.70%	$9.71	4.70%	2.00%	$6.27	4.80%	2.10%	$6.67
Commercial Large	8.20%	3.10%	$86	5.10%	1.70%	$58	5.10%	1.80%	$60
Small Industrial	8.90%	2.30%	$197	7.60%	1.70%	$182	5.90%	1.40%	$153
System Average	8.00%	4.50%		5.00%	2.60%		5.00%	2.60%	

*Total Bill impacts are forecasted on the basis that commodity costs remain constant.

The main drivers for the delivery service rate increase are reviewed in detail in Section 3.0 of this report.

While the focus of this review is on the test years, the current Application should be considered in light of prior rate increases, the current economic context for the province, and with consideration of potential future applications and rate increases.

- Sections 2.1 and 2.2 that follow provide a high level summary of the provincial economic context and affordability considerations that have informed the review of SaskEnergy's application and the observations and recommendations provided.
- Section 2.3 reviews considerations related to the multi-year rate application and the increase being sought for 2023/24 and 2024/25.

2.1 PROVINCIAL ECONOMIC CONTEXT

This section provides an overview of changes to economic indicators for Saskatchewan since 2019 in order to provide context for the current review. Table 2-1 summarizes actual and forecast year over year changes from 2018 through 2024 using key economic indicators for Saskatchewan, including Nominal GDP, employment, unemployment rates, and inflation (change in CPI).

Table 2-1: Summary of Key Economic Indicators for Saskatchewan[1,2,3,4,5]

Indicator	Actual				Forecast		
	2018	2019	2020	2021	2022	2023	2024
Nominal GDP at Market Prices (millions)[1,2]	$ 83,672	$ 83,324	$ 77,833	$ 87,741*	$ 108,211	$ 109,347	$ 111,753
Change from prior year	*4.3%*	*(0.4%)*	*(6.6%)*	*12.7%*	*23.3%*	*1.1%*	*2.2%*
Employment (thousands)[3]	560.3	570.9	544.1	558.2	577.3	581.0	586.2
Change from prior year	*0.5%*	*1.9%*	*(4.7%)*	*2.6%*	*3.4%*	*0.6%*	*0.9%*
Unemployment Rate[4]	6.2%	5.6%	8.4%	6.5%	4.7%	5.1%	5.3%
Change from prior year	*(1.6%)*	*(9.7%)*	*50.0%*	*(22.6%)*	*(27.1%)*	*7.6%*	*2.9%*
Inflation (Change in CPI[5]) (%)	2.3%	1.7%	0.6%	2.6%	6.3%	3.4%	1.7%

**Estimation*

Definitions:
1) Nominal GDP- the total value of goods and services produced in the economic territory of a country or region within a given time period, unadjusted for inflation.
2) Market Prices - the amount of money buyers are willing to pay to acquire goods, services, or assets from sellers. It includes all taxes, retail, wholesale, transportation and other margins less subsidies.
3) Employment - consists of those people who did any work for pay or profit and those who had a job but were absent.
4) Unemployment rate - accounts for people who were temporarily layed off and those who were without work but were available to work.
5) Consumer Price Index (CPI) - represents changes in prices as experienced by Canadian consumers.

The following is noted regarding the provincial economic context:

- **Employment** – After peaking in 2019, Saskatchewan employment numbers declined in 2020 due in part to COVID-19 public health restrictions and the resulting economic effects.[6,7] Major Canadian banks are forecasting employment to surpass pre-pandemic levels in 2022. The Government of

[1] Gross domestic product at market prices, Table 36-10-0222-01, Statistics Canada (November 9, 2021);
Forecast: Average of TD Bank, RBC, BMO, Scotiabank, and National Bank forecasts:
TD Bank: https://economics.td.com/domains/economics.td.com/documents/reports/pef/ProvincialEconomicForecast_Sep2022.pdf (September 2022);
RBC: https://royal-bank-of-canada-2124.docs.contently.com/v/hot-provincial-momentum-to-lose-steam1 (September 12, 2022);
BMO: https://economics.bmo.com/media/filer_public/9c/58/9c58837f-9411-4599-9586-89f27d14773e/outlookprovincial.pdf (October 28, 2022);
Scotiabank: https://www.scotiabank.com/content/dam/scotiabank/sub-brands/scotiabank-economics/english/documents/forecast-tables/forecast_20221017.pdf (October 17, 2022); and
National Bank of Canada: https://www.nbc.ca/content/dam/bnc/en/rates-and-analysis/economic-analysis/monthly-economic-monitor.pdf (October 2022).
[2] Employment, Both sexes, 15 years and over, Total, all industries, Table 14-10-0023-01, Statistics Canada (January 7, 2022);
Forecast: Average of TD Bank, RBC, BMO, Scotiabank, and National Bank forecasts.
[3] Unemployment rate, Both sexes, 15 years and over, Total, all industries, Table 14-10-0023-01, Statistics Canada (January 7, 2022);
Forecast: Average of TD Bank, RBC, BMO, Scotiabank, and National Bank forecasts.
[4] Consumer Price Index, All-items, annual average, Table 18-10-0005-01, Statistics Canada (January 19, 2022);
2022 & 2023 Forecast - Average of: Monthly Economic Monitor, National Bank of Canada Financial Markets. (May 2022) and Provincial Economic Outlook for May 6, 2022, BMO Capital Markets Economic Research;
Forecast: Average of RBC, BMO, Scotiabank, and National Bank forecasts.
[5] Glossary, Statistics Canada. (March 1, 2019)
[6] Page 30, Budget 2022-23, Government of Saskatchewan. (March 23, 2022) Available at:
https://publications.saskatchewan.ca/api/v1/products/117339/formats/134734/download
[7] Page 2, Western Canada, Differences in the economic impacts of COVID-19 across the provinces and territories, Economic and Social Reports, Statistics Canada. (June 23, 2021) Available at: https://www150.statcan.gc.ca/n1/en/pub/36-28-0001/2021006/article/00001-eng.pdf?st=_Hp4M0CG

Saskatchewan is forecasting labour force participation rates to increase above 70% by 2026.[8,9,10] The Government of Saskatchewan expects new investments in the coming years, particularly in the construction industry, to drive employment.[11]

- **Unemployment Rate** - The Saskatchewan unemployment rate declined year over year in 2018 and 2019, reaching 5.6%, before increasing in 2020. While it has not returned to pre-COVID-19 levels, the unemployment rate has declined from 2020 and remains below the national average (6.5% in 2021 compared to the national average of 7.5%).[12] Major Canadian banks are forecasting Saskatchewan's provincial unemployment to reach below pre-pandemic levels in 2022 at approximately 4.7% and increase through to 2024 where it is projected to reach 5.3%.
- **Gross Domestic Product** - Starting in 2019, the Saskatchewan economy experienced two consecutive years of economic contraction. From 2018 to 2019, over half of industrial sectors experienced declines including Manufacturing, Construction, and Natural Resources.[13] Investment in housing declined 11.7%,[14] with housing starts dropping 32.8%. Service industries and Agriculture continued to grow which partially offset decreases seen in other areas.[15] In 2020, Saskatchewan experienced a decrease in GDP due to COVID-19 related restrictions imposed on consumers and businesses. Due to the global nature of COVID-19, exports were affected as all of Canada's major trading partners faced similar restrictions.[16] Arts, entertainment, and recreation and accommodation and food services saw the largest declines of 36.1% and 27.4% respectively. Other material declines in 2020 included mining, quarrying, and oil and gas extraction (-9.9%), construction (-12.1%), and transportation and warehousing (-8.6%). Saskatchewan experienced a rebound in GDP beginning in 2021 including mining, quarrying, and oil and gas extraction (6.7%); arts, entertainment and recreation (2.7%); and accommodation and food services (14.1%). Notably, construction and transportation and warehousing continued to decline at -3.1% and -0.9% respectively.[17] Major Canadian banks expect strong economic growth through 2022, levelling off for 2023 and 2024.

[8] Note to readers, Labour Market Indicators, February 2022, Statistics Canada. Available at: https://www150.statcan.gc.ca/n1/daily-quotidien/220311/dq220311a-eng.htm
[9] Page 35, Budget 2022-23, Government of Saskatchewan. (March 23, 2022) Available at: https://publications.saskatchewan.ca/api/v1/products/117339/formats/134734/download
[10] Unemployment rate, participation rate and employment rate by sex, annual, Table 14-10-0327-02, Statistics Canada. (January 7, 2022) Available at: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410032702
[11] Page 33, Budget 2022-23, Government of Saskatchewan. (March 23, 2022) Available at: https://publications.saskatchewan.ca/api/v1/products/117339/formats/134734/download
[12] Employment, Both sexes, 15 years and over, Total, all industries, Table 14-10-0023-01, Statistics Canada. (January 7, 2022) Available at: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002301
[13] Economic Review 2019, Saskatchewan Bureau of Statistics, Ministry of Finance, page 3. Available at: https://publications.saskatchewan.ca/api/v1/products/86384/formats/127631/download
[14] Provincial and territorial economic accounts, 2019, Statistics Canada. (November 9, 2020) Available at: https://www150.statcan.gc.ca/n1/daily-quotidien/201109/dq201109b-eng.htm
[15] Economic Review 2019, Saskatchewan Bureau of Statistics, Ministry of Finance, pages 4-6. Available at: https://publications.saskatchewan.ca/api/v1/products/86384/formats/127631/download
[16] Provincial and territorial economic accounts, 2020, Statistics Canada. (November 9, 2021) Available at: https://www150.statcan.gc.ca/n1/daily-quotidien/211109/dq211109a-eng.htm
[17] Gross domestic product (GDP) at basic prices, by industry, provinces and territories, Annual, Table 36-10-0402-01, Statistics Canada.

- **Inflation** - Saskatchewan's inflation rate remained at or below the Bank of Canada's target inflation rate of 1-3% until the second half of 2021.[18] The inflation rate dropped below 1% in 2020 during the COVID-19 pandemic. In 2021, Saskatchewan's inflation rate averaged 2.6%, below the national average of 3.4%.[19] In 2022, major Canadian banks are forecasting an inflation rate of 6.3%. Inflation is projected to drop in 2023, reaching near the Bank of Canada's targeted range of 1-3% at 3.4%. Inflation is expected to return to the midpoint of the Bank of Canada's targeted range by 2024.

Inflation is viewed as a threat to the economic recovery and growth of Saskatchewan as interest rate hikes by the Bank of Canada may dampen the housing market and decrease capital investment, affecting economic growth in the province.[20]

Observations

The Saskatchewan economy was greatly affected by COVID-19 in 2020. For the period of 2021-2023, the Saskatchewan economy is expected to rebound with the Government of Saskatchewan forecasting that economic growth will be dependant on commodity prices, rising inflation, geopolitical factors, and the potential for new COVID-19 variants which could reduce economic growth.[21] However, rising interest rates could dampen the recent gains in economic growth, with the possibility of slowing or reversing the current upward trend of employment and GDP. Geopolitical factors also risk creating further global supply chain disruptions, decreasing international trade, and potentially weakening Saskatchewan's economy.

High inflation rates are expected to put upward cost pressure on SaskEnergy operating, maintenance, and administration (OM&A) costs as well as capital spending. Rising interest rates, will increase SaskEnergy's finance charges.

2.2 AFFORDABILITY CONSIDERATIONS

The impact of the current rate proposals on SaskEnergy customers must be considered in light of the current economic context – and its impact on both residential and small commercial customers struggling to recover from recent economic turmoil. Section 19 of this report summarizes comments received by the public regarding the proposed rate increases. Comments provided by members of the public and business associations (i.e., Canadian Federal of Independent Business, Restaurants Canada and the Saskatchewan Landlord Association) – identified significant concern with a material, multi-year rate increase coming after a period of turbulence caused by the COVID-19 pandemic, and at a time of considerable ongoing economic uncertainty driven by the Ukraine war, rising energy prices, and high inflation, that is expected to lead to a global recession.

[18] Inflation, Monetary Policy, Bank of Canada (accessed November 02, 2022). Available at: https://www.bankofcanada.ca/core-functions/monetary-policy/inflation/
[19] Inflation, Monetary Policy Report October 2022, page 3, Bank of Canada.
[20] Page 39, Budget 2022-23, Government of Saskatchewan. (March 23, 2022) Available at: https://publications.saskatchewan.ca/api/v1/products/117339/formats/134734/download
[21] Page 39, Budget 2022-23, Government of Saskatchewan. (March 23, 2022) Available at: https://publications.saskatchewan.ca/api/v1/products/117339/formats/134734/download

The history of delivery rate changes and overall bill impacts for residential customers over the past several years, as well as the impact of the current rate proposals, are summarized in Table 2-2 and Figure 2-1.

Table 2-2 reviews recent year-over-year increases for residential customers and notes six delivery service rate increases between 2013 and 2019, with material year over year increases forecast over the three year test period.

- Between 2013 and 2019, the average monthly delivery service bill increased by 26% (a $9.48 increase in the average monthly bill over the period); over this period the average monthly delivery service bill increase was about $1.58/month.
- Over the period from 2022 to 2024, the average monthly delivery service bill is expected to increase by 19% (an $8.97 increase in the average monthly bill over the 3-year test period compared to delivery service rates in place in 2019).

Table 2-2: Average Residential Delivery Service Bill Increases[22]

	01-Sep-13	01-Sep-14	01-Jan-16	01-Nov-16	01-Nov-17	01-Apr-19	01-Aug-22 Proposed	01-Jun-23 Proposed	01-Jun-24 Proposed
Average Monthly Delivery Service Bill ($/month)	$36.89	$37.77	$39.52	$43.05	$44.76	$46.37	$50.17	$52.73	$55.34
Change in Bill ($/month)	$1.47	$0.89	$1.75	$3.53	$1.71	$1.61	$3.80	$2.56	$2.62
Delivery Service Bill Impact (%)	4.2%	2.4%	4.6%	8.9%	4.0%	3.6%	8.2%	5.1%	5.0%
Average Monthly Carbon Tax Bill ($/month)	-	-	-	-	-	$9.12	$24.87	$30.02	$36.70
Average Monthly Municipal Surcharge* ($/month)	$1.84	$1.89	$1.98	$2.15	$2.24	$2.32	$2.51	$2.64	$2.77
Average Monthly GST Bill* ($/month)	$1.94	$1.98	$2.07	$2.26	$2.35	$2.43	$2.63	$2.77	$2.91

**Based on Municipal Surcharge and GST applied only to the Delivery Service portion of the bill*

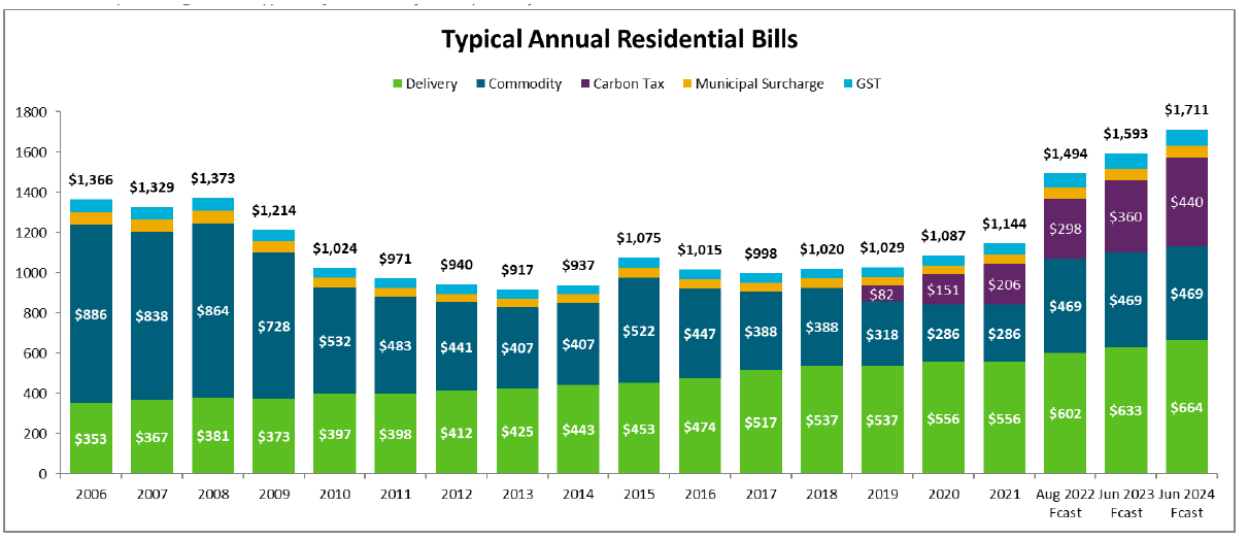
Figure 2-1 illustrates total residential bill impacts over the period from 2006 to 2021 (actual) and 2022/23 through 2024/25 (forecast). As discussed further in Section 17, customer bills also include taxes (GST and Federal Carbon Tax) and municipal surcharges.

- Figure 2-1 shows steady year over year increases in the delivery service portion of customer bills over the period from 2006 and 2021 (averaging about 4% annually over the period); and material variability in the commodity portion of customer bills over the same period (swinging from a 27% decrease in annual residential bills in 2010 to a 28% increase in 2015).
- Over the past decade, delivery service rate increases have been implemented for the most part in an environment where commodity rates were lower, and where in some cases commodity rate reductions were implemented in tandem with delivery rate increases, muting the impact of commodity rate increases on overall customer bills. Figure 2-1 shows the cumulative impact of combined commodity and delivery rate increases in 2022/23.
- Between 2006 and 2018, other taxes and surcharges made up about 9% of the total customer bill; starting in 2019, with the introduction of the federal carbon tax, other taxes and surcharges make

[22] 2nd Round Information Request 17(b).

up an increasing portion of the total customer bill (growing from 17% of the total bill to 34% of the total bill).

Figure 2-1: Typical Annual Residential Bills[23]



The forecast period (2022-2024) shows a significant increase in total annual residential bills – climbing higher than any period since 2006. Significant increases relate in part to a material 31% commodity rate increase being sought at the same time as a material (8%) delivery rate increase (a 64% increase in the commodity portion of the typical annual residential bill in 2022 compared to 2021 – reflecting an increase in November 2021 as well as an increase in August 2022); and in part due to the impact of ongoing increases in carbon tax charges on customer bills (a 45% increase in the carbon tax portion of the typical annual residential bill in 2022 compared to 2021).

A number of factors may impact future revenue requirement and rates beyond the test years:

- **Ongoing capital expenditures to address integrity and growth activities:** Actual annual safety and infrastructure renewal investment ranged between $48.5 million and $54.8 million from 2016/17 to 2019/20; was reduced to $30.8 million in 2020-21 and is forecast to be in the range of $41.0 million and $54.7 million over the period from 2021/22 to 2024/25. While the capital program is outside of the scope for this review, spending on capital impacts depreciation, capital tax, interest expense and income.
- **Future Transportation and Storage Rate Increases:** Transportation and storage expense increases in the test year reflect transportation and storage rate changes effective April 1, 2022. Transportation and storage expense is expected to increase by $5.374 million in 2022/23 over 2021/22 actuals; and by $2.266 million in 2023/24 forecast compared to 2022/23. No increase is forecast for 2024/25.

[23] 2nd Round Information Request 17(b).

- **Future Natural Gas Price Increases:** Natural gas prices have increased significantly since the last commodity rate application, and according to SaskEnergy have entered a "very volatile phase". Figure 2-1 illustrates the degree to which commodity rates and bill impacts can vary materially over time.

Observations

Continued delivery rate increases are expected to be required to support SaskEnergy's ongoing integrity and growth requirements. This will continue to put pressure on consumers.

Overall, a number of factors that materially impact the revenue requirement are either outside the scope of the Panel's review (e.g., capital expenditures, return on equity, and transportation and storage rates), or are flow through items (e.g., gas cost). Many of these items have a material impact on the current test year revenue requirement or have the potential to be material rate drivers going forward. In this context there are limited measures available to reduce or mitigate adverse impacts on ratepayers (outside of continuing to focus on productivity and efficiency measures and measures to reduce operation and maintenance costs and other expenditures).

2.3 MULTI-YEAR RATE APPLICATION

SaskEnergy is seeking an unprecedented three-year rate application – with delivery rates for 2022/23 approved effective August 1, 2022 (during the early stages of the Panel's review process).

The terms of reference for this review note that prior to the implementation of delivery rate changes in 2023 and 2024, SaskEnergy will provide current financial statements and an update on any material changes to business factors vital to the rate application, for the Panel's review by February 15, 2023 and February 15, 2024, respectively. Based on the updated information provided, the Panel will determine the abbreviated review process it requires.

The Panel is to provide updated recommendations to confirm or revise its initial recommendations on the 2023 and 2024 rate changes to the Minister of Crown Investments Corporation no later than April 28, 2023 and April 29, 2024, respectively. The Panel is to provide SaskEnergy with the opportunity and reasonable time to review its updated recommendations on the 2023 and 2024 rate changes prior to finalization to ensure there are no errors in the date or the interpretation of data.

Observations

The last multi-year rate application sought by SaskEnergy was in 2013 which was a two year application covering the 2013/14 and 2014/15 test years. Aside from the unprecedented nature of seeking approval of rate changes for three successive test years – the following material concerns are noted concerns regarding the multi-year rate proposal provided in the Application:

1. In prior proceedings, SaskEnergy has noted that it typically commences its business planning process in June of each year, and submits its business plan for Board of Directors approval in November each year. The business plan underlying the delivery service application was approved

by SaskEnergy's Board of Directors in November 2021; and the economic assumptions used for the application were as of June/July 2021, i.e., the assumptions were over a year old by the time the application was filed.

The following were noted as the only updates made to the Application forecast prior to filing:

- Revision to the distribution toll revenues after completion of a formal distribution toll cost of service review (increased distribution toll revenue by $3.2 million over the test period);
- Revision to the effective date of the 2022 proposed delivery rate increase to August 1, 2022 compared to September 1, 2022 (increased incremental revenue through rates by $1.0 million);
- Revision to the effective date of the 2023 proposed delivery rate increase to June 1, 2023 compared to April 1, 2023 (decreased incremental revenue through rates by $2.0 million); and
- Revision to the effective date of the 2024 proposed delivery rate increase to June 1, 2024 compared to April 1, 2024 (decreased incremental revenue through rates by $2.1 million).

2. SaskEnergy provided its Mid-Application Update on September 29, 2022. This update notes significant variances in 2022/23 forecasts related to the following:
    - Operation and Maintenance expense ($2.0 million reduction);
    - Depreciation expense ($3.1 million reduction);
    - Tax expense ($1.0 million increase);
    - Interest Expense ($2.2 million increase);
    - Net Earnings ($15.1 million increase) and
    - Other Revenue ($7.2 million increase).

    Based on these changes the updated ROE for 2022/23 increases from 2.3% to 5.8%. This is a material change from the forecast provided by SaskEnergy to support the 8% delivery rate increase that was approved effective August 1, 2022. This updated information was only made available September 29, 2022. It is stressed that these were very material updates to the forecasts reviewed during the Panel's review process. These updates were identified late in the process (provided in tandem with 2nd Round interrogatory responses). As such, the updates were not able to be fully canvassed or reviewed as part of this process.

3. It is understood that a number of items impacting the 2022/23 forecast may also impact the forecasts provided for 2023/24 and 2024/25. The following key examples are noted:
    - SaskEnergy Ownership of SaskEnergy Place was not anticipated in the 2022 Delivery Rate Application – and this fundamental change led to a much lower actual depreciation compared to the application forecast. It is assumed that this lower rate would also reduce depreciation expense in 2023/24 and 2024/25. The change in ownership of SaskEnergy Place also increased tax expense.

- SaskEnergy borrowed an additional $50 million of long-term debt in May 2022 which was not anticipated in the 2022 Delivery Rate Application; and also notes increases in short-term borrowing rates compared to the Application. Higher short-term interest rates were also noted.
- SaskEnergy underestimated connect fees and late payment charge revenues in 2022/23 ($2.3 million impact) – it is understood that forecast for 2023/24 and 2024/25 would also be impacted.

As noted – given the timing of the Mid-Application process – there has been limited ability to canvass the information provided and its potential impact on forecasts for 2023/24 and 2024/25.

As outlined in the Terms of Reference prior to the implementation of delivery rate changes in 2023 and 2024, current financial statements and an update on any material changes to business factors vital to the rate application, are to be provided by SaskEnergy for the Panel's review (by February 15, 2023 and February 15, 2024, respectively). The nature and extent of the information to be provided and the process for review of this information is not detailed at this time. However, the timelines indicate a very truncated review process – which is of concern given the potential for the forecasts for 2023/24 and 2024/25 to be materially different from the information reviewed during the current review process.

Recommendations

The 8% Delivery Service Rate increase for 2022/23 was approved on August 1, 2022, prior to the Panel's review process being completed. The assumptions used to support the rate increase were a year old, and the significant changes provided in the Mid-Application Update raise significant concern that the full quantum of the approved rate increase approved was not well supported or justified.

The above raises concerns regarding reliance on the assumptions in the Delivery Service Rate Application used to support the need for 2023/24 and 2024/25 delivery rate increases (given they are more than a year out of date at this time). The Mid-Application Update also notes a number of factors that would materially impact the quantum of the proposed increases in these years. In sum, the information provided suggests that the 5% rate increases proposed for 2023/24 and 2024/25 cannot be fully supported.

It is recommended that the Panel not approve any rate increase for 2023/24 or 2024/25 until updated forecasts are provided by SaskEnergy; and a process is implemented to fully canvass the forecasts. The Panel in its recommendations should specify the level of information expected to be provided by SaskEnergy in the update to be provided in February of 2023 and February 2024. The Panel should also recommend a review process that allows for the information to be fully canvassed prior to recommending any rate increase.

3.0 DELIVERY SERVICE REVENUE REQUIREMENT

The main components of SaskEnergy's revenue requirement are shown in Table 3-1. Figure 3-1 illustrates the share that each revenue requirement component has of the total revenue requirement. The total revenue requirement is offset by revenues from other sources to calculate the net delivery revenue requirement. The 2022/23 test year net revenue requirement of $291.3 million is $9.1 million (3.2%) higher than the 2021/22 actuals. It increases by $18.7 million (6.4%) in the 2023/24 test year and $16.0 million (5.1%) in the 2024/25 test year.

The following is specifically noted regarding the main drivers underlying the increase in overall revenue requirement included in the Application (as summarized in Figure 3-1 and Table 3-1):

- **Operating and Maintenance Expense (O&M) –** O&M expense makes up between 45-48% of the total annual revenue requirement over the test period. It is forecast to increase by about $22.4 million (or 16.9%) in 2022/23 over the 2021/22 actuals; with forecast year over year increases of $2.3 million (1.5%) in 2023/24, and $3.4 million (2.2%) thereafter.
- **Transportation and Storage Expense –** Transportation and storage expense makes up between 18-20% of the total annual revenue requirement over the test period. It is forecast to increase by about $5.4 million (or 9.2%) in 2022/23 over the 2021/22 actuals; with a forecast year over year increase of $2.3 million (3.6%) in 2023/24, and no forecast increase in 2024/25.
- **Depreciation Expense –** Depreciation expense makes up about 17% of total annual revenue requirement over the test period. It is forecast to increase by about $3.2 million (or 6.1%) in 2022/23 over the 2021/22 actuals; with forecast year over year increases of $1.7 million (3.1%) in 2023/24, and $2.4 million (4.2%) in 2024/25.
- **Tax Expense –** Tax expense makes up about 3% of the total annual revenue requirement over the test period. It is forecast to increase by about $0.3 million (or 3.9%) in 2022/23 over the 2021/22 actuals; with forecast year over year increases of $0.5 million (5.4%) in 2023/24 and $0.3 million (3.6%) in 2024/25.
- **Interest Expense –** Interest expense makes up about 9% of the total annual revenue requirement over the test period. It is forecast to decrease by about $0.2 million (or 0.5%) over the 2021/22 actuals; with forecast year over year increases of $2.2 million (7.5%) in 2023/24 and $1.5 million (4.7%) in 2024/25.
- **Other Revenues –** Other Revenues are forecast to decrease by $2.8 million (or 8.3%) in the 2022/23 test year over the 2021/22 actuals, with a forecast increase of $0.7 million (2.2%) in 2023/24 (over 2022/23) and a forecast increase of $1.8 million (5.7%) in 2024/25 (over 2023/24).
- **Net Earnings –** Net Earnings makes up about 3-8% of the total annual revenue requirement over the test period. It is forecast to decrease by about $24.8 million (or 72.0%) in 2022/23 test year over the 2021/22 actuals; with year over year increases of $10.3 million (106.9%) in 2023/24, and $10.1 million (50.6%) in 2024/25.

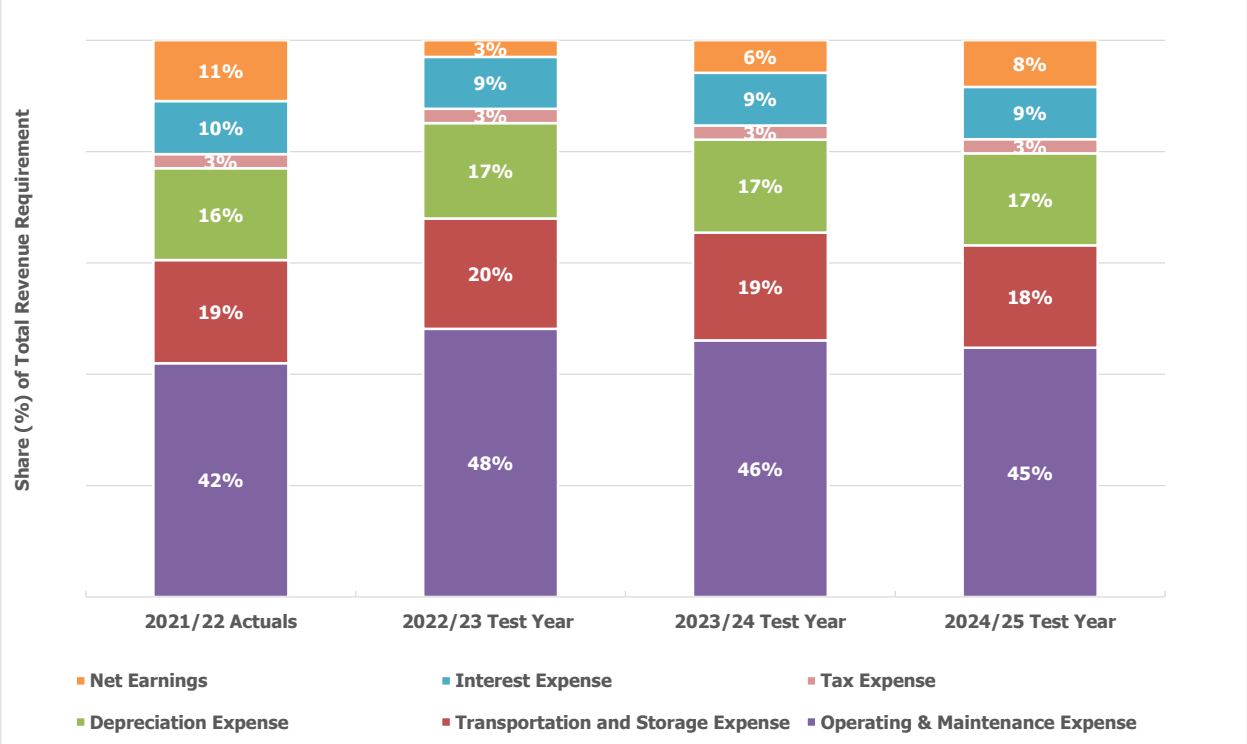
Table 3-1: Revenue Requirement Comparison ($Millions)[24]

	Fiscal Year [Apr 1 to March 31]									
	2021/22	2022/23			2023/24			2024/25		
Component	Actuals Current Application ($ millions)	Test Year Current Application ($ millions)	Change over 2021/22 Actuals ($ millions)	Change over 2021/22 Actuals (%)	Test Year Current Application ($ millions)	Change over 2022/23 Test Year ($ millions)	Change over 2022/23 Test Year (%)	Test Year Current Application ($ millions)	Change over 2023/24 Test Year ($ millions)	Change over 2023/24 Test Year (%)
Expenses										
Operating & Maintenance Expense	132.5	155.0	*22.4*	*16.9%*	157.3	*2.3*	*1.5%*	160.7	*3.4*	*2.2%*
Transportation and Storage Expense	58.4	63.8	*5.4*	*9.2%*	66.0	*2.3*	*3.6%*	66.0	*0.0*	*0.0%*
Depreciation Expense	52.1	55.2	*3.2*	*6.1%*	56.9	*1.7*	*3.1%*	59.3	*2.4*	*4.2%*
Tax Expense	8.0	8.3	*0.3*	*3.9%*	8.7	*0.5*	*5.4%*	9.0	*0.3*	*3.6%*
Interest Expense	30.1	30.0	*0.2*	*(0.5%)*	32.2	*2.2*	*7.5%*	33.7	*1.5*	*4.7%*
Total Expenses	**281.0**	**312.2**	***31.1***	***11.1%***	**321.1**	**9.0**	***2.9%***	**328.8**	**7.6**	***2.4%***
Revenues										
Other Revenue	33.3	30.5	*2.8*	*(8.3%)*	31.2	*0.7*	*2.2%*	33.0	*1.8*	*5.7%*
Net Delivery Revenue Requirement before Net Earnings	**247.7**	**281.6**	**33.9**	***13.7%***	**290.0**	**8.3**	***3.0%***	**295.8**	**5.8**	***2.0%***
Net Earnings	34.5	9.7	*(24.8)*	*(72.0%)*	20.0	*10.3*	*106.9%*	30.1	*10.1*	*50.6%*
Net Delivery Revenue Requirement	**282.2**	**291.3**	**9.1**	***3.2%***	**310.0**	**18.7**	***6.4%***	**325.9**	**16.0**	***5.1%***

* Table 3-1 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update. A comparison of the Original Application and the Mid-Application update is provided in Table 3-3.

[24] Summarized from the revised (09/09) Schedule 1.0 of the 2022 Commodity and Delivery Service Rate Application.

Figure 3-1: Share of Total Revenue Requirement, excluding Other Revenue, for 2021/22 to 2024/25[25]



*Note: values in Figure 3-1 may total to more than 100% due to rounding.

Comparison of Forecast versus Actual Results for prior Years

Table 3-2 compares the actual and forecast revenue requirement over the last four years and indicates:

- **Consistent Lower Actual Net Delivery Revenue Requirement before Net Earnings compared to Forecast:** Actual Net Delivery Revenue Requirement before Net Earnings is less than the forecast in each year from 2018/19 to 2020/21 -- ranging from $11.5 million (5.1%) lower than forecast in 2018/19, to $9.4 million (3.9%) lower than forecast in 2020/21. This change from forecast relates in part to lower actual total expenses from 2018/19 through 2020/21 compared to forecast -- varying from $5.5 million (2.1%) lower for 2018/19; to $10.4 million (3.7%) lower for the 2019/20 test year; to $11.3 million (4.2%) lower in 2020/21. Over the same period, Other Revenues also varied from forecast -- $6.0 million (17.1%) higher than forecast in 2018/19 to $1.9 million (6.1%) lower than forecast in 2020/21.

- **Materially higher Actual Net Earnings compared to Forecast:** Net earnings for the period have been materially higher than forecast – ranging from $38.1 million (127.2%) higher than forecast in 2018/19 to $4.4 million (14.5%) higher than forecast in 2021/22. The large variation in

[25] Prepared based on Table 3-1. Share of total revenue requirement calculated in Figure 3-1 excludes Other Revenue.

net earnings results in the actual Net Delivery Revenue Requirement being higher than forecast from 2018/19 and 2020/21. Actual ROE in each year has consequently been much higher than the Forecast ROE (and in each year higher than the target ROE of 8.3%) – ranging from a 19.69% actual ROE in 2018/19 to an 8.47% actual ROE in 2021/22.

Table 3-2: Revenue Requirement Comparison: Forecast vs Actuals ($Millions)[26]

	2018/19 Forecast [Apr 1 to March 31]				2019/20 Test Year [Apr 1 to March 31]				2020/21 Forecast [Apr 1 to March 31]				2021/22 Forecast [Apr 1 to March 31]			
Component	**Actuals ($ millions)**	**Forecast ($ millions)**	**Diff. *($ millions)***	**Diff. % *(%)***	**Actuals ($ millions)**	**Forecast ($ millions)**	**Diff. *($ millions)***	**Diff. % *(%)***	**Actuals ($ millions)**	**Forecast ($ millions)**	**Diff. *($ millions)***	**Diff. % *(%)***	**Actuals ($ millions)**	**Forecast ($ millions)**	**Diff. *($ millions)***	**Diff. % *(%)***
Expenses																
Operating & Maintenance Expense	127.6	130.4	*(2.8)*	*(2.2%)*	131.1	136.2	*(5.2)*	*(3.8%)*	131.6	142.0	*(10.4)*	*(7.9%)*	132.5	129.5	*3.0*	*2.3%*
Transportation and Storage Expense	53.2	52.7	*0.5*	*1.0%*	53.6	53.9	*(0.3)*	*(0.5%)*	53.5	52.3	*1.1*	*2.1%*	58.4	58.4	*0.0*	*0.0%*
Depreciation Expense	42.6	45.4	*(2.8)*	*(6.3%)*	46.5	48.2	*(1.7)*	*(3.5%)*	50.0	50.7	*(0.8)*	*(1.6%)*	52.1	51.9	*0.2*	*0.3%*
Tax Expense	6.3	6.5	*(0.2)*	*(2.8%)*	6.9	7.4	*(0.4)*	*(5.9%)*	6.9	7.1	*(0.3)*	*(3.7%)*	8.0	7.7	*0.2*	*2.9%*
Interest Expense	26.5	26.6	*(0.1)*	*(0.5%)*	28.7	31.5	*(2.8)*	*(8.8%)*	28.3	29.3	*(1.0)*	*(3.5%)*	30.1	29.9	*0.2*	*0.8%*
Total Expenses	**256.2**	**261.6**	**(5.5)**	***(2.1%)***	**266.8**	**277.1**	**(10.4)**	***(3.7%)***	**270.2**	**281.5**	**(11.3)**	***(4.2%)***	**281.0**	**277.4**	**3.6**	***1.3%***
Revenues																
Other Revenue	(41.1)	(35.1)	*(6.0)*	*17.1%*	(30.6)	(30.4)	*0.2*	*(0.8%)*	(30.3)	(32.2)	*1.9*	*(6.1%)*	(33.3)	(32.0)	*(1.3)*	*3.9%*
Net Delivery Revenue Requirement before Net Earnings	**215.1**	**226.5**	**(11.5)**	***(5.1%)***	**236.1**	**246.7**	**(10.1)**	***(4.1%)***	**239.9**	**249.4**	**(9.4)**	***(3.9%)***	**247.7**	**245.4**	**2.4**	***1.0%***
Net Earnings	68.1	30.0	*38.1*	*127.2%*	41.9	33.5	*8.4*	*25.2%*	40.2	28.9	*11.3*	*28.2%*	34.5	30.1	*4.4*	*14.5%*
Net Delivery Revenue Requirement	**283.2**	**256.5**	***26.7***	***10.4%***	**278.0**	**280.2**	***(2.1)***	***(0.8%)***	**280.1**	**278.2**	***1.9***	***0.7%***	**282.2**	**275.5**	***6.7***	***2.4%***
ROE	19.69%	8.30%	*11.39%*	*137.3%*	11.23%	8.30%	*2.93%*	*35.3%*	10.29%	7.34%	*2.95%*	*40.2%*	8.47%	7.45%	*1.01%*	*13.6%*

[26] Summarized from the revised (09/09) Schedule 1.0 of the 2022 Commodity and Delivery Service Rate Application and 2nd Round Information Request 1 (c)(viii).

The following is noted regarding drivers for variances in actual results compared to the forecasts for the previous test year [2019/20], and the most recent fiscal year [2021/22].

- **O&M Expenses:** In 2019/20, Actual O&M expense was $5.2 million (or 3.8%) **lower** than forecast. Lower than forecast salaries and wages make up more than half of the total reduction in expense. Key areas of actual cost reduction compared to forecast are as follows:[27]
    - $3.2 million **lower** than forecast expense for labour, including a $2.4 million reduction related to wages (regular, part-time, and seasonal) and overtime.
    - $6.6 million **lower** than forecast expense for external services. Key areas of actual cost reduction are as follows:
        - $2.5 million **lower** than forecast expense for AMS/hosting;
        - $1.4 million **lower** than forecast expense for contracts – general;
        - $0.4 million **lower** than forecast expense for other contract services; and
        - $0.3 million **lower** than forecast expense for meter reading.
    - $1.3 million **lower** than forecast expense for communication, public relations, and fees, dues, and community contributions. Key areas of actual cost reduction are as follows:
        - $0.5 million **lower** than forecast expense for energy efficiency programs and awareness; and
        - $0.4 million **lower** than forecast expense for business telephones, cellular, and network services.

    The above cost reductions were offset by a $4.4 million **increase** in misc. corporate charges and a $1.4 million **lower** than forecast expense for external recoveries.

    In 2021/22, Actual O&M expense was $3.0 million (or 2.3%) **higher** than forecast. Key areas of actual cost variances compared to forecast are as follows: [28]
    - $0.8 million **higher** than forecast expense for public relations.
    - $0.7 million **higher** than forecast expense for computer costs.
    - $0.6 million **higher** than forecast expense for fees, dues, and community contributions.
    - $0.5 million **higher** than forecast expense for vehicles.
    - $0.3 million **higher** than forecast expense for materials and supplies.

    The above cost increases were offset by a $1.3 million **decrease** in misc. corporate charges.
- **Transportation and Storage Expense:** In 2019/20, actual costs were $0.3 million (or about 0.5%) **lower** than the test year forecast. In 2021/22, there was no difference between actual and forecast costs.

[27] 2nd Round Information Request 1 (c)(iii) 2022 Commodity and Delivery Service Rate Application.
[28] 2nd Round Information Request 1 (c)(iii) 2022 Commodity and Delivery Service Rate Application.

- **Depreciation Expense:** In 2019/20, overall depreciation expense was $1.7 million (or 3.5%) **lower** than the test year forecast. In 2021/22, actual depreciation expense was $1.2 million (or 2.3%) **higher** than forecast.
- **Tax Expense:** In 2019/20, actual costs were $0.4 million (or 5.9%) **lower** than the test year forecast. In 2021/22, actual costs were $0.2 million (or 2.9%) **higher** than forecast.
- **Interest Expense:** In 2019/20, actual interest expense was $2.8 million (or 8.8%) **lower** than the test year forecast. In 2021/22, actual costs were close to forecast.
- **Net Earnings:** In 2019/20, net earnings was $8.4 million (or 25.2%) **higher** than the test year forecast, resulting in an ROE of 11.2%, which is higher than the 8.3% target. In 2021/22, net earnings was $4.4 million (or 14.5%) **higher** than forecast, resulting in an ROE of 8.5%.
- **Other Revenues:** In 2019/20, actual other revenues were close to the test year forecast. In 2021/22, actual other revenues were $1.3 million (or 3.9%) **higher** than forecast.

Mid-Application Update

On September 29, 2022, SaskEnergy provided the Commodity and Delivery Service 2022 Rate Application Mid-Application Update (Mid-Application Update). The Mid-Application Update compares the July 11, 2022 SaskEnergy Commodity and Delivery Rate Application (the Original Application) submission to "the most recent financial forecast as of September 29, 2022."[29]

Table 3-3 provides a summary comparison of the change in forecast revenue requirement for 2022/23. This indicates the following material variances from the 2022/23 test year forecast:

- $2.1 million (1.3%) **lower** O&M expense;
- $3.1 million (5.6%) **lower** Depreciation expense;
- $7.2 million (23.7%) **higher** Other Revenues;
- $1.0 million (12%) **higher** Tax expense;
- $2.2 million (7%) **higher** Interest expense; and
- $15.1 million (125%) **higher** Net Earnings.

The net impact of these changes results in a materially **higher** overall ROE compared to the forecast provided in the application (increasing from 2.3% to 5.8%).

Further detail is outlined in the sections that follow.

[29] Mid-Application Update, page 4.

Table 3-3: 2022/23 Revenue Requirement Comparison: Original Application vs Mid-Application Update ($000s)[30]

Component	Application	Mid-Application Update	*Change*	*% Change*
Operating & Maintenance Expense	154,962	152,901	(2,061)	*-1.3%*
Transportation and Storage Expense	63,753	63,753	0	*0.0%*
Depreciation Expense	55,207	52,107	(3,100)	*-5.6%*
Tax Expense	8,278	9,267	989	*11.9%*
Interest Expense	29,963	32,128	2,165	*7.2%*
Net Earnings	9,663	24,812	15,149	*156.8%*
Total Delivery Revenue Requirement	**321,826**	**334,968**	**13,142**	***4.1%***
Other Revenue	(30,517)	(37,739)	(7,222)	*23.7%*
Net Delivery Revenue Requirement	**291,309**	**297,229**	***5,920***	***2.0%***

Observations

In each year, SaskEnergy typically commences its business planning process in June, and submits its business plan for Board of Directors Approval in November. From 2015/16 to 2017/18, SaskEnergy was directed by its shareholder to apply restraint measures to reduce budgeted expenditures in order to meet specified financial targets.[31] SaskEnergy indicates that no restraint measures have been applied since 2019/20; and no restraint measures are expected for the 2022/23 to 2024/25 period.[32]

SaskEnergy notes the following operation cost savings and vacancy management savings implemented in recent years:[33]

- **Operating Cost Management** – SaskEnergy realized $6.0 million in savings from operating cost management in 2020/21 and $2.8 million in savings in 2021/22. 2022/23 Q1 actuals indicate $1.5 million in savings are expected in 2022/23.
- **Vacancy Management** – SaskEnergy realised $4.4 million in savings from vacancy management in 2020/21 and $3.3 million in savings in 2021/22. 2022/23 Q1 Actuals indicate that $2.1 million in vacancy management savings are expected.

The information provided by SaskEnergy also shows that in recent prior rate proceedings components of the revenue requirement, such as O&M, depreciation expense, and interest expense, have been consistently lower than forecast, while other components such at net earnings and other revenue

[30] Prepared based on Mid-Application Update filed on September 29, 2022.
[31] 2nd Round Information Request 1 (e) (i), 2018 Commodity and Delivery Service Rate Application and 2nd Round Information Request 21 (b) (i), 2022 Commodity and Delivery Service Rate Application.
[32] 2nd Round Information Request 21(b).
[33] 1st Round Information Request 25 (e) (i) and (ii) and 2nd Round Information Request 21 b (i) and (ii) from the 2022 Commodity and Delivery Service Rate Application.

have been consistently higher than forecast. The Mid-Application Update indicates that this pattern is expected to continue for the 2022/23 test year, with material changes noted in depreciation, O&M, net earnings and other revenues resulting in an overall higher ROE compared to Original Application forecast.

3.1 OPERATING & MAINTENANCE EXPENSE

SaskEnergy's O&M expense includes labour costs, external services, materials and supplies, vehicles, travel, public relations, and other costs. These costs are partially offset through charges to capital, external recoveries, internal recoveries, and intercompany allocations to calculate the O&M expense included in the revenue requirement.

Year over year changes in operating and maintenance expense are summarized in Table 3-4 which indicates:

- The 2021/22 forecast was materially lower than the 2020/21 forecast ($12.5 million, or 8.8%, lower).
- The 2022/23 test year O&M expense forecast is $22.4 million (16.9%) higher than the 2021/22 actuals.
- Further year over year increases in O&M are forecast for the 2023/24 test year ($2.3 million, or 1.5%, higher), and the 2024/25 test year ($3.4 million, or 2.2%, higher).

Table 3-4: SaskEnergy Distribution Division Operating and Maintenance Expense ($Millions)[34]

	Fiscal Year [Apr 1 to March 31]													
						2022/23			2023/24			2024/25		
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23 Test Year		Test Year Current Application	Change over 2023/24 Test Year	
Component	*($ Millions)*					($ Millions)	*($ Millions)*	*(%)*	($ Millions)	*($ Millions)*	*(%)*	($ Millions)	*($ Millions)*	*(%)*
Operations Costs Incurred	141.1	134.8	145.8	135.5	132.8	157.5	*22.0*	*16.2%*	159.7	*2.3*	*1.4%*	163.2	*3.4*	*2.1%*
Capitalized and Recovered	(8.0)	(6.1)	(6.7)	(5.8)	(5.7)	(5.8)	< 0.1	*0.7%*	(5.9)	< 0.1	*1.7%*	(6.0)	*(0.1)*	*1.7%*
Subtotal Operations	133.1	128.7	139.1	129.8	127.1	151.7	*21.9*	*16.9%*	153.8	*2.2*	*1.4%*	157.2	*3.3*	*2.2%*
Engineering Costs Incurred	31.3	32.4	32.4	37.3	36.7	36.6	*(0.7)*	*(1.9%)*	37.5	*0.8*	*2.2%*	38.2	*0.8*	*2.1%*
Capitalized and Recovered	(28.2)	(29.5)	(29.4)	(34.6)	(34.3)	(33.4)	*1.2*	*(3.6%)*	(34.0)	*(0.7)*	*2.0%*	(34.7)	*(0.7)*	*2.0%*
Subtotal Engineering	3.1	2.9	2.9	2.8	2.4	3.3	*0.5*	*19.4%*	3.4	*0.1*	*4.4%*	3.5	*0.1*	*2.8%*
Total	**136.2**	**131.6**	**142.0**	**132.5**	**129.5**	**155.0**	***22.4***	***16.9%***	**157.3**	***2.3***	***1.5%***	**160.7**	***3.4***	***2.2%***
Annual Change in Forecasts			5.8		(12.5)									
Annual Change, %			4.3%		*(8.8%)*									
Actuals vs Forecast			10.4		(3.0)									
Change, %			7.9%		*(2.2%)*									

* Table 3-4 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[34] 1st Round Information Request Revised Responses (09/09) updating Schedule 1.2 of the 2022 Commodity and Delivery Service Rate Application to include 2021-22 actuals.

Changes in O&M expense on an average per customer basis are summarized in Table 3-5.

- Forecast average O&M cost per customer decreases by 9.1% ($32.30 decrease) from 2020/21 to 2021/22 and then increases by 18.7% in the 2022/23 test year forecast ($60.30 increase).
- Further increases in average O&M cost per customers are forecast in 2023/24 (0.8%, or $3.20, over 2022/23) and 2024/25 (1.6%, or $6.00, over 2023/24).
- Actual average O&M costs per customer were lower than forecasts for both 2019/20 and 2020/21 ($11.00 and $27.20, respectively) due to actual O&M being lower than forecast in each year. Actual average O&M costs per customer were higher than forecast for 2021/22 ($5.00) due to actual O&M being higher than forecast.

Table 3-6 summarizes O&M costs by category from 2019-20 through 2024-25. Notable year-over-year changes include:

- There is a notable increase in **Labour** expense in the 2022/23 test year forecast compared to 2021/22 actuals [5.9% increase, or $6.4 million], and further increases in the 2023/24 test year forecast [2.9% increase, or $3.3 million] and the 2024/25 test year forecast [3.0%, or $3.6 million]. Details of these cost increases are reviewed in Section 3.1.1.
- **External Services** increase materially from the 2021/22 actuals to the 2022/23 test year forecast [10.6% increase, or $3.7 million]. There is a slight decrease of $0.4 million (or 1.0%) in 2023/24; and little change in the forecast [increase of $0.02 million] for the 2024/25 test year. Details underlying changes in cost are provided in Section 3.1.2.
- The **Public Relations** expense forecast for the 2022/23 test year is about $3.5 million higher (or 67.9%) compared to the 2021/22 actuals. SaskEnergy attributes the primary driver of the increase to the increase in energy efficiency programs and awareness since 2020/21 actuals ($4.1 million, or 101% increase).[35] Specific changes related to Communication, Public Relations, Fees, Dues and Community Contributions are reviewed in further detail in Section 3.1.3.
- SaskEnergy forecasts an increase in **Computer** costs of $2.1 million (or 27.9%) in 2022/23 over the 2021/22 actuals, and a further increase of $0.4 million (or 4.5%) for both 2023/24 and 2024/25. SaskEnergy notes the increase in the 2022/23 forecast compared to the 2020/21 actuals "is attributable to software lease and maintenance costs".[36]
- There is a $0.7 million (or 24.1%) increase in **Internal Recoveries** in the 2022/23 test year compared to the 2021/22 actuals. For the 2023/24 and 2024/25 test years, there is a slight increase of 1.1% for both years.
- **Materials and Supplies** increases by $0.4 million (or 3.8%) in the 2022/23 test year compared to the 2021/22 forecast [only 1% change from 2021/22 actuals].

[35] Tab 11, page 6 and 1st Round Information Request 2 (k), 2022 Commodity and Delivery Service Rate Application.
[36] 1st Round Information Request 2 (h), 2022 Commodity and Delivery Service Rate Application.

Table 3-5: Operating & Maintenance Cost per Average Number of Customer[37]

	Fiscal Year [Apr 1 to March 31]														
							2022/23			2023/24			2024/25		
	2019/20 Actual	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2021/22	
OM&A Expense ($OOO's)	131,062	136,229	131,603	142,045	132,513	129,542	154,962	22,449	16.9%	157,268	2,306	1.5%	160,691	3,423	2.2%
Avg. Number of Customers	399,826	402,069	402,827	401,405	405,672	402,791	405,791	119	0.0%	408,457	2,666	0.7%	410,957	2,500	0.6%
O&M per Customer ($/Customer)	**327.8**	**338.8**	**326.7**	**353.9**	**326.7**	**321.6**	**381.9**	**55.2**	**16.9%**	**385.0**	**3.2**	**0.8%**	**391.0**	**6.0**	**1.6%**
Annual Change in Forecast				15.0		(32.3)									
Annual Change, %				4.4%		(9.1%)									
Actuals vs Forecast		11.0		27.2		(5.0)									
Change, %		3.4%		8.3%		(1.5%)									

* Table 3-5 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[37] 2nd Round Information Request 1 (c) (iii) of the 2022 Commodity and Delivery Service Request.

Table 3-6: Operating & Maintenance Costs by Category ($Millions)[38]

	Fiscal Year [April 1 to March 31]															
						2022/23					2023/24			2024/25		
	2019-20 Forecast	2020-21 Actual	2020-21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24	
Component	$ Millions					$ Millions	*($ Millions)*	*(%)*	*($ Millions)*	*(%)*	$ Millions	*($ Millions)*	*(%)*	$ Millions	*($ Millions)*	*(%)*
Labour*	101.0	101.2	105.5	108.1	108.0	114.4	13.5	13.3%	6.4	*5.9%*	117.7	3.3	*2.9%*	121.3	3.6	*3.0%*
Pension Costs*	0.2	0.1	0.2	0.1	0.2	0.2	(0.0)	(1.4%)	0.1	*184.9%*	0.2	< 0.1	*5.3%*	0.2	< 0.1	*5.0%*
Charges to Capital	(29.5)	(29.2)	(30.9)	(32.5)	(32.1)	(31.3)	(1.7)	5.9%	1.3	*(3.9%)*	(31.9)	-0.6	*2.1%*	(32.6)	(0.7)	*2.0%*
External Services*	44.1	35.3	43.3	34.9	33.8	38.6	(5.5)	(12.5%)	3.7	*10.6%*	38.2	(0.4)	*(1.0%)*	38.2	< 0.1	*0.0%*
External Recoveries	(3.6)	(3.8)	(1.8)	(5.0)	(5.1)	(4.4)	(0.8)	22.5%	0.6	*(12.4%)*	(4.5)	< 0.1	*2.0%*	(4.6)	< 0.1	*2.0%*
Internal Recoveries	(3.0)	(2.6)	(3.4)	(2.8)	(2.8)	(3.5)	(0.5)	16.4%	(0.7)	*24.1%*	(3.6)	< 0.1	*1.1%*	(3.6)	< 0.1	*1.1%*
Materials and Supplies	8.1	9.0	8.3	9.3	9.0	9.3	1.2	15.1%	< 0 .1	*0.9%*	9.3	0.0	*0.0%*	9.3	0.0	*0.0%*
Energy Costs	0.8	0.8	0.8	0.7	0.7	0.8	(0.0)	(0.6%)	0.1	*17.1%*	0.8	0.0	*0.0%*	0.8	0.0	*0.0%*
Vehicles	8.0	8.4	7.6	9.8	9.3	9.4	1.4	17.1%	(0.4)	*(3.7%)*	9.8	0.4	*4.0%*	10.1	0.3	*3.0%*
Property Costs	4.1	6.0	4.6	5.2	4.9	5.5	1.4	34.5%	0.3	*6.7%*	5.5	0.0	*0.0%*	5.5	0.0	*0.0%*
Computer Costs	6.3	6.8	8.1	7.4	6.7	9.4	3.1	50.0%	2.1	*27.9%*	9.9	0.4	*4.5%*	10.3	0.4	*4.5%*
Sustenance and Transportation	4.0	2.9	3.9	3.1	3.2	3.9	(0.1)	(1.3%)	0.9	*29.2%*	3.9	< 0.1	*(2.0%)*	3.8	< 0.1	*(2.0%)*
Communication	2.3	2.1	2.7	2.9	2.6	3.1	0.7	32.1%	0.2	*7.5%*	3.1	0.0	*0.0%*	3.1	0.0	*0.0%*
Public Relations	3.3	4.3	4.3	5.1	4.3	8.6	5.3	160.6%	3.5	*67.9%*	8.6	0.0	*0.0%*	8.6	0.0	*0.0%*
Fees, Dues and Community Contributions*	2.3	1.7	2.4	2.6	2.0	2.5	0.1	6.1%	< 0 .1	*(3.5%)*	2.5	0.0	*0.0%*	2.5	0.0	*0.0%*
Misc Corporate Charges	3.5	4.6	5.1	2.2	3.5	6.6	3.1	89.6%	4.4	*197.2%*	6.6	< 0.1	*(0.2%)*	7.1	0.5	*7.4%*
Intercompany Allocations	(15.8)	(15.8)	(18.6)	(18.3)	(18.6)	(18.4)	(2.6)	16.4%	< 0 .1	*0.4%*	(18.9)	(0.5)	*3.0%*	(19.5)	(0.6)	*2.9%*
Total	**136.2**	**131.6**	**142.0**	**132.5**	**129.5**	**155.0**	**18.7**	**13.8%**	***22.4***	***16.9%***	**157.3**	***2.3***	***1.5%***	**160.7**	***3.4***	***2.2%***

* Table 3-6 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[38] 2nd Round Information Request 1 (c) (iii) of the 2022 Commodity and Delivery Service Rate Application.

Mid-Application Update

The Mid-Application Update shows that O&M expense decreases by about $2.1 million (or 1.3%) compared to the Original Application. Table 3-7 below summarizes changes in O&M expense between the Original Application and the Mid-Application Update.

Table 3-7: 2022-23 Forecast Operation and Maintenance Cost Comparison: Original Filing vs Mid-Application Update ($000s)[39]

	Original Application	Mid-Application Update	*Change*	*Change %*
Operations Costs Incurred	157,476	154,165	(3,311)	*(2.1%)*
Capitalized and Recovered	(5,800)	(4,397)	1,403	*(24.2%)*
Subtotal Operations	151,676	149,768	(1,908)	*(1.3%)*
Engineering Costs Incurred	36,640	38,108	1,468	*4.0%*
Capitalized and Recovered	(33,354)	(34,975)	(1,621)	*4.9%*
Subtotal Engineering	3,286	3,133	(153)	*(4.7%)*
Total	**154,962**	**152,901**	**(2,061)**	***(1.3%)***

SaskEnergy notes that higher than anticipated employee turnover has lowered labour costs mainly driven by bid lag. This is expected to be partially offset by higher vehicle costs due to higher than anticipated fuel prices.[40]

Observations

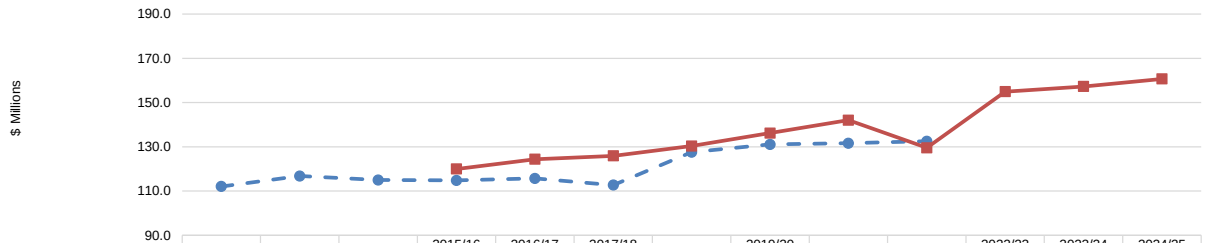
Forecast total O&M expense for the 2022/23 test year is about 19.6% higher than the 2021/22 forecast. As illustrated in Figure 3-2, actuals for 2015-16 through 2020-21 were consistently lower than forecast. 2021/22 actuals were slightly higher than forecast. The following is noted:

- 2015/16 actual O&M expense was $5.2 million (4.3%) **lower** than the test year forecast;
- 2016/17 actual O&M expense was $8.7 million (7.0%) **lower** than the test year forecast;
- 2017/18 actual O&M expense was $13.2 million (10.5%) **lower** than the test year forecast;
- 2018/19 actual O&M expense was $2.8 million (2.2%) **lower** than the forecast;
- 2019/20 actual O&M expense was $5.2 million (3.8%) **lower** than the test year forecast;

[39] Prepared based on Mid-Application Update filed on September 29, 2022.
[40] 2022 Mid-Application Update, page 2.

- 2020/21 actual O&M expense was $10.4 million (7.4%) **lower** than the forecast; and
- 2021/22 actual O&M expense was $3.0 million (2.3%) **higher** than the forecast.

Figure 3-2: Operation and Maintenance Cost Forecasts Compared to Actuals, 2013 to 2024/25 ($Millions)[41]



	2013	2014	2015	2015/16 Test Year	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Actuals	112.1	116.8	115.0	114.8	115.7	112.7	127.6	131.1	131.6	132.5			
Forecast				120.0	124.4	125.9	130.4	136.2	142.0	129.5	155.0	157.3	160.7
Over/Under Forecast				(4.3%)	(7.0%)	(10.5%)	(2.2%)	(3.8%)	(7.4%)	2.3%			
Actual - Forecast				(5.2)	(8.7)	(13.2)	(2.8)	(5.2)	(10.4)	3.0			

The Mid-Application Update indicates that for 2022/23 O&M expense is expected to be materially below the forecast in the Original Application (Table 3-7 indicates a $2.1 million change from forecast). Prior reviews have indicated material concern with an ongoing pattern of actual O&M results being consistently below forecasts. This concern is heightened in an environment where SaskEnergy customers are facing significant delivery and commodity rate increases, at a time of economic uncertainty.

Other specific observations are provided in the sections that follow.

Recommendations

Given the pattern of actual O&M results being consistently below forecasts, it is recommended that SaskEnergy provide updated O&M forecasts to the Panel for its review prior to the panel recommending implementation of any further proposed rate increases.

3.1.1 Labour Costs

Labour costs represent the largest portion of SaskEnergy's O&M expense (about 74% of total O&M expense for the 2022/23 test year). Actuals for the period from 2017/18 to 2020/21 show total Distribution Division full-time equivalent (FTE) positions range from 810 in 2017/18 to 862 in 2020/21. For the 2022/23 fiscal year SaskEnergy is forecasting an increase in FTEs to 902, which is 10 FTEs higher than the 2021/22 actuals (892). SaskEnergy is forecasting no further increases in FTEs for the 2023/24 and 2024/25 test years.

[41] The 2015/16 Test Year is from the 2015 Commodity and Delivery Service Rate Application, the 2016/17 Test year forecast is from the 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from the 2017 Delivery Service Rate Application, 2013 to 2016/17 actuals and the 2019/20 Test Year are from the 2018 Commodity and Delivery Service Rate Application, and 2017/18 to 2021/22 actuals and forecasts from 2020/21 to 2024/25 are from the Revised (09/09) 2022 Commodity and Delivery Service Rate Application Schedules.

Approximately 72% of SaskEnergy's workforce are in-scope employees and members of Unifor Local 649. SaskEnergy notes the current Collective Bargaining Agreement is in effect until January 31, 2023 and that forecasts of economic increases for out-of-scope employees are prepared in accordance with CIC guidelines for Crown sector management employees.[42]

Forecast labour costs included in the revenue requirement reflect base salaries, overtime, standby pay and other labour cost drivers and are influenced by the proportion of positions and costs that are capitalized, allocated to other business units, or vacant. Table 3-8 summarizes total and net labour actual costs for 2019/20 through 2024/25, and indicates the following material year over year changes in Labour expense forecasts:

- **Comparison of 2019/20 and 2022/23 Test Year Forecasts –** Net labour costs in the 2022/23 test year forecast are about $13.5 million (or 13.3%) higher than the 2019/20 test year forecast. Higher forecast expenses compared to 2019/20 mostly relate to higher base labour costs.
- **Comparison of 2022/23 Test Year Forecast and 2021/22 Actuals –** There is a material increase in forecast net labour costs in 2022/23 compared to the 2021/22 actuals, of $6.4 million (or 5.9%) mainly due to forecast base labour cost increases (partially offset by a $0.9 million decrease to overtime).
- **Comparison of 2022/23, 2023/24, and 2024/25 Test Year Forecasts –** There is a further $3.3 million (or 2.9%) increase in forecast 2023/24 net labour costs over the 2022/23 forecast; and a $3.6 million (or 3.0%) increase in the 2024/25 forecast over the 2023/24 forecast. Both increases are mainly due to forecast base labour cost increases.

The following is noted regarding changes in labour cost components:

- **Base Labour Costs**: Base labour costs are about 88% of forecast net labour costs in 2022/23. The forecast for the 2022/23 test year is about $12.4 million (14.0%) higher than the 2019/20 test year forecast and about $7.4 million (7.9%) higher than 2021-22 actuals.
    - **Increase in Average Base Labour Cost:** Table 3-9 shows the forecast average base labour cost per FTE increases by about 7.7% in the 2022/23 test year compared to the 2019/20 test year (and by about 6.7% compared to 2021/22 actuals).

      The increase in average base labour cost per FTE represents about $6.8 million (55%) out of the $12.4 million forecast base labour increases from 2019/20 to 2022/23[43] and about $6.3 million (85%) of the forecast base labour increases over 2021/22 actuals.[44] SaskEnergy notes that while contractor conversion to full time equivalents generates overall net savings for SaskEnergy as the cost per contractor is greater than the cost per full time equivalent[45] it increases the average base labour cost as the average labour cost per FTE for contractor conversion is higher than the average labour cost. Since 2019/20,

[42] Page 13, 2022 Commodity and Delivery Service Rate Application.
[43] 2019/20 test year FTEs at 852 times the increase in base labour cost of $7,963/FTE=$6.8 million/$12.4 million.
[44] 2021/22 actual FTEs at 892 times the increase in base labour cost of $7,032/FTE=$6.3 million/$7.4 million.
[45] 1st Round Information Request 3 (j), 2018 Commodity and Delivery Service Rate Application.

SaskEnergy has converted 18 contractors which has resulted in a net impact of $527,000 in savings (or $31,000 per conversion).[46]

- **Increase in Number of FTEs:** The remaining increases in 2022/23 are due to increases in the number of FTEs. 2022/23 test year FTEs are forecast at 902, which is higher than the 2019/20 test year forecast (852 FTEs) and 2021/22 actuals (892 FTEs). The increase in FTEs reflect contractor conversions, filling vacancies and adding new positions.[47]

- **Overtime:** Overtime costs are the second largest component of net labour costs (7.3% of net labour costs for the 2022/23 test year). 2022/23 forecast overtime costs are $0.8 million (10.3%) higher than 2019/20 forecasts but $0.9 million (9.9%) lower than 2021/22 actuals. SaskEnergy noted a higher number of actual overtime hours in 2021/22 compared to the prior year, primarily related to safety service. SaskEnergy's forecast of overtime hours for 2022/23 is lower than 2021/22 actuals.[48]

[46] 2nd Round Information Request 3 (c) (iv) (ii), 2022 Commodity and Delivery Service Rate Application
[47] 1st Round Information Request 3 (a), 2022 Commodity and Delivery Service Rate Application.
[48] 1st Round Information Request 3 (j), 2022 Commodity and Delivery Service Rate Application.

Table 3-8: Net Labour Costs ($Millions)[49]

	Fiscal Year [Apr 1 to March 31]														
						2022/23					2023/24			2024/25		
	2019-20 Forecast	2020-21 Actual	2020-21 Forecast	2021-22 Actual	2021-22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24	
Components	$ Millions					(Millions)	*(Millions)*	*(%)*	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*
Total Gross Labour	**101.9**	**101.2**	**107.4**	**108.1**	**109.3**	**121.2**	**19.3**	**18.9%**	**13.1**	**12.1%**	**124.6**	**3.4**	**2.8%**	**128.3**	**3.7**	**3.0%**
Less: Vacancy Adjustment	0.9		1.8		1.3	6.7	5.8	626.2%	6.7		6.9	0.1	2.1%	7.0	0.1	1.7%
Total Net Labour Costs	**101.0**	**101.2**	**105.5**	**108.1**	**108.0**	**114.4**	**13.5**	**13.3%**	**13.1**	**5.9%**	**117.7**	**3.3**	**2.9%**	**121.3**	3.6	3.0%
Base Labour Costs	88.3	87.5	92.9	93.3	93.8	100.7	12.4	14.0%	7.4	7.9%	103.7	3.0	3.0%	106.9	3.3	3.2%
Overtime	7.6	7.9	7.7	9.3	8.9	8.4	0.8	10.3%	(0.9)	(9.9%)	8.5	0.2	2.0%	8.7	0.2	2.0%
Substitution	0.4	0.4	0.4	0.4	0.4	0.3	< 0.1	(15.3%)	< 0.1	(16.6%)	0.3	< 0.1	2.1%	0.3	< 0.1	1.8%
Holiday Extra Item/Vacation Pay	1.5	2.1	1.4	1.8	1.6	1.6	0.1	7.5%	-0.2	(8.7%)	1.6	< 0.1	2.1%	1.7	< 0.1	2.2%
Premiums	0.1	0.1	0.1	0.1	0.1	0.1	< 0.1	(14.4%)	< 0.1	(12.2%)	0.1	< 0.1	2.0%	0.1	< 0.1	1.9%
Stand by	2.5	2.4	2.4	2.4	2.4	2.5	< 0.1	3.0%	0.1	4.5%	2.6	< 0.1	2.0%	2.6	< 0.1	2.0%
Inconvenience Pay/Shift Differential	0.6	0.8	0.7	0.8	0.8	0.8	0.2	27.7%	< 0.1	2.8%	0.8	< 0.1	4.0%	0.9	< 0.1	4.0%
Total Net Labour Costs	**101.0**	**101.2**	**105.5**	**108.1**	**108.0**	**114.4**	**13.5**	**13.3%**	**6.4**	**5.9%**	**117.7**	**3.3**	**2.9%**	**121.3**	**3.6**	**3.0%**
Annual Change in Forecast			4.6		2.5											
Annual Change %			4.5%		2.3%											
Actuals vs Forecast			4.4		0.1											
Change, %			4.3%		0.0%											

* Table 3-8 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[49] Based on Tab 10, page 3, of the 2022 Commodity and Delivery Service Rate Application and 2nd Round Information Request 3 (e) (ii) of the 2022 Commodity and Delivery Service Rate Application.

Table 3-9: Average Labour Costs per Full Time Equivalent[50]

	Fiscal Year [Apr 1 to March 31]															
						2022/23					2023/24			2024/25		
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24	
								(%)		(%)			(%)			(%)
Base Labour Costs ($000s)	88,294	87,457	92,868	93,306	93,820	100,685	*12,391*	*14.0%*	*7,379*	*7.9%*	103,659	*2,974*	*3.0%*	106,936	*3,277*	*3.2%*
Total Net Labour Costs ($000s)	100,965	101,191	105,545	108,066	108,014	114,424	*13,459*	*13.3%*	*6,358*	*5.9%*	117,693	*3,269*	*2.9%*	121,273	*3,580*	*3.0%*
Full-Time Equivalents	852	862	871	892	887	902	*50*	*5.9%*	*10*	*1.1%*	902	-	*0.0%*	902	-	*0.0%*
Avg Base Labour / FTE ($/FTE)	103,686	101,422	106,636	104,617	105,832	111,649	*7,963*	*7.7%*	*7,032*	*6.7%*	114,947	*3,298*	*3.0%*	118,580	*3,633*	*3.2%*
Avg Net Labour / FTE ($/FTE)	118,566	117,349	121,192	121,166	121,843	126,884	*8,318*	*7.0%*	*5,718*	*4.7%*	130,509	*3,625*	*2.9%*	134,479	*3,970*	*3.0%*
Annual Change in Forecast			2,626		651											
Annual Change, %			2.2%		0.5%											
Actuals vs Forecast			3,843		677											
Change, %			3.3%		0.6%											

* Table 3-9 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[50] 2nd Round Information Request 3 (a) (ii) of the 2022 Commodity and Delivery Service Rate Application.

SaskEnergy notes that the increase of 40 FTEs in the 2022/23 test year over the 2020/21 actuals is attributable to a combination of filling vacant positions and adding new positions. Overall, these changes result in increases in labour costs of $4.9 million when comparing 2020/21 actuals to the 2022/23 forecast.[51] SaskEnergy identified the three major drivers for the increase in FTEs to be in Customer Service Operations; Infrastructure Delivery and Reliability; and the Chief Information Officer and Enterprise Security Program. SaskEnergy notes additional internal resources in construction staff will result into cost savings of approximately $3.6 million in 2021/22 through 2022/23.[52]

The increases in FTEs for 2019/20 through 2024/25 are summarized in Table 3-10. Forecast Total FTEs have increased annually from 2019/20 (897 FTEs) to 2021/22 (991 FTEs) but are forecast to decrease by 1% (or 9 FTEs) from 2021/22 to 2022/23. Some of the notable net changes in FTEs are as follows:[53]

- **2020/21 over 2019/20 -** SaskEnergy reported 11 additions to the Executive VP and Chief Information Officer division, including 1 deletion (net of 10), with 4 of the 11 additions being contractor conversions and reporting 20 vacancies out of the 62 total. SaskEnergy also reported 7 net additions in both the Executive VP, Customer Service Operations and Executive VP, Infrastructure Delivery & Reliability divisions, with 33 and 12 vacancies, respectively.
- **2021/22 over 2020/21 -** SaskEnergy reported 5 net additions to the Executive VP and Chief Information Officer division and 4 net additions for the Executive VP, Infrastructure Delivery & Reliability division, with 25 and 8 vacancies, respectively.
- **2022/23 over 2021/22 -** SaskEnergy reported 6 additions to the Executive VP and Chief Information Officer division, including 7 deletions (net of -1), with 5 of the 6 additions being contractor conversions and reporting 20 vacancies out of the 66 total. SaskEnergy also reported -4 net additions in the Executive VP, Customer Service Operations (with 4 out of 10 additions being contractor conversions) division and 21 net additions in the Executive VP, Infrastructure Delivery & Reliability (with 19 of the 22 additions being contractor conversions) division, with 45 and 26 vacancies, respectively.

[51] 1st Round Information Request 2 (g).
[52] 1st Round Information Request 3 (a).
[53] 2nd Round Information Request 3 (b) (iv).

Table 3-10: Annual Changes in FTEs from 2019/20 to 2024/25[54]

	Fiscal Year [Apr 1 to March 31]												
						Test Years			2022/23				
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual	
											(%)		*(%)*
President and CEO	13	13	13	13	13	13	13	13	13	0	0.0%	0	0.0%
Executive VP, Customer Service Operations	510	517	517	530	530	531	531	531	531	21	4.1%	1	0.2%
Executive VP, Corporate Planning	14	13	13	15	15	16	16	16	16	2	14.3%	1	6.7%
Executive VP, Infrastructure Delivery & Reliability	159	169	169	200	200	202	202	202	202	43	27.0%	2	1.0%
Executive VP and Chief Information Officer	52	62	62	74	74	66	66	66	66	14	26.9%	(8)	(10.8%)
Executive VP and Chief Financial Officer	93	95	95	93	93	86	86	86	86	(7)	(7.5%)	(7)	(7.5%)
Executive VP, Stakeholder Engagement, Chief Legal Officer & Corporate Secretary	26	27	27	34	34	37	37	37	37	11	42.3%	3	8.8%
Executive VP, Human Resources & Safety	30	30	30	32	32	31	31	31	31	1	3.3%	(1)	(3.1%)
Total	**897**	**926**	**926**	**991**	**991**	**982**	**982**	**982**	**982**	**85**	**9.5%**	**(9)**	**(0.9%)**
Annual Change in Forecast			29		65	9							
Annual Change %			3.2%		7.0%	(0.9%)							

* Table 3-10 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[54] 2nd Round Information Request 3 (b) (iv) 2022 Commodity and Delivery Service Rate Application.

Table 3-11 shows FTEs adjusted for vacancies. There are 80 FTE vacancies forecast for the 2022/23, 2023/24, and 2024/25 test years (or an 8.2% vacancy rate each year). This is higher than the actual vacancy rate for 2019/20 and 2020/21 (6.8% and 6.9%, respectively) but lower than the actual vacancy rate for 2021/22 (10.0%). FTEs net of vacancies are 902 for the 2022/23, 2023/24, and 2024/25 test year, compared to 836 for 2019/20 actuals and 892 for 2021/22 actuals.

Table 3-12 shows the total labour costs that are capitalized in each year. Labour capitalization is relatively consistent for 2020/21 and 2021/22 actuals and 2022/23 through 2024/25 forecasts.

Table 3-11: Full-Time Equivalent Vacancies from 2018/19 to 2024/25[55]

	Fiscal Year [Apr 1 to March 31]								Test Years		
	2018/19 Actual	2018/19 Forecast	2019/20 Actual	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast
Full Time Equivalents (FTEs)	868	868	897	897	926	926	991	991	982	982	982
Vacant FTEs	55	40	61	45	64	55	99	105	80	80	80
Calculated Vacancy Rate	6.4%	4.6%	6.8%	5.0%	6.9%	5.9%	10.0%	10.5%	8.2%	8.2%	8.2%
Annual Change in Forecast Vacant FTEs				5		10		50	(25)		
Annual Change, %				12.5%		22.2%		90.9%	(23.8%)		
Actuals vs Forecast Vacant FTEs		(15)		(16)		(9)		6			
Change, %		(27.3%)		(26.2%)		(14.1%)		6.1%			

* Table 3-11 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

Table 3-12: Labour Capitalization from 2019/20 to 2024/25 ($Millions)[56]

	Fiscal Year [Apr 1 to March 31]														
						2022/23					2023/24			2024/25		
	2019-20 Forecast	2020-21 Actual	2020-21 Forecast	2021-22 Actual	2021-22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24	
Components	$ Millions					(Millions)	*(Millions)*	*(%)*	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*
Total Net Labour Costs	**101.0**	**101.2**	**105.5**	**108.1**	**108.0**	114.4	13.5	13.3%	6.4	5.9%	117.7	3.3	2.9%	121.3	3.6	3.0%
Vacancy Adjustment	0.9		1.8		1.3	6.7	5.8	626.2%	6.7		6.9	0.1	2.1%	7.0	0.1	1.7%
Total Gross Labour	**101.9**	**101.2**	**107.4**	**108.1**	**109.3**	**121.2**	**19.3**	**18.9%**	**13.1**	**12.1%**	**124.6**	**3.4**	**2.8%**	**128.3**	**3.7**	**3.0%**
Capitalization	(20.8)	(22.5)	(22.4)	(25.7)	(24.3)	(23.2)	(2.3)	11.3%	2.5	(9.9%)	(23.5)	(0.4)	1.5%	(24.0)	(0.4)	1.9%
Total Labour (net) of Vacancy and Capitalization	**81.0**	**78.7**	**85.0**	**82.3**	**85.1**	**98.0**	**16.9**	**20.9%**	**15.6**	**19.0%**	**101.0**	**3.1**	**3.1%**	**104.3**	3.3	3.2%

* Table 3-12 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[55] 2nd Round Information Request 1 (c) (ii) 2022 Commodity and Delivery Service Rate Application.
[56] Based on Tab 10, Page 2, of the 2022 Commodity and Delivery Service Rate Application and 2nd Round Information Request 3 (e) (ii) of the 2022 Commodity and Delivery Service Rate Application.

Observations

The increase in base and net labour costs reflect an increase in the average labour cost per FTE and in the number of FTEs. While contractor conversions to full time equivalents can generate overall net savings for SaskEnergy (as the cost per contractor is greater than the cost per full time equivalent) it increases the average base labour cost as the average labour cost per FTE for contractor conversion is higher than the average labour cost. Further detail regarding the impact of contractor conversions on External Services is provided in Section 3.1.2.

3.1.2 External Services

Table 3-6 shows that External Services expense is forecast to be substantially lower in the 2022/23 test year forecast compared to the 2019/20 test year forecast ($38.6 million compared to $44.1 million). However, SaskEnergy is forecasting External Services to increase by $3.7 million (14%) in the 2022/23 test year forecast over 2021/22 actuals. External Services expense is forecast to decrease slightly in 2023/24 compared to 2022/23 ($0.4 million or 1%) and remain flat in 2024/25 compared to 2023/24. SaskEnergy notes that in response to the collapse in global oil prices, along with the COVID-19 pandemic, it reorganized its resources to focus on essential core work and executed contractor conversions to realize savings.[57]

The following are noted regarding key drivers for changes in external services expense:

- **Contract Services:** Forecast expense in this category was $32.653 million and $32.561 million in 2019/20 and 2020/21 before declining to $25.988 in 2021/22. Costs are forecast to increase by $0.880 million (to $26.868 million) in 2022/23, with only minor variances over the subsequent test years. Actual contract services costs averaged about $27.390 over the three year period from 2019/20 to 2021/22, i.e., test year forecasts are slightly lower than the average for the past three years' actual results.[58]

  Increases in the following contract service cost areas contribute to overall External Services expense increases in the test period (combined costs in these areas make up over 80% of total Contract Services costs):[59]

  - **AMS/Hosting** ($2.0 million increase in 2022/23 test year over 2021/22 actuals) – AMS/Hosting makes up 36-38% of total Contract Services expense over the test period. SaskEnergy is projecting increases in voice services from SaskTel, enterprise architecture program, workstation support, and geographical information systems.

    Between 2018/19 and 2020/21 actual AMS/Hosting costs were consistently below forecast costs with year to year cost variances ranging from actuals being $1.3 million below forecast in 2020/21 to $2.5 million below forecast in 2019/20. SaskEnergy notes variances in 2019/20 relate to the accounting system (OneWorld), records information management, share point, local and wide area networks and video conferences. 2020/21 variances relate

[57] 1st Round Information Request 2 (f).
[58] 2nd Round Information Request 5 (b), 2022 Commodity and Delivery Service Rate Application.
[59] 2nd Round Information Request 5(a) and (b).

to collaborative applications, video conferences, share point, enterprise architecture and records information management.

- **Contract Analysts** ($1.5 million increase in 2022/23 test year over 2021/22 actuals) – Contract Analyst expense makes up 44-46% of total Contract Services expense over the test period. SaskEnergy notes the increase in Contract Analyst costs in the 2022/23 test year relates mainly to increased attention on enterprise security. Planned security improvements in 2022/23 focus on addressing recommendations from the CIC-initiated Crown sector security assessment ($1.2 million increase). The balance of the forecast increase relates to optimizing/maintaining existing application portfolios (including customer and work management systems) to provide for customer convenience and self service ($0.6 million).

The above cost increases to Contract Services costs are partially offset by an overall reduction in the Contracts – General cost category ($2.9 million reduction in 2022/23 compared to 2021/22 actuals) due to reclassification of expenses (see discussion of Routine Maintenance below).

- **Consulting Services:** Forecast expense in this category increased from $4.368 million in 2019/20 to $5.007 million in 2020/21 before declining to $2.670 million in 2021/22. Expenses are forecast to increase by $1.080 million in 2022/23 test year, with only minor reductions in subsequent test years. Actual consulting services costs have declined steadily over the past several years, from $7.764 million in 2018/19 to $4.156 million in 2019/20 to $3.012 million in 2020/21 and $2.403 million in 2021/22. SaskEnergy notes that consulting services were reduced in 2020/21 and 2021/22 mainly due to COVID-19. SaskEnergy intends to normalize consulting services related to legal, audit services and networks and infrastructure consulting services in the 2022/23 test year.[60] This is expected to result in an increase of $1.3 million in the 2022/23 test year compared to the 2021/22 actuals.
- **Routine Maintenance:** Actual Routine Maintenance costs averaged $2.615 million annually over the three year period from 2019/20 to 2021/22 (forecasts over the same period averaged about $2.694 million annually over the same period). Routine maintenance is forecast to almost double in the test years (over 2021/22 actual amounts) – with the 2022/23 forecast increasing by $2.362 million (or 90%) over 2021/22 actuals. Over the test period, forecast routine maintenance expense averages about $4.866 million annually (ranging form $4.982 million in 2022/23 to $4.784 million in 2024/25). SaskEnergy notes the increase in routine maintenance costs for the test years relates to a reclassification of expenses. The costs to contract line locating with Shermco is now reported in Other Contract Services (instead of Contacts – General). Other Contract Services is included in Routine Maintenance expense. Contracts General is included in Contract Services expense.[61]

Observations

2020/21 actual External Services expense decreased by 6% (or $2.2 million) over 2019/20 (actuals); and there was a further 1% (or $0.4 million) decrease in 2021/22 (actuals) over 2020/21 (actuals). This resulted in a 7% (or $2.6 million) decrease in expense over a two-year period. As noted, AMS /Hosting experienced

[60] 2nd Round Information Request 5(b).
[61] 2nd Round Information Request 5(d).

lower actuals than forecast over the period from 2019/20 to 2020/21 (ranging from $1.3 million to $2.5 million below forecast) but was higher than forecast in 2021/22 ($0.2 million higher than forecast).

SaskEnergy is forecasting an increase in expense of 11% (or $3.7 million) for the 2022/23 test year over the 2021/22 (actuals). As noted, the test year increase relates primarily to contract analysts in digital, technology and security ($1.5 million increase over 2021/22 actuals), hosting ($2.0 million increase over 2021/22 actuals), and consulting services ($1.3 million increase over 2021/22 actuals).

Impact of Contractor Conversions

SaskEnergy notes that since 2018/19 there have been 16 contractor conversions applicable to external services expense which have reduced costs in digital, technology and security areas of external services. Contractor conversions related to digital technology and security include the following positions: 8 business process advisors; 2 managers; 2 specialists; 1 analyst; 1 business solutions integrator; 1 solutions and adoption advisor; and 1 project manager. Cost reductions relate mainly to project delivery and enterprise architecture.

SaskEnergy notes that overall, savings in external services expenses since 2018/19 equate to approximately $1.5 million in the distribution division; however, consistent with the 2022/23 corporate plan, mitigating ongoing security threats is a high priority and this impacts external services expense. Thus, while costs savings due to contractor conversions are identified – Contract Analyst costs remain relatively flat year to year.[62]

3.1.3 Communication, Public Relations, Fees, Dues and Community Contributions

SaskEnergy provided information on O&M costs related to communication, public relations, fees, dues and community contributions. These cost areas include general advertising and marketing costs, safety advertising, energy efficiency programming and awareness costs, professional memberships and associations, sponsorships, training and conference registrations and scholarships. Table 3-13 provides a detailed breakdown of actual costs since 2020/21 as well as forecasts from 2019/20 to 2024/25.

- **Comparison of 2021/22 Forecast to 2020/21 Actuals:** Total expenses for the 2021/22 fiscal year were forecast to be $0.8 million (or 9.7%) higher compared to 2020/21 actuals primarily due to forecast increases in spending on training and conferences (57%, or $0.2 million, increase) and business, telephones, cellular and network (28%, or $0.6 million, increase), offset by a reduction in damage claims and other expenses (57%, or $0.1 million, reduction) and energy efficiency programs and awareness (4%, or $0.2 million, reduction).
- **Comparison of 2021/22 Actuals and 2022/23 Test Year Forecast:** Total communication, public relations, fees, dues and community contribution expenses for the 2022/23 test year are forecast to be $14.2 million, which is a $3.6 million (or 34.2%) increase over the 2021/22 actuals.

[62] 2nd Round information requests 5(e).

Cost variances for the 2022/23 test year compared to the 2021/22 actuals relate primarily to the following expense areas:

- A $3.2 million (or 64.8%) **increase** in energy efficiency programs and awareness expense;
- A $0.21 million (or 7.5%) **increase** in business, telephones, cellular and network;
- A $0.18 million (or 345.3%) **increase** in spending on general advertising and marketing; and
- A $0.16 million (or 23.1%) **increase** in training and conferences.

- **Comparison of 2022/23 Test Year Forecast to the 2019/20 Test Year Forecast:** Total communication, public relations, fees, dues and community contribution expenses for the 2022/23 test year forecast were about $6.2 million (or 77.8%) higher compared to the 2019/20 test year primarily due to an increase in energy efficiency programs and awareness (increase of $5.4 million) and business, telephones, cellular and network (increase of $0.8 million).

Table 3-13: Communication, Public Relations, Fees, Dues and Community Contributions ($000s)[63]

	Fiscal Year [April 1 to March 31]													
						2022/23					2023/24		2024/25	
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23	Test Year Current Application	Change over 2023/24
Component			($000's)			($000's)	*($000's)*	*(%)*	*($000's)*	*(%)*	($000's)	*($000's)*	($000's)	*($000's)*
General Advertising and Marketing	273	38	286	53	94	236	(37)	(13.6%)	183	345.3%	236	-	236	-
Safety and Awareness	185	57	199	86	108	151	(34)	(18.4%)	65	75.6%	151	-	151	-
Energy Efficiency Programs and	2,853	4,245	3,767	4,996	4,093	8,235	5,382	188.6%	3,239	64.8%	8,235	-	8,235	-
Professional Membership and Dues	864	819	915	1,114	867	1,015	151	17.5%	(99.0)	(8.9%)	1,015	-	1,015	-
Sponsorships and Donations	463	245	424	578	337	430	(33)	(7.1%)	(148.0)	(25.6%)	430	-	430	-
Scholarships	105	105	105	105	105	105	0	0.0%	-	0.0%	105	-	105	-
Training and Conferences	805	383	882	696	602	857	52	6.5%	161	23.1%	857	-	857	-
Damage Claims and Other	98	173	94	66	74	64	(34)	(34.7%)	(2.0)	(3.0%)	64	-	64	-
Business Telephones, Cellular and Network Services	2,322	2,057	2,668	2,863	2,630	3,077	755	32.5%	214	7.5%	3,077	-	3,077	-
Total	**7,968**	**8,122**	**9,340**	**10,557**	**8,910**	**14,170**	**6,202**	**77.8%**	**3,613**	**34.2%**	**14,170**	**0**	**14,170**	**0**
Annual Change in Forecast			1,218		(430)									
Annual Change %			15.0%		(4.6%)									
Actuals vs Forecast			1,218		(1,647)									
Change, %			15.0%		(15.6%)									

* Table 3-13 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[63] 2nd Round Information Request 1 (c) (iii), 2022 Commodity and Delivery Service Rate Application.

The primary driver of increased spending in this area is an increase in energy efficiency programs and awareness expense. SaskEnergy is forecasting an increase in spending in 2022/23 of $4.1 million compared to 2021/22 forecasts (approximately doubling the spending), but an increase of $3.2 million (or 65%) compared to 2021/22 actuals. SaskEnergy is forecasting to maintain this level of spending in 2023/24 and 2024/25.

SaskEnergy provided information that its energy efficiency spending per capita is the lowest in a survey of provinces. SaskEnergy states it is committed to helping customers make their energy dollars go further and committed to doubling its annual investment to increase the rebates SaskEnergy offers to customers. SaskEnergy indicated it does not anticipate cost savings in other areas of the delivery revenue requirement as a result of the increased energy efficiency spending.[64] SaskEnergy notes that program portfolios in some other jurisdictions have evolved to be increasingly inclusive and reduce barriers to program participation, in some cases as required under provincial legislation or regulations and provides specific examples from British Columbia and Manitoba.[65]

Observations

The notable increase in Communication, Public Relations, Fees, Dues and Community Contributions related costs in the 2022/23 test year compared to 2020/21 actuals and 2021/22 forecasts relates primarily to increased energy efficiency spending. The increased spending of over $4 million per year compared to prior years represents approximately a 1% annual cost increase on the total revenue requirement.

Table 3-14 shows total energy efficiency program and awareness spending per customer for 2019/20 to 2024/25. The actual average cost per customer was $10.54 for 2020/21 and $12.32 for 2021/22 compared to forecasts of $9.38 and $10.16 respectively. Over the test years, spending is forecast to average approximately $20 per customer.

Table 3-14: Total Energy Efficiency Programs and Awareness Average Cost Per Customer[66]

	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast
Total Energy Efficiency Programs and Awareness ($000s)	2,853	4,245	3,767	4,996	4,093	8,235	8,235	8,235
Average # of Customers	402,069	402,827	401,405	405,672	402,791	405,791	408,457	410,957
Total Cost per Customer	7.10	10.54	9.38	12.32	10.16	20.29	20.16	20.04

* Table 3-14 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

Recommendations

The consultant recognizes that SaskEnergy energy efficiency spending per capita is low when compared to other provinces; and that SaskEnergy's current approach to energy efficiency programs is a low overhead approach commensurate with the size of the program portfolio that SaskEnergy has operated. However, in

[64] 1st Round Information Request 4 (a).
[65] 2nd Round Information Request 4 (d).
[66] 2nd Round Information Request 13 (a), 2022 Commodity and Delivery Service Rate Application and Tab 11, page 6.

light of the current economic and cost environment for ratepayers, it is recommended that SaskEnergy in selecting energy efficiency programs, develop measures that will consider rate impacts for customers, and ensure that programs selected provide benefits to SaskEnergy, ratepayers generally, and individual program participants.

3.1.4 Intercompany Allocations

Table 3-6 shows intercompany allocations, included as an offset to the operating and maintenance costs, increase from $15.8 million for the 2019/20 test year forecast to $18.4 million for the 2022/23 test year forecast. Forecasts for 2022/23 are $0.20 million lower than 2021/22 forecasts (of $18.6 million). Over the test period intercompany allocations increase to $18.9 million in 2023/24 and $19.5 million in 2024/25.

The intercompany allocation offset shown in Table 3-6 reflects two outcomes of SaskEnergy's intercompany allocation study:

1. A credit to the distribution division for services provided to TransGas and other subsidiaries; less
2. A share of costs that are budgeted within TransGas but that provide services to the distribution company.

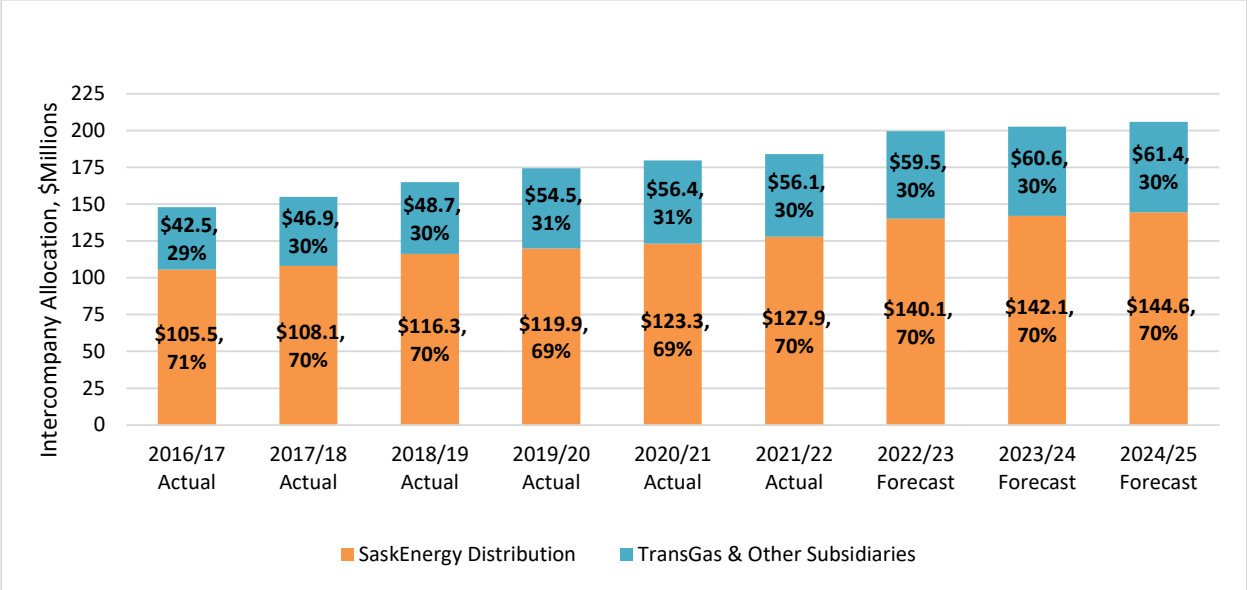
For example, in 2022-23, approximately $23.1 million in divisional OM&A is allocated to TransGas and other subsidiaries[67] offset by $4.8 million in costs budgeted to TransGas and allocated to the distribution company.[68]

SaskEnergy states the manpower budgets for the Distribution Division and TransGas form the basis of the allocation of corporate costs, with 73% of costs to the Distribution Division and 27% to TransGas based on the FTE count of 686.3 for the distribution company and 256.8 for TransGas. The 73/27% split relates to business units that exclude service groups, digital technology and security and finance.[69] Allocations for other service groups may be based on the same ratio as the corporate allocation, or may use other allocations based on historical experience or professional judgement. SaskEnergy notes it made changes to allocations for other business units including Indigenous Engagement; Executive; Land; and I-tech North and South.[70]

Figure 3-3 shows the total dollars allocated to the Distribution Company (both including the share of costs budgeted to TransGas but allocated to the distribution company) separately from dollars allocated to TransGas and other subsidiaries.

[67] Page 25 of Tab 12.
[68] Page 26 of Tab 12.
[69] 1st Round Information Request 6 (b).
[70] 1st Round Information Request 6 (d).

Figure 3-3: SaskEnergy Inter-Company Allocation, 2016/17 to 2024/25[71]



Observations

Intercompany allocations as reviewed appear to be appropriate and reasonable. SaskEnergy indicated that the FTE split of 73%/27% is applied to the corporate allocation between the Distribution Division and TransGas – as the majority of expenses that are allocated to Corporate are driven by the number of employees required to run each utility.[72]

Figure 3-3 shows that the proportion of total costs allocated to the distribution company has remained relatively stable (approximately 70% total) for the last several years. Based on this analysis the Consultant concludes that changes proposed by SaskEnergy to the intercompany cost allocation study result in relatively minor changes to the total proportion of costs allocated to the distribution company. SaskEnergy notes there have been no changes to the principles or methods for allocation in recent years; and that an independent review of the allocation process/methodology has not been undertaken, but is something management would consider.[73]

3.2 TRANSPORTATION AND STORAGE EXPENSE

Delivery transportation service is provided by TransGas Limited (TransGas), a wholly owned subsidiary of SaskEnergy.[74] TransGas also owns and operates a non-regulated natural gas storage business integrated with the transmission pipeline system. SaskEnergy contracts with TransGas for storage service on behalf

[71] Tab 12, 2022 Commodity and Delivery Service Rate Application. 2nd Round Information Request 1 (c) (iv) actuals for 2021/22. The actuals for 2018/19 were split up before/after the sale of BESCO [April 2018 to September 2018 and October 2018 to March 2019]. The amounts presented combines the before and after actuals.
[72] 2nd Round Information Request 6(a).
[73] 2nd Round Information Request 6(a).
[74] Page 9 of 2022 Commodity and Delivery Service Rate Application.

of its delivery customers. Delivery transportation expense includes the cost of transporting natural gas from the TransGas Energy Pool to SaskEnergy's distribution system pressure regulating stations.

Transportation and storage expense makes up approximately 19% of the total annual delivery revenue requirement over the 2022/23 through 2024/25 test years, and is the second largest component of the revenue requirement after Operating and Maintenance Expense (see Table 3-1 and Figure 3-1). For the 2022/23 test year, transportation and storage expense is forecast to be $63.8 million, which is $9.8 million (or 18.2%) higher compared to the 2019/20 test year.

Table 3-15 provides a summary of the year-to-year changes in the transportation and storage expense for forecasts and actuals available from 2019/20 through 2024/25. SaskEnergy is forecasting a $5.4 million (9.2%) increase in the 2022/23 test year over the 2021/22 actuals; a further increase of $2.3 million (or 3.6%) in 2023/24; and no increase in 2024/25. SaskEnergy notes that the forecast increase for the 2022/23 test year includes a transportation and storage rate increase assumption of 8.9% effective April 1, 2022; and the 2023/24 test years includes a 3.6% transportation and storage rate increase assumption.[75] TransGas' transportation and storage rates are subject to provincial cabinet approval.

[75] 1st Round Information Request 7 (a)(i) and (a)(iii), 2022 Commodity and Delivery Service Rate Application.

Table 3-15: Transportation and Storage Expense ($ millions)[76]

	Fiscal Year [Apr 1 to March 31]														
						2022/23					2023/24			2024/25	
Category	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24
	(Millions)					(Millions)	*(Millions)*	*(%)*	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*	(Millions)	*(Millions)*
Transportation Costs	33.7	34.0	32.9	37.2	37.2	40.6	*6.9*	*20.6%*	3.5	*9.3%*	42.1	1.4	3.6%	42.1	*0.0*
Storage Costs	20.2	19.4	19.4	21.2	21.2	23.1	*2.9*	*14.3%*	1.9	*9.0%*	23.9	0.8	3.6%	23.9	*0.0*
Total	**53.9**	**53.5**	**52.3**	**58.4**	**58.4**	**63.8**	**9.8**	*18.2%*	**5.4**	*9.2%*	**66.0**	**2.3**	3.6%	**66.0**	***0.0***
Transportation Contracted Demand (GJ/day)	605,000	605,000	605,000	608,000	608,000	608,000	**3,000**	*0.5%*	0	*0.0%*	608,000	0	0.0%	608,000	*0*
Contracted Firm Deliverability (GJ/day)	393,217	393,217	393,217	393,217	393,217	393,217	**0**	*0.0%*	0	*0.0%*	393,217	0	0.0%	393,217	*0*
Contract Storage Volume (PJs)	23.4	23.4	23.4	23.4	23.4	23.4	**0**	*0.0%*	0	*0.0%*	23.4	0	0.0%	23.4	*0*
Annual Change in Forecast Total Costs			(1.6)		6.0										
Annual Change, %			(2.9%)		11.5%										
Actuals vs Forecast			(1.1)		(0.0)										
Change, %			(2.1%)		0.0%										

* Table 3-15 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[76] Revised (09/09) Schedule 1.1 of the 2022 Commodity and Delivery Service Rate Application.

Table 3-16 summarizes actual transportation and storage rate changes since 2009 and forecast changes for the test years.

Table 3-16: Transportation and Storage Rate Changes[77]

Effective Date	L11 Delivery Transportation			Storage			
	Demand Charge, $ per GJ/d per month	% Change	Impact on Expenses, $million	Withdrawal Charge, $ per GJ/d per month	Capacity Charge, $ per GJ/d per month	% Change	Impact on Expenses, $million
February 1, 2009	$3.7976			$1.3943	$0.0295		
February 1, 2012	$4.0830	7.5%	$1.8	$1.6939	$0.0250	1.0%	$0.2
March 1, 2013	$4.1405	1.4%	$0.3	$1.8026	$0.0266	6.4%	$0.8
January 1, 2014	$4.2813	3.4%	$1.0	$1.8855	$0.0278	4.6%	$0.7
January 1, 2015	$4.4269	3.4%	$1.0	$1.9579	$0.0289	3.9%	$0.7
January 1, 2016	$4.4269	0.0%	$0.0	$1.7955	$0.0352	5.8%	$1.0
January 1, 2017	$4.4269	0.0%	$0.0	$1.7955	$0.0352	0.0%	$0.0
May 1, 2018	$4.6881	5.9%	$1.9	$1.9014	$0.0373	5.9%	$0.8
April 1, 2021	$5.1100	9.0%	$3.2	$2.0725	$0.0407	9.1%	$1.8
April 1, 2022 (22-23 Year)	$5.5699	8.9%	$3.4	$2.2570	$0.0443	8.8%	$1.9
2023/24 Forecast	$5.7704	3.6%	$1.5	$2.3383	$0.0459	3.6%	$0.8
2024/25 Forecast	$5.7704	0.0%	$0.0	$2.3383	$0.0459	0.0%	$0.0

Transportation contracted demand is determined based on a 1-in-20 peak day design criterion in consideration of severe winter weather in Saskatchewan. SaskEnergy indicates other natural gas utilities in Canada and the United States use a range of "1 in 5 design" to a "coldest ever design".[78] While a lower peak day design criterion may reduce costs; this must be weighed against the requirement to provide continued safe and reliable service. SaskEnergy's forecast contracted demand is 608,000 GJs/day for the 2022/23 through 2024/25 test years.

SaskEnergy also notes that on the coldest days, storage provides up to two thirds of the natural gas used by customers to heat their homes and businesses, pipeline systems can become constrained during severe weather, and contracted storage capacity is necessary to ensure the continued delivery of reliable natural gas to customers.[79] The last change in contracted storage volumes was in 2015/16[80]; no change is assumed over the 2022/23 through 2024/25 test years.

Mid-Application Update

The Mid-Application Update did not provide any updates to the forecast for Transportation and Storage expense.

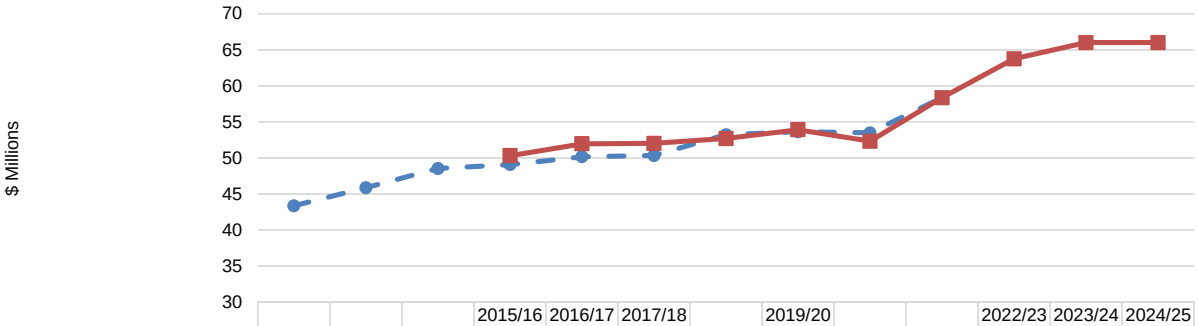
Observations

Figure 3-4 compares year over year changes in forecast and actual transportation and storage expense. This indicates that SaskEnergy's forecasts for transportation and storage expense have typically been within

[77] Prepared based on 2nd Round Information Request 7 (a) 2022 Commodity and Delivery Service Rate Application.
[78] Page 55, 2022 Delivery Service and Commodity Rate Application. SaskEnergy's design criteria assumes there is a 1 in 20 probability that the design peak day load will be reached during the upcoming winter.
[79] Page 9, 2022 Commodity and Delivery Service Rate Application.
[80] Schedule 4.1 of 2018 Commodity and Delivery Service Rate Application.

a +/- 4% range each year, with some actuals being higher than forecast and some being lower than forecast. The Consultant considers this to indicate a reasonable level of forecast accuracy.

Figure 3-4: Transportation and Storage Expense Forecasts Compared to Actuals, 2013 to 2024/25 ($Millions)[81]



	2013	2014	2015	2015/16 Test Year	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Actuals	43.4	45.9	48.5	49.1	50.2	50.3	53.2	53.6	53.5	58.4			
Forecast				50.3	52.0	52.0	52.7	53.9	52.3	58.4	63.8	66.0	66.0
Over/Under Forecast				(2.5%)	(3.4%)	(3.2%)	1.0%	(0.5%)	2.2%	0.0%			
Actual - Forecast				(1.2)	(1.8)	(1.7)	0.5	(0.3)	1.1	0.0			

The Consultant notes TransGas has an exclusive legislated franchise to transport natural gas within the Province of Saskatchewan. TransGas transportation and storage rates are subject to Provincial Cabinet approval, and are outside the scope of the Panel's terms of reference. The increases in transportation and storage expense since the 2019/20 test year are almost entirely due to increases in transportation and storage rates. Contracted demand for the 2022/23 test year is forecast to increase to 608,000 GJ/day from 605,000 GJ/day in the 2019/20 test year but this only accounts for approximately $0.2 million of the increase to transportation expense from 2020/21 to 2022/23.[82]

The Panel has previously expressed an interest in working with SaskEnergy to increase transparency with respect to how transportation and storage rates are set to provide the Panel and the public with better assurance that these costs are reasonable and prudently incurred.[83] Given the magnitude of the proposed increase in the delivery service rates proposed in the current application, the Consultant continues to believe increased transparency is desirable. The Consultant notes TransGas has a customer dialogue process that SaskEnergy participates in and that provides a forum for sharing information with a representative group of customers, but that discussions, materials and minutes of the process are confidential.[84]

[81] The 2015/16 Test Year is from the 2015 Commodity and Delivery Service Rate Application, the 2016/17 Test year forecast is from the 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from the 2017 Delivery Service Rate Application, 2013 to 2016/17 actuals and the 2019/20 Test Year are from the 2018 Commodity and Delivery Service Rate Application, and 2017/18 to 2021/22 actuals and forecasts from 2020/21 to 2024/25 are from the Revised (09/09) 2022 Commodity and Delivery Service Rate Application.
[82] 1st Round Information Request 7 (e), 2022 Commodity and Delivery Service Rate Application.
[83] Page 12. Saskatchewan Rate Review Panel Report to the Minister dated October 4, 2017.
[84] TransGas website. Customer dialogue process. Available: https://www.transgas.com/customer-central/customer-dialogue. Accessed September 28, 2022.

Recommendations

It is understood that TransGas transportation and storage rates are subject to Provincial Capital approval – and are outside the scope of the Panel's Terms of Reference.

However, in light of the recent increases in transportation and storage rates and their materiality to the delivery service revenue requirement, it is recommended the Panel continue to work with SaskEnergy to determine information that can be made available to ensure greater transparency regarding the need for, and drivers of, transportation and storage rate increases. This will provide the Panel and the public with better assurance that these costs are reasonable, prudently incurred and fairly allocated to the distribution division ratepayers.

3.3 DEPRECIATION EXPENSE

SaskEnergy's current depreciation rates are based on a study completed in 2018.[85] The next depreciation study is anticipated in be completed in April 2023. SaskEnergy indicates that it is not planning to update depreciation expense for the test years based on the new depreciation study as it does not expect the results to be materially different than current rates.[86] Table 3-17 summarizes actual depreciation expense for 2020/21 and forecasts for 2019/20 through 2024/25.

The 2022/23 test year forecast for depreciation expense is $7.0 million (or 14.6%) higher than the 2019/20 test year forecast and $3.2 million (or 6.1%) higher than the 2021/22 actuals. The most material forecast increases in depreciation expense from the 2019/20 test year to the 2022/23 test year are in the following asset categories:

- Meters is forecast to be about $2.4 million (or 71.5%) higher;
- Building and Site Improvements is forecast to be about $1.5 million (or 56.8%) higher; and
- Information System Assets is forecast to be about $0.9 million (or 8.5%) higher.

SaskEnergy states that depreciation expense continues to trend higher as capital expenditures for both new customer connections and investment in system integrity infrastructure renewal programs have accelerated. It notes this increase in annual investment in safety and infrastructure renewal is due to an increased attention to natural gas related incidents which has led to an industry-wide change regarding public safety and the integrity of their systems.[87] SaskEnergy confirmed that year over year increases in depreciation expense are driven by increases in property, plant, and equipment and not changes to depreciation rates or methods.[88]

[85] Page 33. 2022 Delivery Service and Commodity Rate Application.
[86] 1st Round Information Request 8 (b) (i) and (ii) from 2022 Commodity and Delivery Service Rate Application.
[87] Page 33 and 34 of the 2022 Commodity and Delivery Service Rate Application.
[88] 1st Round Information Request 8 (a), 2022 Commodity and Delivery Service Rate Application.

Table 3-17: Depreciation Expense ($Millions)[89]

	Fiscal Year [Apr 1 to March 31]															
						2022/23					2023/24			2024/25		
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application (Millions)	Change over 2019/20 Test Year (Millions)		Change over 2021/22 Actual (Millions)		Test Year Current Application (Millions)	Change over 2022/23 (Millions)		Test Year Current Application (Millions)	Change over 2023/24 (Millions)	
								(%)		(%)			(%)			(%)
Distribution Plant																
Land Rights	0.3	0.2	0.2	0.2	0.2	0.2	< 0 .1	(31.1%)	0.0	0.0%	0.2	0.0	0.0%	0.2	0.0	0.0%
Building and Site Improvements	2.6	3.4	3.3	3.6	3.6	4.2	1.5	56.8%	0.6	15.5%	4.7	0.6	13.5%	5.1	0.4	8.8%
Services	13.3	13.0	12.7	13.0	13.0	13.8	0.5	3.9%	0.8	6.3%	14.5	0.7	4.7%	15.1	0.6	4.2%
Meter and Regulator Installations	2.3	2.6	2.5	2.7	2.7	2.7	0.5	20.0%	< 0 .1	2.5%	2.8	< 0 .1	2.5%	2.9	< 0 .1	2.3%
Mains	13.5	11.3	11.3	11.5	11.5	12.0	(1.4)	(10.7%)	0.6	4.9%	12.5	0.5	3.8%	12.8	0.4	2.9%
NGV Fueling Stations & Fuel Makers	0.0	0.0	0.1	0.0	0.0	0.0	< 0 .1		0.0	0.0%	0.0	0.0	0.0%	0.0	0.0	0.0%
Measuring and Regulating Equipment	1.7	1.1	1.1	1.1	1.1	1.1	(0.6)	(33.0%)	< 0 .1	0.5%	1.2	< 0 .1	1.6%	1.2	< 0 .1	1.5%
Meters	3.4	5.5	5.5	5.5	5.5	5.9	2.4	71.5%	0.4	7.6%	6.3	0.4	7.4%	6.7	0.4	6.4%
Other Distribution Equipment	0.7	0.9	0.9	1.0	1.0	1.2	0.5	62.0%	0.2	18.4%	1.3	0.1	9.9%	1.5	0.1	10.9%
Sub-total	**37.8**	**37.9**	**37.6**	**38.5**	**38.6**	**41.2**	**3.3**	**8.8%**	**2.6**	***6.8%***	**43.5**	**2.3**	***5.6%***	**45.5**	**2.0**	***4.6%***
Amortization of Customer Contributions	(7.2)	(7.4)	(7.6)	(7.9)	(7.8)	(7.9)	(0.8)	10.6%	< 0 .1	1.1%	(8.1)	(0.2)	1.9%	(8.3)	(0.2)	2.2%
Sub-total	**30.6**	**30.5**	**30.0**	**30.7**	**30.8**	**33.2**	**2.6**	**8.4%**	**2.5**	**8.2%**	**35.4**	**2.2**	***6.5%***	**37.2**	**1.8**	***5.2%***
General Plant																
Building and Improvements	3.2	1.9	1.9	2.3	2.0	2.0	(1.1)	(36.1%)	(0.2)	(10.9%)	2.1	0.1	5.8%	2.2	0.1	5.2%
Office Furniture and Equipment	0.5	0.5	0.5	0.4	0.4	0.4	< 0 .1	(16.7%)	< 0 .1	(3.1%)	0.4	< 0 .1	(1.6%)	0.4	< 0 .1	(3.3%)
Transportation Vehicles	1.8	1.4	1.4	1.4	1.3	1.6	(0.2)	(13.0%)	0.2	13.7%	1.7	< 0 .1	6.2%	1.8	0.2	9.2%
Heavy Work Equipment	1.1	1.0	1.1	1.1	1.1	1.2	0.1	9.6%	0.1	13.0%	1.3	< 0 .1	7.5%	1.4	0.1	7.8%
Tools and Equipment	0.8	0.9	0.9	1.0	1.0	1.0	0.2	19.8%	< 0 .1	0.2%	0.9	< 0 .1	(1.9%)	1.0	< 0 .1	2.1%
Information System Assets	10.2	8.9	10.0	10.6	10.2	11.0	0.9	8.5%	0.4	3.9%	10.2	(0.8)	(7.1%)	10.3	< 0 .1	0.2%
Leased Computers	0.0	1.0	1.0	1.0	0.9	0.8	0.8		(0.1)	(13.1%)	0.9	< 0 .1	5.8%	1.0	< 0 .1	10.9%
Leased Buildings	0.0	2.9	2.9	2.5	2.9	2.9	2.9		0.4	16.8%	2.9	0.0	0.0%	2.9	0.0	0.0%
Leased Vehicles	0.0	1.0	1.0	1.2	1.2	1.1	1.1		(0.1)	(11.1%)	1.1	< 0 .1	1.3%	1.1	< 0 .1	4.0%
Sub-total	**17.5**	**19.5**	**20.8**	**21.4**	**21.1**	**22.0**	**4.5**	**25.4%**	**0.6**	***3.0%***	**21.6**	**(0.4)**	***(2.0%)***	**22.1**	**0.5**	***2.5%***
Total Depreciation Expense	**48.2**	**50.0**	**50.7**	**52.1**	**51.9**	**55.2**	**7.0**	**14.6%**	***3.2***	***6.1%***	**56.9**	***1.7***	***3.1%***	**59.3**	***2.4***	***4.2%***
Annual Change in Forecast			2.6		1.1											
Annual Change, %			5.3%		2.3%											
Actual vs. Forecast			0.8		(0.2)											
Change, %			1.6%		(0.3%)											

* Table 3-17 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[89] Revised (09/09) Schedule 1.3 from the 2022 Commodity and Delivery Service Rate Application.

Depreciation expense is offset by $7.9 million related to amortization of customer contributions for the 2022/23 test year.[90] SaskEnergy notes that amortization of customer contributions is calculated using a 3% amortization rate.

Mid-Application Update

The Mid-Application Update (Table 3-18) includes a decrease in depreciation expense largely attributed to a $2.4 million (or 82.3%) decrease in leased building expenses due to the purchase of the SaskEnergy Place which was previously leased.[91] SaskEnergy notes that the cost reduction relates to the depreciation rate for Buildings and Improvements being much lower than the depreciation rate for Right of Use Assets – Buildings (which depends on the term of the lease). SaskEnergy notes that owning SaskEnergy Place was not anticipated in the 2022 Delivery Rate Application. This change is 76% of the overall reduction in depreciation expense forecast in 2022/23.

SaskEnergy also notes an unanticipated increase in discount rates which resulted in a significant decline in its decommissioning asset in March 2022 ($1.0 million reduction in depreciation expense). The decommissioning depreciation impacts building and site improvements ($0.3 million cost reduction), services ($0.4 million cost reduction), mains ($0.2 million), measuring and regulating equipment ($0.06 million), and other distribution equipment ($0.08 million).[92]

[90] Schedule 1.3, 2022 Commodity and Delivery Service Rate Application.
[91] September 29, 2022 Mid-Application update, page 7.
[92] September 29, 2022 Mid-Application update, page 7.

Table 3-18: Comparison of Depreciation Expense for 2022/23 Test Year: Original Filing Compared to Mid-Application Update ($000s)[93]

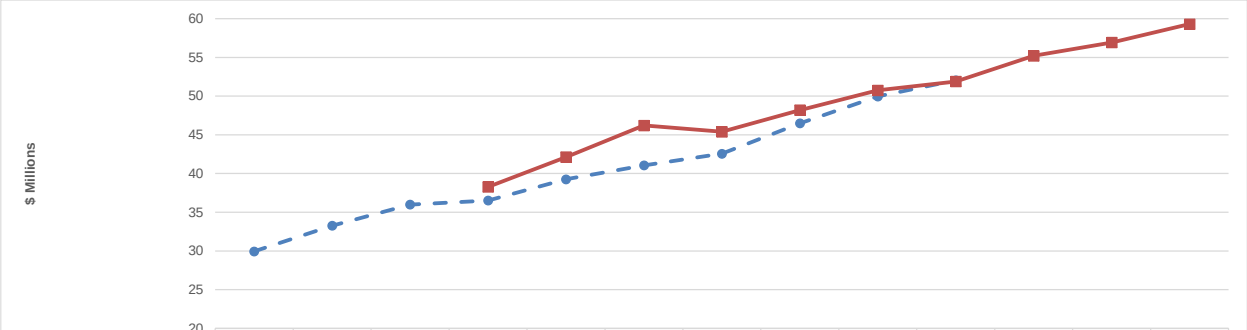
	Original Application	Mid-Application Update	*Change*	*Change %*
Distribution Plant				
Land Rights	177	177	-	0.0%
Building and Site Improvements	4,152	3,828	(324)	(7.8%)
Services	13,842	13,482	(360)	(2.6%)
Meter and Regulator Installations	2,746	2,754	8	0.3%
Mains	12,014	11,812	(202)	(1.7%)
NGV Fueling Stations & Fuel Makers	26	26	-	0.0%
Measuring and Regulating Equipment	1,143	1,087	(56)	(4.9%)
Meters	5,863	5,588	(275)	(4.7%)
Other Distribution Equipment	1,189	1,106	(83)	(7.0%)
Sub-total	41,152	39,859	(1,293)	(3.1%)
Amortization of Customer Contributions	(7,941)	(8,328)	(387)	4.9%
Sub-total	33,211	31,531	(1,680)	(5.1%)
General Plant				
Building and Improvements	2,018	2,403	385	19.1%
Office Furniture and Equipment	433	433	-	0.0%
Transportation Vehicles	1,557	1,558	1	0.1%
Heavy Work Equipment	1,224	1,224	-	0.0%
Tools and Equipment	956	995	39	4.1%
Information System Assets	11,016	11,016	-	0.0%
Leased Computers	847	988	141	16.6%
Leased Buildings	2,871	507	(2,364)	(82.3%)
Leased Vehicles	1,076	1,453	377	35.0%
Sub-total	21,996	20,576	(1,420)	(6.5%)
Total Depreciation Expense	**55,207**	**52,107**	**(3,100)**	**(5.6%)**

Observations

Figure 3-5 compares actual and forecast depreciation expense. This indicates that from 2015/16 through 2019/20 SaskEnergy's forecasts of depreciation expense were between $1.7 million and $5.2 million higher than actuals. Figure 5-3 in Section 5.0 indicates forecast capital costs from 2016/17 through 2022/22 being between $9.1 million and $60.9 million higher than actual capital expense over the period. More recent actuals for depreciation expense for 2020/21 and 2021/22 were closer to forecasts.

[93] Schedule 1.3. 2022 Mid-Application Update.

Figure 3-5: Depreciation Expense Forecasts Compared to Actuals, 2013 to 2024/25 ($Millions)[94]



	2013	2014	2015	2015/16 Test Year	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Actuals	29.9	33.3	36.0	36.5	39.3	41.1	42.6	46.5	50.0	52.1			
Forecast				38.3	42.1	46.2	45.4	48.2	50.7	51.9	55.2	56.9	59.3
Over/Under Forecast				(4.6%)	(6.8%)	(11.2%)	(6.3%)	(3.5%)	(1.5%)	0.3%			
Actual - Forecast				(1.8)	(2.9)	(5.2)	(2.8)	(1.7)	(0.8)	0.2			

Depreciation expense increased by about $7.0 million (or about 15%) from the 2019/20 test year to the 2022/23 test year. Depreciation expense is forecast to increase by 3.1% (or $1.7 million) in 2023/24, and 4.2% (or $2.4 million) in 2024/25. Depreciation expense is a key driver of upward pressure on customer rates in the near term. Given the three-year test period in the current application, and the history of actual depreciation expense being lower than test-year forecasts, the Consultant believes it will be important to monitor changes in actual depreciation forecasts compared to test year forecasts.

Recommendations

Given the trend in lower actual depreciation expense compared to forecast, and the materially lower actual depreciation expense expected in 2022/23 compared to the test year forecast, it is recommended that depreciation expense forecasts for 2023/24 and 2024/25 be updated by SaskEnergy and subject to careful review by the Panel prior to the Panel recommending implementation of any requested rate adjustments in those years. This will help to ensure that requested rate adjustments remain reasonable.

It is understood that the new depreciation study will be completed with an effective date of April 1, 2023. It is recommended that the new depreciation study, along with the corporation's response to the study, be provided to the Panel when completed and prior to the next delivery rate application. While the outcomes of the study will not be able to inform the 2023/24 update, it should be confirmed whether or not it can inform 2024/25.

[94] The 2015/16 Test Year is from the 2015 Commodity and Delivery Service Rate Application, the 2016/17 Test year forecast is from the 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from the 2017 Delivery Service Rate Application, 2012 to 2016/17 actuals and the 2019/20 Test Year are from the 2018 Commodity and Delivery Service Rate Application, and 2017/18 to 2020/21 actuals and forecasts from 2020/21 to 2024/25 are from the 2022 Commodity and Delivery Service Rate Application.

3.4 TAX EXPENSE

SaskEnergy's tax expense consists of corporate capital tax and grants in lieu of taxes:

- Corporate capital tax is paid to the Province of Saskatchewan. It is calculated at 0.6% of capital invested in excess of $10 million in accordance with the formula and deductions and allowances are prescribed by *The Saskatchewan Corporation Capital Tax Act*.[95]
- SaskEnergy is generally exempt from property taxes on its infrastructure. Historically, in instances where SaskEnergy purchased existing infrastructure that had a previous property tax obligation, SaskEnergy carried forward that tax obligation by means of a grant-in-lieu of taxes. However, SaskEnergy notes that in the 2018-19 Provincial Budget, the provincial government expanded the grants-in-lieu program and it now includes all owned, non-linear real estate assets.[96]
- SaskEnergy states the federal carbon tax applies to all fossil fuels, including natural gas, and is calculated based on the amount used by the customer. As a registered natural gas distributor, SaskEnergy is required to collect and remit a carbon charge to the federal government. This is a flow through cost, which increases on April 1 each year, under the federal government's carbon pricing system. This is not included in the tax expense.[97]

Table 3-19 summarizes forecast and recent actual tax expense. Tax expense is forecast at $8.3 million for the 2022/23 test year. This represents an increase of $0.9 million (or 12.4%) over the 2019/20 test year and an increase of $0.3 million (or 3.9%) over 2021/22 actuals. Further increases are forecast in 2023/24 and 2024/25.

[95] Page 34, 2022 Commodity and Delivery Service Rate Application.
[96] Page 34, 2022 Commodity and Delivery Service Rate Application.
[97] Page 34, 2022 Commodity and Delivery Service Rate Application.

Table 3-19: Tax Expense ($Millions)[98]

	Fiscal Year [Apr 1 to March 31]															
						2022/23					2023/24			2024/25		
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application (Millions)	Change over 2019/20 Test Year (Millions)	Change over 2019/20 Test Year (%)	Change over 2021/22 Actual (Millions)	Change over 2021/22 Actual (%)	Test Year Current Application (Millions)	Change over 2022/23 (Millions)	Change over 2022/23 (%)	Test Year Current Application (Millions)	Change over 2023/24 (Millions)	Change over 2023/24 (%)
Corporate Capital Tax	7.0	6.1	6.5	7.2	6.9	7.6	*0.6*	*8.5%*	*0.4*	*5.7%*	8.0	*0.5*	*5.9%*	8.3	*0.3*	*3.9%*
Grants in Lieu of Taxes	0.4	0.7	0.6	0.8	0.8	0.7	*0.3*	*86.1%*	< 0 .1	*(11.9%)*	0.7	*0.0*	*0.0%*	0.7	*0.0*	*0.0%*
Total Taxes	**7.4**	**6.9**	**7.1**	**8.0**	**7.7**	**8.3**	***0.9***	***12.4%***	***0.3***	***3.9%***	**8.7**	***0.5***	***5.4%***	**9.0**	***0.3***	***3.6%***
Annual Change in Forecast			(0.3)		0.6											
Annual Change, %			(3.5%)		8.9%											
Actual vs. Forecast			0.3		(0.2)											
Change, %			3.7%		(2.8%)											

* Table 3-19 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[98] Schedule 1.4 from the 2022 Commodity and Delivery Service Rate Application and 1st Round Information Request Revised Responses, 2022 Commodity and Delivery Service Rate Application.

Corporate tax expense is forecast at $7.6 million for the 2022/23 test year which is $0.6 million (or 8.5%) higher than the 2019/20 test year. As illustrated in Table 3-20, corporate tax is forecast to increase throughout the 2022/23, 2023/24 and 2024/25 test years due to increases in Taxable Paid up Capital.

SaskEnergy is forecasting grants in lieu of taxes at $0.70 million for the 2022/23 test year which is $0.3 million (or 86.1%) higher than the 2019/20 test year but $0.1 million (or 11.9%) lower than 2021/22 actuals. SaskEnergy notes the increase in grants in lieu of taxes in 2022/23 compared to 2020/21 actuals is due to building improvements made at the Regina Service Centre coupled with a mill rate increase in 2021. Grants in lieu of taxes are forecast to be flat for 2022/23 through 2024/25.[99]

The net book value used for the corporate capital tax calculation for 2022/23 in Table 3-20 ($1,464 million) is higher compared to the net book value included in the rate base shown in Table 3-30 ($1,061 million).

Under IFRS, SaskEnergy recognises customer contributions as revenues in the year received, while for regulatory purposes customer contributions are included as an offset to plant in-service. SaskEnergy notes that the difference between net book value in the corporate tax calculation and plant in service is due to the accounting framework used, and the most significant difference between the two accounting frameworks relates to the treatment of customer contributions. SaskEnergy indicates that customer contributions are not included in the corporate tax calculations.[100]

[99] 1st Round Information Request 10 (a), 2022 Commodity and Delivery Service Rate Application
[100] 1st Round Information Request 12 (c), 2018 Commodity and Delivery Service Rate Application.

Table 3-20: Corporate Tax Expense Forecast Compared to Actuals ($Millions)[101]

	Actuals		Forecast						Test Years					
	2019/20	2020/21	2019/20	Inc. over 2019/20 Actuals	2020/21	Inc. over 2020/21 Actuals	2021/22	Inc. over 2020/21 Actuals	2022/23	Inc. over 2021/22 Forecast	2023/24	Inc. over 2022/23 Test Year	2024/25	Inc. over 2023/24 Test Year
Net Book Value	1,260.7	1,307.9	1,323.8	5.0%	1,309.1	0.1%	1,368.5	4.6%	1,464.2	7.0%	1,581	8.0%	1,698	7.4%
Less Undepreciated Capital Cost	789.5	811.8	885.2	12.1%	836.9	3.1%	852.2	5.0%	935.9	9.8%	1,033	10.4%	1,124	8.8%
Income Tax deduction	471.2	496.1	438.6	(6.9%)	472.2	(4.8%)	516.3	4.1%	528.4	2.3%	548	3.6%	574	4.8%
Retained Earnings and Equity	607.9	639.3	548.1	(9.8%)	647.5	1.3%	680.5	6.4%	694.8	2.1%	711	2.4%	734	3.2%
Loans and Advances	1,599.3	1,663.3	1,576.1	(1.5%)	1,685.3	1.3%	1,761.8	5.9%	1,862.2	5.7%	1,937	4.0%	1,991	2.8%
Interest Payable	14.6	15.2	16.1	10.0%	16.1	5.6%	16.8	10.1%	19.7	17.4%	23	15.5%	24	7.1%
Less: Income Tax Deduction	(471.2)	(496.1)	(438.6)	(6.9%)	(472.2)	(4.8%)	(516.3)	4.1%	(528.4)	2.3%	(548)	3.6%	(574)	4.8%
Total Paid up capital	1,750.6	1,821.8	1,701.6	(2.8%)	1,876.7	3.0%	1,942.7	6.6%	2,048.3	5.4%	2,123	3.7%	2,175	2.4%
Less: Standard Exemption	(10.8)	(10.8)	(10.8)	(0.2%)	(10.8)	(0.3%)	(10.0)	(7.8%)	(10.0)	0.0%	(10)	0.0%	(10)	0.0%
Total Paid up capital	1,739.8	1,810.9	1,690.8	(2.8%)	1,865.9	3.0%	1,932.7	6.7%	2,038.3	5.5%	2,113	3.7%	2,165	2.5%
Less: Investment Allowance	(691.6)	(786.3)	(526.3)	(23.9%)	(777.7)	(1.1%)	(775.0)	(1.4%)	(775.0)	0.0%	(775)	0.0%	(775)	0.0%
Taxable Paid up Capital	**1,048.2**	**1,024.7**	**1,164.5**	**11.1%**	**1,088.2**	**6.2%**	**1,157.7**	**13.0%**	**1,263.3**	**9.1%**	**1,338**	**5.9%**	**1,390**	**3.9%**
Rate	0.6%	0.6%	0.6%		0.6%		0.6%		0.6%	0.0%	0.6%	0.0%	0.6%	0.0%
Forecast Corporate Capital Tax Expense	**6.3**	**6.1**	**7.0**	**11.1%**	**6.5**	**6.2%**	**6.9**	**13.0%**	**7.6**	**9.1%**	**8.0**	**5.9%**	**8.3**	**3.9%**

* Table 3-20 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[101] Schedule 1.4 from the 2022 Commodity and Delivery Service Rate Application.

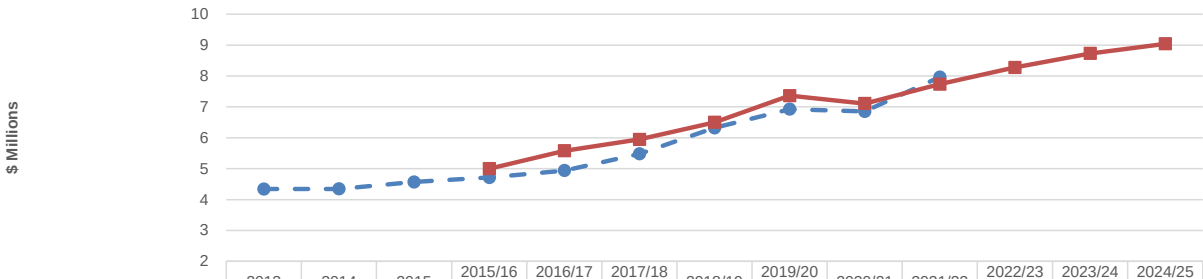
Mid-Application Update

The Mid-Application Update includes an increase in tax expense compared to the Original Application of $1.0 million (or 11.9%). This reflects a $0.7 million (or 98.1%) increase in Grants in Lieu of Taxes and a $0.3 million (or 4.0%) increase in corporate capital tax. SaskEnergy notes some of the increase is due to the purchase of SaskEnergy Place, which was not initially anticipated in the 2022 Commodity and Delivery Service Rate Application.[102]

Observations

Figure 3-6 compares year over year changes in forecast and actual tax expense. This indicates that from 2015/16 through 2020/21 SaskEnergy's actual tax expense was between $0.2 million and $0.6 million lower than forecast. Recent actuals for 2021/22 were $0.2 million higher than forecast.

Figure 3-6: Tax Expense Forecasts Compared to Actuals, 2013 to 2024/25 ($Millions)[103]



	2013	2014	2015	2015/16 Test Year	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Actuals	4.3	4.3	4.6	4.7	4.9	5.5	6.3	6.9	6.9	8.0			
Forecast				5.0	5.6	5.9	6.5	7.4	7.1	7.7	8.3	8.7	9.0
Over/Under Forecast				(5.7%)	(11.5%)	(7.9%)	(2.8%)	(5.9%)	(3.6%)	2.9%			
Actual - Forecast				(0.3)	(0.6)	(0.5)	(0.2)	(0.4)	(0.3)	0.2			

For the 2022/23 test year, SaskEnergy forecast a $0.91 million (or 12.4%) increase in tax expenses over the 2019/20 test year, and a $0.31 million (or 3.9%) increase over the 2021/22 actuals. For the 2023/24 test year, SaskEnergy forecast a $0.45 million (or 5.4%) increase over 2022/23 and a further $0.31 million (or 3.6%) in 2024/25 over 2023/24.

In the 2018 Commodity Service and Delivery rate review, the Consultant noted the following:

- That available information at that time indicated that the corporate capital tax expense calculation includes amounts related to subsidiaries other than the Distribution Division - which raised fairness concerns for SaskEnergy Customers. In the 2018 proceeding SaskEnergy stated its view that SaskEnergy, the distribution division, administers the total debt on behalf of all subsidiary companies of SaskEnergy Incorporated. Within the corporate capital tax calculation, there is a

[102] September 29, 2022 Mid-Application Update, page 8.
[103] The 2015/16 Test Year is from the 2015 Commodity and Delivery Service Rate Application, the 2016/17 Test year forecast is from the 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from the 2017 Delivery Service Rate Application, 2012 to 2016/17 actuals and the 2019/20 Test Year are from the 2018 Commodity and Delivery Service Rate Application, and 2017/18 to 2020/21 actuals and forecasts from 2020/21 to 2024/25 are from the 2022 Commodity and Delivery Service Rate Application.

considerable investment allowance and a standard exemption provided to the distribution division to offset the debt used to finance all of SaskEnergy Incorporated's subsidiary companies.[104]

- The Consultant also recommended that SaskEnergy review and report to the Provincial Government on the impact that the accounting treatment for customer contribution has on corporate capital tax calculations and update the Panel in the next rate application. In the 2018 proceeding SaskEnergy had stated its view that there would be no impact to include customer contributions in corporate capital tax calculations as the net book value decrease would be offset by the undepreciated capital cost decrease.[105]

In its report to the Minister following the 2018 Commodity Service and Delivery Rate review, the Panel recommended that SaskEnergy review the calculations and methodology for the corporate capital tax to the operating division and the holding division of SaskEnergy Incorporated, noting the review should consider the effect that IFRS accounting treatment for customer contributions has on corporate tax calculations and update the Panel in the next application.

SaskEnergy noted in response to the Panel's recommendation that "this is currently being reviewed and nothing has been implemented at this time."[106] SaskEnergy also noted that it "is part of a collaboration initiative with other Crown Corporations that is reviewing the Corporate Capital Tax with the Ministry of Finance", "there is currently no appetite within the Ministry to eliminate the tax", "progress is being made to simplify the calculation and make it more transparent," but "this is not expected to have a material effect on the amount of capital paid."[107]

The Consultant is concerned the Panel's recommendation from the 2018 Commodity and Delivery Service Rate review has not been fully addressed to date and further information is not available regarding the matters raised during the last review either in the response to Panel Recommendations (Tab 24) or in response to Information Requests. Information on this matter was requested in a format similar to that which was provided by SaskEnergy during the 2018 review; however, SaskEnergy notes that, "the calculation of capital tax as legislation by the Capital Tax Act, is based on the corporate structure of the paying entity. A calculation table based on the information provided in this question is not an accurate representation of capital tax."[108]

The Consultant has reviewed SaskEnergy's calculation of the Corporate Capital Tax and finds it is consistent with previous delivery service applications. The Consultant does not dispute that SaskEnergy has correctly calculated the Corporate Capital Tax obligation. However, the Consultant continues to have concerns with the treatment of customer contributions and capital related to subsidiaries and how those amounts are reflected in the Delivery Service revenue requirement.

[104] 2nd Round Information Request 10 (a) from the 2018 Delivery Service Application proceeding.
[105] 1st Round Information Request 12 (c) from the 2018 Delivery Service Application proceeding.
[106] 1st Round Information Request 23(a).
[107] 2nd Round Information Request 9(a).
[108] 2nd Round Information Request 9 (a).

Recommendations

The impact that the accounting treatment for customer contribution has on corporate capital tax calculations continues to be of concern – and in the Consultant's view further information on this issue would help to better understand the potential impact that the current approach has to revenue requirement. A further response on this matter should be provided by SaskEnergy as part of the next financial update in order to ensure greater transparency.

Once the collaboration initiative with other Crown Corporations and the Ministry of Finance regarding the Corporate Capital Tax has been completed; it is recommended that an update on outcomes from this process be provided to the Panel.

3.5 INTEREST EXPENSE

SaskEnergy incurs interest expense primarily to finance its capital and infrastructure requirements. SaskEnergy's interest expense includes financing costs for bank indebtedness (short-term debt); interest on notes payable to the holdings division (long-term debt); accretion expense; and amortization of deferred charges. This is offset by sinking fund earnings, capitalized interest and interest allocated to the commodity cost of gas. SaskEnergy notes that it conducts its borrowings through the provincial government and has access to debt at a lower cost than it would achieve on a standalone basis.[109]

Table 3-21 summarizes actual interest expense for 2020/21 and 2021/22, and forecasts from 2019/20 to 2024/25. The total interest expense forecast for 2022/23 is $29.96 million, a decrease of $1.49 million (or 5%) over the 2019/20 test year forecast. However, the forecast for the 2022/23 fiscal year is also $0.16 million (or 1%) lower than 2021/22 actuals.

The following is noted regarding the annual year over year changes in interest expense:

- The total actual interest expense for 2020/21 was $3.2 million (or 10.0%) **lower** than the 2019/20 forecast.
- The total forecast interest expense for 2021/22 was $1.6 million (or 5.6%) **higher** than 2020/21 actuals.
- The total interest expense for 2022/23 is forecast to be $1.5 million (or 4.7%) **lower** than the 2019/20 test year forecast.
- The total interest expense for 2022/23 is forecast to be $0.2 million (or 0.5%) **lower** compared to the 2021/22 actuals.
- The total interest expense for the 2023/24 fiscal year is forecast to be $2.2 million (or 7.5%) **higher** compared to the 2022/23 forecast. Total interest expense for the 2024/25 fiscal year is forecast to be $1.5 million (or 4.7%) **higher** compared to the 2023/24 forecast.

[109] Page 35, 2022 Commodity and Delivery Service Rate Application.

Table 3-21: Interest Expense ($Millions)[110]

	Fiscal Year [Apr 1 to March 31]														
						2022/23					2023/24			2024/25		
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24	
	$ Millions					(Millions)	*(Millions)*	*(%)*	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*
Interest on Notes Payable to Holdings Division	26.3	26.5	26.2	26.3	26.3	26.3	< 0 .1	*(0.1%)*	0.0	*0.0%*	27.8	1.5	*5.7%*	27.8	< 0 .1	*0.1%*
Interest on Bank Indebtedness	4.9	0.1	0.8	0.3	0.3	0.8	(4.1)	*(83.1%)*	0.5	*166.7%*	1.8	0.9	*114.4%*	3.2	1.4	*80.4%*
Interest on Finance Lease	0.0	0.4	0.4	0.4	0.4	0.4	0.4		< 0 .1	*(0.5%)*	0.4	< 0 .1	*(0.2%)*	0.4	< 0 .1	*3.2%*
Accretion Expense	3.1	3.9	3.8	4.4	4.3	4.6	1.5	*48.6%*	0.2	*5.3%*	4.9	0.3	*6.5%*	5.2	0.3	*6.1%*
Amortization of Deferred Charges	0.2	0.0	0.1	0.0	0.0	0.0	(0.2)	*(105.7%)*	< 0 .1	*(40.9%)*	0.0	< 0 .1	*(69.2%)*	0.0	< 0 .1	*500.0%*
Sinking Fund Earnings	(2.4)	(2.2)	(1.4)	(1.1)	(1.3)	(1.6)	0.7	*(30.2%)*	(0.6)	*50.1%*	(2.0)	(0.3)	*20.6%*	(2.2)	(0.2)	*10.8%*
Capitalized Interest	(0.2)	(0.4)	(0.2)	(0.0)	(0.1)	(0.3)	< 0 .1	*29.5%*	(0.3)	*544.7%*	(0.3)	< 0 .1	*1.0%*	(0.3)	< 0 .1	*1.0%*
Interest Allocated to Commodity Cost of Gas	(0.4)	(0.0)	(0.4)	(0.1)	(0.1)	(0.2)	0.3	*(62.3%)*	(0.1)	*184.7%*	(0.3)	(0.2)	*97.6%*	(0.4)	< 0 .1	*9.3%*
Total	**31.5**	**28.3**	**29.3**	**30.1**	**29.9**	**30.0**	(1.5)	*(4.7%)*	(0.2)	*(0.5%)*	**32.2**	**2.2**	*7.5%*	**33.7**	**1.5**	*4.7%*
Annual Change in Forecast			(2.2)		0.6											
Annual Change, %			(6.9%)		2.1%											
Actuals vs Forecast			1.0		(0.2)											
Change, %			3.5%		(0.8%)											

* Table 3-21 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[110] Schedule 1.5 of Revised (09/09) 2022 Commodity and Delivery Service Rate Application.

Table 3-22 summarizes forecast long-term and short-term average outstanding debt. The following is noted regarding the annual changes in long-term and short-term average outstanding debt balances:

- In the 2020/21 fiscal year, actual long-term debt balances increased by 13.8% (or $75.3 million) over the 2019/20 forecast, while short-term debt balances decreased by 82.4% (or $181.4 million).
- In the 2022/23 fiscal year, long-term debt balances are forecast to increase by 5.3% (or $32.2 million) over 2021/22 actuals, while short-term debt balances are forecast to increase by 43.6% (or $31.8 million) over 2021/22 actuals.
- In the 2023/24 fiscal year, the long-term debt balances are forecast to increase by 0.1% (or $0.6 million) over the 2022/23 forecast, and short-term debt balances are forecast to increase by 53.9% (or $56.5 million) over the 2022/23 forecast.
- In the 2024/25 fiscal year, the long-term debt balances are forecast to decrease by 0.6% (or $4.1 million) over the 2023/24 forecast, and short-term debt balances are forecast to further increase by 50.8% (or $81.8 million) over the 2023/24 forecast.

SaskEnergy notes that revenues peak in winter months and decline in warmer months and that this trend creates periods where SaskEnergy requires access to short-term financing, as well as short-term investing, both of which are transacted through the Ministry of Finance.[111] Short-term debt accounted for 6% of actual total debt in 2020/21 and is forecast to range from 14% to 28% in the 2022/23 through 2024/25 test years. SaskEnergy notes the forecast increase in the short-term is mainly driven by its capital expenditure plan. Capital investment almost doubles in 2022-23 through to 2024-25 in comparison to 2021-22 considerably exceeding cash from operations.[112]

[111] Page 35, 2022 Commodity and Delivery Service Rate Application.
[112] 1st Round Information Request 9 (b).

Table 3-22: Long-Term and Short-Term Average Outstanding Debt ($Millions)[113]

	Fiscal Year [Apr 1 to March 31]															
						2022/23					2023/24			2024/25		
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24	
	$ Milions					(Millions)	*(Millions)*	*(%)*	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*
Average Outstanding Long Term Debt	545.3	620.6	622.2	611.6	611.0	643.8	98.5	18.1%	32.2	5.3%	644.4	0.6	0.1%	640.3	(4.1)	(0.6%)
Long Term Debt Percentage	71%	94%	94%	89%	90%	86%	14.8%	20.8%	(3.3%)	(3.7%)	80%	(6.0%)	(7.0%)	72%	(7.5%)	(9.4%)
Average Interest Rate	4.43%	3.91%	4.01%	4.11%	4.08%	4.14%	(0.29%)	(6.5%)	0.0%	0.7%	4.00%	(0.1%)	(3.4%)	4.00%	0.00%	0.0%
Average Outstanding Short Term Debt	220.3	38.9	39.2	72.9	66.8	104.7	(115.6)	(52.5%)	31.8	43.6%	161.2	56.5	53.9%	243.0	81.8	50.8%
Short Term Debt Percentage	29%	6%	6%	11%	10%	14%	(14.8%)	(51.4%)	3.3%	31.3%	20%	6.0%	43.0%	28%	7.5%	37.5%
Average Interest Rate	2.22%	0.25%	2.07%	0.42%	0.45%	2.36%	0.14%	6.3%	1.9%	461.9%	1.10%	(1.3%)	(53.4%)	1.31%	0.21%	19.1%
Total Average Outstanding Debt	**765.6**	**659.5**	**661.4**	**684.6**	**677.8**	**748.5**	**(17.1)**	**(2.2%)**	**64.0**	**9.3%**	**805.6**	**57.1**	**7.6%**	**883.3**	**77.7**	**9.6%**
Weighted Average Cost of Debt	3.79%	3.70%	3.89%	3.72%	3.72%	3.89%	0.10%	2.6%	0.2%	4.6%	3.42%	-0.47%	(12.1%)	3.26%	(0.2%)	(4.7%)
Annual Change in Forecast Long-Term Debt			76.9		(11.2)											
Annual Change, %			14.1%		(1.8%)											
Annual Change in Forecast Short-Term Debt			(181.1)		27.6											
Annual Change, %			(82.2%)		70.5%											

* Table 3-22 reflects information provided in the Original Application and includes updated forecasts for 2022/23 included in the Mid-Application Update.

[113] 2nd Round Information Request 1 (c)(vi) and Revised (10/15) 2nd Round Information Request 8 (a) from 2022 Commodity and Delivery Service Rate Application.

The following is specifically noted regarding key drivers underlying interest expense:

Short-Term Debt

As summarized in Table 3-21, interest expense related to short-term debt is forecast to decrease by $4.1 million (or 83.1%) in 2022/23 compared to the 2019/20 test year. Interest expense related to short-term debt is forecast to increase by $0.5 million (or 166.7%) in 2022/23 compared to the 2021/22 actuals; increase by $0.9 million (or 114.4%) in 2023/24 compared to the 2022/23 test year; and increase $1.4 million (or 80.4%) in 2024/25 compared to the 2023/24 test year.

The average interest rate for short-term debt is forecast to increase from 2.22% in the 2019/20 test year to 2.36% in the 2022/23 test year and then decrease to 1.10% in the 2023/24 test year followed by an increase to 1.31% for the 2024/25 test year. SaskEnergy notes that short-term debt interest rate forecasts are based on the average of Bank of Montreal, Bank of Nova Scotia, Royal Bank, TD Bank and CIBC forecast for three month Treasury bills and 30-year Government of Canada Bonds, adjusted for the Province of Saskatchewan's credit spread. The interest rates used in the forecasts included in the Application were from June and July of 2021.[114] SaskEnergy acknowledged interest rates in July 2022 had increased by 1.8% compared to the average rates included in the Application.[115] SaskEnergy reported the distribution division's short-term debt rate as at July 31, 2022 was 2.39%.[116] SaskEnergy indicated a 2% increase in short-term interest rates compared to the assumptions in the application would increase interest expense by approximately $2.8 million in 2022/23 and $5.0 million by 2024/25.[117]

Table 3-23 provides the short-term debt interest expense calculation for 2022/23 test year (includes updated forecasts for 2022/23).

[114] Page 5, Tab 14 of 2022 Commodity and Delivery Service Rate Application.
[115] 1st Round Information Request 9 (c).
[116] 1st Round Information Request 9 (i).
[117] 1st Round Information Request 1 (d).

Table 3-23: Short-Term Debt Interest Expense Calculation for 2022/23 Test Year ($000)[118]

Month	Short-term Debt, $000	Interest Rate	Interest Expense
Apr-2022	63,083	0.87%	50
May-2022	21,462	1.28%	45
Jun-2022	61,349	1.37%	47
Jul-2022	97,059	2.39%	158
Aug-2022	136,057	2.39%	232
Sep-2022	148,444	2.39%	283
Oct-2022	137,675	2.39%	285
Nov-2022	133,065	2.39%	270
Dec-2022	123,803	2.39%	256
Jan-2023	115,582	2.39%	238
Feb-2023	103,523	2.39%	218
Mar-2023	115,236	2.39%	218
Avg. Balance	$ 104,695		
Total Expense			$ 2,301
Average Rate		2.20%	
Bank Fees			$ 173
Interest on Bank Indebtedness		2.36%	$ 2,474

* Table 3-23 reflects information provided in the Original Application and includes updated forecasts for 2022/23 included in the Mid-Application Update.

[118] 2nd Round Information Request 8 (a) Update (10/15), 2022 Commodity and Delivery Service Rate Application.

Long-Term Debt

As summarized in Table 3-21, interest expense related to long-term debt is relatively unchanged between the 2019/20 test year forecast and the 2022/23 test year forecast. Interest expense related to long-term debt is forecast to increase by $1.5 million (or 5.7%) in 2023/24 compared to the 2022/23 test year and is relatively unchanged between the 2023/24 and 2024/25 test years. SaskEnergy long-term borrowing assumptions include $50 million in 2022/23, $50 million in 2023/24, and plans to reissue $50 million in long-term debt in 2024/25 when its current long-term borrowing of $50 million matures on June 3, 2024.[119]

The outstanding balance of long-term debt is forecast to increase by $98.5 million (or 18.1%) in 2022/23 compared to the 2019/20 test year forecast; however, the average interest rate decreases from 4.43% in the 2019/20 test year forecast compared to 4.14% in the 2022/23 forecast.

Table 3-24 summarizes the existing long-term debt outstanding balances and interest expenses. Not included are two new debt issues forecast that drive the changes in the interest expense on long-term debt in 2023/24 and 2024/25.

[119] 1st Round Information Request 9 (a) and 2nd Round Information Request 8 (a) Update (10/15), 2022 Commodity and Delivery Service Rate Application.

Table 3-24: Current Long-Term Debt[120]

Debt Item	Issue Date	Maturity Date	Outstanding Balance	Interest Rate	Interest Expense
Bond #34	4-Dec-98	5-Mar-29	25,000,000	5.75%	1,437,500
Bond #35	24-Mar-99	5-Mar-29	25,000,000	5.60%	1,400,000
Bond #40	8-Aug-01	5-Sep-31	50,000,000	6.40%	3,200,000
Bond #52	14-Nov-08	1-Jun-40	75,000,000	5.19%	3,892,500
Bond #56	12-Mar-12	3-Feb-42	25,000,000	3.40%	850,000
Bond #57 -1	17-Jan-14	2-Jun-45	50,000,000	3.90%	1,950,000
Bond #57 - 2	17-Jan-14	2-Jun-45	50,000,000	3.90%	1,950,000
Bond #58	28-Mar-14	3-Jun-24	50,000,000	3.20%	1,600,000
Bond #60	13-Feb-15	2-Jun-45	10,000,000	3.90%	390,000
Bond #63	20-Oct-16	2-Dec-46	50,000,000	2.75%	1,375,000
Bond #65	16-May-17	2-Jun-48	50,000,000	3.30%	1,650,000
Bond #65B	31-May-18	2-Jun-48	50,000,000	3.30%	1,650,000
Bond #68	2-Apr-19	2-Jun-50	50,000,000	3.10%	1,550,000
Bond #69	22-May-19	2-Jun-50	35,000,000	3.10%	1,085,000
Bond #70	23-Jul-19	2-Jun-58	25,000,000	2.95%	737,500
Bond #72	28-Apr-20	2-Jun-50	50,000,000	3.10%	1,550,000
Bond #76	12-May-22	2-Dec-52	50,000,000	2.80%	1,236,667
Total Long Term Debt			**720,000,000**		**27,504,167**
Calculated Average Cost of Long Term Debt				4.13%	
Amortization of Debt Costs			(3,224,983)		42,500
Debt Retirement Funds			(71,060,028)		(893,798)
Total as at Mar 31, 2023			**645,714,989**		**26,652,869**

* Table 3-24 reflects information provided in the Original Application and includes updated forecasts for 2022/23 included in the Mid-Application Update.

Sinking Fund Payments [or Debt Retirement Fund]

SaskEnergy is legislatively required to maintain sinking funds related to its long-term debt. Debt issues in excess of five years carry a mandatory sinking fund payment. These payments are made to the Ministry of Finance and it is the Ministry that manages the sinking fund investments. SaskEnergy notes that it estimates

[120] Prepared based on Tab 14, page 8, and 2nd Round Information Request 8 (a) Update (10/15), 2022 Commodity and Delivery Service Rate Application.

sinking fund earning amounts each year based on the prior year's actual results and market conditions.[121] Table 3-25 summarizes debt retirement fund earnings recent actuals and the forecasts for the test years.

Yields have declined from 3.6% for the 2019/20 test year forecast. Over the test years, the average yield is forecast to increase slightly from 2.1% for 2022/23, to 2.3% in 2023/24, and 2.5% in 2024/25. Sinking fund earnings are included as an offset to the long-term debt interest expense which reduces the average cost of debt.

Table 3-25: Debt Retirement Fund Earnings ($000)[122]

	Fiscal Year [Apr 1 to March 31]						
	2018/19 Forecast	2019/20 Forecast	2020/21 Actual	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast
	($000s)						
Debt Retirement Fund Balances	57,261	65,062	61,099	$69,403	$77,751	$86,438	$89,593
Debt Retirement Fund Earnings	1,743	2,361	2,212	1,316	1,648	1,987	2,201
Average Yield	3.0%	3.6%	3.5%	1.9%	2.1%	2.3%	2.5%

SaskEnergy has provided an update to their debt retirement fund earnings forecast provided in the application. SaskEnergy has lowered their forecast from $1.6 million in 2022/23 to $0.9 million. In the first quarter of 2022/23, SaskEnergy incurred a loss of approximately $0.3 million on the sale of bonds due to increases in bond yields.[123]

Accretion Expense

Accretion expense was introduced as a line item in interest expense in the June 2014 Financial Update. Accretion expense is a periodic annual expense that is recognized when updating the present value of future asset decommissioning liabilities using a discounted cash flows approach.

SaskEnergy notes accretion expense is directly related to the negative salvage value previously included in depreciation expense; however, International Financial Reporting Standards (IFRS) require that it be reported as a component of interest expense.[124] Table 3-26 summarizes recent forecasts and actuals for accretion expense. Accretion expense is forecast at $4.6 million for the 2022/23 test year (about 48.6% higher than the 2019/20 test year forecast), and increases to $5.2 million by 2024/25. These changes primarily reflect increases in the Present Value of Estimated Decommissioning Liabilities as well as small increases in the discount rate from 2020/21 actuals.

[121] 1st Round Information Request 11 (l), 2018 Commodity and Delivery Service Rate Application.
[122] 1st Round Information Request 9 (h) from 2022 Commodity and Delivery Service Rate Application and 1st Round Information Request 11 (k) from 2018 Commodity and Delivery Service Rate Application
[123] 2nd Round Information Request 8 (b) 2022 Commodity and Delivery Service Rate Application.
[124] Page 3-4, 2014 Delivery Service Rate Financial Update.

Table 3-26: Accretion Expense ($000)[125]

	Fiscal Year [Apr 1 to March 31]							
	2017/18 Actual	2018/19 Forecast	2019/20 Forecast	2020/21 Actual	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast
Present Value of Estimated Decomissioning Liability	100,428	100,743	101,135	179,540	174,060	193,160	209,560	226,260
Discount Rate	2.4%	2.7%	3.1%	2.2%	2.5%	2.4%	2.3%	2.3%
Accretion Expense	2,428	2,694	3,096	3,917	4,327	4,600	4,900	5,200

Amortization of Deferred Charges

The Amortization of Deferred Charges included in interest expense is forecast to be $0.013 million for the 2022/23 test year as shown in Table 3-21. This is about $0.24 million lower than the 2019/20 test year.

Capitalized Interest

The Capitalized Interest forecast for the 2022/23 test year is $0.303 million – about $0.07 million (or 29.5%) higher than the 2019/20 test year. Forecasts for 2023/24 and 2024/25 are similar to 2022/23. SaskEnergy states the reduction in capitalized interest in the 2021/22 forecast compared to actuals for 2020/21 is mainly due to the CIS upgrade project in January 2021 being capitalized (which notably reduced interest capitalization); and information system expenditures declined in 2021/22 which meant limited accumulation of work in process and interest capitalization.[126]

Interest Allocated to Commodity Cost of Gas

Interest Allocated to Commodity Cost of Gas is forecast to be $0.17 million for the 2022/23 test year – about $0.28 million (or 62.3%) lower than the 2019/20 test year.

Mid-Application Update

The Mid-Application Update includes a material increase in interest expense compared to the Original Application, based on a $1.2 million (or 4.7%) increase in long-term debt interest expense, $1.7 million (or 200.2%) increase in short-term debt expense, and a $0.8 million (or 45.8%) decrease in sinking fund earnings partially offset by a $1.5 million (or 865.5%) increase in interest allocated to commodity cost of gas.

SaskEnergy notes that the increase in long-term debt interest expense is due to additional borrowing of $50 million in May 2022 at a coupon rate of 2.8% and the increase in short-term debt interest expense is due to short-term borrowing rates fluctuating between 0.87% and 3% for 2022/23 (compared to the Original Filing assumption of short-term borrowing rates fluctuating between 0.26% and 0.78% for 2022/23). The reduction in sinking fund earnings is due to rising bond/yield rates which led to losses realized in the first quarter of 2022/23.[127]

[125] 1st Round Information Request 9 (g) from 2022 Commodity and Delivery Service Rate Application and 1st Round Information Request 11 (j) from 2018 Commodity.
[126] 1st Round Information Request 9 (e) from 2022 Commodity and Delivery Service Rate Application.
[127] September 29, 2022 Mid-Application Update, page 9.

Table 3-27 compares the interest expense included in the Original Application to the interest expense in the Mid-Application Update.

Table 3-27: Comparison of Interest Expense for 2022/23 Test Year: Original Filing Compared to Mid-Application Update ($000s)[128]

	Original Application	Mid-Application Update	*Change*	*Change %*
Interest on Notes Payable to Holdings Division	26,268	27,504	1,236	4.7%
Interest on Bank Indebtedness	824	2,474	1,650	200.2%
Interest on Finance Lease	404	281	(123)	(30.4%)
Accretion Expense	4,600	4,533	(67)	(1.5%)
Amortization of Deferred Charges	(13)	43	56	(430.8%)
Sinking Fund Earnings	(1,648)	(894)	754	(45.8%)
Capitalized Interest	(303)	(190)	113	(37.3%)
Interest Allocated to Commodity Cost of Gas	(168)	(1,622)	(1,454)	865.5%
Total	**29,963**	**32,129**	**2,166**	**7.2%**

Observations

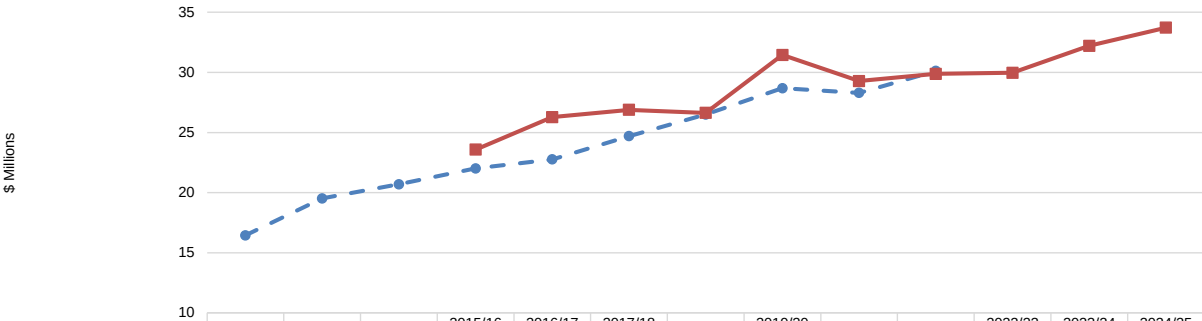
During the review of SaskEnergy's 2017 Delivery Service Rate Application, it was noted that SaskEnergy short-term interest rate forecasts have tended to be higher than actual results which has benefited SaskEnergy.[129] Figure 3-7 compares forecasts and actuals for total interest expense. The following is noted:

- 2016/17 actual interest expense was $3.5 million [13.4%] lower than the test year forecast
- 2017/18 actual interest expense was $2.2 million [8.1%] lower than the test year forecast;
- 2018/19 actual interest expense was $0.1 million [0.5%] lower than the 2018/19 fiscal year forecast;
- 2019/20 actual interest expense was $2.8 million [8.8%] lower than the test year forecast.

These differences were due both to lower interest rates as well as lower borrowing levels compared to forecast.[130]

[128] Schedule 1.5. 2022 Mid-Application Update.
[129] The Panel's Report to the Minister Responsible for Crown Investments Corporation of Saskatchewan on SaskEnergy's 2017 Delivery Rate Application. http://www.saskratereview.ca/docs/saskenergy2017/srrp-2017-saskenergy-report-final.pdf [accessed on September, 08 2022].
[130] Based on information provided in 1st Round Information Request 1 (h) ii) from 2018 Commodity and Delivery Service Rate Application, Schedule 1.5 of the 2022 Commodity and Delivery Service Rate Application, Schedule 1.0 of the 2017 Delivery Service Rate Application, and Schedule 4.0 of the 2016 Commodity and Delivery Service Rate Application.

Figure 3-7: Interest Expense Forecasts Compared to Actuals, 2013 to 2024/25 ($Millions)[131]



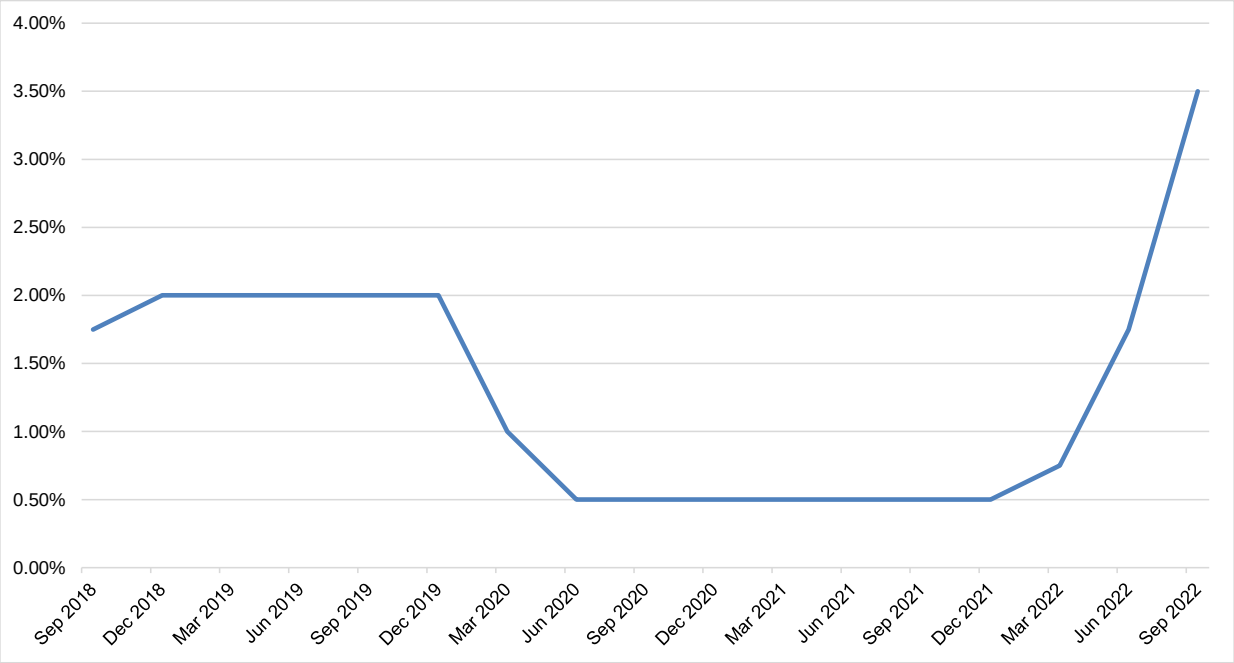
	2013	2014	2015	2015/16 Test Year	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Actuals	16.4	19.5	20.7	22.0	22.8	24.7	26.5	28.7	28.3	30.1			
Forecast				23.6	26.3	26.9	26.6	31.5	29.3	29.9	30.0	32.2	33.7
Over/Under Forecast				(6.6%)	(13.4%)	(8.1%)	(0.5%)	(8.8%)	(3.4%)	0.8%			
Actual - Forecast				(1.6)	(3.5)	(2.2)	(0.1)	(2.8)	(1.0)	0.2			

The interest rate environment is very different today than during prior applications. Figure 3-8 illustrates the substantial increase in the Bank of Canada's Prime Rate since March 2022. In its information note dated September 7, 2022, the Bank of Canada stated that given the outlook for inflation, the Governing Council still judges that the policy interest rate will need to rise further.[132] The Consultant notes the information provided by SaskEnergy that a 2% increase in short-term interest rates compared to the assumptions in the application would increase interest expense by approximately $2.8 million in 2022/23 and $5.0 million by 2024/25.[133]

SaskEnergy provided an update on short-term and long-term interest rates, with long-term rates increasing from 4.08% in the initial filing to 4.14% in the update. Short-term interest rates have increased materially by nearly 2% from 0.58% in the initial filing to 2.36% in the update.[134] These increases to interest rates have resulted in increases for interest expense for the 2022/23 test year with interest expense from short-term bank indebtedness increasing by $1.7 million (or 200.2%) and interest expense from long-term borrowing increasing by $1.2 million (or 4.7%) in the Mid-Application update.

[131] The 2015/16 Test Year is from the 2015 Commodity and Delivery Service Rate Application, the 2016/17 Test year forecast is from the 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from the 2017 Delivery Service Rate Application, 2012 to 2016/17 actuals and the 2019/20 Test Year are from the 2018 Commodity and Delivery Service Rate Application, and 2017/18 to 2020/21 actuals and forecasts from 2020/21 to 2024/25 are from the 2022 Commodity and Delivery Service Rate Application.
[132] Bank of Canada website. Available: https://www.bankofcanada.ca/2022/09/fad-press-release-2022-09-07/. Accessed September 22, 2022.
[133] 1st Round Information Request 1 (d).
[134] Tab 14, page 4, and 2nd Round Information Request 8 (a) Update (10/15), 2022 Commodity and Delivery Service Rate Application.

Figure 3-8: Bank of Canada Prime Rate Change[135]



Recommendations

Changes in interest rates compared to forecast can potentially have a material impact on the revenue requirement. Given the current rising interest rate environment it is recommended that SaskEnergy provide an updated interest expense forecast to the Panel for its review prior to the Panel recommending the implementation of any further proposed rate increases.

[135] Prepared based on information from Bank of Canada. https://www.bankofcanada.ca/rates/banking-and-financial-statistics/posted-interest-rates-offered-by-chartered-banks/ [accessed on September 08, 2022].

3.6 NET INCOME

SaskEnergy's Application included forecasts of net income and return on equity (ROE) of $9.7 million (ROE of 2.3%) in 2022/23, $20.0 million (ROE of 4.7%) in 2023/24, and $30.1 million (ROE of 6.9%) in 2024/25. SaskEnergy's forecast net income for the test years does not achieve its long-term target ROE of 8.3%.

However, it is noted that the Mid-Application Update (provided on September 29, 2022) materially increases SaskEnergy's net income and ROE for 2022/23 (Net Income for 2022/23 increases by $15.1 million and ROE increases to 5.8%). Key drivers for this change (as noted by SaskEnergy in its Mid-Application Update) relate to colder than normal weather; a lower forecast heat value; and added asset optimization revenues resulting from unforeseen market volatility.

Table 3-28 compares available forecast and actual net income calculations for 2019/20 through 2024/25 (as included in the Original Application).

Table 3-28: Net Income Calculation ($Millions)[136]

	Fiscal Year [Apr 1 to March 31]															
						2022/23					2023/24			2024/25		
Component	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24	
	$ Millions					(Millions)	*(Millions)*	*(%)*	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*
Operating & Maintenance Expense	136.2	131.6	142.0	132.5	129.5	155.0	18.7	13.8%	22.4	17.3%	157.3	2.3	1.5%	160.7	3.4	2.2%
Transportation and Storage Expense	53.9	53.5	52.3	58.4	58.4	63.8	9.8	18.2%	5.4	9.2%	66.0	2.3	3.6%	66.0	0.0	0.0%
Depreciation Expense	48.2	50.0	50.7	52.1	51.9	55.2	7.0	14.6%	3.2	6.1%	56.9	1.7	3.1%	59.3	2.4	4.2%
Tax Expense	7.4	6.9	7.1	8.0	7.7	8.3	0.9	12.4%	0.3	4.0%	8.7	0.5	5.4%	9.0	0.3	3.6%
Interest Expense	31.5	28.3	29.3	30.1	29.9	30.0	(1.5)	(4.7%)	(0.2)	(0.5%)	32.2	2.2	7.5%	33.7	1.5	4.7%
Revenue Requirement Before Net Earnings	**277.1**	**270.2**	**281.5**	**281.0**	**277.4**	**312.2**	**35.0**	**12.6%**	**31.1**	**11.1%**	**321.1**	**9.0**	**2.9%**	**328.8**	**7.6**	**2.4%**
Other Revenue	(30.4)	(30.3)	(32.2)	(33.3)	(32.0)	(30.5)	(0.1)	0.3%	2.8	(8.3%)	(31.2)	(0.7)	2.2%	(33.0)	(1.8)	5.7%
Net Revenue Requirement Before Net Earnings	**246.7**	**239.9**	**249.4**	**247.7**	**245.4**	**281.6**	**34.9**	**14.1%**	**33.9**	**13.7%**	**290.0**	**8.3**	**3.0%**	**295.8**	**5.8**	**2.0%**
Delivery Service Revenues at Proposed Rates	280.2	280.1	278.2	282.2	275.5	291.3	11.1	4.0%	9.1	3.2%	310.0	18.7	6.4%	325.9	16.0	5.1%
Net Earnings	**33.5**	**40.2**	**28.9**	**34.5**	**30.1**	**9.7**	**(23.8)**	**(71.1%)**	**(24.8)**	**(72.0%)**	**20.0**	**10.3**	**106.9%**	**30.1**	**10.1**	**50.6%**
Equity Portion of Rate Base	403.1	390.9	393.5	407.1	404.0	414.5	11.3	2.8%	10.5	2.6%	428.2	13.7	3.3%	439.2	11.0	2.6%
Return on Equity	8.3%	10.3%	7.3%	8.5%	7.5%	2.3%	(6.0%)		(5.1%)		4.7%	2.3%		6.9%	2.2%	
Net Earnings to get 8.30% ROE	33.5	32.4	32.7	33.8	33.5	34.4					35.5			36.5		
Revenue Deficiency to get 8.30% ROE	0.0	7.8	(3.8)	0.7	(3.4)	(24.7)					(15.5)			(6.3)		

* Table 3-28 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[136] Prepared based on Schedules 1.0 and 1.6, Tab 16 of Original Application and Revised (09/09) Application Update of the 2022 Commodity and Delivery Service Rate Application.

SaskEnergy calculates its long-term return on equity target based on a capital structure of 37% equity[137] and rate base for the test year. Each of these matters is commented on in further detail in Sections 3.6.1 (Rate Base) and 3.6.2 (Capital Structure and Return on Equity).

Table 3-28 indicates actual net income in 2020/21 was $11.3 million (28%) higher than forecast ($40.2 million actual vs. $28.9 million forecast). SaskEnergy attributes the higher net income to strategic vacancy management resulting in lower labour costs, lower external services costs due to contractor conversions, management of training, travel, communication, and professional fees, and delayed implementation of technology enhancements.[138]

Forecast net income for 2021/22 is $10.1 million (25%) lower than 2020/21 actuals. SaskEnergy attributes the lower forecast net income to increased transportation and storage rates and a warmer winter forecast for 2021/22 compared to 2020/21.[139]

Forecast net income for 2022/23 is $24.8 million (71%) lower than 2021/22 actuals. SaskEnergy attributes the lower net income primarily to the following factors:[140]

- TransGas implemented an 8.9% rate increase on April 1, 2022 which increased the transportation and storage expense by approximately $5.4 million, in addition to the $4.9 million 2021 TransGas rate increase.
- SaskEnergy continues to enhance support for customer efficiency programs to help customers reduce their heating bills and their impact on the environment. SaskEnergy has also been expanding customer initiatives which cumulatively are forecast to increase operating and maintenance expense by approximately $4.0 million.
- SaskEnergy increased its full-time equivalent complement by 40 and compensation increase assumptions in 2021/22 and 2022/23 which together results in a gross labour increase of approximately $13.2 million.
- SaskEnergy is forecasting increases to external services such as meter reading, digital, technology and security contract analysts, consulting, and hosting of approximately $3.3 million.

Forecast net income for 2023/24 and 2024/25 increases relative to 2022/23, primarily as a result of increased forecasts of delivery service revenues. SaskEnergy notes there are continuing cost increases forecast in these test years.[141]

Mid-Application Update

The Mid-Application Update includes a material increase of $15.1 million (or 156.8%) in forecast net income due to weather being 2% colder than normal as of August 31, 2022 (approximately $4 million added revenues).[142] SaskEnergy also notes impacts relating to an assumed decline in heat value from 39.9 MJ/m^3

[137] Page 2, Tab 14 of 2022 Commodity and Delivery Service Rate Application.
[138] 1st Round Information Request 15 (a), 2022 Commodity and Delivery Service Rate Application.
[139] 1st Round Information Request 15 (b), 2022 Commodity and Delivery Service Rate Application.
[140] 1st Round Information Request 15 (b), 2022 Commodity and Delivery Service Rate Application.
[141] 1st Round Information Request 15 (b), 2022 Commodity and Delivery Service Rate Application.
[142] September 29, 2022 Mid-Application Update, page 10.

to 39.5 MJ/m^3 (which would generate $2 million in added revenues); and higher asset optimization revenues due to unforeseen market volatility ($4.9 million added Other Revenues). The Mid-Application Update also notes cost reductions in O&M ($2.1 million lower than forecast) and Depreciation expense ($3.1 million lower than forecast).

Table 3-29 summarizes SaskEnergy's actual and weather-normalized ROE for 2012 through 2021/22 for the distribution utility and for SaskEnergy on a consolidated basis.

The actual average ROE for the last five years was 14.20%, while the average of weather normalized ROE for the same period was at 11.90%. The average for the last ten years shows actual ROE at 10.70%, while the average of weather normalized ROE for the same period was at 9.90%. These are materially higher than the target ROE of 8.3%.

Table 3-29: Actual and Weather Normalized Return on Equity[143]

		Distribution Utility		SaskEnergy Consolidated	
		Actual ROE	Weather Normalized ROE	Actual ROE	Weather Normalized ROE
Calendar Years	2012	8.30%	9.70%	11.00%	11.40%
	2013	12.40%	9.00%	11.00%	10.00%
	2014	10.20%	4.50%	6.50%	2.40%
	2015	3.30%	8.00%	12.30%	14.20%
2015/16 Fiscal Year		0.60%	7.10%	11.60%	13.90%
2016/17 Fiscal Year		9.20%	11.50%	8.80%	9.60%
2017/18 Fiscal Year		21.20%	19.00%	12.20%	11.40%
2018/19 Fiscal Year		19.70%	14.70%	12.90%	11.40%
2019/20 Fiscal Year		11.20%	8.90%	6.10%	5.30%
2020/21 Fiscal Year		10.30%	9.80%	5.20%	5.00%
2021/22 Fiscal Year		8.50%	7.00%	5.40%	4.70%
5-year Average		**14.20%**	**11.90%**	**8.40%**	**7.60%**
10-year Average		**10.70%**	**9.90%**	**9.20%**	**8.80%**

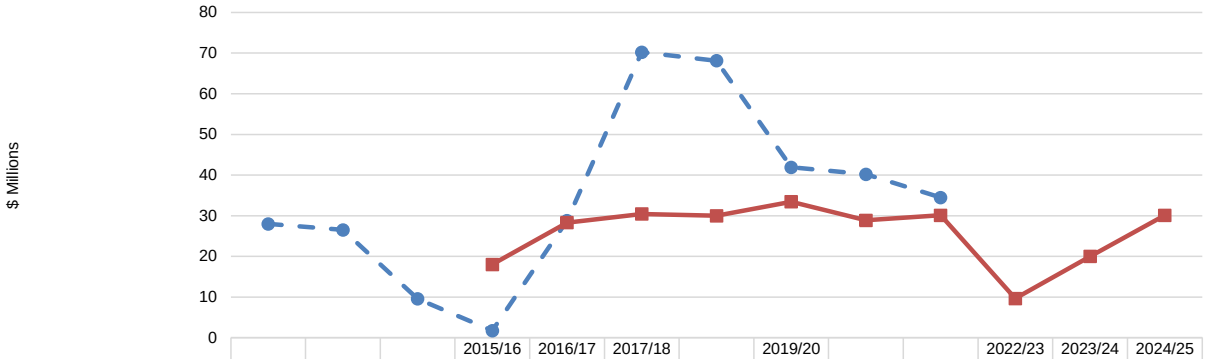
Observations

Figure 3-9 compares available actuals and forecasts of net income for 2013 through 2024/25. Actual net income has typically been higher than forecast, in some years, substantially higher. Higher net income can

[143] Tab 15, page 2, and 2nd Information Request 1 (c) (vii), 2022 Commodity and Delivery Service Rate Application.

result from colder than average winters when revenues are typically higher, but also can reflect lower overall costs than forecast.

Figure 3-9: Net Income Forecasts Compared to Actuals, 2013 to 2024/25 ($Millions)[144]



	2013	2014	2015	2015/16 Test Year	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Actuals	28.0	26.5	9.6	1.7	28.8	70.2	68.1	41.9	40.2	34.5			
Forecast				18.0	28.3	30.4	30.0	33.5	28.9	30.1	9.7	20.0	30.1
Over/Under Forecast				(90.3%)	1.8%	130.7%	127.2%	25.2%	39.2%	14.5%			
Actual - Forecast				(16.3)	0.5	39.8	38.1	8.4	11.3	4.4			

The provision to earn a fair ROE allows a utility to maintain its financial integrity. If the ROE target is too low, a very mild winter or an unexpected expense could cause the corporation to incur a net operating loss. SaskEnergy's long-term target ROE is comparable to peer utilities.

However, the Consultant is concerned about the pattern of SaskEnergy routinely achieving higher than forecast net income. As noted in Table 3-29, the average for the last ten years shows actual ROE at 10.70%, while the average of weather normalized ROE for the same period was at 9.90% - both higher than the target ROE of 8.3%.

While some of this can be attributed to colder than average winters recently, weather normalized ROE has also been higher than the long-term target in most recent years. The Consultant notes that in response to information requests in the 2018 Commodity and Delivery Service Rate Application, SaskEnergy stated there were expectations by its shareholder to achieve higher net income than planned in the approved budget.[145]

[144] The 2015/16 Test Year is from the 2015 Commodity and Delivery Service Rate Application, the 2016/17 Test year forecast is from the 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from the 2017 Delivery Service Rate Application, 2012 to 2016/17 actuals and the 2019/20 Test Year are from the 2018 Commodity and Delivery Service Rate Application, and 2017/18 to 2020/21 actuals and forecasts from 2020/21 to 2024/25 are from the Revised (09/09) 2022 Commodity and Delivery Service Rate Application.

[145] 1st Round Information Request 2 (d), 2018 Commodity and Delivery Service Rate Application.

Recommendations

Actual net income has typically been higher than forecast, and in some years substantially higher than forecast. It is recommended that SaskEnergy provide updated forecasts to the Panel for its review prior to the Panel recommending the implementation of any further proposed rate increases.

3.6.1 Rate Base

Rate base is the total dollar value of all assets used by a utility to provide service to customers; and is the amount on which the utility is permitted to earn a return.

Under normal regulatory principles assets included in rate base must be considered "used and useful and prudently acquired". This means that only assets that are providing utility service to customers are included in rate base and that the costs of assets should reflect reasonable procurement and management.

Rate base includes the following components:

- Plant in service - this is the largest component of the rate base and consists of total cost of assets in service.
- Accumulated depreciation of assets in service (included as an offset to the rate base).
- Fuel inventories (consisting of gas in storage).
- Other non-fuel inventories (materials and supplies).
- Allowance for Cash Working Capital - the average amount of capital provided by shareholders, over and above the investment in plant and other specific rate base components, to bridge the gap or lag between the time expenditures are required to provide services and the time revenue is received from customers.

Table 3-30 provides a summary of 2019/20 through 2024/25 forecasts and 2020/21 and 2021/22 actuals, and indicates as follows:

- 2022/23 test year rate base is forecast to be approximately $30.7 million (2.8%) higher than 2019/20 test year forecasts and $19.8 million (1.8%) higher than 2021/22 actuals. This reflects higher net book value of assets as well as higher gas in storage.
- Rate base is forecast to further increase by $37.1 million (3.3%) in 2023/24 and an additional $29.7 million (2.6%) in 2024/25. These increases primarily reflect increases in the net book value of assets with changes.

Table 3-30: Summary of Rate Base from 2019/20 to 2024/25 ($Millions)[146]

	Fiscal Year [Apr 1 to March 31]														
						2022/23					2023/24			2024/25	
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24
	$ Millions					(Millions)	*(Millions)*	*(%)*	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*
Plant in Service at Cost	1,586.0	1,592.7	1,614.0	1668.3	1,668.1	1,748.9	*162.8*	*10.3%*	*80.6*	*4.8%*	1,843.1	94.2	*5.4%*	1,929.8	*86.7*	*4.7%*
Accumulated Depreciation	(548.0)	(594.5)	(600.0)	(632.8)	(636.9)	(688.2)	(140.2)	*25.6%*	(55.4)	*8.7%*	(744.7)	(56.5)	8.2%	(802.3)	(57.6)	*7.7%*
Net Book Value	**1,038.0**	**998.2**	**1,013.9**	**1,035.4**	**1,031.1**	**1,060.7**	**22.7**	***2.2%***	**25.2**	***2.4%***	**1,098.4**	**37.7**	**3.6%**	**1,127.5**	***29.1***	***2.6%***
Natural Gas in Storage	26.9	32.2	25.3	37.5	35.2	34.3	*7.4*	*27.6%*	(3.3)	(8.7%)	31.8	(2.4)	(7.1%)	30.7	(1.1)	*(3.5%)*
Inventories of Materials	8.4	10.1	9.0	11.2	10.0	10.1	*1.7*	*20.0%*	(1.1)	(9.8%)	10.0	(0.1)	(0.7%)	9.9	(0.1)	*(0.7%)*
Cash Working Capital	16.2	16.0	15.4	16.2	15.5	15.1	(1.1)	*(6.7%)*	(1.1)	(6.8%)	17.0	1.9	12.5%	18.8	1.8	*10.5%*
Total	**1,089.5**	**1,056.4**	**1,063.6**	**1,100.4**	**1,091.9**	**1,120.2**	**30.7**	***2.8%***	**19.8**	**1.8%**	**1,157.3**	**37.1**	**3.3%**	**1,187.0**	***29.7***	***2.6%***
Annual Change in Forecast			(25.9)		28.3											
Annual Change, %			(2.4%)		2.7%											
Actuals vs Forecast			7.2		(8.5)											
Change, %			0.7%		(0.8%)											

* Table 3-30 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[146] Tab 16, page 2, 2022 Commodity and Delivery Service Rate Application.

3.6.2 Capital Structure and Return on Rate Base

SaskEnergy's capital structure and Return on Equity for the test years are outside the scope of the Panel's review parameters. The comparative table provided below (Table 3-31) is for illustration purposes to show SaskEnergy's capital structure and ROE target parameters in comparison to other peer utilities.

Table 3-31: Return on Equity (%) and Common Equity (%)[147]

	Company	Return on Equity (%)	Common Equity Ratio (%)
1	Centra Gas Manitoba*	8.30%	31.20%
2	SaskEnergy (target ROE)*	8.30%	37.00%
3	ATCO Gas Calgary	8.50%	37.00%
4	Fortis BC (Vancouver)	8.75%	38.50%
5	Energir (Montreal)	8.90%	38.50%
6	Union Gas Limited (Hamilton)	8.93%	36.00%
7	Enbridge Gas Distribution (Toronto)	9.00%	36.00%

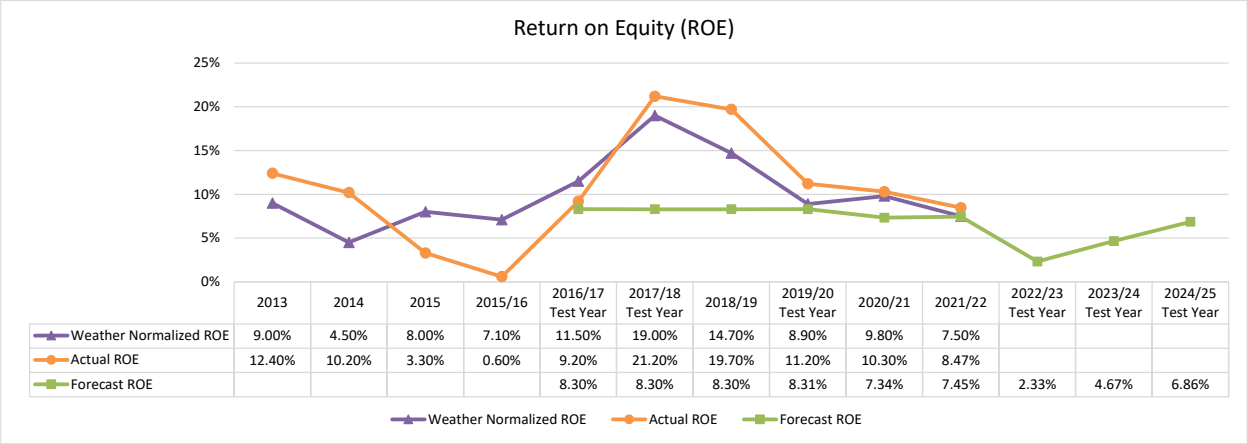
*Centra Gas Manitoba and SaskEnergy are Crown Corporations.

Observations

Figure 3-10 compares year over year changes in weather normalized ROE, forecast ROE, and actual ROE for 2013 through 2024/25. This shows that forecast ROE has been below the weather normalized and actual ROE from 2017/18 through 2021/22. Since 2017/18 the actual ROE has been above the weather normalized ROE. Since 2016/17, SaskEnergy has been above its target ROE of 8.3%, and in some cases both the weather normalized and actual ROE have been well above the target ROE.

[147] Tab 22, page 10, 2022 Commodity and Delivery Service Rate Application.

Figure 3-10: Weather Normalized ROE, Forecast ROE and Actual ROE, 2013 to 2024/25[148,149]



	2013	2014	2015	2015/16	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Weather Normalized ROE	9.00%	4.50%	8.00%	7.10%	11.50%	19.00%	14.70%	8.90%	9.80%	7.50%			
Actual ROE	12.40%	10.20%	3.30%	0.60%	9.20%	21.20%	19.70%	11.20%	10.30%	8.47%			
Forecast ROE					8.30%	8.30%	8.30%	8.31%	7.34%	7.45%	2.33%	4.67%	6.86%

It is recognized that SaskEnergy must maintain a capital structure that balances financial stability with the need to maintain competitive customer rates and to provide reliable services. The Consultant observes that SaskEnergy's deemed common equity ratio and ROE are within the range of peer utilities in Canada. SaskEnergy's 37% equity ratio is approximately the midpoint of the ranges used by SaskEnergy's peer utilities; and the target ROE of 8.30% is slightly below the average ROE target [average of 8.47%] for comparable major utilities in other jurisdictions.

3.7 OTHER REVENUE

SaskEnergy earns other revenue from a variety of sources including connect fees, asset optimization [previously gas marketing margins], distribution tolls and other miscellaneous revenues. Table 3-32 summarizes actual other revenue for 2020/21 and 2021/22, and forecasts for 2019/20 to 2024/25. These revenues are offsets to SaskEnergy's revenue requirement and reduce the need for revenue from delivery service rates.

[148] The 2016/17 Test year forecast is from Tab 15 of the 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from Tab 15 of the 2017 Delivery Service Rate Application, 2018/19 forecast and the 2019/20 Test Year are from Tab 15 of the 2018 Commodity and Delivery Service Rate Application, and 2013 to 2020/21 actuals and forecasts from 2020/21 to 2024/25 are from tab 15 of the 2022 Commodity and Delivery Service Rate Application. The 2021/22 actuals are from the 2nd Round Information Request 1 (c) (viii).

[149] Weather normalized ROE is only available from 2012 to 2021/22. Forecast ROE are used for 2021/22 to 2024/25.

Table 3-32: Other Revenue ($Millions)[150]

	Fiscal Year [Apr 1 to March 31]														
						2022/23					2023/24			2024/25	
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actuals		Test Year Current Application	Change over 2022/23		Test Year Current Application	Change over 2023/24	
	$ Millions					(Millions)	*(Millions)*	*(%)*	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*	(Millions)	*(Millions)*	*(%)*
Connect Fees	2.1	1.8	1.9	2.6	2.6	1.8	*(0.2)*	*(11.2%)*	*(0.8)*	*(30.8%)*	1.8	*0.0*	*0.0%*	1.8	*0.0*	*0.0%*
Margin on Asset Optimization	5.9	3.4	6.1	4.1	4.0	1.9	*(4.0)*	*(68.2%)*	*(2.2)*	*(54.1%)*	1.9	*0.0*	*0.0%*	1.9	*0.0*	*0.0%*
Late Payment Charges	1.2	1.8	1.5	2.9	2.3	1.5	*0.3*	*25.0%*	*(1.4)*	*(48.9%)*	1.5	*0.0*	*0.0%*	1.5	*0.0*	*0.0%*
Customer Financing	0.1	0.0	0.1	0.0	0.1	0.0	*< 0 .1*	*(34.4%)*	*< 0 .1*	*(8.7%)*	0.0	*0.0*	*0.0%*	0.0	*0.0*	*0.0%*
Miscellaneous Revenue	0.6	0.7	0.6	0.7	0.6	0.6	*< 0 .1*	*11.8%*	*< 0 .1*	*(6.8%)*	0.6	*0.0*	*0.0%*	0.6	*0.0*	*0.0%*
Distribution Tolls	20.6	22.5	22.1	22.9	22.4	24.6	*4.0*	*19.5%*	*1.7*	*7.6%*	25.3	*0.7*	*2.7%*	27.1	*1.8*	*7.1%*
Total	**30.4**	**30.3**	**32.2**	**33.3**	**32.0**	**30.5**	***0.1***	***0.3%***	***(2.8)***	***(8.3%)***	**31.2**	***0.7***	***2.2%***	**33.0**	***1.8***	***5.7%***
Annual Change in Forecast			1.7		(0.1)											
Annual Change, %			5.7%		(0.4%)											
Actuals vs Forecast			1.9		(1.3)											
Change, %			6.1%		(3.8%)											

* Table 3-32 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

[150] Revised (09/09) schedule 1.7 from the 2022 Commodity and Delivery Service Rate Application.

Forecast Other Revenues for the 2022/23 test year are $30.5 million, which is about $0.1 million (or 0.3%) higher compared to the 2019/20 test year, and about $2.8 million (or 8.3%) lower compared to 2021/22 actuals.

- **Connect Fees –** For the 2022/23 test year, connect fees are forecast to be about $0.2 million (or about 11.2%) lower than the 2019/20 test year and $0.8 million (or about 30.8%) lower than 2021/22 actuals. Connect fees are forecast to remain flat in the 2023/24 and 2024/25 test years.
- **Asset Optimization –** 2022/23 test year revenues from Asset Optimization are forecast to be about $4.0 million (or 68.2%) lower than the 2019/20 test year forecast and about $2.2 million (54.1%) lower than the 2021/22 actuals.

  SaskEnergy notes it obtains asset optimization revenues by optimizing the transportation contracts in the commodity market when they are not required by the utility and that this improves the efficiency of its transportation contracts. SaskEnergy can use its assets in a variety of ways in order to extract value including using its excess NIT to TEP capacity to bring gas in from AECO to either be sold at TEP or Empress.[151] SaskEnergy noted that at the time the rate application was prepared, it appeared that the NGTL transportation shortage was finally resolved and the margins between markets were minimal. However, since the application was filed, part of the NGTL transportation expansion project that was set to bring on the required capacity to move gas freely to markets downstream of AECO, has been delayed and is now projected to be completed in Q1 2023. Because of this delay, there has been elevated spreads between AECO and TEP/Empress for 2022/23. If sufficient transportation capacity comes online, SaskEnergy anticipates the spreads between AECO and TEP/Empress to reduce once again which would align with SaskEnergy's original rate application revenue forecast.[152]

  SaskEnergy has previously noted that the magnitude of asset optimization revenues is dependent on the alignment of underutilized assets/capacity with market pricing opportunities, and is therefore difficult to forecast.[153]
- **Late Payment Charges –** Late payment charges in the 2022/23 test year are forecast to be about $1.5 million which is $0.3 million (or about 25.0%) higher than the 2019/20 test year forecast, and about $1.4 million (or about 48.9%) lower than 2021/22 actuals.
- **Distribution Tolls –** Large natural gas users who are not SaskEnergy customers sometimes require the use of SaskEnergy's distribution facilities to regulate and adjust the pressure of their natural gas from the TransGas high-pressure transmission pipeline system to the users' metering location. SaskEnergy provides this service and assesses a toll which is charged to TransGas.[154] For the 2022/23 test year revenues from Distribution Tolls are forecast to increase by about $4.0 million (or 19.5%) over the 2019/20 test year forecast and about $1.7 million (or about 7.6%) over 2021/22 actuals. The 2023/24 test year revenues from Distribution Tolls are forecast to further

[151] 1st Round Information Request 7 (b) and 11(a).
[152] 1st Round Information Request 11 (b).
[153] 1st Round Information Request 13(e), 2018 Commodity and Delivery Service Rate Application.
[154] 1st Round Information Request 16(b).

increase by $0.7 million (or 2.7%) over the 2022/23 test year, and increase further in 2024/25 by $1.8 million (or about 7.1%) over the 2023/24 test year.

Mid-Application Update

The Mid-Application Update includes a material increase of $7.2 million (or 23.7%) in other revenues compared to the Original Application, based on a $4.9 million (or 259.3%) increase in asset optimization, $1.5 million (or 101.6%) increase in late payment charges, and a $0.8 million (or 44.9%) increase in connect fees. SaskEnergy notes that the increase in asset optimization is due to unforeseen market volatility. SaskEnergy also notes that it underestimated the connect fee and late payment charge revenue assuming the re-connect fees to customers who were disconnected for non-pay and late payment charges waived during 2020/21 would continue into 2022/23.[155]

Table 3-33 compares the other revenues included in the Original Application to the other revenues in Mid-Application Update.

Table 3-33: Comparison of Other Revenues for 2022/23 Test Year: Original Filing Compared to Mid-Application Update ($000s)[156]

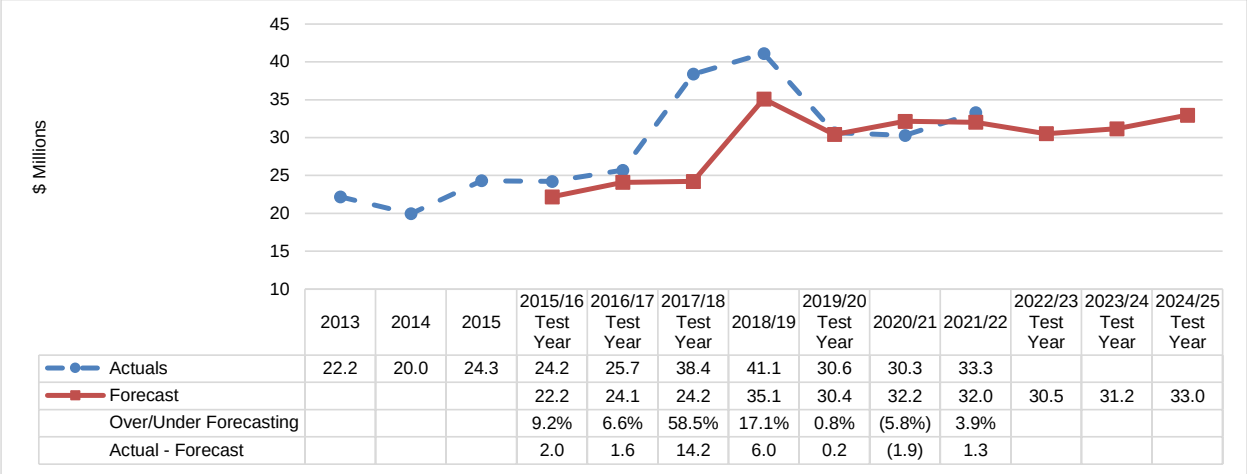
	Original Application	Mid-Application Update	*Change*	*Change %*
Connect Fees	(1,820)	(2,638)	(818)	44.9%
Asset Optimization	(1,881)	(6,759)	(4,878)	259.3%
Late Payment Charges	(1,500)	(3,024)	(1,524)	101.6%
Customer Financing	(42)	(40)	2	(4.8%)
Miscellaneous Revenue	(643)	(686)	(43)	6.7%
Distribution Tolls	(24,631)	(24,592)	39	(0.2%)
Total	**(30,517)**	**(37,739)**	**(7,222)**	**23.7%**

Observations

Figure 3-11 compares forecasts and actuals for total other revenues. Asset optimization is the primary driver to material variances in other revenues, and while revenues from asset optimization have decreased, the forecast of $1.9 million appears low for the test years and could result in other revenues being under forecast.

[155] September 29, 2022 Mid-Application Update, page 11.
[156] Schedule 1.7. 2022 Mid-Application Update.

Figure 3-11: Other Revenue Forecasts Compared to Actuals, 2013 to 2024/25 ($Millions)[157]



	2013	2014	2015	2015/16 Test Year	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Actuals	22.2	20.0	24.3	24.2	25.7	38.4	41.1	30.6	30.3	33.3			
Forecast				22.2	24.1	24.2	35.1	30.4	32.2	32.0	30.5	31.2	33.0
Over/Under Forecasting				9.2%	6.6%	58.5%	17.1%	0.8%	(5.8%)	3.9%			
Actual - Forecast				2.0	1.6	14.2	6.0	0.2	(1.9)	1.3			

Other Revenue sources for the 2022/23 test year are all generally lower compared to the most recent actuals, except for revenues from distribution tolls.

The Consultant understands Asset Optimization revenues, in particular, are highly variable and difficult to forecast. Variances in Asset Optimization revenues have contributed to years when actual revenues exceed forecasts. Where there are variances between forecast and actual Other Revenues sources, SaskEnergy bears the risk (or benefit) to its net income. Table 3-32 shows year over year fluctuations in Asset Optimization revenues. While it is difficult to forecast revenues from this source, the ongoing impact of over or under-forecasting these revenues can be material. During the review of the 2017 Application, SaskEnergy forecast revenues from this source at $2.1 million while actual revenues were $16.2 million ($14.1 million higher than the forecast). This contributed to the very high net income realised for the 2017/18 fiscal year. The Mid-Application Update indicates a material variance in Asset Optimization revenues for 2022/23 (a $4.9 million increase over the Original Application forecast) – which is also expected to contribute to a higher net income than forecast for 2022/23.

SaskEnergy also notes the forecast for connect revenues over the test period is also too low. SaskEnergy notes that the 2020/21 forecast for connect fees was used as the basis for test year forecasts. However, to address hardship related to the COVID-19 pandemic, in 2020/21 SaskEnergy waived the reconnect fee for customers disconnected for non-pay in the summer months. This resulted in underestimating connect revenues by about $0.8 million in 2022/23, which also likely effects 2023/24 and 2024/25 forecasts. SaskEnergy notes that this will be considered in the financial update for 2023/24 and 2024/25.[158]

[157] The 2015/16 Test Year is from the 2015 Commodity and Delivery Service Rate Application, the 2016/17 Test year forecast is from the 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from the 2017 Delivery Service Rate Application, 2012 to 2016/17 actuals and the 2019/20 Test Year are from the 2018 Commodity and Delivery Service Rate Application, and 2017/18 to 2020/21 actuals and forecasts from 2020/21 to 2024/25 are from the Revised (09/09) 2022 Commodity and Delivery Service Rate Application.

[158] 2nd Round Information Request 12(c).

The Mid-Application Update indicates a $1.5 million increase in late payment charges in 2022/23 compared to the Original Application.

In summary, the consultant is concerned that the asset optimization revenue forecast may be conservative. Further, as outlined in the Mid-Application Update and response to information requests, the connect revenues forecast for the entire test period may also be too low.

Separately, as outlined in Section 8.0 – the most recent cost of service study recommends that SaskEnergy recover TransGas related costs through a fixed payment as opposed to the current distribution tolls (which result in SaskEnergy being exposed to weather related risk). SaskEnergy is reviewing this recommendation in fall 2022 and if implemented the change would occur in the next fiscal year.

Recommendations

In the consultant's view, revenues from asset optimization are conservatively forecast and are likely to be higher than estimated for the test years. Forecast connect fees are likely too low. The material increase in forecast late payment charges for 2022/23, as noted in the Mid-Application Update, is also of concern. It is recommended that SaskEnergy provide updated forecasts to the Panel for its review prior to the panel recommending the implementation of any further proposed rate increases.

With regard to distribution tolls – it is recommended that SaskEnergy provide an update on whether the cost of service recommendation will be implemented during next update. If a change is recommended the impact to distribution tolls (both in terms of risk profile and financial risk to distribution ratepayers) should be provided.

3.8 REVENUE DEFICIENCY

Table 3-34 provides a comparison of revenue requirements to achieve an 8.30% ROE, as well as the revenues at proposed rates and the revenue deficiency.

Table 3-34: Revenue Deficiency ($millions)[159]

	2022/23	2023/24	2024/25
Net Delivery Revenue Requirement to get 8.30% ROE	316.0	325.5	332.3
Forecast Revenues at Current Rates	274.5	297.1	312.4
Revenue Deficiency at Current Rates	**41.5**	**28.4**	**19.9**
Average increase required over existing rates	*15.1%*	*9.6%*	*6.4%*
Proposed Average Rate Increase	*8.0%*	*5.0%*	*5.0%*
Incremental Revenues with Rate Increase	**16.8**	**12.9**	**13.5**
Forecast Revenues at Proposed Rates	291.3	310.0	325.9
Revenue Deficiency at Proposed Rates	**24.7**	**15.5**	**6.4**

* Table 3-34 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Update.

SaskEnergy notes that incremental revenues are weather dependent [i.e., the proposed increase to the volumetric Delivery Charge is based on normal weather]. If weather is colder than normal, this revenue will be higher and customer bills will increase since more volume will be consumed. If weather is warmer than normal, customers will consume less natural gas, resulting in lower bills and lower delivery revenue for SaskEnergy.

Observations

SaskEnergy's proposed rate increases do not eliminate the revenue deficiency by 2024/25. Additional revenue increases, cost reductions or a combination of the two would be required for SaskEnergy to achieve its target ROE by 2024/25.

The revenue deficiency for 2022/23 does not consider the impact of the Mid-Application Update - which shows the forecast net delivery revenue requirement for 2022/23 increasing to $297.2 million (a $5.9 million increase over the Original Application forecast). This would change the results noted in Table 3-34.

At this time, updated information regarding the 2023/24 and 2024/25 forecasts are not available.

[159] Prepared based on Schedule 1.0 and Schedule 5.3, 2022 Commodity and Delivery Service Rate Application.

4.0 PRODUCTIVITY AND EFFICIENCY

SaskEnergy operates an extensive gas distribution network over a large service territory with a low customer density,[160] and notes that it is facing increased capital and operating costs related to increasing regulatory and industry standards. The Application indicates that SaskEnergy has achieved approximately $56.5 million in productivity and efficiency savings since 2009.[161]

Actual productivity and efficiency savings averaged $5.3 million annually from 2009 to 2017/18 (ranging from $4.0 million to $6.2 million).[162] Actual savings in 2020/21 were materially lower ($1.2 million) than historical trends, while actual 2021/22 savings were higher (at $7.9 million). Material savings are estimated for the application test years – with estimated savings ranging from $13.7 million to $13.9 million over the test period.[163]

SaskEnergy confirmed that targeted productivity and efficiency measures described in its application resulted in permanent savings that are reflected in the test year forecasts.[164] SaskEnergy also specified that there were no restraint measures in place after 2017/18; no restraint measures were in place from 2019/20 test year through to 2021/22; and no restraint measures are expected for 2022/23 through 2024/25 test year.[165]

Key measures that are anticipated to provide productivity and efficiency savings for the period from 2022/23 to 2024/25 are summarized in Table 4-1. SaskEnergy notes that many of the initiatives shown in Table 4-1 started as process improvements in previous years which developed into specific projects (as listed). The initiative may be listed, but savings are not anticipated until implementation is determined.[166]

[160] 2022 Delivery Service and Commodity Rate Application, page 21.
[161] Tab 6, page 1.
[162] 2018 Commodity and Delivery Service Rate Application, page 23. 2017 Delivery Service Rate Application, page 10. 2017 Delivery Rate Application Tab 23, page 1-2. 2016 Commodity and Delivery Service Rate Application, page 19-20 (savings noted are for the consolidated company and not just the distribution company).
[163] 1st Round Information Request 25 (a) and (c) 2022 Delivery Service and Commodity Rate Application.
[164] 1st Round Information Request 25(b), 2022 Delivery Service and Commodity Rate Application.
[165] 2nd Round Information Requests 21(b).
[166] 2nd Round Information Request 21(a).

Table 4-1: Summary of Actual and Targeted Fiscal Year Savings[167]

	Actual ($)		Targeted Savings ($)		
	2020/21	2021/22	2022/23	2023/24	2024/25
Crown Collaboration					
Enhanced Public Safety			27,000	27,000	27,000
Express Address		122,012	123,000	124,000	125,000
Joint Infrastructure		2,131,200	2,135,000	1,955,000	1,955,000
Line Locating		3,767,400	3,838,000	3,838,000	3,838,000
Mapping		76,513	77,000	77,000	77,000
Natural Gas Optimization		70,000	50,000	50,000	50,000
Microsoft Licensing		186,234	186,000	186,000	186,000
SCADA Leverage		147,500			
New Bill and Letter Print Service	100,000	250,000			
GIS and Work Management Integration		1,000	25,000	60,000	10,000
Workday - NRIS		10,000	10,000	10,000	10,000
Vegetation Mangaement			25,000	25,000	25,000
Corporate Purchase Cards	-	-	-	-	-
Fleet Lease Collaboration	-	-	-	-	-
Subtotal	**100,000**	**6,761,859**	**6,496,000**	**6,352,000**	**6,303,000**
Innovation and Business Processes					
Construction Work Management System	300,000	300,000	320,000	320,000	320,000
Contract Conversion	700,000	764,000	3,600,000	3,600,000	3,600,000
Customer Connection Collaboration with Operations			59,000	59,000	59,000
Mercury Modem Replacement	-	-	-	-	-
Operations Work Management Alignment Project			200,000	200,000	200,000
Regulator and Relief Valve Purchase Agreement	-	-	-	-	-
Subtotal	**1,000,000**	**1,064,000**	**4,179,000**	**4,179,000**	**4,179,000**
Leveraging Technology					
Telecom Savings and Process Efficiencies	100,000	100,000			
Customer Connect	-	-	-	-	-
Customer Portal/ Website Enhancements			700,000	700,000	700,000
Install to Bill			2,100,000	2,100,000	2,100,000
Procure to Pay			425,000	425,000	425,000
Subtotal	**100,000**	**100,000**	**3,225,000**	**3,225,000**	**3,225,000**
Total Savings	**1,200,000**	**7,925,859**	**13,900,000**	**13,756,000**	**13,707,000**

[167] 2nd Round Information Request 21(a), 2022 Delivery Service and Commodity Rate Application.

Observations

The Consultant notes that capital spending and infrastructure renewal requirements are likely to continue to put upward pressure on delivery service rates for the foreseeable future.

The current economic context and concerns noted regarding customer affordability (see Section 2.1, Section 2.2 and Section 19 of this report) highlight the need for SaskEnergy to continue to intensify its efforts to identify and implement productivity and efficiency improvements that can effectively reduce its costs and revenue requirement, wherever possible.

It appears that SaskEnergy has materially increased planned productivity and efficiency measures for the test years. SaskEnergy indicates that no restraint measures have been applied since 2019/20; and no restraint measures are expected for 2022/23 to 2024/25.[168] SaskEnergy also notes the "intention is to return to normal course of business and deliver improvements to processes and customer experience that is sustainable into the future".[169]

[168] 2nd Round Information Request 21(b).
[169] 1st Round Information Request 25(e).

5.0 CAPITAL EXPENDITURES

Capital expenditures are outside the scope of review for the Panel. However, capital expenditures influence the Distribution Utility's interest expense, depreciation expense and O&M expenses. Therefore, a review of SaskEnergy's capital program is necessary to understand the cost drivers behind the proposed revenue requirement and delivery service rates.

5.1 OVERVIEW OF TEST YEAR CAPITAL EXPENDITURES

From 2016/17 to 2021/22, average annual net capital spending was approximately $89.7 million – spending peaked over the period at $121.0 million in 2018/19, before declining materially in 2019/20 ($89.7 million) and 2021/22 ($64.7 million). Net spending is forecast to increase to $164.4 million by 2024/25. With average net spending over the test period at $154.2 million.

Table 5-1 summarizes actual capital expense from 2016/17 to 2021/22 and forecast expense from 2022/23 to 2024/25. This shows material actual year over year variances from 2016/17 to 2021/22, ranging from a 29% increase ($27.3 million) in 2018/19 over 2017/18 actuals to a 26% decrease ($31.3 million) in 2019/20 of 2018/19 actuals. This also shows a material forecast increase in spending in 2022/23 ($73.9 million, or 114%, increase) compared to 2021/22 actual spending.

Table 5-1: Total Actual and Forecast Capital Spending ($ millions)[170]

							Application Test Years		
	2016/17 Actual	2017/18 Actual	2018/19 Actual	2019/20 Actual	2020/21 Actual	2021/22 Actual	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast
Distribution									
Customer Connections	37.7	37.2	45.0	34.9	36.8	35.9	39.2	40.3	36.3
System Improvements	52.8	53.1	54.8	48.5	30.8	38.3	54.7	54.4	52.1
Gas Measurement	6.4	8.0	4.8	5.5	5.6	4.8	11.2	14.6	12.9
Green Energy Initiatives						0.1	3.6	3.7	3.7
Tools/Station	1.0	1.0	1.0	0.8	0.9	0.6	0.9	0.9	0.9
Subtotal	**97.9**	**99.3**	**105.6**	**89.7**	**74.1**	**79.7**	**109.6**	**113.9**	**105.9**
General Plant									
Information Systems	10.5	10.5	13.8	10.2	11.8	2.6	22.0	25.9	20.1
Enterprise Security					0.6	0.5	1.1	1.0	1.0
Vehicles	3.2	6.3	5.2	2.1	2.2	2.4	3.0	3.6	3.6
Building/ Furniture	1.7	2.1	19.4	4.2	3.9	2.4	17.7	31.5	48.3
Regulators	0.5	0.5	0.9	1.1	0.8	-			
Subtotal	**15.9**	**19.4**	**39.3**	**17.6**	**19.3**	**7.9**	**43.8**	**62.0**	**73.0**
Total Capital	113.8	118.7	144.9	107.3	93.4	87.6	153.4	175.9	178.9
Customer Connections	- 20.2	- 25.0	- 23.9	- 17.6	- 17.9	- 22.9	- 14.8	- 16.4	- 14.5
Net Capital	**93.6**	**93.6**	**121.0**	**89.6**	**75.5**	**64.7**	**138.5**	**159.4**	**164.3**
Annual Change		-	27.40	- 31.40	- 14.10	- 10.80	73.80	20.90	4.90
Annual Change, %		0.00%	29%	-26%	-16%	-14%	114%	15%	3%

Changes in Forecast Spending: 2018/19 to 2021/22

Table 5-2 summarizes year over year changes from forecast and indicates a consistent pattern of actual expenditures being materially lower than forecast in most years. This also shows a material increase in 2022/23 test year spending (114% increase) compared to 2021/22 actuals.

[170] Tab 8, page 8. 2nd Round Information Request 1(c).

Table 5-2: Capital Spending from 2019/20 to 2024/25 ($Millions)[171]

	Fiscal Year [Apr 1 to March 31]												
						Current Application Test Years			2022/23				
	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast	Test Year Current Application	Change over 2019/20 Test Year		Change over 2021/22 Actual	
	(Millions)					(Millions)			($ Millions)	*($ Millions)*	*(%)*	*($ Millions)*	*(%)*
Distribution													
Customer Connections	55.6	36.8	36.1	35.9	34.9	39.2	40.3	36.3	39.2	(16.4)	(29.5%)	3.3	9.2%
System Improvements	67.6	30.8	60.1	38.3	41.0	54.7	54.4	52.1	54.7	(12.9)	(19.1%)	16.4	42.8%
Gas Measurement	6.8	5.6	7.1	4.8	7.7	11.2	14.6	12.9	11.2	4.4	64.7%	6.4	133.3%
Green Energy Initiatives				0.1	0.2	3.6	3.7	3.7	3.6	3.6		3.5	3500.0%
Tools/Station	1.6	0.9	1.0	0.6	0.7	0.9	0.9	0.9	0.9	(0.7)	(43.8%)	0.3	50.0%
Sub-total	**131.6**	**74.1**	**104.2**	**79.8**	**84.6**	**109.5**	**113.8**	**105.8**	**109.5**	**(22.1)**	**(16.8%)**	**29.7**	**37.2%**
General Plant													
Information Systems	25.7	11.8	13.5	2.6	3.6	22.0	25.9	20.1	22.0	(3.7)	(14.4%)	19.4	746.2%
Enterprise Security		0.6	0.8	0.5	0.7	1.1	1.0	1.0	1.1	1.1		0.6	120.0%
Vehicles	4.9	2.2	1.9	2.4	2.3	3.0	3.6	3.6	3.0	(1.9)	(38.8%)	0.6	25.0%
Building/Furniture	12.1	3.9	6.6	2.4	2.7	17.7	31.5	48.3	17.7	5.6	46.3%	15.3	637.5%
Regulators	0.7	0.8	0.7	0.0									
Sub-total	**43.3**	**19.3**	**23.5**	**7.8**	**9.3**	**43.8**	**61.9**	**72.9**	**43.8**	**0.5**	**1.2%**	**36.0**	**461.5%**
Total Capital Expenditures	**174.9**	**93.4**	**127.7**	**87.6**	**93.9**	**153.4**	**175.7**	**178.7**	**153.4**	**(21.5)**	**(12.3%)**	**65.8**	**75.1%**
Customer Contributions	**(24.4)**	**(17.9)**	**(15.9)**	**(22.9)**	**(19.9)**	**(14.8)**	**(16.4)**	**(14.5)**	**14.8**	**9.6**	**(39.3%)**	**8.1**	**(35.4%)**
Net Capital Expenditures	**150.5**	**75.5**	**111.8**	**64.7**	**73.9**	**138.5**	**159.4**	**164.3**	**138.5**	**(12.0)**	**(8.0%)**	**73.8**	**114.1%**
Annual Change in Forecast	3.4		(38.7)		(37.9)	146.5	20.9	4.9					
Annual Change, %	2.3%		(25.7%)		(33.9%)	87.4%	15.1%	3.1%					
Actuals vs Forecast	60.9		36.3		9.2								
Change, %	68.0%		48.1%		14.2%								

[171] Tab 8, page 8; 2nd Round Information Request 1 (c).

The following is specifically noted regarding year over year variances in **Distribution** Expense:

- **Customer Connections –** Year over year variances relate primarily to actual net new distribution customer additions being higher or lower than forecast.[172] The material variance in 2019/20 also relates to the forecast new natural gas service to Sturgeon Lake First Nation in the Prince Albert/ North Battleford area not proceeding in that year ($12.5 million estimated cost). The higher net additions in 2020/21 were offset by urban mains, large industrial and gas measurement being lower than planned due to lower investment in rotary and turbine meters along with electronic integrators.
- **System improvements** – SaskEnergy notes that variances in system improvements expense relate in part to the service tee upgrade program being significantly under budget in 2019/20 and 2020/21; 2019/20 expense was $6.7 million lower than forecast expense due to a labour disruption in October 2019; and in 2020/21 the number of upgrades significantly decreased due to the effects of the COVID-19 pandemic (i.e., to reduce close contacts, only urgent or high priority investments proceeded in that year). SaskEnergy also notes that in 2019/20 system expenses proceeded as planned in the Regina area, the Saskatoon area and the Prince Alberta area at a lower cost per service which also reduced costs in that year.[173] Lower 2021/22 expense relates to lower than forecast costs[174] or work not proceeding or being deferred to 2022/23.[175]
- **Gas Measurement** – SaskEnergy notes that customer connections variances from forecast also impact gas measurement expense (i.e., capital investment for new meters). SaskEnergy notes lower 2021/22 expense relates to supply issues (i.e., meter purchases);[176] and measurement expenditures were delayed into 2022/23.

The following is specifically noted regarding year over year variances in **General Plant** Expense:

- **Information Systems** – SaskEnergy notes that Information Systems expense was significantly under forecast in 2018/19 due to capital costs being deferred to 2019/20;[177] and significantly under forecast in 2019/20 due to labour disruptions and due to the pandemic (supporting essential services took priority).[178]
- **Building/Furniture** – SaskEnergy notes the variance in 2018/19 relates primarily to the lower planned investment in the new Regina Service Centre ($1.7 million lower cost than forecast in that

[172] See responses to 1st Round information request 12(b) and 2nd Round information request 11(a). In 2018/19 4000 net new distribution customers were forecast compared to 2,775 actual connections; in 2019/20 3,600 net new distribution customers were forecast compared to 2,459 actually added and in 2020/21 2,300 net new customers were forecast compared to 3,001 actually added.
[173] See responses to 1st Round information request 12(b). SaskEnergy notes that process improvements implemented from the Constellation Initiative resulted in $1.1 million in lower costs for work in the Regina area; $1.1 million lower costs for work in the Saskatoon area; and $1.6 million lower costs for work in the Prince Albert area.
[174] 2nd Round information request 11(a). Investment in pressure monitoring, odorant and system isolation valves was lower than expected in 2021-22.
[175] 2nd Round information request 11(a). The Dulwich TBS station relocation, the Coleville TBS Rebuild, and the Yellow Grass TBS upgrade did not proceed in 2021-22. Saskatoon South facility system improvements and enhancements, enterprise security, and mobile equipment proceeded but the majority of the planned investment was deferred to 2022-23.
[176] 2nd Round information request 11(a). Along with a shortage of material (i.e., computer chips), the industry also experienced a shortage of qualified labour at their factories in the United States and Mexico.
[177] 2nd Round information request 11(a). SaskEnergy notes deferred spending on the following: Desktop Refresh II, Report Everything Online (REO) Upgrade, OneWorld Upgrade, Website Rebuild and Unified Communications and Collaboration Infrastructure.
[178] 1st Round information request 12 (b).

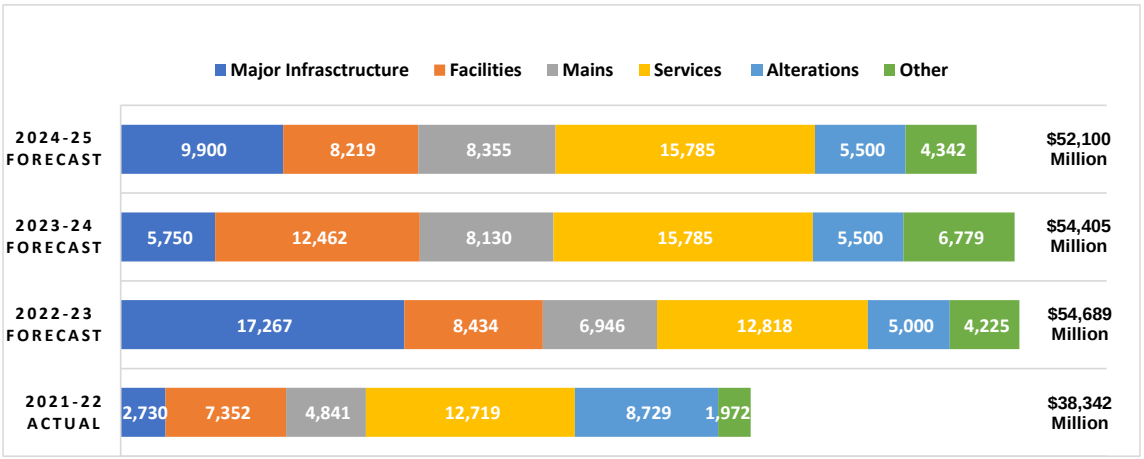
year); and the variance in 2020/21 relates to the planned investment in the new Kindersley Service centre ($1.5 million) not proceeding in that year.[179]

5.1.1 Summary of Forecast Distribution Expense

Distribution expense includes spending on Customer Connections, System Improvements, Gas Measurement and Tools/Station. Forecast distribution spending over the test period averages approximately $109.7 million annually (ranging between $105.8 million and $113.8 million). Overall, actual distribution spending over the period from 2017/18 to 2021/22 averaged $89.7 million.

- **System Improvements:** Actual expense has been consistently less than forecast over the past 5 years (with material variances from forecast in 2019/20 and 2020/21). Forecast spending over the test years averages about $53.7 million annually -- a 31% increase (or $12.7 million) over the 2021/22 forecast. The forecast level of spending is similar to the actual annual spending between 2017/18 and 2018/19. Unlike spending on customer connections, capital spending related to integrity programming does not generate an incremental revenue stream for the corporation. The majority of annual expense relates to: Major Infrastructure, Facilities, Mains, Services and Alterations (between 88-92% of total System Improvement expense over the test years). 2021/22 Actual and 2022/23 to 2024/25 forecast expense is summarized below.

Figure 5-1: Actual and Forecast System Improvements Expense: 2021/22 to 2024/25 ($Millions)



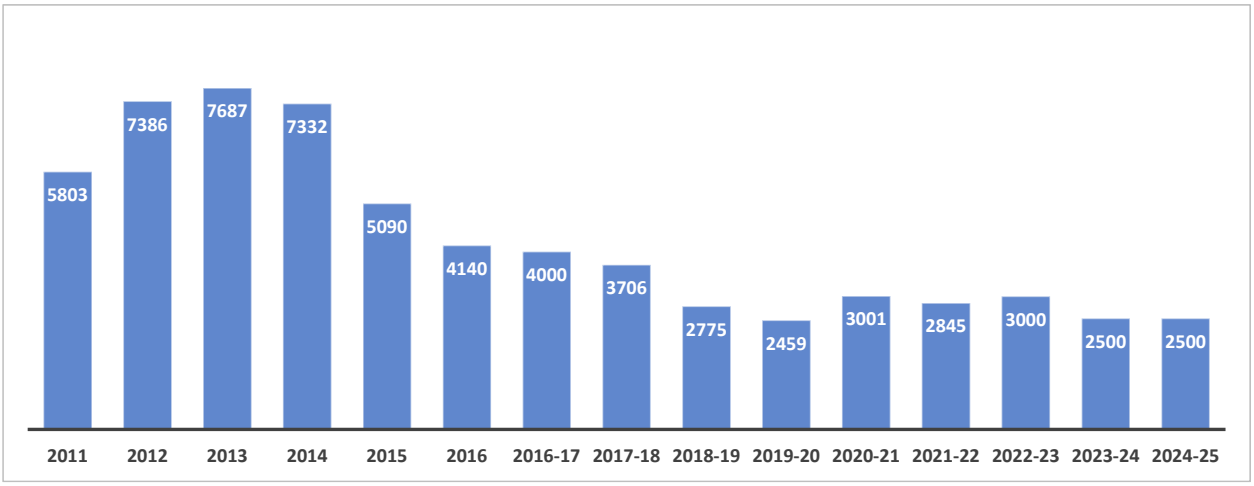
Material components of forecast system improvement capital relate to spending on risk management and growth activities.

- Distribution spending increases are partially offset by forecast reductions in **Customer Connection** expense. Figure 5-2 shows the general decline in new customer connections since 2013 with actual annual net increases averaging 3,131 annually since 2016/17. Lower spending on customer connections between 2019/20 and 2021/22 relates to the slower pace of new connections

[179] 2nd Round information request 11(a).

since 2018/19. This reduces capital requirements to serve new customers, but also reduces the potential for revenue growth through system expansion and new customers.

Figure 5-2: Summary of Annual Active Increases in Customers[180]



- Over the period from 2022/23 through 2024/25 **Gas Measurement** spending is forecast to average $12.9 million annually. The increase in Gas Measurement spending for 2022/23 through 2024/25 compared to 2021/22 is due to supply chain issues in 2021/22, along with a shortage of material (i.e., computer chips).[181]
- **Green Energy Initiatives** are added as an expense item in 2021/22. Forecast expenditures in this cost area are approximately 3% of total Distribution expense over the forecast period – increasing from a forecast of $0.2 million in 2021/22 to an average of $3.7 million annually over the test years. SaskEnergy notes this level of spending is expected to be maintained at levels similar to 2022 to 2025 levels ($2-2.5 million per year).[182]

Table 5-3: Summary of Green Energy Initiative Expenditures by Category[183]

	2022/23	**2023/24**	**2024/25**
Vent Gas Reduction	0	0	0
Electricity (solar power project)	360,000	640,000	700,000
Optimization (line heater upgrades)	110,000	1,330,000	1,530,000
Total	**$470,000**	**$1,970,000**	**$2,230,000**

[180] 1st Round Information Request 16 (k), 2017 Delivery Service Rate Application; Application 1st Round Information Request 14(g) 2018 Commodity and Delivery Service Rate. 2nd Round Information Request 11(e), 2022 Delivery Service and Commodity Rate Application.
[181] 1st Round Information Request 12 (h), 2022 Commodity and Delivery Service Rate Application.
[182] 2nd Round Information Request 11(d)(ii).
[183] 2nd Round Information Request 11(d)(i).

- Spending on **Tools/Station** has remained relatively flat over the period.

5.1.2 Summary of Forecast General Plant Expense

General Plant expense includes spending on Information Systems, Vehicles, Buildings/ Furniture and Regulators.

Overall spending on **General Plant** between 2015/16 and 2021/22 averaged about $19.2 million annually (with annual expenses ranging from $7.8 million in 2021/22 to $39.3 million in 2018/19). Test year spending on General Plant is materially higher than actual average annual spending experienced since 2015/16 – with average annual spending on General Plant forecast at about $59.6 million (with expenses forecast to increase from $43.8 million in 2022/23 to $73 million in 2024/25). As outlined in Table 5-1 and Table 5-2 – material increases in General Plant expense in the test years relate primarily to increased forecast spending on Buildings and Furniture and on Information Systems.

- **Buildings and Furniture:** With the exception of 2018/19, actual Buildings and Furniture expense since 2015/16 has remained within the range of $0.90 million and $4.2 million (averaging about $3 million annually). The material increase in expense in 2018/19 (of $19.4 million) related to the purchase of Regina Service Centre. As summarized in Table 5-4, the material forecast increase in Buildings and Furniture expense in the test years relates primarily to the new Saskatoon Service Centre (approximately 73-73% of annual spending on Buildings and Furniture each test year). SaskEnergy's forecast indicates plans to purchase the land in 2022/23 and construct the facility in 2023/24 and 2024/25 (total cost of approximately $75 million); however, updated information provided by SaskEnergy indicates that planned expenditures in 2022/23 are deferred.[184]

Table 5-4: Forecast Buildings & Furniture Expense: 2019/20 to 2024/25 ($Millions)[185]

	2019/20 - Actual	2020/21 - Actual	2021/22 – Actual	2022/23 - Forecast	2023/24 - Forecast	2024/25 - Forecast
Saskatoon Service Centre	-	-	-	13	23.2	35.8
Regina Service Centre	3.4	1.3		1	1	
SaskEnergy Place	-	-	-		0.6	2.1
Kindersley Service Centre	-	0.1	-	0.1	1.5	
Building Maintenance	0.5	2.2	2.2	3.4	4.9	10.1
Furniture	0.3	0.3	0.2	0.2	0.3	0.3
Total	**4.2**	**3.9**	**2.4**	**17.7**	**31.5**	**48.3**

- **Information Systems:** Actual spending on Information Systems has averaged $9.8 million annually between 2015/16 and 2021/22 (with annual expense ranging from $2.6 million in 2021/22 to $13.8 million in 2018/19). Information Systems expense is forecast to increase materially in the

[184] 1st Round Information Request 12(j), 2022 Commodity and Delivery Service Rate Application.
[185] 2nd Round Information Request 11(g).

test year to $22.7 million annually (increasing from $22 million in 2022/23 to $25.9 million in 2023/24 and then decreasing to $20.1 million in 2024/25).

SaskEnergy notes low actual spending in 2021/22 of $2.6 million relates to significant resource constraints related to the digital, technology, and security department;[186] while material increased spending is required in the test years to continue to address technology enhancements focused on "physical asset management, information technology asset management, enterprise stakeholder relationship management, enterprise business technology platforms, customer convenience and self-service, operational efficiencies, revenue assurance, customer experience, and operational work management."[187] Information provided by SaskEnergy indicates that test year spending is comprised primarily of spending on small projects (projects less than $0.50 million), with spending in this category increasing from 20% of forecast Information Systems spending in 2022/23 to 49% of forecast Information Systems spending 2023/24 to 69% of forecast Information Systems spending in 2024/25.[188]

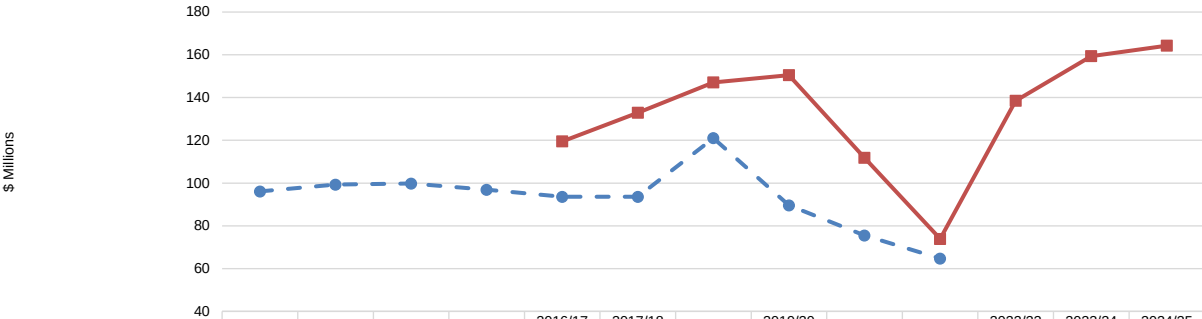
- **Other General Plant Expense:** Actual annual spending on **Vehicles** averaged $3.7 million since 2015/16. Spending is forecast to average $3.4 million annually over the test period (increasing from $3.0 million in 2022/23 to $3.6 million in 2023/24 and 2024/25). Actual spending on **Enterprise Security** averaged about $0.6 million annually over 2020/21 and 2021/22, and is forecast to average about $1 million annually over the test period.

Observations

It is understood that the capital program is outside the purview of the Panel; however, capital expenditures impact other areas of the revenue requirement, and review of SaskEnergy's capital program is necessary in order to understand the cost drivers behind the proposed revenue requirement and delivery service rates, and provides some context for future rates. Figure 5-3 compares actual and forecast capital expense. This indicates that from 2016/17 through 2021/22 SaskEnergy's forecasts of capital expense were between $9.2 million and $60.9 million higher than actuals.

[186] See 1st Round Information Request 12(l), 2022 Commodity and Delivery Service Rate Application. Which notes that "The reduced resource compliment meant focusing primarily on projects that will enhance customer convenience and self-service (i.e., Customer Portal project) to delivery improved customer interactions and improving operational efficiency, revenue assurance, and customer experience (i.e., Install to Billing project)."
[187] 1st Round Information Request 12 (l), 2022 Commodity and Delivery Service Rate Application.
[188] 2nd Round Information Request 11(h).

Figure 5-3: Capital Expense Forecasts Compared to Actuals, 2013 to 2024/25 ($Millions)[189]



	2013	2014	2015	2015/16	2016/17 Test Year	2017/18 Test Year	2018/19	2019/20 Test Year	2020/21	2021/22	2022/23 Test Year	2023/24 Test Year	2024/25 Test Year
Actuals	96.1	99.3	99.8	96.9	93.6	93.6	121.0	89.6	75.5	64.7			
Forecast					119.5	132.9	147.1	150.5	111.8	73.9	138.5	159.4	164.3
Over/Under Forecasting					(21.7%)	(29.6%)	(17.7%)	(40.5%)	(32.5%)	(12.4%)			
Actual - Forecast					(25.9)	(39.3)	(26.1)	(60.9)	(36.3)	(9.2)			

SaskEnergy provided updates for 2022/23 which indicate that actual spending on capital will be lower than the forecast provided in the Application. More specifically, as at August 31, 2022, SaskEnergy spent $38.3 million (or about 25% of the 2022/23 forecast of $153.4 million in gross capital expenditures).[190] SaskEnergy notes the following key factors affecting the 2022/23 forecasts:

- Resource constraints in digital, technology and security; and planned initiatives within technology modernization, information and asset management as well as bill presentment and gas retailer replacement are at risk of not proceeding in 2022/23.
- Low probability of proceeding with the new Saskatoon Service Centre in 2022/23 (but a high probability that remaining investment planned for 2022/23 will be spent in 2023/24).
- Near term execution of environmental social governance (ESG) initiatives will be on transmission assets as opposed to distribution assets. SaskEnergy notes plans to invest in additional emissions reduction initiatives beyond what is currently in flight applicable to line heaters, service centres, and town border station in 2023/24.

Sustained capital spending requirements will continue to drive revenue requirement increases related to depreciation expense, capital tax and interest expense. SaskEnergy's net capital expenditures are forecast to average $134.0 million annually over the period between 2021/22 and 2024/25. Ongoing and sustained capital spending requirements will continue to place upward pressure on delivery service rates for the foreseeable future.

[189] The 2016/17 Test year forecast is from Tab 6, page 8, 2016 Commodity and Delivery Service Rate Application, the 2017/18 Test Year Forecast is from Tab 6, page 8, 2017 Delivery Service Rate Application, 2013 to 2016/17 actuals and the 2018/19 forecast and 2019/20 Test Year are from Tab 6, page 8, 2018 Commodity and Delivery Service Rate Application, and 2017/18 to 2020/21 actuals and forecasts from 2020/21 to 2024/25 are from Tab 8, page 8, 2022 Commodity and Delivery Service Rate Application. The 2021/22 actuals are from 2nd Round Information Request 1 (c) (i).

[190] See response to 2nd Round Information Request 11(c). SaskEnergy notes that this is likely understated due to timing for when invoices are paid and reported in the financial statements.

While a significant portion of capital expense is focused on integrity and growth projects, it is noted that material and increasing amounts are also being spent in the areas such as information systems, and buildings and furniture which do not appear to relate directly to system integrity or growth.

6.0 SAFETY, RELIABILITY AND ENVIRONMENT

SaskEnergy's distribution system is extensive, consisting of 71,600 km of distribution pipeline, 1,178 pressure regulation stations, and 406,000 customers distributed over a 380,000 km^2 service area. SaskEnergy notes that its system operates in extreme weather conditions on varied terrain and requires substantial monitoring and maintenance to ensure integrity of infrastructure and public safety.[191]

The Application notes that planned maintenance activities form an extensive part of SaskEnergy's operational work plan and that SaskEnergy performs 225,000 maintenance activities and customer repairs each year to ensure safe and reliable service. Work to ensure safe and reliable service includes undertaking activities required to meet codes, industry best practice, and SaskEnergy's internal standards group; as well as infrastructure upgrades and expansions required to increase system capacity to address growth in major urban and some rural areas.[192]

SaskEnergy's safety and reliability activities and measures also include the following:[193]

- **Elevated Public Awareness** campaigns regarding facility contact and odour awareness.
- **Enhanced Damage Prevention Activities** (including Saskatchewan Common Ground Alliance and promotion of membership in Sask 1st call).
- **Increased Scrutiny on Procedures** through the Competency Assessment Plan and proactive engagement with internal and external stakeholders regarding safety solutions, including work with external consultants and other distribution utilities across Canada to understand leading practices.
- **Employee Safety.**
- **Timely Response to Safety Incidents** through maintaining a distributed workforce throughout Saskatchewan and area offices located at the cities or larger towns within each early with technicians on standby to respond at any time in an area.

6.1 SAFETY AND RELIABILITY SPENDING

SaskEnergy's system integrity program uses an enterprise risk approach that focuses on the risks faced by the approximate $1.9 billion of SaskEnergy/TransGas facilities that deliver natural gas to industrial, businesses and residences throughout the province.[194] SaskEnergy notes that safety and awareness costs include: capital investment in safety and integrity; direct operating and maintenance costs in safety; and integrity and safety communication and awareness costs included in O&M expense. These total costs are summarized in Table 6-1 which reviews variances in year over year spending from 2019/20 through 2024/25. Overall year over year changes in spending are largely driven by variances in integrity capital spending – which makes up over 90% of total safety and awareness costs.

[191] 2022 Delivery and Commodity Service Rate Application, page 11-12.
[192] 2022 Delivery and Commodity Service Rate Application, page 11.
[193] Tab 9.
[194] Page 29. 2022 Delivery and Commodity Service Rate Application.

Table 6-1: Total Safety and Awareness Costs ($Millions)[195]

							Application Test Years			2022/23 Test Years			
	2019/20 Actual	2019/20 Forecast	2020/21 Actual	2020/21 Forecast	2021/22 Actual	2021/22 Forecast	2022/23 Forecast	2023/24 Forecast	2024/25 Forecast	Change over 2019/20 Test Year		Change over 2021/22 Actual	
	($Millions)						($Millions)			($Millions)	(%)	($Millions)	(%)
Safety & Integrity Capital	48.5	67.6	30.8	60.1	38.3	41.0	54.7	54.4	52.1	(12.9)	(19.1%)	16.4	42.8%
Maintenance Program	2.6	3.0	2.5	2.4	2.6	2.5	2.7	2.5	2.5	(0.3)	(10.0%)	0.1	3.8%
Communication and Awareness	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.0	0.0%	0.1	100.0%
Total Safety and Awareness Costs	**51.2**	**70.7**	**33.4**	**62.7**	**41.0**	**43.6**	**57.6**	**57.1**	**54.8**	**(13.1)**	**(18.5%)**	**16.6**	**40.5%**
Average # of Customers	399,826	402,827	401,405	405,672	402,791	405,791	405,791	408,457	410,957	2964	0.7%	3,000	0.7%
Total Cost per Customer	**128.06**	**175.51**	**83.21**	**154.56**	**101.79**	**107.44**	**141.94**	**139.79**	**133.35**	**(33.6)**	**(19.1%)**	**40.2**	**39.4%**
Actual vs. Forecast Total Cost		19.50		29.30		2.60	14.00	(0.5)	(2.3)				
Change, %		38.1%		87.7%		6.3%	32.1%	(0.9%)	(4.0%)				

Table 6-1 notes the actual average cost per customer was $83 for 2020/21 and $102 for 2021/22 compared to forecasts of $155 and $107 respectively. SaskEnergy notes that there is an increased focus on regulatory compliance which results in additional costs to safety and awareness policies/programs.[196]

The following is noted:

- **Safety and Integrity Capital:** Actual annual distribution related capital programming spending declined from $48.5 million in 2019/20 to $30.8 million in 2020/21. Test year forecasts show spending increasing to higher levels (ranging between $54.7 million in 2022/23 and $52.1 million in 2024/25). Key areas of spending on system integrity capital were reviewed in Section 5.1.1.

  SaskEnergy notes that asset integrity and reliability capital expenditures are approved under its Capital Investment Governance Policy. Expenditures of a similar nature are grouped into programs and each program has a relative risk ranking used to determine a high level prioritization.[197] Within these programs individual expenditures are prioritized – and at a project level work may be assessed using quantitative measures (e.g., pipeline integrity) or qualitative measures (civil improvements). Programs are reviewed annually and assessment tools are continually being created and refined. SaskEnergy notes that in 2019/20 and 2020/21 spending was reduced as priority was placed on immediate high-risk work. The forecast is returning to a more proactive plan of risk mitigation versus reactive approach used over the past two years. This has led to an increase in spending in the test years to catch up on deferred work. Spending is expected to level off "to a more sustainable spend."[198]

- **Planned Maintenance Program:** Approximately 10.7% of SaskEnergy's total operations and maintenance expenses relate to the planned maintenance program for the test period.[199] This includes spending on safety and integrity measures related to cathodic protection and leak surveys. As summarized in the table below, actual spending over the past three years has remained fairly consistent and forecast test year spending is expected to remain within the same range.[200]

[195] Tab 11, page 6; 2nd Round Information Request 13 (a), (b), and (c).
[196] 2nd Round Information Request 13 (b), 2022 Commodity and Delivery Service Rate Application.
[197] See Response to 1st Round Information Request 14(d). SaskEnergy notes that factors that can establish program risk ranking can include personal safety, failure/ loss of pressure containment, reliability and equipment obsolescence.
[198] 1st Round Information Request 14(e).
[199] 2nd Round Information Request, 12(a).
[200] See Table 6-1. Amounts include general administration.

Table 6-2: Safety and Integrity O&M Spending ($Millions)[201]

	Actual			Forecast		
	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
General Adminstration	0.1	0.1	0.2	0.4	0.2	0.2
Cathodic Protection	0.5	0.5	0.5	0.5	0.5	0.5
Leak Survey	2.0	2.0	1.9	1.8	1.8	1.8
	2.6	**2.5**	**2.6**	**2.7**	**2.5**	**2.5**

- **Safety and Awareness Programming:** Safety and communication awareness costs have declined from actual costs of $0.95 million in 2018/19 to $0.06 million in 2020/21. Costs were forecast to increase to $0.11 million in 2021/22 and then be maintained at $0.15 million over the test period.[202]

6.2 SAFETY AND RELIABILITY MEASURES

SaskEnergy uses a Unified Management System to ensure continuous improvement in safety and reliability of the distribution system – and considers the following metrics in this regard:

- Leak Rate – number of leaks per 1,000 km of mains; and
- Number of kilometers of leak survey completed (leading indicator).

SaskEnergy notes that proactively completing leak surveys helps to identify issues before a public incident occurs.

Target versus actual leak rates over the period over the past five years (from 2017/18 to 2021/22) are summarized in Figure 6-1. This notes that the actual leak rate was higher than the target leak rate in each year (ranging from 130% higher in 2017/18 down to 36% higher in 2020/21 and 41% higher in 2021/22).

Table 6-3 summarizes the rationale for changes in leak rate each year. SaskEnergy notes that from 2017/18 to 2019/20 the number of actual leaks has been above target primarily due to a curb valve issue identified in Saskatoon in December 2017. In 2019/20, higher actual leaks were also attributed to an increased number of 5/8 steel tubing leaks in the Uplands neighbourhood of Regina. Higher actual leaks in 2020/21 related to above average external interference and incorrect operation incidents as well as full implementation of advance mobile leak survey technology. Higher actual leaks in 2021/22 relate to unfavourable weather in Saskatoon and Regina resulting in higher number of natural forces and degradation-type leaks.

[201] 2nd Round Information Request 13 (c).
[202] Tab 11, page 6.

Figure 6-1: Actual Leak Rate vs Target Leak Rate: 2017/18 to 2021/22[203]

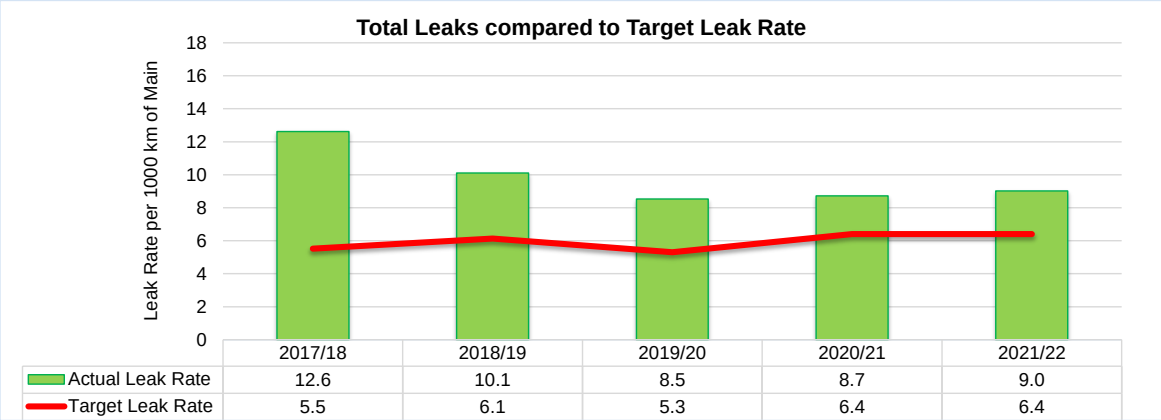


Table 6-3: Target vs. Actual Combined Leak Rate per 1000 km of Main (2017/18 to 2021/22)[204]

Year	Actual Leak Rate	Target Leak Rate	Explanation for Increase/ Decrease
2017/18	12.6	5.5	This number is above target due to a new threat type being identified in Saskatoon in December 2017. An increased number of leaks were found due to the curb valve issue in Saskatoon.
2018/19	10.1	6.1	This number is above target due to the continuing curb valve issue in Saskatoon. This new threat type is being addressed through an expanded service upgrade program.
2019/20	8.5	5.3	This number is above target due to the continuing curb valve issue in Saskatoon and the increased number of 5/8 steel tubing leaks found in the Uplands neighbourhood in Regina.
2020/21	8.7	6.4	This number is above target due to above average external interference and incorrect operation incidents, in addition to the full implementation of advanced mobile leak survey technology resulting in a higher number of leaks at lower concentrations being found by leak survey.
2021/22	9.0	6.4	Unfavourable weather was a contribution factor to the type of leaks found in both, Saskatoon and Regina. This resulted in a higher number of natural forces and degradation-type leaks being found.

[203] 1st Round Information Request 14 (g).
[204] Response to 1st Round Information Request 14(g).

Table 6-4 provides a breakdown of the causes/categories of leaks between 2017/18 and 2021/22; and related OM&A spending each year. This indicates that over the period from 2017/18 to 2021/22 the total number of annual leaks has decreased by 27% (from 882 leaks in 2017/18 to 643 leaks in 2021/22).

Table 6-4: Total Leaks and Leak Cause: 2017/18 to 2021/22[205]

Year	Leaks/ 1,000 of Mains	kms of Main	External Interference	Incorrect Operation*	Corrosion/ Degradation[T]	Natural Forces[T]	MMC	Other**	Total Leaks***	Spending included in OM&A****
2017/18	12.62	69,870	191	12	16	525	46	92	882	$2.49 Million
2018/19	10.10	70,180	160	15	27	387	36	84	709	$2.52 Million
2019/20	8.53	70,707	169	23	20	284	33	74	603	$2.22 Million
2020/21	8.72	70,996	175	33	156	172	68	15	619	$2.36 Million
2021/22	9.02	71,270	161	36	329	46	68	3	643	$2.40 Million

* Incorrect Operation incidents include: operator error, missed locates, and mapping issues

**Other inclues equipment malfunctions and incidents that were unable to be classified under a specific incident type

*** Total leaks includes all company found and publicly reported leaks and line hits

**** Safety and Integrity spending included in OM&A for cathodic protection and leak surveys

[T] The classification of Saskatoon curb valve leaks changed in 2020/21 from Natural Forces to Corrosion/Degradation when the main cause was determined to be degradation of the sealing components, not from ground or soil movement.

The following is specifically noted regarding the categories of leaks noted in Table 6-4.

- **External Interference**: Defined as an unintentional or intentional contact made with pipeline infrastructure resulting in damage or failure. Table 6-4 notes an overall 16% reduction in leaks due to external interference over the past 5 years (from 191 in 2017/18 to between 160 and 175 over the period between 2018/19 and 2021/22).
- **Incorrect Operation**: Defined as failure due to improper operation or insufficient procedures (can include operator error, missed locates and mapping issues). Table 6-4 notes an overall 200% increase in leaks due to incorrect operation over the past 5 years (increasing from 12 in 2017/18 to 36 in 2021/22).
- **Corrosion/Degradation:** Leaks due to corrosion have significantly increased over the past 5 years from between 16 to 27 over the period from 2017/18 to 2018/19 to 156 in 2020/21 and 329 in 2021/22. The significant increase relates to the reclassification of Saskatoon curb valve leaks in 2021. Curb valve leaks were initially considered to be due to ground forces/soil movement, however, it was determined the source of the leak related to degradation of sealing components.
- **Natural Forces:** Defined as an incident caused by geotechnical forces, weather-related issues, wildfire, or other natural causes. Leaks due to natural forces have decreased materially over the past 5 years (from 525 in 2017/18 to 46 in 2021/22). As noted above, this change relates to the reclassification of Saskatoon curb valve leaks in 2021.
- **Material Manufacturing or Construction Defect (MMC):** Defined as leaks related to defective pipe body, defective joining method or other pre-commission construction issues. Leaks

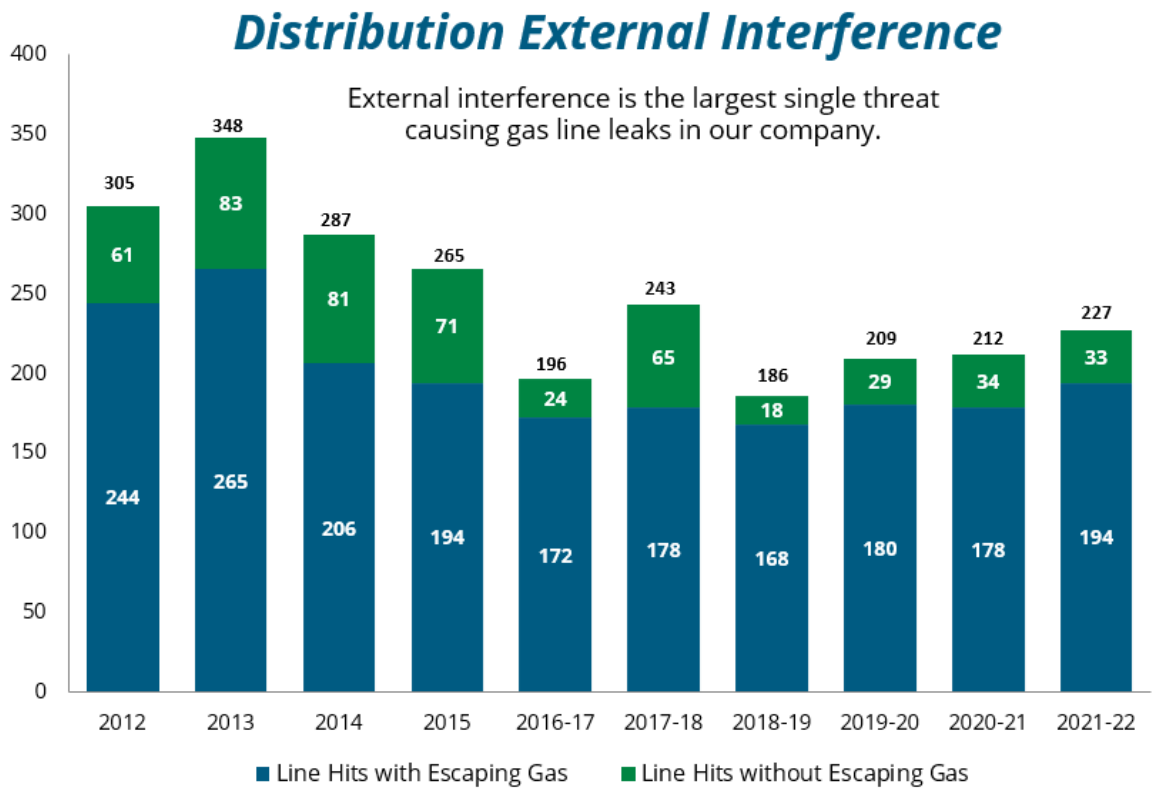
[205] Response to 1st Round Information Request 14(h).

due to MMC have increased to 68 leaks in each of the past two years after a reduction in 2018/19 (from 46 to 36) and 2019/20 (33).

- **"Other":** Leaks categorized as other includes equipment malfunction and incidents that were not classified under another incident type. Leaks categorized as "other" have steadily decreased over the past 5 years from 92 in 2017/18 to 3 in 2021/22.

Over the past five years external interference has made up about 10-27% of total leaks. SaskEnergy notes that "external interference is the largest single threat causing gas line leaks in our company". Information provided by SaskEnergy indicates that while line hits have declined since 2013, they started to increase over the period from 2018/19 to 2021/22.

Figure 6-2: Distribution External Interference[206]



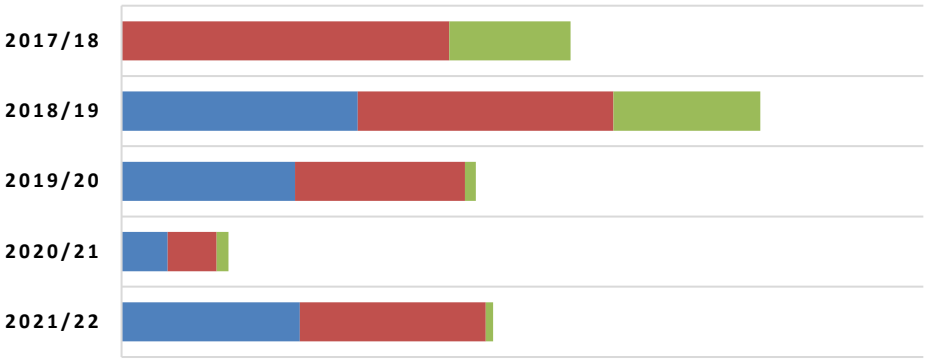
Since 2017/18 the number of leaks has been materially impacted by natural forces and corrosion/degradation. Natural forces leaks made up between 47-60% of total leaks over the period between 2017/18 to 2019/20 before declining to 28% of total leaks in 2020/21 and 7% of total leaks in 2021/22. Corrosion/Degradation leaks made up between 2-4% of leaks between 2017/18 and 2019/20 before increasing to 25% of total leaks in 2020/21 and 51% of total leaks in 2021/22. The overall changes

[206] SaskEnergy October 12, 2022 public presentation (PPT), slide 12 (corrected via email from Lori Christie dated November 4, 2022).

in natural forces' leaks and corrosion/ degradation leak – seems to relate predominantly to the reclassification of Saskatoon curb valve leaks.

Figure 6-3 summarizes Service Upgrade program targeted spending from 2017/18 to 2019/20 – and shows that after 2017/18 Saskatoon service upgrades and Regina service upgrades make up an equal share of program costs; and spending on upgrades in other communities comprising a smaller share of costs after 2018/19.

Figure 6-3: Service Upgrade Program Targeted Spending[207]



	2021/22	2020/21	2019/20	2018/19	2017/18
Saskatoon Spend	6,672,000	1,720,000	6,492,500	8,843,000	-
Regina Spend	6,950,000	1,840,000	6,360,000	9,560,000	12,264,000
Other Community	278,000	440,000	397,500	5,497,000	4,536,000

SaskEnergy notes that service upgrades are prioritized using a risk-based approach that considers probability and consequence. The probability of failure is determined from previous leak rates and the consequence is determined by the characteristics of a typical failure. Leak rate is a major consideration in prioritizing areas for upgrade across the province. SaskEnergy notes that while Saskatoon leaks have a greater probability than Regina, they have a much lower consequence and are upgraded at an equal rate to that of Regina.

6.3 OTHER SAFETY PERFORMANCE MEASURES

SaskEnergy indicates that it responds to over 14,000 customer safety calls each year with the following results:[208]

- Response time in rural areas just under 60 minutes
- Response time in urban centres just over 30 minutes

[207] 2nd Round Information Request 13(f).
[208] Tab 9, page 2. 2022 Delivery Service and Commodity Rate Application.

SaskEnergy notes that 60% of calls are in Saskatchewan's 10 largest cities and 40% are spread throughout rural locations and communities smaller than 10,000 people.

Table 6-5 summarizes the actual average response time for all safety calls between 2017 and 2022 (forecasted). The table also provides the urban versus rural response times over that period. Response times appear to remain within the same general range year to year.

Table 6-5: Actual Average Response Time and Location of Safety Calls[209]

	Minutes		
	Response Time (All Safety Calls)	Rural Response Time	Urban Response Time
2017	25	39	24
2018	25	39	23
2019	25	41	24
2020	25	40	24
2021	26	40	24
2022*	26	41	24

* Forecasted

Table 6-6 summarizes information regarding SaskEnergy actual lost time injuries, medical aid and preventable vehicle collisions since 2016/17. This indicates year to year variability in both the total recordable injury frequency rate and PVC frequency rate. Overall, five year average for the total recordable injury frequency rate was 2.16 and five year average for the PVC frequency rate was 1.54.

[209] 1st Round Information Request 14(j).

Table 6-6: Actual Lost Time Injuries, Medical Aid and Preventable Vehicle Collisions[210]

	2017/18	2018/19	2019/20	2020/21	2021/22
Lost Time Injuries (LTI)	13	9	13	7	16
Medical Aids (MA)	9	10	9	7	9
Preventable Vehicle Collisions (PVC)	27	17	12	18	25
Total Recordable Injury Frequency Rate*	2.43	2.08	2.31	1.43	2.56
PVC Frequency Rate **	2.12	1.40	0.95	1.30	1.93

* Corporate Recordable Injury Rate is the sum of the Lost Time Injuries and Medical Aid multiplied by 200,000 and divided by total hours worked.

** Corporate PVC Frequency Rate is the number of Preventable Vehicle Collisions multiplied by 1 million an divided by the total KMs driven.

Observations

Figure 6-2 indicates that total line hits have declined compared to historic highs in 2013 and 2014, however, incremental increases in line hits are noted for the past 3 years.

The actual leak rate has been higher than the target leak rate each year since 2017/18; however, the actual leak rate has declined from 12 leaks/1,000 km of mains to 9 leaks/1,000 km of mains since 2017/18 – which indicates some improvement over time. Total leaks have also declined over the period (as noted in Table 6-4). The information provided by SaskEnergy's indicates that the total number leaks since 2017/18 has been materially impacted by natural forces and corrosion/ degradation (a significant number of leaks relate to the Saskatoon curb valve issue identified in 2017/18).

6.4 ENVIRONMENTAL ISSUES

SaskEnergy notes its commitment to protection of the environment – by targeting a 35% reduction in emissions from operations by 2030. SaskEnergy is using a Unified Management System to ensure continuous improvement of environmental protection within the distribution system using three measures:[211]

1. **Emissions from operations** - SaskEnergy notes that emissions are heavily regulated and compliance with regulations is standard, and has established a target to reduce emissions from its operations by 35% by 2030. SaskEnergy notes that corporate emissions have decreased by about 32,920 tCO2e since 2019, primarily due to system improvements and modernization. Projects completed in 2021/22 (at cost of $0.40 million) resulted in an approximate 3,670 tCO2e reduction/year.
2. **Number of spills or gas releases into the environment** – SaskEnergy notes that spills and releases are classified as an incident and investigated, with any recommendations or corrective

[210] 1st Round Information Request 14(j).
[211] See Tab 9, page 5 and response to 1st Round Information Request 14(k) and 2nd Round Information Request 11(d).

actions identified through investigation addressed and incorporated into procedure and processes changes. The following was noted by SaskEnergy regarding progress for this measure:

Year	2019	2020	2021
Number of Spills/ Gas Releases	5	3	3

3. **Non-compliance to environmental regulations** – SaskEnergy notes non-compliances are identified through audits conducted annually both internally and from the regulator. Non-compliances will have a corrective action assigned to the appropriate individual and an assigned due date. Completion of corrective action drives continuous improvement. SaskEnergy notes the following non-compliances identified by the regulator:

Year	2019	2020	2021
Non-Compliance Identified	13	8	1

SaskEnergy notes that "underlying these three measures are all the activities which support the environmental protection of SaskEnergy's natural gas system in Saskatchewan".[212]

With regard to emissions reductions SaskEnergy notes that meeting the Corporate Vision target of 35% emission reduction in eleven years will require significant effort in the following priority areas:

1. Vent Gas Reduction;
2. Renewable Electricity; and
3. Optimization.

SaskEnergy notes the 35% emissions reductions target was initiated this year and a roadmap has been completed and will be executed over the next 7.5 years to achieve the target. Actual emissions will be compared to the 2019 baseline on an annual basis and improvements in the roadmap and project plans will be adjusted on a go forward basis if emissions reductions are not being achieved.[213] SaskEnergy is planning to reduce emissions by 3.5% annually over the ten year period from 2020 to 2030.

Vent Gas Reduction is identified by SaskEnergy as the first priority area for emissions reductions (represents projects to conserve or flare natural gas vented at SaskEnergy facilities). Venting emissions account for approximately 25% of SaskEnergy's annual greenhouse gas emissions. However, SaskEnergy does not anticipate any spending on this during the test period.

Over the test period (2022/23 to 2024/25) SaskEnergy anticipates spending focused on Electricity and Optimization projects as follows:[214]

- **Electricity (Solar Projects):** Electricity includes reducing electricity consumption and using renewable electricity generation. Electricity emissions currently account for about 5% of SaskEnergy's total annual emissions and can be eliminated over time by installing low or zero emissions technologies such as solar, wind, and pressure energy recovery systems. Forecast

[212] Tab 9, page 5.
[213] Response to 1st Round Information Request 14(k).
[214] Tab 9 pages 5-7; 1st Round Information Request 14(l) and 2nd Round Information Request 11(d).

spending on electricity includes $0.360 million on in 2022/23, increasing to $0.64 million in 2023/24 and $0.70 million in 2024/25.

- **Optimization (Line Heater Upgrades):** Optimization includes design improvements, asset upgrades, procedure changes, and expansion of SaskEnergy's existing emission reduction initiatives. This can include: optimizing engine usage; converting conventional line heaters to CWT (Cold Weather Technologies) or other high efficiency heaters; compressor rod packing Slipstream systems; expand scope and frequency of LDAR (Leak Detection and Repair) program; instrument air conversions and lower bleed pneumatic devices; and planned compressor station retirements. Forecast spending includes $0.11 million in 2022/23, increasing to $1.33 million in 2023/24, and $1.53 million in 2024/25.

SaskEnergy notes that Green Energy Initiative spending will be maintained at levels similar to the test year forecasts ($2 to $2.5 million/year) going forward towards 2030;[215] and plans over the next couple of years will focus on determining forecast costs out to 2030.

SaskEnergy also notes its role in assisting customers with meeting their own sustainability goals – "with a focus on expanding rebate programs to increase energy efficiency of customers and awareness of the benefit of natural gas and how it can play a role in a low carbon energy mix." SaskEnergy notes that programs being implemented at this time include: Residential Equipment Replacement Rebate (RERR); the Commercial Boiler Rebate (CBR); and the Commercial Space and Water Heating Rebate (CSWHR).[216]

Observations

SaskEnergy has noted its commitment to protection of the environment, and outlined recent progress regarding the environmental protection measures identified for the distribution system.

SaskEnergy is targeting a 35% reduction in emissions from operations by 2030 (compared to 2019) - and efforts over the next several years will focus on emission reduction priority areas including: vent gas reduction; renewable electricity and optimization. Near term program costs are expected to be in the range of $2-2.5 million/year.

SaskEnergy noted that green energy initiatives and climate change plans are part of the Corporate Strategic Plan, and there is not a single document that summarizes all the actions outside the Corporate Plan. Information provided by SaskEnergy indicates that the road map or plan being implemented is currently under review and will continue to be adapted to address issues as they arise.

Recommendations

Responses provided by SaskEnergy indicate that the plan or road map being developed will be updated on an iterative basis – to adapt to new information or changing circumstances. It is recommended that the Panel seek further consolidated updates regarding these plans as they are developed.

[215] 2nd Round Information Request 11(d).
[216] 1st Round Information Request 14(m).

It is understood that SaskEnergy and SaskPower are both pursuing green energy initiatives. It is recommended that the Panel urge SaskEnergy and SaskPower to collaborate regarding their forward looking strategies and implementation plans to ensure plans and strategies are developed in an efficient, integrated and holistic manner that that considers the energy system in Saskatchewan; each utility's role and focus; and the most cost effective and beneficial approach to emissions reductions for each utility and its customers.

6.5 PLANNED MAINTENANCE PROGRAM

SaskEnergy has developed Construction, Operations and Maintenance Practices (COMPs – formerly Standard Practice Instructions Manual), which incorporate all the necessary design, operation and maintenance instructions to be in compliance with the related codes, industry and corporate standards. COMP manuals are reviewed regularly and adjusted as required to meet corporate standards as well as applicable codes and regulations.[217]

SaskEnergy notes that it migrated transmission workers onto the same work management system used by distribution workers in 2022. The work management system uses optimization and prioritization to ensure all work is completed in the most efficient manner - and in this respect, SaskEnergy notes that total completed preventative maintenance work orders increased from 40,000 in 2017 to over 75,000 in 2022 with the same number of staff used to complete the work.[218]

SaskEnergy notes annual maintenance activities fall into four main categories and are performed on over 12,000 distribution and transmission assets each year.[219]

Annual Maintenance Activities	Distribution and Transmission Assets Maintained
1. Function Testing 2. Condition Assessment 3. End of Life Assessment 4. Predictive Analysis	• Building and Site Maintenance • Pressure Regulator and Relief Valves • Station and Process Valves • Compressor and Engines • Station process equipment (line heaters, filter separators, odorant systems) • Auxiliary equipment (cathodic protection, electrical and measurement) • Pipeline Locating • Leak Surveys

SaskEnergy also maintains customer end point gas measurement equipment in compliance with Measurement Canada requirements, and notes most gas meter fleet is made up of residential meter sets managed through a sampling process, testing and statistical analysis to determine fitness of meter groups. Based on the sampling process, the meter exchange program can change between 10,000 and 25,000

[217] Tab 8, page 2, 2022 Delivery Service and Commodity Rate Application.
[218] Tab 8, page 2-3, 2022 Delivery Service and Commodity Rate Application.
[219] Tab 8, page 3, 2022 Delivery Service and Commodity Rate Application.

meters per year.[220] SaskEnergy notes that maintenance of customer end point gas measurement equipment through sample and recall meter exchanges is a capitalized cost.[221]

Table 6-7 below summarizes planned maintenance spending from 2017/18 to 2021/22 (actual) and forecast spending for 2022/23 to 2024/25 and indicates as follows:

- Actual planned maintenance expense averaged $5.2 million annually over the past five years (2017/18 to 2021/22), ranging from $5.5 million annually to $4.8 million annually. It is forecast to increase to $5.4 million in 2022/23 with spending in increasing incrementally over 2023/24 and 2024/25 (from $5.5 million to $5.6 million).
- Approximately 11% of operations and maintenance expenses forecast in the test years relate to the planned maintenance program.[222] This is reduced from about 13% in 2017/18.
- Regulator Stations make up about 63% of planned maintenance spending forecast in the test years. This is reduced from about 78% in 2017/18.
- Mains and Services make up the remaining 37% of planned maintenance spending forecast in the test years. This has increased from about 22% 2017/18.

Table 6-7: Spending on the Planned Maintenance Program[223]

	Actual					Forecast		
	2017/18	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**
Planned Maintenance (Hours)	15,215	12,259	13,361	13,314	12,091	12,702	12,396	12,549
Total OM&A (Hours)	113,690	111,860	106,166	117,169	110,416	113,792	112,104	112,948
Planned Maintenance ($ 000's)	5,543	4,811	5,469	5,033	5,239	5,435	5,489	5,598
OM&A Budget ($ 000's)	41,366	43,901	43,454	44,295	47,845	50,970	51,470	52,499
% of Total ($)	13.4%	11.0%	12.6%	11.4%	10.9%	10.7%	10.7%	10.7%
Regulator Statios (Hours)	11,813	8,697	8,623	8,337	7,597	7,967	7,782	7,874
Regulator Stations ($ 000's)	4,301	3,413	3,529	3,152	3,292	3,409	3,445	3,513
% of Total Planned Maintenance ($)	77.6%	70.9%	64.5%	62.6%	62.8%	62.7%	62.8%	62.7%
Mains & Services (Hours)	3,402	3,562	4,738	4,977	4,494	4,150	4,857	4,736
Mains & Services ($ 000's)	1,242	1,398	1,939	1,882	1,947	2,026	2,043	2,086
% of Total Planned Maintenance ($)	22.4%	29.1%	35.5%	37.4%	37.2%	37.3%	37.2%	37.3%

Observations

In the Consultant's view, the methods used by SaskEnergy to plan and deliver its maintenance program appear to be reasonable and consistent with industry standards.

[220] Tab 8, page 3, 2022 Delivery Service and Commodity Rate Application.
[221] 1st Round Information Request 13(a).
[222] 1st Round Information Request 13(a).
[223] 1st Round Information Request 13(a).

7.0 LOAD FORECAST

A utility's load forecast is an essential aspect of developing the revenue requirement. The load forecast determines cost drivers such as required gas volumes and capital costs related to customer additions as well as the revenue forecast during the test years.

SaskEnergy prepares an annual load forecast based on two key variables:

1. **Average Use per Customer (UPC):** Historical average consumption per customer data is normalized for weather. SaskEnergy uses regression equations for Residential and Commercial Small customer classes, which account for over 80% of total sales, to quantify the historical trend in customer use. The calculation for heating degree day variance is done on a province-wide basis using average temperatures in Regina and Saskatoon. SaskEnergy states that for Commercial Large and Small Industrial customers the historic use per customer is used as there is no statistically valid regression equation for this data.[224]
2. **Forecast Number of Customers:** The forecast average number of customers for each customer class is calculated as the sum of the actual average number of customers served for the previous period plus estimated additions.

Table 7-1 summarizes the weather normalized average use per customer for each customer class from 2016/17 to Forecast 2024/25.

Table 7-1: Average Weather Normalized Use per Customer (GJ)[225]

	Actuals						Forecast		
Customer Class	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Residential	103	107	104	103	103	104	101	101	100
Annual Change %		*4%*	*(3%)*	*(1%)*	*0%*	*1%*	*(3%)*	*0%*	*(1%)*
Commercial Small	507	511	509	529	515	537	510	506	502
Annual Change %		*1%*	*0%*	*4%*	*(3%)*	*0*	*(5%)*	*(1%)*	*(1%)*
Commercial Large	6891	6584	6759	6677	6400	6621	6382	6368	6355
Annual Change %		*(4%)*	*3%*	*(1%)*	*-4%*	*3%*	*(4%)*	*0%*	*0%*

SaskEnergy notes that use per customer in Saskatchewan has been declining on average by 1% to 2% annually since 1982, and indicates that this is a common trend across North America for a number of reasons, including: customer acquisition of more energy efficient furnaces and appliances, installation of programmable thermostats, improved insulation in home and businesses, reduced hot water consumption and generally increased awareness of energy consumption. However, it also notes that the use per customer trend has begun to level off in recent years due to customers maintaining more energy efficient homes, fewer homes with low energy equipment, and lower natural gas prices.[226]

[224] Page 53, 2022 Delivery Service and Commodity Rate Application.
[225] Prepared based on information on page 54 of 2022 Delivery Service and Commodity Rate Application.
[226] Page 53 of 2022 Delivery Service and Commodity Rate Application and page 35, 2018 Commodity and Delivery Service Rate Application.

The total number of customers is forecast by taking the sum of the actual average number of customers served for the previous period and the forecast customer additions based on anticipated new construction and planned projects to unserved areas.[227]

Table 7-2 summarizes the actual average number of customers for 2017/18 through 2021/22 compared to the forecast for the same period.

- Table 7-2 shows that the actual number of customers were within +/-1% compared to the forecast for the Residential and Commercial Small customer classes, which are slightly more than 80% of the total load on the system.
- Actual customer counts for the Commercial Large are within +/- 2% compared to the forecast; and Small Industrial customer classes have a variance compared to forecast that ranges between -10.3% and 3.8%. However, these classes represent a very small number of customers.

Table 7-3 summarizes the annual change in the actual average number of customers for 2017/18 through 2021/22.

The average growth of total customers was approximately 0.7% annually from 2017/18 to 2021/22. The 2022/23 to 2024/25 forecast years assume the following annual changes in number of customers:

- For Residential, a 0.8% increase in 2022/23 over 2021/22 actuals, and further increases of 0.6% in 2023/24 and 0.6% in 2024/25;
- For Commercial Small, a 1.1% increase in 2022/23 over 2021/22 actuals, and further increases of 0.8% in 2023/24 and 0.7% in 2024/25;
- For Commercial Large, a 0.7% decrease in 2022/23 over 2021/22 actuals, an increase of 0.1% in 2023/24 and a further increase of 0.1% in 2024/25; and
- For Small Industrial, a 3.7% decrease in 2022/23 over 2021/22 actuals and remaining at 26 customers for 2023/24 and 2024/25.

[227] Page 54. 2022 Delivery Service and Commodity Rate Application.

Table 7-2: Actual Average Number of Customers Compared to Forecast[228]

	2017/18			2018/19			2019/20			2020/21			2021/22		
	Actual	Forecast	Variance	Actual	Forecast	Variance	Actual	Forecast	Variance	Actual	Forecast	Variance	Actual	Forecast	Variance
Number of Customers															
Residential	349,789	349,874	0.0%	352,774	353,190	(0.1%)	354,848	355,102	(0.1%)	358,001	356,578	0.4%	359,757	360,123	(0.1%)
Commerical Small	39,658	39,761	(0.3%)	40,003	39,937	0.2%	40,379	40,317	0.2%	40,767	40,731	0.1%	41,055	41,129	(0.2%)
Commercial Large	1,468	1,440	1.9%	1,487	1,473	1.0%	1,502	1,490	0.8%	1,511	1,504	0.5%	1,526	1,513	0.9%
Small Industrial	29	30	(3.3%)	26	29	(10.3%)	26	29	(10.3%)	26	26	0.0%	27	26	3.8%
Total	**390,944**	**391,105**	**0.0%**	**394,290**	**394,629**	**(0.1%)**	**396,754**	**396,937**	**0.0%**	**400,305**	**398,838**	**0.4%**	**402,364**	**402,791**	**(0.1%)**

Table 7-3: Average Actual Number of Customers for 2017/18 through 2024/25[229]

	2017/18	2018/19		2019/20		2020/21		2021/22		2022/23		2023/24		2024/25	
	Actual	Actual	Annual Change	Actual	Annual Change	Actual	Annual Change	Actual	Annual Change	Forecast	Annual Change	Forecast	Annual Change	Forecast	Annual Change
Number of Customers															
Residential	349,789	352,774	0.9%	354,848	0.6%	358,001	0.9%	359,757	0.5%	362,747	0.8%	365,093	0.6%	367,294	0.6%
Commerical Small	39,658	40,003	0.9%	40,379	0.9%	40,767	1.0%	41,055	0.7%	41,503	1.1%	41,822	0.8%	42,118	0.7%
Commercial Large	1,468	1,487	1.3%	1,502	1.0%	1,511	0.6%	1,526	1.0%	1,515	(0.7%)	1,517	0.1%	1,519	0.1%
Small Industrial	29	26	(10.3%)	26	0.0%	26	0.0%	27	3.8%	26	(3.7%)	26	0.0%	26	0.0%
Total	**390,944**	**394,290**	**0.9%**	**396,754**	**0.6%**	**400,305**	**0.9%**	**402,364**	**0.5%**	**405,791**	**0.9%**	**408,457**	**0.7%**	**410,956**	**0.6%**

[228] 1st Round Information Request, 21(b) 2022 Delivery Service and Commodity Rate Application.
[229] 1st Round Information Request, 21(b) and Schedule 5.0 of 2022 Delivery Service and Commodity Rate Application.

In forecasting new customers, SaskEnergy indicates it consults the Canada Mortgage and Housing Corporation's (CMHC) housing outlook, and that the customer growth forecast is based on a review of the following:

- Single detached and multi-family housing starts;
- Migration statistics (Saskatchewan net migration, interprovincial migration breakdown, net migration by major center);
- Economic activity (building permit values, net job creation in Saskatoon and Regina, Saskatchewan real GDP growth);
- Attractiveness of Saskatchewan (labour market comparison to other provinces and costs to own and rent homes); and
- Additional sources of information include the Government of Saskatchewan and Statistics Canada websites.[230]

Table 7-4 provides a comparison of the weather normalized load by customer class for 2017/18 through 2021/22 actuals compared to forecast. The table indicates:

- The weather normalized actuals for the Residential customer class were within -2.4% and 3.3% of forecast;
- The weather normalized actuals for the Commercial Small were within -0.9% and 4.4% of forecast; and
- There were slightly larger variations in Commercial Large [ranging between -3.5% and 4.4%] and notable variations in Small Industrial [ranging between -14.3% and 12.4%] classes. However, the Small Industrial class accounts for only 1 to 2% of total sales volumes.

[230] 1st Round Information Requests, 23(c) 2018 Commodity and Delivery Service Rate Application. The response to 1st Round information Request 21(c) from the 2022 Delivery Service and Commodity Rate Application notes there have been no changes to forecast methods for new customer additions form previous years.

Table 7-4: Actual and Forecast Sales for 2017/18 to 2021/22 (000s of GJs)[231]

	2017/18			2018/19			2019/20			2020/21			2021/22		
	Actual	Forecast	Variance	Actual	Forecast	Variance	Actual	Forecast	Variance	Actual	Forecast	Variance	Actual	Forecast	Variance
000's/GJs															
Residential	37,357	36,158	3.3%	36,754	37,644	(2.4%)	36,586	37,477	(2.4%)	38,213	37,170	2.8%	37,987	37,061	2.5%
Commerical Small	20,254	20,439	(0.9%)	20,370	20,423	(0.3%)	21,371	20,474	4.4%	21,003	20,946	0.3%	22,040	21,134	4.3%
Commercial Large	9,667	9,895	(2.3%)	10,051	9,675	3.9%	10,026	10,050	(0.2%)	9,671	10,018	(3.5%)	10,101	9,677	4.4%
Small Industrial	910	810	12.3%	784	892	(12.1%)	715	784	(8.8%)	613	715	(14.3%)	689	613	12.4%
Total	**68,188**	**67,302**	**1.3%**	**67,959**	**68,634**	**(1.0%)**	**68,698**	**68,785**	**(0.1%)**	**69,500**	**68,851**	**0.9%**	**70,817**	**68,485**	**3.4%**

Table 7-5: Weather Normalized Consumption by Customer Class (000s of GJs)[232]

	Fiscal Year [Apr 1 to March 31]								
in 000s GJs	**2016/17 Actual**	**2017/18 Actual**	**2018/19 Actual**	**2019/20 Actual**	**2020/21 Actual**	**2021/22 Forecast**	**2022/23 Test Year**	**2023/24 Test Year**	**2024/25 Test Year**
Customer Class									
Residential	35,745	37,357	36,754	36,585	38,213	37,061	36,788	36,715	36,589
Commercial Small	19,947	20,254	20,370	21,371	21,003	21,134	21,151	21,143	21,124
Commercial Large	9,899	9,667	10,051	10,026	9,671	9,677	9,669	9,661	9,653
Small Industrial	950	889	784	715	613	613	613	613	613
Total Deliveries	**66,541**	**68,167**	**67,959**	**68,697**	**69,500**	**68,485**	**68,221**	**68,131**	**67,979**
Annual Change		1,626	(208)	738	803	(1,015)	(264)	(90)	(152)
Annual Change, %		2.4%	(0.3%)	1.1%	1.2%	(1.5%)	(0.4%)	(0.1%)	(0.2%)

[231] 1st Round Information Requests, 21(b) 2022 Commodity and Delivery Service Rate Application.
[232] Schedule 5.0 and 6.1 of 2022 Delivery Service and Commodity Rate Application. In Mid-Application Update filing from September 29, 2022 SaskEnergy used a heat value of 39.50 MJ/m^3, a change from 39.90 MJ/m^3 used in the Original Application.

Based on the forecast average use per customer and the average number of customers, SaskEnergy constructs a forecast of consumption by customer class. Table 7-5 summarizes actual weather normalized consumption for 2016/17 through 2020/21 and forecast weather normalized consumption for 2021/22 through 2024/25 by customer class. Volumes presented in Table 7-5 are inclusive of all delivered gas (i.e., includes delivered gas supplied by SaskEnergy and other gas retailers). The following is noted:[233]

- The annual average increase in total weather normalized consumption for the actual 2016/17 through 2020/21 period was about 1.1%.
- Growth in Residential consumption over the period from 2016/17 through 2020/21 averaged 1.7% annually, while growth in Commercial Small customer class consumption increased by an average of 1.3% annually. Annual consumption for the Commercial Large class declined by 0.6% on average, annually.
- Small Industrial class consumption declined on average by 10.4%, annually from 2016/17 through 2020/21.

Overall, weather normalized sales for the 2022/23 test year (in GJ) are forecast to be about 0.4% lower compared to the 2020/21 forecast; and show a 0.6% annual average decrease from 2020/21 through 2024/25 forecast:

- The average annual increase for the **Residential customer class** is forecast to be 0.3% from 2016/17 to 2024/25. This is much smaller than the annual average increase of 1.7% from 2016/17 through 2020/21 as indicated above. The smaller average annual increase is due to the more recent declining trend since 2020/21 (a 1.1% average annual decrease since 2020/21 actuals).
- The average annual increase for the **Commercial Small customer class** is forecast to be 0.7% from 2016/17 to 2024/25. This is lower than the annual average increase of 1.3% from 2016/17 through 2020/21 as indicated above. The smaller average annual increase is driven by the small change in consumption since 2020/21 (a 0.1% average annual increase since 2020/21 actuals).
- The average annual decrease for the **Commercial Large customer class** is forecast to be 0.3% from 2016/17 to 2024/25. This is lower than the annual average decrease of 0.6% 2016/17 through 2020/21 as indicated above. The smaller average annual decrease is driven by the small change in consumption since 2020/21 (a 0.1% average annual decrease since 2020/21 actuals).[234]
- The forecast for **Small Industrial class consumption** is expected to be at the 2020/21 actual level but average annual consumption is forecast to decrease by 5.3% from 2016/17 to 2024/25.

[233] Average annual increases are determined by taking the consumption for each customer class in the final reference year divided by the initial reference year averaged over referenced time span.
[234] SaskEnergy notes that in 2017/18, customer accounts were reviewed and customers were re-classified based on actual consumption between Commercial Small, Commercial Large or Small Industrial customer classes. 1st Round Information Request, 23(h), 2018 Commodity and Delivery Service Rate Application.

During the review of prior recent applications, it was noted that monthly sales forecasts are traditionally important to utility decision making processes. With the implementation of Advanced Metering Infrastructure (AMI) SaskEnergy should have more reliable monthly data available to conduct monthly load forecast analysis, which may improve load forecasting and related decision making processes. SaskEnergy has noted that once AMI is fully implemented the possibility of creating a process that would read all meters at month-end would more accurately record the volume of natural gas consumed in a specific month. SaskEnergy notes that as of July 2022, AMI natural gas modules have been installed on approximately 99.6% of customer meters.[235]

SaskEnergy notes it is currently working through a data analytics project to improve its load forecast accuracy by using actual volumes of natural gas consumed in a specific month. However, for the purpose of forecasting it is expected that "at least five years of accurate historical AMI data will first be required in order to show an improvement to load forecasting".[236]

Mid-Application Update

In the Mid-Application Update, SaskEnergy states that it reviewed the forecast 2022/23 heat value and determined that a lower heat value of 39.50 m^3/MJ (compared to 39.90 m^3/MJ in the Original Application) is expected for the test year and updated its Application accordingly.[237] SaskEnergy prepares its load forecast in GJ and converts into m^3 using a heat value forecast [as the commodity and delivery variable rates are in m^3]. The decrease in heat value results in a higher load forecast in m^3.

Table 7-6 provides a summary of the changes due to the heat value update from 39.90 MJ/m^3 to 39.50 MJ/m^3. Table 7-6 shows that 0.4 MJ/m^3 change in heat value results in about 1.0% increase in load forecast.

[235] 1st Round information Request 5(b).
[236] 2018 Commodity and Delivery Service Rate Application, 1st Round Information Request 23 (b); and 2022 Delivery Service and Commodity Rate Application 1st Round information Request 21(b).
[237]See Section 10 of this report of details of the historical trend for heat value.

Table 7-6: Impact of Heat Value to the Load Forecast[238]

Customer Classes	Original Application	Mid-Application Update	Change	Change, %
in 000s GJs				
Residential	36,788	36,788	0	0%
Commercial Small	21,151	21,151	0	0%
Commercial Large	9,669	9,669	0	0%
Small Industrial	613	613	0	0%
Total Deliveries	**68,221**	**68,221**	**0**	**0%**
in 000s m^3				
Residential	922,009	931,346	9,337	1.0%
Commercial Small	530,091	535,459	5,368	1.0%
Commercial Large	242,343	244,797	2,454	1.0%
Small Industrial	15,352	15,508	156	1.0%
Total Deliveries	**1,709,795**	**1,727,109**	**17,314**	**1.0%**

Observations

The updated heat values used for the mid-application load forecast for 2022/23 appears reasonable when compared to recent actual heat values.[239]

The Mid-Application Update filing shows that although there is no change in the energy [GJ] based load forecast, the heat value change has a notable impact on the load forecast in terms of volume [m^3]. This also affects the revenue forecasts as SaskEnergy rates are based on volume and not on energy. This highlights continued concerns that relate to heat value as discussed in further detail in Section 10.

Recommendations

In the Consultant's view, the load forecast proposed in the Application is reasonable. However, concern is noted with regard to the updated heat value and the impact that the lower expected heat value will have on actual revenues compared to the forecasts used to determine the 2022/23 revenue requirement underlying the 2022/23 rates implemented effective August 1, 2022. Section 10 of this report reviews customer fairness concerns related to this issue (i.e., some customers pay more than others to achieve the same heating energy, depending on geographic location), as well as concerns regarding ongoing revenue and GCVA impacts for SaskEnergy (actual variances from forecast have resulted in $9.6 million GCVA balance owing from customers). Ongoing concerns regarding setting rates based on volume as opposed to energy – support the need to shift to billing in energy as soon as possible.

[238] Prepared based on information provided in Revised Schedule 5.2, September 29, 2022 Mid-Application Update, page 2.
[239] The actual heat value was 39.19 MJ/m^3 in 2019/20, 39.63 MJ/m^3 in 2020/21, and 39.44 MJ/m^3 in 2021/22.

It is recommended that given AMI is over 99% implemented, once over 5 years of reliable historical data is collected,[240] that SaskEnergy review the reasonableness of its load forecast based on available monthly data.

[240] 1st Round Information Request 21 (b), 2022 Delivery Service and Commodity Rate Application.

8.0 COST-OF-SERVICE STUDY

A cost-of-service study is an analytical tool used in utility ratemaking to determine the average costs to serve each customer class. A cost-of-service study apportions the utility's revenue requirement to each customer class based on cost causation principles. The results of the cost of service study are used to inform the utility's rate design and ensure each customer class is paying a fair share of costs. A revenue-to-cost coverage ratio (RCC ratio) compares the revenues at proposed rates to the costs allocated in the cost of service study for each customer class. SaskEnergy states its long-term objective is to have all classes within a revenue-to-cost ratio range of 95% to 105%.[241]

Table 8-1 summarizes the RCC ratios from the 2018 Rate Application and for the 2022-23 through 2024-25 test years at proposed rates in the current application.

Table 8-1: Comparison of Revenue to Cost Ratios[242]

	Revenue-to-Cost Ratio, %			
	2018 Rate Application	**2022-23 Test Year**	**2023-24 Test Year**	**2024-25 Test Year**
Residential	98.9%	101.7%	99.9%	99.7%
Commercial Small	102.9%	104.3%	101.3%	101.3%
Commercial Large	102.6%	100.0%	97.6%	99.0%
Small Industrial	103.2%	97.4%	99.5%	103.0%
Total	**100.0%**	**102.1%**	**100.0%**	**100.0%**

Table 8-1 shows that by the 2024-25 test year the Residential and Commercial Large customer class RCC ratios are slightly below 100%, meaning that revenues do not fully recover the costs to serve these customer classes. All other customer classes have RCC ratios greater than 100%, indicating revenues are somewhat higher than the costs to serve these classes. All customer classes are within the 95%-105% band and the total revenue-to-cost ratio is 100%.

SaskEnergy's application includes an external review of its cost of service methodology performed by Chymko Consulting Ltd (Chymko) in 2022. The Chymko study concluded that overall the results of SaskEnergy's methods and models are consistent with generally accepted ratemaking principles and practices and that the overall methodology is appropriate.[243] Chymko provided six recommendations to SaskEnergy on its cost allocation methods. Chymko's recommendations and SaskEnergy's responses are summarized in Table 8-2.

[241] Page 38. 2022 Delivery Service and Commodity Rate Application.
[242] Page 2 of Tab 17 of 2022 Delivery Service and Commodity Rate Application.
[243] Page 1 of the Chymko study provided in Tab 17 of 2022 Delivery Service and Commodity Rate Application.

Table 8-2: Chymko COSS Recommendations and SaskEnergy Responses[244]

Chymko Recommendation	SaskEnergy Response
Recommendation #1: Justify OM&A Functionalization Assumptions. Chymko recommends SaskEnergy review the OM&A business units and provide rationales to justify their proration ratios.	SaskEnergy will begin to review and document its assumptions and simplify the cost of service model in the fall of 2022.
Recommendation #2: Simplify the OM&A Functional Design Model. Chymko recommends simplifying and consolidating all assumptions onto a single tab.	SaskEnergy will begin to review and document its assumptions and simplify the cost of service model in the fall of 2022.
Recommendation #3: Review Minimum Plant Analysis. SaskEnergy currently uses one demand/site ratios for feeder and frontage mains. Chymko recommends SaskEnergy explore separate classification ratios for feeder and frontage mains.	SaskEnergy will begin to review and document its assumptions and simplify the cost of service model in the fall of 2022.
Recommendation #4: Study Viability of a Commercial-Large Demand Charge. Chymko recommends SaskEnergy investigate the technical and administrative feasibility of a demand charge for the Commercial-large customer class to improve intra-class equity and reduce reliance on volume-based revenues.	This recommendation requires further review to determine if changes are required.
Recommendation #5: Recover Cost of Servicing TransGas Sites Through a Fixed Payment. Chymko notes the current practice of recovering costs from TransGas through distribution-tolls results in SaskEnergy being exposed to weather related risks. Chymko recommends SaskEnergy recover TransGas related costs through a fixed payment.	This recommendation requires further review to determine if changes are required.[245]
Recommendation #6: Consider allocating costs according to volume but billing customers with recognition to energy content. Chymko recommends SaskEnergy consider billing with recognition of energy content, noting that different customers receive gas with different energy content.	The Heat Value Project is currently looking at billing customers in recognition of natural gas energy content and implementation will be determined as a result of the project.[246]

Observations

The cost of service study apportions costs to each class of customer based on underlying cost drivers. The cost of service study is an important tool for understanding and evaluating the reasonableness of the

[244] 1st Round Information Request SRRP #18 (a).
[245] 2nd Round Information Request 16(b) notes that SaskEnergy plans to begin review of this recommendation this fall and implementation will be determined once the review is complete. The review will include how this would be implemented and how it will affect SaskEnergy and TransGas. If a decision is to implement a change it would likely be implemented in the following fiscal year.
[246] 2nd Round Information Request 16(a). SaskEnergy notes the heat value project is going through internal governance process for review and decision. The Investment Governance Committee (IGC) is recommending deferring the business case as it overlaps in both scope and resources with possible dependencies of other projects. However, IGC agrees that the need identified in the business case is important and should proceed. There is an opportunity to potentially combine scope and deliverables within projects due to the overlap of limited resources. The review will help commit to an accurate implementation date to complete the deliverables.

utility's rate proposals. In the Consultant's view, SaskEnergy's objective of keeping RCC ratios for all customer classes within a range of 95% to 105% is consistent with normal utility practice in Canada.

SaskEnergy notes the Chymko report was received after the cost of service documents for the current application were complete and that therefore none of Chymko's recommendations are reflected in the 2022-23 through 2024-25 cost of service studies in the current application. SaskEnergy indicates it expects the recommendations will inform the next cost of service and that impacts of implementing any recommendations will be provided at that time.[247]

SaskEnergy notes that it is not planning to submit an updated cost of service study with the 2023/24 update filing, as it expects the update will focus on financial updates and material updates to business.[248]

Recommendations

The Consultant recommends that SaskEnergy quantify the impact on the allocation of costs to each customer class of any changes to the cost of service study methodology as soon as feasible and no later than the next delivery service rate application.

Concern is noted that should SaskEnergy delay implementation until after the current three-year delivery rate application – implementation of cost of service study changes will not occur until after 2024/25. The impact of this delay is not well understood at this time – and it is recommended that the Panel engage with SaskEnergy over 2022/23 in order to better understand whether delay in implementing the cost of service would result in any adverse effects for customers.

As such, the following approach is recommended:

1. A cost of service study update be provided to the Panel as part of SaskEnergy's February 2023 update filing; this update should assess feasibility of implementing cost of service study changes within the next year; or outline why this cannot be done.
2. SaskEnergy meet with the Panel in early 2023 to review the cost of service study changes and impacts, and answer any questions from the Panel;
3. Consideration be given to implementing the cost of service study changes as part of the 2024/25 update.

[247] 1st Round Information Request SRRP 18 (b).
[248] 2nd Round Information Request 16(c).

9.0 DELIVERY SERVICE RATE DESIGN

SaskEnergy is proposing average rate increases of 8% in 2022-23, 5% in 2023-24, and 5% in 2024-25. These rate increases are anticipated to generate incremental revenues of $45.6 million by the end 2024-25 compared to existing rates.[249] SaskEnergy proposes to recover these additional revenues by increasing the basic monthly charge and the volumetric delivery charge for residential, commercial small and commercial large rate classes. For the small industrial class, SaskEnergy is proposing to increase only the volumetric delivery charge in all three years.

Table 9-1 summarizes SaskEnergy's current and proposed delivery rates.

Table 9-1: Current and Proposed Delivery Service Rates[250]

Rate Class & Components	Units	Current Rates ($)	Rate Increase	% Increase	Proposed Rates August 1, 2022	Rate Increase	% Increase	Proposed Rates June 1, 2023
Residential								
Basic Monthly Charge	$/Mo.	23.20	1.30	5.6%	**24.50**	1.30	5.3%	**25.80**
Delivery Charge	$/m^3	0.0993	0.0107	10.8%	**0.1100**	0.0054	4.9%	**0.1154**
Commercial Small								
Basic Monthly Charge	$/Mo.	38.50	3.00	7.8%	**41.50**	3.00	7.2%	**44.50**
Delivery Charge	$/m^3	0.0811	0.0063	7.8%	**0.0874**	0.0031	3.5%	**0.0905**
Commercial Large								
Basic Monthly Charge	$/Mo.	137.40	22.10	16.1%	**159.50**	15.00	9.4%	**174.50**
Delivery Charge	$/m^3	0.0684	0.0048	7.0%	**0.0732**	0.0032	4.4%	**0.0764**
Small Industrial								
Basic Monthly Charge	$/Mo.	216.00	0.00		216.00	0.00		216.00
Delivery Charge								
- First 40,000 m^3/mo.	$/m^3	0.0442	0.0040	9.0%	**0.0482**	0.0037	7.7%	**0.0519**
- Balance	$/m^3	0.0381	0.0040	10.5%	**0.0421**	0.0037	8.8%	**0.0458**

Rate Class & Components	Units	Rate Increase	% Increase	Proposed Rates June 1, 2024
Residential				
Basic Monthly Charge	$/Mo.	1.80	7.0%	**27.60**
Delivery Charge	$/m^3	0.0035	3.0%	**0.1189**
Commercial Small				
Basic Monthly Charge	$/Mo.	3.00	6.7%	**47.50**
Delivery Charge	$/m^3	0.0035	3.9%	**0.0940**
Commercial Large				
Basic Monthly Charge	$/Mo.	10.00	5.7%	**184.50**
Delivery Charge	$/m^3	0.0038	5.0%	**0.0802**
Small Industrial				
Basic Monthly Charge	$/Mo.	0.00		216.00
Delivery Charge				
- First 40,000 m^3/mo.	$/m^3	0.0031	6.0%	**0.0550**
- Balance	$/m^3	0.0031	6.8%	**0.0489**

Bold Figures identify changes from current rates

[249] 2nd Round Information Request 19(a) [Delivery].
[250] Schedule 1.8 of 2022 Delivery Service and Commodity Rate Application.

SaskEnergy identified six rate design principles that it considered in developing its recommended delivery service rates:[251]

1. **"Postage Stamp" Pricing Philosophy:** Charging the same rate regardless of geographical location or distance to a given customer within each rate class. SaskEnergy states it has had postage stamp rates since 1982.
2. **Fixed Costs vs. Volumetric Rates:** SaskEnergy notes that over 98% of the cost of delivery service consists of fixed costs. As a result, even the volumetric delivery charge, which is based on natural gas usage, is recovering fixed costs related to the distribution system.
3. **Revenue Requirement:** Delivery rates should fully recover the cost of providing service to allow the utility the opportunity to achieve its approved financial targets, as well as provide revenue stability over time.
4. **Fairness between Rate Classes:** Rate adjustments should be fair and equitable to all customers with revenue-to-cost ratios within an acceptable range of 0.95 to 1.05, providing a measure of fairness between classes.
5. **Fairness within Rate Classes:** Ideally, for each rate class, the Basic Monthly Charge and the Delivery Charge should be set as close as possible to their corresponding average unit price to ensure minimal cross-subsidization between different sized users in the same rate class. SaskEnergy's long-term objective is to recover at least 75% of its fixed customer care related costs through the Basic Monthly Charge.
6. **Gradualism:** Allowing for rate realignment over several rate applications to avoid significant rate changes for customers at one time.

The proposed delivery service rate increases and revenue to cost ratios for each rate class are shown in Table 9-2. It should be noted the revenue to cost ratios assume a full year of revenues at the proposed rates and do not achieve the long-term return on equity target.[252]

[251] Summarized from pages 37 - 39, 2022 Delivery Service and Commodity Rate Application.
[252] See response to 2nd Round Information Request 16(d) which notes that the RC Ratio in 2022-23 appears higher because the model is structured for annual rate changes and not a rate change within the test period. SaskEnergy's three year application maintained the fiscal year as the test periods for all three years although the implementation date was within the test period. The model is calculating the incremental revenue as if it is receiving it from April 2022 to March 2023. Also, SaskEnergy's cost of service models were prepared for a November 1, 2022 implementation date and there was not sufficient time to re-do the cost of service models for August 1 2022 implementation. There is no impact to net income or ROE. The model assumes more revenues are generated than actually generated. The difference in incremental revenues is $5.2 million.

Table 9-2: Proposed Rate Increases and Revenue to Cost Ratios[253]

	2022-23		2023-24		2024-25	
	% Increase	RC Ratio	% Increase	RC Ratio	% Increase	RC Ratio
Residential	8.1%	101.7%	5.1%	99.9%	5.1%	99.7%
Commercial Small	7.8%	104.3%	4.7%	101.3%	4.8%	101.3%
Commercial Large	8.2%	100.0%	5.1%	97.6%	5.1%	99.0%
Small Industrial	8.9%	97.4%	7.6%	99.5%	5.9%	103.0%
Average	8.0%	102.1%	5.0%	100.0%	5.0%	100.0%

Table 9-2 shows that the proposed rate increases vary somewhat for each customer class.

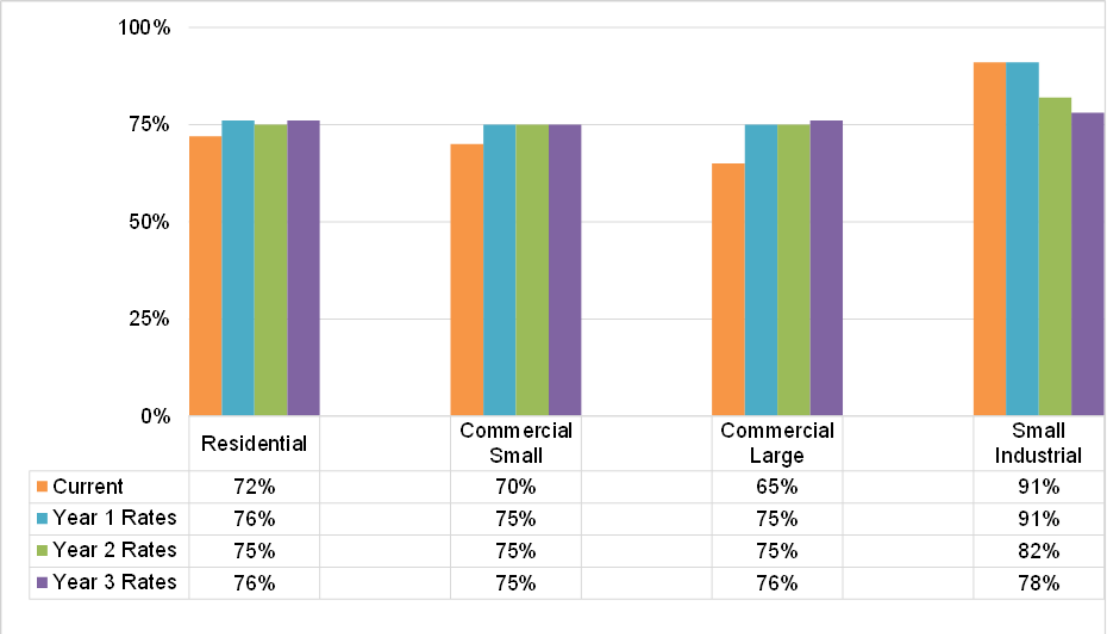
- Higher than average rate increases are proposed for residential, commercial large and small industrial customers.
- Lower than average rate increases are proposed for the commercial small class as their class revenue to cost ratio is consistently above 100%.

All of the customer classes are within the target revenue to cost range of 95% to 105% in all years. SaskEnergy notes that it is difficult to target a precise revenue to cost ratio, particularly for some of the smaller rate classes.[254] SaskEnergy provided information that suggested that if the average rate increase were applied equally to all rate classes the change to the revenue to cost ratios would be modest, with the largest difference being the small industrial class where the 2024-25 revenue to cost ratio would be reduced from 103% to 99%.[255]

SaskEnergy states it has a long-term objective to recover at least 75% of its customer care related costs through the Basic Monthly Charge. SaskEnergy acknowledges that the majority of delivery service costs are fixed costs, but also notes that customers tend to oppose fixed charges, particularly in months of low or no usage, and that most utilities have basic monthly charges that are too low relative to their fixed costs.[256] Figure 9-1 shows the proportion of customer care costs recovered through the Basic Monthly Charge for each customer class. SaskEnergy's proposed rates achieve its objective of recovering at least 75% of customer care related costs through the basic monthly charge for all rate classes.

[253] Delivery service rate increases summarized from page 4 of the 2022 Delivery Service and Commodity Rate Application. Revenue to Cost Coverage ratios summarized from Tab 17, Summary of Revenues and Degree of Cost Recovery by Rate Class [the last schedule of Cost of Service study for each test year].
[254] 1st Round Information Request SRRP-22 (b).
[255] 1st Round Information Request SRRP-22 (c).
[256] Summarized from pages 38 and 39. 2022 Delivery Service and Commodity Rate Application.

Figure 9-1: SaskEnergy Basic Monthly Charges[257]



	Residential	Commercial Small	Commercial Large	Small Industrial
Current	72%	70%	65%	91%
Year 1 Rates	76%	75%	75%	91%
Year 2 Rates	75%	75%	75%	82%
Year 3 Rates	76%	75%	76%	78%

In its report to the Minister Responsible for Crown Investments Corporation of Saskatchewan Regarding the SaskEnergy Delivery Service Rate Application Effective date April 1, 2019, the Panel recommended that SaskEnergy review its long-term policy objective to recover 75% of costs through the basic monthly charge to determine if it is still reasonable, considering factors including the fixed-cost nature of most of SaskEnergy's delivery costs, risks of income variability, peer utility comparisons and customer acceptability.[258]

SaskEnergy retained an external consultant (Chymko) to review its internal objective of recovering 75% of costs through the BMC to determine if it is still reasonable. A report was completed in September 2022.[259] The report concludes that "the current basic monthly charge is satisfactory" and recommends that SaskEnergy "consider raising its charge target, subject to further study and the principle of gradualism".[260] The following is noted regarding the basis for raising the BMC target:

- This aligns with several aspects of the rate design principles, particularly the financial, short-term efficiency, and feasibility principles.
- This allows a greater degree of cost recovery from net-zero-emission communities that may otherwise not generate enough revenue through usage charges to recover the cost of fixed infrastructure.
- This is considered reasonable within the context of other utility services in Saskatchewan and the comparable rural Alberta natural gas utilities.

[257] Prepared based on figures provided on page 38 of the 2022 Delivery Service and Commodity Rate Application.
[258] Pages 24 and 25 of the Panel's report to the Minister dated February 4, 2019.
[259] See Attachment 5 provided with 2nd Round Information Requests in response to 2nd Round Information Request 19(g).
[260] 2nd Round Information Request 19(g).

- It is considered a more suitable option than developing a rate design alternative, such as a residential demand charge or implementing one hundred percent fixed charges.

Observations

Utility rate design requires careful consideration of a number of competing objectives. Regulatory principles require that the utility demonstrate that its proposed rate design reflect an appropriate balance between these rate principles.

The Consultant notes that some other natural gas distribution companies appear to recover a larger proportion of customer related costs through a fixed charge than SaskEnergy does currently. For example: ATCO Gas structures its rates for its Low Use Rate class (applicable to customers using 1,200 GJ/year or less) with a rate design that collects 90% of customer-related costs through a fixed charge and a variable charge that recovers the remaining costs.[261]

The report provided by Chymko concludes that the current BMC target is "satisfactory" but recommends raising the BMC target. SaskEnergy notes that it will study the impacts of raising its BMC recovery objective and make a decision regarding the matter once this study is complete.[262]

Recommendations

The Chymko report supports SaskEnergy adjusting its long-term policy objective to recover 75% of costs through the BMC and transitioning to a rate structure that recovers a higher proportion of revenues through the BMC. It is recommended that SaskEnergy provide the Panel an update on this matter once SaskEnergy has completed its review; and, if feasible, that an update be provided as part of SaskEnergy's February 2023 update filing. This update should address what action SaskEnergy is going to undertake relative to the report, potential impacts of implementing this change, and indicate whether, if it is to be implemented, this change can be made within the 3-year application period.

[261] This rate design was most recently reviewed and approved by the Alberta Utilities Commission in ATCO Gas and Pipelines 2020 Phase II General Rate Application. AUC Decision 25428-D01-2020 dated December 21, 2020. Fixed revenues account for 73% of total revenues for this class per Exhibit 26283_X0002_Attachment 1.1.
[262] 2nd Round Information Request 19(g).

10.0 HEATING VALUES

Natural gas is a mix of hydrocarbon gases and contains different energy content (or heat value) depending on the composition of natural gas. Where natural gas has a higher heat value, less gas is required to produce an equivalent amount of heating energy. Heat value may vary depending on where natural gas is sourced from and how much it is processed prior to being delivered to customers.[263] The weighted average heat value for delivered gas experienced over the past five years has ranged from 37.72 MJ/m^3 to 43.28 MJ/m^3, depending on the location of the delivery point.[264]

Heat value of natural gas was fairly stable prior to 2008 due to the fact that SaskEnergy was a net exporter of natural gas, and the majority of natural gas processed and used in the province was sourced from conventional gas. Lower natural gas commodity prices led to a decline in conventional gas well drilling activities in Saskatchewan; and by 2016 approximately half of the natural gas produced in the province was from associated gas which is typically hotter than conventional gas.[265]

With the decline in drilling activities in Saskatchewan, the province also became a net importer of natural gas. SaskEnergy has noted that the heat value of natural gas received at different locations along the Alberta border differs, and may change over time depending on whether or not natural gas liquids' prices are driving extraction of liquids from the natural gas stream. A rise in natural gas liquids' prices could result in lower provincial heat values, as gas processing plants increase throughput and processing, removing liquids that otherwise may be retained in the gas stream delivered to the TransGas system.

Table 10-1 provides the quantity of gas sourced from Alberta and Saskatchewan from 2016/17 test year to the 2021/22 forecast and the estimated heat values by year for all gas produced from Saskatchewan and all gas imported into Saskatchewan from Alberta, and indicates as follows:

- Alberta purchases have increased as a percentage of total gas volumes (from 59% in 2016/17 to 85% in 2021/22).
- The heat value for Alberta purchases increased from 38.70 MJ/m^3 in 2016/17 to 39.20 MJ/m^3 in 2021/22 (Forecast), and heat value for Saskatchewan purchases increased from 38.50 MJ/m^3 in 2016/17 to 38.97 MJ/m^3 in 2021/22 (forecast). Over the past three years the heat value for Alberta purchases has ranged from 38.9 MJ/m^3 (2019/20) to 39.2 MJ/m^3 (2021/22 forecast) and Saskatchewan purchases has ranged from 38.46 MJ/m^3 (2019/20) to 39.17 MJ/m^3 (2020/21) to 38.97 MJ/m^3 (2021/22 forecast).

[263] 2016 Commodity and Delivery Service Rate Application 1st Round Information Request, 27(a).
[264] 2022 Commodity and Delivery Service Rate Application, 1st Round Information Request, 24(a).
[265] This was reviewed in detail in the 2016 Delivery and Commodity Rate Application, Tab 24 and in response to 2016 Delivery and Commodity Rate Application 1st Round Information Request 27(n) and 2nd Round Information Request 20(e).

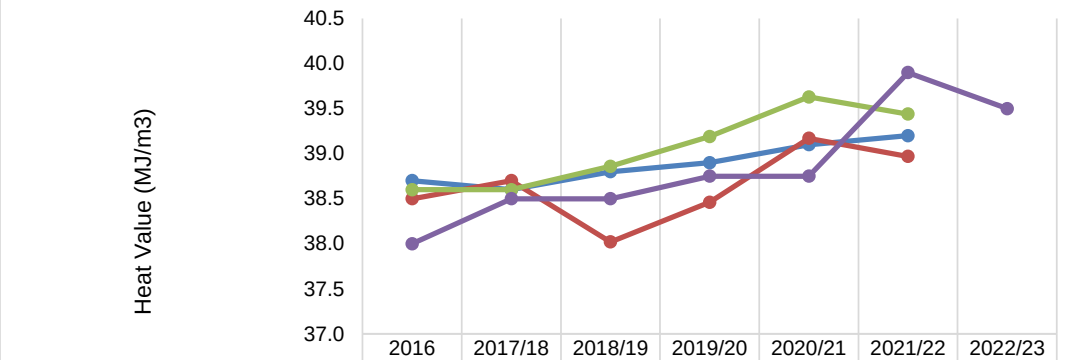
Table 10-1: Summary of Volumes Purchased and Estimated Heat Value[266]

	Volumes of Natural Gas Purchased						
	Alberta Purchases (PJ)	Alberta % of Total Purchased	Heat Value (MJ/m^3)*	Sask. Purchases (PJ)	Sask. % of Total Purchased	Heat Value (MJ/m^3)*	Total (PJ)
Nov 2016 - Oct 2017	30.8	58.9%	38.70	21.5	41.1%	38.50	52.3
Nov 2017 - Oct 2018	35.1	56.5%	38.60	27.0	43.5%	38.70	62.1
Nov 2018 - Oct 2019	44.4	72.4%	38.80	16.9	27.6%	38.02	61.3
Nov 2019 - Oct 2020	47.1	78.5%	38.90	12.9	21.5%	38.46	60.0
Nov 2020 - Oct 2021	46.7	85.2%	39.10	8.1	14.8%	39.17	54.8
[Forecast] Nov 2021 - Oct 2022	53.6	84.5%	39.20	9.8	15.5%	38.97	63.4

* Estimated heat values are based on all of the gas received onto the TransGas transportation system for both Saskatchewan gas as well as the gas imported from Alberta.

Figure 10-1 provides a comparison of estimated heat value for Alberta Imports, Saskatchewan Production, Test Year Forecasts, and the Actual Heat Rate experienced between 2016 and 2021/22 and forecast for 2022/23. This indicates that actual heat rates were generally aligned with heat rates for Alberta imports over the period from 2016 through 2018/19, then climbed above both Alberta Imports and Saskatchewan Production between 2018/19 and 2021/22. Forecast heat rates have tended to remain lower than actuals but were higher in 2021/22.

Figure 10-1: Estimated Heat Value: 2016 to 2022/23[267]



	2016	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Alberta Imports (MJ/m3)	38.70	38.60	38.80	38.90	39.10	39.20	
Sask. Production (MJ/m3)	38.50	38.70	38.02	38.46	39.17	38.97	
Actual Heat Rate (MJ/m3)	38.60	38.60	38.86	39.19	39.63	39.44	
Test Year Forecast (MJ/m3)	38.00	38.50	38.50	38.75	38.75	39.90	39.50

[266] 1st Round Information Request 24(e) 2022 Commodity and Delivery Service Rate Application.
[267] 1st Round Information Request 24 (b) and (e), 2nd Round Information Request 20 (a), and Mid-Application Update, page 2, 2022 Commodity and Delivery Service Rate Application. Information for the 2021/22 forecast heat rate is from page 7 of the 2021 Commodity Rate Application, and information on actuals and forecast for 2016 and 2017/18 are from 1st Round Information Request 26 (b) of the 2018 Commodity and Delivery Service Rate Application.

Prior SaskEnergy applications and prior Panel reports have outlined concerns that heat value variance may have on SaskEnergy customer bills as well as on the Corporation's net revenues and the GCVA balance.

10.1 HEAT VALUE VARIANCE & CUSTOMER BILLS

SaskEnergy buys natural gas in energy (GJ) but bills customers on a volumetric basis (m^3). In past proceedings concerns have been raised by the Panel and by members of the public, regarding variations in heat value that resulted in some customers paying more than others to achieve the same heating energy, depending on geographic location.[268]

Bill impacts for residential customers in major centres across Saskatchewan due to variations in heating value in 2020/21 are summarized in Table 10-2 and Figure 10-2. Table 10-3 shows variations in heating value for small commercial and large commercial customers (2020/21).

Table 10-2 indicates that the weighted average heat value has ranged from 38.40 MJ/m^3 (Swift Current) to 43.28 MJ/m^3 (Weyburn).[269]

- In 2017/18, the distribution of the weighted average heat value by region declined, with bill impacts for most communities converging within a 2% (+/-) range of the system average heat value in 2017/18 (see Figure 10-2).
- While heat values in most regions of the province have remained within the 2% (+/-) range around the system average, since 2018/19 heat values Weyburn, Estevan and Yorkton have been outside this range. In 2020/21, Regina also fell outside this range. As a result, average residential customers in these communities have had average bill impacts between 2.4% (Regina) and 5.6% (Weyburn) lower than average residential customers in other areas of Saskatchewan (See Table 10-2).

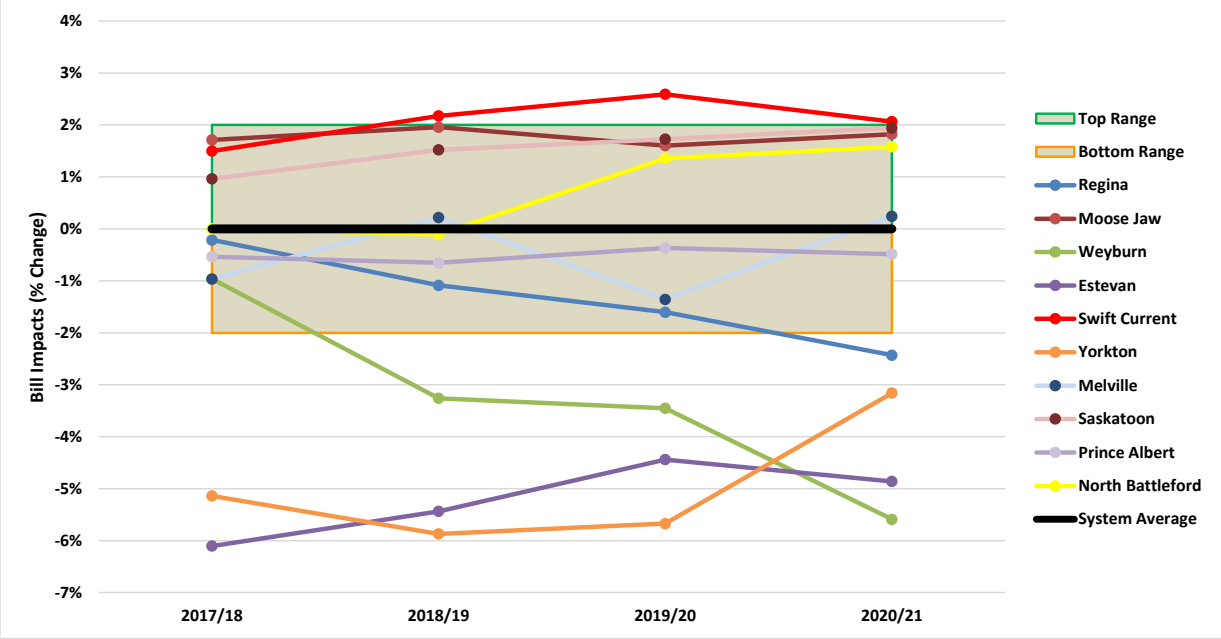
SaskEnergy expects the Saskatchewan gas supply to continue to decline, which would be replaced with Alberta supply. Alberta supply has a higher heat value than conventional Saskatchewan production, but a lower heat value than Saskatchewan gas produced with oil. SaskEnergy notes that the expectation that oil drilling in Saskatchewan is expected to remain below pre-pandemic levels resulting in less gas being produced with oil. This could lead to a slight decline in heat value in future years.[270]

[268] During the 2013 Delivery Service Rate Application, Connect Energy indicated a concern that heat value variations are unfair to customers and create financial risk to gas retailers (as they cannot recover variances related to heat value from customers). This was outlined in a written submission by Connect Energy.
[269] 1st Round Information Request 24(a) 2022 Commodity and Delivery Service Rate Application. SaskEnergy notes that the actual number of customers being served in each heat value region is not available as customers are not currently attached to heat values. To estimate the number of customers in each region, the number of current customers being served in each of the major ten centres was extrapolated to include rural customers in each area. This profile was then applied to the average number of customers outstanding each year.
[270] 1st Round Information Request 24 (d), 2022 Commodity and Delivery Service Rate Application.

Table 10-2: Average Consumption & Average Bill Impacts for 12 Month Period (2020/21)[271]

		Heat Value				Average 2020/21 Residential Average Bills					
	Estimated Average Number of Customers	Weighted Average (MJ/m^3)	Minimum	Maximum	Heat Value Variance (%)	Annual Basic Monthly Charge ($)	Annual Delivery Charge ($)	Annual Commodity Charge ($)	Total Bill ($)	Total Bill Variance ($)	Total Bill Variance (%)
Regina	129,829	41.09	40.11	43.18	3.7%	278	262	263	803	(19)	(2.4%)
Moose Jaw	22,774	38.54	37.73	38.75	(2.8%)	278	279	280	838	15	1.8%
Weyburn	7,836	43.28	43.08	43.32	9.2%	278	248	250	777	(46)	(5.6%)
Estevan	8,180	42.77	42.16	43.16	7.9%	278	251	253	783	(40)	(4.9%)
Swift Current	13,600	38.40	37.50	38.70	(3.1%)	278	280	281	840	17	2.1%
Yorkton	13,109	41.61	40.50	42.68	5.0%	278	258	260	797	(26)	(3.2%)
Melville	4,246	39.42	38.07	40.84	(0.5%)	278	273	274	825	3	0.2%
Saskatoon	163,460	38.48	37.88	38.77	(2.9%)	278	279	281	839	16	1.9%
Prince Albert	26,959	39.92	39.48	40.72	0.7%	278	269	271	819	(4)	(0.5%)
North Battleford	10,287	38.69	37.59	39.30	(2.4%)	278	278	279	836	13	1.6%
System Average	**400,279**	**39.63**	**39.26**	**39.93**	**0.00%**	**278**	**271**	**273**	**823**	**0**	**0.0%**

Figure 10-2: Residential Bill Impacts due to Heat Value Variance (% change)[272]



[271] 1st Round Information Request 24 (a) 2022 Delivery Service and Commodity Rate Application.
[272] 1st Round Information Request 24 (a) 2022 Delivery Service and Commodity Rate Application.

Table 10-3: Average Consumption & Average Bill Impacts for over 12 Month Period for Small Commercial and Large Commercial Customers (2020/21)[273]

	Average 2020/21 Commercial Small						Average 2020/21 Commercial Large					
	Average Bills						Average Bills					
	Annual Basic Monthly Charge ($)	Annual Delivery Charge ($)	Annual Commodity Charge ($)	Total Bill ($)	Total Bill Variance ($)	Total Bill Variance (%)	Annual Basic Monthly Charge ($)	Annual Delivery Charge ($)	Annual Commodity Charge ($)	Total Bill ($)	Total Bill Variance ($)	Total Bill Variance (%)
Regina	462	1,037	1,276	2,775	(86)	(3.0%)	1,649	10,699	15,611	27,960	(973)	(3.4%)
Moose Jaw	462	1,106	1,361	2,929	68	2.4%	1,649	11,410	16,647	29,706	773	2.7%
Weyburn	462	985	1,212	2,658	(202)	(7.1%)	1,649	10,159	14,822	26,630	(2,303)	(8.0%)
Estevan	462	996	1,226	2,685	(176)	(6.2%)	1,649	10,280	14,999	26,928	(2,004)	(6.9%)
Swift Current	462	1,110	1,366	2,938	77	2.7%	1,649	11,450	16,707	29,806	873	3.0%
Yorkton	462	1,024	1,261	2,747	(114)	(4.0%)	1,649	10,568	15,419	27,635	(1,297)	(4.5%)
Melville	462	1,081	1,331	2,874	13	0.5%	1,649	11,155	16,276	29,079	146	0.5%
Saskatoon	462	1,108	1,363	2,932	71	2.5%	1,649	11,425	16,670	29,745	812	2.8%
Prince Albert	462	1,068	1,314	2,843	(18)	(0.6%)	1,649	11,014	16,070	28,732	(201)	(0.7%)
North Battleford	462	1,102	1,356	2,919	58	2.0%	1,649	11,366	16,583	29,597	665	2.3%
System Average	**462**	**1,075**	**1,323**	**2,861**	**0**	**0.0%**	**1,649**	**11,095**	**16,189**	**28,933**	**0**	**0.0%**

10.2 HEAT VALUE VARIANCE & SASKENERGY NET EARNINGS

SaskEnergy has noted that during the annual budget and rate application process, an annual heat value is forecast and used to translate energy into volume.

Because SaskEnergy purchases natural gas in energy (GJ) and sells natural gas to customers based on volume (m^3), a financial risk results due to the difficulty in accurately estimating the average annual heat value. SaskEnergy's net earnings vary depending on the difference between forecast and actual heat values.

Heat value variances from forecast also impact commodity revenues, i.e., when heat value increases, customers require smaller volumes to achieve the same heating value, decreasing commodity revenues (which are based on volume). The GCVA mitigates SaskEnergy's financial risks related to heat value variances that impact commodity revenues. Commodity revenue variances from forecast are captured in the GCVA and collected (or refunded) in future periods. However, if amounts owed by ratepayers accrue in the GCVA it may compound the amounts owing from ratepayers (and required commodity rate increases) in future periods.

The actual impact that heat value variance has had on SaskEnergy commodity and delivery revenues is summarized in Table 10-4. This indicates ongoing impacts to SaskEnergy revenues since 2019/20 due to the variation between forecast and actual heat values.

[273] 1st Round Information Request 24 (a) 2022 Commodity and Delivery Service Rate Application.

Table 10-4: Actual Heat Value Revenue Impacts, 2019/20 to 2021/22 ($Millions)[274]

	Heat Value			Actual	
	Actual	Forecast Delivery	Forecast Commodity*	Delivery Revenue Impact	Commodity Revenue Impact
2019/20	39.19	38.75	38.75	(1.89)	(2.20)
2020/21	39.63	38.75	38.75	(3.66)	(2.80)
2021/22	39.44	38.75	39.90	(2.86)	3.20

* The commodity heat value forecast was updated in the 2021 Commodity Rate Application from 38.75 to 39.90.

Table 10-5 shows the potential impact of actual heat value variance from forecast for the 2022/23 to 2024/25 fiscal years (assuming +/- 2% variation from the forecast heat rate of 39.50 m^3/MJ).

Table 10-5: Forecast Heat Value Revenue Impacts, 2022/23 to 2024/25 ($Millions)[275]

	Heat Value	Delivery Revenue Impact		Commodity Revenue Impact	
	Forecast	+2% Heat Value	-2% Heat Value	+2% Heat Value	-2% Heat Value
2022/23	39.50	(3.30)	3.35	(4.33)	4.45
2023/24	39.50	(3.48)	3.54	(4.62)	4.76
2024/25	39.50	(3.61)	3.68	(4.64)	4.75

SaskEnergy notes that heat value impacts for 2022/23 to 2024/25 will depend on the difference between forecasted heat value and actual heat value. Generally, an actual heat value higher than forecast will result in lower actual delivery and commodity revenues. A lower heat value than forecast will result in actual higher delivery and commodity revenues.

The Mid-Application Update decreased the forecast heat value used to determine commodity and delivery rates from 39.90 m^3/MJ (in the Original Application) to 39.50 m^3/MJ. SaskEnergy notes that the assumed reduction in heat value from 39.9 m^3/MJ (as forecast in the Original Application) to 39.5 m^3/MJ as noted in the Mid-Application Update is expected to generate $2 million more delivery revenue for the months of September 2022 to March 2023 assuming normal weather.[276]

[274] 1st Round Information Request 24 (c) and 2nd Round Information Request 20 (a) (iii), 2022 Delivery Service and Commodity Rate Application. Revenue impacts for 2019/20 to 2021/22 use a heat value rate of 38.75 m^3/MJ and 2022/23 to 2024/25 test years use a heat value of 39.50 m^3/MJ from the Mid-Application Update, September 29, 2022.
[275] 1st Round Information Request 24 (c) and 2nd Round Information Request 20 (a) (iii), 2022 Delivery Service and Commodity Rate Application. Revenue impacts for 2019/20 to 2021/22 use a heat value rate of 38.75 m^3/MJ and 2022/23 to 2024/25 test years use a heat value of 39.50 m^3/MJ from the Mid-Application Update, September 29, 2022.
[276] 2nd Round Information Request 14(c).

Observations

Material concerns related to heat value variance impacts on customer bills, on net revenues, and the GCVA have been noted by the consultant, SaskEnergy and the Panel in prior years.

- As summarized in Table 10-2 and Figure 10-2, variations in heat value result in some customers paying more than others to achieve the same heating energy, depending on geographic location. This has resulted in ongoing fairness concerns for ratepayers and other stakeholders.
- Material delivery and commodity revenue impacts have also been noted in the past. Actual and potential forecast impacts are summarized in Table 10-4 and Table 10-5. With regard to GCVA impacts – SaskEnergy has noted a totally heat value variance impact to the GCVA over the past 5 years of $9.6 million (owing to SaskEnergy from customers).

In 2016, SaskEnergy outlined in detail a number of external factors that impact heat value and that make it difficult to accurately forecast including the following:

- The price of natural gas;
- The volume of natural gas imported from Alberta;
- The volume of natural gas produced and exported from Saskatchewan;
- The price of oil and where it will be over the forecast period; and
- The price of natural gas liquids and the degree of liquids extraction in gas plants.

SaskEnergy noted that these factors are often in a state of flux and beyond SaskEnergy's control. However, as the consultant has previously noted, SaskEnergy is capable of making changes to its billing system that would mitigate these concerns for both the Corporation and its customers.[277]

Billing in energy would eliminate the need for forecasting heat value and the associated risks and fairness issues related to heat value variance and variances in customer bills.

SaskEnergy previously noted that billing in energy is viewed as "most appropriate for a distribution system that receives natural gas from a number of different supply sources" and it is "easier for customers to understand since energy (GJs) is the unit most widely used by the media." SaskEnergy has continued to indicate a willingness to review measures required to transition to billing in energy.

SaskEnergy has noted that it is currently undertaking a Heat Value Project – which is assessing billing customers in recognition of natural gas energy content. The project is currently in the internal governance process for review and decision – and at the business case stage waiting for review and prioritization. The Investment Governance Committee (IGC) has recommended deferring the project business case as it overlaps in scope and resources with dependencies of other projects; however, IGC has agreed that the needs identified in the business case are important and should proceed. SaskEnergy notes that there is an

[277] See 2016 Consultant's report, page 10-8.

opportunity to combine scope and deliverables of the heat value project with other projects due to the overlap of limited resources.[278]

Recommendations

Addressing heat value variance has been an outstanding issue and discussed as part of many prior reviews. The Panel, SaskEnergy and the Consultant have all raised concern regarding the fairness impacts for customers and the material revenue impacts for SaskEnergy. The Consultant recommends that the Panel strongly urge SaskEnergy to pursue measures required to shift to billing in energy on a priority basis.

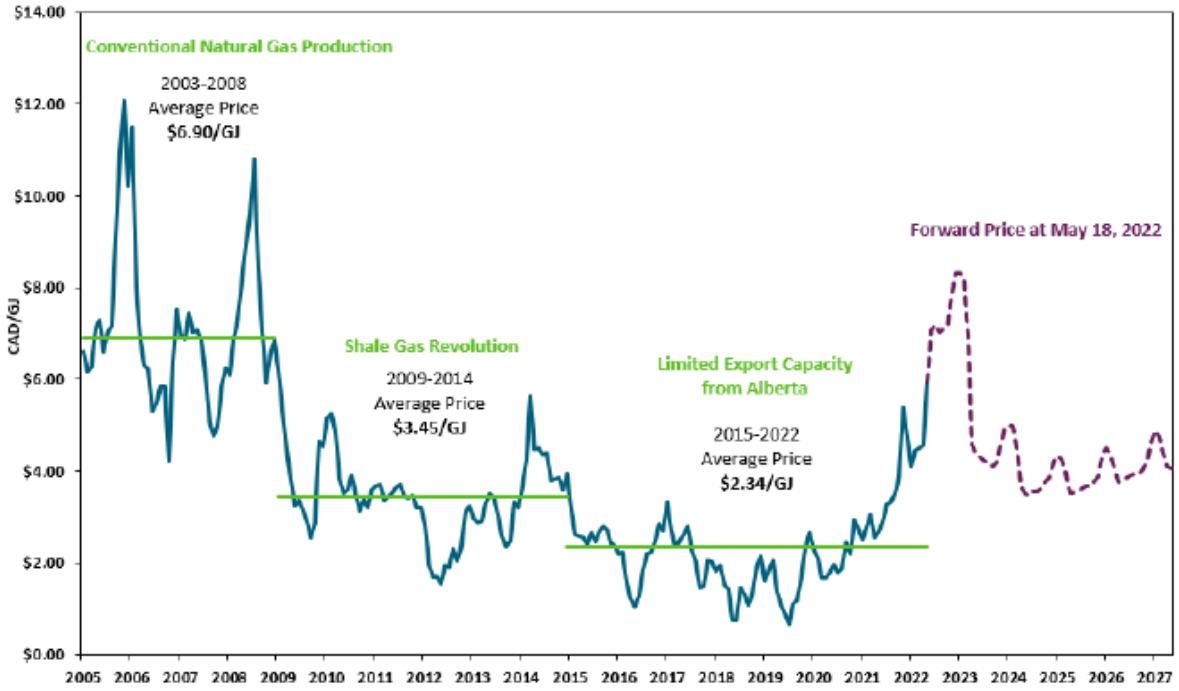
[278] 2nd Round Information Request 16©.

11.0 NATURAL GAS MARKET UPDATE

Natural gas prices are set in an open market and can be affected by production, natural gas storage levels, economic conditions and pipeline capacity available to move gas from producing basins to consuming areas.[279] SaskEnergy notes that forward natural gas prices have rebounded and returned to levels not seen since 2014 and currently are over 85% higher than the last commodity rate application. This has resulted in an in an increase in the cost of gas, and the GCVA not being recovered as forecast.[280]

Figure 11-1 illustrates the AECO monthly index historical prices and the forward price at May 18, 2022. This notes that prices are expected to increase to over $8.00 by 2023 and expected to remain in the range of $4.00 or higher over the period to 2027.

Figure 11-1: Recent AECO Natural Gas Prices[281]



SaskEnergy notes that a 7% colder than normal winter in 2021/22 resulted in the requirement for purchase of an additional 3.5 million GJs of gas to meet customer needs; and stronger markets resulted in gas purchases at a higher price than SaskEnergy's current commodity rate. Energy prices in Western Canada have continued to increase, with all summer months trading higher than the previous winter months.

[279] 2021 Commodity Rate Application, page 9
[280] Application, page 46.
[281] Page 47, 2022 Delivery Service and Commodity Rate Application.

Growing liquified natural gas export capacity and uncertainty regarding Europe's energy shortfall combined with low storage levels and cold weather has kept upward pressure on Northern American natural gas prices. As countries continue to look for greener energy alternatives, many continue to use natural gas as a greener alternative to other fuel sources. Global conflicts, such as the war in Ukraine add additional turmoil to an energy market struggling with supply/ demand balance following impacts of COVID-19.[282]

Observations

SaskEnergy has provided sufficient information on the current and forecast gas market to support its requested commodity rate.

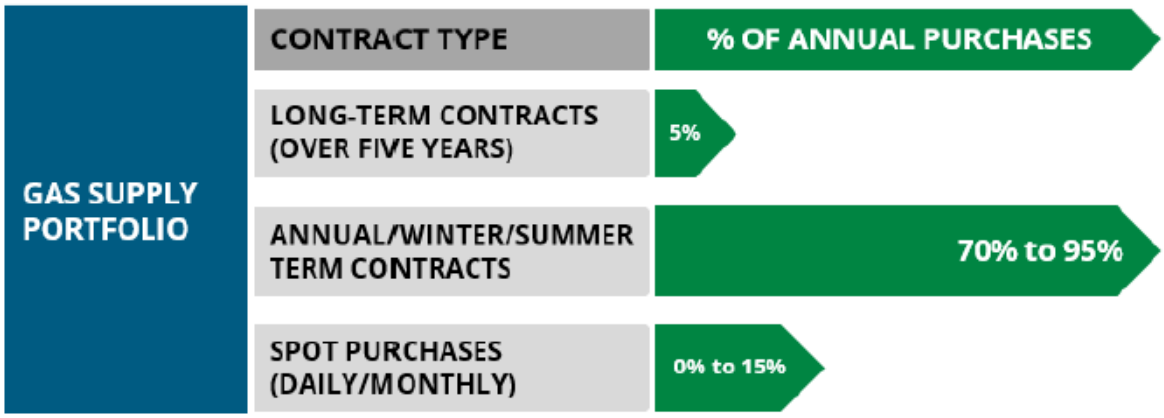
[282] Application, page 46.

12.0 GAS SUPPLY OVERVIEW

12.1 SUPPLY PORTFOLIO AND PURCHASE REQUIREMENTS

The Figure 12-1 illustrates SaskEnergy's gas supply portfolio for a normal year:[283]

Figure 12-1: SaskEnergy's Gas Supply Portfolio for a Normal Year



SaskEnergy notes that the gas supply portfolio is designed to give the least cost mix while providing required flexibility and security of supply:[284]

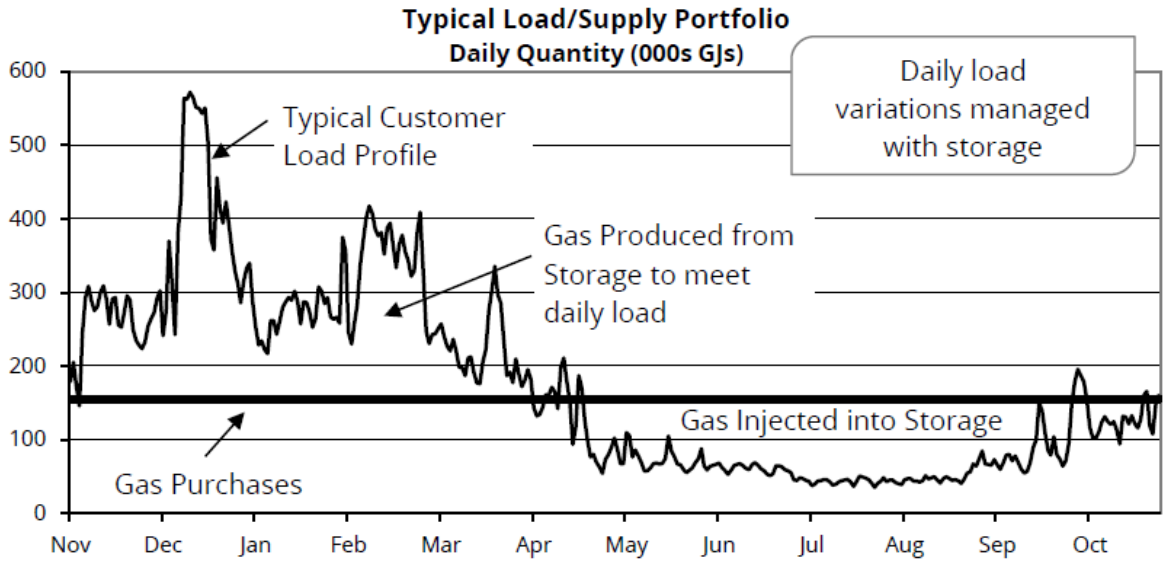
- Long-term contracts provide required security of supply as well as the ability to execute multi-year, fixed price physical contracts contemplated in the gas price risk management strategy.
- Annual contracts allow SaskEnergy to adjust to customer migration to/from SaskEnergy's regulated commodity service.
- Seasonal and spot contracts allow SaskEnergy to adjust to variations in load due to weather or to simply purchase additional summer gas to top up storage. Contracts of one-year or less in duration minimize costs as potential premiums associated with long-term contracts are avoided.

Due to the large seasonal variance in gas consumption in Saskatchewan,[285] SaskEnergy supplies gas to customers using natural gas storage to fill the gap in supply during high consumption months. Use of storage enables SaskEnergy to serve winter loads while maintaining relatively uniform monthly purchases of four to five million gigajoules throughout the year.[286] Figure 12-2 illustrates the typical load/supply

[283] Page 49, 2022 Delivery Service and Commodity Rate Application.
[284] Page 49 and 50, 2022 Delivery Service and Commodity Rate Application.
[285] Application page 48 notes approximately 70% of the total requirement must be supplied during the winter months.
[286] Application Page 48. Forecast monthly purchase volumes are provided at line 15 of Schedule 2.0 of the 2022 Delivery Service and Commodity Rate Application.

portfolio for SaskEnergy, shows that purchases are relatively uniform throughout the year, and that storage is used to meet the daily load in winter months when demand is higher.

Figure 12-2: Typical Load/ Supply Portfolio[287]



SaskEnergy indicates that during normal weather situations, storage provides approximately 30% of annual natural gas requirements, 45% of a normal winter gas requirements, and 65% of gas consumed on the coldest day of the year.[288]

SaskEnergy, in the Original Application, is forecasting that it will supply approximately 56 million GJs to customers over the application period (the Mid-Application Market Update indicates that this will increase to 61 million GJs). SaskEnergy contracts for a quantity of natural gas based on a normal weather load forecast. In the event of a colder than normal winter, SaskEnergy purchases additional short-term gas as required; in contrast, if winter weather is warmer than normal, SaskEnergy will typically exit the winter with higher than normal storage inventory levels, and reduce its gas purchases accordingly over the summer period. Alternatively, if gas prices remain relatively high despite a mild winter in Saskatchewan, SaskEnergy may sell some of this excess gas during the winter period.[289]

Over the last several years SaskEnergy has become more reliant on imports from Alberta. Figure 12-3 illustrates the gas supply for Saskatchewan. The figure shows that since 2011 Saskatchewan has become a net importer filling the gap in supply through purchases from Alberta.

[287] Page 47, 2022 Delivery Service and Commodity Rate Application.
[288] Page 47, 2022 Delivery Service and Commodity Rate Application.
[289] Page 48, 2022 Delivery Service and Commodity Rate Application.

Figure 12-3: Saskatchewan Gas Supply[290]

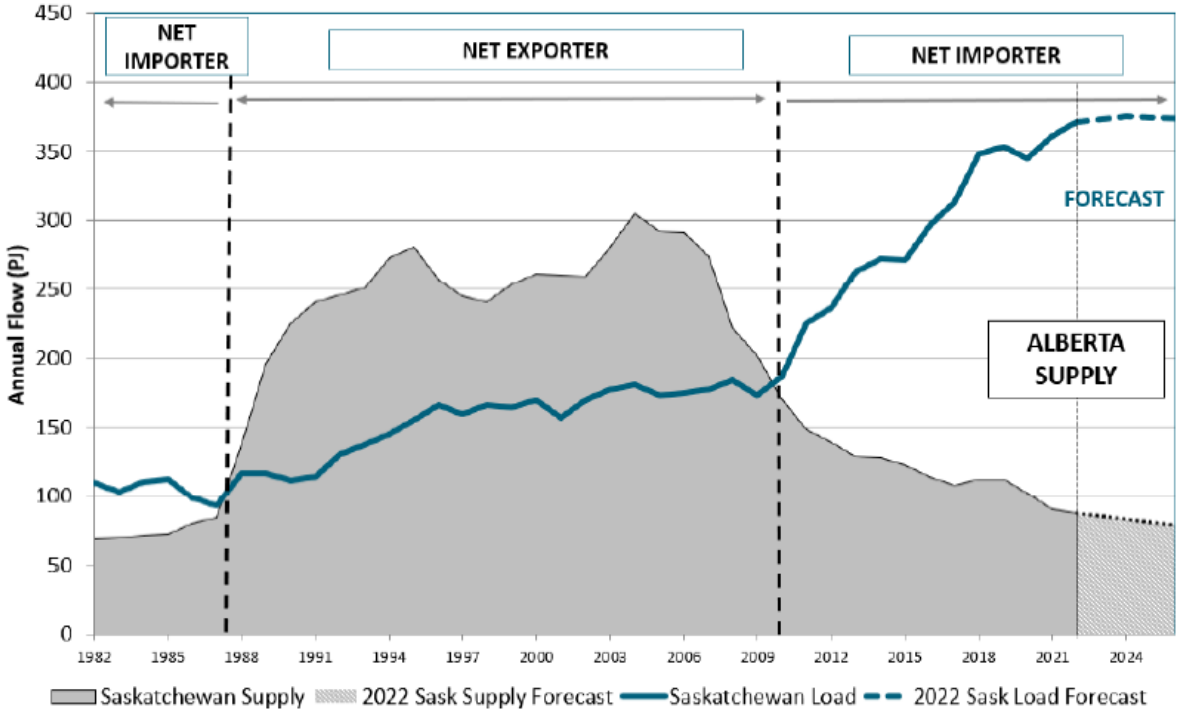


Table 12-1 summarizes the breakdown between actual Saskatchewan and Alberta purchases for the last five years of actuals (November to October from 2016/17 to 2020/21) and the forecasts for November 2021 to October 2022. This indicates a steady increase in purchases from Alberta over the period.

Table 12-1: Gas Purchases by Source (Petajoules or PJs)[291]

	Alberta Purchases (PJ)	Alberta % of Total Purchased	Sask. Purchases (PJ)	Sask. % of Total Purchased	Total (PJ)
Nov 2016 - Oct 2017	30.8	58.9%	21.5	41.1%	52.3
Nov 2017 - Oct 2018	35.1	56.5%	27	43.5%	62.1
Nov 2018 - Oct 2019	44.4	72.4%	16.9	27.6%	61.3
Nov 2019 - Oct 2020	47.1	78.5%	12.9	21.5%	60.0
Nov 2020 - Oct 2021	46.7	85.2%	8.1	14.8%	54.8
[Forecast] Nov 2021 - Oct 2022	53.6	84.5%	9.8	15.5%	63.4

[290] Page 43, 2022 Delivery Service and Commodity Rate Application.
[291] 1st Round Information Request Commodity 24 (e)[Delivery], 2022 Commodity and Delivery Service Rate Application.

SaskEnergy currently contracts for 200,000 GJ/day of firm transportation capacity from Alberta.[292] This is required to ensure a secure supply of natural gas to meet customer requirements and provide firm access to additional gas to meet the requirement for colder than normal winters.[293] Approximately 70,000 GJ/day of the 200,000 GJ/day of firm transportation contracted is reserved for potential incremental winter gas purchase requirements. SaskEnergy notes that annual contracts allow it to adjust to customer migration to/from SaskEnergy's regulated commodity service.[294]

SaskEnergy notes that the increase in natural gas prices over the last year has had a significant impact on gas retailers for the upcoming gas year; and this is expected to result in a number of customers served by gas retailers returning to SaskEnergy:

- During the 2021 Commodity Rate Application review, SaskEnergy indicated the potential for additional customer load to return to SaskEnergy from retailers. SaskEnergy noted at that time that the potential impact of this migration of customers back to SaskEnergy could be 2 to 4 PJs of gas that would need to be purchased at market prices. At the time, SaskEnergy estimated the added annual cost to purchase two additional PJs of gas at $8 million – which would be offset by commodity revenue of $6.3 million, leaving a net cost of $1.7 million.[295]
- SaskEnergy notes that the market is now significantly higher than SaskEnergy's proposed commodity rate and gas retailers are less competitive.[296] This has resulted a number of customers served by gas retailers returning to SaskEnergy. SaskEnergy expects that effective November 1, 2022, ~6 million GJs of load served by gas retailers will return to SaskEnergy. SaskEnergy has contracted for additional firm transportation from Alberta and will require additional unhedged purchases to serve the load. SaskEnergy estimates an impact to the GCVA of approximately $9.5 million; and an impact to the forecasted cost of gas of approximately $31.6 million.[297]

Observations

SaskEnergy's supply portfolio is changing in response to decreasing gas supply from Saskatchewan. The approach adopted by SaskEnergy appears to be prudent with regard to ensuring reliability of supply and maintaining flexibility to adapt to different weather conditions as well as provision to supply additional customer loads in case customers that buy gas from retailers return to SaskEnergy.

Concern is noted regarding the impact of customers served by retailers returning to SaskEnergy. It is noted that SaskEnergy is the supplier of last resort and on a legislative basis has an obligation to serve. It is also noted that the details of the contracts between these customers and gas retailers is not known. However, this additional load is expected to drive material costs for SaskEnergy that will adversely impact other existing customers (due to the requirement to purchase additional gas at market prices).

[292] Firm transportation capacity from Alberta increased from 150,000 GJ/day to 170,000 GJ/day effective November 1, 2018; to 180,000 GJ/day effective November 1, 2019 to 200,000 GJ/Day effective November 1, 2020. See 2018 Commodity and Delivery Service Rate Application, Page 11, and 2021 Commodity Rate Application, 1st Round Information Request 4(q)(i).
[293] Application page 48.
[294] Application page 49.
[295] 2021 Commodity Rate Application, 1st Round Information Request 4(t).
[296] When natural gas prices were low, SaskEnergy increased its hedged quantity and extended its hedging program.
[297] 2nd Round Information Requests 2(c).

12.2 MAXIMUM DAILY USAGE REQUIREMENTS

In addition to ensuring adequate supply is available on an annual basis, SaskEnergy must have sufficient supply and capacity to meet the load requirements on the coldest day of the year. SaskEnergy uses a 1-in-20 peak day design criterion to determine the maximum daily usage requirements designed to consider severe winter weather in Saskatchewan. SaskEnergy indicates that this design criterion is within the typical range used by other natural gas utilities in Canada and the United States, who use a range of "1 in 5 design" to a "coldest ever design".[298] While a lower peak day design criterion may reduce costs; this must be weighed against the requirement to provide continued safe and reliable service. SaskEnergy's test year forecast contracted demand is 608,000 GJs/day.

Table 12-2 summarizes the forecast supply mix for peak day requirements, and shows that the majority portion of supply for maximum peak day requirements are from storage [64%] followed by base supply [25%]. SaskEnergy notes that "should the actual peak day requirement exceed the forecasted amount, SaskEnergy would buy additional spot gas to meet the demand. The same firm transportation capacity from Alberta contracted by SaskEnergy to meet incremental winter gas requirements would be used to meet any peak day requirements in excess of the forecast."[299]

Table 12-2: Forecast Supply Mix for Peak Day Requirements[300]

		GJs/ day
1	Annual base supply	154,000
2	Storage	390,000
3	Spot purchases	29,000
4	Gas retailers	35,000
5	**Total**	**608,000**

Observations

The Consultant finds that SaskEnergy's peak day design criterion represents a reasonable balance between costs and reliability.

[298] Page 55, 2022 Delivery Service and Commodity Rate Application. SaskEnergy's design criteria assumes there is a 1 in 20 probability that the design peak day load will be reached during the upcoming winter.
[299] Application, page 49.
[300] Page 49, 2022 Commodity and Delivery Service Rate Application.

13.0 FORECAST COST OF GAS SOLD

SaskEnergy's forecast cost of gas sold for the application period is made up for the following components:

1. Cost of purchased gas;
2. Transportation costs;
3. Price management activities';
4. Storage costs, including interest expense;
5. Operations, maintenance and administration expense;
6. Bad debt expense; and late payment charges [offset costs]; and
7. Cost of internal use.

SaskEnergy's forecasts for these components are reviewed in the following sections.

13.1 COST OF PURCHASED GAS

SaskEnergy's physical purchase contracts have historically been priced referencing the AECO monthly index or AECO daily index; however, SaskEnergy also enters into multi-year fixed price physical purchase contracts from Alberta as part of its Gas Purchase and Commodity Price Risk Management Strategy. The credit risk associated with these gas purchases is managed under the Corporate Credit Risk Management Policy. As such, SaskEnergy's gas purchase portfolio consists of both AECO indexed purchases as well as fixed price purchases.[301]

SaskEnergy notes that natural gas prices are influenced by a number of factors including production, demand, natural gas storage levels and economic conditions. Figure 11-1 [see Section 11] illustrates changes in AECO natural gas prices from 2005 to May 2022 (actuals) and forward prices to 2027.

SaskEnergy forecasts AECO forward prices to be as follows:[302]

- $7.958/GJ for the period from November 2022 to March 2023; and
- $4.277/GJ for the period from April 2023 to October 2023.

SaskEnergy notes that the cost of purchase gas reflects the total costs of gas divided by total volume of gas purchased (fixed price and floating). Overall, the cost of purchase gas (including fixed price purchases) before financial hedges is forecast to decline over the forecast period as follows:

- $4.507/GJ from November 2022 to December 2022;
- $4.515/GJ from January 2023 to March 2023; and

[301] Page 50, 2022 Delivery Service and Commodity Rate Application.
[302] Schedule 2.1, 2022 Delivery Service and Commodity Rate Application.

- $2.987/GJ from April 2023 to October 2023.

Index priced gas purchases in Saskatchewan contain a price differential (basis) to the underlying AECO index that represents the difference in the market price of gas in Saskatchewan relative to Alberta. SaskEnergy notes the TEP/AECO price differential for 2022/23 will not be determined until negotiations with suppliers are completed later this fall. For the application SaskEnergy is forecasting the TEP/AECO basis to be approximately $0.70/GJ for gas purchased in Saskatchewan.[303]

SaskEnergy is forecasting the cost of purchase gas at $179.6 million for 54.7 million GJs. SaskEnergy notes this represents gas purchase contracts including the results from the natural gas price risk management program. This includes forecast Saskatchewan purchases of $59.3 million and forecast Alberta purchases of $141.1 million (a total of $200.4 million).[304] Gas sales for the period are 53.9 GJs. This results in an average cost of gas sold of $3.7/GJ.[305]

Mid-Application Market Update

The Mid-Application Market Update is based on September 21, 2022 market prices (compared to May 18, 2022 market prices in the Original Application), and shows total gas purchase costs of $213.8 million for 61.5 million GJ. This includes forecast Saskatchewan purchases of $37.966 million and forecast Alberta purchases of $179.2 million (total of $217.2 million).[306] Gas sales for the period are 61.1 million GJs. This results in an average cost of gas sold of $3.6/GJ[307].

The total cost of purchased gas increased by $34.2 million compared to the Original Application; total gas purchases increased by 6.8 million GJ and total gas sales increased by 7.2 million GJ. The average cost of gas sold declined by about $0.16.

13.2 TRANSPORTATION COSTS

As SaskEnergy is now purchasing a significant portion of natural gas from Alberta (see Figure 12-3 in Section 12), the cost of transportation has a larger impact on the commodity rate.[308] SaskEnergy incurs transportation costs to ship gas purchased from Alberta. SaskEnergy notes that "to ensure it can deliver the Alberta natural gas purchases to TEP, [it] contracts for firm transportation service from Alberta to TEP with TransGas Limited (TransGas), a wholly owned subsidiary of SaskEnergy".[309]

Costs upstream of TEP are forecast to be approximately $29.6 million for the 2022/23 gas year.[310]

[303] Application, page 50.
[304] Before price risk management activities, transportation and storage costs, and O&M costs.
[305] Before price risk management activities, transportation and storage costs, and O&M costs. Calculated based on Schedule 2.0, 2022 Delivery Service and Commodity Rate Application.
[306] Before price risk management activities, transportation and storage costs, and O&M costs.
[307] Before price risk management activities, transportation and storage costs, and O&M costs.
[308] Application, page 41.
[309] Application, page 44.
[310] Application Schedule 2.0.

Transportation costs are forecast to average about:[311]

- $0.52/GJ from November 2022 to March 2023; and
- $0.55/GJ from April 2023 to October 2023.

SaskEnergy notes that transportation costs are derived by taking total transportation costs and dividing by Alberta purchase volume to determine the value of the transport per GJ. These costs can vary year to year based on TransGas transportation expenses as well as the volume of gas that SaskEnergy must purchase to meet its load (which is dependent on weather). SaskEnergy notes that as it is a net importer of natural gas – and that it contracts firm Alberta transportation to meet a 1 in 25 year winter. Consequently, during cold winters, the cost per GJ will be lower than during warm winters, when less natural gas is purchased.[312]

Mid-Application Market Update

The Mid-Application Market Update shows an increase in transportation costs compared to the Original Application - from $29.6 million to $31.9 million ($2.3 million increase).[313]

SaskEnergy notes that it is anticipating approximately half of gas retailer load to return from gas retailers to SaskEnergy effective November 1. To serve this load, SaskEnergy has contracted for additional firm transportation from Alberta and will require additional unhedged purchases to meet it.[314]

13.3 PRICE MANAGEMENT ACTIVITIES

SaskEnergy manages its cost of gas in accordance with the Commodity Price Risk Management Strategy (hedging) approved by its Board of Directors.[315]

SaskEnergy notes that "rate stability" continues to resonate with its customers, citing customer research conducted in 2020. This customer research notes that the majority of customers continue to indicate a preference for SaskEnergy to continue to provide stable rates. It is noted that customers want to avoid unexpected changes to bills and want stability for budgeting purposes.[316]

SaskEnergy notes that currently it has "approximately 95% of its natural gas purchases hedged for the upcoming winter, November 1, 2022 to March 31, 2023 for normal weather, and 80% of its natural gas purchases price protected over the application period, November 1, 2022 to October 31, 2023, in accordance with SaskEnergy's Commodity Price Risk Management Strategy."[317] SaskEnergy forecasts its price management activities to result in inflows of approximately $50.4 million in 2022/23 test year.[318]

[311] Application Schedule 2.1.
[312] 1st Round information request 4(a).
[313] Application Schedule 2.0 compared to Mid-Application Update Schedule 2.0.
[314] Mid Application Update page 10 and 2nd Round Information Requests 2(c).
[315] Application Page 51.
[316] Application, Page 52.
[317] Application page 52.
[318] Schedule 2.0, 2022 Delivery Service and Commodity Rate Application.

These inflows are included as an offset to the cost of purchased gas and reduce the cost of gas to customers.

Mid-Application Market Update

The Mid-Application Market Update is based on September 22, 2022 market prices [compared to May 18, 2022 market prices used in the Original Application] and shows the forecast price risk management activities inflows of $35.338 million compared to $50.408 million in the Original Application for the 2022/23 gas year (or a decrease of $15.070 million).[319]

13.4 STORAGE GAS COSTS

SaskEnergy's customers incur storage gas costs when SaskEnergy withdraws gas from storage.

As reviewed in Section 12, due to the large seasonal variance in gas consumption in Saskatchewan, SaskEnergy supplies gas to customers using natural gas storage to fill the gap in supply during high consumption months. Use of storage enables SaskEnergy to serve winter loads while maintaining relatively uniform monthly purchases throughout the year. SaskEnergy indicates that during normal weather situations, storage provides approximately 30% of annual natural gas requirements, 45% of normal winter gas requirements, and 65% of gas consumed on the coldest day of the year.

SaskEnergy notes that natural gas in storage is valued at the weighted average cost of gas during the injection period of April to October, and at the end of the summer period, the value of gas injected in storage will be fixed.

SaskEnergy notes that as at October 31, 2022, an estimated 16.8 million GJs of natural gas will be in storage at an estimated price of $4.34/GJ, which will be withdrawn during November 2022 to October 2023).[320] This results in an overall cost of $12.8 million for the 2022/23 gas year.[321]

Mid-Application Market Update

The Mid-Application Market Update is based on September 21, 2022 market prices (compared to May 18, 2022 market prices used in the Original Application) shows storage gas cost of $11.5 million compared to $12.8 million in the Original Application for the 2022/23 gas year (or a decrease of $1.3 million).

13.5 INTEREST AND OPERATING COSTS

SaskEnergy's cost of gas sold includes direct operating costs, overheads, capital related costs, bad debt expense and gas in storage carrying costs, as they relate to gas supply acquisition. These costs are partially offset by late payment charges. Forecast costs in 2022/23 include:

[319] 2022 Mid-Application Market Update Filing, Schedule 2.0.
[320] Application, Page 44.
[321] Schedule 2.0 2022 Delivery Service and Commodity Rate Application.

- **Gas in Storage Interest Expense of $0.195 Million**:[322] Inventory carrying costs for gas in storage are calculated using SaskEnergy's short-term borrowing rate applied to the average monthly balance of storage inventories. The forecast borrowing rate used in the application ranges from 0.53% to 1.03%.[323] The Delivery Mid-Application Update indicates updated short-term borrowing rates fluctuating between 0.87% in April 2022 and 3.0% in March 2023.[324]
- **Operations, Maintenance and Administration Costs of $1.550 Million**: Commodity OM&A expense includes allocated corporate overhead (administrative support costs, external audit fees, executive and board of directors' costs) as well as capital related costs.[325] Forecast costs remain in the same range for the 2022/23 gas year as forecast during the 2021 Commodity Rate Application. SaskEnergy notes that allocation methods or assumptions used for OM&A costs have not materially changed and that cost increases in 2022/23 compared to 2020/21 reflect overall increases in costs. Corporate overhead costs are noted as the primary driver of OM&A cost increases – reflecting higher divisional support costs related to digital, technology and security, community engagement costs, management costs and audit fees.[326]
- **Gas Supply Related Bad Debt Expense of $1.250 Million and Gas Supply related Late Payment Revenues of $0.839 million**: Late payment revenue (interest charged to customers who pay bills after the payment due date) reduces the effects of bad debts expense associated with commodity sales revenue. SaskEnergy notes that higher bad debt expense forecast in 2022/23 compared to 2021/22 reflects increases in customer bills due to carbon charges and utility rates. SaskEnergy notes that it is expected that incremental costs, high inflation and the anticipated upcoming economic downturn will increase collection risk and bad debt expense.[327]

Total forecast costs related to these items in the 2022/23 test period are $3.0 million. These costs are offset by revenues from gas supply related late payment revenues, forecast at $0.839 million, (net cost of $2.2 million).[328]

Mid-Application Market Update

The Mid-Application Market Update shows an increase in interest expense ($1.135 million), no change in OM&A expense; and a $0.032 million increase in bad debt expense. Late payment charges also increase by $0.059 million. This results in a total net increase in costs for these items after late payment revenues are considered of $1.108 million.[329]

[322] Schedule 2.0 2022 Delivery Service and Commodity Rate Application.
[323] Page 44, 2022 Delivery Service and Commodity Rate Application.
[324] Delivery Mid-Application Market Update, page 9.
[325] See Tab 20.
[326] 1st Round Information Request 5(a).
[327] 1st Round Information Request 5(b).
[328] Schedule 2.0, 2022 Delivery Service and Commodity Rate Application.
[329] Schedule 2.0 of Mid-Application Market Update Filing; compared to Schedule 2.0 of the Original Application.

13.6 COSTS OF INTERNAL USE

SaskEnergy's gas distribution system consumes natural gas related to the following types of use:

- Line and catalytic heating loads at town border stations, which ensure operation of facilities during low winter temperatures;
- Use in SaskEnergy owned buildings; and
- Lost and unaccounted for gas.[330]

Internal usage reduces the total cost of gas sold as these costs are recovered through delivery service rates. The forecast reduction is $2.9 million for 2022/23 or an average reduction to the cost of gas sold of $0.054/GJ.

Mid-Application Market Update

The Mid-Application Market Update shows a $1.2 million reduction in the forecast cost of internal usage (from $2.9 million in the Original Application to $1.7 million in the Mid-Application Market Update).[331]

13.7 SUMMARY

Table 13-1 shows the calculation of the cost of gas sold for 2022/23. This shows total Saskatchewan and Alberta purchases totalling $3.72/GJ, offset by $0.94/GJ related to price risk management activity. Overall, the cost of purchase gas -- at $3.33/GJ once hedging and cost upstream of TEP are considered -- is the primary cost driver for the cost of gas sold in 2022/23 (94% of the cost of gas sold).

During the 2021 Commodity Rate Application – the average cost of gas sold was expected to increase from $2.83/GJ (November 2019 to October 2020) to $2.97/GJ (November 2020 to October 2021). For the two year test period included in the 2021 Commodity Rate Application the average cost of gas was expected to increase over the first year to $3.03/GJ (November 2021 to October 2022) and then decrease over the second year to $2.91/GJ (November 2022 to October 2023).

The current application forecasts a $0.65/GJ increase in average cost of gas for 2022/23 compared to the forecast for 2022/23 used in the 2021 Commodity Rate Application ($3.56/GJ for the November 2022 to October 2023 period).

[330] Page 45, 2022 Delivery and Service Commodity Rate Application.
[331] Schedule 2.0 of the Mid-Application Market Update Filing; compared to Schedule 2.0 of the Original Application.

Table 13-1: Calculation of Cost of Gas Sold for 2022/23 ($000s)[332]

Line	Description	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Total	Average Cost per GJ Sold
1	Saskatchewan Purchases - Floating Price	6,494	6,710	6,710	6,061	6,710	3,733	3,857	3,733	3,857	3,857	3,733	3,857	59,312	1.101
2	Alberta Purchases - Fixed Price	6,256	6,464	6,464	5,839	6,464	6,609	6,830	6,609	6,830	6,830	6,609	6,830	78,634	1.459
3	Alberta Purchases - Floating Price	8,321	8,598	8,684	7,844	8,684	2,846	2,941	2,846	2,941	2,941	2,846	2,941	62,433	1.159
4	Price Risk Management (Inflows)/Outflows	(10,015)	(10,349)	(10,349)	(9,347)	(10,349)	0	0	0	0	0	0	0	(50,409)	(0.936)
5	Costs upstream of TEP	2,436	2,517	2,517	2,274	2,517	2,436	2,517	2,436	2,517	2,517	2,436	2,517	29,637	0.550
6	**Cost of Purchase Gas**	**$13,491**	**$13,941**	**$14,027**	**$12,670**	**$14,027**	**$15,624**	**$16,145**	**$15,624**	**$16,145**	**$16,145**	**$15,624**	**$16,145**	**$179,606**	**3.333**
7	Storage Withdrawal (Injection)	8,265	18,404	21,250	16,067	7,893	(2,644)	(9,356)	(9,863)	(12,567)	(12,594)	(9,544)	(2,477)	12,833	0.238
8	Gas in Storage Interest Expense	16	16	16	16	16	16	16	16	16	16	16	16	195	0.004
9	Gas Supply OM&A Expense	129	129	129	129	129	129	129	129	129	129	129	129	1,550	0.029
10	Gas Supply Related Bad Debt Expense	150	208	223	184	151	83	42	36	23	23	39	88	1,250	0.023
11	Gas Supply Related Late Payment Charges	(44)	(57)	(84)	(109)	(110)	(100)	(85)	(68)	(55)	(46)	(41)	(40)	(839)	(0.016)
12	Less Cost of Internal Usage	(220)	(311)	(400)	(376)	(421)	(309)	(286)	(178)	(108)	(50)	(115)	(122)	(2,896)	(0.054)
13	**Cost of Gas Sold**	**$21,788**	**$32,330**	**$35,161**	**$28,582**	**$21,685**	**$12,799**	**$6,606**	**$5,697**	**$3,583**	**$3,623**	**$6,108**	**$13,738**	**$191,700**	**3.558**
14	Customer Sales (GJ - 000s)	6,486	8,958	9,601	7,946	6,505	3,557	1,826	1,568	975	983	1,675	3,802	53,881	3.56
15	Purchases (less Fuel Gas & Line Loss) (GJ - 000s)	4,646	4,801	4,812	4,346	4,812	4,385	4,531	4,385	4,531	4,531	4,385	4,531	54,694	3.505
16	Cost of Purchase Gas ($/GJ)	$2.904	$2.904	$2.915	$2.915	$2.915	$3.563	$3.563	$3.563	$3.563	$3.563	$3.563	$3.563		
17	Storage Withdawal (Injection)	1,905	4,243	4,899	3,704	1,819	(742)	(2,626)	(2,768)	(3,527)	(3,534)	(2,678)	(695)	0	
18	Storage Withdrawal (Injection) Rate ($/GJ)	$4.339	$4.337	$4.338	$4.338	$4.338	$3.562	$3.563	$3.563	$3.563	$3.563	$3.563	$3.562		
19	Internal Usage	(65)	(86)	(109)	(104)	(126)	(86)	(79)	(49)	(29)	(14)	(31)	(34)	(813)	

[332] Schedule 2.0 of the 2022 Delivery Service and Commodity Rate Application.

Mid-Application Market Update[333]

In the Original Application, SaskEnergy estimated the cost of purchase gas at $179.6 million (or $3.33/GJ) and the cost of gas sold at $191.7 million (or $3.56/GJ) for the 2022/23 test year. In the Mid-Application Update SaskEnergy estimates the cost of purchase gas at $213.8 million (or $3.50/GJ) and the cost of gas sold at $226.9 million (or $3.72/GJ) for the 2022/23 test year.

Observations

The cost of gas sold appears to be properly calculated and consistent with previous practice.

Material changes between forecasts for 2022/23 primarily related to two factors:

1. Ongoing market price increases and volatility in 2022/23; and
2. Increases in gas volumes related to a significant portion of gas retailer load returning to SaskEnergy. Serving these additional volumes required SaskEnergy to plan for additional purchases at market prices (i.e., this increased the proportion of gas purchases that are not hedged).

Table 13-2 summarizes changes in the average cost of gas sold ($/GJ) in the 2021 Commodity Rate Application; the Original Application; and the Mid-Application Market Update. Table 13-2 summarizes the calculation of Cost of Gas Sold and shows variances between the Original Application and the Mid-Application Market Update.

- Table 13-2 shows a material change in the 2022/23 forecast purchases in the Original Application compared to the 2022/23 forecast used in the 2021 Commodity Rate Application – purchases increasing from $2.526/GJ to $3.719/GJ (a $1.19/GJ, or 47%, increase). The Mid-Application Market Update shows a reduction compared to the Original Application ($0.16/GJ, or 4%, reduction). SaskEnergy has noted overall natural gas price increases and ongoing market instability as an underlying factor for the changes noted in the 2022/23 forecasts provided.[334]
- Table 13-2 also indicates a material change in the offset to the Cost of Purchase Gas related to hedging. The price hedging forecast for 2022/23 included in the 2021 Commodity Rate Application of about $0.195/GJ, increased materially in the Original Application to $0.936/GJ, and then declined to $0.579/GJ in the Mid-Application Market Update. SaskEnergy has noted that a significant amount of forecast purchases for 2022/23 were hedged – which would support the material increase in price hedging inflows for 2022/23 as forecast in the Original Application. SaskEnergy has also noted that a number of customers served by retailers are expected to return to SaskEnergy on November 1, 2022 (about 6 million GJs of load). The gas purchases required to serve this additional load would not be hedged – impacting the cost of purchase gas, and reducing the impact of price hedging in the Mid-Application Market Update.[335]

[333] Schedule 2.0 September 29, 2022 Mid-Application Market Update, page 4.
[334] 2nd Round Information Request 1(b) [Commodity] notes ongoing market volatility – with forward natural gas prices spiking after August 24 (AECO winter reaching highs near $8.00/GJ and AECO summer 2023 over $5.00/GJ) and then declining prior to the Mid-Application Market Update Filing in late September (with September 21, 2022 prices at $6.18/GJ and summer 2023 at $4.41/GJ).
[335] 2nd Round Information Request 1(b) notes expected return of almost half of the gas retailer load (about 6 million GJs) resulting in more natural gas required to be purchased at market prices (as opposed to lower hedged price).

- Overall, Table 13-2 shows the cost of purchase gas for 2022/23 increasing by 17% from $2.85/GJ as forecast in the 2021 Commodity Rate Application, to $3.33/GJ in the Original Application; and then by another 5% (to $3.50/GJ) in the Mid-Application Market Update. This also shows the average cost of gas sold for 2022/23 gas year (as included in the Original Application) has increased by 22% compared to the forecast used in the 2021 Commodity Rate Application; and the Mid-Application Market Update filing shows a further 4% increase over the forecast in the Original Application.
- Table 13-3 indicates a $34.2 million increase in cost of purchase gas in the Mid-Application Market Update compared to the Original Application (a 19% increase). This also shows as follows regarding changes in the calculation for the cost of gas sold in the Mid-Application Market Update compared to the Original Application:
    - A $21.346 million (or 36%) reduction in Saskatchewan purchases;
    - A $38.135 million (or 27%) increase in Albert purchases;
    - A $15.071 million (29.9%) reduction in price hedging inflows; and
    - A $2.298 million (7.8%) increase in the costs upstream of TEP.

Table 13-2: Average Cost of Gas Sold, $/GJ[336]

	Forecast Average Cost per GJ Sold				
	Nov 2020 - Oct 2021	Nov 2021 - Oct 2022	Nov 2022 - Oct 2023		
	2021 Application	2021 Application	2021 Application	2022 Application	Mid-Application Update
Alberta, Saskatchewan, and Other Purchases	2.802	2.804	2.526	3.719	3.556
Price Hedging (Inflows)/Outflows	(0.124)	(0.327)	(0.195)	(0.936)	(0.579)
Purchases and Hedging Subtotal	**2.678**	**2.477**	**2.330**	**2.783**	**2.978**
Costs upstream of TEP	0.513	0.519	0.521	0.550	0.523
Cost of Purchase Gas	**3.191**	**2.996**	**2.851**	**3.333**	**3.501**
Other Costs/ Charges	(0.218)	0.083	0.103	0.224	0.214
Cost of Gas Sold	**2.973**	**3.033**	**2.910**	**3.559**	**3.715**
Customer Sales (GJ- 000s)	**54,518**	**54,100**	**53,881**	**53,881**	**61,066**

*Note $3.72/GJ is the expected cost of gas thru to November 2023; the difference from $4.20/GJ commodity rate relates to the amount necessary to discharge the balance in the GCVA.

[336] Prepared based on Application Schedule 1.0 and 2.0 2021 Commodity Rate Application, Schedule 2.0 of the 2022 Commodity and Delivery Service Rate Application, and Schedule 2.0 from the Mid-Application Market Update September 29, 2022.

Table 13-3: Calculation of Cost of Gas Sold for 2022/23 Gas Year ($000s)[337]

Line	Description	Original Application	Mid-Application Update	Change from Original Application ($000s)	Change from Original Application (%)
1	Saskatchewan Purchases	$59,312	$37,966	($21,346)	(36.0%)
2	Alberta Purchases	$141,067	$179,202	$38,135	27.0%
3	Price Hedging (Inflows)/Outflows	($50,409)	($35,338)	$15,071	(29.9%)
4	Costs upstream of TEP	$29,637	$31,935	$2,298	7.8%
5	**Cost of Purchase Gas**	**$179,606**	**$213,765**	**$34,159**	**19.0%**
6	Storage Withdrawal (Injection)	$12,833	$11,505	($1,328)	(10.3%)
7	Gas in Storage Interest Expense	$195	$1,330	$1,135	582.1%
8	Gas Supply OM&A Expense	$1,550	$1,550	$0	0.0%
9	Gas Supply Related Bad Debt Expense	$1,250	$1,282	$32	2.6%
10	Gas Supply Related Late Payment Charges	($839)	($898)	($59)	7.0%
11	Less Cost of Internal Usage	($2,896)	($1,681)	$1,215	(42.0%)
12	**Cost of Gas Sold**	**$191,699**	**$226,854**	**$35,155**	**18.3%**

[337] Schedule 2.0 of the 2022 Commodity and Delivery Service Rate Application and Schedule 2.0 from the Mid-Application Market Update September 29, 2022.

14.0 GAS COST VARIANCE ACCOUNT (GCVA)

14.1 GCVA METHODOLOGY

The GCVA tracks the difference between actual commodity sales revenue and actual gas costs. When actual gas costs exceed the amount recovered from commodity rates, balances accumulate that are later collected from customers. When actual gas costs are lower than the amount recovered through commodity rates, balances owing to customers are accumulated and refunded through future commodity rate adjustments. Balances in the GCVA accrue interest at SaskEnergy's short-term borrowing rate.[338]

14.2 GCVA BALANCE

The commodity rate was last adjusted effective November 1, 2021. Table 14-1 sets out the calculation of the GCVA balance from November 2020 to October 2021; and Table 14-2 sets out the calculation of the GCVA for the period from November 1, 2021 through October 31, 2022. Figure 14-1 shows that between November 2021 and October 2022 the GCVA balance increased from $20.4 million owing from customers to $24.4 million owing from customers.

As detailed in Section 10, actual heat value compared to forecast continues to have an impact to GCVA balances. SaskEnergy notes that actual heat values ranged between 39.19 MJ/m^3 in 2019/20 to 39.63 MJ/m^3 in 2020/21 to 39.44 MJ/m^3 in 2021/22. SaskEnergy notes that from 2017/18 to 2021/22, the impact of the actual heat value to the GCVA balance was $9.6 million (owing to SaskEnergy from customers).[339]

The forecast heat value in the 2021 Commodity Rate Application was 39.90 MJ/m^3.[340]

[338] Summarized from page 45 of the 2022 Delivery Service and Commodity Rate Application.
[339] 1st Round Information Request 24 (b)[Delivery].
[340] 2nd Round Information Request 5(b)[Commodity].

Table 14-1: Calculation of GCVA Balance for November 2020 to October 2021 ($000s)[341]

Line	Description	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
1	Opening Balance Under/(Over) Recovery	($5,609)	($3,540)	($1,270)	$848	$3,883	$5,684	$8,149	$9,706	$11,173	$12,058	$13,299	$14,728
2	Purchases - Alberta	$14,079	$9,950	$8,292	$13,440	$7,123	$7,300	$9,693	$9,470	$10,427	$9,580	$12,148	$15,979
3	Purchases - Saskatchewan	$3,629	$2,375	$2,168	$2,305	$2,454	$1,687	$2,018	$1,747	$2,184	$2,313	$2,358	$2,768
4	Less Purchase of Other Gas Sales	($528)	($3)	($11)	($2)	($7)	$0	($11)	$0	$0	-$2	$0	-$1
5	Financial Risk Management (Inflows)/Outflows	($1,182)	($776)	($1,037)	($2,739)	($999)	$0	$0	$0	$0	$0	$0	$0
6	Transportation	$2,321	$2,327	$2,328	$2,248	$2,248	$2,334	$2,353	$2,351	$2,353	$2,356	$2,373	$2,370
7	Cost of purchase Gas	**$18,318**	**$13,873**	**$11,741**	**$15,252**	**$10,818**	**$11,320**	**$14,052**	**$13,568**	**$14,964**	**$14,247**	**$16,879**	**$21,116**
8	Storage Withdrawal (Injection)	$708	$8,792	$12,032	$12,997	$5,456	$1,056	($6,920)	($7,550)	($11,963)	($9,698)	($12,164)	($6,904)
9	Gas in Storage Interest Expense	$4	$4	$4	$4	$4	$4	$4	$4	$4	$4	$4	$4
10	Gas Supply O&M & Admin Expense	$110	$110	$110	$110	$110	$110	$110	$110	$110	$110	$110	$110
11	Gas Supply Related Bad Debt Expense	$59	$71	$76	$88	$50	$34	$19	$16	$8	$12	$12	$30
12	Less Gas Supply Late Payment Charges	($50)	($101)	($86)	($105)	($144)	($94)	($89)	($74)	($39)	($37)	($27)	($24)
13	Less Cost of Internal Usage	($83)	($104)	($134)	($134)	($169)	($164)	($91)	($70)	($19)	($38)	($37)	($37)
14	Cost of Gas Sold	**$19,065**	**$22,643**	**$23,742**	**$28,211**	**$16,125**	**$12,265**	**$7,085**	**$6,004**	**$3,063**	**$4,600**	**$4,776**	**$14,294**
15	Commodity Sales Revenue	$16,983	$20,373	$21,624	$25,176	$14,325	$9,801	$5,528	$4,538	$2,179	$3,361	$3,348	$8,581
16	Gain (loss) on other gas sales	$14	$0	$0	$0	$0	$0	$1	$0	$0	$0	$0	$0
17	Period GCVA Balance	**$2,068**	**$2,271**	**$2,118**	**$3,035**	**$1,800**	**$2,465**	**$1,556**	**$1,466**	**$884**	**$1,239**	**$1,428**	**$5,713**
18	Period GCVA Interest	$0	$0	$0	$0	$1	$1	$1	$1	$1	$2	$2	$2
19	Closing Cumulative GCVA Balance	**($3,540)**	**($1,270)**	**$848**	**$3,883**	**$5,684**	**$8,149**	**$9,706**	**$11,173**	**$12,058**	**$13,299**	**$14,728**	**$20,443**
20	Customer Sales (000s GJs)	$6,711	$8,137	$8,579	$9,962	$5,692	$3,894	$2,189	$1,777	$840	$1,314	$1,316	$3,432
21	Purchases (less Fuel Gas & Line Loss)	$6,477	$4,897	$4,142	$5,164	$3,718	$3,553	$4,368	$4,053	$4,216	$4,149	$4,749	$5,113
22	Cost of Purchase Gas ($/GJ)	$2.828	$2.833	$2.835	$2.954	$2.910	$3.186	$3.217	$3.348	$3.549	$3.434	$3.554	$4.130
23	Storage Withdrawal (Injection)	$264	$3,278	$4,486	$4,845	$2,034	$331	($2,151)	($2,255)	($3,370)	($2,824)	($3,422)	($1,672)
24	Storage Withdrawal (Injection) Rate ($/GJ)	$2.682	$2.682	$2.682	$2.682	$2.682	$3.186	$3.217	$3.348	$3.549	$3.434	$3.554	$4.130
25	Internal Usage (000s GJs)	($29)	($37)	($48)	($47)	($60)	$10	($28)	($21)	($5)	($11)	($10)	($9)

* Table 14-1 reflects information provided in the Original Application and does not reflect the updated forecasts included in the Mid-Application Market Update.

[341] 1st Round Information Request 1 (c) and 2022 Commodity and Delivery Service Rate Application.

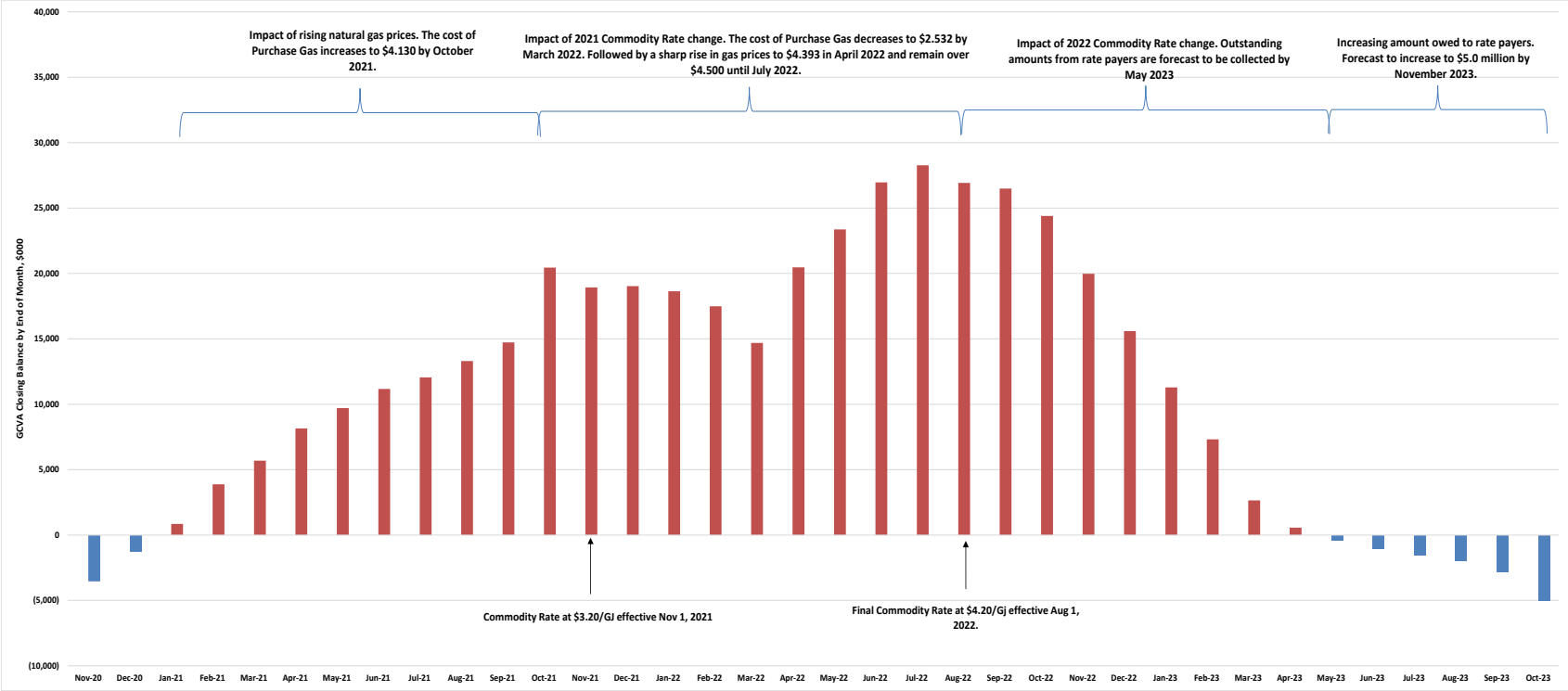
Table 14-2: Calculation of GCVA Balance for November 2021 to October 2022 ($000s)[342]

		Actuals										Forecasts	
		Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Line	Description												
1	Opening Balance Under/(Over) Recovery	$20,443	$18,936	$19,035	$18,635	$17,491	$14,688	$20,471	$23,361	$26,965	$28,274	$26,928	$26,493
2	Purchases - Alberta	$13,646	$16,644	$15,731	$10,737	$9,779	$15,974	$17,166	$18,700	$16,017	$9,913	$15,608	$12,862
3	Purchases - Saskatchewan	$3,327	$4,896	$3,308	$3,218	$3,772	$3,547	$5,352	$8,445	$6,065	$3,766	$3,409	$3,380
4	Less Purchase of Other Gas Sales	($1)	$0	($8)	($4)	-$6	-$2	-$3	-$2	$0	$0	$0	$0
5	Financial Risk Management (Inflows)/Outflows	($4,083)	($3,193)	($3,775)	($3,897)	-$4,927	$0	$0	$0	$0	$0	$0	$0
6	Transportation	$2,393	$2,415	$2,408	$2,394	$2,393	$2,510	$2,446	$2,447	$2,427	$2,478	$2,434	$2,515
7	Cost of purchase Gas	**$15,282**	**$20,762**	**$17,664**	**$12,448**	**$11,011**	**$22,029**	**$24,961**	**$29,590**	**$24,509**	**$16,157**	**$21,452**	**$18,757**
8	Storage Withdrawal (Injection)	$3,975	$12,853	$16,003	$17,096	$9,421	$603	($15,129)	($19,915)	($20,105)	($11,017)	($14,015)	($2,475)
9	Gas in Storage Interest Expense	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5
10	Gas Supply O&M & Admin Expense	$119	$119	$119	$119	$119	$119	$119	$119	$119	$119	$119	$119
11	Gas Supply Related Bad Debt Expense	$105	$168	$171	$153	$116	$84	$34	$30	$16	$33	$40	$93
12	Less Gas Supply Late Payment Charges	($36)	($55)	($91)	($158)	($186)	($117)	($139)	($82)	($48)	($47)	($26)	($25)
13	Less Cost of Internal Usage	($58)	($104)	($140)	($197)	($170)	($210)	($151)	($116)	($60)	($30)	($53)	($60)
14	Cost of Gas Sold	**$19,392**	**$33,748**	**$33,731**	**$29,466**	**$20,316**	**$22,512**	**$9,700**	**$9,632**	**$4,435**	**$5,221**	**$7,522**	**$16,415**
15	Commodity Sales Revenue	$20,902	$33,651	$34,131	$30,612	$23,122	$16,736	$6,826	$6,055	$3,170	$6,625	$8,023	$18,585
16	Gain (loss) on other gas sales	$1	$0	$2	$1	$4	$1	$2	$1	$0	$0	$0	$0
17	Period GCVA Balance	**($1,511)**	**$97**	**($402)**	**($1,147)**	**($2,810)**	**$5,775**	**$2,872**	**$3,575**	**$1,265**	**($1,404)**	**($501)**	**($2,170)**
18	Period GCVA Interest	$3	$2	$3	$3	$7	$7	$19	$28	$44	$58	$66	$71
19	Closing Cumulative GCVA Balance	**$18,936**	**$19,035**	**$18,635**	**$17,491**	**$14,688**	**$20,471**	**$23,361**	**$26,965**	**$28,274**	**$26,928**	**$26,493**	**$24,394**
20	Customer Sales (000s GJs)	$6,349	$10,422	$10,523	$9,387	$7,077	$5,145	$2,102	$1,841	$955	$1,541	$1,910	$4,425
21	Purchases (less Fuel Gas & Line Loss)	$5,192	$6,652	$5,832	$4,392	$4,349	$5,014	$5,420	$5,697	$5,386	$4,870	$5,549	$5,116
22	Cost of Purchase Gas ($/GJ)	$2.944	$3.121	$3.029	$2.834	$2.532	$4.393	$4.605	$5.194	$4.550	$3.317	$3.866	$3.666
23	Storage Withdrawal (Injection)	$1,176	$3,802	$4,734	$5,058	$2,787	$178	($4,476)	($5,892)	($5,948)	($3,260)	($4,146)	($732)
24	Storage Withdrawal (Injection) Rate ($/GJ)	$3.380	$3.380	$3.380	$3.380	$3.380	$3.380	$3.380	$3.380	$3.380	$3.380	$3.380	$3.380
25	Internal Usage (000s GJs)	($19)	($32)	($44)	($63)	($59)	($48)	$1,158	$2,036	$1,516	($70)	$508	$41

* Table 14-2 reflects information provided in the Original Application and includes updated actuals for July and August and forecasts for September and October, as included in the Mid-Application Market Update.

[342] 1st Round Information Request 1 (c), 2022 Commodity and Delivery Service Rate Application and Schedule 3.0 Revised September 29, 2022 for Mid-Application Market Update.

Figure 14-1: Closing Cumulative GCVA Balance: November 2020 to October 2022 ($000s)[343]



* Figure 14-1 reflects information provided in the Original Application and includes updated actuals for July and August and forecasts for September and October, as included in the Mid-Application Market Update.

[343] Prepared based on 1st Round Information Request 1 (c), 2022 Commodity and Delivery Service Rate Application and Schedule 3.0 Revised September 29, 2022 for Mid-Application Market Update.

Observations

The lower heat value forecast used in the Mid-Application Market Update, and slightly lower gas prices since the Original Application was filed, result in a slight reduction in the commodity reference rate in GJ (changes from $4.20/GJ (16.74 cents/$m^3$) to $4.12/GJ (16.26 cents/$m^3$). SaskEnergy is not seeking to adjust the commodity rate at this time.

GCVA Balance

Figure 14-1 shows four periods impacting the GCVA balance since November 2020:

- **November 1, 2021 to March 31, 2022**: The commodity rate increases to $3.20/GJ effective November 1, 2021, reflecting higher natural gas prices. The cost of purchase gas declines to $2.53 by March 2022. The GCVA balance begins to decline from $19.035 million owing from customers in December 2021 to $14.688 million owing from customers in March 2022 (decrease of $4.347 million).
- **April 1, 2022 to July 31, 2022**: The cost of purchase gas increases sharply to $4.39/GJ in April 2022, further increases to $5.19/GJ in June and then falls to $4.50/GJ in July 2022. The GCVA balance begins to materially increase starting in April 2022, reflecting changes in natural gas prices. By the end of July 2022, the GCVA has increased to $28.3 million owing from customers (increase of $13.6 million).
- **August 1, 2022 to April 30, 2023**: The commodity rate increase to $4.20 is implemented effective August 1, 2022. The commodity rate change results in a forecast decline in the GCVA from the balance of $26.9 million owing from customers starting in August 2022. The balance is shown as being almost cleared by April 30, 2023.
- **May 1, 2023 to October 31, 2023**: This shows a negative balance in the GCVA (shifting to amounts owing from SaskEnergy to customers) over the period from May 1, 2023 to October 31, 2023 – with approximately $5.0 million owing to customers by October 31, 2023.

SaskEnergy's proposed commodity rate of $4.20/GJ results in the GCVA balance of $28.3 million as at July 2022 being forecast to be fully collected over a 9 month period from August 2022 to May 2023, with a forecast balance of $5.0 million owing to customers by October 31, 2022. By comparison, the 2021 Commodity Rate Application, proposed collection of an $18 million GCVA balance owing from customers over a 24 month period ending October 31, 2023 (with the balance at $0.4 million owing from customers at that time).

SaskEnergy notes that the GCVA balance did not decrease as forecast in the 2021 Commodity Rate Application as natural gas prices were higher than forecast and additional purchases of 3.5 million gigajoules of gas were required to support a 7% colder than normal winter.[344] Due to the stronger markets, additional gas purchases were made at higher prices than the current commodity rate. Forward natural gas prices have rebounded and returned to levels not seen since 2014 and currently are over 85% higher than

[344] Application page 45-46.

they were at the time of the last commodity rate application. This has resulted in SaskEnergy not recovering its GCVA as forecast.

SaskEnergy notes concern regarding continued market volatility. Over the period from August 24, 2022 to September 21, 2022, forward natural gas prices spiked with AECO winter reaching highs near $8.00/GJ and AECO summer 2023 over $5.00/GJ; then fell along with most other capital markets. The Mid-Application Market Update Filing used natural gas prices as of September 21, 2022, with AECO winter prices at $6.18/GJ, and summer 2023 prices at $4.41/GJ.

SaskEnergy also notes that its load has increased due to the return of almost half of the gas retailer load – resulting in more natural gas required to be purchased at market prices (as opposed to hedged at a lower price).[345]

Heat Value Impacts on GCVA

Natural gas is purchased in energy (GJ) and sold to customers in volume. When the actual heat value is higher than forecast the volume sold in m^3 is lower resulting in lower revenues to offset the cost of purchased gas. When heat value is lower than forecast this results in higher than expected SaskEnergy revenues, and vice versa.

Heat value variances from forecast impact commodity revenues. The GCVA mitigates SaskEnergy's financial risks related to heat value variances that impact commodity revenues. Commodity revenue variances from forecast are captured in the GCVA and collected (or refunded) in future periods. Table 14-3 below summarizes the forecast and actual heat values over the period from 2017/18 to 2021/22 and the impact to the GCVA over the period. This notes a negative $3.2 million impact in 2021/22 relating to lower actual heat value that forecast (reducing the GCVA balance).

Table 14-3: Summary of Heat Value Impact to GCVA ($)[346]

	Forecast	Actual	Impact to GCVA
2017/18	38.00	38.61	$6.7 million
2018/19	38.75	38.86	$1.1 million
2019/20	38.75	39.19	$2.2 million
2020/21	38.75	39.63	$2.8 million
2021/22	39.90	39.44	($3.2 million)
Total			$9.6 million

* Positive number indicates growing GCVA.
** Negative number indicates GCVA is reducing.

[345] 2nd Round Information Request 1(b).
[346] 2nd Round Information Request 5(b).

The overall magnitude of the under (or over) recovery and period between commodity rate adjustments may result in intergenerational inequity.

The Original Application used a forecast heat value of 39.90 MJ/m^3. The Mid-Application Market Update indicates that the expected heat value for the test period is 39.50 MJ/m^3. SaskEnergy notes that the lower forecast heat value reflects reduced Southeast gas production and is considered reasonable for the test year given historical data.[347] This lower heat value results in higher sales volumes in m^3 (and related revenues) compared to forecasts used in the Original Application. As noted in Table 14-3, higher commodity revenues that result from a lower heat value compared to forecast have reduced the GCVA balance by about $3.2 million in 2021/22. This impact is expected to continue over the 2022/23 test year.

Section 10 reviews in further detail ongoing concerns regarding variations in heat value and prior panel recommendations on this issue. SaskEnergy has commenced a heat value business case to assess options on how best to resolve heat value variance issues.

Quantum of Threshold for GCVA Balance

Commodity risk is managed by monitoring future potential changes to the GCVA. SaskEnergy notes that it typically reviews and adjusts its commodity rate once or twice per year, but that if the GCVA is projected to grow to $20 million or more (surplus or deficit) before the semi-annual review process, it may bring forward a commodity rate recommendation to its Board of Directors prior to the next scheduled commodity rate adjustment.

In prior commodity rate reviews, the Panel has recommended that SaskEnergy review the basis for the +/- $20 million quantum as the forecast metric for the GCVA to determine if it remains appropriate. During the 2021 review, SaskEnergy noted that as its "customer base has grown over the years, use per customer continues to decrease. This has resulted in SaskEnergy's gas purchases to remain relatively equal. Therefore, SaskEnergy believes the $20 million threshold is still appropriate." Following the 2021 Commodity Rate Application review, the Panel again recommended that SaskEnergy review the basis for the threshold. SaskEnergy in response has indicated that its assessment has not changed.[348]

The points of concern raised by the consultant during the 2021 Commodity Rate Application remain, i.e., the GCVA may not be working effectively based on the core purpose and function of the account.

- The GCVA is a mechanism that tracks variances between actual commodity sales revenue and actual natural gas costs.
- The purpose of the GCVA is to provide SaskEnergy the opportunity to recover the cost of gas sold to customers without mark-up. Similar to other jurisdictions, SaskEnergy typically designs a commodity rate that targets a GCVA balance of zero at the end of a test period.[349] Rate design principles target a GCVA balance of zero to minimize the impact of intergenerational equity/fairness.

[347] 2nd Round Information Request 2(a).
[348] 1st Round Information Request 23, (b) reiterates the same statement as included in Tab 7 of the 2021 Commodity Rate Application.
[349] 1st Round Information Request 1(d), 2018 Commodity and Delivery Service Rate Application.

- SaskEnergy adjusts its commodity rate less frequently than other peer utilities. Most other peer utilities have more frequent rate adjustments that occur monthly (Edmonton, Calgary and Montreal) or quarterly (Vancouver, Winnipeg, Hamilton and Toronto).[350] Table 14-4 summarizes SaskEnergy commodity rate adjustments since 2014 – and indicates an average of 16 months between applications (consideration July 1, 2014 to August 1, 2022). While this approach promotes rate stability (which is valued by SaskEnergy's customers), it can raise concerns regarding intergenerational equity.

Table 14-4: Commodity Rate Adjustments Since 2014[351]

Date of Commodity Rate Change	Commodity Rate		GCVA Balance	Period Between Rate Adjustments
	$/m^3	$/GJ		Months
July 1, 2014	0.1863	4.84	$34 Million	
January 1, 2016	0.1596	4.30	$5.3 Million	18 months
November 1, 2016	0.1387	3.65	$2.4 Million	11 months
November 1, 2018*	0.1136	2.93	$16.1 Million	24 months
April 1, 2019	0.1020	2.65	$18.4 Million	5 months
November 1, 2021	0.1278	3.20	($18.8 Million)	31 months
August 1, 2022	0.1676	4.20	($24.4 Million)	8 months

***Interim Rate Effective November 1, 2018**

- SaskEnergy has noted that it "has a fairly stable customer base, the same customers that caused the GCVA balance are essentially the same customers from whom the GCVA is recovered or refunded. SaskEnergy estimates the intergenerational fairness would impact less than 1% of the customers".[352]
- SaskEnergy has a +/- $20 million forecast metric for GCVA for triggering a commodity rate change. The quantum for the metric was set about 18-20 years ago when commodity rates were in the range of $4 to $6/GJ.
- During the 2021 Commodity Rate Application – the Consultant noted that over the period between November 2018 and October 2021, while the GCVA balance was within the +/- $20million threshold it changed by more than $37 million, from $18 million owed to customers to about $19 million owed from customers.
- High GCVA balances can put further upward pressure on commodity rates during times of commodity price increases. During the 2021 Commodity rate application, clearing the GCVA balance was about 67% of the total rate change.[353]

[350] 2021 Commodity Rate Application, 1st Round Information Request 2 (h) i).
[351] The actual GCVA balance as of November 1, 2021 was $20.4 million, as provided in 1st Round Information Request 1 (c), 2022 Commodity and Delivery Service Rate Application.
[352] 2021 Commodity Rate Application, 1st Round Information Request 2(i)(i).
[353] The 2021 Consultant Report notes with regard to the commodity rate adjustment at that time a $0.39/GJ change related to GCVA out of total change of $0.58/GJ.

Recommendations

SaskEnergy provides frequent updates on the balances of the GCVA to the Panel – however these updates do not necessarily trigger a commodity rate application. The Consultant has previously noted a concern that high GCVA balances may put further upward pressure on commodity rates during times of commodity price increases; and the Panel has also previously noted concerns related to high GCVA balances.

The Consultant notes that there is merit to developing a formalized policy that includes a framework for more regular, automatic adjustments to commodity rates to ensure that large balances do not accumulate and to mitigate concerns related to intergenerational equity. As part of the development of the formal policy, it may be appropriate to review the basis for the $20 million quantum used as the forecasted metric for the GCVA to determine if it remains appropriate.

Recommendations with regard to heat value are addressed in Section 10.

15.0 DETERMINATION OF COMMODITY RATE

The last commodity rate adjustment occurred November 1, 2021. At that time the commodity rate was increased to reflect higher natural gas prices. Since then, natural gas prices have further increased.

SaskEnergy implemented the proposed commodity rate of $4.20 effective August 1, 2022. This was 31% higher than the then existing rate of $3.20 implemented November 1, 2021. SaskEnergy notes that approval of the rate effective August 1, 2022 results in a forecast GCVA balance of $5.0 million owing to customers at the end of the Application period (October 31, 2023).

Mid-Application Market Update

The Mid-Application Market Update includes an updated heat value of 39.50 MJ/m^3 for the 2022/23 test period (as opposed to the forecast of 39.90 m^3/MJ used for the Original Application). It also notes slightly lower forecast natural gas prices since the Original Application was filed.[354]

SaskEnergy prepares its load forecast in GJ and then converts it into m^3 using a forecast heat value, the decrease in heat value results in a higher forecast load (in m^3).[355] The lower heat value forecast used in the Mid-Application Market Update, and slightly lower natural gas prices since the initial filing, results in a slight reduction in the commodity reference rate in GJ (changes from $4.20/GJ (16.74 cents/$m^3$) to $4.12/GJ (16.26 cents/$m^3$). This would reduce the commodity rate increase from 31% to 27.2%, and result in the following bill impact changes (based on average customer's annual consumption):[356]

	Mid-Application Market Update ($/month)	Original Application ($/month)	Change ($/month)
Residential	$7.37	$8.39	$1.02
Commercial Small	$37.04	$42.15	$5.11
Commercial Large	$464	$528	$64
Small Industrial	$1,712	$1,949	$237

*The average monthly increase is based on an average customer's annual consumption and will vary depending on customer usage.

SaskEnergy is not proposing to change the commodity rate approved August 1, 2022 at this time; noting that lower natural gas prices and a lower forecast heat value are offset by an increase in customer load due to customers returning to SaskEnergy commodity service from Gas Retailers. SaskEnergy also notes that political uncertainty in Europe, coupled with colder than normal winter forecasts, suggests that gas prices will continue to be volatile with risks skewed to the upside. SaskEnergy notes that with consideration of these factors – and the July 31, 2022 GCVA balance of $26.9 million – it would be prudent to maintain the interim rate in effect until the GCVA balance is near zero.[357]

[354] September 29, 2022 Mid-Application Market Update, page 10.
[355] The commodity and delivery variable rates are in m^3.
[356] Mid-Application Market Update, page 2.
[357] Mid Application Update page 10.

Table 15-1 provides the calculation of the proposed commodity rate for both the Original Application and the Mid-Application Market Update.

Table 15-1: Calculation of GCVA Balance for 2022/23[358]

	Original Application	Mid-Application Update
Estimated Balance of GCVA at October 31, 2022 ($ 000s)	$34,312	$24,394
November 2022 to October 2023 Gas Cost Forecast ($000s)	$191,751	$226,905
Total Forecast Costs to Recover ($000s)	**$226,063**	**$251,299**
November 2022 to October 2023 Forecast Sales (GJ - 000s)	53,881	61,066
Weighted Cost per Unit Sales	$4.196	$4.115
Applied for Commodity Rate	$4.20	$4.12
Customer Commodity Rate Equivalent (cents/m^3)	16.74	16.26
Heating Value used	39.90 MJ/m^3	39.50 MJ/m^3

Observations

The Consultant reviewed the proposed commodity rate calculation and finds that it uses an approach consistent with previous applications.

The following is noted regarding the assumed commodity rate and the collection of the GCVA balance over the 2022/23 gas year.

- The 2021 Commodity Rate Application included a multi-year cost of gas coverage period focused on cost of gas over the two year forward period from November 1, 2021 to October 31, 2023; and recovery of the GCVA balance owing from customers at the end of October 2021 over a two year period. SaskEnergy notes that a two-year recovery period was used "to minimize the bill impact to customers, after customers had the lowest commodity rates in over 20 years".[359]
- In the Original Application SaskEnergy noted that significant increases in natural gas prices since spring 2022 resulted in an increased cost of natural gas. This resulted in the GCVA balance growing, instead of declining as forecast in the 2021 Commodity Rate Application. In light of this, SaskEnergy proposed a one year recovery period for the GCVA balance in the Original Application, noting

[358] Based on Schedule 4.0 as provided by SaskEnergy on September 29, 2022 for Mid-Application Market Update.
[359] Application page 46.

"natural gas prices have entered a very volatile phase, and it is prudent to recover the GCVA as quickly as possible".[360]

- SaskEnergy has provided information that indicates that if the GCVA balance was cleared over a two year period, the commodity rate required would be in the range of $3.74/GJ (with GCVA balance of $24.8 million owing from customers at October 31, 2023); if it was cleared over a 3-year period, the commodity rate required would be $3.62/GJ (with GCVA balance of $31.3 million owing from customers at October 31, 2023).[361] A lower commodity rate increase at this time would reduce bill impacts for customers during a period where both significant commodity and delivery rate increases are being proposed. However, gas price changes noted between the Original Application and the Mid-Application Market Update support concerns regarding market volatility at this time; and using an extended recovery period during a period of market volatility may increase the risk that (in the event gas prices and load increases) the GCVA balance would continue to accumulate rather than decline over this period. This may result in potential larger rate requirements in the future as well as intergenerational equity concerns.
- Table 15-1 notes that the GCVA balance has been recovered more quickly compared to the forecast included in the Original Application, i.e., the Mid-Application Market Update shows the GCVA balance $9.918 million lower by October 31, 2022.
- Information provided by SaskEnergy during the review process indicates that with the commodity rate of $4.20/GJ approved on August 1, 2022 maintained over the 2022/23 gas year – it is forecast to fully recover the GCVA balance by April 2023; with approximately $5 million owing to customers by the end of October 2022.

Recommendations

It is recommended that the commodity rate approved as at August 1, 2022, of $4.20/GJ, be maintained at this time. However, the GCVA balance is expected to decline and be discharged by May 2023. The Panel should recommend that SaskEnergy submit an application to reduce the commodity rate, as soon as SaskEnergy is assured that the GCVA balanced will be discharged, in order to provide relief to ratepayers.

[360] Application page 46.
[361] 1st Round Information Request 6(e).

16.0 PRICE RISK MANAGEMENT STRATEGY AND POLICY

16.1 STRATEGY

SaskEnergy manages its cost of gas in accordance with a Commodity Price Risk Management Strategy (Strategy) that is approved by its Board of Directors each year. The Strategy allows SaskEnergy to manage the long-term price of its gas purchases through financial instruments and fixed price physical gas purchases at AECO. SaskEnergy indicates that while this approach may mitigate the impacts of market volatility in the short-term, it cannot shield customers from longer term impacts of rising and falling natural gas prices.[362]

Each year the Strategy specifies hedge targets as a percent of forecast natural gas purchases based on normal weather. Price risk management limits are set as a minimum and maximum of daily volume of natural gas to be hedged prior to the start of each season. SaskEnergy uses both financial transactions and physical fixed price gas purchases to manage its cost of gas. The Strategy outlines the types of authorized transactions that may be made over the period, the types of risks related to the authorized transactions and how they are managed.

The Application outlines the two primary and opposing objectives of gas price risk management that must be balanced against each other in any commodity rate application:[363]

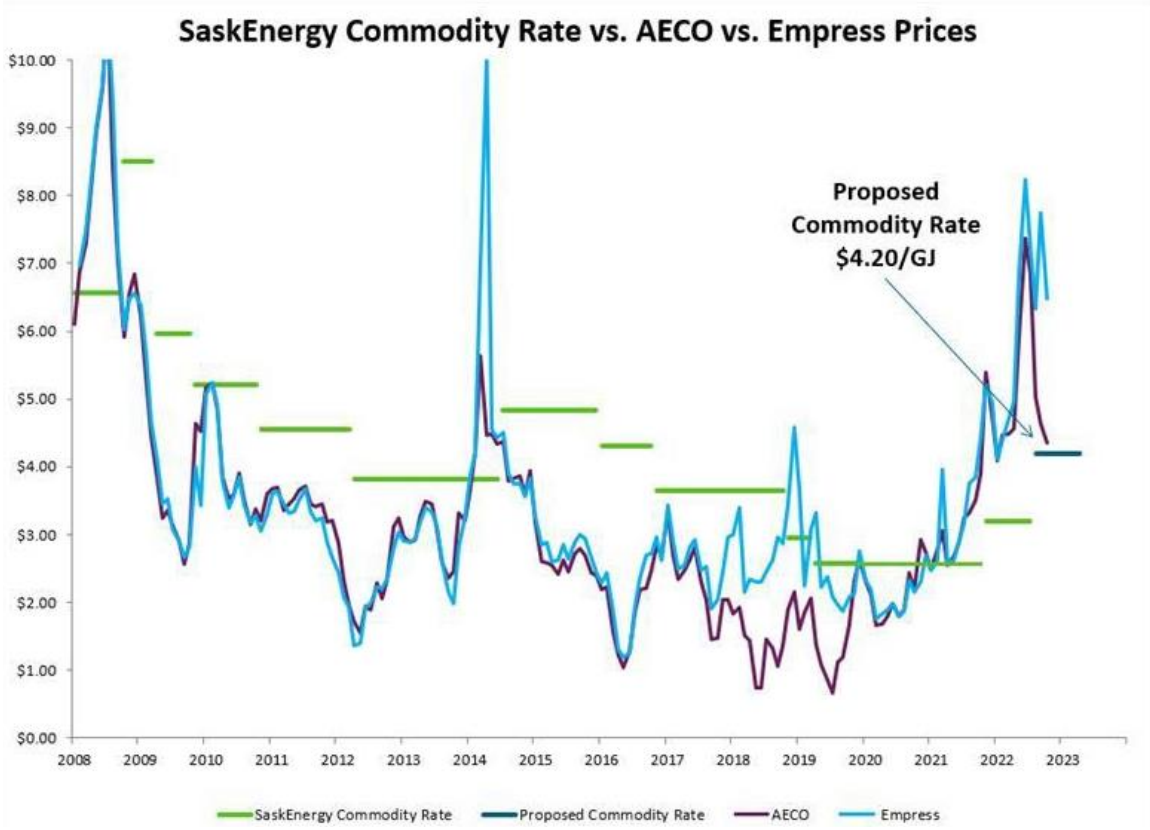
1. To provide customers with rate stability; and
2. To offer rates that are comparable to the market price of natural gas and competitive with other Canadian utilities.

The strategy endeavours to provide a competitive cost of natural gas while minimizing the risks associated with volatility of natural gas prices.

Figure 16-1 summarizes the relative stability in the SaskEnergy Commodity rates compared to historic AECO/Empress prices from 2008 to 2023. SaskEnergy note that in comparison to AECO prices, the commodity rate has been fairly stable. During periods of rising AECO prices, the rate has outperformed the market, and when prices are declining, it underperforms AECO prices.

[362] Page 51, 2022 Delivery Service and Commodity Rate Application.
[363] Page 51, 2022 Delivery Service and Commodity Rate Application.

Figure 16-1: SaskEnergy Commodity Rate vs AECO and Empress Prices (2008 – 2023)[364]



SaskEnergy currently has approximately 95% of its natural gas purchases hedged for the upcoming winter [November 1 to March 31] and approximately 80% of its natural gas purchase price protected over the application period [November 1, 2022 to March 31, 2023].[365]

Observations

The Panel's Terms of Reference require the Panel to check to ensure that SaskEnergy's natural gas price management strategy is executed as approved by the SaskEnergy's Board of Directors, however, the Strategy and any details of price management transactions or gas purchase contracts cannot be publicly released.

SaskEnergy has provided the Consultant with information that outlines the basis for recommending the current strategy. SaskEnergy notes that customer survey's continue to confirm a customer preference for stable rates as customers want to avoid unexpected changes in bills and desire stability for budgeting purposes.

[364] 2nd Round Information Request 6(a).
[365] Application, page 52.

The natural gas price management strategy appears to be being executed as approved.

16.2 POLICY

SaskEnergy maintains a Commodity Price Risk Management Policy ("Policy") that provides a framework and principles to manage risks (such as market risks, regulatory risks, credit risks and interest rate risks) that may be associated with the purchase and sale of natural gas and commodity derivative transactions associated with these activities.

The Policy specifies objectives, control principles, reporting principles and risk management systems, and specifically outlines the roles and responsibilities of the Board of Directors, Executive Committee, Commodity Risk Management Committee, Front Office, Middle Office and Back Office regarding implementation of commodity activities, strategies and transactions. The Policy is subject to a formal review by the Audit and Finance committee every two years. Any changes in the policy that are considered material are reviewed by the Board of Directors. Procedures are subject to review by the Commodity Risk Management Committee annually.

Audit Services reports biannually on compliance with the Policy and procedures; at any time, recommendations for corrective action may be made by Audit Services, if appropriate. Audit Services also reviews a sample of gas marketing tickets monthly.

SaskEnergy indicates that in accordance with industry best practices all transactions are independently monitored daily by the Middle Office for compliance. Any exceptions are noted. When external auditors perform their year-end review it is one of the areas tested. Further, with CEO/ CFO certification, and key controls are tested as they relate to financial statements. The last internal audit was completed in October 2019 and revealed compliance to the well documented policies, procedures and strategies relating to commodity activities. Established controls were found to be functioning effectively. Audit services continues to review a sample of gas marketing tickets monthly.[366]

SaskEnergy notes that an external audits of the Commodity Risk Management Policy and Procedures has never been directly performed by SaskEnergy's external auditors, but certain procedures including the review of transition tickets are part of the CEO/CFO certification process and reviewed annually. Any significant change in policy would require the external auditors to perform a more extensive review.[367]

Observations

The Panel's Terms of Reference require the Panel to check to see that SaskEnergy's price risk management practices are aligned with the SaskEnergy Board of Directors approved policy and procedures for engaging in gas price management activities.

SaskEnergy has provided information on a confidential basis that indicates compliance with the Board of Director's approved policy and procedures for engaging in gas price management activities.

[366] 1st Round Information Request 7(c)[Commodity].
[367] 1st Round Information Request 7(c) [Commodity].

17.0 CUSTOMER IMPACTS

Customer bills include variable or volumetric rates [Commodity Rate and Delivery Rate] and a fixed charge [Basic Monthly Charge]. Bill impacts will vary depending on customer class and usage levels. SaskEnergy is proposing the following rate changes that will impact customer bills:

- An increase to the Commodity Rate from 12.78 cents/m^3 ($3.20/GJ) to 16.74 cents/$m^3$ ($4.20/GJ) effective August 1, 2022.
- An increase to the Basic Monthly Charge and the volumetric Delivery Charge on August 1, 2022, June 1, 2023, and June 1, 2024, for residential, commercial small and commercial large rate classes. For the small industrial class, SaskEnergy is proposing to increase only the volumetric delivery charge. The average rate increases are as follows (depending on use and assuming commodity rates remain constant after the increase implemented August 1, 2022):
    - For August 1, 2022, the average delivery rate impact is from 7.8% to 8.9%.
    - For June 1, 2023, the average delivery rate impact is from 4.7% to 7.6%.
    - For June 1, 2024, the average delivery rate impact is from 4.8% to 5.9%.

17.1 SUMMARY OF CUSTOMER BILL IMPACTS: COMMODITY & DELIVERY

Table 17-1 and table 17-2 summarize the bill impacts for average customers in each customer class for 2022/23 and for 2023/24 and 2024/25. At average consumption levels, customers in all rate classes are expected to experience overall bill increases over the three year application period, with the most significant impacts in 2022/23.

Table 17-1: Customer Bill Impacts from Proposed Commodity and Delivery Service Rate Changes (2022/23)[368]

	Commodity Rate Increase ($3.20/GJ to $4.20/GJ)		Delivery Service Rate Increase		Total Bill Impact	
	$/Month	Annual % Increase	$/Month	Annual % Increase	$/Month	Annual Bill % Increase
	2022/23					
Residential	$8.39	11.8%	$3.57	5.0%	$11.95	16.8%
Commercial Small	$42.15	16.2%	$9.71	3.7%	$51.85	19.9%
Commercial Large	$528.00	19.2%	$86.00	3.1%	$614.00	22.3%
Small Industrial	$1,949.00	22.9%	$197.00	2.3%	$2,145.00	25.2%
Average		13.7%		4.5%		18.2%

[368] Page 4, 2022 Commodity and Delivery Service Rate Application.

Table 17-2: Customer Bill Impacts from Proposed Rate Delivery Service Rate Changes (2023/24 and 2024/25)[369]

	Delivery Service Rate		Total Bill Impact	
	$/Month	Annual % Increase	$/Month	Annual Bill % Increase
	2023/24			
Residential	$2.43	5.1%	$2.43	2.9%
Commercial Small	$6.27	4.7%	$6.27	2.0%
Commercial Large	$58.00	5.1%	$58.00	1.7%
Small Industrial	$182.00	7.6%	$182.00	1.7%
Average		5.0%		2.6%
	2024/25			
Residential	$2.53	5.1%	$2.53	3.0%
Commercial Small	$6.67	4.8%	$6.67	2.1%
Commercial Large	$60.00	5.1%	$60.00	1.8%
Small Industrial	$153.00	5.9%	$153.00	1.4%
Average		5.0%		2.6%

SaskEnergy provided information on the distribution of customer bill impacts at different consumption levels for each customer class. Table 17-3 through Table 17-5 provide the distribution of bill impacts from 2022/23 to 2024/25 for the Residential, Commercial Small and Commercial Large customer classes, and average bill impacts for the Small Industrial customer class. The following is noted regarding annual bill impacts resulting from the proposed rate increases over the 2022/23 to 2024/25 for each customer class:

- **Residential Customers**: Total annual bill impacts, depending on usage, range from 16-20% in 2022/23; 2-3% in 2023/24; and 2-3% in 2024/25.
- **Commercial Small**: Total annual bill impacts, depending on usage, range from 17-24% in 2022/23; are in 2% range in 2023/24; and 2-3 range in 2024/25.
- **Commercial Large**: Total annual bill impacts, depending on usage, range from 24-25% in 2022/23; are in 2% range in 2023/24; and are in 1% range in 2024/25.
- **Small Industrial**: Total annual bill impacts would be about 25% in 2022/23; about 2 % in 2023/24; and about 1% in 2024/25.

[369] Page 4, 2022 Commodity and Delivery Service Rate Application.

Table 17-3: Annual 2022/23 Bill Impacts by Customer Consumption (not including taxes and surcharges)[370]

	2022/23										
	Percentage of Customers within Class	Annual Usage Interval (m^3)	Average Annual Use (m3)	Current Average Annual Bill, $/year	Average Bill with Proposed Commodity Rate Change		Average Bill with Proposed Delivery Rate Change		Total Average Bill Change		
					change, $/year	change, %	change, $/year	change, %	$/year	change, $/year	change, %
	A	B	C	D	E	F=E/D	G	H=G/D	I=D+E+G	J=I-D	K=J/D
Residential	72%	0-3000	2,043	$742	$81	11%	$37	5%	$860	$118	16%
	27%	3,001-7,000	3,922	$1,169	$155	13%	$58	5%	$1,382	$213	18%
	2%	Over 7,000	9,687	$2,478	$384	15%	$119	5%	$2,981	$503	20%
Commercial Small	65%	0-10,000	4,388	$1,379	$174	13%	$63	5%	$1,615	$237	17%
	31%	10,001-50,000	21,036	$4,856	$833	17%	$241	5%	$5,929	$1,073	22%
	5%	Over 50,000	84,447	$18,103	$3,344	18%	$919	5%	$22,366	$4,263	24%
Commercial Large	75%	0-200,000	102,373	$21,734	$4,054	19%	$1,111	5%	$26,900	$5,165	24%
	20%	200,001-400,000	272,630	$55,139	$10,796	20%	$2,933	5%	$68,868	$13,729	25%
	5%	Over 400,000	529,373	$105,512	$20,963	20%	$5,680	5%	$132,155	$26,643	25%
Small Industrial			695,551	$120,912	$27,544	23%	$2,782	2%	$151,239	$30,326	25%

[370] Tab 21 of 2022 Commodity and Delivery Service Rate Application. 1st Round Information Request 19 (a) and 2nd Round Information Request [Commodity] 3 (a) 2022 Commodity and Delivery Service Rate Application.

Table 17-4: Annual 2023/24 Bill Impacts by Customer Consumption (not including taxes and surcharges)[371]

	2023/24										
	Percentage of Customers within Class	Annual Usage Interval (m^3)	Average Annual Use (m3)	2022/23 Average Annual Bill, $/year	Average Bill with Proposed Commodity Rate Change		Average Bill with Proposed Delivery Rate Change		Total Average Bill Change		
					change, $/year	change, %	change, $/year	change, %	$/year	change, $/year	change, %
	A	B	C	D	E	F=E/D	G	H=G/D	I=D+E+G	J=I-D	K=J/D
Residential	72%	0-3000	2,043	$860	$0	0%	$27	3%	$887	$27	3%
	27%	3,001-7,000	3,922	$1,382	$0	0%	$37	3%	$1,419	$37	3%
	2%	Over 7,000	9,687	$2,981	$0	0%	$68	2%	$3,049	$68	2%
Commercial Small	65%	0-10,000	4,388	$1,615	$0	0%	$39	2%	$1,653	$39	2%
	31%	10,001-50,000	21,036	$5,929	$0	0%	$129	2%	$6,057	$128	2%
	5%	Over 50,000	84,447	$22,366	$0	0%	$472	2%	$22,838	$472	2%
Commercial Large	75%	0-200,000	102,373	$26,900	$0	0%	$568	2%	$27,469	$568	2%
	20%	200,001-400,000	272,630	$68,868	$0	0%	$1,488	2%	$70,356	$1,488	2%
	5%	Over 400,000	529,373	$132,155	$0	0%	$2,874	2%	$135,029	$2,874	2%
Small Industrial			695,551	$151,239	$0	0%	$2,574	2%	$153,813	$2,574	2%

Table 17-5: Annual 2024/25 Bill Impacts by Customer Consumption (not including taxes and surcharges)[372]

	2024/25										
	Percentage of Customers within Class	Annual Usage Interval (m^3)	Average Annual Use (m3)	2023/24 Average Annual Bill, $/year	Average Bill with Proposed Commodity Rate Change		Average Bill with Proposed Delivery Rate Change		Total Average Bill Change		
					change, $/year	change, %	change, $/year	change, %	$/year	change, $/year	change, %
	A	B	C	D	E	F=E/D	G	H=G/D	I=D+E+G	J=I-D	K=J/D
Residential	72%	0-3000	2,043	$887	$0	0%	$29	3%	$916	$29	3%
	27%	3,001-7,000	3,922	$1,419	$0	0%	$35	2%	$1,454	$35	2%
	2%	Over 7,000	9,687	$3,049	$0	0%	$56	2%	$3,105	$56	2%
Commercial Small	65%	0-10,000	4,388	$1,653	$0	0%	$37	2%	$1,689	$37	2%
	31%	10,001-50,000	21,036	$6,057	$0	0%	$95	2%	$6,151	$94	2%
	5%	Over 50,000	84,447	$22,838	$0	0%	$317	1%	$23,155	$317	1%
Commercial Large	75%	0-200,000	102,373	$27,469	$0	0%	$380	1%	$27,850	$380	1%
	20%	200,001-400,000	272,630	$70,356	$0	0%	$976	1%	$71,332	$976	1%
	5%	Over 400,000	529,373	$135,029	$0	0%	$1,874	1%	$136,903	$1,874	1%
Small Industrial			695,551	$153,813	$0	0%	$2,156	1%	$155,971	$2,156	1%

[371] Tab 21 of 2022 Commodity and Delivery Service Rate Application. 1st Round Information Request 19 (a) and 2nd Round Information Request [Commodity] 3 (a) 2022 Commodity and Delivery Service Rate Application.
[372] Tab 21 of 2022 Commodity and Delivery Service Rate Application. 1st Round Information Request 19 (a) and 2nd Round Information Request [Commodity] 3 (a) 2022 Commodity and Delivery Service Rate Application.

The following is noted regarding customer bill impacts over the three year application period for each customer class:

- **Residential Customers**:
    - **72%** of residential customers use less than 3,000 m^3/year of natural gas.
        - On average these customers would see a $81 (or 11%) annual bill increase from the commodity rate increase effective August 1, 2022. The proposed delivery service rate increase in 2022 would increase annual bills by $37 (or 5%). The total net impact is a $118 (or 16%) annual bill increase.
        - The proposed delivery service rate increase effective June 1, 2023 would further increase average annual bills by $27 (or 3%); and the proposed delivery service increase effective June 1, 2024 would further increase average annual bills by $29 (or 3%).
    - **27%** of residential customers use between 3,000 m^3/year and 7,000 m^3/year of natural gas.
        - These customers would see on average a $155 (or 13%) annual bill increase from the commodity rate increase effective August 1, 2022. The proposed delivery service rate increase would increase average annual bills by $58 (or 5%). The total net impact is a $213 (or 18%) average annual bill increase.
        - The proposed delivery service rate increase effective June 1, 2023 would further increase average annual bills by $37 (or 3%); and the proposed delivery service increase effective June 1, 2024 would further increase average annual bills by $35 (or 2%).
    - **2%** of residential customers use more than 7,000 m^3/year of natural gas.
        - These customers would on average see a $384 (or 15%) annual bill increase from the commodity rate increase effective August 1, 2022. The proposed delivery service rate increase would increase average annual bills by $119 (or 5%). The total net impact is a $503 (or 20%) annual bill increase.
        - The proposed delivery service rate increase effective June 1, 2023 would further increase average annual bills by $68 (or 2%); and the proposed delivery service increase effective June 1, 2024 would further increase average annual bills by $56 (or 2%).
- **Commercial Small Customers**:
    - **65%** of Commercial Small customers use less than 10,000 m^3/year of natural gas.
        - These customers would see on average a $174 (or 13%) annual bill increase from the commodity rate increase effective August 1, 2022. The proposed delivery service rate increase would increase average annual bills by $63 (or 5%). The total net impact is a $237 (or 17%) average annual bill increase.

- The proposed delivery service rate increase effective June 1, 2023 would further increase average annual bills by $39 (or 2%); and the proposed delivery service increase effective June 1, 2024 would further increase average annual bills by $37 (or 2%).

- **31%** of Commercial Small customers use between 10,000 m^3/year and 50,000 m^3/year of natural gas.
  - These customers would see on average a $833 (or 17%) annual bill increase from the commodity rate increase effective August 1, 2022. The proposed delivery service rate increase would increase average annual bills by $241 (or 5%). The total net impact is a $1,073 (or 22%) average annual bill increase.
  - The proposed delivery service rate increase effective June 1, 2023 would further increase average annual bills by $129 (or 2%); and the proposed delivery service increase effective June 1, 2024 would further increase average annual bills by $95 (or 2%).
- **5%** of Commercial Small customers use more than 50,000 m^3/year of natural gas.
  - These customers would see an average $3,344 (or 18%) annual bill increase from the commodity rate increase effective August 1, 2022. The proposed delivery service rate increase would increase average annual bills by $919 (or 5%). The total net impact is a $4,263 (or 24%) annual bill increase.
  - The proposed delivery service rate increase effective June 1, 2023 would further increase average annual bills by $472 (or 2%); and the proposed delivery service increase effective June 1, 2024 would further increase average annual bills by $317 (or 1%).

- **Commercial Large Customers**:
  - **75%** of Commercial Large customers use less than 200,000 m^3/year of natural gas.
    - These customers would see an average $4,054 (or 19%) annual bill increase from the commodity rate increase effective August 1, 2022. The proposed delivery service rate increase would increase annual bills by $1,111 (or 5%). The total net impact is a $5,165 (or 24%) annual bill increase.
    - The proposed delivery service rate increase effective June 1, 2023 would further increase average annual bills by $568 (or 2%); and the proposed delivery service increase effective June 1, 2024 would further increase average annual bills by $380 (or 1%).
  - **20%** of Commercial Large customers use between 200,000 m^3/year and 400,000 m^3/year of natural gas.
    - These customers would see a $10,796 (or 20%) average annual bill increase from the commodity rate increase effective August 1, 2022. The proposed delivery service rate increase would increase average annual bills by $2,933 (or 5%). The total net impact is a $13,729 (or 25%) average annual bill increase.

  - The proposed delivery service rate increase effective June 1, 2023 would further increase average annual bills by $1,488 (or 2%); and the proposed delivery service increase effective June 1, 2024 would further increase average annual bills by $976 (or 1%).

- Average **Industrial Small** customers would see a $27,544 (or 23%) annual bill increase from the commodity rate increase effective August 1, 2022.
  - The proposed delivery service rate increase would increase annual bills by $2,782 (or 2%). The total net impact is a $30,326 (or 25%) annual bill increase.
  - The proposed delivery service rate increase effective June 1, 2023 would further increase annual bills by $2,574 (or 2%); and the proposed delivery service increase effective June 1, 2024 would further increase annual bills by $2,156 (or 1%).

The following figures show bill impacts for commodity and delivery rate changes for Residential, Commercial Small and Commercial Large customers:

- Figures 17-1 to 17-3 illustrate the range of potential annual bill impacts based on usage for 2022/23.
- Figure 17-4 to 17-6 illustrates the range of potential annual bill impacts based on usage for 2023/24.
- Figure 17-7 to 17-9 illustrate the range of potential annual bill impacts based on usage for 2024/25.

Figure 17-1: Range of Potential Annual Bill Impacts for Residential, 2022/23[373]

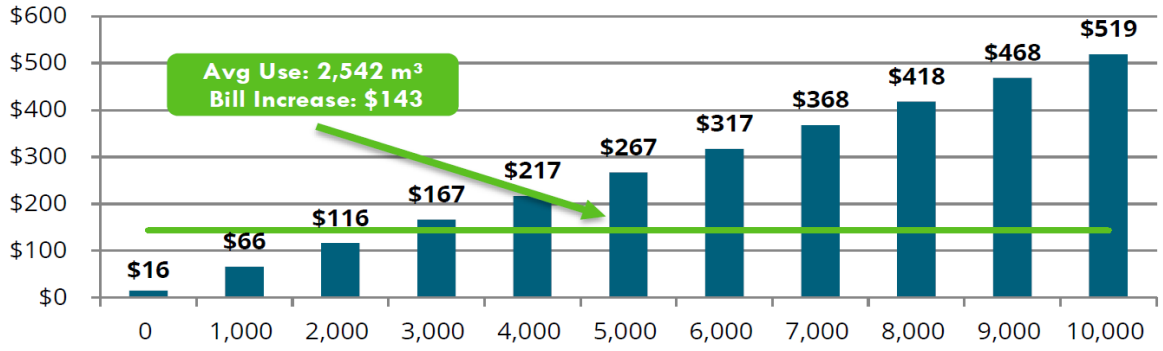


Figure 17-2: Range of Potential Annual Bill Impacts for Commercial Small, 2022/23[374]

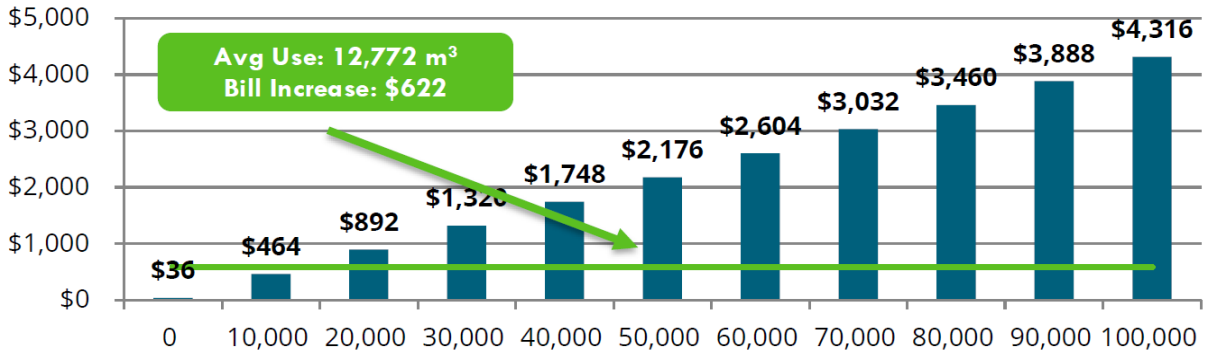
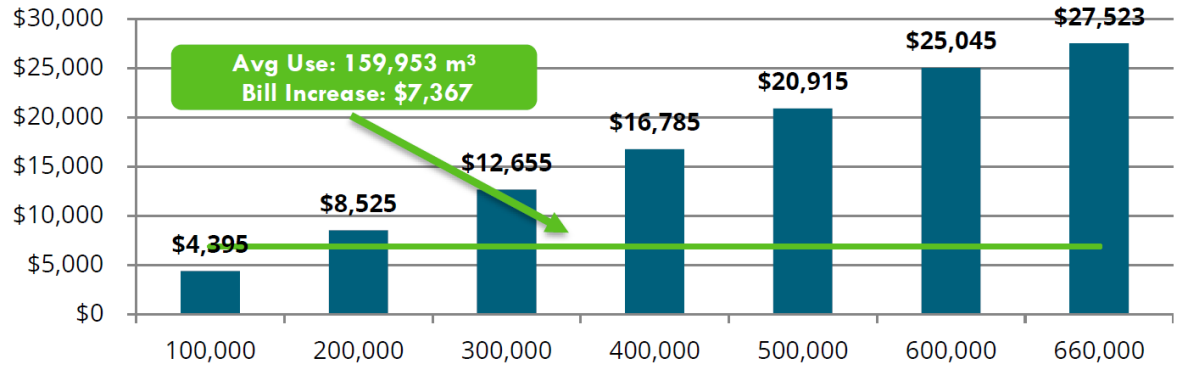


Figure 17-3: Range of Potential Annual Bill Impacts for Commercial Large, 2022/23[375]



[373] Tab 21, page 7.
[374] Tab 21, page 7.
[375] Tab 21, page 7.

Figure 17-4: Range of Potential Annual Bill Impacts for Residential, 2023/24[376]

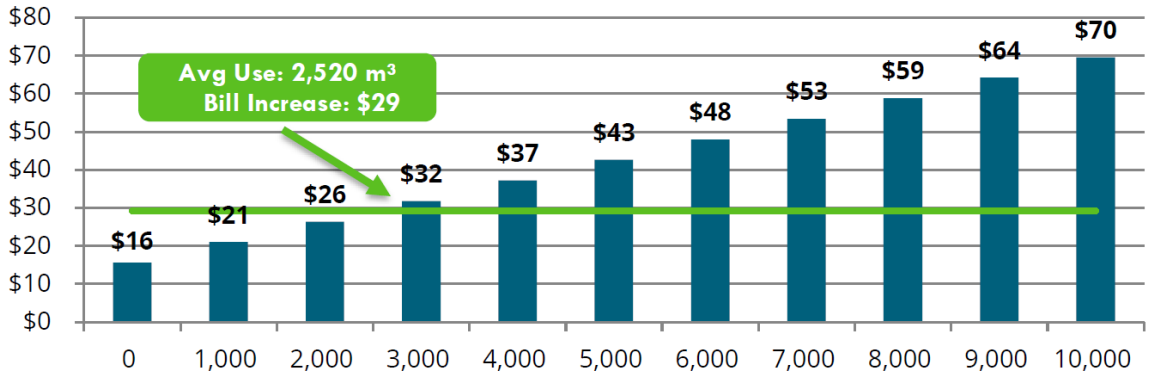


Figure 17-5: Range of Potential Annual Bill Impacts for Commercial Small, 2023/24[377]

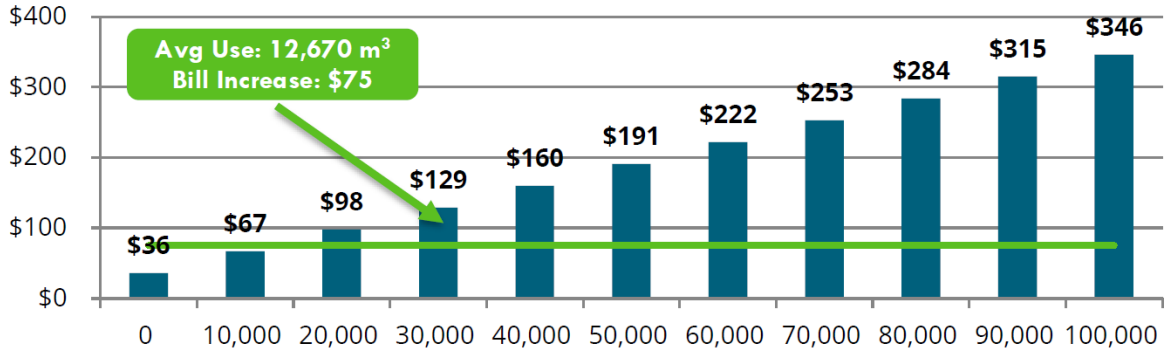
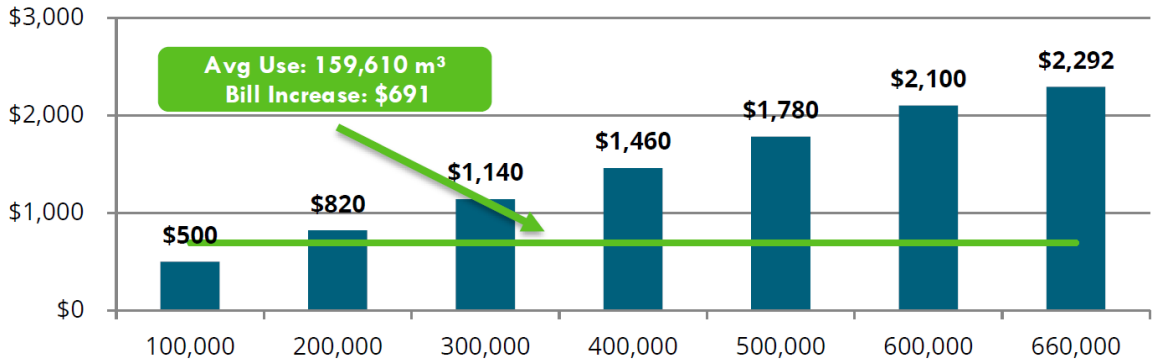


Figure 17-6: Range of Potential Annual Bill Impacts for Commercial Large, 2023/24[378]



[376] Tab 21, page 8.
[377] Tab 21, page 8.
[378] Tab 21, page 8.

Figure 17-7: Range of Potential Annual Bill Impacts for Residential, 2024/25[379]

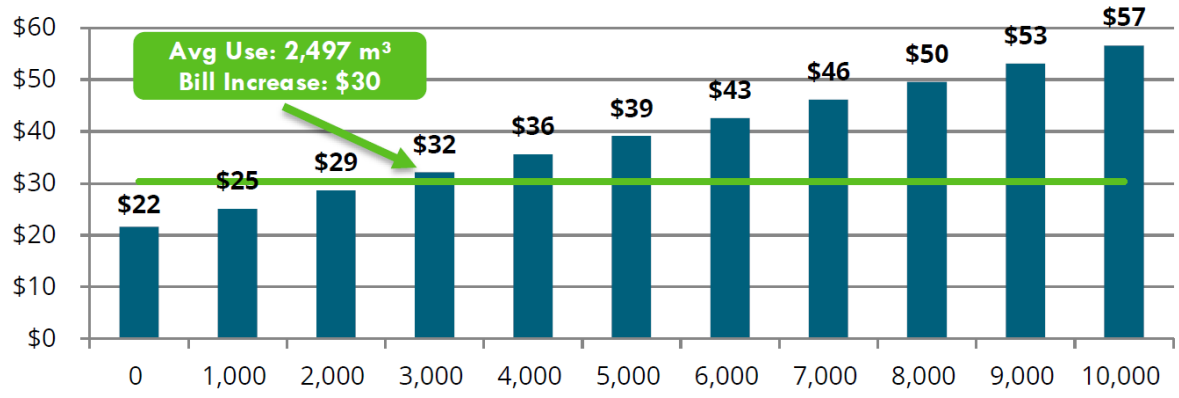


Figure 17-8: Range of Potential Annual Bill Impacts for Commercial Small, 2024/25[380]

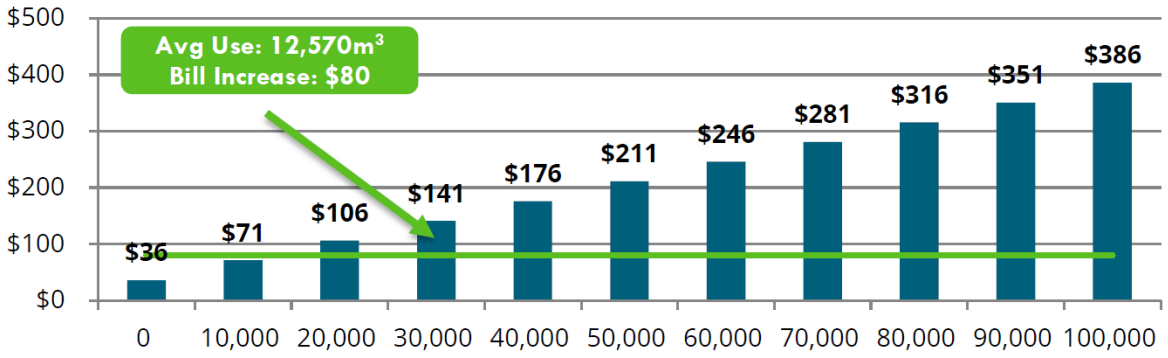
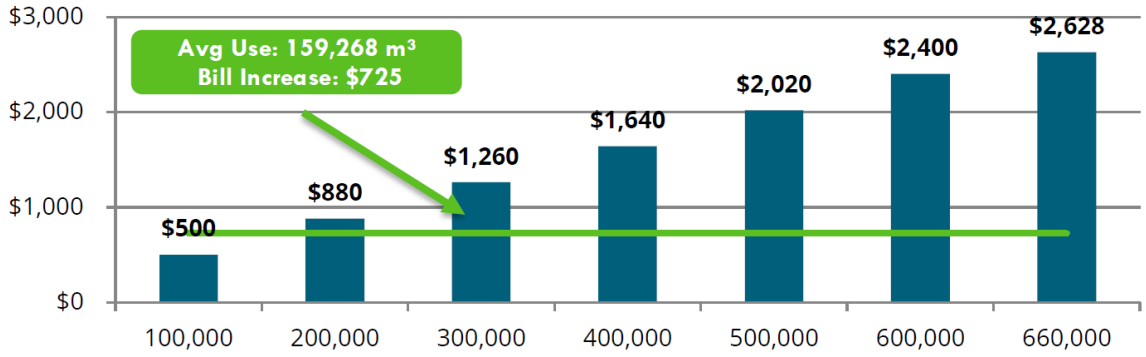


Figure 17-9: Range of Potential Annual Bill Impacts for Commercial Small, 2024/25[381]



[379] Tab 21, page 9.
[380] Tab 21, page 9.
[381] Tab 21, page 9.

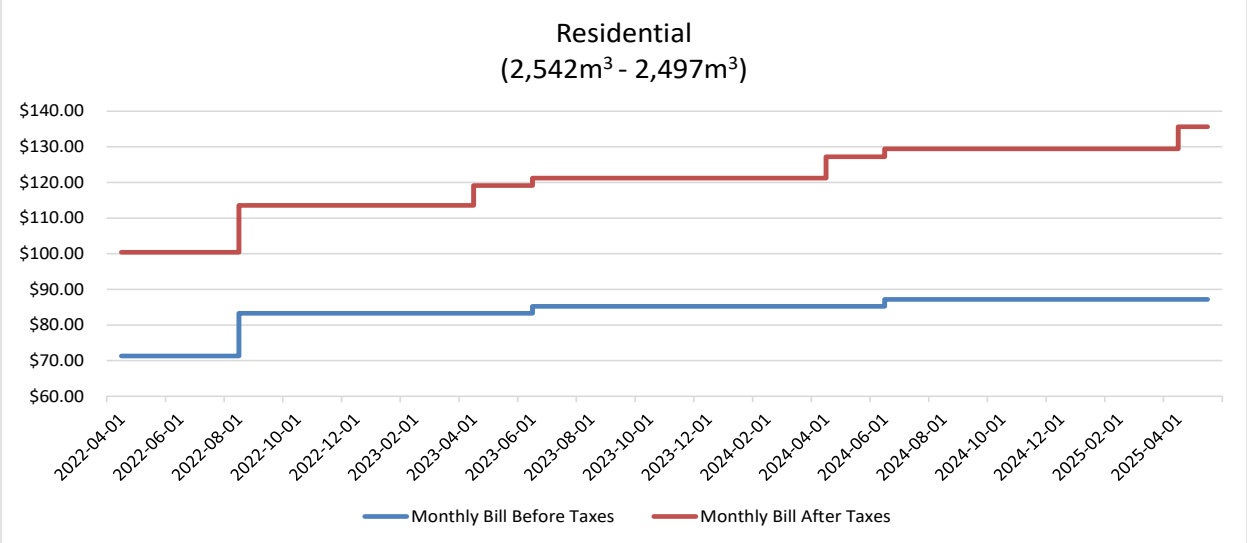
17.2 IMPACT OF OTHER TAXES AND CHARGES ON CUSTOMER BILLS

Customer bills are affected not only by changes to SaskEnergy's rates, but also by taxes (federal carbon charge, municipal surcharges, and GST). Figures 17-10 to 17-12 show changes to customer bills without taxes (blue line) and with taxes (red line) from April 1, 2021 through May 31, 2025. This indicates a material change in annual bills at the end of the application period after taxes and surcharges are applied.

For residential customers:

- The monthly bill **before taxes** includes the delivery charge, the basic monthly charge (BMC), and the commodity charge.
    - The commodity charge increased by 31% on August 1, 2022; commodity bill impacts decrease by 1% in 2023 and 2024 due to assumed decreasing consumption.
    - The delivery charge increased by 11% on August 1, 2022, and then 4% on June 1, 2023, and 2% on June 1, 2024; the BMC increases by 5%-7% each test year.
- The monthly bill **after taxes** is largely driven by carbon tax increases (increases by 26% on April 1, 2023 and 22% on April 1, 2024 and 19% on April 1, 2025); other bill impacts relate to the municipal surcharge (increases by 17% on August 1, 2022 and 2% on June 1, 2023 and June 1, 2024); and GST.

Figure 17-10: Residential Customer Class Monthly Bill Changes from August 1, 2022 to May 31, 2025, Before and After Taxes and Surcharges[382]



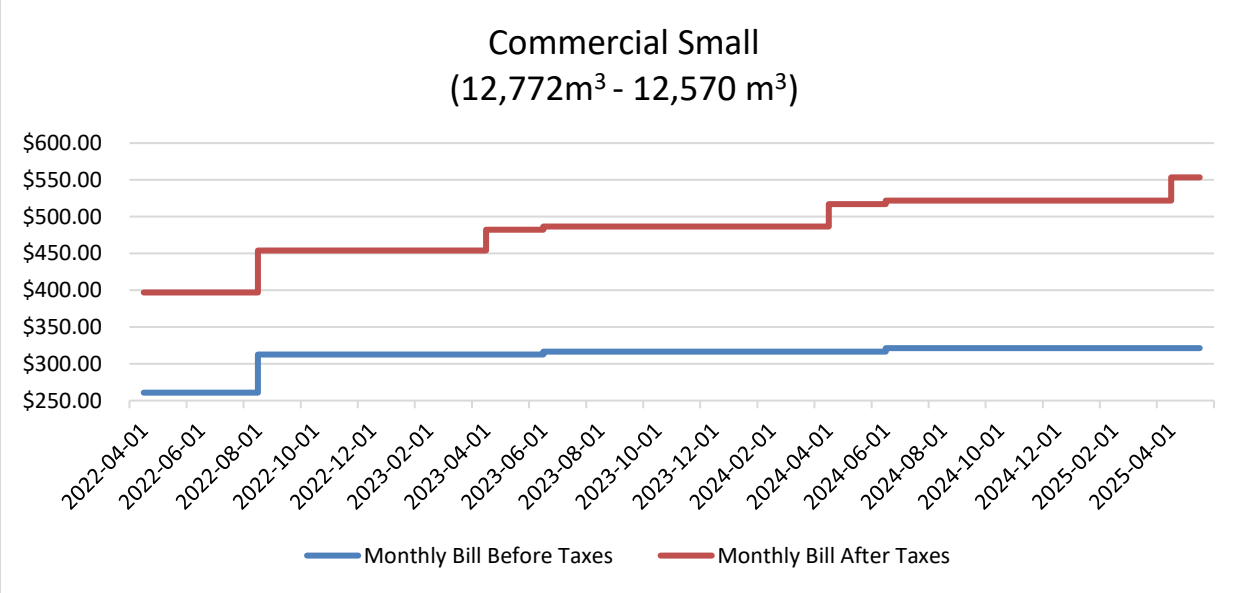
[382] Based on information from 1st Round Information Request 19 (c). SaskEnergy assumes a decreasing average consumption per customer class for each test year. Residential customer class assumes 2,542 m^3 consumption annually in the current period [April 2022 to July 2022] and the 2022/23 test year, 2,520 m^3 consumption annually in 2023/24, and 2,497 m^3 consumption annually in 2024/25. Taxes include federal carbon charges, GST, and municipal surcharges. The carbon tax is set to increase annually on April 1. Carbon taxes are calculated using the information provided from 1st Round Information Request 19 (c) and (f), and GST was calculated at 5% of existing bill including the carbon tax increase implemented annually on April 1, 2023; 2024; and 2025.

For commercial small customers:

- The monthly bill **before taxes** include the delivery charge, the basic monthly charge (BMC), and the commodity charge.
    - The commodity charge increased by 31% on August 1, 2022; commodity bill impacts then decrease by 1% in 2023 and 2024 due to assumed decreasing consumption.
    - The delivery charge increased by 8% on August 1, 2022, and then 3% on June 1, 2023, and June 1, 2024; the BMC increases by 7%-8% each test year.

The monthly bill **after taxes** is largely driven by carbon tax increases (increases by 26% on April 1, 2023 and 22% on April 1, 2024 and 19% on April 1, 2025); other bill impacts relate to the municipal surcharge (increases by 20% on August 1, 2022 and 1% on June 1, 2023 and June 1, 2024); and GST.

Figure 17-11: Commercial Small Customer Class Monthly Bill Changes from August 1, 2022 to May 31, 2025, Before and After Taxes and Surcharges[383]

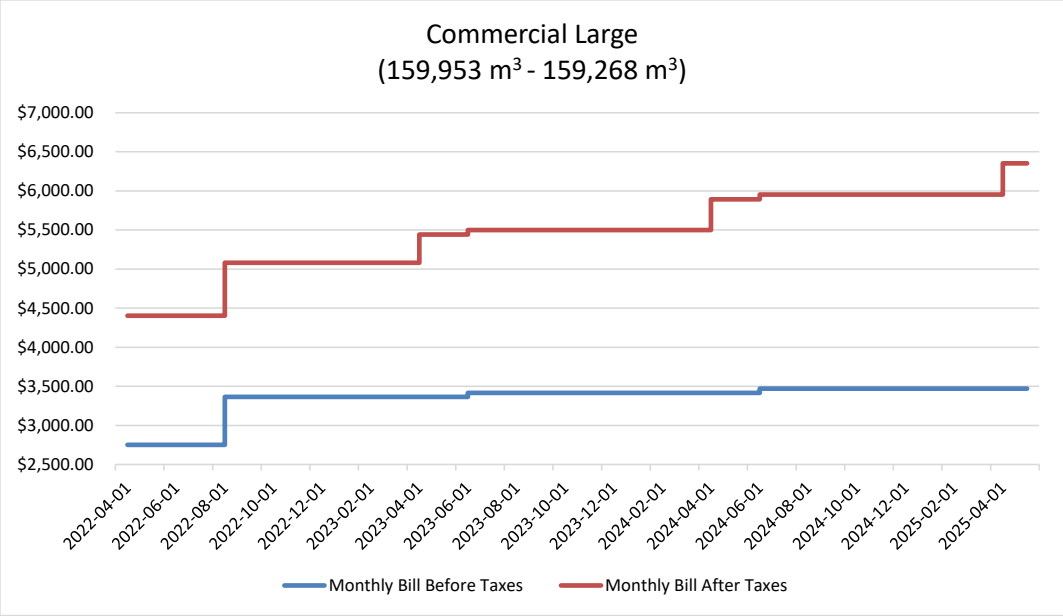


[383] Based on information from 1st Round Information Request 19 (c). SaskEnergy assumes a decreasing average consumption per customer class for each test year. Commercial Small customer class assumes 12,772 m^3 consumption annually in the current period [April 2022 to July 2022] and the 2022/23 test year, 12,670 m^3 consumption annually in 2023/24, and 12,570 m^3 consumption annually in 2024/25. Taxes include federal carbon charges, GST, and municipal surcharges. The carbon tax is set to increase annually on April 1. Carbon taxes are calculated using the information provided from 1st Round Information Request 19 (c) and (f), and GST was calculated at 5% of existing bill including the carbon tax increase implemented annually on April 1, 2023; 2024; and 2025.

For Commercial Large customers:

- The monthly bill **before taxes** include the delivery charge, the basic monthly charge (BMC), and the commodity charge.
    - The commodity charge increased by 31% on August 1, 2022; commodity bill impacts decrease by less than 1% in thereafter due to assumed decreasing consumption.
    - The delivery charge increases by 7% on August 1, 2022, 4% on June 1, 2023, and 5% June 1, 2024; and the BMC increases by 16% on August 1, 2022, 9% on June 1, 2023 and 6% on June 1, 2024.
- The monthly bill **after taxes** is largely driven by carbon tax increases (increases by 26% on April 1, 2023 and 23% on April 1, 2024 and 19% on April 1, 2025); other bill impacts relate to the municipal surcharge (increases by 22% on August 1, 2022 and 2% on June 1, 2023 and June 1, 2024); and GST.

Figure 17-12: Commercial Large Customer Class Monthly Bill Changes from August 1, 2022 to May 31, 2025, Before and After Taxes and Surcharges[384,385]



[384] Based on information from 1st Round Information Request 19 (c). SaskEnergy assumes a decreasing average consumption per customer class for each test year. Commercial Large customer class assumes 159,953 m^3 consumption annually in the current period [April 2022 to July 2022] and the 2022/23 test year, 159,610 m^3 consumption annually in 2023/24, and 159,268 m^3 consumption annually in 2024/25. Taxes include federal carbon charges, GST, and municipal surcharges. The carbon tax is set to increase annually on April 1. Carbon taxes are calculated using the information provided from 1st Round Information Request 19 (c) and (f), and GST was calculated at 5% of existing bill including the carbon tax increase implemented annually on April 1, 2023; 2024; and 2025.

[385] The information provided in 1st Round Information 19 (c) on current rates for the Commercial Large customer class were not correct (confirmed by SaskEnergy in comments on draft report dated October 31, 2022). The correct rates for the delivery, commodity, and carbon charge were obtained from 1st Round Information Request 19 (a) and (f), and the municipal surcharge was calculated at 5% the sum of the delivery, commodity, and basic monthly charge, and GST was calculated at 5% of the sum of all the other charges.

The federal carbon tax makes up the largest portion of other taxes and charges on customer bills. The carbon tax increases annually on April 1 and the bill impacts on customers will increase as carbon taxes increase in each of the next three years.

SaskEnergy notes that the federal carbon tax began on April 1, 2019 at $20/tonne, and increased to $30/tonne on January 1, 2020. It increased to $50/tonne by 2022, and is forecast to increase to $65/tonne in 2023, and $80/tonne in 2024. SaskEnergy estimates that in 2022/23, with a $50/tonne carbon tax, customers will see a charge of $0.0979/m³ for natural gas. In 2023, SaskEnergy estimates customers will see a charge of $0.1239/m³ and in 2024, estimates a carbon tax of $0.1525/m³.[386]

Table 17-6 illustrates the monthly bill impacts for residential and commercial customers from carbon tax at $50/tonne, $65/tonne and $80/tonne. The table shows:

- In 2022, with a $50/tonne carbon tax, residential customers would see a 25% bill increase; commercial small customers would see an 33% bill increase; and commercial large customers would see a 39% bill increase.
- In 2023, with a $65/tonne carbon tax, residential customers would see a 31% bill increase; commercial small customers would see a 42% bill increase; and commercial large customers would see a 49% bill increase.
- In 2024, with a $80/tonne carbon tax, residential customers would see a 36% bill increase; commercial small customers would see a 50% bill increase; and commercial large customers would see a 58% bill increase.

[386] 1st Round Information Request 19 (f) and 7 (c), 2022 Commodity and Delivery Service Rate Application.

Table 17-6: Assumed Monthly Bill Impact from Carbon Tax for Average Usage by Customer Class[387]

Monthly Bill Impact

	Average Annual Consumption, m^3	Monthly Bill at 2022/23 Proposed Rates $/Month	2022 with $50/tonne		Average Annual Consumption, m^3	Monthly Bill at 2023/24 Proposed Rates $/Month	2023 with $65/tonne		Average Annual Consumption, m^3	Monthly Bill at 2024/25 Proposed Rates $/Month	2024 with $80/tonne	
			$/Month	Monthly Bill % Change			$/Month	Monthly Bill % Change			$/Month	Monthly Bill % Change
Residential	2,542	$83.3	$20.7	24.9%	2,520	$85.2	$26.0	30.5%	2,497	$87.2	$31.7	36.4%
Commercial Small	12,772	$312.7	$104.2	33.3%	12,670	$316.8	$130.8	41.8%	12,570	$321.3	$159.7	49.7%
Commercial Large	159,953	$3,366.6	$1,305.0	38.8%	159,610	$3,417.3	$1,647.6	48.9%	159,268	$3,470.8	$2,023.9	58.3%

Annual Bill Impact

	Average Annual Consumption, m^3	Annual Bill at 2022/23 Proposed Rates $/Year	2022 with $50/tonne		Average Annual Consumption, m^3	Annual Bill at 2023/24 Proposed Rates $/Year	2023 with $65/tonne		Average Annual Consumption, m^3	Annual Bill at 2024/25 Proposed Rates $/Year	2024 with $80/tonne	
			$/Year	Annual Bill % Change			$/Month	Monthly Bill % Change			$/Year	Annual Bill % Change
Residential	2,542	$999.0	$248.9	24.9%	2,520	$1,022.0	$312.2	30.5%	2,497	$1,046.0	$380.8	36.4%
Commercial Small	12,772	$3,752.0	$1,250.4	33.3%	12,670	$3,802.0	$1,569.5	41.3%	12,570	$3,856.0	$1,916.8	49.7%
Commercial Large	159,953	$40,399.0	$15,659.7	38.8%	159,610	$41,007.0	$19,771.2	48.2%	159,268	$41,649.0	$24,286.5	58.3%

[387] Prepared base on Tab 21 and 1st Round Information Request 19 (f) and 7 (c) 2022 Commodity and Delivery Service Rate Application.

Observations

The proposed increases in commodity and delivery rates effective August 1, 2022 result in notable bill increases for each customer class. Average usage Residential customers will see an approximate 16.8% bill increase, Commercial Small customers will see a 19.9% bill increase, Commercial Large customers will see a 22.3% bill increase, and Small Industrial customers will see a 25.2% bill increase.

Separate from the current SaskEnergy application, customer bills will also be impacted by the increasing carbon tax over the test years. Figures 17-10 to 17-12 show the proposed rate increases to customers before and after taxes, which includes GST, federal carbon tax, and municipal surcharges. The material bill increases noted for 2022/23, combined with other taxes and surcharges that customers must pay on their bills, raise material concerns regarding both customer affordability and competitiveness, in a volatile economic context where global disruptions and the potential for recession may threaten Saskatchewan's economy.

18.0 COMPETITIVENESS

The Terms of Reference for the Panel's review require that the Panel provide an opinion regarding the fairness and reasonableness of SaskEnergy's proposed commodity and delivery rate change having consideration for the effect of the proposed rates on the competitiveness of the SaskEnergy compared to utilities in other jurisdictions. The Consultant reviewed the competitiveness of SaskEnergy's proposed rate changes from a customer bill perspective and from a return on equity and capital structure perspective.

Section 3.6.2 reviews SaskEnergy's capital structure and common equity ratio and provides comment on its competitiveness relative to peer utilities.

18.1 BILL COMPARISONS TO OTHER JURISDICTIONS

SaskEnergy provided information on the effect of its proposed rate changes on customer bills relative to other jurisdictions. This section provides a comparison of Residential and Commercial customer bills to other jurisdictions. An assessment of competitiveness for Small Industrial customers is not provided since these customers tend to have unique operating requirements that make comparisons across jurisdictions difficult.[388]

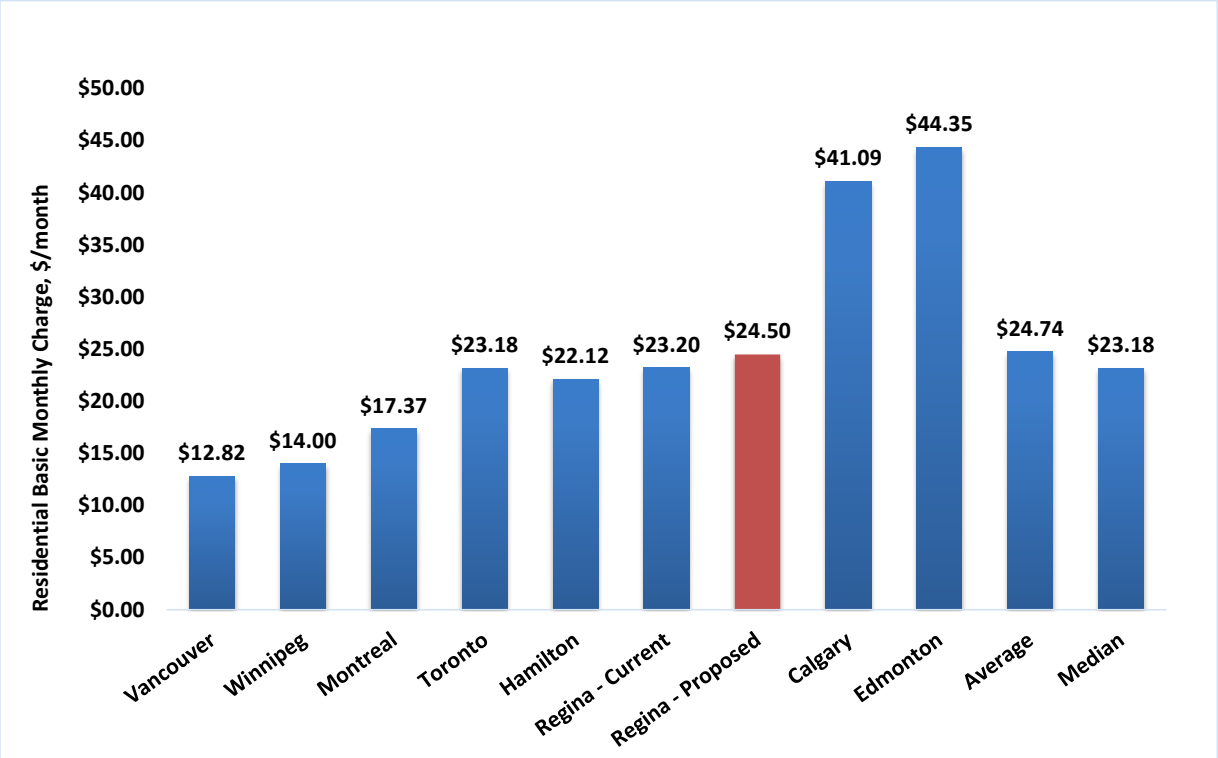
18.1.1 Residential Customer Bill Comparison

Residential bills include a Basic Monthly Charge, a volumetric Delivery charge, and the Commodity charge.

- Figure 18-1 compares the Basic Monthly Charges for residential customers effective May 1, 2022. This indicates that the Basic Monthly Charge for SaskEnergy residential customers is higher compared to the five major Canadian centres, but lower compared to Edmonton and Calgary.
- Figure 18-2 shows the actual annual residential delivery and commodity costs for May 2021 through June 2022.
- Figure 18-3 compares bills at most recent rates effective May 2022, including rates proposed by SaskEnergy effective August 1, 2022. This shows, assuming the other major utilities do not change their rates, that SaskEnergy would have the third lowest bills with proposed August 1, 2022 rates.

[388] During the review of the 2013 Delivery Service Rate Application the response to 1st Round Information Request 24 (c) noted that the bill comparisons provided by SaskEnergy for that review were before applicable taxes and surcharges. Based on this, it is assumed that the bill comparisons provided in the current review do not reflect impacts of carbon taxes/ charges that may exist in other jurisdictions. For example, the sample bill for Fortis BC shows carbon tax separately from rates under other charges and taxes. Available at: https://www.fortisbc.com/NaturalGas/Homes/Rates/Mainland/Pages/Sample-bill-for-Mainland-customers.aspx.

Figure 18-1: Residential Basic Monthly Charge Comparison ($/Month) as of May 1, 2022[389]



[389] 2nd Round Information Request 18 (a) (i), 2022 Commodity and Delivery Service Rate Application.

Figure 18-2: Annual Average Residential Delivery and Commodity Costs for June 2021 – May 2022 (based on average consumption of 2,542 m³/year)[390]

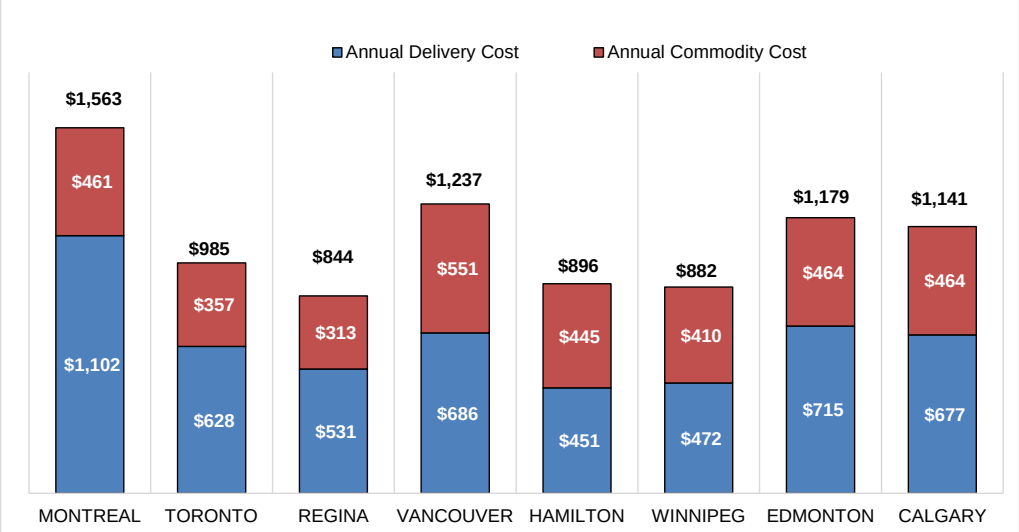
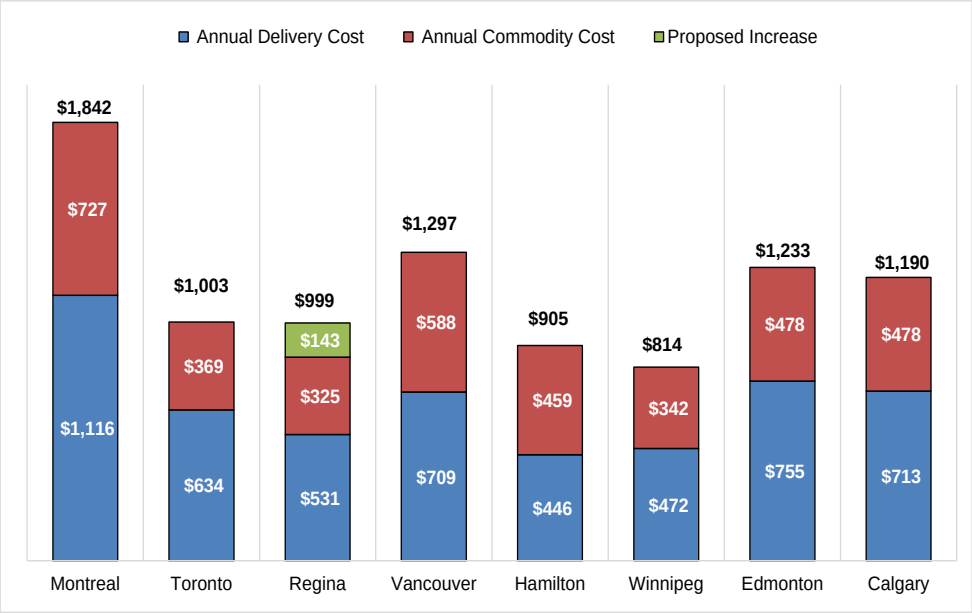


Figure 18-3: Annual Average Residential Delivery and Commodity Costs for Rates in Place, May 2022[391]



*Proposed increase noted relates to both the commodity and delivery increase, and is applied to rates in place May 1, 2022. Information included in the figure for other utilities does not consider whether rates for other utilities have changed since that date. To the extent there have been increases these are not reflected.

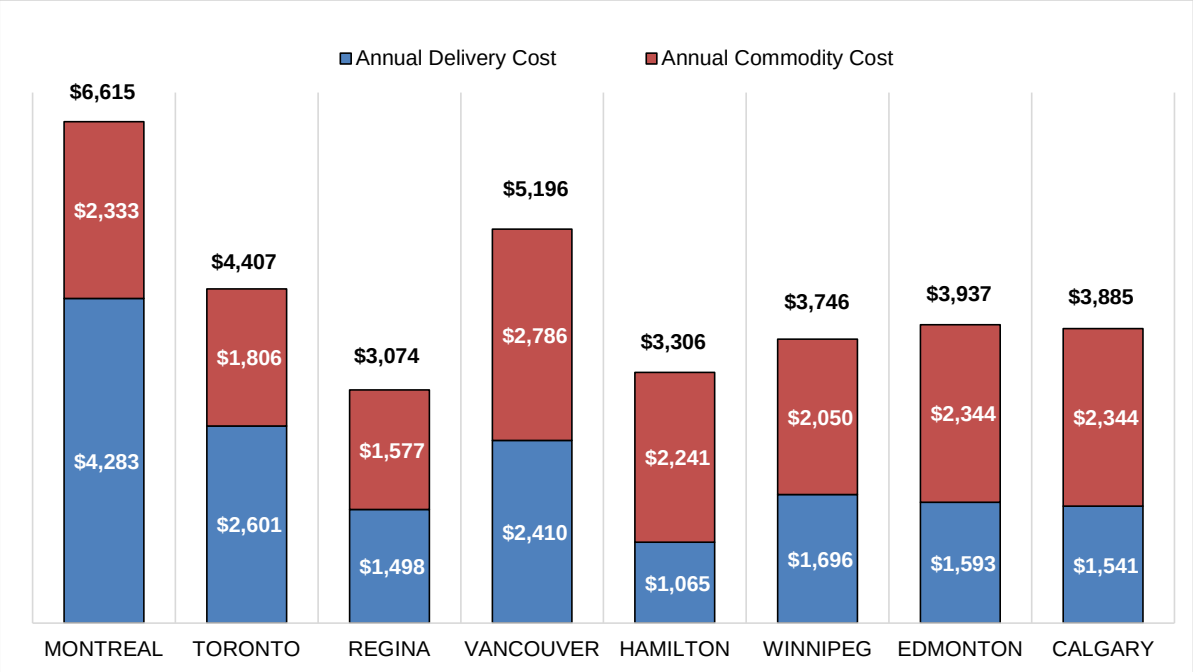
[390] Tab 22, page 4. 2022 Commodity and Delivery Service Rate Application.
[391] Tab 22, page 5 and 1st Round Information Request 19 (a) , 2022 Commodity and Delivery Service Rate Application. SaskEnergy notes that bills are as of May 1, 2022, and the proposed increase is for August 1, 2022.

18.1.2 Commercial Small Bill Comparison

Figure 18-4 provides a comparison of average annual bills for Commercial Small customers for rates from June 2021 to May 2022.

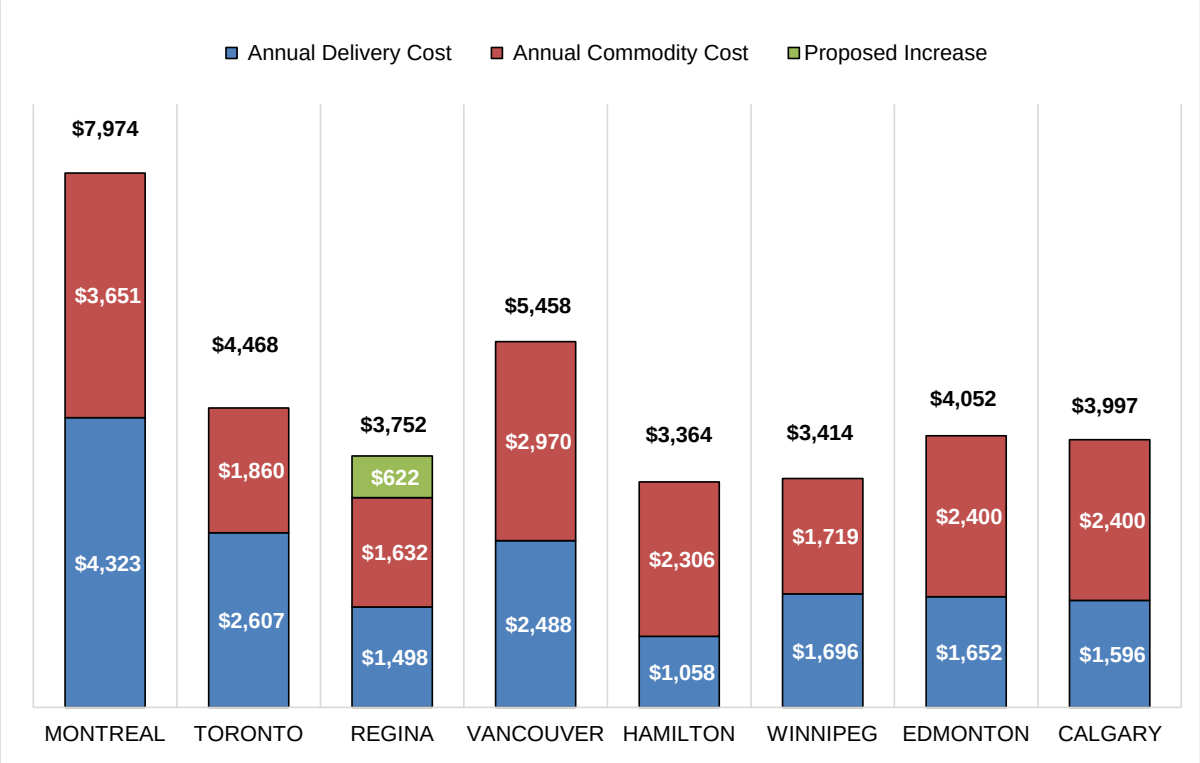
Figure 18-5 provides a comparison of Commercial Small bills for rates effective May 2022, which includes proposed bill increases, effective August 1, 2022 for SaskEnergy. This shows that, assuming the other major utilities do not change their rates, Commercial Small bills in Regina are expected to be the third lowest of the jurisdictions surveyed under the proposed rates.

Figure 18-4: Commercial Small Delivery and Commodity Costs for June 2021 – May 2022 (based on consumption of 12,772 m³/year)[392]



[392] Tab 22, page 6. 2022 Commodity and Delivery Service Rate Application.

Figure 18-5: Annual Average Commercial Small Delivery and Commodity Costs for Rates in Place, May 2022[393,394]



*Proposed increase noted relates to both the commodity and delivery increase, and is applied to rates in place May 1, 2022. Information included in the figure for other utilities does not consider whether rates for other utilities have changed since that date. To the extent there have been increases these are not reflected.

18.1.3 Commercial Large Bill Comparison

Figure 18-6 provides a comparison of average annual bills for Commercial Large customers for rates from June 2021 to May 2022.

Figure 18-7 provides a comparison of Commercial Large bills for the rates effective May 2022 and includes proposed bills effective August 1, 2022 for SaskEnergy. This shows, assuming the other major utilities do not change their rates, that Commercial Large bills in Regina are expected to be the second lowest of the eight jurisdictions surveyed under the proposed rates.

[393] Tab 22, page 7 and 2nd Round Information Request 18 (a), 2022 Commodity and Delivery Service Rate Application. SaskEnergy notes that bills are taken as of May 1, 2022, and the proposed increase is for August 1, 2022.
[394] See Tab 21 and 1st Round Information Request 19 (a) for the Commercial Small class which provides the average annual impact.

Figure 18-6: Commercial Large Delivery and Commodity Costs for June 2021 – May 2022 (based on consumption of 159,953 m³/year)[395]

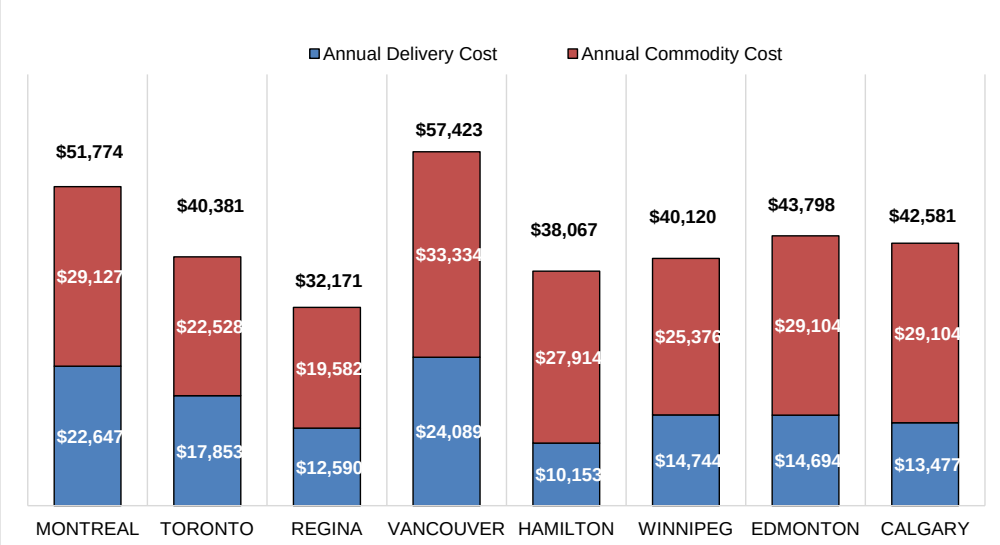
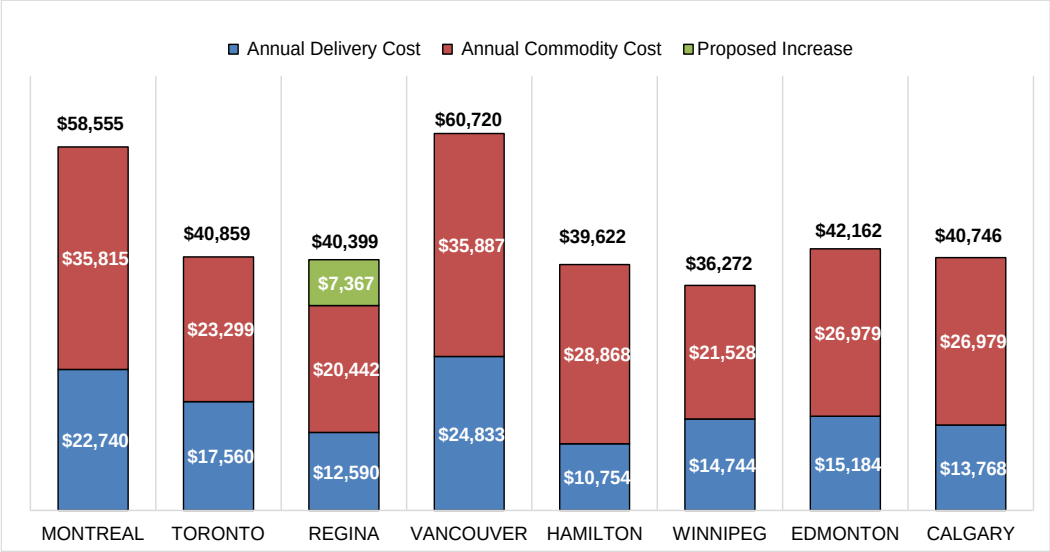


Figure 18-7: Annual Average Commercial Large Delivery and Commodity Costs for Rates in Place, May 2022[396],[397]



*Proposed increase noted relates to both the commodity and delivery increase, and is applied to rates in place May 1, 2022. Information included in the figure for other utilities does not consider whether rates for other utilities have changed since that date. To the extent there have been increases these are not reflected.

[395] Tab 22, page 8. 2022 Delivery Service and Commodity Rate Application.
[396] Tab 22, page 9 and 2nd Round Information Request 18 (a), 2022 Commodity and Delivery Service Rate Application. SaskEnergy notes that bills are taken as of May 1, 2022, and the proposed increase is for August 1, 2022.
[397] See Tab 21 and 1st Round Information Request 19 (a) for the Commercial Large class which provides the average annual impact.

Observations

With the implementation of proposed rate changes – commodity and delivery rates remain lower than most major centres for all customer classes (second or third lowest). This indicates that, assuming that other major utilities do not change their rates, SaskEnergy will remain competitive with other jurisdictions.

Section 3.6.2 reviews SaskEnergy's capital structure and common equity ration and provides common on its competitiveness relative to peer utilities.

19.0 PUBLIC COMMENTS

The following materials were received from the public as part of the review of the Application and made available to the Consultant:

- **Videos of Public Meetings held on October 11, 2022 and October 12, 2022:** The Panel hosted a public meeting in Saskatoon on October 11 and in Regina on October 12, 2022, where SaskEnergy was invited to make a presentation. The purpose of the meeting was to inform the public of the 2022 Delivery Service and Commodity Rate Application and to receive public feedback. Videos of the meetings were made available on the Panel's website along with the PowerPoint presentation provided by SaskEnergy at the meeting.[398]
- **Text of written submissions including electronic messages received from Individuals:** Public comments were received over a period from July 11, 2022 to October 12, 2022. Two comments were received and posted on the Panel's website. These indicated significant concern regarding the approval of material rate increases during a global recession.[399]
- **Written Submission by Canadian Federation of Independent Business (CFIB):**[400] The CFIB provided a submission (dated July 13, 2022) noting the rate increase comes "with next to no notice", and citing "concerns regarding SaskEnergy's proposal to increase energy rates by 24 per cent for the small commercial sector over the next three years." In particular, the CFIB notes "following two years of pandemic restrictions, declining revenues and rising debt, businesses are now facing the cost pressures of record high gas prices, the expansion of PST, rising payroll costs" and concern that higher energy costs "will … further hinder small business recovery, meaning business owners will have fewer resources to create jobs, invest in their businesses, and contribute to the growth of the provincial economy." The submission cites survey data from June 2022 which indicates that "80 per cent Saskatchewan small business owners are struggling to get back on track due to "rising government costs", and "one in six (17%) of Saskatchewan small businesses are actively considering bankruptcy."
- **Written Submission by Restaurants Canada** – Restaurants Canada provided a submission (dated July 20, 2022) which urged that "the proposed rate increase should not be considered in a policy vacuum" as the restaurant industry is "grappling with a number of challenges as operators shift their focus towards a fragile economic recovery including severe labour shortages, supply chain disruptions, incurring large debt levels[401] as a result of the pandemic, and rising inflationary cost pressures."

  The submission noted that "piling on additional steep utilities increases at a time when the restaurant sector is already struggling would harm the industry's fragile economic recovery and would place an even greater strain on restaurant operator's finances". It was noted that the industry "is now struggling to recover at least $600 million in lost revenue" and while "the

[398] See presentations provided on the Panel's website at: https://www.saskratereview.ca/secuap.php?apn=jul_11_22_se
[399] See submissions provided on the Panel's website at: https://www.saskratereview.ca/secuap.php?apn=jul_11_22_se
[400] Per the submission provided by CFIB – the organization represents 4,300 small business members in Saskatchewan.
[401] The submission cites February 2022 survey information which notes that "eight out of 10 restaurants have taken out debt due to COVID-19 and at least two thirds of these businesses will need at least a year and a half to recover".

restaurant sector has also seen a bump in sales' the proposed increases "with only a few weeks notice"… "is tone deaf and would yet again increase the cost of their day-to-day operations as they struggle to recover from the impact of the pandemic."

It noted that the increase[402] "would be implemented at the worst possible time for the food service sector" and the "sector has minimal control over the amount of natural gas and electricity usage[403]" and the "carbon tax…is also a major contributing factor in the rising cost of utilities" and needs to be considered[404]. The submission urges that the panel recommend to Cabinet a drastically reduced year over year delivery service rate increase" in consideration of the current fragile financial stage of the provinces restaurant sector as it turns a corner towards economic recovery".

- **Written Submission by the Saskatchewan Landlord Association:[405]** The Saskatchewan Landlord Association provided a submission (dated October 12, 2022) outlining concerns about SaskEnergy's proposal to increase its delivery and commodity rates - noting "the rates being put forward by SaskEnergy are significant both for rental housing providers and their tenants." The submission notes "rising utility costs will impair a provider's ability to maintain the property due to shrinking profit margins and will undoubtedly impact tenants as they navigate higher costs on all aspects of their lives, including rent and utilities", and "lower, more reasonable increases could maintain stability while also protecting Saskatchewan people against high energy costs." The submission also encourages SaskEnergy to work with the industry to "incentivize energy-efficiency upgrades for tenants and rental housing providers, to further reduce energy costs."

SaskEnergy provided written responses to the written submissions provided by CFIB and Restaurants Canada noting the following key points in response to the concerns raised in each submission:

- SaskEnergy takes "steps to ensure that costs are controlled" and has been "limiting the extent of possible rate increases through internal efficiencies, business process changes, collaboration with other Crowns, employing new technology and mitigating operating and capital costs."
- SaskEnergy has "not increased its delivery service rate since 2019" while being impacted by inflationary pressures", "rising costs of fuel and other operating expenses", and "growing environmental and regulatory responsibilities."
- SaskEnergy "will be investing a further $16 million in energy efficiency programs to support customers in reducing their emissions and monthly natural gas bills".

[402] The submission notes, "SaskEnergy's proposed natural gas delivery service rate increases would result in an increase of over $7,000 for a large commercial business in the first year effective August 1st, 2022 (in under two weeks' time), and subsequent increases of $691 in year two and $725 in year three. The proposed rate hike would cost a small commercial business, for example a small family-owned restaurant, an additional $622.25 in 2022, and an additional $75.28 in 2023, and $80.04 in 2024 – a staggering increase of almost $800 over the course of the next three years."
[403] The submission notes "the foodservice industry is by necessity an energy dependent industry relative to other businesses where 75% of a restaurant's energy use is directly associated with the foodservice process itself which involves a wide range of energy consuming equipment for cooking, hot food holding, refrigeration, ice making, exhaust ventilation, and cleanup/sanitation".
[404] The submission notes the objective of the carbon tax to incentivize consumers to reduce energy consumption does not apply to restaurateurs who rely on energy to safely store, prepare, and cook the food for their guests."
[405] The correspondence provided notes that the Saskatchewan Landlord Association "represents hundreds of rental housing providers" from across the province "who collectively own, operate, and/or manage over 50,000 rental housing units"

- "Natural gas prices have risen sharply" resulting in an increase in the GCVA, and "an interim adjustment (effective August 1, 2022) was needed to avoid more significant increases in the future." However, the hedging strategy provides for a commodity rate "substantially lower than the market price of natural gas" and without hedging a commodity rate of at least $6.00/GJ would be required.
- SaskEnergy notes that "Even with the rate increase, [it] offers the lowest combined natural gas bill in Canada for our residential and commercial customers."
- The carbon tax "is a federal charge" and SaskEnergy "is legally required to remit the federal carbon tax to the federal government. The charge is based solely on the volume of natural gas used by a customer and is not impacted by a utility's commodity rate".
- The provincial government is "taking seriously" the issue of energy affordability and has "announced a four-point affordability plan to help people address the rising cost of living".

Observations

The above matters were considered in the preparation of the Consultant's report and the recommendations.

20.0 PAST PANEL RECOMMENDATIONS

The Panel provided the following recommendations in its report to the Minister regarding SaskEnergy's 2018 Delivery Service and Commodity Rate Application (dated February 4, 2019):[406]

1. That the proposed delivery service rate increase of 3.7% effective April 1, 2019 be revised to 3.4%.
2. That the Panel's approval for the interim commodity rate decrease effective November 1, 2018 of $3.65/GJ to $2.95/GJ be confirmed.
3. That the proposed commodity rate effective April 1, 2019 that would see a further decrease to $2.65/GJ be revised to $2.575/GJ to eliminate any outstanding balance in the GVCA by March 31, 2020

Recommendations #1 through #3 were implemented.[407]

The Panel also made further specific recommendations to SaskEnergy. The responses to recommendations 1 to 6 were provided in Tab 24 of the Application; the response to Recommendation 7 was provided in Tab 7 of the 2021 Commodity Rate Application; and the response to Recommendations 8 to 13 were provided in response to 1st Round Information Request 23(a).

It is noted that while a response was provided to each recommendation – not all recommendations were implemented. A summary of each recommendation to SaskEnergy and the response provided is provided below. In some cases SaskEnergy has undertaken a study or assessment and the matter is under review.

Table 20-1: Summary of Recommendations and Responses (Delivery Application)

Recommendation	Response
1. That SaskEnergy use the average base labour cost of $100,677 (or $4.530 million) for the vacancy rate adjustments of 45 vacant full-time equivalents (FTEs) for 2019-20.	SaskEnergy included a vacancy management forecast of both in-scope and out-of-scope vacancy that ranges from approximately $75 thousand per FTE to $125 thousand per FTE. SaskEnergy uses these numbers to determine vacancy rates more accurately, rather than just an overall average.
2. That SaskEnergy in future delivery rate applications provide greater disclosure regarding growth in expenditures related to Labour FTEs and expenditures in External Services. This disclosure should include details regarding the relationship between internal labour and external services cost forecasts, as well as any impacts related to changes in operations (e.g., the transition to hosting services).	Implemented. SaskEnergy has included more disclosure regarding its labour and external services in MFR 8 – OM&A Expense Detail by providing four additional tables: Labour Details, Pension Details, External Services Details and Fees, Dues and Community Contributions Details.

[406] See Tab 24 of the Application.
[407] See Tab 24 of the Application as well as Tab 7 of the 2021 Commodity Rate Application which notes; The interim rate increase of $2.95/GJ was implemented on November 1, 2018; and The Panel's recommended commodity rate of $2.575 was implemented on April 1,2019.

Recommendation	Response
3. That SaskEnergy carefully review its spending forecasts and to continue to find ways to avoid increases in areas of controllable costs such as professional memberships, dues, training and conferences, as well as discretionary spending areas including sponsorship and donations.	SaskEnergy continues to monitor its spending in relation to professional development of its employees.
4. That SaskEnergy develop a plan to limit future increases in O&M expenses to a measurable target/average cost per customer, such as a percentage related to the annual rate of the Saskatchewan Consumer Price Index.	SaskEnergy is committed to improvements in efficiencies and process enhancement that can limit O&M expenses and will look to establish targets where possible.
5. That SaskEnergy adjust its revenue requirement to reflect the revisions in transportation and storage expense which is now forecasted to be $55.724 million up from the $54.697 million in the mid-application update.	Implemented
6. That SaskEnergy review its long-term policy objective to recovery 75% of costs through the basic monthly charge (BMC) to determine if it is still reasonable.	SaskEnergy has engaged an external consultant to review and compare with other utilities across Canada. The report is expected to be available by the end of August 2022. It will be shared with the Panel at that time.
7. That SaskEnergy review the basis for the $20 million quantum as the forecasted metric for the GCVA to determine if it remains appropriate.	As SaskEnergy's customer base has grown over the years, use per customer continues to decrease. This has resulted in SaskEnergy's gas purchases to remain relatively equal. Therefore, SaskEnergy believes the $20 million threshold is still appropriate.
8. That SaskEnergy file the new depreciation study with the Panel along with the corporation's response as soon as reasonably possible.	A copy of the new depreciation study is included in the rate application. A presentation was provided to the Panel on September 11, 2019.
9. That SaskEnergy review the calculations and methodology for the corporate capital tax to the operating division and the holding division of SaskEnergy Incorporated. This review should also consider the effect that IFRS accounting treatment for customer contributions has on corporate tax calculations and update the Panel in the next application.	This is currently being reviewed and nothing has been implemented at this time.
10. That SaskEnergy reduce the cash working capital allowance in rate base by $2.1 million to reflect revenue lag days from distribution tolls that use 45.6 days.	The working capital allowance was reduced.
11. That SaskEnergy review how future asset removal costs (decommissioning cost, asset retirement obligations or negative salvage) that are collected from customers are reflected in utility rate base. It is recommended that customer provided capital for future decommissioning (accumulated balance of depreciation of decommissioning assets and accretion expenses, less amounts used) be	It is included in the financing portion of rate base. SaskEnergy has restated the rate base to include the decommissioning depreciation.

Recommendation	Response
included in the financing portion of rate base as no cost capital.	
12. That SaskEnergy provide more detailed explanations in future delivery rate applications regarding intercompany allocations, productivity and efficiency measures, capital expenditures, and load forecast.	SaskEnergy included additional details in the current application and will continue to work with the Panel to ensure their needs are met.
13. That SaskEnergy pursue measures required to shift to billing in energy as soon as possible.	SaskEnergy has developed a business case assessing the options to address billing in energy. The business case is going through the internal governance process for review and decision.

The Panel also provided four recommendations to the Minister in its Report submitted on October 13, 2021 regarding the 2021 Commodity Rate Application. SaskEnergy's response to each recommendation was provided in the response to 1st Round Information Request 23(b). The recommendations and responses provided are summarized below.

Table 20-2: Summary of Recommendations and Responses (Commodity Application)

Recommendation	Response
1. That the proposed commodity rate increase of 28.1% to 12.78 cents per cubic meter ($3.20 per Gigajoule) effective November 1, 2021, be approved to eliminate the outstanding balance in the GCVA by October 31, 2023, and recover forecast commodity purchases over the same period.	The proposed commodity rate of 28.1% to 12.78 cents per cubic metre ($3.20 per Gigajoule) was implemented on November 1, 2021 as per the Saskatchewan Rate Review Panel's recommendation.
2. That SaskEnergy review the basis for the $20 million threshold for triggering an application for amounts owing to or from customers.	As SaskEnergy's customer base has grown over the years, use per customer continues to decrease. This has resulted in SaskEnergy's gas purchases to remain relatively equal. Therefore, SaskEnergy believes the $20 million threshold is still appropriate.
3. That SaskEnergy continue efforts to bill in energy, which would eliminate the need for forecasting heat value and the associated risks related to heat value variance.	SaskEnergy has developed a business case assessing the options to address billing in energy. The business case is going through the internal governance process for review and decision.
4. That SaskEnergy provide a report in its next application on its renewable natural gas efforts in order that the Panel may consider the potential benefits, costs or other issues that such a program may present.	SaskEnergy continues to complete a report on renewable natural gas and will provide a copy to the Panel during the next application.

21.0 SUMMARY OF CONSULTANT'S OBSERVATIONS

The following is a summary of observations made in previous sections of the report.

Application Overview

1. The Saskatchewan economy was greatly affected by COVID-19 in 2020. For the period of 2021-2023, the Saskatchewan economy is expected to rebound. Economic growth will be dependant on commodity prices, rising inflation, geopolitical factors, and the potential for new COVID-19 variants which could reduce economic growth. Geopolitical factors also risk creating further global supply chain disruptions, decreasing international trade, and potentially weakening Saskatchewan's economy. High inflation rates are expected to put upward cost pressure on SaskEnergy operating, maintenance, and administration (OM&A) costs as well as capital spending. Rising interest rates, will increase SaskEnergy's finance charges.

2. Continued delivery rate increases are expected to be required to support SaskEnergy's ongoing integrity and growth requirements. This will continue to put pressure on consumers. Overall, a number of factors that materially impact the revenue requirement are either outside the scope of the Panel's review, or are flow through items. Many of these items have a material impact on the current test year revenue requirement or have the potential to be material rate drivers going forward. In this context there are limited measures available to reduce or mitigate adverse impacts on ratepayers (outside of continuing to focus on productivity and efficiency measures and measures to reduce operation and maintenance costs and other expenditures).

3. The business plan underlying the delivery service application was approved by SaskEnergy's Board of Directors in November 2021; and the economic assumptions used for the application were as of June/July 2021, i.e., the assumptions were over a year old by the time the application was filed. SaskEnergy provided its Mid-Application Update on September 29, 2022. This update notes significant variances in 2022/23 forecasts. It is understood that a number of items impacting the 2022/23 forecast may also impact the forecasts provided for 2023/24 and 2024/25. As noted – given the timing of the Mid-Application process – there has been limited ability to canvass the information provided and its potential impact on forecasts for 2023/24 and 2024/25.

4. As outlined in the Terms of Reference prior to the implementation of delivery rate changes in 2023 and 2024, current financial statements and an update on any material changes to business factors vital to the rate application, are to be provided by SaskEnergy for the Panel's review (by February 15, 2023 and February 15, 2024, respectively). The nature and extent of the information to be provided and the process for review of this information is not detailed at this time. However, the timelines indicate a very truncated review process – which is of concern given the potential for the forecasts for 2023/24 and 2024/25 to be materially different from the information reviewed during the current review process.

Delivery Service Revenue Requirement

5. SaskEnergy typically commences its business planning process in June, and submits its business plan for Board of Directors Approval in November. From 2015/16 to 2017/18, SaskEnergy was directed by its shareholder to apply restraint measures to reduce budgeted expenditures in order

to meet specified financial targets. SaskEnergy indicates that no restraint measures have been applied since 2019/20; and no restraint measures are expected for the 2022/23 to 2024/25 period. SaskEnergy notes operation cost savings and vacancy management savings in recent years.

6. In recent prior rate proceedings components of the revenue requirement, such as O&M, depreciation expense, and interest expense, have been consistently lower than forecast, while other components such at net earnings and other revenue have been consistently higher than forecast. The Mid-Application Update indicates that this pattern is expected to continue for the 2022/23 test year, with material changes noted in depreciation, O&M, net earnings and other revenues resulting in an overall higher ROE compared to Original Application forecast.

Operating and Maintenance Expense

7. Forecast total O&M expense for the 2022/23 test year is about 19.6% higher than the 2021/22 forecast. Actuals for 2015-16 through 2020-21 were consistently lower than forecast. 2021/22 actuals were slightly higher than forecast. The Mid-Application Update indicates that for 2022/23 O&M expense is expected to be materially below the forecast in the Original Application. Prior reviews have indicated material concern with an ongoing pattern of actual O&M results being consistently below forecasts. This concern is heightened in an environment where SaskEnergy customers are facing significant delivery and commodity rate increases, at a time of economic uncertainty.

Labour Costs

8. The increase in base and net labour costs reflect an increase in the average labour cost per FTE and in the number of FTEs. While contractor conversions to full time equivalents can generate overall net savings for SaskEnergy (as the cost per contractor is greater than the cost per full time equivalent) it increases the average base labour cost as the average labour cost per FTE for contractor conversion is higher than the average labour cost.

External Services

9. 2020/21 actual External Services expense decreased by $2.2 million over 2019/20 (actuals); and there was a further $0.4 million decrease in 2021/22 (actuals) over 2020/21 (actuals). This resulted in a $2.6 million decrease in expense over a two-year period. SaskEnergy is forecasting an increase in expense of $3.7 million for the 2022/23 test year over the 2021/22 (actuals). As noted, the test year increase relates primarily to contract analysts in digital, technology and security ($1.5 million increase over 2021/22 actuals), hosting ($2.0 million increase over 2021/22 actuals), and consulting services ($1.3 million increase over 2021/22 actuals).

10. SaskEnergy notes that since 2018/19 there have been 16 contractor conversions applicable to external services expense which have reduced costs in digital, technology and security areas of external services. Cost reductions relate mainly to project delivery and enterprise architecture.

11. SaskEnergy notes that overall, savings in external services expenses since 2018/19 equate to approximately $1.5 million in the distribution division; however, consistent with the 2022/23 corporate plan, mitigating ongoing security threats is a high priority and this impacts external services expense. Thus, while costs savings due to contractor conversions are identified – Contract Analyst costs remain relatively flat year to year.

Communication, Public Relations, Fees, Dues and Community Contributions

12. The notable increase in Communication, Public Relations, Fees, Dues and Community Contributions related costs in the 2022/23 test year compared to 2020/21 actuals and 2021/22 forecasts relates primarily to increased energy efficiency spending. The increased spending of over $4 million per year compared to prior years represents approximately a 1% annual cost increase on the total revenue requirement. The actual average cost per customer was $10.54 for 2020/21 and $12.32 for 2021/22 compared to forecasts of $9.38 and $10.16, respectively. Over the test years, spending is forecast to average approximately $20 per customer.

Intercompany Allocations

13. Intercompany allocations appear to be appropriate and reasonable. SaskEnergy indicated that the FTE split of 73%/27% is applied to the corporate allocation between the Distribution Division and TransGas – as the majority of expenses that are allocated to Corporate are driven by the number of employees required to run each utility. The proportion of total costs allocated to the distribution company has remained relatively stable (approximately 70% total) for the last several years. Changes proposed by SaskEnergy to the intercompany cost allocation study result in relatively minor changes to the total proportion of costs allocated to the distribution company.

14. SaskEnergy notes there have been no changes to the principles or methods for allocation in recent years; and that an independent review of the allocation process/methodology has not been undertaken, but is something management would consider.

Transportation and Storage Expense

15. SaskEnergy's forecasts for transportation and storage expense have typically been within a +/- 4% range each year, with some actuals being higher than forecast and some being lower than forecast. The Consultant considers this to indicate a reasonable level of forecast accuracy. The increases in transportation and storage expense since the 2019/20 test year are almost entirely due to increases in transportation and storage rates.

16. TransGas has an exclusive legislated franchise to transport natural gas within the Province of Saskatchewan. TransGas transportation and storage rates are subject to Provincial Cabinet approval, and are outside the scope of the Panel's terms of reference.

17. The Panel has previously expressed an interest in working with SaskEnergy to increase transparency with respect to how transportation and storage rates are set to provide the Panel and the public with better assurance that these costs are reasonable and prudently incurred. Given the magnitude of the proposed increase in the delivery service rates proposed in the current application, the Consultant continues to believe increased transparency is desirable. The Consultant notes TransGas has a customer dialogue process that SaskEnergy participates in and that provides a forum for sharing information with a representative group of customers, but that discussions, materials and minutes of the process are confidential.

Deprecation Expense

18. From 2015/16 through 2019/20 SaskEnergy's forecasts of depreciation expense were between $1.7 million and $5.2 million higher than actuals. Forecast capital costs from 2016/17 through 2022/22 were between $9.1 million and $60.9 million higher than actual capital expense over the period.

More recent actuals for depreciation expense for 2020/21 and 2021/22 were closer to forecasts. Depreciation expense increased by about $7.0 million (or about 15%) from the 2019/20 test year to the 2022/23 test year. Depreciation expense is forecast to increase by $1.7 million in 2023/24, and $2.4 million in 2024/25. Depreciation expense is a key driver of upward pressure on customer rates in the near term. Given the three-year test period in the current application, and the history of actual depreciation expense being lower than test-year forecasts, the Consultant believes it will be important to monitor changes in actual depreciation forecasts compared to test year forecasts.

Tax Expense

19. From 2015/16 through 2020/21 SaskEnergy's actual tax expense was between $0.2 million and $0.6 million lower than forecast. Recent actuals for 2021/22 were $0.2 million higher than forecast. For the 2022/23 test year, SaskEnergy forecast a $0.91 million increase in tax expenses over the 2019/20 test year, and a $0.31 million increase over the 2021/22 actuals. For the 2023/24 test year, SaskEnergy forecast a $0.45 million increase over 2022/23 and a further $0.31 million in 2024/25 over 2023/24.

20. In its report to the Minister following the 2018 Commodity Service and Delivery Rate review, the Panel recommended that SaskEnergy review the calculations and methodology for the corporate capital tax to the operating division and the holding division of SaskEnergy Incorporated, noting the review should consider the effect that IFRS accounting treatment for customer contributions has on corporate tax calculations and update the Panel in the next application. SaskEnergy noted in response to the Panel's recommendation that "this is currently being reviewed and nothing has been implemented at this time." SaskEnergy also noted that it "is part of a collaboration initiative with other Crown Corporations that is reviewing the Corporate Capital Tax with the Ministry of Finance", "there is currently no appetite within the Ministry to eliminate the tax", "progress is being made to simplify the calculation and make it more transparent," but "this is not expected to have a material effect on the amount of capital paid."

21. The Consultant is concerned the Panel's recommendation from the 2018 Commodity and Delivery Service Rate review has not been fully addressed to date and further information is not available regarding the matters raised during the last review either in the response to Panel Recommendations (Tab 24) or in response to Information Requests. Information on this matter was requested in a format similar to that which was provided by SaskEnergy during the 2018 review; however, SaskEnergy notes that, "the calculation of capital tax as legislation by the Capital Tax Act, is based on the corporate structure of the paying entity. A calculation table based on the information provided in this question is not an accurate representation of capital tax."

22. The Consultant has reviewed SaskEnergy's calculation of the Corporate Capital Tax and finds it is consistent with previous delivery service applications. The Consultant does not dispute that SaskEnergy has correctly calculated the Corporate Capital Tax obligation. However, the Consultant continues to have concerns with the treatment of customer contributions and capital related to subsidiaries and how those amounts are reflected in the Delivery Service revenue requirement.

Interest Expense

23. During the review of SaskEnergy's 2017 Delivery Service Rate Application, it was noted that SaskEnergy short-term interest rate forecasts have tended to be higher than actual results which

has benefited SaskEnergy. Actual interest expense was lower than the forecast each year from 2016/17 to 2019/20. These differences were due both to lower interest rates as well as lower borrowing levels compared to forecast.

24. The interest rate environment is very different today than during prior applications. In its information note dated September 7, 2022, the Bank of Canada stated that given the outlook for inflation, the Governing Council still judges that the policy interest rate will need to rise further. The information provided by SaskEnergy indicates that a 2% increase in short-term interest rates compared to the assumptions in the application would increase interest expense by approximately $2.8 million in 2022/23 and $5.0 million by 2024/25.

25. SaskEnergy provided an update on short-term and long-term interest rates, with long-term rates increasing from 4.08% in the initial filing to 4.14% in the update. Short-term interest rates have increased materially by nearly 2% from 0.58% in the initial filing to 2.36% in the update. These increases to interest rates have resulted in increases for interest expense for the 2022/23 test year with interest expense from short-term bank indebtedness increasing by $1.7 million and interest expense from long-term borrowing increasing by $1.2 million in the Mid-Application update.

Net Income

26. Actual net income has typically been higher than forecast, in some years substantially higher. Higher net income can result from colder than average winters when revenues are typically higher, but also can reflect lower overall costs than forecast.

27. The provision to earn a fair ROE allows a utility to maintain its financial integrity. If the ROE target is too low, a very mild winter or an unexpected expense could cause the corporation to incur a net operating loss. The Consultant is concerned about the pattern of SaskEnergy routinely achieving higher than forecast net income. The average for the last ten years shows actual ROE at 10.70%, while the average of weather normalized ROE for the same period was at 9.90% - both higher than the target ROE of 8.3%. While some of this can be attributed to colder than average winters recently, weather normalized ROE has also been higher than the long-term target in most recent years.

28. It is recognized that SaskEnergy must maintain a capital structure that balances financial stability with the need to maintain competitive customer rates and to provide reliable services. The Consultant observes that SaskEnergy's deemed common equity ratio and ROE are within the range of peer utilities in Canada. SaskEnergy's 37% equity ratio is approximately the midpoint of the ranges used by SaskEnergy's peer utilities; and the target ROE of 8.30% is slightly below the average ROE target [average of 8.47%] for comparable major utilities in other jurisdictions.

Other Revenue

29. Other Revenue sources for the 2022/23 test year are all generally lower compared to the most recent actuals, except for revenues from distribution tolls.

30. Asset optimization is the primary driver to material variances in other revenues, and while revenues from asset optimization have decreased, the forecast of $1.9 million appears low for the test years and could result in other revenues being under forecast. Asset Optimization revenues, in particular, are highly variable and difficult to forecast. Variances in Asset Optimization revenues have

contributed to years when actual revenues exceed forecasts. Where there are variances between forecast and actual Other Revenues sources, SaskEnergy bears the risk (or benefit) to its net income. While it is difficult to forecast revenues from other revenues, the ongoing impact of over or under-forecasting these revenues can be material. During the review of the 2017 Application, SaskEnergy forecast revenues from this source at $2.1 million while actual revenues were $16.2 million ($14.1 million higher than the forecast). This contributed to the very high net income realised for the 2017/18 fiscal year. The Mid-Application Update indicates a material variance in Asset Optimization revenues for 2022/23 (a $4.9 million increase over the Original Application forecast) – which is also expected to contribute to a higher net income than forecast for 2022/23.

31. SaskEnergy also notes the forecast for connect revenues over the test period is also too low. SaskEnergy notes that the 2020/21 forecast for connect fees was used as the basis for test year forecasts. However, to address hardship related to the COVID-19 pandemic, in 2020/21 SaskEnergy waived the reconnect fee for customers disconnected for non-pay in the summer months. This resulted in underestimating connect revenues by about $0.8 million in 2022/23, and which also likely effects 2023/24 and 2024/25 forecasts. SaskEnergy notes that this will be considered in the financial update for 2023/24 and 2024/25. The Mid-Application Update also indicates a $1.5 million (101.6%) increase in late payment charges in 2022/23 compared to the Original Application.

32. The most recent cost of service study recommends that SaskEnergy recover TransGas related costs through a fixed payment as opposed to the current distribution tolls (which result in SaskEnergy being exposed to weather related risk). SaskEnergy is reviewing this recommendation in fall 2022 and if implemented the change would occur in the next fiscal year.

Revenue Deficiency

33. SaskEnergy's proposed rate increases do not eliminate the revenue deficiency by 2024/25. Additional revenue increases, cost reductions or a combination of the two would be required for SaskEnergy to achieve its target ROE by 2024/25. The revenue deficiency for 2022/23 does not consider the impact of the Mid-Application Update - which shows the forecast net delivery revenue requirement for 2022/23 increasing to $297.2 million (a $5.9 million increase over the Original Application forecast). At this time, updated information regarding the 2023/24 and 2024/25 forecasts are not available.

Productivity and Efficiency

34. The Consultant notes that capital spending and infrastructure renewal requirements are likely to continue to put upward pressure on delivery service rates for the foreseeable future. The current economic context and concerns noted regarding customer highlight the need for SaskEnergy to continue to intensify its efforts to identify and implement productivity and efficiency improvements that can effectively reduce its costs and revenue requirement, wherever possible. It appears that SaskEnergy has materially increased planned productivity and efficiency measures for the test years. SaskEnergy indicates that no restraint measures have been applied since 2019/20; and no restraint measures are expected for 2022/23 to 2024/25. SaskEnergy also notes the "intention is to return to normal course of business and deliver improvements to processes and customer experience that is sustainable into the future".

Capital Expenditures

35. It is understood that the capital program is outside the purview of the Panel; however, capital expenditures impact other areas of the revenue requirement, and review of SaskEnergy's capital program is necessary in order to understand the cost drivers behind the proposed revenue requirement and delivery service rates, and provides some context for future rates. From 2016/17 through 2021/22 SaskEnergy's forecasts of capital expense were between $9.2 million and $60.9 million higher than actuals.

    SaskEnergy provided updates for 2022/23 which indicate that actual spending on capital will be lower than the forecast provided in the Application. More specifically, as at August 31, 2022, SaskEnergy spent $38.3 million (or about 25% of the 2022/23 forecast of $153.4 million in gross capital expenditures).

36. Sustained capital spending requirements will continue to drive revenue requirement increases related to depreciation expense, capital tax and interest expense. SaskEnergy's net capital expenditures are forecast to average $134.0 million annually over the period between 2021/22 and 2024/25. Ongoing and sustained capital spending requirements will continue to place upward pressure on delivery service rates for the foreseeable future. While a significant portion of capital expense is focused on integrity and growth projects, it is noted that material and increasing amounts are also being spent in the areas such as information systems, and buildings and furniture which do not appear to relate directly to system integrity or growth.

Safety, Reliability and Environment

37. Total line hits have declined compared to historic highs in 2013 and 2014, however, incremental increases in line hits are noted for the past 3 years.

38. The actual leak rate has been higher than the target leak rate each year since 2017/18; however, the actual leak rate has declined from 12 leaks/1,000 km of mains to 9 leaks/1,000 km of mains since 2017/18 – which indicates some improvement over time. Total leaks have also declined over the period. The information provided by SaskEnergy's indicates that the total number leaks since 2017/18 has been materially impacted by natural forces and corrosion/ degradation (a significant number of leaks relate to the Saskatoon curb valve issue identified in 2017/18).

39. SaskEnergy has noted its commitment to protection of the environment, and outlined recent progress regarding the environmental protection measures identified for the distribution system. SaskEnergy is targeting a 35% reduction in emissions from operations by 2030 (compared to 2019) - and efforts over the next several years will focus on emission reduction priority areas including: vent gas reduction; renewable electricity and optimization. Near term program costs are expected to be in the range of $2-2.5 million/year. SaskEnergy noted that green energy initiatives and climate change plans are part of the Corporate Strategic Plan, and there is not a single document that summarizes all the actions outside the Corporate Plan. Information provided by SaskEnergy indicates that the road map or plan being implemented is currently under review and will continue to be adapted to address issues as they arise.

40. In the Consultant's view, the methods used by SaskEnergy to plan and deliver its maintenance program appear to be reasonable and consistent with industry standards.

Load Forecast

41. The updated heat values used for the mid-application load forecast for 2022/23 appears reasonable when compared to recent actual heat values.

42. The Mid-Application Update filing shows that although there is no change in the energy [GJ] based load forecast, the heat value change has a notable impact on the load forecast in terms of volume [m^3]. This also affects the revenue forecasts as SaskEnergy rates are based on volume and not on energy. This highlights continued concerns that relate to heat value.

Cost of Service Study

43. The cost of service study apportions costs to each class of customer based on underlying cost drivers. The cost of service study is an important tool for understanding and evaluating the reasonableness of the utility's rate proposals. In the Consultant's view, SaskEnergy's objective of keeping RCC ratios for all customer classes within a range of 95% to 105% is consistent with normal utility practice in Canada.

44. SaskEnergy notes the Chymko report was received after the cost of service documents for the current application were complete and that therefore none of Chymko's recommendations are reflected in the 2022-23 through 2024-25 cost of service studies in the current application. SaskEnergy indicates it expects the recommendations will inform the next cost of service and that impacts of implementing any recommendations will be provided at that time. SaskEnergy notes that it is not planning to submit an updated cost of service study with the 2023/24 update filing, as it expects the update will focus on financial updates and material updates to business.

Delivery Service Rate Design

45. Utility rate design requires careful consideration of a number of competing objectives. Regulatory principles require that the utility demonstrate that its proposed rate design reflect an appropriate balance between these rate principles.

46. The Consultant notes that some other natural gas distribution companies appear to recover a larger proportion of customer related costs through a fixed charge than SaskEnergy does currently. For example: ATCO Gas structures its rates for its Low Use Rate class (applicable to customers using 1,200 GJ/year or less) with a rate design that collects 90% of customer-related costs through a fixed charge and a variable charge that recovers the remaining costs. The report provided by Chymko concludes that the current BMC target is "satisfactory" but recommends raising the BMC target. SaskEnergy notes that it will study the impacts of raising its BMC recovery objective and make a decision regarding the matter once this study is complete.

Heating Values

47. Material concerns related to heat value variance impacts on customer bills, on net revenues, and the GCVA have been noted by the consultant, SaskEnergy and the Panel in prior years. Variations in heat value result in some customers paying more than others to achieve the same heating energy, depending on geographic location. This has resulted in ongoing fairness concerns for ratepayers and other stakeholders. Material delivery and commodity revenue impacts have also been noted in the past. With regard to GCVA impacts – SaskEnergy has noted a totally heat value

variance impact to the GCVA over the past 5 years of $9.6 million (owing to SaskEnergy from customers).

48. Billing in energy would eliminate the need for forecasting heat value and the associated risks and fairness issues related to heat value variance and variances in customer bills.

49. SaskEnergy has noted that it is currently undertaking a Heat Value Project – which is assessing billing customers in recognition of natural gas energy content. The project is currently in the internal governance process for review and decision – and at the business case stage waiting for review and prioritization. The Investment Governance Committee (IGC) has recommended deferring the project business case as it overlaps in scope and resources with dependencies of other projects; however, IGC has agreed that the needs identified in the business case are important and should proceed. SaskEnergy notes that there is an opportunity to combine scope and deliverables of the heat value project with other projects due to the overlap of limited resources.

Natural Gas Market Update

50. SaskEnergy has provided sufficient information on the current and forecast gas market to support its requested commodity rate.

Gas Supply Overview

51. SaskEnergy's supply portfolio is changing in response to decreasing gas supply from Saskatchewan. The approach adopted by SaskEnergy appears to be prudent with regard to ensuring reliability of supply and maintaining flexibility to adapt to different weather conditions as well as provision to supply additional customer loads in case customers that buy gas from retailers return to SaskEnergy.

52. Concern is noted regarding the impact of customers served by retailers returning to SaskEnergy. It is noted that SaskEnergy is the supplier of last resort and on a legislative basis has an obligation to serve. It is also noted that the details of the contracts between these customers and gas retailers are not known. However, this additional load is expected to drive material costs for SaskEnergy that will adversely impact other existing customers (due to the requirement to purchase additional gas at market prices).

53. The Consultant finds that SaskEnergy's peak day design criterion represents a reasonable balance between costs and reliability.

Forecast Cost of Gas Sold

54. The cost of gas sold appears to be properly calculated and consistent with previous practice.

55. Material changes between forecasts for 2022/23 primarily related to two factors: ongoing market price increases and volatility in 2022/23; and increases in gas volumes related to a significant portion of gas retailer load returning to SaskEnergy. Serving these additional volumes required SaskEnergy to plan for additional purchases at market prices (i.e., this increased the proportion of gas purchases that are not hedged).

56. SaskEnergy has noted that a significant amount of forecast purchases for 2022/23 were hedged – which would support the material increase in price hedging inflows for 2022/23 as forecast in the

Original Application. SaskEnergy has also noted that a number of customers served by retailers are expected to return to SaskEnergy on November 1, 2022 (about 6 million GJs of load). The gas purchases required to serve this additional load would not be hedged – impacting the cost of purchase gas, and reducing the impact of price hedging in the Mid-Application Market Update.

57. The average cost of gas sold for 2022/23 gas year (as included in the Original Application) has increased by 22% compared to the forecast used in the 2021 Commodity Rate Application; and the Mid-Application Market Update filing shows a further 4% increase over the forecast in the Original Application. There was a $34.2 million increase in cost of purchase gas in the Mid-Application Market Update compared to the Original Application.

Gas Cost Variance Account

58. The lower heat value forecast used in the Mid-Application Market Update, and slightly lower gas prices since the Original Application was filed, result in a slight reduction in the commodity reference rate in GJ (changes from $4.20/GJ (16.74 cents/$m^3$) to $4.12/GJ (16.26 cents/$m^3$). SaskEnergy is not seeking to adjust the commodity rate at this time.

59. SaskEnergy's proposed commodity rate of $4.20/GJ results in the GCVA balance of $28.3 million as at July 2022 being forecast to be fully collected over a 9 month period from August 2022 to May 2023, with a forecast balance of $5.0 million owing to customers by October 31, 2022. By comparison, the 2021 Commodity Rate Application, proposed collection of an $18 million GCVA balance owing from customers over a 24 month period ending October 31, 2023.

60. SaskEnergy notes concern regarding continued market volatility. Over the period from August 24, 2022 to September 21, 2022, forward natural gas prices spiked with AECO winter reaching highs near $8.00/GJ and AECO summer 2023 over $5.00/GJ; then fell along with most other capital markets. The Mid-Application Market Update Filing used natural gas prices as of September 21, 2022, with AECO winter prices at $6.18/GJ, and summer 2023 prices at $4.41/GJ. SaskEnergy also notes that its load has increased due to the return of almost half of the gas retailer load – resulting in more natural gas required to be purchased at market prices (as opposed to hedged at a lower price).

61. The Original Application used a forecast heat value of 39.90 MJ/m^3. The Mid-Application Market Update indicates that the expected heat value for the test period is 39.50 MJ/m^3. This lower heat value results in higher sales volumes in m^3 (and related revenues) compared to forecasts used in the Original Application. Higher commodity revenues that result from a lower heat value compared to forecast have reduced the GCVA balance by about $3.2 million in 2021/22. This impact is expected to continue over the 2022/23 test year.

62. In prior commodity rate reviews, the Panel has recommended that SaskEnergy review the basis for its +/- $20 million quantum as the forecast metric for the GCVA to determine if it remains appropriate. During the 2021 review, SaskEnergy noted that as its "customer base has grown over the years, use per customer continues to decrease. This has resulted in SaskEnergy's gas purchases to remain relatively equal. Therefore, SaskEnergy believes the $20 million threshold is still appropriate." Following the 2021 Commodity Rate Application review, the Panel again recommended that SaskEnergy review the basis for the threshold. SaskEnergy in response has indicated that its assessment has not changed. The points of concern raised by the consultant

during the 2021 Commodity Rate Application remain, i.e., the GCVA may not be working effectively based on the core purpose and function of the account.

Determination of Commodity Rate

63. The Consultant reviewed the proposed commodity rate calculation and finds that it uses an approach consistent with previous applications.

64. The 2021 Commodity Rate Application included a multi-year cost of gas coverage period focused on cost of gas over the two year forward period from November 1, 2021 to October 31, 2023; and recovery of the GCVA balance owing from customers at the end of October 2021 over a two year period. SaskEnergy notes that a two-year recovery period was used "to minimize the bill impact to customers, after customers had the lowest commodity rates in over 20 years".

65. In the Original Application SaskEnergy noted that significant increases in natural gas prices since spring 2022 resulted in an increased cost of natural gas. This resulted in the GCVA balance growing, instead of declining as forecast in the 2021 Commodity Rate Application. In light of this, SaskEnergy proposed a one year recovery period for the GCVA balance in the Original Application, noting "natural gas prices have entered a very volatile phase, and it is prudent to recover the GCVA as quickly as possible".

66. SaskEnergy has provided information that indicates that if the GCVA balance was cleared over a two year period, the commodity rate required would be in the range of $3.74/GJ (with GCVA balance of $24.8 million owing from customers at October 31, 2023); if it was cleared over a 3-year period, the commodity rate required would be $3.62/GJ (with GCVA balance of $31.3 million owing from customers at October 31, 2023). A lower commodity rate increase at this time would reduce bill impacts for customers during a period where both significant commodity and delivery rate increases are being proposed. However, gas price changes noted between the Original Application and the Mid-Application Market Update support concerns regarding market volatility at this time; and using an extended recovery period during a period of market volatility may increase the risk that (in the event gas prices and load increases) the GCVA balance would continue to accumulate rather than decline over this period. This may result in potential larger rate requirements in the future as well as intergenerational equity concerns.

67. The GCVA balance has been recovered more quickly compared to the forecast included in the Original Application, i.e., the Mid-Application Market Update shows the GCVA balance $9.918 million lower by October 31, 2022. Information provided by SaskEnergy during the review process indicates that with the commodity rate of $4.20/GJ approved on August 1, 2022 maintained over the 2022/23 gas year – it is forecast to fully recover the GCVA balance by April 2023; with approximately $5 million owing to customers by the end of October 2022.

Price Risk Management Strategy and Policy

68. SaskEnergy has provided the Consultant with information that outlines the basis for recommending the current strategy. SaskEnergy notes that customer survey's continue to confirm a customer preference for stable rates as customers want to avoid unexpected changes in bills and desire stability for budgeting purposes. The natural gas price management strategy appears to be being executed as approved.

69. SaskEnergy has provided information on a confidential basis that indicates compliance with the Board of Director's approved policy and procedures for engaging in gas price management activities.

Customer Impacts

70. The proposed increases in commodity and delivery rates effective August 1, 2022 result in notable bill increases for each customer class. Average usage Residential customers will see an approximate 16.8% bill increase, Commercial Small customers will see a 19.9% bill increase, Commercial Large customers will see a 22.3% bill increase, and Small Industrial customers will see a 25.2% bill increase.

71. Separate from the current SaskEnergy application, customer bills will also be impacted by the increasing carbon tax over the test years. The material bill increases noted for 2022/23, combined with other taxes and surcharges that customers must pay on their bills, raise material concerns regarding both customer affordability and competitiveness, in a volatile economic context where global disruptions and the potential for recession may threaten Saskatchewan's economy.

Competitiveness

72. With the implementation of proposed rate changes – commodity and delivery rates remain lower than most major centres for all customer classes (second or third lowest). This indicates that, assuming that other major utilities do not change their rates, SaskEnergy will remain competitive with other jurisdictions. Section 3.6.2 reviews SaskEnergy's capital structure and common equity ration and provides common on its competitiveness relative to peer utilities.

Public Comments

73. The above matters were considered in the preparation of the Consultant's report and the recommendations.

22.0 SUMMARY OF CONSULTANT'S RECOMMENDATIONS

The Consultant recommends to the Panel that:

Application Overview

1. It is recommended that the Panel not approve any rate increase for 2023/24 or 2024/25 until updated forecasts are provided by SaskEnergy; and a process is implemented to fully canvass the forecasts. The Panel should specify the level of information expected to be provided by SaskEnergy in the update to be provided in February of 2023 and February 2024. The Panel should also recommend a review process that allows for the information to be fully canvassed prior to recommending any rate increase.

Operating and Maintenance Expense

2. Given the pattern of actual O&M results being consistently below forecasts, it is recommended that SaskEnergy provide updated O&M forecasts to the Panel for its review prior to the panel recommending implementation of any further proposed rate increases.

Communications, Public Relations, Fees, Dues and Community Contributions

3. In light of the current economic and cost environment for ratepayers, it is recommended that SaskEnergy in selecting energy efficiency programs, develop measures that will consider rate impacts for customers, and ensure that programs selected provide benefits to SaskEnergy, ratepayers generally, and individual program participants.

Transportation and Storage Expense

4. It is recommended the Panel continue to work with SaskEnergy to determine information that can be made available to ensure greater transparency regarding the need for, and drivers of, transportation and storage rate increases.

Depreciation Expense

5. It is recommended that depreciation expense forecasts for 2023/24 and 2024/25 be updated by SaskEnergy and subject to careful review by the Panel prior to the Panel recommending implementation of any requested rate adjustments in those years.
6. It is recommended that the new depreciation study, along with the corporation's response to the study, be provided to the Panel when completed and prior to the next delivery rate application. While the outcomes of the study will not be able to inform the 2023/24 update, it should be confirmed whether or not it can inform 2024/25.

Tax Expense

7. The impact that the accounting treatment for customer contribution has on corporate capital tax calculations continues to be of concern – and in the Consultant's view further information on this issue would help to better understand the potential impact that the current approach has to

revenue requirement. A further response on this matter should be provided by SaskEnergy as part of the next financial update in order to ensure greater transparency.

8. Once the collaboration initiative with other Crown Corporations and the Ministry of Finance regarding the Corporate Capital Tax has been completed; it is recommended that an update on outcomes from this process be provided to the Panel.

Interest Expense

9. Given the current rising interest rate environment it is recommended that SaskEnergy provide an updated interest expense forecast to the Panel for its review prior to the Panel recommending the implementation of any further proposed rate increases.

Net Income

10. It is recommended that SaskEnergy provide updated forecasts to the Panel for its review prior to the Panel recommending the implementation of any further proposed rate increases.

Other Revenue

11. It is recommended that SaskEnergy provide updated other revenue forecasts to the Panel for its review prior to the panel recommending the implementation of any further proposed rate increases.
12. With regard to distribution tolls – it is recommended that SaskEnergy provide an update on whether the cost of service recommendation will be implemented during next update. If a change is recommended the impact to distribution tolls (both in terms of risk profile and financial risk to distribution ratepayers) should be provided.

Safety, Reliability and Environment

13. Responses provided by SaskEnergy indicate that the plan or road map being developed will be updated on an iterative basis – to adapt to new information or changing circumstances. It is recommended that the Panel seek further consolidated updates regarding these plans as they are developed.
14. It is recommended that the Panel urge SaskEnergy and SaskPower to collaborate regarding their forward looking strategies and implementation plans to ensure plans and strategies are developed in an efficient, integrated and holistic manner that that considers the energy system in Saskatchewan; each utility's role and focus; and the most cost effective and beneficial approach to emissions reductions for each utility and its customers.

Load Forecast

15. Ongoing concerns regarding setting rates based on volume as opposed to energy – support the need to shift to billing in energy as soon as possible.
16. It is recommended that given AMI is over 99% implemented, once over 5 years of reliable historical data is collected, that SaskEnergy review the reasonableness of its load forecast based on available monthly data.

Cost of Service Study

17. The Consultant recommends that SaskEnergy quantify the impact on the allocation of costs to each customer class of any changes to the cost of service study methodology as soon as feasible and no later than the next delivery service rate application.

18. It is recommended that the Panel engage with SaskEnergy over 2022/23 in order to better understand whether delay in implementing the cost of service would result in any adverse effects for customers. The following approach is recommended:

    - A cost of service study update be provided to the Panel as part of SaskEnergy's February 2023 update filing; this update should assess feasibility of implementing cost of service study changes within the next year; or outline why this cannot be done.
    - SaskEnergy meet with the Panel in early 2023 to review the cost of service study changes and impacts, and answer any questions from the Panel;
    - Consideration be given to implementing the cost of service study changes as part of the 2024/25 update.

Delivery Service Rate Design

19. The Chymko report supports SaskEnergy adjusting its long-term policy objective to recover 75% of costs through the BMC and transitioning to a rate structure that recovers a higher proportion of revenues through the BMC. It is recommended that SaskEnergy provide the Panel an update on this matter once SaskEnergy has completed its review; and, if feasible, that an update be provided as part of SaskEnergy's February 2023 update filing. This update should address what action SaskEnergy is going to undertake relative to the report, potential impacts of implementing this change, and indicate whether, if it is to be implemented, this change can be made within the 3-year application period.

Heating Values

20. The Consultant recommends that the Panel strongly urge SaskEnergy to pursue measures required to shift to billing in energy on a priority basis.

Gas Cost Variance Account (GCVA)

21. The Consultant notes that there is merit to developing a formalized policy that includes a framework for more regular, automatic adjustments to commodity rates to ensure that large balances do not accumulate and to mitigate concerns related to intergenerational equity. As part of the development of the formal policy, it may be appropriate to review the basis for the $20 million quantum used as the forecasted metric for the GCVA to determine if it remains appropriate.

Determination of Commodity Rate

22. It is recommended that the commodity rate approved as at August 1, 2022, of $4.20/GJ, be maintained at this time. However, the GCVA balance is expected to decline and be discharged by May 2023. The Panel should recommend that SaskEnergy submit an application to reduce the

commodity rate, as soon as SaskEnergy is assured that the GCVA balanced will be discharged, in order to provide relief to ratepayers.

APPENDIX A:
SASKENERGY NATURAL GAS COMMODITY AND DELIVERY RATE CHANGE PROPOSAL – TERMS OF REFERENCE

Government of Saskatchewan

Minister's Order

SaskEnergy Natural Gas Commodity and Delivery Rate Change Proposal

Terms of Reference

WHEREAS by a Minister's Order dated December 22, 2018 (the "2018 Order"), issued pursuant to Section 15 of *The Executive Government Administration Act*, the Minister of Crown Investments Corporation appointed a Ministerial Advisory Committee known as the Saskatchewan Rate Review Panel;

AND WHEREAS the 2018 Order provides for specific terms of reference for each rate change review to be attached by further Minister's Order;

AND WHEREAS it is desirable to establish terms of reference for a combined SaskEnergy commodity rate change review and a delivery rate change review and to attach the terms of reference to the 2018 Order;

NOW THEREFORE, I hereby amend the 2018 Order by attaching **"Schedule D: Combined SaskEnergy Commodity Rate Change and Delivery Rate Change Proposal".**

Dated at Regina, Saskatchewan this 8th day of July 2022

Minister of Crown Investments Corporation

Schedule D:
Combined SaskEnergy Commodity Rate Change and Delivery Rate Change Proposal

Terms of Reference

The Saskatchewan Rate Review Panel (the Panel) is requested to conduct a combined review of the SaskEnergy increase to its natural gas commodity rate effective August 1, 2022 and increases to its delivery service rates, consisting of:

- An increase effective August 1, 2022;
- An increase effective June 1, 2023; and,
- An increase effective June 1, 2024.

The Panel shall function within its mandate and operational terms of reference as specified in the Minister's Order dated December 22, 2018. The Panel shall provide an opinion of the fairness and reasonableness of the rate changes proposed by SaskEnergy, having consideration for the following:

- The interests of SaskEnergy, its customers, and the public;
- Consistency with SaskEnergy's mandate, objectives, and methodologies;
- Relevant industry practices and principles; and,
- The effect of the proposed rate changes on the competitiveness of SaskEnergy related to other jurisdictions.

DELIVERY RATE REVIEW

In conducting its Delivery Rate Review, the Panel will consider:

A) The reasonableness of the proposed rate change(s) in the context of SaskEnergy's forecasted cost of service over the period(s) 2022-23 through 2024-25, comprised of:

(i) Load forecast;
(ii) Contracted transportation and storage service;
(iii) Planned maintenance programs;
(iv) Operating, maintenance, administrative, depreciation, and finance expenses; and,
(v) Corporate Capital Tax.

B) The revenue requirement resulting from the delivery cost of service.

C) The following parameters as given:
(i) The rate structure (i.e., components and classifications);
(ii) The budgeted capital allocation, rate base, and established corporate policies over the period 2022-23 through 2024-25;
(iii) SaskEnergy's long-term return on equity target of 8.3% for its local distribution operations;
(iv) Existing service levels;
(v) Transportation and storage rates set by TransGas; and,
(vi) The target revenue-to-cost ratio range of 0.95 to 1.05.

COMMODITY RATE REVIEW

In conducting its Commodity Rate Review, the Panel will:

A) Consider the reasonableness of the proposed commodity rate change in the context of:

(i) The cost of gas anticipated by SaskEnergy for the effective term;
(ii) The gas purchase contracts entered into by SaskEnergy for the supply of gas; and,
(iii) The natural gas commodity market conditions at the time of the SaskEnergy contractual commitments.

B) Consider the impact changing market prices will have on the commodity rate proposed by SaskEnergy.

C) Check to ensure that the SaskEnergy natural gas price management strategy is executed as approved by the SaskEnergy Board of Directors, and its practices are aligned with the SaskEnergy Board of Directors-approved policy and procedures for engaging in gas price management activities.

D) Consider the principle that SaskEnergy passes on the cost of gas to consumers without discount or mark-up as a given.

COMBINED RATE REVIEW

SaskEnergy will provide the Panel with its application package immediately. SaskEnergy will also provide the Panel with any supplementary information as the Panel may require in fulfilling its mandate and these Terms of Reference.

SaskEnergy may provide the Panel with a mid-application financial update if a business factor(s) vital to formulating this rate application has changed materially from the original factors used in the application. Should it be deemed necessary, any material updates to the application shall be provided by no later than September 29, 2022.

The Panel shall determine a public consultation process for this rate change application that is appropriate and cost effective under the circumstances and within the timeline for the review as established by the Minister of Crown Investments Corporation.

The Panel shall provide members of the public with the opportunity to review and comment on the SaskEnergy rate change submission outside any public meeting, to the extent reasonable, and within the timeline for the review as established by the Minister of Crown Investments Corporation.

SaskEnergy shall be provided with an opportunity to make a presentation to the Panel and the public to discuss noteworthy rate application issues.

Questions from the public, Panel members, and its technical consultant(s) that require a response from SaskEnergy shall be received and organized by the Panel in a timely and efficient manner and forwarded to SaskEnergy for response.

The Panel shall provide SaskEnergy with the opportunity and reasonable time to review the technical consultant's preliminary report prior to its finalization to ensure there are no errors in data or in the interpretation of data. The preliminary report shall include the consultant's observations (e.g., outstanding issues and questions), but will not include the consultant's recommendations to the Panel.

Where Panel recommendations are different from SaskEnergy's proposed rate changes, its final report must include an explanation of how, in its opinion, implementation of the Panel's rate recommendations will allow SaskEnergy to achieve the performance inherent in:

- The parameters outlined in section (C) of the Delivery Rate Review; and,
- The principle outlined in section (D) of the Commodity Rate Review.

CONFIDENTIALITY

Consistent with the "Confidentiality Guidelines" for the Panel, the Panel will not publicly release or require SaskEnergy to publicly release confidential information supplied by SaskEnergy to the Panel during the course of the rate change application review.

The Panel will release, as part of its final report, the results of the review of the SaskEnergy rate change proposal as conducted by an independent third party. By doing so the Panel shall ensure there has been no indirect release of any confidential SaskEnergy information.

CONDUCT OF THE REVIEW

The Panel will present its report to the Minister of Crown Investments Corporation no later than December 16, 2022.

ABBREVIATED REVIEW FOR JUNE 1, 2023 AND JUNE 1, 2024 RATE CHANGES

Prior to the implementation of delivery rate changes in 2023 and 2024, SaskEnergy will provide current financial statements and an update on any material changes to business factors vital to the rate application, for the Panel's review by February 15, 2023 and February 15, 2024, respectively. Based on the updated information provided by SaskEnergy, the Panel will determine the abbreviated review process it requires.

The Panel shall provide SaskEnergy with the opportunity and reasonable time to review the Panel's updated recommendations on the 2023 and 2024 rate changes prior to finalization to ensure there are no errors in the data or the interpretation of data.

The Panel will provide updated recommendations to confirm or revise its initial recommendations on the 2023 and 2024 rate changes to the Minister of Crown Investments Corporation no later than April 28, 2023 and April 29, 2024, respectively.