



# **TABLE OF CONTENTS**

R	E C	O M M E N D A T I O N	4				
Ε	X E	C U T I V E S U M M A R Y	5				
C	O R						
0	V E	R V I E W					
S	A S	K E N E R G Y S E R V I C E S					
1.		VERY SERVICE RATE APPLICATION DETAILS					
	1.1	Delivery Revenue Requirement Summary					
	1.2	Delivery Transportation and Storage Expense					
	1.3	Operating and Maintenance Expense					
	1.4	Productivity and Efficiency Measures					
	1.5	Sustainability (Environmental, Social and Governance)					
	1.6	Delivering Safe and Reliable Service					
	1.7	Depreciation Expense					
	1.8	Tax Expense					
	1.9	Interest Expense					
	1.10	Net Income					
	1.11	Other Revenue					
	1.12	Rate Design Principles and Objectives					
	1.13	Rate Classes					
	1.14	Recommended Delivery Rates	40				
	1.15	Delivery Service Bill Impact					
2.	СОМ	MODITY RATE APPLICATION DETAILS					
	2.1	2.1 Forecast Cost of Gas Sold					
	2.2	Gas Cost Variance Account	45				
	2.3	Natural Gas Supply Overview	46				
	2.4	Recommended Commodity Rate	52				
	2.5	Commodity Bill Impact	52				
3.	LOAD	O FORECAST	53				
	3.1	Annual Requirements	53				
	3.2	Peak Day Requirements – Maximum Daily Usage	55				
4.	CUST	OMER BILL IMPACT	56				
4.	MINI	MUM FILING REQUIREMENTS	57				
5.	GLOS	SSARY OF TERMS	59				
6.	SCHE	DULES	61				

# RECOMMENDATION

SaskEnergy is applying to increase its delivery service rates over the next three years; by an average of 8% effective August 1, 2022, 5% effective June 1, 2023, and 5% effective June 1, 2024. SaskEnergy is also applying to increase its commodity rate by 31% to 16.74 cents per cubic metre (\$4.20/gigajoule). If approved, the recommended rates will result in an overall average bill increase for customers as follows:

Year 1 Effective	Commodity Rate Increase (\$3.20/GJ to \$4.20/GJ)		Delivery Rate Increase			Total Bill Impact			
August 1, 2022	Commodity % Increase	\$/Month	Commodity Bill % Increase	Delivery % Increase	\$/Month	Delivery Bill % Increase	\$/Month	\$/Year	Annual Bill % Increase
Residential	31.0%	\$8.39	11.8%	8.1%	\$3.57	5.0%	\$11.95	\$143.45	16.8%
Commercial Small	31.0%	\$42.15	16.2%	7.8%	\$9.71	3.7%	\$51.85	\$622.25	19.9%
Commercial Large	31.0%	\$528	19.2%	8.2%	\$86	3.1%	\$614	\$7.367	22.3%
Small Industrial	31.0%	\$1,949	22.9%	8.9%	\$197	2.3%	\$2,145	\$25,745	25.2%
Average	31.0%		13.7%	8.0%		4.5%			18.2%

Year 2	Delivery Ra	te Increase	Total Bill Impact			
Effective June 1, 2023	\$/Month	Delivery % Increase	\$/Month	\$/Year	Annual Bill % Increase	
Residential	\$2.43	5.1%	\$2.43	\$29.21	2.9%	
Commercial Small	\$6.27	4.7%	\$6.27	\$75.28	2.0%	
Commercial Large	\$58	5.1%	\$58	\$691	1.7%	
Small Industrial	\$182	7.6%	\$182	\$2,185	1.7%	
Average		5.0%			2.6%	

Year 3	Delivery Ra	te Increase	Total Bill Impact			
Effective June 1, 2024	\$/Month	Delivery Bill % Increase	\$/Month	\$/Year	Annual Bill % Increase	
Residential	\$2.53	5.1%	\$2.53	\$30.34	3.0%	
Commercial Small	\$6.67	4.8%	\$6.67	\$80.04	2.1%	
Commercial Large	\$60	5.1%	\$60	\$725	1.8%	
Small Industrial	\$153	5.9%	\$153	\$1,830	1.4%	
Average		5.0%			2.6%	

# EXECUTIVE SUMMARY

SaskEnergy is applying for an 8% increase to its delivery service rates, effective August 1, 2022, 5% increase effective June 1, 2023, and 5% increase effective June 1, 2024, and an increase to its commodity rate of 31% effective August 1, 2022.

## **Delivery Service Rates**

This application is to increase the Basic Monthly Charge (BMC) and/or the volumetric Delivery Charge. This application is requesting a three-year rate increase and will provide \$43.3 million in additional revenues over the three years and a return on equity (ROE) of 2.3% in 2022-23, 4.7% in 2023-24 and 6.9% in 2024-25.

SaskEnergy's delivery service rate increases are primarily required to support investment in the system and public safety efforts. In addition, public and regulator expectations of the Corporation's environmental and social responsibilities are increasing. SaskEnergy continues to enhance its support for customer efficiency programs, such as the residential equipment replacement rebate, to help customers reduce their heating bills, as well as their impact on the environment through purchase and installation of energy efficient equipment. SaskEnergy has also been expanding its customer experience initiatives.

# **Commodity Rate**

SaskEnergy buys natural gas on the open market on behalf of its customers. Aligning itself with standard regulatory practice, SaskEnergy passes on the cost of natural gas to customers at the same price it pays suppliers, including all expenses. The cost of providing natural gas to customers this coming year is forecasted to be higher than the current rate of 12.78 cents per cubic metre (\$3.20/gigajoule (GJ). The last commodity rate adjustment was November 1, 2021, when the commodity rate was increased to reflect the higher price of natural gas. Since then, natural gas prices have continued to increase.

SaskEnergy's recommended commodity rate is 16.74 cents per cubic metre (\$4.20/GJ) effective August 1, 2022. The recommended commodity rate is designed to reflect the higher forecasted cost of gas over the 12-month period November 1, 2022 to October 31, 2023, while clearing out the GCVA by the end of the period.

In summary, the recommended delivery service rates will allow SaskEnergy to continue to provide safe and reliable delivery of natural gas to its customers. SaskEnergy's residential delivery service rates will continue to be competitive among the major natural gas utilities in Canada. The recommended commodity rate reflects higher natural gas costs and provides some stability to customers for the long term, while maintaining the lowest commodity rate in Canada.

# CORPORATE STRUCTURE OVERVIEW

The following visual provides an overview of SaskEnergy and its four wholly owned and one indirect operating subsidiary. Additional information on the legal corporate entities and their functions can be found within the Corporate Profile Section of SaskEnergy's 2020-21 Annual Report.



Initially, when SaskEnergy was created in 1988, there were two separate legal entities, which now comprise SaskEnergy Incorporated. There was both a holding company – Saskatchewan Energy Corporation (SEC) – and Provincial Gas Limited (PGL). PGL was responsible for fulfilling the legislative franchise of owning and operating the distribution utility in the province. SEC operated in a holding company capacity providing oversight and administering financial relationships and transactions between the Ministry of Finance and Crown Investments Corporation (CIC).

In the early 1990's, SEC and PGL were amalgamated so that both the holding function and the distribution function would be contained in one entity. Then, within this new entity, two formal divisions were created – the Distribution Division and the Holdings Division – as a means of maintaining the segregation of the two different functions.

The Holdings Division is a reporting entity that holds equity investments in the five subsidiary operations as well as provides a conduit for financial transactions with both the Ministry of Finance and CIC. As an example, short and long-term borrowings as well as equity advances from the Ministry of Finance and CIC respectively, flow into the Holdings Division and are then allocated to subsidiary operations and the Distribution Division. In a similar fashion, SaskEnergy's dividends to CIC are paid by the Holdings Division and are funded through dividends that it receives from subsidiary operations as well as from the Distribution Division.

The Distribution Division, a term used throughout the rate application, encompasses all facets of operations for the distribution utility. Although the Distribution Division is not a formal legal entity, it is a separate division for financial reporting purposes and separate financial statements are prepared for it. The Distribution Division provides the regulated delivery service to the gas distribution customers, and it is the entity responsible for this rate application.

# S A S K E N E R G Y S E R V I C E S

SaskEnergy provides two services related to natural gas deliveries to its customers:

- Gas Delivery Service; and
- Gas Supply Service (Commodity)

#### **GAS DELIVERY SERVICE**

Gas Delivery Service includes storage and transportation as well as all distribution facilities and operations necessary for delivery of natural gas to customers throughout the year. SaskEnergy earns its approved return on its investment through its delivery service.

The cost of the delivery service is recovered through a two-part rate:

- 1) A Basic Monthly Charge (BMC), which is a fixed dollar amount per month, designed to recover the fixed costs attributed to cover customer care related costs including the customer service line, meter reading and customer account administration; and
- 2) A Delivery Charge, which is a volumetric charge applied to each cubic metre of natural gas used by the customer. The Delivery Charge will vary from month to month based on a customer's consumption. The Delivery Charge attempts to recover capacity related costs associated with the distribution system including storage and transportation.

The relationship of services and the rates are illustrated in the chart below.

SASKENERGY SERVICES AND RATES



#### **GAS SUPPLY SERVICE**

Gas Supply Service is the supply of the natural gas commodity. All customers have the option to purchase their natural gas supply from a seller other than SaskEnergy. Gas Supply Service is provided to customers who purchase their natural gas supply from SaskEnergy. Natural gas is sold to customers at cost, along with expenses incurred in the procurement of gas. SaskEnergy does not incur a profit or loss on the sale of the commodity.

This application is for an adjustment to both the delivery service rates and the commodity rate (gas supply service). The combined rate changes will result in an overall bill increase for customers.

# 1. DELIVERY SERVICE RATE APPLICATION DETAILS

SaskEnergy's delivery service rate setting process has two steps:

# **DELIVERY RATE SETTING PROCESS**

# **DETERMINATION OF THE REVENUE REQUIREMENT**

The Revenue Requirement is the total revenue the delivery business requires to recover all costs of providing delivery service, including a regulated target for net earnings. SaskEnergy's revenue requirement includes the following components:

- Delivery Transportation and Storage Expense;
- Operating and Maintenance Expense;
- Depreciation Expense;
- Tax Expense;
- Interest Expense; and
- Net Earnings.

The Revenue Requirement is derived from two sources; revenue from customers and revenue from other business activities. The Revenue Requirement is based on the cost to deliver natural gas to the customer's meter. If the Revenue Requirement is greater than the amount that existing rates would generate over a forecasted period, there is a revenue deficiency. If the Revenue Requirement were lower than the amount existing rates would generate, there would be a revenue over-recovery. The forecasted period used to determine the revenue requirement is typically over an upcoming 12-month period. However, for this rate application, SaskEnergy has designated an application period of April 1, 2022 to March 31, 2025. This will provide revenue certainty and better planning for the corporation and rate certainty for customers for budgeting.

Since the forecast Revenue Requirement for the application period is greater than the revenue existing rates would generate, SaskEnergy is requesting a delivery service rate increase. This rate application includes financial schedules that quantify the components of the forecasted Revenue Requirement for the application period.

## **RATE DESIGN**

Rate Design involves developing appropriate rates that will recover the Revenue Requirement allocated to each customer class. This process is referred to as Cost of Service.

SaskEnergy's cost of service methodology is reviewed by an external party.

The last Cost of Service Study was completed in 2022 and the external party completing the study determined that SaskEnergy's existing practices are consistent with generally accepted ratemaking practices, resulting in fair and reasonable rates.

# 1.1 DELIVERY REVENUE REQUIREMENT SUMMARY

Schedule 1.0 summarizes the cost of service that is required to provide delivery service to SaskEnergy's customers. For the application period, April 1, 2022 to March 31, 2023, the cost of service is \$291.3 million, April 1, 2023 to March 31, 2024 is \$310.0 million and April 1, 2024 to March 31, 2025 is \$325.9 million. This compares to \$274.5 million, \$297.1 million, and \$312.4 million of base revenue that could be generated through existing rates, respectively. Thus, SaskEnergy is projecting a \$43.3 million revenue deficiency over the application period, and hence a rate increase is requested.

The following sections discuss the individual components of the delivery cost of service, and additional detail has been provided in Schedules 1.1 through 1.7.

#### 1.2 DELIVERY TRANSPORTATION AND STORAGE EXPENSE

Delivery transportation service is provided by TransGas. TransGas owns and operates the transmission and storage business and has the exclusive legislated franchise to transport natural gas within the Province of Saskatchewan. TransGas' transportation and storage rates are subject to Provincial Cabinet approval. SaskEnergy contracts with TransGas on behalf of its delivery customers, who choose SaskEnergy as opposed to those who individually contract directly with TransGas. Delivery transportation expense includes the cost of transporting natural gas from TEP to SaskEnergy's distribution system pressure regulating stations.

Storage service is also provided by TransGas. SaskEnergy contracts for storage services with TransGas on behalf of its delivery customers. Storage expense includes the cost of storage contracts required to meet consumption peaks during the winter months. Contracted capacity refers to the total volume of natural gas that SaskEnergy requires at the start of the heating season to meet the expected withdrawals of natural gas from storage during the winter. Deliverability refers to the daily rate at which natural gas is required to be withdrawn from storage to meet customer volume requirements. 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 SaskEnergy customers.

Transportation and storage are critical to ensure the security of supply for SaskEnergy customers. TransGas increased its transportation and storage rates on April 1, 2022. The increase to transportation tolls and storage rates is reflected in the forecast costs.

Since 2017-18, TransGas has been expanding the transmission system to meet current and future demand. By the end of 2022-23, the TransGas system will have grown by \$396 million or 50% from expansion effort, resulting in an enhanced transportation system. Utility expansions such as this are critical to economic growth in any jurisdiction and must be supported by capital-based rate adjustments to recover the customers' share of this growth.

Two major system expansion efforts were recently completed and, as such, are reflected in the recommended rates for 2022-23. The 86-kilometre Rosetown to Vanscoy transmission line provides additional system capacity to meet current natural gas demand, support system reliability in extreme winter conditions and supply capacity for future growth. The Pierceland Supply project was also completed and brought into service, which increases gas supply into the province from Alberta. These two major projects totaled \$184 million in capital and generated significant economic activity throughout Saskatchewan. With these critical system expansion projects now complete, TransGas anticipates inflationary rate pressure in the foreseeable future, which customers are aware of.

TransGas is also taking steps to manage its operating costs to keep rates low, while investing in planned system expansion and ongoing system safety and integrity efforts required to support deliverability and industrial growth in the province. Examples of cost management efforts include reducing external service provider spending such as consulting services and communications spending. TransGas' cost management efforts have resulted in budget reductions for 2022-23 of \$2.8 million from the previous year.

Other operating expenses are higher due to retirement of assets (i.e., producer receipt points), more stringent regulatory requirements (i.e., increased leak surveys and emissions reductions) and inflationary pressures including wages and salaries. In addition, TransGas is considered a large emitter under the federal government's Output-Based Pricing System (OBPS) and is required to pay a tax on carbon emissions. For fiscal 2022-23, TransGas has budgeted \$2.4 million in tax for carbon emissions tax which is recouped through the rate increase. Additionally, TransGas customers will pay their own individual tax on carbon emissions in two forms. Large industrial customers of TransGas are regulated under the province's Output-based Performance Standards, while a limited number of TransGas' small industrial customers pay their carbon tax as a line item on their TransGas invoice which is then remitted to the Federal Government.

Transport and storage cost estimates are provided in Schedule 1.1 and are forecast to be \$63.8 million, \$66.0 million, and \$66.0 million, respectively, for the application period. The peak day forecast is forecast as 608,000 GJ in 2022-23, 2023-24 and 2024-25.

## 1.3 OPERATING AND MAINTENANCE EXPENSE

# Serving the Most Expansive System in Canada while being among the lowest Delivery Rates

SaskEnergy's natural gas system has served Saskatchewan and its people for close to seven decades by delivering natural gas and energy solutions responsibly to residents, businesses, and industries while continuing to provide competitive rates.



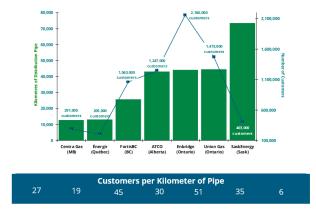
SaskEnergy manages the largest distribution system in Canada with approximately 71,600 kilometres of distribution pipeline, 1,178 pressure regulation stations, and 406,000 customers. All of which are distributed over a 380,000 square kilometre service area across Saskatchewan. This expansive coverage honours the Saskatchewan Government's Crown Sector Strategic Priorities,

where SaskEnergy serves approximately 93% of all communities within the province, including numerous individual farms, resorts, and First Nation locations.

To achieve safe and reliable service to the people of Saskatchewan, SaskEnergy must perform over 225,000 maintenance activities and customer repairs each year. SaskEnergy must be proactive in providing ongoing maintenance of the distribution system. Planned maintenance activities form an extensive part of the operational work plan each year. This includes key maintenance activities required by codes, industry best practice, and by SaskEnergy's internal standards group. As well, growth in major urban and some rural areas require infrastructure upgrades/expansions to increase system capacity to accommodate current and anticipated future growth.

The graph below illustrates the vast size of SaskEnergy's distribution system relative to other major natural gas utilities that operate in Canada. The next largest utility in terms of the kilometres of distribution pipe is ATCO Gas in Alberta. In terms of the challenge SaskEnergy faces with its extensive network, the customer density of SaskEnergy is six customers per kilometre of pipe versus an industry peer average of 30 customers per kilometre.

#### **DISTRIBUTION PIPE VS. NUMBER OF CUSTOMERS**



Based on publicly available information for 2020 and 2021.

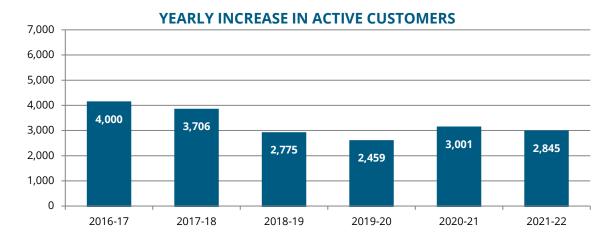
SaskEnergy's system operates in extreme weather conditions and in many types of terrain and requires substantial monitoring and maintenance each year to protect the integrity of the infrastructure and safety of the public. This has underscored the importance of SaskEnergy continuing to focus on how to manage its workload and operating expenses most effectively.

# **Continued Customer Growth, Continued System Growth**

SaskEnergy continued the expansion of its system by adding 276 kilometres of

distribution main pipelines and 3,417 new gas service lines to connect customers to SaskEnergy infrastructure in 2021-22. As a result of this customer connect activity and other service activations and deactivations, there was 2,845 net new customers added during 2021-22 as seen in the following graph. This was down by 156 customers or 5% from the prior year.





#### Labour

#### **Overview**

SaskEnergy Customer Service, Operations, Engineering and Construction requires a workforce of approximately 733 full time equivalents (FTE's). In addition, there are 249 FTE's in the Distribution Division that perform services in corporate support functions such as Human Resources, Legal and Finance. Despite the high levels of growth and activity over the past number of years, SaskEnergy has effectively managed the required change in staffing levels. Productivity efforts realized have been critical to this resourcing management. SaskEnergy continues to monitor vacancy management through attrition plans.

The operating and maintenance expenses are comprised primarily of labour related costs. Approximately 59% of the operating and maintenance expenses forecasted for the application period are labour related costs. This includes employee benefit and pension costs. SaskEnergy's in-scope employees, who represent approximately 72% of the workforce, are members of Unifor Union of Canada (Unifor), Local 649. The current Collective Bargaining Agreement is in effect until January 31, 2023. Economic increases for out-of-scope employees are in accordance with CIC guidelines for crown sector management employees.

#### **Operations**

SaskEnergy's core business is to deliver safe, reliable, and affordable natural gas to the province of Saskatchewan. SaskEnergy must ensure the delivery of this gas occurs in the most adverse conditions, including extreme weather events and other uncontrollable factors. SaskEnergy's Operations team of close to 300 technicians is spread throughout the province in 46 different locations, due to SaskEnergy's large geographical dispersion.

The staffing locations enable SaskEnergy Operations to maintain a safety service response standard aligned with that of industry peers and deliver on our corporate value of Safety to our customers. SaskEnergy responds to more than 14,000 safety service response calls from customers each year, with an average response time of just over 30 minutes in urban locations, and under 60 minutes in rural location. These call types include odour, carbon monoxide, and pressure checks where SaskEnergy technicians respond 24 hours a day, 365 days a year to maintain a safe and reliable distribution system.

SaskEnergy Operations uses a workforce management system to streamline the delivery of the approximately 225,000 maintenance, repair, and customer appointment activities across close to 300 technicians each year in a manner that balances the businesses goals of service to the customer and workforce efficiency.

Operations has been able to hold staffing levels flat over the past number of years, even with an increasing number of customers to serve each year and hundreds of kilometres of new gas lines to maintain each year.

# Sask 1st Call Integration

Sask 1<sup>st</sup> Call changed its software solution on March 1, 2020, from Teldig to Pelican's OneCallAccess software. The software update resulted in a multitude of changes to the Sask 1<sup>st</sup> Call ticket transmitted to SaskEnergy/TransGas and rendered the original Sask 1<sup>st</sup> Call automated interface obsolete.

In October 2021, SaskEnergy implemented an automated solution to generate and dispatch work orders for line locating activities initiated through Sask 1<sup>st</sup> Call. The automated solution eliminates manual administrative effort that had been required to generate over 47,000 standard locate tickets each year. This activity was seasonally heavy between April through November and could require as many as eight seasonal employees to keep pace with peak workloads and ensure locates were dispatched on time.

The new interface automates the receipt of Sask 1<sup>st</sup> Call locate ticket requests from the Pelican software and transforms the information received to automatically generate a field activity in SaskEnergy's host work order system. From there, existing functionality of the workforce management system picks up the ticket and dispatches it to available technician capacity. Greater than 95% of locate tickets have been automated through this project.

# **Line Locating**



External interference is the largest single threat causing gas line leaks for SaskEnergy. Every year people damage pipeline when they cross or dig near pipelines without the awareness necessary to complete projects safely. SaskEnergy remains committed to designing safer pipelines, monitoring activity, and educating the public.

Through Sask 1<sup>st</sup> Call, roughly 135,000 locate requests are initiated in relation to SaskEnergy's pipelines. This volume of work would require a workforce of roughly 100 technicians just to perform locates, with the staffing challenge amplified by the fact that over 80% of this workload occurs between April through November.

Today, costs of locates are managed through a joint infrastructure locate program with SaskPower and SaskTel. The collaboration provides Saskatchewan customers with a cost effective and clean customer experience. Via Sask 1<sup>st</sup> Call a customer submits a single request, and via the Crown collaboration a single truck is rolled to locate the buried infrastructure of SaskEnergy, SaskPower, and SaskTel.

# **Operations Work Management Alignment Project**

In February 2022, SaskEnergy and TransGas successfully implemented the Operations Work Management Alignment project. The project aligned internal organizational structures and roles performing workforce management activities, delivered a set of common business processes designed to reduce overhead administration, and moved all of Operations business to using a common suite of applications for workforce management.

Prior to this project, SaskEnergy (distribution) operations and TransGas (transmission) operations had different people, roles, business processes and technology to support workforce management in each arm of the business. With the project implementation, 80 transmission staff and an incremental 50,000 work order activities were aligned into a common system with the distribution utility.

The project delivered immediate benefits to TransGas (transmission) business in reduction of administrative overhead by eliminating many legacy practices around manual paper and record handling and leveraging technology to optimize approximately 50% of work scheduling. The project also delivered a foundational platform where all SaskEnergy and TransGas technicians receive work through a common system, to support a transition to the Utility of the Future.

#### **Customer Service**

Customer service groups work collaboratively to enhance customer experience and environmental stewardship through operational excellence and ease of use solutions to meet the needs of residential, business, and industrial customers.

# SaskEnergy Website

SaskEnergy began the process of updating its external website in 2020 and launched the new site in 2021. The new website is mobile-friendly and provides a more

intuitive experience focused on how people digest information. There is relevant content with fewer clicks and finding information is easier thanks to the intuitive navigation. Some key features on the new website include:



- Enhanced online tools such as the Network Member search.
- An improved grain drying energy estimator to help customers see how natural gas can provide long-term cost savings as well as reduce their impact on the environment.
- Interactive components to help customers work through tasks such as understanding their natural gas bill.

The site is built for continuous improvement, enabling further enhancements, integration of additional tools and features to enrich the interaction customers have with SaskEnergy.

#### **Customer Connect**



In addition to an estimate and reference number customers who use SaskEnergy's Rural Residential Online Estimating system will also receive an image of where they are requesting natural gas service, as illustrated by the picture and red dot above

The Customer Business group had a successful year with a primary focus on continuous improvement and enhancing customer experience. A Customer Business telephone queue was created to prioritize customer calls for a timelier response. This queue system also provides the ability to monitor customer call service levels so that resource strategies can be more responsive to customer needs. In addition, implementation of automated email notifications to customers at various stages of the Customer Connect process has resulted in a more informed customer and a dramatic drop in calls from customers looking for status updates.

An Online Rural Estimate tool was launched on SaskEnergy's website in 2020 to provide rural customers the ability to conveniently receive an estimate of the cost to connect natural gas to their property. This has been enhanced through 2021 with the addition of the cost estimate to install service during the winter construction season, along with an automated quote letter emailed directly to the customer. The online estimate tool provided 2,988 quotes in 2021 to rural customers considering natural gas as an energy source.

# **Integrated Credit Card Solution**

In January 2021 SaskEnergy began offering customers the option to pay their monthly natural gas bill by credit card through saskenergy.com. SaskEnergy customers had been requesting this capability and the option was well received. Each month the number of users paying by credit card has increased, with 148 in January 2021 and increasing to a peak of 2,364 in February 2022. Since inception 14,681 credit card payments have been processed with this method.

A minimum viable product approach was used to introduce the payment option promptly to customers. Payments were being manually processed by SaskEnergy's Payment Services team until an integration between systems could be completed. Payment Services manually entered 7,720 credit card payments from January to October 2021. In October 2021, SaskEnergy successfully implemented an automation, nearly eliminating the manual entry required by Payment Services and reducing risk associated with manually applying customer payments.

#### Install to Bill Initiative

A team from various departments in the company (including Finance, CIS Support, Customer Services, Operations, Measurement and Billing) was formed to explore opportunities for continued improvement of the process from meter installation to customers' billing process, currently being completed by a series of interconnected processes.

As a result of this initiative, SaskEnergy will implement a series of projects in manageable strategies over a 5-year period. The staged implementation will allow SaskEnergy to complete projects and assess their impacts on customers and business processes; allowing flexibility for tactics to be adjusted as needed. A cross-functional team, that will utilize a continuous improvement approach, will address issues within the Install to Billing process and deliver upon recommendations to support an end-to-end customer centric solution.

First stage projects include 'quick-wins' in process improvement to support timely invoicing, account set-up and utilizing integration/automation to transfer information

from system to system.

The future state process allows employees to work on value added tasks, and to have bill-ready information at their disposal. In addition to being integral to operational effectiveness, technology systems are used by every employee, touch nearly every business process, and when aligned with streamlined business process and implemented properly, add tremendous value to the customer.

# **ExpressAddress**

ExpressAddress is a joint initiative launched expressaddress in 2003 by Saskatchewan companies with the goal of delivering enhanced customer service to Saskatchewan residents. This is achieved by allowing individuals to connect, disconnect, transfer, and update their address with multiple companies in one place avoiding duplication of effort. ExpressAddress is governed by a steering committee known as eSask, which is formed by SaskEnergy acting as Operations Manager, SaskPower acting as Operations



Sponsor, City of Regina, City of Saskatoon, SaskTel, and SGI. Additional subscribing organizations include Access Communications, City of Weyburn, eHealth, Ministry of Social Services, Public Employees Benefits Agency, Regina Public Library, SecurTek, and Workers' Compensation Board of Saskatchewan.

This collaboration has nearly 20 years of experience and its value is measured by customer use. Customers are demonstrating their growing preference for online service with ExpressAddress move requests increasing 35% (2019), 38% (2020), and 18% (2021) over the past three years.

ExpressAddress is due for an upgrade so SaskEnergy, as Operations Manager, is in the process of rebuilding the platform. The rebuild will be undertaken with a customer centric approach and leverage technology to meet the growing expectations of customers for a readily available, easy to use online solution. The solution will leverage analytics that will provide insight into customer activity to support future optimizations. Most importantly, a modernized interface can support the desire of SaskEnergy's business applications to automate the transfer of data from ExpressAddress to SaskEnergy's Customer Information System (CIS). This undertaking will streamline the process and significantly reduce manual intervention, improving the customer experience will allowing SaskEnergy staff to focus on more value-added tasks.

#### **Modernized Customer Portal**

SaskEnergy's My Account was launched in 2003 and the service has largely remained unchanged since that time. The online service was developed to meet customers needs by providing them the ability to view their SaskEnergy bills online anytime of the day along with historical usage.

A new customer Portal Project is currently underway with the goal to deliver a modern platform accessible to all SaskEnergy customers with expanded self-service options in an authenticated space. This is a multigenerational project that will continue to offer further customer offerings including expanded paperless billing promotion, digital payments, a Landlord Property self-management tool, chat, electronic communication, and online appointment booking for customers and contractors.

Online Appointment Booking provides further self-service options and will meet the convenience need for our customers while enabling SaskEnergy to have their resources focusing on other value-added tasks.

## **Customer Experience**

SaskEnergy remains committed to seeking feedback from customers to improve service delivery. A primary tool to access the Voice of the Customer is collecting feedback from customers through transaction surveys and overall satisfaction surveys. New customer connections are usually accompanied by high customer expectations, so a transaction survey is used to measure customers' experience throughout the process of getting connected. The purpose of the survey is to provide timely feedback to SaskEnergy with specific suggestions for improvement and allows for greater customer communication and satisfaction.

SaskEnergy also measures customer satisfaction annually by surveying a sample of the residential customer base across the province. In the most recent survey, residential customer's overall satisfaction was 89%, remaining the same from the previous year.

#### Construction

As part of its resourcing strategy, Gas Construction within SaskEnergy has utilized contractors over the years to supplement its internal resource base to deliver and maintain safe and reliable natural gas service to its customers. These contractors have supplied labour and equipment resources to



support peak construction activity primarily related to customer connect and system integrity work. Although SaskEnergy can manage the workload with the support of contractors, there is a cost premium relative to the use of external contractors.

Considering this, additional internal resources were added to the Construction staff complement in 2020 and 2021. The additional internal resources result in fewer external resources required to complete the work. SaskEnergy will continue to strategically balance its construction resource base to effectively manage the work. Construction workload will continue to include customer connect activities and integrity related work for its distribution and transmission system.

The additional internal construction resources help to support efficiencies and allow Construction to improve delivery of services with greater speed while increasing value to customers.

# **Technology**

Understanding the benefits and limitations that hosting services provides, SaskEnergy continues to manage technology systems in-house where available and when it is advantageous to the organization. Business requirements, outcomes/objectives, cost, and risk factors are all considered in the analysis process to determine if SaskEnergy leverages hosting services or manages the solution on-premises. The current industry trend is moving away from on-premises services and moving to cloud/hosted solutions, therefore some of the application solutions that meet SaskEnergy business needs are only available in hosted models and SaskEnergy will likely be moving to more cloud-based solutions in the future. These will be evaluated on an ongoing basis to determine the best option for SaskEnergy.

# **Cyber Security**

Cyber security is a threat that is on the rise. SaskEnergy recognizes this threat and has made improvements to the Enterprise Security Program over the last several years. SaskEnergy continued to enhance its security with a focused redevelopment of core security controls within SCADA (Supervisory Control and Data Acquisition) and ICS (Industrial Control Systems) environments along with the implementation of a Web Application Firewall (WAF) to protect internet facing services such as SaskEnergy's website. These improvements ensure that security controls protecting SaskEnergy's critical operational technology and corporate services have the capabilities to protect against today's threats.

Cyber security defenses are designed, implemented, and managed by SaskEnergy's Enterprise Security department. Their mandate is to protect customer and stakeholder confidence, operational visibility, and technology transformation through

the reduction of risk from physical and cyber security threats to SaskEnergy operations, assets, and personnel.

Each year Enterprise Security responds to threats against SaskEnergy which include:

- 1000+ daily endpoint malware threats;
- 150,000+ network exploits annually;
- 2 million+ emails blocked quarterly; and
- 10,000+ vulnerabilities remediated annually.

Operating and maintenance expenses shown on Schedule 1.2 reflect SaskEnergy's total operating and maintenance expenses which are forecast to be \$155.0 million, \$157.3 million, and \$160.7 million, respectively. As the SaskEnergy workforce performs construction services, some of the associated operating and maintenance expenses are capitalized and depreciated over the service life of the related asset.

#### 1.4 PRODUCTIVITY AND EFFICIENCY MEASURES

SaskEnergy has always been challenged to deliver safe, reliable, and competitive natural gas service over a large service territory with low customer density. This produces a significant amount of infrastructure (pipeline) per customer and many kilometres that must be covered to maintain these facilities and respond to customer needs. SaskEnergy continues to foster its culture of efficiency to help mitigate these costs by optimizing its truck rolls and reducing the kilometres driven.

Further efficiencies will be realized through effective use of technology, resources, and Crown collaboration.

The global pandemic changed how many businesses operated in 2020 and 2021, and SaskEnergy was no exception. Employees were moved out of the workplace to ensure their safety and well-being while front-line staff adapted to an enhanced safety environment for contacting customers. SaskEnergy reduced its OM&A and reviewed capital forecasts due to changes in the economy resulting from the pandemic. Reviewing forecasts was already a practice that SaskEnergy performed but it also provided new conversations on how to operate the business safely and efficiently. Technology enhancements and virtual meetings have also been at the forefront to continue to keep connected during this interesting time. A return to normal business operations has occurred but looks different than before, such as online meetings resulting in less travel. SaskEnergy continues to review their expenses, plan projects according to current growth requirements and operate the business efficiently.

# 1.5 SUSTAINABILITY (ENVIRONMENTAL, SOCIAL AND GOVERNANCE)

Sustainability is at the core of every decision that SaskEnergy makes. The global landscape is shifting and transitioning to a low-carbon future. Participating in this transition has been incorporated in the environmental, social and governance (ESG) principles of SaskEnergy's plans and operations for many years.

In 2021, SaskEnergy released it's first-ever sustainability report. The report looks back on what has been accomplished so far and where efforts will be focused to be successful in the future. Looking ahead, SaskEnergy is committed to improving core operations while advancing the organization in ESG principles. The report is available at https://www.saskenergy.com/about-us/our-company/reports.

# **Sustainability Framework**

The sustainability framework includes three pillars that align with the corporate vision and sets a foundation for sustainability reporting.

#### Pillar One: Environment



The Environment pillar highlights the commitment to reducing the impact of operations on the environment while supporting customers in reducing theirs. SaskEnergy has committed to reducing emissions from operations by 35 per cent by 2030 while doubling annual investment in customer efficiency programming.

Environmental sustainability efforts focus on:

- Reducing emissions from operations;
- Supporting customers in reducing end-use emissions; and
- Protecting the local environment, including plant life, wildlife, wetlands, native prairie and species at risk.

SaskEnergy has reduced their impact on the environment by prioritizing and completing jobs according to configured rules that allow for optimum effectiveness and customer service as well as proactive maintenance. As part of the efficiency realized, a reduction of 400,000 kilometres travelled to complete work has been achieved which equates to taking 20 vehicles off the road.

# Pillar Two: Prosperity



The Prosperity pillar aligns with the vision of environmental sustainability and economic prosperity for future generations while supporting the provincial economy by investing in the rural, urban, and Indigenous communities where SaskEnergy employees live and work.

SaskEnergy supports the provincial economy through procurement processes for the natural gas system. This includes purchasing materials from Saskatchewan vendors, sourcing local labour, and contracting Indigenous-owned businesses. Independent plumbing, heating and appliance companies throughout the province make up SaskEnergy's Network Member program which supports natural gas customers with programs and services.

SaskEnergy is committed to designing, maintaining, and operating a safe and reliable natural gas system. Steps are taken to ensure that every kilometre of the system is monitored and protected. One way this is completed is through leak surveys, which are completed system wide.

# Pillar Three: People



The People pillar highlights SaskEnergy's employees who drive the success of the organization.

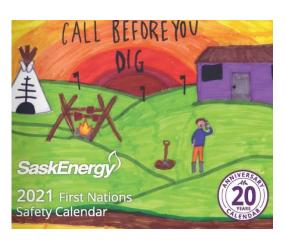
SaskEnergy is focused on a diverse workforce that is capable of meeting environmental responsibilities while providing essential energy

to its customers. SaskEnergy is committed to creating an inclusive work environment that recognizes and appreciates all employee perspectives and talents. Networks, such as Generation Energy (Gen-E), SaskEnergy Aboriginal Government Employees (SAGE) and the Joint Diversity Committee, allows employees to come together and collaborate.

SaskEnergy is committed to a representational and inclusive workforce that includes women in management roles and Indigenous employees. While SaskEnergy is slightly below the Saskatchewan Human Rights Commission's target of 47% for women in management roles, at 41%, it continues to make strides to reach that target. With a Saskatchewan Human Rights Commission's target of 14% of total employees as Indigenous, SaskEnergy is slightly above with their 2021-22 target of 14.5%.

SaskEnergy's goal continues to see every employee go home safely at the end of the day and meet the vision of Mission: Zero – zero injuries, zero fatalities and zero suffering.

The First Nations Safety Calendar celebrated its 20-year anniversary in 2021. Students in schools on First Nations that are connected to the natural gas system are invited to take part in an artwork contest related to natural gas safety. The calendar is distributed to First Nations communities, Indigenous organizations, and educational institutions throughout the province. On average, about 1,000 submissions from 60 schools are received every year.



# **Environmental Stewardship**

Environmental Stewardship is the responsible use and protection of the natural environment. SaskEnergy's customers and stakeholders expect us to be good environmental stewards and to "do the right thing". Prioritizing environmental stewardship will create long-term sustainability and ultimately long-standing public trust. True environmental stewards anchor their environmental strategy at the Board level, which builds the foundation and leads to effective, next generation environmental leadership. SaskEnergy has established an Environmental, Social & Governance (ESG) committee and added an environmental imperative at the strategic level. This has put a new focus on the priorities of the organization to meet our customer and stakeholder's expectations and potentially influence their perceptions. For SaskEnergy to be successful, there needs to be a renewed corporate focus on environmental stewardship. This corporate focus includes integrating environmental considerations into strategic planning, decision making and operating processes as well as stakeholder engagement.

One new initiative is a new pilot project, called the "Regina Service Centre Energy Efficiency Pilot". It is a comprehensive energy monitoring, reporting, and advising service that will quantify utility savings, and identify and promote reductions in the facility's carbon footprint. The complexity of energy demand and the potential for high-energy consumption make this an ideal facility for active monitoring and subsequent optimization of building performance. SaskEnergy will be able to promote this efficiency initiative through dashboard capabilities in an employee-facing display, high traffic location of the facility. The dashboard will highlight the energy and carbon footprint savings and it can be used to encourage occupants to participate in energy conservation activities to increase the success of this initiative.

# **Regulations and Collaboration**

Emissions regulations are rapidly evolving and becoming increasingly stringent for the natural gas industry. SaskEnergy must comply with various provincial and federal regulations that are focused on reducing air pollution and climate change impacts by limiting operational releases. These regulations include:

- Multi-Sector Air Pollutant Regulations;
- National Pollutant Release Inventory Regulations;
- Greenhouse Gas Reporting Program Regulations;
- Oil and Gas Methane Regulations; and
- Carbon Pricing: Carbon Levy and Output-Based Pricing System Regulations.

An Emissions Data Management System has been implemented to allow for more robust and seamless management of emissions data. The system supports easier green house gas inventory verification, improves the efficiency and effectiveness of quality control activities, and will facilitate compliance with new regulatory data management requirements.

SaskEnergy has committed to achieving a 35% reduction in greenhouse gas emissions from operations by 2030, compared to 2019 levels. To achieve this goal, business units across the company are collaborating to identify and implement emissions reduction technologies and activities. Over the next several years, there will be significant capital and human resource effort directed towards this important initiative.

SaskEnergy is a founding partner of the Natural Gas Innovation Fund (NGIF). It was created by the CGA to support the funding of cleantech innovation in the natural gas value chain. It seeks to fill a technology development gap in the sector and invest in innovation enabling natural gas solutions for current and emerging challenges facing Canada's energy system. Through this partnership SaskEnergy supports the development of new technology that will help to reduce emissions in the natural gas industry.

SaskEnergy is developing a renewable electricity strategy focused on the addition of solar panels at some of its regulator stations and compressor sites. Regina's TBS #1 has been identified as a first location to install solar panels and preliminary work is underway.

During 2022-23, SaskEnergy is hosting demonstrations of two innovative technologies. The first is a residential natural gas heat pump and the second is a micro combined heat and power (mCHP) system for small commercial buildings. SaskEnergy supported both of these Canadian multi-unit demonstrations through its partnership with the Natural Gas Innovation Fund.

The natural gas heat pump is developed by ThermoLift, a manufacturer based out of Stony Brook, NY. This thermal compression heat pump uses natural gas as an energy source and combines heating, cooling and domestic hot water delivery, to function as a furnace, water heater and air conditioner in one single unit. The heat pump utilizes an innovative cycle that reduces energy consumption and costs by approximately 30 to 50 per cent. Unlike electric heat pumps that can have significantly lower efficiency in temperatures below zero degrees Celsius, testing has shown the natural gas heat pump can operate efficiently even when outdoor temperatures have dipped to -25 degrees Celsius. Installation is planned for summer 2022.

The mCHP system is developed by Enviro Power, a Connecticut based company, and is produced, serviced and warrantied by Burnham Holdings, an established boiler manufacturer. The mCHP system is a high efficiency boiler that generates both heat and onsite power, providing cost and emissions savings. Installation is planned for late summer 2022.

Saskatchewan's first net zero ready multi-unit residential building (MURB) is heated with a hybrid gas-electric heating system that combines natural gas heating with electric air source heat pumps. SaskEnergy supported the installation of right-sized high efficiency natural gas furnaces and smart thermostats in each of the units. The National Affordable Housing Corporation's Willowview Heights MURB located in Saskatoon achieved the first Net Zero Ready label for a MURB in Canada. It is part of the Canadian Home Builders' Association Net Zero Home Labelling program, which has a goal to understand the best way to make MURBS net zero, affordable and marketable. Energy monitoring on each unit will give renters, owners, and builders real-time data to lower their energy use and emissions. Energy use will also be shared with CHBA and Natural Resources Canada for use in developing net zero standards for MURBs.

# **Energy Efficiency Programs**

SaskEnergy is committed to its environmental stewardship in its operations and strives to anticipate Saskatchewan's future energy requirements while reducing its environmental impact. It supports its customers' efficiency initiatives through rebate programs to allow them to increase their energy efficiency. SaskEnergy provided more than \$1 million in support for Saskatchewan customers through the following three rebate programs during 2019-20 and \$1.7 million in 2020-21.



In 2019, SaskEnergy launched the Residential Equipment Replacement Rebate Program. The cash rebate is provided to customers installing new, high efficiency space and/or water heating appliances in their homes. By upgrading older equipment, customers can improve the safety, efficiency and

quality of their home heating systems while reducing energy use and costs as well as greenhouse gas emissions which benefits the environment. Customer participation has more than doubled year over year with customers receiving rebates for over 8,000 appliances since the program launched.

In addition to the residential rebate program, a Commercial Space & Water Rebate and a Commercial Boiler Rebate are available for commercial customers. These rebates are available to commercial businesses to install energy efficient natural gas space and/or water heating systems and provide a rebate based on the incremental price of a natural gas condensing boiler over a standard-efficiency boiler. They encourage commercial property owners to choose the most efficient equipment available to maximize their energy and costs savings, as well as reduce emissions into the environment.

For upgrading a residential furnace from 65% to 97% in energy efficiency, the bill savings would be \$414/year based on current rates, but the carbon levy avoidance escalates from \$163/year (current) to \$692/year by 2030. Similarly for a commercial boiler, using a small apartment building as an example, annual bill savings could be \$4,000/year which carbon levy avoidance escalates from \$1,780/year to \$7,564/year by 2030.

SaskEnergy's award winning Tune-Up Assistance Program (TAP) provides income qualified homeowners with free furnace maintenance which includes a SaskEnergy

Network Home Heating Tune-Up, two furnace filters, a carbon monoxide alarm, and up to \$100 in repairs if required. TAP provides customers with service, education, and peace of mind. This program ensures customers' home heating equipment is operating efficiently, effectively, and safely. Since its inception in 2017, TAP has helped



approximately 2,300 low-income qualified homeowners in 48 communities throughout Saskatchewan. The TAP program was recognized with the 2019 Canadian Gas Association's Michael Mulcahy Award for Excellence and Innovation in Customer Care and Service.

SaskEnergy remains committed to reducing its carbon footprint within Saskatchewan. This commitment includes increasing budgets to help customers reduce their emissions through energy efficiency and by committing funds to initiatives that are expected to contribute to a greener gas stream. It will also continue to reduce emissions from internal operations through its environmental and sustainability programs.

SaskEnergy's commitment to expand energy efficiency programs will result in new offerings in 2022-23. First will be an updated offering for commercial customers. An evaluation of the commercial programs is leading into a program update. The update is being done with intention to expand the reach of the program to commercial market segments that have been identified as under-served.

In addition to the program update for commercial customers, other customer segmentations are being prioritized to deliver programs which are cost effectively generating GHG reductions and being inclusive of SaskEnergy's diverse customer base.

Expanding the energy efficiency portfolio delivers benefits to Saskatchewan customers such as bill savings, carbon levy avoidance, emissions reductions, non-energy benefits, and new jobs. The non-energy benefits include reducing the risk of carbon monoxide safety events, better occupant comfort and more usable space, while upgrading building and ventilation systems lead to healthier indoor environments.

#### **Canadian Gas Association Award for Environmental Stewardship**

SaskEnergy received three Canadian Gas Association (CGA) Environmental Stewardship awards for 2021, one for Operating Practices and two for Innovation in Emissions Reduction. The three projects recognized SaskEnergy's commitment to environmental sustainability and reducing greenhouse gas emissions.

#### Environmental Screening Tool

SaskEnergy's Environmental Screening Tool, which launched in July 2020, has revolutionized the way the Environment & Sustainability team works to protect the environment and cultural resources, and has streamlined the project planning process.

Through a desktop application, the Environmental Screening Tool allows teams throughout SaskEnergy to pre-screen projects for environmental, heritage and geotechnical concerns. Some of the environmental and land management factors the software can screen for include natural vegetation, rare and endangered species, protected lands, and First Nations communities.

#### Vented Gas Capture on Transmission Compressor Engines

The technology, known as SlipStream, captures vented natural gas and redirects it into the engine air intake for use as a supplemental fuel source. As a result, methane

that would otherwise be emitted into the atmosphere is now reused, which reduces greenhouse gas emissions while also saving money.

SaskEnergy trialed the technology on two mobile compressors at the Success Compressor Station in 2016. The trial reduced greenhouse gas emissions from the equipment by about 75 per cent, providing an estimated lifetime fuel savings of approximately \$65,540 per compressor. Since then, SlipStream units have been installed on the majority of SaskEnergy operating compressors and installations will continue until the entire fleet is optimized with this technology.

Demand Side Management Portfolio Expansion (Customer Efficiency Programs)

SaskEnergy's customer energy efficiency programs help customers reduce their greenhouse gas emissions and energy costs. As a result of the expanded energy efficiency rebate programs, customer emissions savings in 2020-21 were five times higher than those in 2018-19.

#### 1.6 DELIVERING SAFE AND RELIABLE SERVICE



SaskEnergy's system integrity program is built off an enterprise risk assessment that focuses on the risks faced by the \$1.9 billion of SaskEnergy facilities that deliver natural gas to industry, businesses, and residences throughout Saskatchewan.

The integrity program was developed in compliance with code and regulatory requirements, industry best

practice and an assessment of risk particular to the SaskEnergy system. SaskEnergy aligns itself with industry best practices through participation within the Canadian Gas Association which collaborates with the majority of natural gas companies in Canada, to continually improve risk assessment and mitigation programs and activities. Other industry groups like the Pipeline Research Council International and Canadian Common Ground Alliance are utilized to leverage research money to solve specific issues and assist with the continual improvement of SaskEnergy's integrity and maintenance programs. Based on this alignment, SaskEnergy has developed specific risk identification protocol and is applying this so that all assets owned and operated by SaskEnergy have a consistent asset management strategy that supports the safe and reliable design, construction, and operation of the natural gas system in Saskatchewan.

# **Leak Survey**

The Leak Survey Program is an essential component of SaskEnergy's Corporate

Integrity Management programming. This program identifies, assesses, and reports on fugitive leaks and potentially hazardous conditions that exist on SaskEnergy's system. Each year, approximately one quarter of SaskEnergy's distribution and transmission natural gas systems are surveyed. This amounts to roughly 20,000 kilometres of distribution gas mains,



100,000 distribution services, and 4,000 kilometres of high-pressure pipelines. These surveys are completed in accordance with safety and regulatory requirements. The majority of the Leak Survey Program is completed by means of external contractors, with internal resources completing surveys on all infrastructure within company station boundaries and in any other areas inaccessible to external contractors.

In 2020, SaskEnergy fully incorporated new vehicle-mounted leak survey technologies replacing traditional "over the line" leak survey methods comprised mainly of walking surveys. These new technologies are significantly more sensitive, can detect leaks from a distance, and can cover a greater area in a shorter timespan compared to traditional methods.

With a 1000x greater sensitivity than that of traditional instruments, these vehicle-mounted survey technologies have the ability to detect fugitive emissions at an effective distance of 30 metres in urban areas and up to 1 kilometre in less dense rural areas. In many areas where this unit can drive down the back alley and front street the effective coverage area includes the meterset, service line, and service tee of each individual service, therefore mitigating the need to enter private property by means of a walking surveyor. This technology has significantly increased the efficiency of the survey and increased the safety for all surveyors by reducing the potential of on-site customer conflicts.

When the mobile unit cannot achieve one hundred percent coverage due to neighborhood geometry, lack of access road(s), and/or pipeline placement (i.e., open greenspaces), walking surveyors are dispatched to perform a traditional "over the pipe centerline" survey.



Due to its increased sensitivity, this technology has enabled the program to detect more leaks at lower concentrations, typically before they are detectable by the public and well in advance of becoming hazardous. In 2021 between both survey types, planned and supplemental, the Leak Survey

Program achieved a high leak survey versus customer found leak ratio at 77%, with the supplemental survey averaging 90% by itself. This success can be attributed to the continued use of these vehicle-mounted technologies, enabling a more efficient survey resulting in a higher survey cycle frequency in known high leak rate areas, and an overall better utilization of full range of capabilities. Early detection of leaks has inturn allowed SaskEnergy to take a risk-based approach to prioritize repairs, maximize operational resources, and minimize safety risks.

In addition to surveying below ground infrastructure, right-of-ways continue to be inspected as part of the program to report on deficiencies and potentially hazardous conditions that may exist for scheduled repair or remediation, such as but not limited to encroachments, missing/damaged signage, and inactive service risers.

Environmental sustainability has become a major focus for many industries resulting

in new laws and the strengthening of established regulatory requirements; challenging companies to rethink their strategies on how to address fugitive emissions. The Leak Survey Program is becoming a major part of SaskEnergy's fugitive emission monitoring and reduction strategy. Improvements to emission monitoring practices for



SaskEnergy/TransGas facilities, such as at pressure regulating stations and compressor stations, have recently been implemented. Early detection and appropriate response protocols can greatly reduce overall fugitive emissions helping SaskEnergy achieve its environmental targets.

#### **Station Imagery**

SaskEnergy has been using drones since 2013 to photograph high-resolution images of its facilities. This technology allows SaskEnergy to update the plot plan drawings for the majority of the regulator stations in the system in a much shorter time frame. This provides Operations, Engineering and System Integrity with more accurate information regarding the location and type of facilities at each station, which will improve overall safety and reliability of these facilities.



SaskEnergy's Station Imagery Project builds off the past use of drones to capture images of compressor stations. It provides up-to-date aerial snapshots of town border stations. As part of this project, new technology is helping to develop a 360-degree eye-level view of facilities, inside and out. While the photos do not provide a conventional as-built

(a document that contains information such as a two-dimensional layout of the facilities) there is sufficient detail that all critical facilities can be clearly identified. This reduces the number of field trips to determine this information and provides all users with accurate and consistent data in a timely manner.

A station imagery crew can now capture all information in about one or two hours and can document up to three sites in a day. The conventional method of measuring and sketching could take up to a day with more time in the office to turn it into a useable product. The high-resolution images are also compatible with the Geographic Information System (GIS).

# **Major Growth Infrastructure**

The Major Growth Infrastructure (MGI) program assesses the infrastructure and capital requirements to ensure the distribution and transmission systems have adequate delivery capacity to meet load growth and reliability. The focus of the program is on growing communities and/or addressing areas of high risk by monitoring and evolving to meet changing requirements.







The City of Regina is currently planning for long term development. Their Official Community Plan (OCP) includes projected growth through intensification (higher population density in existing urban areas) or expansion (growth into new urban areas). As the increase in residential, commercial, and small industrial demand on the West, Northwest and East areas of the city continue, additional infrastructure is required to increase available capacity and serve new customers in a cost effective and timely manner.

The City of Moose Jaw is planning an industrial subdivision to be developed to the Southeast of Moose Jaw which would require additional capacity. A second TBS is currently being planned to serve this industrial subdivision and will provide a secondary source of supply to the City of Moose Jaw. A secondary source of supply will greatly improve reliability and reduce operational risk as growth expands in the city.

The City of Saskatoon is growing and has several neighbourhoods under development with future growth areas identified within City sector plans. Current development and future expansion are primarily located in the East and Northeast areas of the city. The current distribution infrastructure has limited capacity to support continued expansion in these areas resulting in increased reliability risk. New distribution facilities and pipelines would enhance the hydraulic capacity of the system, optimize system operation, improve system reliability, and deliver increased capacity to meet projected customer demand.

SaskEnergy perpetually evaluates its planning procedures, both capital and operational, to ensure the plans align with customer trends. Strategic projects are developed which identify cost-effective distribution infrastructure located to support current and long-term development and system reliability.

# **Emergency Preparedness**

SaskEnergy takes its responsibility as a natural gas provider very seriously. Through SaskEnergy's Corporate Emergency Management Program, it develops, trains, and practices for emergencies to minimize their effects to customers, employees, and the communities it serves. Some of the key actions include:

- Emergency response training;
- Incident Command training, table-top exercises and full-scale mock exercises;
- Business Continuity Planning;
- Hazard Identification and Risk Assessment:
- Incident investigations for continuous improvement;
- Natural Gas Awareness Training for First Responders throughout Saskatchewan;
   and
- Cooperative and coordinated emergency response efforts with other utilities, ministries, and agencies in Saskatchewan.

#### 1.7 DEPRECIATION EXPENSE

Depreciation expense for the application period is estimated at \$55.2 million, \$56.9 million, and \$59.3 million, respectively, as detailed in Schedule 1.3. This expense reflects the depreciation associated with plant and equipment and corporate infrastructure required to:

- connect new customers;
- undertake economically justified and safety-related system improvements;
- support safe, reliable and efficient operations; and
- manage the information, work management and customer administration.

Depreciation expense continues to trend higher as capital expenditures for both new customer connections and investment in system integrity and infrastructure renewal programs have accelerated. Increased attention to natural gas related incidents has led to an industry-wide change in the approach natural gas utilities and pipelines must take regarding public safety and the integrity of their systems. Higher regulatory and industry standards and a more comprehensive risk-based management system requires annual capital investments in maintaining and replacing existing infrastructure.

SaskEnergy has an external Depreciation Study performed every few years. The last depreciation study was completed in 2018 on assets as of March 31, 2017.

#### 1.8 TAX EXPENSE

Taxes consist of Corporate Capital Tax and property taxes as detailed in Schedule 1.4. Corporate Capital Tax is paid to the Province of Saskatchewan and is calculated at 0.6% of capital invested in excess of \$10 million. The expense is calculated in accordance with the formula, deductions and allowances prescribed by *The Saskatchewan Corporation Capital Tax Act*.

As a Crown Corporation, SaskEnergy is exempt from property taxes on its infrastructure within Saskatchewan. Historically, in instances where SaskEnergy purchased existing infrastructure that had a previous property tax obligation, SaskEnergy will carry forward that tax obligation by means of a grant-in-lieu of taxes. However, in its 2018-19 Provincial Budget, government expanded the grants-in-lieu program, and it now includes all owned, non-linear real estate assets. The payment of grants-in-lieu to municipalities maintains the property tax revenue despite a transfer of ownership to a Crown Corporation.

The forecast tax expense for the application period is \$8.3 million, \$8.7 million, and \$9.0 million, respectively. Corporate Capital Tax has increased from previous years as the total debt has increased, mainly driven by ongoing capital investment to connect new customers, to improve and modernize SaskEnergy's system and to enhance the customer experience.

As part of the federal government's carbon pricing system, a 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.

#### 1.9 INTEREST EXPENSE

SaskEnergy's cost for financing its natural gas distribution infrastructure, equipment and operations is estimated at \$30.0 million, \$32.2 million, and \$33.7 million, respectively, for the application period as detailed in Schedule 1.5. These expenses consist primarily of financing costs for short and long-term debt, off-set by sinking fund earnings, capitalized interest and interest costs allocated to the cost of gas. SaskEnergy conducts its borrowing activity through the Province of Saskatchewan and, as a result, benefits from the favourable borrowing rates of the Province. These rates are lower than what SaskEnergy would achieve if it was required to go to the market and borrow in its own right.

SaskEnergy's cash inflows are highly cyclical, but they follow a similar pattern every year. Revenues peak in the winter months and decline in the warmer months and 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.

## 1.10 NET INCOME

The net income estimates of \$9.7 million, \$20.0 million, and \$30.1 million, respectively, for the application period as detailed in Schedule 1.6, reflects the level of earnings that will provide SaskEnergy with a return on investment as measured by the rate of return on equity. The rate of return on equity is targeted at 2.3%, 4.7%, and 6.9%, respectively, for the application period. This does differ slightly from SaskEnergy's 2022-23 Financial Plan. This is due to different implementation dates that were assumed in the Financial Plan. SaskEnergy notes that this ROE is lower than the long-term regulated ROE target of 8.3% and strives to reduce its revenue shortfall by finding internal efficiencies and re-evaluating spending and plans to return to its long-term ROE in the 2025-26 year. This level of return is comparable to industry average as evidenced in the recent rate of return levels allowed by the various regulatory authorities that provide regulatory oversight for natural gas utilities operating in other jurisdictions in Canada.

SaskEnergy did not pursue a rate increase in 2020 or 2021 in recognition of the financial challenges customers were experiencing. The recommended rate increase will ensure the Corporation remains financially sustainable and has appropriate funds to invest in maintaining a safe and reliable system. SaskEnergy plans on returning to its long-term ROE of 8.3% in the 2025-26 year.

#### 1.11 OTHER REVENUE

Other Revenue is summarized on Schedule 1.7 and is forecast at \$30.5 million, \$31.2 million, and \$33.0 million, respectively, for the application period. Other Revenue consists of Distribution Tolls, Asset Optimization through commodity activities, Connect Fees, Service Alteration Fees, Late Payment Charges, Miscellaneous Revenue and Customer Financing.

The largest component of Other Revenue is Distribution Tolls. Large in-province natural gas users purchase their natural gas directly from a natural gas producer or gas retailer, and contract transportation service for this natural gas directly with TransGas. Although these are not SaskEnergy customers, most of these users 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. As part of its franchise, SaskEnergy provides this service and assesses a toll which is charged to TransGas. TransGas then recovers this toll from its customers through its rates. Distribution tolls are set based on recovering the cost of service on a 1:1 basis (revenue-to-cost ratio of 1) and for the application period are forecast at \$24.6 million, \$25.3 million, and \$27.1 million, respectively.

To ensure safe and reliable service, SaskEnergy must contract enough storage and transportation to ensure customers have natural gas throughout the winter months particularly on the coldest days of the year. Given the potential for extreme variation in temperatures in Saskatchewan, there are times during normal business operations that these contracts would not be fully utilized. SaskEnergy optimizes the utilization of its assets through its Asset Optimization activities by purchasing and selling natural gas to earn a margin. Net margins from Asset Optimization activities are based on forecast sales opportunities and are estimated at \$1.9 million in all three years. The actual net margin from Asset Optimization varies from year to year and is contingent on prevailing market conditions. Asset Optimization opportunities have decreased in the last couple of years.

All these forecasted revenues are recognized when determining the revenue requirement and have the effect of lowering rates for SaskEnergy's delivery customers.

In March 2020, in response to the global pandemic, SaskEnergy implemented the Government of Saskatchewan's Crown Utility Interest Waiver Program. Under this program, any late payment charges a customer accrued were waived. For customers with existing arrears, collections activities (including disconnections for non-payment) were temporarily put on hold. This resulted in additional time to actively manage customer repayments. The program ended in September 2020 and management continues to actively manage arrears and account collections.

## 1.12 RATE DESIGN PRINCIPLES AND OBJECTIVES

Rate design should recover all costs fairly, both between the various rate classes as well as within each rate class. This can represent a challenge since various rate design principles can conflict with one another. The following rate design principles underpin SaskEnergy's delivery service rate recommendation. An external cost of service study is currently underway.

### "Postage Stamp" Pricing Philosophy

A postage stamp rate charges the same amount regardless of the geographical location or distance involved for any given customer found within each rate class. The best example is Canada Post's rate to mail a letter. Whether the letter is mailed to an address across the street or across the country, the sender's cost to mail the letter is the same. Thus, postage stamp rates do not differentiate price based on distance or location within a given franchise area.

Postage stamp rates recognize that cost differences due to location or distance do exist. However, these cost differences are averaged for the pricing of the service. Consequently, within each rate class, customers have the same rate irrespective of their geographical location.

Regulators across North America have long approved the use of postage stamp rates in rate setting for natural gas services. In Canada, regulators in each jurisdiction have approved postage stamp rates for the various classes of service for each of the major natural gas distribution utilities and their respective franchise areas.

SaskEnergy rates have been postage stamp rates since 1982. SaskEnergy (and the industry in general) continues to believe postage stamp rates represent one of the most fundamental and fairest ways to charge for natural gas distribution services. Postage stamp rates must be supported by a legislated or otherwise granted monopoly so the low cost to serve customers cannot by-pass the utility.

#### **Fixed Costs versus Volumetric Rates**

One challenge for the utility and its rate design is that over 98% of the cost of delivery service consists of fixed costs. Consequently, even the volumetric component of the rate – the Delivery Charge – recovers fixed costs related to the distribution system such as the contractual transportation requirements for peak day and storage capacity. However, this is typical of the rate design faced by all major Canadian natural gas distribution utilities.

### **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. For SaskEnergy to maintain financial integrity, it requires an additional \$16.8 million in revenue in year one, \$12.9 million in year two, and \$13.6 million year three, over the application period. Even though it maintains financial integrity, this results in a ROE less than target.

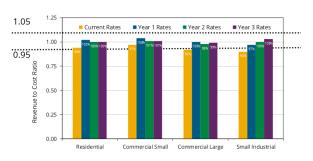
#### **Fairness between Rate Classes**

Rate adjustments should be fair and equitable to all customers. Revenue-to-cost ratios provide a measure of the fairness of rates between various classes. The premise is that a fair rate should recover a dollar of revenue for each dollar of cost

incurred in providing service. Thus, the ratio of revenue compared to the cost of providing service would be 1.00.

The adjacent chart summarizes how well each of the rate classes recover the allocated cost of delivery service as measured by the revenue to cost ratio, both at current rates and at the recommended rates. If approved, the

#### **REVENUE-TO-COST RATIOS**



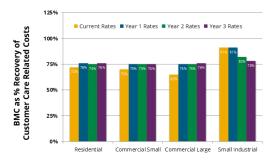
recommendation would result in a revenue-to-cost ratio in each class within the stated objective of 0.95 to 1.05.

SaskEnergy's long-term objective is to have rates that achieve a revenue-to-cost ratio between 0.95 and 1.05, which is the industry acceptable range. Ratios outside this range could be an indication that some cross-subsidization exists between rate classes.

#### **Fairness within Rate Classes**

Ideally, for each rate class, the BMC and the Delivery Charge should be set as close as possible to their corresponding average unit costs. This ensures there is little, if any, cross-subsidization between smaller users versus larger users within the same rate class. This issue also affects the utility's ability to achieve its targeted earnings.

#### **BASIC MONTHLY CHARGES**



Proper customer care related cost recovery helps to mitigate the impact of weather variations upon earnings.

However, most utilities have a BMC that is too low and a Delivery Charge that is too high. Customers tend to oppose fixed charges, particularly in months of low or no usage.

SaskEnergy has a long-term objective to recover at least 75% of the fixed customer care related costs through its BMC. The chart summarizes the percent of customer care related costs SaskEnergy is forecast to recover through the BMC in each customer class. This rate application will meet SaskEnergy's objective of recovering at least 75% through BMC.

#### Gradualism

This principle allows rate realignments to occur more gradually, over several rate applications as opposed to all at once. If all rate realignments were introduced at once, particularly when seeking a general rate increase, some customers could experience a significant increase while other customers may experience a decrease. SaskEnergy is applying for a general rate increase of 8% in year one, 5% in year two and 5% in year three in this application. Residential customer's total overall bill impacts will be 5.0% in year one, 2.9% in year two and 3.0% in year three.

#### 1.13 RATE CLASSES

SaskEnergy currently defines its rate classes on an end-use basis. Rate classes consist of Residential, Commercial Small, Commercial Large and Small Industrial. The Residential customer class includes both rural and urban residences.

Commercial Small includes most main street businesses including restaurants, as well as facilities such as curling rinks, smaller elementary schools and hospitals, and commercial agricultural operators. These customers consume up to and including 100,000 m³ of natural gas annually. Commercial Large customers consume between 100,001 and 660,000 m³ of natural gas annually. These are larger hotels, high schools, and hospitals; larger municipal offices or warehouse buildings; larger office buildings, and small manufacturers.

Small Industrial customers represent a small group of customers that use between 660,000 m<sup>3</sup> and 970,000 m<sup>3</sup> of natural gas annually and prefer the convenience of dealing with SaskEnergy. Most industrial gas users are not SaskEnergy customers but rather contract for transportation service directly with TransGas and buy their natural gas from a supplier other than SaskEnergy. Currently there are 26 customers in this

rate class. Because there are so few customers in this rate class, small changes in the number of customers can impact the average profile and cost of service.

In November 2021, the upper limit of the Small Industrial class was changed to improve fairness between the customer base and prevent customers from switching between SaskEnergy and TransGas rate classes. This will allow for more accurate forecasting for SaskEnergy. Existing customers (prior to November 1, 2021) are eligible to maintain their service using the previous upper limit of 1,320,000 m<sup>3</sup>. If an existing customer cancels service, or changes rate classes, the old definition will no longer be applied.

#### 1.14RECOMMENDED DELIVERY RATES

For the Residential, Commercial Small, and Commercial Large rate classes, an increase to the Basic Monthly Charge and volumetric Delivery Charge is being recommended in all three years. The Small Industrial class recommends an increase to the volumetric Delivery Charge in all three years.

The following table identifies the rate changes in each of the three years.

Pata Class	Curren	t Rates	Effe	nded Rates ctive 1, 2022	Effe	nded Rates ctive , 2023	Effe	nded Rates ctive , 2024
Rate Class	Basic Monthly	Delivery Charge \$/m³	Basic Monthly	Delivery Charge \$/m³	Basic Monthly	Delivery Charge \$/m³	Basic Monthly	Delivery Charge \$/m³
Residential	Charge \$ \$23.20	\$0.0993	Charge \$ \$24.50	\$0.1100	Charge \$ \$25.80	\$0.1154	Charge \$ \$27.60	\$0.1189
Commercial Small	\$38.50	\$0.0811	\$41.50	\$0.0874	\$44.50	\$0.0905	\$47.50	\$0.0940
Commercial Large	\$137.40	\$0.0684	\$159.50	\$0.0732	\$174.50	\$0.0764	\$184.50	\$0.0802
Small Industrial	\$216.00		\$216.00		\$216.00		\$216.00	
First 40,000 m <sup>3</sup> /month		\$0.0442		\$0.0482		\$0.0519		\$0.0550
Balance		\$0.0381		\$0.0421		\$0.0458		\$0.0489

A detailed delivery service rate schedule can be found in Schedule 1.8.

The recommended rate increases would result in an additional \$43.3 million in revenue over the three-year period for SaskEnergy. The increased revenue from the Delivery Charge is weather dependent and may be reduced by periods of warm weather and/or by further gains in customer's energy efficiency.

Schedule 1.9 summarizes, on a monthly basis, the revenues by rate class for the current and the recommended rates.

#### 1.15 DELIVERY SERVICE BILL IMPACT

The customer bill impact below includes the impact of only the delivery service rate increase. The delivery service rate change will result in an increase of \$3.57 per month, \$2.43 per month and \$2.53 per month, respectively, for Residential customers. See Section 4 for the full bill impact.

If approved, an average Residential customer would receive an annual average bill increase of 5.0%, 2.9% and 3.0%, respectively. Commercial Small customers would receive an average annual bill increase of 3.7%, 2.0%, and 2.1%, respectively while Commercial Large customers would receive an average annual bill increase of 3.1%, 1.7%, and 1.8%, respectively. The Small Industrial customers would have an average bill increase of 2.3%, 1.7%, and 1.4%, respectively.

	A	Effective ugust 1, 20	22	J	Effective une 1, 2023	3	Effective June 1, 2024			
Rate Class	Delivery Service % Increase	Average Monthly Increase	Annual Bill Impact % Increase	Delivery Service % Increase	Average Monthly Increase	Annual Bill Impact % Increase	Delivery Service % Increase	Average Monthly Increase	Annual Bill Impact % Increase	
Residential	8.1%	\$3.57	5.0%	5.1%	\$2.43	2.9%	5.1%	\$2.53	3.0%	
Commercial Small	7.8%	\$9.71	3.7%	4.7%	\$6.27	2.0%	4.8%	\$6.67	2.1%	
Commercial Large	8.2%	\$86.08	3.1%	5.1%	\$57.56	1.7%	5.1%	\$60.43	1.8%	
Small Industrial	8.9%	\$196.83	2.3%	7.6%	\$182.06	1.7%	5.9%	\$152.54	1.4%	
Average	8.0%		4.5%	5.0%		2.6%	5.0%		2.6%	

All Bill Impacts shown are based on average customers and will vary depending on individual customer usage.

#### 2. COMMODITY RATE APPLICATION DETAILS

When SaskEnergy's bundled service was divided into Gas Delivery Service and Gas Supply Service for all customers in September of 1998, SaskEnergy chose a common reference point for commodity pricing purposes. The common reference point is the TransGas Energy Pool (TEP), a notional point that all buyers and sellers of gas in Saskatchewan can access.

The commodity rate includes all costs of obtaining gas at TEP. In addition to the "raw" cost of the commodity, the commodity rate includes the effect of natural gas price risk management transactions, administrative costs of acquiring the gas, transporting gas to TEP and financing of gas inventory in storage. As SaskEnergy is now purchasing a larger proportion of natural gas from Alberta, the cost of transportation has a larger impact on the commodity rate.

SaskEnergy designs its commodity rate to recover the cost of natural gas that SaskEnergy purchases for its customers, plus any gas supply related expenses. This application is designed to:

- recover the forecast cost of gas to be sold on a one-year forward basis; and
- clear any balance projected in the GCVA at the end of October 2023.

#### 2.1 FORECAST COST OF GAS SOLD

The commodity rate is intended to recover the Cost of Gas Sold over the application period. The Cost of Gas Sold is the expected cost per unit at the time the sale occurs.

The components of Cost of Gas Sold are:

- Cost of Purchase Gas costs to buy natural gas on the open market, purchased in units of energy called gigajoules (GJs). The amount to be purchased is based on expected consumption by SaskEnergy customers, given normal weather.
- Transportation Costs costs to move natural gas from the producing gas fields or outside of Saskatchewan to TEP.
- Natural Gas from Storage gas is purchased and injected into storage during the summer and subsequently withdrawn and sold during the winter months. Since this gas is purchased and then stored, the price is fixed prior to the sale of gas. The gas is sold at cost to customers, regardless of the market price of winter gas.
- Interest and Operating Expenses consists of direct operating costs, overheads, capital related costs, bad debt expense and gas in storage carrying costs related to the acquisition of gas supply.
- Cost of Internal Usage represents the natural gas consumed by SaskEnergy within the gas distribution system to provide delivery service. The costs are included in the Cost of Gas Sold calculation and subsequently allocated from commodity to delivery operating expenses and recovered through delivery rates.

The cost of gas sold for the one-year application period November 1, 2022 to October 31, 2023 is forecast to be \$191.7 million. Schedule 2.0 illustrates the key cost components which are discussed in sequence as follows.

#### **Cost of Purchase Gas**

The cost of purchase gas is forecast to be \$179.6 million for 54.7 million GJs (see lines 6 and 15, Schedule 2.0). This represents SaskEnergy's gas purchase contracts including the results from the natural gas price risk management program.

SaskEnergy has a commodity price risk management strategy (hedging) that is designed to reduce price volatility, particularly in the winter when customers consume the most natural gas. SaskEnergy utilizes both fixed price physical natural gas purchases as well as financial transactions to manage the price of natural gas.

Financial transactions are used to manage price indexed gas purchase contracts. A portion of SaskEnergy's gas purchase contracts are price indexed contracts whereby the price paid by SaskEnergy fluctuates with the market price. The prices are established monthly and therefore subject to change, up or down, on a monthly basis.

At May 18, 2022, the following natural gas purchases were hedged:

- 70% of the summer period April 2022 to October 2022;
- 95% of the winter period November 2022 to March 2023; and
- 70% of the summer period April 2023 to October 2023.

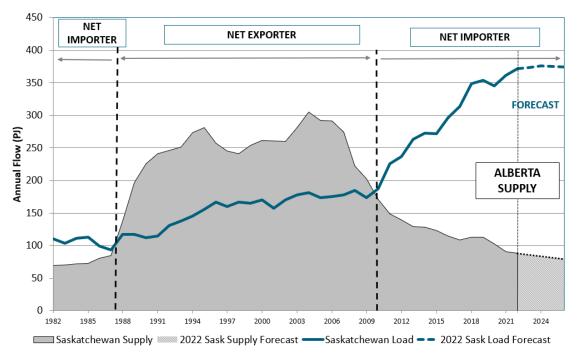
Overall, SaskEnergy has 80% of future natural gas purchases hedged over the application period. The unhedged purchases remain subject to change in prices, up or down, on a monthly basis.

The cost of purchase gas, for rate-setting purposes, is developed using current market information. Detailed per unit calculations can be found in Schedule 2.1.

### **Transportation Costs**

For the period of November 1, 2022 to October 31, 2023, SaskEnergy is forecasting to purchase approximately 84% of its natural gas supply from outside of the province. The majority of the supply from outside of the province comes from Alberta.

# Saskatchewan Gas Supply CHANGE IN SASK SUPPLY & DEMAND



To ensure it can deliver the Alberta natural gas purchases to TEP, SaskEnergy contracts for firm transportation service from Alberta to TEP with TransGas Limited (TransGas), a wholly owned subsidiary of SaskEnergy. This service will cost approximately \$29.6 million over the one-year application period. This amount can be seen on line 5, Schedule 2.0.

### **Natural Gas from Storage**

Natural gas is injected into storage during the months of April to October and withdrawn during the winter months of November to March.

Natural gas in storage is valued at the weighted average cost of gas during the injection period of April to October. These costs include gas purchase costs (including the impact of gas price risk management) and all costs of transportation to storage. At the end of the summer period, the value of gas injected in storage will be fixed. When it is subsequently withdrawn and sold to customers, it is priced at cost, not at the current market price.

At October 31, 2022, the start of winter, 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. Details of the gas in storage can be found in Schedule 2.2.

## **Interest and Operating Expenses**

SaskEnergy includes in its commodity rate direct operating costs, capital related costs, bad debt expenses and inventory carrying costs, as they relate to gas supply acquisition.

Included is \$2.2 million in interest and operating costs, as summarized in Schedule 2.0, lines 8 through 11.

Inventory carrying costs relate to gas in storage and are calculated using SaskEnergy's short-term borrowing rate applied to the average monthly balance of storage inventories. The forecasted borrowing rate ranges from 0.53% to 1.03%.

Lastly, late payment charge 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.

### **Cost of Internal Usage**

Natural gas is consumed within the operations of SaskEnergy's gas distribution system to provide the physical delivery service. This includes usage for:

- SaskEnergy's line and catalytic heaters located at town border stations, which ensure operation of facilities during low winter temperatures;
- SaskEnergy owned buildings; and
- Lost and Unaccounted for Gas.

Schedule 2.0, Line 12 summarizes the cost of internal usage gas by month. Costs are based on the average cost of gas sold including any associated cost of transportation.

The Cost of Internal Usage is shown as a reduction to the Cost of Gas Sold because the gas is consumed within the distribution system and allocated to the cost of delivery service. The cost of \$2.9 million is recovered through rates for delivery service. Even if SaskEnergy did not provide the gas supply service, SaskEnergy would have to purchase and transport this gas to provide delivery service.

#### 2.2 GAS COST VARIANCE ACCOUNT

The GCVA is the mechanism which tracks the difference between actual commodity sales revenue and actual natural gas costs. The net differences are accumulated for a period of time. The balance is then applied to a future commodity rate or the current year's commodity rate may be adjusted.

Where actual costs incurred exceed the amount recovered from commodity sales, customers owe the balance to SaskEnergy. Where actual costs incurred are less than the amount recovered from commodity sales, SaskEnergy owes the balance to customers.

Balances in the GCVA accrue interest at the Corporation's short-term borrowing rate and are accumulated along with the under or over recovered gas costs.

#### **Calculation of Gas Cost Variance Account**

The GCVA as at October 31, 2022 is projected to have a balance of \$34.3 million owing from customers to SaskEnergy. The forecasted GCVA balance owing is a result of an increased cost of gas, relative to commodity sales revenue.

The GCVA did not decrease as forecast in the last commodity rate application as natural gas prices increased higher than forecast and additional purchases were made to support a 7% colder than normal winter.

Schedule 3.0 details the components of the GCVA for the period November 1, 2021 to October 31, 2022.

#### 2.3 NATURAL GAS SUPPLY OVERVIEW

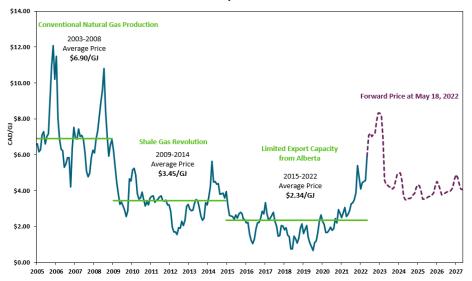
### **Natural Gas Market Update**

Natural gas prices have risen significantly since the last Commodity Rate Application resulting in an increased cost of natural gas. The last rate application used a two-year recovery period of November 1, 2021 to October 31, 2023 as opposed to the traditional one-year recovery period. This was to minimize the bill impact to customers, after customers had the lowest commodity rates in over 20 years. In this application it is recommended to return to the traditional one year recovery of the GCVA. Natural gas prices have entered a very volatile phase, and it is prudent to recover the GCVA as quickly as possible.

The 2021-22 winter in Saskatchewan was 7% colder than normal which resulted in SaskEnergy purchasing an additional 3.5 million gigajoules of gas to meet its customers' needs. Due to the increasingly stronger markets, this gas was purchased at a higher price than SaskEnergy's current commodity rate. Energy prices in Western Canada have continued to increase into the summer months. Currently, all summer months are trading higher than the previous winter months. Forward natural gas prices have rebounded and returned to levels not seen since 2014 and currently are over 85% higher than they were at the time of the last commodity rate application. This has resulted in SaskEnergy not recovering its GCVA as forecasted.

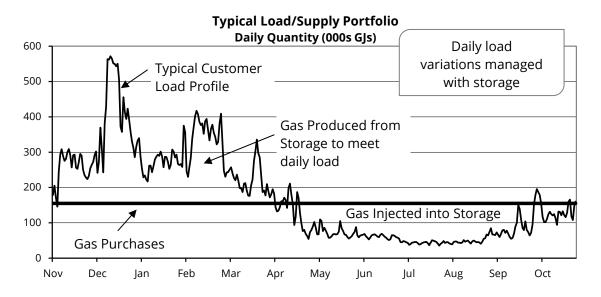
Growing liquified natural gas (LNG) export capacity and the uncertainty around Europe's energy shortfall combined with low storage levels and cold weather has kept upward pressure on North American natural gas prices. In December 2021, the US was the global leader in LNG exports for the first time ever, surpassing both Australia and Qatar. As countries continue to look for greener energy alternatives, many continue to utilize natural gas as a greener alternative to other fuel sources. Global conflicts such as the war in Ukraine has added additional turmoil to an energy market that was already struggling with its supply/demand balance following the impacts of COVID-19.

#### **AECO Monthly Index Historical Prices**



# **Gas Supply Portfolio**

SaskEnergy's gas delivery to its customers comes from two sources: storage inventory and gas purchase contracts with suppliers. Storage gives SaskEnergy the ability to meet the ever-changing demands of its customers caused by weather variability. Approximately 65% of the gas consumed on the coldest day of the year is sourced from storage. Storage gas also supplies approximately 45% of a normal winter's gas requirements and approximately 30% of annual requirements, based on normal weather.



SaskEnergy enters into various types of gas purchase contracts with producers/suppliers to ensure adequate supply. There are three key parameters that

dictate the structure of SaskEnergy's supply portfolio required for any contract year: annual gas requirements, winter gas requirements and maximum daily requirements.

### **Purchase Requirements**

SaskEnergy contracts to purchase a quantity of natural gas equal to the "most likely" annual load forecast, which is based on consumption that results from a weather normalization analysis of the last thirty years of weather data. Based on average weather, SaskEnergy forecasts to require approximately 56 million GJs of supply to meet customer requirements, fuel gas and internal usage over the application period.

SaskEnergy currently contracts for 200,000 GJ/day of firm transportation capacity from Alberta. This firm transportation from Alberta is required to ensure a secure supply of natural gas to meet customer requirements and to provide firm access to additional gas to meet the requirements of colder than normal winters.

Approximately 70% of the annual gas requirements must be supplied during the winter period to meet the gas requirements resulting from an average/normal winter. The use of storage enables SaskEnergy to satisfy this concentrated winter requirement while maintaining relatively uniform gas purchases over the entire year.

In the event of a colder than normal winter, SaskEnergy purchases additional short-term gas as required. SaskEnergy monitors storage levels and weather forecasts to ensure that additional winter gas is purchased in a timely manner. This additional winter gas, if required, would be sourced primarily from Alberta. SaskEnergy contracts for sufficient firm transportation capacity from Alberta to transport the additional gas required to meet the needs of a colder than normal winter. Approximately 70,000 GJ/day of the 200,000 GJ/day of firm transportation contracted from Alberta is reserved for potential incremental winter gas purchase requirements. This firm transportation gives SaskEnergy direct access to AECO, one of the most liquid gas hubs in North America and provides the security of supply required in serving heating load utility customers. Costs associated with purchasing incremental winter gas may impact the actual cost of gas and would be captured in the GCVA.

Should the winter weather be warmer than normal, SaskEnergy will typically exit the winter with higher-than-normal storage inventory levels, and then reduce its gas purchases accordingly over the summer period. Alternatively, if gas prices remained relatively high despite a mild winter in Saskatchewan, SaskEnergy may sell some of this excess gas during the winter period.

### **Maximum Daily Requirements**

In addition to managing the annual and winter requirements, consideration must be

given to managing the requirements on the coldest day. The design level for system delivery capacity used at SaskEnergy means there is only a 5% chance that the weather would be colder than the design level. The maximum daily requirement (peak day) is forecast to be 608,000 GJ/day. This peak day forecast includes the gas requirements of SaskEnergy's customers as well as the requirements of customers purchasing their gas from third party suppliers, referred to as Gas Retailers.

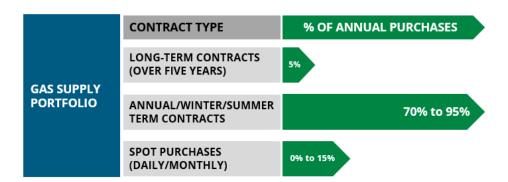
This peak day requirement is forecast to be satisfied with the gas supplies shown in the adjacent graphic.

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.

# Gas Purchase Portfolio

SaskEnergy's gas purchase contract portfolio must have the flexibility to adapt to both weather variability as well as customer migration to/from Gas Retailers. SaskEnergy's current gas supply portfolio for a normal year consists of:



The gas supply portfolio is designed to give the least cost mix while providing the required flexibility and security of supply. The long-term contracts provide the 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. The annual contracts allow SaskEnergy to adjust to customer migration to/from SaskEnergy's regulated commodity service. The seasonal and spot contracts allow

PEAK DAY REQUIREMENT

608,000 GJ/day

SPOT PURCHASES 29,000 GJ/day
GAS RETAILERS 35,000 GJ/day

ANNUAL BASE

**SUPPLY** 

154,000 GJ/day

**STORAGE** 

390,000 GJ/day

SaskEnergy to adjust to variations in load due to weather or to simply purchase additional summer gas to top up storage. The contracts of one-year or less in duration minimize costs, as potential premiums associated with long-term contracts are avoided.

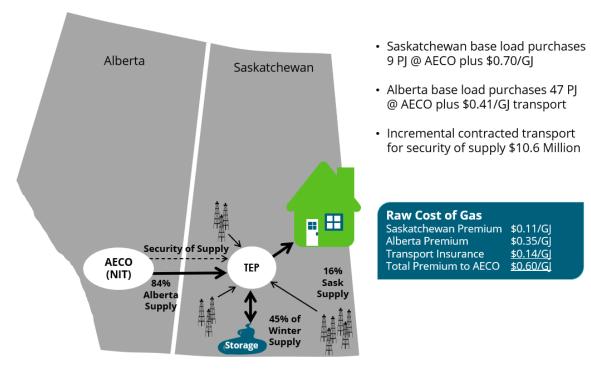
### **Gas Pricing**

SaskEnergy's physical purchase contracts have historically been priced referencing the AECO monthly index or AECO daily index. In the last few years SaskEnergy has also been entering into multi-year fixed price physical purchase contracts as part of the SaskEnergy's Gas Purchase and Price Risk Management Strategy. Therefore, SaskEnergy's gas purchase portfolio now consists of both AECO indexed gas purchases as well as fixed priced gas purchases. The credit risk associated with these gas purchases is managed under the Corporate Credit Risk Management Policy.

Index priced gas purchases in Saskatchewan contain a price differential or basis to the underlying AECO index. This basis represents the difference in the market price of gas in Saskatchewan relative to Alberta. This TEP/AECO basis differential fluctuates daily, monthly, and seasonally based on the supply/demand dynamics for the underlying term. Although the TEP/AECO price differential for 2022-23 will not be determined until negotiations with suppliers are completed later this fall, within this application SaskEnergy is forecasting this TEP/AECO basis to be approximately \$0.70/GJ for gas purchased in Saskatchewan.

During a normal/average weather year, approximately 16% of SaskEnergy's supply is forecast to be sourced from Saskatchewan over the application period, with the remaining 84% forecast to be sourced from Alberta. SaskEnergy must pay firm transportation charges to move the Alberta gas into Saskatchewan. These transportation costs are forecast to average \$0.41/GJ.

The following chart quantifies SaskEnergy's forecasted raw weighted average cost of natural gas purchases relative to AECO on a per GJ basis. The cost to transport the 84% of normal weather natural gas purchases from Alberta; plus the cost of the incremental firm transportation from Alberta to transport the incremental gas purchases required in the event of colder than normal winter weather; and the TEP/AECO basis differential on the 16% of natural gas purchases sourced from Saskatchewan; result in a weighted average cost of AECO plus \$0.60/GJ for all SaskEnergy's gas purchases associated with normal/average weather. This does not include the impact of SaskEnergy's price risk management program, or interest, operating and maintenance expenses associated with the managing of SaskEnergy's natural gas supply.



SaskEnergy forecasts to pay a weighted average price of AECO plus \$0.60/GJ for its gas purchase requirements associated with normal/average weather.

### **Gas Price Management**

SaskEnergy manages its cost of gas in accordance with its Board of Directors approved Commodity Price Risk Management Strategy. This strategy allows SaskEnergy to manage the long-term price of its gas purchases by using financial instruments and fixed price physical gas purchases at AECO. While this allows SaskEnergy to shield customers from volatile prices in the short-term, it cannot shield customers in the long-term from the market reality of rising and falling natural gas prices.

The two primary objectives that guide gas price risk management activities are:

- to provide customers with rate stability; and
- to offer rates that are comparable to the market price of natural gas and competitive with other Canadian utilities.

The Commodity Price Risk Management Strategy endeavors to provide a competitive cost of natural gas, while minimizing the risks associated with the volatility inherent in natural gas prices.

The notion of "rate stability" still has a strong resonance with SaskEnergy's customers. SaskEnergy conducted customer research in 2020 to assess if customer preferences had changed. Overall, the majority of customers still indicate their preference for SaskEnergy to continue to provide stable rates. Leading reasons are that customers want to avoid unexpected changes in bills and want stability for budgeting purposes.

Currently, SaskEnergy has approximately 95% of its natural gas purchases hedged for the upcoming winter, November 1, 2022 to March 31, 2023 for normal weather, and approximately 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.

#### 2.4 RECOMMENDED COMMODITY RATE

SaskEnergy recommends increasing the current commodity rate of 12.78 cents per cubic metre (\$3.20/GJ) to 16.74 cents per cubic metre (\$4.20/GJ) effective August 1, 2022. The detailed rate calculation can be found in Schedule 4.0.

This rate recognizes current market prices, natural gas price management activities, gas held in storage, and clearing the GCVA balance over the one-year application period.

#### 2.5 COMMODITY BILL IMPACT

The customer bill impact below includes all rate charges on the bill and compares the proposed commodity rate increase to the current rates over one year.

	_	Rate Increase o \$4.20/GJ)	Total Bill Impact
	\$/Month*	% Increase	Annual % Increase
Residential	\$8.39	31.0%	11.8%
Commercial Small	\$42.15	31.0%	16.2%
Commercial Large	\$528	31.0%	19.2%
Small Industrial	\$1,949	31.0%	22.9%
Average		31.0%	13.7%

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

On average, the commodity rate change will result in approximately \$8.39/month, or an 11.8% annual bill increase for Residential customers.

#### 3. LOAD FORECAST

# 3.1 ANNUAL REQUIREMENTS

SaskEnergy prepares an annual customer load forecast based on normal weather to determine the amount of natural gas that is needed to serve SaskEnergy customers. The load forecast is also used to calculate the revenue expected from existing rates.

The majority of SaskEnergy's customer usage is to heat homes and businesses. Consequently, SaskEnergy's loads are very dependent on weather and can vary significantly. Historical loads are weather adjusted (normalized) to take into consideration this variation due to weather. The load forecast determines the expected natural gas consumption based on normal or average weather. For forecasting purposes, normal weather is calculated using weather data from the past thirty years for Regina and Saskatoon.

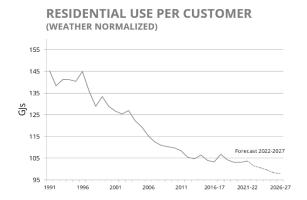
## **Forecast Methodology**

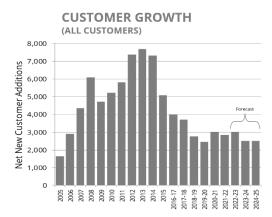
SaskEnergy forecasts its load requirements using historical customer consumption data. The historic customer consumption is adjusted to remove the effects of actual temperature deviations from normal weather, which is calculated using an analysis of the temperature of the last thirty years. This way, customer consumption can be compared from year to year without the effects of weather deviations.

#### **Use Per Customer**

The determination of the use per customer is based on historical weather-adjusted consumption. Regression equations are used to quantify the historical decline rate and forecast the use per customer for the upcoming period for the Residential and Commercial Small customer classes, which account for over 80% of SaskEnergy's customer load. For the remaining customer classes, the historic use per customer is used to forecast, as there is no statistically valid regression equation from this data.

Over time, customer usage has declined across North America as end users acquire more energy efficient furnaces and appliances, install programmable thermostats, improve insulation in homes and businesses, reduce hot water usage, and generally have increased awareness of their energy consumption. New customer home constructions, as well as multi-unit dwellings use considerably less natural gas than existing customers and some are also replacing older less energy efficient homes. The use per customer trend has begun to slow in recent years due to customers maintaining more energy efficient homes, fewer homes with low energy equipment, and lower natural gas prices.





SaskEnergy prepares the load forecast for an outlook of five years with breakdowns by month and rate class as well as requirements for internal use.

To determine the monthly gas purchase requirements, an operating plan is prepared from the gas sales load forecast. The operating plan also includes purchases of gas required to compensate the TransGas pipeline system for fuel gas and unaccounted for gas, as well as SaskEnergy internal usage. Thus, the total natural gas purchase requirement is established.

The following table shows the historical and forecast weather normalized use per customer class.

WEATHER NORMALIZED ANNUAL VOLUME (GJs)												
	2016- 17	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022-23 Forecast	2023-24 Forecast	2024-25 Forecast			
RESIDENTIAL	103	107	104	103	103	104	101	101	100			
COMMERCIAL SMALL	507	511	509	529	515	537	510	506	502			
COMMERCIAL LARGE	6891	6584	6759	6677	6400	6621	6382	6368	6355			

#### **Number of Customers**

The total number of customers is the sum of the actual average number of customers served for the previous period plus the estimated customer additions. The number of customer additions (net of service retirements) is based on anticipated new construction and planned projects to unserved areas.

## **Forecast Annual Requirements**

The forecast annual requirements for delivery customers are summarized on Schedule 5.0, Schedule 5.1 and Schedule 5.2 and illustrate the sensitivity of SaskEnergy's customer load to extreme changes in weather, calculated at two standard deviations away from normal weather. Schedule 5.3 quantifies the impact the variation in weather has on the corporation's revenues.

## 3.2 PEAK DAY REQUIREMENTS - MAXIMUM DAILY USAGE

A critical function of a natural gas utility is to provide reliable natural gas delivery to all customers during all weather conditions. To provide reliable delivery, the utility must have adequate transportation capacity, storage capacity, and natural gas supplies. The day with the highest consumption (typically the coldest day of winter) is referred to as the peak day since consumption has reached a peak.

### **Forecast Methodology**

The forecast peak day load is calculated by multiplying the estimated peak day use per customer times the number of customers (i.e., peak day load = peak day use per customer multiplied by the number of customers).

SaskEnergy's historical peak day load is estimated by TransGas. This estimate is based on a calculation which includes actual measurement, where available, and a load computation at locations where direct measurement is not available. The number of customers on peak day is known from billing system records. This approach has shown to be cost effective and with an appropriate degree of accuracy.

Using the data from the past ten years, a mathematical relationship using regression analysis has been developed between peak day use per customer and degree-days. The peak day forecast use per customer for the upcoming period is determined using this equation. The number of customers expected on peak day is taken from the customer number forecast.

# **Key Assumptions**

SaskEnergy uses a 1-in-20 design criteria for peak day (i.e., there is a 1-in-20 probability that the design peak day load will be reached during the upcoming winter). This design criteria is within the typical range of criteria 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".

The degree-day forecast for a 1-in-20 peak day is determined from 30-year Environment Canada weather statistics for Regina and Saskatoon. This results in 54.2 degree-days, which corresponds to an average daily temperature of -36.2 degrees Celsius.

# **Peak Day Load Forecast and Historical Peak Days**

SaskEnergy's peak day is summarized on Schedule 5.4. Historical peak day loads can be found in Schedule 5.5.

### **Customer Consumption**

SaskEnergy's customer consumption is summarized on Schedule 6.0 and 6.1.

#### 4. CUSTOMER BILL IMPACT

The recommended delivery service and commodity rate increase results in the following total annual customer bill impacts:

Rate Class	Year One Effective August 1, 2022 \$/year	Year Two Effective June 1, 2023 \$/year	Year Three Effective June 1, 2024 \$/year	Total Bill Increase over Application Period \$
Residential	\$143.45	\$29.21	\$30.34	\$203.00
Commercial Small	\$622.25	\$75.28	\$80.04	\$777.57
Commercial Large	\$7,367	\$691	\$725	\$8,783
Small Industrial	\$25,745	\$2,185	\$1,830	\$29,760

To determine the impact the delivery service rate increase will have on a specific customer's bill, a Bill Estimator can be found on SaskEnergy's website at www.saskenergy.com/manage-account/rates/bill-estimator.

# 4. MINIMUM FILING REQUIREMENTS

SaskEnergy provides the following Minimum Filing Requirements to the Panel when requesting a review for a Delivery Service Rate Adjustment. SaskEnergy may supply additional information, and the Saskatchewan Rate Review Panel and their consultants may also request additional information.

- 1. Delivery Service Rate Adjustment details, containing at least the following information:
  - Rate changes requested in detail
  - Revenue Requirement
  - Storage & Transportation costs
  - Operating, Maintenance & Administration costs
  - Depreciation Charges & Rates
  - Taxes
  - Current Rate Structure, Classification System and Revenue-to-Cost Ratios
  - Detailed Customer Bill Impact
  - Load forecasts, including high/low scenarios and forecasted customer counts
  - Customer Consumption
- 2. Commodity Rate Adjustment details, containing at least the following information:
  - Rate change requested in detail
  - Detailed Forecasted Natural Gas Costs for the Application Period including
    - Forecasted Cost of Future Purchases
    - Price risk Management Cash Flows
    - o Natural Gas Inventory and Related Interest Costs
    - o Operating, Maintenance and Administrative Charges
    - o Bad Debt Expense and Late Payment Revenue
  - Actual detailed cost of cost of gas sold and commodity revenue for the application period of the previous commodity rate application to present (Gas Cost Variance Account)
  - Gas Supply Overview
  - Detailed Customer Bill Impact
- 3. Latest Annual Report
- 4. Current Corporate and Executive Organization Structure
- 5. Corporate Plan including the Business and Strategic Plans coincidental with the Rate Application and Risk Assessment for SaskEnergy
- 6. Most Recent Corporate Responsibility and Sustainability Report
- 7. Latest Corporate Performance Report and Recent Internal Reports on Productivity and Efficiency Improvement within SaskEnergy with the Recent Annual Actual Benchmarks and Operating Metrics

- 8. Most Recent Economic Report for Saskatchewan Prepared by Third Party
- 9. Planned Maintenance and Capital Programs Together with Distribution Integrity Management Program Update
- 10. Safety, Reliability and Environmental Issues and Public Reports, if any
- 11. Past, Current & Future Staff Levels by Division and Detail including an Update on Contractor to FTE Conversions
- 12. Operating, Maintenance & Administrative Expense Detail including Variance Analysis
- 13. Inter-Company Cost Allocations Details, if any on Financial Arrangements with Subsidiaries/Partners and Intercompany Cost Allocations Methodology and Historical Actuals and Current Forecasts
- 14. Revenues Collected and Paid to Municipalities including Grants in Lieu of Taxes
- 15. Capital Structure and Cost of Capital including Detailed Debt and Finance Charges
- 16. Past, Current and Projected Return on Equity and Working Capital Requirements
- 17. Rate Base and its Derivation
- 18. Most Current Cost of Service & Allocation Study Report and Methodologies in Use
- 19. Current Continuity Depreciation Schedule including Depreciation Rates by Asset Type and Most Current External Depreciation Study Report
- 20. Annual LDC Commodity Price Risk Management Strategy
- 21. Commodity OM&A, Bad Debt Expense and Late Payment Revenue
- 22. High-Average-Low Customer Bill Impacts
- 23. Effect of the Recommended Rate Change on Competitiveness with Other lurisdictions
- 24. Regulatory Issues Impacts Report
- 25. Report on Implementation of Previous Panel Recommendations
- 26. Update on Heat Value Billing, Rate Design and Other Future Considerations

The Panel will not release or require SaskEnergy to publicly release commercially sensitive material or other material designated as confidential. Financial data contained within the Application will include the five years prior to the test period.

#### 5. GLOSSARY OF TERMS

#### **AECO**

A market center in Alberta located at the storage facility AECO "C" operated by Niska Gas Storage. It is the most commonly referenced pricing point for natural gas purchased in Alberta.

#### **Annual Load Factor**

The ratio of the average daily volume of natural gas shipped (or consumed) over a year to the daily contract demand volume. Load factors are usually expressed in percent. Gas producers want to sell gas at 100% load factor, or at a constant rate. Residential consumers use gas at an annual load factor of approximately 30%.

#### **Basis Differential**

The price differential between two locations or pricing points (hubs) as determined by the marketplace (as opposed to the fixed cost of transportation between the two locations). For SaskEnergy, the basis differential between AECO and the TransGas Energy Pool is important in determining the price paid to gas producers.

## **Distribution System**

Facilities used to receive natural gas from a high-pressure transmission system and provide pressure reduction, regulation and piping to deliver natural gas to end use customers. A natural gas distribution system includes the following major components:

- Pressure Regulating Station (Town Border Station) A facility which receives natural gas from a transmission pipeline and reduces pressure for entry into the distribution mains.
- Main The piping which delivers natural gas from the pressure regulating station (Town Border Station) to the point of connection to the service pipe which serves as individual customer.
- Service The piping which delivers natural gas from point of connection at the main to the meter on the customer's premise.
- Meter An instrument for measuring or recording the volume of gas that has passed through it.

# **Gas Cost Variance Account (GCVA)**

A regulatory accounting mechanism that captures the difference between actual Cost of Gas Sold and the actual revenues from the Commodity Rate. The net differences are accumulated for a period of time. The balance is then applied to a future Commodity Rate or the current years Commodity Rate may be adjusted.

#### **Gas Year**

Begins on November 1 of one year and ends October 31 of the following year.

### Gigajoule (GJ)

A metric measure of energy used to express the heating value of natural gas or of energy consumed. A typical home uses about 103 gigajoules per year.

1 Terajoule (TJ) = 1,000 Gigajoules, 1 Petajoule (PJ) = 1,000,000 Gigajoules.

#### **Heat Value**

The amount of energy produced through combustion by a specified quantity of fuel. Heat value of natural gas produced in Saskatchewan is quoted in megajoules per cubic metre. Natural gas with a high heat value produces more energy relative to natural gas with a lower heat value.

#### **Heating Degree Day**

The average daily temperature (Celsius) subtracted from 18 degrees. For example, if the daily high is +5 and the low is -15 the average daily temperature is -5. The degree-days for that day are 18-(-5) = 23.

#### **Market Hub**

An interchange where multiple pipelines interconnect creating physical and pricing liquidity. AECO/NIT is the market hub in Alberta.

## **Receipt Point**

The location where gas enters a transporter's system from a well, gas plant or pipeline interconnect.

### **TransGas Energy Pool (TEP)**

Acts like a market hub in Saskatchewan on the TransGas system. SaskEnergy and all gas suppliers use the TransGas Energy Pool (TEP) as the common reference point where natural gas commodity is priced. In addition, SaskEnergy's storage and delivery transportation commence at TEP.

# 6. SCHEDULES

Schedule 1.0 – Delivery Revenue Requirement Summary	62
Schedule 1.1 – Delivery Transportation and Storage Expense	
Schedule 1.2 – Operating and Maintenance Expense	
Schedule 1.3 – Depreciation Expense	
Schedule 1.4 – Tax Expense	
Schedule 1.5 – Interest Expense	69
Schedule 1.6 – Net Income	
Schedule 1.7 – Other Revenue	
Schedule 1.8 – Recommended Delivery Rates	
Schedule 1.9 – Forecast Delivery Revenues	
COMMODITY RATE APPLICATION DETAILS	
Schedule 2.0 – Forecast Cost of Gas Sold	76
Schedule 2.1 – Forecast Gas Prices	77
Schedule 2.2 – Forecast Cost of Gas – Storage Inventory Details	78
Schedule 3.0 – Gas Cost Variance Account	79
Schedule 3.1 – Gas Cost Variance Account – Storage Inventory Details	80
Schedule 4.0 – Determination of Commodity Rate	81
LOAD FORECAST	
Schedule 5.0 – Load Forecast – Base Case	82
Schedule 5.1 – Load Forecast – Cold Weather Scenario	85
Schedule 5.2 – Load Forecast – Warm Weather Scenario	88
Schedule 5.3 – Revenue Sensitivity to Changes in Weather	91
Schedule 5.4 – Peak Day Load Forecast	94
Schedule 5.5 – Historical Peak Days	95
CUSTOMER CONSUMPTION	
Schedule 6.0 – Average Annual Use Per Customer by Rate Class	96
Schedule 6.1 – Customer Consumption by Rate Class	100

# **SCHEDULE 1.0 (1 of 2)**

# **DELIVERY REVENUE REQUIREMENT SUMMARY** (\$000's)

# SaskEnergy Incorporated Delivery Revenue Requirement Summary (\$000's)

Component	2016-17 Actual	2017-18 Actual	2018-19 Actual	2018-19 Forecast	2019-20 Actual	2019-20 Forecast	2020-21 Actual	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast	2023-24 Forecast	2024-25 Forecast
Operating & Maintenance	115,725	112,680	127,569	130,377	131,062	136,229	131,603	142,045	129,542	154,962	157,268	160,691
Transportation & Storage	50,176	50,342	53,216	52,709	53,630	53,919	53,480	52,332	58,361	63,753	66,019	66,019
Depreciation Expense	39,260	41,051	42,559	45,398	46,483	48,186	49,967	50,746	51,889	55,207	56,921	59,296
Tax Expense	4,938	5,481	6,319	6,501	6,924	7,362	6,853	7,107	7,738	8,278	8,729	9,041
Interest Expense	22,760	24,698	26,498	26,635	28,687	31,450	28,296	29,279	29,882	29,963	32,208	33,716
Net Earnings	28,812	70,220	68,117	29,982	41,904	33,459	40,201	28,878	30,104	9,663	19,994	30,118
Total Delivery Revenue Requirement	261,672	304,471	324,279	291,602	308,690	310,605	310,400	310,387	307,516	321,826	341,140	358,881
Other Revenue and Adjustments												
Other Revenue	(25,692)	(38,390)	(41,101)	(35,106)	(30,644)	(30,411)	(30,290)	(32,150)	(32,036)	(30,517)	(31,177)	(32,961)
Net Delivery Revenue Requirement	235,980	266,080	283,178	256,496	278,046	280,194	280,110	278,237	275,480	291,309	309,963	325,920

# **SCHEDULE 1.0 (2 of 2)**

# **DELIVERY REVENUE REQUIREMENT SUMMARY** (\$000's)

# SaskEnergy Incorporated Revenue Requirement Comparison: Forecast vs Actuals (\$000's)

	2019-20	2019-20	Variance	Variance %	2020-21	2020-21	Variance	Variance %
	April 1 to	April 1 to			April 1 to	April 1 to		
	March 31	March 31			March 31	March 31		
Component	Forecast	Actual			Forecast	Actual		
Operating and Maintenance Expense	136,229	131,062	(5,167)	-3.79%	142,045	131,603	(10,442)	-7.35%
Transportation and Storage Expense	53,919	53,630	(289)	-0.54%	52,332	53,480	1,149	2.19%
Depreciation Expense	48,186	46,483	(1,703)	-3.53%	50,746	49,967	(780)	-1.54%
Tax Expense	7,362	6,924	(438)	-5.95%	7,107	6,853	(254)	-3.58%
Interest Expense	31,450	28,687	(2,763)	-8.78%	29,279	28,296	(983)	-3.36%
Net Earnings	33,459	41,904	8,445	25.24%	28,878	40,201	11,323	39.21%
Total Delivery Revenue Requirement	310,605	308,690	(1,915)	-0.62%	310,387	310,400	13	0.00%
Other Revenue	(30,411)	(30,644)	(233)	0.77%	(32,150)	(30,290)	1,861	-5.79%
Net Delivery Revenue Requirement	280,194	278,046	(2,148)	-0.77%	278,237	280,110	1,874	0.67%

# Revenue Requirement Comparison: Forecast vs Actuals (\$000's)

	2021-22	2022-23	2023-24	2024-25
	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
	April 1 to	April 1 to	April 1 to	April 1 to
	Mar 31	Mar 31	Mar 31	Mar 31
Component	Forecast	Forecast	Forecast	Forecast
Operating and Maintenance Expense	129,542	154,962	157,268	160,691
Transportation and Storage Expense	58,361	63,753	66,019	66,019
Depreciation Expense	51,889	55,207	56,921	59,296
Tax Expense	7,738	8,278	8,729	9,041
Interest Expense	29,882	29,963	32,208	33,716
Net Earnings	30,104	9,663	19,994	30,118
Total Delivery Revenue Requirement	307,516	321,826	341,140	358,881
Other Revenue	(32,036)	(30,517)	(31,177)	(32,961)
Net Delivery Revenue Requirement	275,480	291,309	309,963	325,920

# **DELIVERY TRANSPORTATION AND STORAGE EXPENSE** (\$000's)

# SaskEnergy Incorporated Delivery Transportation and Storage Expense (\$000's)

	2016-17 Actual	2017-18 Actual	2018-19 Actual	2018-19 Forecast	2019-20 Actual	2019-20 Forecast	2020-21 Actual	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast	2023-24 Forecast	2024-25 Forecast
TRANSPORTATION & STORAGE (\$000's)												
<b>Transportation</b> Transportation Costs	31,821	31,986	33,861	32,665	34,185	33,696	34,036	32,887	37,154	40,638	42,082	42,082
Storage Cost	18,355	18,355	19,355	20,044	19,445	20,223	19,445	19,445	21,207	23,115	23,937	23,937
Total Transportation & Storage Expense	50,176	50,342	53,216	52,709	53,630	53,919	53,480	52,332	58,361	63,753	66,019	66,019
Volume												
<b>Transportation</b> Contracted Demand (in GJ's/day)	600,000	600,000	605,000	605,000	605,000	605,000	605,000	605,000	608,000	608,000	608,000	608,000
<b>Storage</b> Contracted Firm Deliverability (in GJ's/day) Contracted Storage Volume (in PJ's)	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4	393,217 23.4

# **OPERATING AND MAINTENANCE EXPENSE** (\$000's)

# SaskEnergy Incorporated Operating and Maintenance (\$ 000's)

	2016-17	2017-18	2018-19	2018-19	2019-20	2019-20	2020-21	2020-21	2021-22	2022-23	2023-24	2024-25
	Actual	Actual	Actual	Forecast	Actual	Forecast	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Operations												
Costs Incurred	124,009	120,431	134,398	135,668	136,427	141,050	134,839	145,806	132,807	157,476	159,738	163,165
Capitalized & Recovered	(9,876)	(9,578)	(8,816)	(7,511)	(8,179)	(7,959)	(6,096)	(6,683)	(5,694)	(5,800)	(5,899)	(6,000)
Subtotal Operations	114,133	110,852	125,582	128,157	128,248	133,091	128,744	139,123	127,113	151,676	153,839	157,165
Engineering and Construction												
Costs Incurred	27,122	27,935	29,296	29,466	30,281	31,306	32,356	32,352	36,717	36,640	37,450	38,227
Capitalized & Recovered	(25,530)	(26,107)	(27,309)	(27,246)	(27,467)	(28,168)	(29,497)	(29,430)	(34,288)	(33,354)	(34,021)	(34,701)
Subtotal Engineering & Construction	1,592	1,828	1,987	2,220	2,814	3,138	2,859	2,922	2,429	3,286	3,429	3,526
								•		•	•	
Total Operating & Maintenance	115,725	112,680	127,569	130,377	131,062	136,229	131,603	142,045	129,542	154,962	157,268	160,691

# **DEPRECIATION EXPENSE** (\$000's)

#### SaskEnergy Incorporated Depreciation Expense (\$000's)

	2016-17 Actual	2017-18 Actual	2018-19 Actual	2018-19 Forecast	2019-20 Actual	2019-20 Forecast	2020-21 Actual	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast	2023-24 Forecast	2024-25 Forecast
Distribution Plant												
Land Costs												
Land Rights	257	257	173	257	177	257	177	176	177	177	177	177
Building and Site Improvements	2,132	2,365	2,327	2,490	2,895	2,648	3,360	3,340	3,594	4,152	4,711	5,125
Services	11,819	12,333	11,666	12,856	12,104	13,322	12,952	12,690	13,017	13,842	14,499	15,109
Meter and Regulator Installations	1,742	1,849	2,311	2,151	2,444	2,288	2,575	2,524	2,664	2,746	2,814	2,880
Mains	10,971	11,402	10,205	12,322	10,777	13,456	11,299	11,275	11,480	12,014	12,467	12,830
NGV Fueling Stations & Fuel Makers	-	-	(1)	0	19		26	53	26	26	26	26
Measuring and Regulating Equipment	1,483	1,528	945	1,604	987	1,706	1,082	1,094	1,084	1,143	1,161	1,178
Meters	3,003	3,186	6,892	3,214	5,394	3,419	5,465	5,475	5,527	5,863	6,299	6,699
Other Distribution Equipment	554	634	711	690	846	734	947	945	1,026	1,189	1,307	1,450
Distribution before Customer Contributions	31,960	33,552	35,230	35,584	35,642	37,830	37,882	37,573	38,595	41,152	43,461	45,474
Amortization of Customer Contributions	(5,770)	(6,212)	(6,780)	(6,663)	(7,229)	(7,183)	(7,420)	(7,600)	(7,778)	(7,941)	(8,095)	(8,273)
Sub-total	26,190	27,340	28,449	28,921	28,413	30,647	30,463	29,974	30,817	33,211	35,365	37,201
General Plant												
Land	-	-	-		-		-	-	-	-	-	-
Buildings and Improvements	1,588	1,579	1,361	2,905	1,752	3,159	1,928	1,887	2,004	2,018	2,135	2,246
Office Furniture and Equipment	519	495	496	489	494	520	475	479	448	433	426	412
Transportation Vehicles	2,113	2,350	1,377	1,682	1,435	1,789	1,381	1,430	1,318	1,557	1,654	1,806
Heavy Work Equipment	1,121	1,096	882	1,102	999	1,117	1,017	1,083	1,107	1,224	1,316	1,418
Tools and Equipment	714	726	781	750	888	798	913	909	951	956	938	958
Information System Assets	7,014	7,466	7,703	9,549	7,944	10,156	8,921	10,040	10,229	11,016	10,231	10,256
Leased Computers	-	-	650	-	842	-	962	1,006	939	847	896	994
Leased Buildings	-	-	-	-	2,909	-	2,890	2,912	2,871	2,871	2,871	2,871
Leased Vehicles	-	-	860		807	-	1,016	1,028	1,206	1,076	1,090	1,134
Sub-total	13,069	13,711	14,110	16,477	18,070	17,539	19,503	20,773	21,072	21,996	21,556	22,095
Total Depreciation	39,260	41,051	42,559	45,398	46,483	48,186	49,966	50,746	51,889	55,207	56,921	59,296

# **SCHEDULE 1.4 (1 of 2)**

# TAX EXPENSE (\$000's)

#### SaskEnergy Incorporated Tax Expense (\$000's)

	2016-17	2017-18	2018-19	2018-19	2019-20	2019-20	2020-21	2020-21	2021-22	2022-23	2023-24	2024-25
	Actual	Actual	Actual	Forecast	Actual	Forecast	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Corporate Capital Tax	4,725	5,242	5,695	6,081	6,289	6,987	6,148	6,529	6,946	7,580	8,031	8,343
Grants in Lieu of Taxes	213	239	624	420	635	375	705	578	792	698	698	698
Total Taxes	4,938	5,481	6,319	6,501	6,924	7,362	6,853	7,107	7,738	8,278	8,729	9,041

# **SCHEDULE 1.4 (2 of 2)**

# TAX EXPENSE (\$000's)

# SaskEnergy Incorporated Calculation of Corporate Capital Tax

	2016-17	2017-18	2018-19	2018-19	2019-20	2019-20	2020-21	2020-21	2021-22	2022-23	2023-24	2024-25
	Actual	Actual	Actual	Forecast	Actual	Forecast	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Net Book Value	1,023,455	1,099,944	1,186,539	1,204,287	1,260,724	1,323,817	1,307,896	1,309,099	1,368,537	1,464,247	1,580,763	1,698,004
less UCC *	655,880	706,848	756,752	781,777	789,475	885,190	811,778	836,853	852,230	935,880	1,033,168	1,124,147
Income Tax Deduction	367,575	393,096	429,787	422,510	471,249	438,627	496,118	472,246	516,307	528,367	547,595	573,857
Retained Earnings and Equity	392,738	465,178	560,962	519,658	607,949	548,130	639,332	647,504	680,457	694,801	711,477	734,447
Loans and Advances	1,288,690	1,337,817	1,401,502	1,440,754	1,599,313	1,576,054	1,663,330	1,685,332	1,761,787	1,862,212	1,936,852	1,990,526
Interest Payable less: Income Tax Deduction	10,769	11,601	13,087	12,620	14,595	16,056	15,238	16,091	16,770	19,695	22,753	24,360
	(367,575)	(393,096)	(429,787)	(422,510)	(471,249)	(438,627)	(496,118)	(472,246)	(516,307)	(528,367)	(547,595)	(573,857)
Total Paid up Capital	1,324,622	1,421,501	1,545,765	1,550,521	1,750,608	1,701,613	1,821,782	1,876,680	1,942,707	2,048,341	2,123,486	2,175,475
less: Standard Exemption	(10,788)	(10,762)	(10,782)	(10,788)	(10,810)	(10,788)	(10,845)	(10,810)	(10,000)	(10,000)	(10,000)	(10,000)
Taxable Paid up Capital	1,313,834	1,410,739	1,534,983	1,539,733	1,739,798	1,690,825	1,810,936	1,865,870	1,932,707	2,038,341	2,113,486	2,165,475
less Investment Allowance	(526,281)	(537,043)	(585,816)	(526,281)	(691,631)	(526,281)	(786,269)	(777,678)	(775,000)	(775,000)	(775,000)	(775,000)
Taxable Paid up Capital	787,553	873,697	949,167	1,013,452	1,048,167	1,164,544	1,024,667	1,088,192	1,157,707	1,263,341	1,338,486	1,390,475
Rate	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Corporate Capital Tax Expense	4,725	5,242	5,695	6,081	6,289	6,987	6,148	6,529	6,946	7,580	8,031	8,343

<sup>\*</sup>UCC refers to Undepreciated Capital Cost

# INTEREST EXPENSE (\$000's)

#### SaskEnergy Incorporated Interest Expense (\$000's)

	2016-17	2017-18	2018-19	2018-19	2019-20	2019-20	2020-21	2020-21	2021-22	2022-23	2023-24	2024-25
	Actual	Actual	Actual	Forecast	Actual	Forecast	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
Interest on Notes Payable to Holdings Division	21,047	22,489	23,714	23,641	26,592	26,289	26,520	26,210	26,268	26,268	27,768	27,809
Interest on Bank Indebtedness	952	1,194	1,569	2,287	547	4,880	96	810	299	824	1,767	3,188
Interest on Finance Lease	-	-	-	-	383	-	415	353	437	404	403	416
Accretion Expense	2,066	2,428	2,956	2,694	3,798	3,096	3,917	3,840	4,327	4,600	4,900	5,200
Amortization of Deferred Charges	243	250	230	230	102	227	(20)	133	(22)	(13)	(4)	(24)
Debt Retirement Fund Earnings	(1,085)	(978)	(1,323)	(1,743)	(1,811)	(2,361)	(2,212)	(1,401)	(1,316)	(1,648)	(1,987)	(2,201)
Capitalized Interest	(144)	(350)	(188)	(148)	(505)	(234)	(375)	(221)	(55)	(303)	(306)	(309)
Interest Allocated to Commodity Cost of Gas	(319)	(335)	(459)	(326)	(419)	(446)	(44)	(445)	(56)	(168)	(332)	(363)
Total Interest Expense	22,760	24,698	26,498	26,635	28,687	31,450	28,296	29,279	29,882	29,963	32,208	33,716

# NET INCOME (\$000's)

#### SaskEnergy Incorporated Net Income (\$000's)

Net Income before Market Adjustments on Asset Optimization

Total Net Income

2016-17 Actual	2017-18 Actual	2018-19 Actual	2018-19 Forecast	2019-20 Actual	2019-20 Forecast	2020-21 Actual	2020-21 Forecast	2021-22 Forecast	2022-23 Forecast	2023-24 Forecast	2024-25 Forecast
28,812	70,220	68,117	29,982	41,904	33,459	40,201	28,878	30,104	9,663	19,994	30,118
28,812	70,220	68,117	29,982	41,904	33,459	40,201	28,878	30,104	9,663	19,994	30,118

# OTHER REVENUE (\$000's)

#### SaskEnergy Incorporated Other Revenue (\$000's)

2019-20

2018-19

Connect Fees
Margin on Asset Optimization
Late Payment Charges
Customer Financing
Miscellaneous Revenue
Distribution Tolls

2016-17

2017-18

2018-19

**Total Other Revenue** 

Actual Actual Actual Forecast Actual **Forecast** Actual Forecast Forecast Forecast Forecast Forecast (2,034)(1,983)(2,338)(2,094)(2,358)(2,050)(1,782)(1,850)(2,572)(1,820)(1,820)(1,820)(4,017)(1,881)(5,644)(16,197)(16,753)(11,799)(6,391)(5,913)(3,391)(6,062)(1,881)(1,881)(2,293)(1,816)(1,500)(2,338)(1,500)(1,500)(1,500)(1,132)(1,112)(2,123)(1,326)(1,200)(98) (115)(82) (90)(68) (64)(49)(62)(51) (42)(42)(42)(568)(520)(640)(464)(767)(575)(744)(553)(630)(643)(643)(643)(16, 264)(18,414)(19,165)(19,333)(18,767)(20,609)(22,507)(22,123)(22,429)(24,631) (25,291)(27,075)(25,692)(38,390)(41,101) (35,106)(30,644)(30,411) (30,290)(32,150)(32,036)(30,517) (31,177) (32,961)

2019-20

2020-21

2020-21

2021-22

2022-23

2023-24

2024-25

# **RECOMMENDED DELIVERY RATES**

# **SaskEnergy Distribution Division**

Rate Class & Components	Units	Current Rates	Rate Increase	Year One Aug 1, 2022	Rate Increase	Year Two Jun 1, 2023	Rate Increase	Year Three Jun 1, 2024
Residential	<b>.</b>							
Basic Monthly Charge	\$/Mo.	23.20	1.30	24.50	1.30	25.80	1.80	27.60
Delivery Charge	\$/m <sup>3</sup>	0.0993	0.0107	0.1100	0.0054	0.1154	0.0035	0.1189
Commodity Rate	\$/m <sup>3</sup>	0.1278	0.0396	0.1674	-	0.1674	-	0.1674
Commercial Small								
Basic Monthly Charge	\$/Mo.	38.50	3.00	41.50	3.00	44.50	3.00	47.50
Delivery Charge	\$/m³	0.0811	0.0063	0.0874	0.0031	0.0905	0.0035	0.0940
Commodity Rate	\$/m³	0.1278	0.0396	0.1674	-	0.1674	-	0.1674
Commercial Large								
Basic Monthly Charge	\$/Mo.	137.40	22.10	159.50	15.00	174.50	10.00	184.50
Delivery Charge	\$/m³	0.0684	0.0048	0.0732	0.0032	0.0764	0.0038	0.0802
Commodity Rate	\$/m³	0.1278	0.0396	0.1674	-	0.1674	-	0.1674
Small Industrial								
Basic Monthly Charge	\$/Mo.	216.00	-	216.00	-	216.00	-	216.00
Delivery Charge								
- First 40,000 m <sup>3</sup> /Mo.	\$/m³	0.0442	0.0040	0.0482	0.0037	0.0519	0.0031	0.0550
- Balance	\$/m³	0.0381	0.0040	0.0421	0.0037	0.0458	0.0031	0.0489
Commodity Rate	\$/m <sup>3</sup>	0.1278	0.0396	0.1674	-	0.1674	-	0.1674

- Bold Figures identify the changes from the current rates
   m³ = cubic metres

## **SCHEDULE 1.9 (1 of 3)**

#### **2022-23 FORECAST DELIVERY REVENUES**

## Delivery Revenue at Current Rates (\$ millions)

Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	14.2	11.3	11.1	9.9	10.0	11.2	15.1	19.7	23.9	25.2	21.9	19.1	192.5
Commercial Small	4.8	3.1	2.8	2.4	2.4	3.0	4.4	6.6	8.7	8.9	8.1	7.0	62.2
Commercial Large	1.4	1.3	0.8	0.7	0.6	0.6	1.5	1.8	2.6	2.7	2.4	2.6	19.1
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.7
Total Delivery	20.5	15.8	14.8	13.1	13.0	14.9	20.9	28.2	35.2	36.9	32.5	28.8	274.5

## Delivery Revenues at Recommended Rates (\$ millions)

Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	14.2	11.3	11.1	9.9	10.8	12.1	16.3	21.3	25.8	27.3	23.6	20.6	204.2
Commercial Small	4.8	3.1	2.8	2.4	2.6	3.2	4.7	7.1	9.4	9.6	8.8	7.5	66.1
Commercial Large	1.4	1.3	0.8	0.7	0.7	0.7	1.6	1.9	2.8	2.9	2.6	2.8	20.3
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.7
Total Delivery	20.5	15.8	14.8	13.1	14.1	16.1	22.6	30.4	38.0	39.9	35.1	31.1	291.3
Rate Change	-	-	-	-	1.0	1.2	1.7	2.3	2.8	3.0	2.6	2.3	16.8

Note: Tables may not add percisely due to rounding

## **SCHEDULE 1.9 (2 of 3)**

#### **2023-24 FORECAST DELIVERY REVENUES**

## Delivery Revenue at Current Rates (\$ millions)

Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	15.4	12.2	12.1	10.7	10.8	12.2	16.3	21.3	25.8	27.3	23.6	20.7	208.5
Commercial Small	5.2	3.4	3.0	2.6	2.6	3.2	4.7	7.1	9.4	9.6	8.8	7.5	67.3
Commercial Large	1.5	1.4	0.9	0.7	0.7	0.7	1.6	1.9	2.8	2.9	2.6	2.8	20.6
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.7
Total Delivery	22.2	17.1	16.0	14.2	14.2	16.2	22.7	30.4	38.0	39.9	35.2	31.1	297.1

## Delivery Revenues at Recommended Rates (\$ millions)

Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	15.4	12.2	12.7	11.3	11.4	12.8	17.1	22.4	27.1	28.6	24.8	21.7	217.5
Commercial Small	5.2	3.4	3.2	2.8	2.7	3.4	5.0	7.5	9.9	10.1	9.2	7.9	70.2
Commercial Large	1.5	1.4	1.0	8.0	0.7	0.7	1.7	2.0	2.9	3.0	2.8	2.9	21.5
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.8
Total Delivery	22.2	17.1	16.8	14.9	14.9	17.0	23.8	32.0	39.9	41.9	36.9	32.7	310.0
Rate Change	-	-	0.8	0.7	0.7	0.8	1.1	1.5	1.9	2.0	1.8	1.6	12.9

Note: Tables may not add percisely due to rounding

## **SCHEDULE 1.9 (3 of 3)**

#### **2024-25 FORECAST DELIVERY REVENUES**

## Delivery Revenue at Current Rates (\$ millions)

Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	16.2	12.9	12.7	11.3	11.4	12.8	17.2	22.4	27.1	28.6	24.8	21.7	219.2
Commercial Small	5.4	3.6	3.2	2.8	2.8	3.4	5.0	7.5	9.9	10.1	9.3	7.9	70.8
Commercial Large	1.6	1.5	1.0	0.8	0.7	0.7	1.7	2.0	2.9	3.0	2.8	2.9	21.6
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.8
Total Dolivory		10.0	16.0	15.0	14.0	17.0	22.0	22.0	20.0	41.0	26.0	22.7	212.4
Total Delivery	23.3	18.0	16.9	15.0	14.9	17.0	23.8	32.0	39.9	41.9	36.9	32.7	312.4

## Delivery Revenues at Recommended Rates (\$ millions)

Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	16.2	12.9	13.4	11.9	12.0	13.5	18.0	23.5	28.5	30.1	26.1	22.8	228.7
Commercial Small	5.4	3.6	3.3	2.9	2.9	3.6	5.2	7.9	10.4	10.6	9.7	8.3	73.8
Commercial Large	1.6	1.5	1.0	0.8	0.7	0.8	1.8	2.1	3.0	3.2	2.9	3.1	22.5
Small Industrial	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	8.0
Total Delivery	23.3	18.0	17.7	15.7	15.7	17.9	25.0	33.6	41.9	44.0	38.8	34.3	325.9
Rate Change	-	-	0.8	0.7	0.7	0.9	1.2	1.6	2.0	2.1	1.8	1.6	13.6

Note: Tables may not add percisely due to rounding

## SCHEDULE 2.0 FORECAST COST OF GAS SOLD

#### SaskEnergy Incorporated

Forecast Cost of Gas Sold (\$000's) November 1, 2022 - October 31, 2023

		1	2	3	4	5	6	7	8	9	10	11	12	13
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
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	\$59,311
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	\$78,633
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	\$62,432
4	Price Risk Management (Inflows)/Outflows	(\$10,015)	(\$10,349)	(\$10,349)	(\$9,347)	(\$10,349)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$50,408)
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	\$29,638
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
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
8	Gas in Storage Interest Expense	\$16	\$16	\$16	\$16	\$16	\$16	\$16	\$16	\$16	\$16	\$16	\$16	\$195
9	Gas Supply Operating Maintenance & Admin Expenses	\$129	\$129	\$129	\$129	\$129	\$129	\$129	\$129	\$129	\$129	\$129	\$129	\$1,550
10	Gas Supply Related Bad Debt Expense	\$150	\$208	\$223	\$184	\$151	\$83	\$42	\$36	\$23	\$23	\$39	\$88	\$1,250
11	Less Gas Supply Related Late Payment Charges	(\$44)	(\$57)	(\$84)	(\$109)	(\$110)	(\$100)	(\$85)	(\$68)	(\$55)	(\$46)	(\$41)	(\$40)	(\$839)
12	Less Cost of Internal Usage	(\$220)	(\$311)	(\$400)	(\$376)	(\$421)	(\$309)	(\$286)	(\$178)	(\$108)	(\$50)	(\$115)	(\$122)	(\$2,896)
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

				Vol	ume (Gigajo	ules - 000s	)							
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
14	Customer Sales	6,486	8,958	9,601	7,946	6,505	3,557	1,826	1,568	975	983	1,675	3,802	53,881
15	Purchases (less Fuel Gas & Line Loss)	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
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 Withdrawal (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)	\$4.338	\$4.338	\$4.338	\$4.338	\$4.338	\$3.563	\$3.563	\$3.563	\$3.563	\$3.563	\$3.563	\$3.563	
19	Internal Usage	(65)	(86)	(109)	(104)	(126)	(86)	(79)	(49)	(29)	(14)	(31)	(34)	(813)

Note: Numbers may not add up exact due to rounding.

## **SCHEDULE 2.1** FORECAST GAS PRICES

# SaskEnergy Incorporated Forecast Gas Prices for November 1, 2022 - October 31, 2023 Closing Prices as of May 18, 2022 \$/Gigajoule

		1	2	3	4	5	6	7	8	9	10	11	12
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
1	AECO Forward Prices	7.958	7.958	7.958	7.958	7.958	4.277	4.277	4.277	4.277	4.277	4.277	4.277
	COST OF PURCHASE GAS												
2	Cost of Purchase Gas - Fixed Price	2.172	2.172	2.172	2.172	2.172	2.203	2.203	2.203	2.203	2.203	2.203	2.203
3	Cost of Purchase Gas - Floating Price	8.253	8.253	8.252	8.252	8.252	4.650	4.650	4.650	4.650	4.650	4.650	4.650
4	Cost of Purchase Gas Before Financial Hedges	4.507	4.507	4.515	4.515	4.515	2.987	2.987	2.987	2.987	2.987	2.987	2.987
5	Change in Price due to Financial Hedges	(2.142)	(2.142)	(2.137)	(2.137)	(2.137)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	Receipt Transport	0.521	0.521	0.520	0.520	0.520	0.552	0.552	0.552	0.552	0.552	0.552	0.552
7	Forecast Cost of Purchase Gas	2.886	2.886	2.897	2.897	2.897	3.539	3.539	3.539	3.539	3.539	3.539	3.539
8	Volume Adjusted Cost of Purchase Gas <sup>1</sup>	2.904	2.904	2.915	2.915	2.915	3.563	3.563	3.563	3.563	3.563	3.563	3.563
	COST OF GAS SOLD												
9	Purchase Price	2.904	2.904	2.915	2.915	2.915	3.563	3.563	3.563	3.563	3.563	3.563	3.563
10	% of Sales met with Purchases	70.6%	52.6%	49.0%	53.4%	72.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
11	Inventory Withdrawal Price	4.338	4.338	4.338	4.338	4.338	3.770	3.621	3.596	3.584	3.579	3.576	3.576
12	% of Sales met with Inventory	29.4%	47.4%	51.0%	46.6%	28.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13	Cost of Gas Sold before OM&A	3.325	3.583	3.641	3.578	3.313	3.563	3.563	3.563	3.563	3.563	3.563	3.563
14	Interest, OM&A and Bad Debt Expense Less Late Payment Charges <sup>2</sup>	0.039	0.034	0.030	0.028	0.029	0.037	0.059	0.075	0.121	0.128	0.088	0.052
15	Forecast Cost of Gas Sold	\$ 3.364 \$	3.616 \$	3.671 \$	3.607 \$	3.342 \$	3.601	\$ 3.622	3.639	\$ 3.684	\$ 3.692	\$ 3.651 \$	\$ 3.615

<sup>1</sup> The volume of purchase gas has been adjusted for Fuel Gas and Line Loss.

<sup>2</sup> Interest, OM&A, Bad Debt Expense and Late Payment Charges are budgeted annually and calculated as equal monthly expenses. Due to the varying monthly sales volumes, the impact on the Cost of Gas Sold will be minimal during months where sales volumes are high and considerably greater when sales volumes are low.

## SCHEDULE 2.2 FORECASTED COST OF GAS – STORAGE INVENTORY DETAILS

#### **SaskEnergy Incorporated**

Storage Inventory Details - Forecasted Cost of Gas November 1, 2022 - October 31, 2023

			1	2	3	4	5	6	7	8		9	10	11	12
		ı	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Ju	1-23	Jul-23	Aug-23	Sep-23	Oct-23
Line	Gas in Storage - Volume														
1	Opening Balance (000's GJs)		16,840	14,934	10,692	5,793	2,089	270	1,012	3,	537	6,405	9,932	13,466	16,145
2	Closing Balance (000's GJs)	•	14,934	10,692	5,793	2,089	270	1,012	3,637	6,	105	9,932	13,466	16,145	16,840
3	(Injections)/ Withdrawals (000's GJs)		1,905	4,243	4,899	3,704	1,819	(742)	(2,626)	(2,	768)	(3,527)	(3,534)	(2,678)	(695)
4	(Injection)/Withdrawal Price		\$4.34	\$4.34	\$4.34	\$4.34	\$4.34	\$3.56	\$3.56	\$	3.56	\$3.56	\$3.56	\$3.56	\$3.56
5	Weighted Average Price of Gas in Storage		\$4.34	\$4.34	\$4.34	\$4.34	\$4.34	\$3.77	\$3.62	\$	3.60	\$3.58	\$3.58	\$3.58	\$3.58
	Cost of Gas in Storage														
6	Opening Balance (\$000)	\$ 7	73,048	\$ 64,783	\$ 46,379	\$ 25,130	\$ 9,063	\$ 1,170	\$ 3,814	\$ 13,	170	\$ 23,033	\$ 35,600	\$ 48,194	\$ 57,738
7	Closing Balance (\$000)	\$ (	64,783	\$ 46,379	\$ 25,130	\$ 9,063	\$ 1,170	\$ 3,814	\$ 13,170	\$ 23	033	\$ 35,600	\$ 48,194	\$ 57,738	\$ 60,215
8	Net Change in Inventory (\$000)	\$	8,265	\$ 18,404	\$ 21,250	\$ 16,067	\$ 7,893	\$ (2,644)	\$ (9,356)	\$ (9	363)	\$ (12,567)	\$ (12,594)	\$ (9,544)	\$ (2,477)

		Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	TOTAL
Line	Storage Inventory Carrying Costs														
					< Summ	ier>									
9	Gas in Storage Closing Balance	\$4,105	\$3,412	\$14,098	\$26,479	\$42,337	\$57,991	\$69,944	\$73,048	\$64,783	\$46,379	\$25,130	\$9,063	\$1,170	
10	Average Daily Balance		\$3,758	\$8,755	\$20,288	\$34,408	\$50,164	\$63,968	\$71,496	\$68,916	\$55,581	\$35,755	\$17,096	\$5,116	
11	Interest Rate		0.51%	1.01%	1.01%	0.36%	0.36%	0.36%	0.53%	0.53%	0.53%	0.78%	0.78%	0.78%	
12	Calculated Monthly Interest Charge		\$2	\$8	\$17	\$11	\$15	\$19	\$32	\$30	\$25	\$24	\$10	\$3	
13	Total Annual Interest														\$195
14	Amortized Monthly Interest Charge														\$16

Note: Tables might not add precisely due to rounding.

## SCHEDULE 3.0 GAS COST VARIANCE ACCOUNT

#### SaskEnergy Incorporated

Gas Cost Variance Account (\$000's) November 1, 2021 - October 31, 2022

		1	2	3	4	5	6	7	8	9	10	11	12	13
Line	Description	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22 Forecast	Jun-22 Forecast	Jul-22 Forecast	Aug-22 Forecast	Sep-22 Forecast	Oct-22 Forecast	TOTAL
1	GCVA Balance Forward at October 31, 2021	\$20,443												\$20,443
2	Opening Cumulative GCVA Balance - Under/(Over) Recovery	\$20,443	\$18,936	\$19,035	\$18,635	\$17,491	\$14,688	\$20,455	\$22,164	\$24,287	\$25,663	\$26,991	\$29,241	
3	Purchases - Alberta	\$13,646	\$16,644	\$15,731	\$10,737	\$9,779	\$15,974	\$10,875	\$11,300	\$11,721	\$11,587	\$11,281	\$11,702	\$150,978
4	Purchases - Saskatchewan	\$3,327	\$4,896	\$3,308	\$3,218	\$3,772	\$3,408	\$5,060	\$5,887	\$6,140	\$5,969	\$5,862	\$6,119	\$56,968
5	Less Purchase of Other Gas Sales	(\$1)	\$0	(\$8)	(\$4)	(\$6)	(\$2)	\$0	\$0	\$0	\$0	\$0	\$0	(\$21)
6	Price Risk Management (Inflows)/Outflows	(\$4,083)	(\$3,193)	(\$3,775)	(\$3,897)	(\$4,927)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$19,876)
7	Transportation	\$2,393	\$2,415	\$2,408	\$2,394	\$2,393	\$2,541	\$2,517	\$2,436	\$2,517	\$2,517	\$2,436	\$2,517	\$29,485
8	Cost of Purchase Gas	\$15,282	\$20,762	\$17,664	\$12,448	\$11,011	\$21,921	\$18,453	\$19,623	\$20,379	\$20,074	\$19,579	\$20,339	\$217,534
9	Storage Withdrawal (Injection)	\$3,975	\$12,853	\$16,003	\$17,096	\$9,421	\$694	(\$10,686)	(\$12,381)	(\$15,858)	(\$15,654)	(\$11,953)	(\$3,104)	(\$9,596)
10	Gas in Storage Interest Expense	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$5	\$59
11	Gas Supply Operating Maintenance & Admin Expenses	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$119	\$1,431
12	Gas Supply Related Bad Debt Expense	\$105	\$168	\$171	\$153	\$116	\$84	\$29	\$25	\$16	\$16	\$27	\$61	\$969
13	Less Gas Supply Related Late Payment Charges	(\$36)	(\$55)	(\$91)	(\$158)	(\$186)	(\$117)	(\$49)	(\$39)	(\$32)	(\$27)	(\$24)	(\$23)	(\$836)
14	Less Cost of Internal Usage	(\$58)	(\$104)	(\$140)	(\$197)	(\$170)	(\$210)	(\$326)	(\$223)	(\$136)	(\$61)	(\$143)	(\$153)	(\$1,921)
15	Cost of Gas Sold	\$19,392	\$33,748	\$33,730	\$29,466	\$20,316	\$22,496	\$7,544	\$7,130	\$4,493	\$4,471	\$7,610	\$17,243	\$207,640
16	Commodity Sales Revenue (\$3.20/GJ)	\$20,902	\$33,651	\$34,131	\$30,612	\$23,122	\$16,736	\$5,854	\$5,026	\$3,124	\$3,151	\$5,368	\$12,186	\$193,864
17	Gain (loss) on other gas sales	1	0	2	1	4	1	0	0	0	0	0	0	\$8
18	Period GCVA Balance	(\$1,510)	\$97	(\$404)	(\$1,147)	(\$2,809)	\$5,759	\$1,691	\$2,104	\$1,369	\$1,320	\$2,242	\$5,057	\$13,768
19	Period GCVA Interest	\$3	\$2	\$3	\$3	\$7	\$7	\$18	\$19	\$8	\$8	\$8	\$14	\$101
20	Closing Cumulative GCVA Balance (Line 2+18+19)	\$18,936	\$19,035	\$18,635	\$17,491	\$14,688	\$20,455	\$22,164	\$24,287	\$25,663	\$26,991	\$29,241	\$34,312	\$34,312

				Vo	olume (Giga	joules - 000s	i)							
Line	Description	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22 Forecast	Oct-22 Forecast	TOTAL
21	Customer Sales	6,349	10,422	10,523	9,387	7,077	5,145	1,829	1,571	976	985	1,678	3,808	59,816
22	Purchases (less Fuel Gas & Line Loss)	5,192	6,652	5,832	4,392	4,349	4,988	4,534	4,388	4,534	4,534	4,388	4,534	58,318
23	Cost of Purchase Gas (\$/GJ)	\$2.944	\$3.121	\$3.029	\$2.834	\$2.532	\$4.395	\$4.069	\$4.472	\$4.494	\$4.427	\$4.462	\$4.486	
24	Storage Withdrawal (Injection)	1,176	3,802	4,734	5,058	2,787	205	(3,162)	(3,663)	(4,692)	(4,631)	(3,536)	(918)	(2,839)
25	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	
26	Internal Usage	(19)	(32)	(44)	(63)	(59)	(48)	456	845	1,134	1,082	826	192	4,270

Note: Numbers may not add up exact due to rounding.

## SCHEDULE 3.1 GAS COST VARIANCE ACCOUNT – STORAGE INVENTORY DETAILS

#### **SaskEnergy Incorporated**

Storage Inventory Details - Gas Cost Variance Account November 1, 2021 to October 31, 2022

		1	2	3	4	5	6	7		8		9		10		11		12
		Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22 Forecast	F	Jun-22 orecast	F	Jul-22 orecast	F	Aug-22 orecast	F	Sep-22 orecast		Oct-22 Forecast
Line	Gas in Storage - Volume																	
1	Opening Balance (000's GJs)	18,772	17,596	13,794	9,060	4,002	1,215	1,009		3,635		6,404		9,933		13,469		16,148
2	Closing Balance (000's GJs)	17,596	13,794	9,060	4,002	1,215	1,009	3,635		6,404		9,933		13,469		16,148		16,840
3	(Injections)/ Withdrawals (000's GJs)	1,176	3,802	4,734	5,058	2,787	205	(2,626)		(2,769)		(3,529)		(3,536)		(2,679)	ļ	(692)
4	(Injection)/Withdrawal Price	\$3.38	\$3.38	\$3.38	\$3.38	\$3.38	\$4.40	\$4.07		\$4.47		\$4.49		\$4.43		\$4.46		\$4.49
5	Weighted Average Price of Gas in Storage	\$3.38	\$3.38	\$3.38	\$3.38	\$3.38	\$3.38	\$3.88		\$4.13		\$4.26		\$4.31		\$4.33		\$4.34
	Cost of Gas in Storage																	
6	Opening Balance (\$000)	\$ 63,453	\$ 59,478	\$ 46,625	\$ 30,622	\$ 13,527	\$ 4,105	\$ 3,412	\$	14,098	\$	26,479	\$	42,337	\$	57,991	\$	69,944
7	Closing Balance (\$000)	\$ 59,478	\$ 46,625	\$ 30,622	\$ 13,527	\$ 4,105	\$ 3,412	\$ 14,098	\$	26,479	\$	42,337	\$	57,991	\$	69,944	\$	73,048
8	Net Change in Inventory (\$000)	\$ 3,975	\$ 12,853	\$ 16,003	\$ 17,096	\$ 9,421	\$ 694	\$ (10,686)	\$	(12,381)	\$	(15,858)	\$	(15,654)	\$	(11,953)	\$	(3,104)

		Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	TOTAL
Line Stora	age Inventory Carrying Costs														1
	_														
	L			<	Previous St	ımmer>									ı
9 Gas in	n Storage Closing Balance	\$9,309	\$8,254	\$15,174	\$22,724	\$34,687	\$44,384	\$56,548	\$63,453	\$59,478	\$46,625	\$30,622	\$13,527	\$4,105	1
	ge Daily Balance		\$8,782	\$11,714	\$18,949	\$28,705	\$39,536	\$50,466	\$60,001	\$61,465	\$53,051	\$38,624	\$22,074	\$8,816	
11 Interes	est Rate		0.11%	0.11%	0.12%	0.15%	0.17%	0.17%	0.17%	0.19%	0.15%	0.17%	0.24%	0.50%	
12 Calcula	lated Monthly Interest Charge		\$1	\$1	\$2	\$4	\$6	\$7	\$9	\$10	\$7	\$6	\$4	\$4	
13 Total A	Annual Interest														\$59
14 Amorti	tized Monthly Interest Charge														\$5

Note: Numbers may not add up exact due to rounding.

## SCHEDULE 4.0 DETERMINATION OF COMMODITY RATE

#### SaskEnergy Incorporated

## Determination of Commodity Rate for November 1, 2022 to October 31, 2023

Line	Description	Amount	Ref.
1	Estimated Palance of COVA at October 21, 2022 (000%)	¢24.212.100	Schodula 2.0 Col. 12 Lina 20
1	Estimated Balance of GCVA at October 31, 2022 (000's)	\$34,312,190	Schedule 3.0, Col. 13, Line 20
2	November 2022 to October 2023 Gas Cost Forecast (000's)	\$ 191,750,559	Schedule 2.0, SUM Col. 13, Line 12
3	Total Forecast Costs to Recover (000's)	\$ 226,062,749	Line 1 plus Line 2
4	November 2022 to October 2023 Forecast Sales (GJs - 000's)	53,880,685	Schedule 2.0, SUM Col. 13, Line 13
5	November 2022 to October 2023 Monthly Weighted Cost per Unit of Sales	\$4.196	Line 3 divided by Line 4
6	Indicative Commodity Rate	\$4.20	
7	Customer Commodity Rate Equivalent (Heating Value = 39.90 MJ/m <sup>3</sup> )	16.74	cents per cubic metre

#### Notes:

- 1. Numbers might not add precisely due to rounding.
- SaskEnergy purchases natural gas on an energy basis (GJs) and bills its customers on a volume basis (cubic metres). The Heating Value
  used to convert energy to volume is a forecast based on the previous average volume-weighted twelve months.
- 3. The methodology is designed to target a zero GCVA balance at the end of the one year period (November 2022 October 2023).

## **SCHEDULE 5.0 (1 of 3)**

#### 2022-23 LOAD FORECAST - BASE CASE

			Apr	il 1, 2022 - N	larch 31, 202	3 Monthly F	orecast Nun	nber of Cust	omers				
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Average
Residential	362,197	361,636	360,835	360,427	360,416	361,290	362,684	363,821	364,474	364,846	365,072	365,260	362,747
Commercial Small	41,402	41,382	41,327	41,292	41,278	41,355	41,477	41,613	41,674	41,724	41,753	41,761	41,503
Commercial Large	1,504	1,506	1,510	1,509	1,509	1,511	1,518	1,520	1,522	1,523	1,524	1,524	1,515
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	405,129	404,550	403,698	403,254	403,229	404,182	405,705	406,980	407,696	408,120	408,375	408,571	405,791

		April 1	, 2022 - Marc	ch 31, 2023 N	lonthly Fore	cast Deliver	y Volumes i	n Thousands	of Cubic Me	tres (m³)			
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	58,671	28,940	27,706	15,403	16,441	28,726	66,868	113,398	155,249	168,861	134,823	106,923	922,009
Commercial Small	39,340	19,021	14,593	10,462	10,112	16,910	34,079	61,624	87,489	89,861	80,611	65,988	530,091
Commercial Large	17,691	16,442	9,391	7,093	6,026	6,426	18,644	22,540	34,403	36,271	32,676	34,740	242,343
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	116,430	65,050	52,046	33,859	32,917	53,310	120,102	199,862	278,431	297,118	250,007	210,664	1,709,795

		Apri	1, 2022 - Ma	rch 31, 2023	Monthly Fo	recast Deliv	ery Volumes	in Thousan	ds of Gigajoເ	iles (GJ)			
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	2,341	1,155	1,105	615	656	1,146	2,668	4,525	6,194	6,738	5,379	4,266	36,788
Commercial Small	1,570	759	582	417	403	675	1,360	2,459	3,491	3,585	3,216	2,633	21,151
Commercial Large	706	656	375	283	240	256	744	899	1,373	1,447	1,304	1,386	9,669
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	4,646	2,595	2,077	1,351	1,313	2,127	4,792	7,975	11,109	11,855	9,975	8,405	68,221

Note: Tables may not add percisely due to rounding

Heat Value Assumed is 39.9

## **SCHEDULE 5.0 (2 of 3)**

#### 2023-24 LOAD FORECAST - BASE CASE

			Apr	il 1, 2023 - N	larch 31, 202	4 Monthly F	orecast Nun	nber of Cust	omers				
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Average
Residential	364,539	363,975	363,169	362,758	362,747	363,627	365,030	366,174	366,831	367,206	367,433	367,622	365,093
Commercial Small	41,720	41,700	41,644	41,609	41,595	41,673	41,795	41,933	41,994	42,045	42,074	42,082	41,822
Commercial Large	1,506	1,508	1,512	1,511	1,511	1,513	1,520	1,522	1,524	1,525	1,526	1,526	1,517
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	407,791	407,208	406,351	405,904	405,879	406,838	408,371	409,655	410,375	410,802	411,059	411,256	408,457

		April 1	, 2023 - Mar	ch 31, 2024 N	lonthly Fore	cast Deliver	y Volumes ii	n Thousands	of Cubic Me	tres (m³)			
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	58,554	28,883	27,651	15,372	16,408	28,669	66,735	113,172	154,940	168,524	134,554	106,710	920,171
Commercial Small	39,325	19,013	14,588	10,458	10,108	16,904	34,066	61,601	87,456	89,827	80,580	65,963	529,890
Commercial Large	17,676	16,428	9,383	7,087	6,021	6,420	18,629	22,522	34,374	36,241	32,649	34,711	242,142
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	116,284	64,971	51,977	33,819	32,875	53,241	119,941	199,594	278,060	296,717	249,681	210,397	1,707,555

		April	1, 2023 - Ma	rch 31, 2024	Monthly Fo	recast Deliv	ery Volumes	in Thousand	ds of Gigajou	iles (GJ)			
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	2,336	1,152	1,103	613	655	1,144	2,663	4,516	6,182	6,724	5,369	4,258	36,715
Commercial Small	1,569	759	582	417	403	674	1,359	2,458	3,490	3,584	3,215	2,632	21,143
Commercial Large	705	655	374	283	240	256	743	899	1,372	1,446	1,303	1,385	9,661
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	4,640	2,592	2,074	1,349	1,312	2,124	4,786	7,964	11,095	11,839	9,962	8,395	68,131

Note: Tables may not add percisely due to rounding

Heat Value Assumed is 39.9

## **SCHEDULE 5.0 (3 of 3)**

#### 2024-25 LOAD FORECAST - BASE CASE

			Apr	il 1, 2024 - N	larch 31, 202	5 Monthly F	orecast Nun	nber of Cust	omers				
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Average
Residential	366,738	366,170	365,359	364,946	364,935	365,820	367,231	368,382	369,043	369,421	369,649	369,840	367,294
Commercial Small	42,015	41,995	41,939	41,903	41,889	41,968	42,091	42,230	42,291	42,342	42,372	42,379	42,118
Commercial Large	1,508	1,510	1,514	1,513	1,513	1,515	1,522	1,524	1,526	1,527	1,528	1,528	1,519
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	410,287	409,700	408,838	408,388	408,363	409,329	410,870	412,162	412,887	413,316	413,575	413,773	410,957

		April 1	, 2024 - Marc	ch 31, 2025 N	Nonthly Fore	cast Deliver	y Volumes i	n Thousands	of Cubic Me	tres (m³)			
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	58,353	28,784	27,556	15,320	16,352	28,571	66,506	112,785	154,410	167,948	134,094	106,345	917,023
Commercial Small	39,290	18,997	14,575	10,449	10,099	16,889	34,037	61,547	87,380	89,748	80,510	65,906	529,427
Commercial Large	17,661	16,415	9,375	7,081	6,016	6,415	18,613	22,503	34,346	36,211	32,621	34,682	241,941
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	116,034	64,842	51,862	33,751	32,805	53,122	119,667	199,135	277,425	296,032	249,123	209,945	1,703,745

		April	1, 2024 - Ma	rch 31, 2025	Monthly Fo	recast Deliv	ery Volumes	in Thousan	ds of Gigajoເ	ıles (GJ)			
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	2,328	1,148	1,099	611	652	1,140	2,654	4,500	6,161	6,701	5,350	4,243	36,589
Commercial Small	1,568	758	582	417	403	674	1,358	2,456	3,486	3,581	3,212	2,630	21,124
Commercial Large	705	655	374	283	240	256	743	898	1,370	1,445	1,302	1,384	9,653
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	4,630	2,587	2,069	1,347	1,309	2,120	4,775	7,945	11,069	11,812	9,940	8,377	67,979

Note: Tables may not add percisely due to rounding

Heat Value Assumed is 39.9

## **SCHEDULE 5.1 (1 of 3)**

#### 2022-23 LOAD FORECAST - COLD WEATHER SCENARIO

			Apr	il 1, 2022 - N	larch 31, 202	3 Monthly F	orecast Nun	nber of Cust	omers				
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Average
Residential	362,197	361,636	360,835	360,427	360,416	361,290	362,684	363,821	364,474	364,846	365,072	365,260	362,747
Commercial Small	41,402	41,382	41,327	41,292	41,278	41,355	41,477	41,613	41,674	41,724	41,753	41,761	41,503
Commercial Large	1,504	1,506	1,510	1,509	1,509	1,511	1,518	1,520	1,522	1,523	1,524	1,524	1,515
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	405,129	404,550	403,698	403,254	403,229	404,182	405,705	406,980	407,696	408,120	408,375	408,571	405,791

		April 1	, 2022 - Marc	h 31, 2023 N	Nonthly Fore	cast Deliver	y Volumes i	n Thousands	of Cubic Me	tres (m³)			
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	70,405	34,728	33,247	18,484	19,729	34,472	80,242	136,078	186,299	202,633	161,787	128,308	1,106,411
Commercial Small	47,208	22,825	17,512	12,554	12,135	20,292	40,895	73,949	104,987	107,833	96,733	79,186	636,109
Commercial Large	21,229	19,731	11,269	8,512	7,232	7,711	22,373	27,048	41,283	43,525	39,211	41,688	290,811
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	139,570	77,930	62,384	40,451	39,432	63,722	144,021	239,375	333,859	356,116	299,629	252,194	2,048,684

		April	1, 2022 - Ma	rch 31, 2023	Monthly Fo	recast Deliv	ery Volumes	in Thousan	ds of Gigajou	iles (GJ)			
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	2,809	1,386	1,327	737	787	1,375	3,202	5,429	7,433	8,085	6,455	5,119	44,146
Commercial Small	1,884	911	699	501	484	810	1,632	2,951	4,189	4,303	3,860	3,160	25,381
Commercial Large	847	787	450	340	289	308	893	1,079	1,647	1,737	1,565	1,663	11,603
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	5,569	3,109	2,489	1,614	1,573	2,543	5,746	9,551	13,321	14,209	11,955	10,063	81,742

Note: Tables may not add percisely due to rounding

Heat Value Assumed is 39.9

## **SCHEDULE 5.1 (2 of 3)**

#### 2023-24 LOAD FORECAST - COLD WEATHER SCENARIO

			Apr	il 1, 2023 - N	1arch 31, 202	4 Monthly F	orecast Nun	nber of Cust	omers				
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Average
Residential	364,539	363,975	363,169	362,758	362,747	363,627	365,030	366,174	366,831	367,206	367,433	367,622	365,093
Commercial Small	41,720	41,700	41,644	41,609	41,595	41,673	41,795	41,933	41,994	42,045	42,074	42,082	41,822
Commercial Large	1,506	1,508	1,512	1,511	1,511	1,513	1,520	1,522	1,524	1,525	1,526	1,526	1,517
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	407,791	407,208	406,351	405,904	405,879	406,838	408,371	409,655	410,375	410,802	411,059	411,256	408,457

		April 1	, 2023 - Marc	ch 31, 2024 N	Monthly Fore	cast Deliver	y Volumes i	n Thousands	of Cubic Me	etres (m³)			
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	70,264	34,659	33,181	18,447	19,690	34,403	80,082	135,806	185,928	202,229	161,465	128,052	1,104,205
Commercial Small	47,190	22,816	17,505	12,550	12,130	20,285	40,880	73,921	104,947	107,792	96,696	79,156	635,868
Commercial Large	21,211	19,714	11,260	8,505	7,226	7,704	22,354	27,026	41,249	43,489	39,178	41,654	290,57
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	139,395	77,836	62,302	40,402	39,382	63,639	143,827	239,053	333,414	355,635	299,237	251,874	2,045,996

		April	1, 2023 - Ma	rch 31, 2024	Monthly Fo	recast Deliv	ery Volumes	in Thousan	ds of Gigajou	les (GJ)			
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	2,804	1,383	1,324	736	786	1,373	3,195	5,419	7,419	8,069	6,442	5,109	44,058
Commercial Small	1,883	910	698	501	484	809	1,631	2,949	4,187	4,301	3,858	3,158	25,371
Commercial Large	846	787	449	339	288	307	892	1,078	1,646	1,735	1,563	1,662	11,594
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	5,562	3,106	2,486	1,612	1,571	2,539	5,739	9,538	13,303	14,190	11,940	10,050	81,635

Note: Tables may not add percisely due to rounding

Heat Value Assumed is 39.9

## **SCHEDULE 5.1 (3 of 3)**

#### 2024-25 LOAD FORECAST - COLD WEATHER SCENARIO

			Apr	il 1, 2024 - M	larch 31, 202	5 Monthly F	orecast Nun	nber of Cust	omers				
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Average
Residential	366,738	366,170	365,359	364,946	364,935	365,820	367,231	368,382	369,043	369,421	369,649	369,840	367,294
Commercial Small	42,015	41,995	41,939	41,903	41,889	41,968	42,091	42,230	42,291	42,342	42,372	42,379	42,118
Commercial Large	1,508	1,510	1,514	1,513	1,513	1,515	1,522	1,524	1,526	1,527	1,528	1,528	1,519
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	410,287	409,700	408,838	408,388	408,363	409,329	410,870	412,162	412,887	413,316	413,575	413,773	410,957

		April 1	, 2024 - Marc	ch 31, 2025 N	Monthly Fore	cast Deliver	y Volumes i	n Thousand	of Cubic Me	tres (m³)			
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	70,024	34,541	33,068	18,384	19,622	34,285	79,808	135,342	185,292	201,537	160,912	127,614	1,100,428
Commercial Small	47,149	22,796	17,490	12,539	12,119	20,267	40,844	73,856	104,856	107,698	96,612	79,087	635,313
Commercial Large	21,194	19,698	11,250	8,498	7,220	7,698	22,336	27,004	41,215	43,453	39,146	41,619	290,329
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	139,095	77,681	62,163	40,321	39,299	63,497	143,498	238,501	332,652	354,813	298,568	251,332	2,041,423

		April	1, 2024 - Ma	rch 31, 2025	Monthly Fo	recast Deliv	ery Volumes	in Thousan	ds of Gigajoບ	iles (GJ)			
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	2,794	1,378	1,319	734	783	1,368	3,184	5,400	7,393	8,041	6,420	5,092	43,907
Commercial Small	1,881	910	698	500	484	809	1,630	2,947	4,184	4,297	3,855	3,156	25,349
Commercial Large	846	786	449	339	288	307	891	1,077	1,644	1,734	1,562	1,661	11,584
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	5,550	3,099	2,480	1,609	1,568	2,534	5,726	9,516	13,273	14,157	11,913	10,028	81,453

Note: Tables may not add percisely due to rounding

Heat Value Assumed is 39.9

MI/m3

## **SCHEDULE 5.2 (1 of 3)**

#### 2022-23 LOAD FORECAST - WARM WEATHER SCENARIO

			Apr	il 1, 2022 - N	larch 31, 202	3 Monthly F	orecast Nun	nber of Cust	omers				
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Average
Residential	362,197	361,636	360,835	360,427	360,416	361,290	362,684	363,821	364,474	364,846	365,072	365,260	362,747
Commercial Small	41,402	41,382	41,327	41,292	41,278	41,355	41,477	41,613	41,674	41,724	41,753	41,761	41,503
Commercial Large	1,504	1,506	1,510	1,509	1,509	1,511	1,518	1,520	1,522	1,523	1,524	1,524	1,515
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	405,129	404,550	403,698	403,254	403,229	404,182	405,705	406,980	407,696	408,120	408,375	408,571	405,791

		April 1	, 2022 - Marc	h 31, 2023 N	Monthly Fore	cast Deliver	y Volumes i	n Thousands	of Cubic Me	tres (m³)			
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	46,936	23,152	22,165	12,322	13,153	22,981	53,494	90,718	124,200	135,089	107,858	85,539	737,607
Commercial Small	31,472	15,216	11,674	8,370	8,090	13,528	27,263	49,299	69,991	71,889	64,489	52,791	424,073
Commercial Large	14,153	13,154	7,513	5,674	4,821	5,140	14,915	18,032	27,522	29,017	26,140	27,792	193,874
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	93,290	52,169	41,708	27,268	26,401	42,897	96,184	160,350	223,002	238,119	200,385	169,133	1,370,906

		April	1, 2022 - Ma	rch 31, 2023	Monthly Fo	recast Deliv	ery Volumes	in Thousan	ds of Gigajoເ	iles (GJ)			
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	1,873	924	884	492	525	917	2,134	3,620	4,956	5,390	4,304	3,413	29,431
Commercial Small	1,256	607	466	334	323	540	1,088	1,967	2,793	2,868	2,573	2,106	16,920
Commercial Large	565	525	300	226	192	205	595	719	1,098	1,158	1,043	1,109	7,736
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	3,722	2,082	1,664	1,088	1,053	1,712	3,838	6,398	8,898	9,501	7,995	6,748	54,699

Note: Tables may not add percisely due to rounding Heat Value Assumed is 39.9 MJ/m3

## **SCHEDULE 5.2 (2 of 3)**

#### 2023-24 LOAD FORECAST - WARM WEATHER SCENARIO

April 1, 2023 - March 31, 2024 Monthly Forecast Number of Customers													
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Average
Residential	364,539	363,975	363,169	362,758	362,747	363,627	365,030	366,174	366,831	367,206	367,433	367,622	365,093
Commercial Small	41,720	41,700	41,644	41,609	41,595	41,673	41,795	41,933	41,994	42,045	42,074	42,082	41,822
Commercial Large	1,506	1,508	1,512	1,511	1,511	1,513	1,520	1,522	1,524	1,525	1,526	1,526	1,517
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	407,791	407,208	406,351	405,904	405,879	406,838	408,371	409,655	410,375	410,802	411,059	411,256	408,457

April 1, 2023 - March 31, 2024 Monthly Forecast Delivery Volumes in Thousands of Cubic Metres (m³)													
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	46,843	23,106	22,121	12,298	13,126	22,935	53,388	90,538	123,952	134,819	107,643	85,368	736,137
Commercial Small	31,460	15,211	11,670	8,366	8,087	13,523	27,253	49,281	69,965	71,861	64,464	52,771	423,912
Commercial Large	14,141	13,143	7,507	5,670	4,817	5,136	14,903	18,017	27,499	28,993	26,119	27,769	193,714
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	93,173	52,106	41,653	27,235	26,367	42,842	96,055	160,135	222,706	237,798	200,124	168,920	1,369,115

		Apri	1, 2023 - Ma	rch 31, 2024	Monthly Fo	recast Deliv	ery Volumes	in Thousan	ds of Gigajou	les (GJ)			
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	1,869	922	883	491	524	915	2,130	3,612	4,946	5,379	4,295	3,406	29,372
Commercial Small	1,255	607	466	334	323	540	1,087	1,966	2,792	2,867	2,572	2,106	16,914
Commercial Large	564	524	300	226	192	205	595	719	1,097	1,157	1,042	1,108	7,729
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	3,718	2,079	1,662	1,087	1,052	1,709	3,833	6,389	8,886	9,488	7,985	6,740	54,628

Note: Tables may not add percisely due to rounding Heat Value Assumed is 39.9 MJ/m3

## **SCHEDULE 5.2 (3 of 3)**

#### 2024-25 LOAD FORECAST - WARM WEATHER SCENARIO

April 1, 2024 - March 31, 2025 Monthly Forecast Number of Customers													
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Average
Residential	366,738	366,170	365,359	364,946	364,935	365,820	367,231	368,382	369,043	369,421	369,649	369,840	367,294
Commercial Small	42,015	41,995	41,939	41,903	41,889	41,968	42,091	42,230	42,291	42,342	42,372	42,379	42,118
Commercial Large	1,508	1,510	1,514	1,513	1,513	1,515	1,522	1,524	1,526	1,527	1,528	1,528	1,519
Small Industrial	26	26	26	26	26	26	26	26	26	26	26	26	26
Total Delivery	410,287	409,700	408,838	408,388	408,363	409,329	410,870	412,162	412,887	413,316	413,575	413,773	410,957

April 1, 2024 - March 31, 2025 Monthly Forecast Delivery Volumes in Thousands of Cubic Metres (m³)													
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	46,683	23,027	22,045	12,256	13,081	22,857	53,205	90,228	123,528	134,358	107,275	85,076	733,619
Commercial Small	31,432	15,197	11,660	8,359	8,080	13,511	27,229	49,238	69,904	71,799	64,408	52,725	423,542
Commercial Large	14,129	13,132	7,500	5,665	4,813	5,132	14,891	18,002	27,477	28,969	26,097	27,746	193,553
Small Industrial	729	647	356	901	337	1,247	511	2,300	1,289	2,125	1,898	3,012	15,352
Total Delivery	92,973	52,003	41,561	27,181	26,311	42,747	95,836	159,768	222,198	237,251	199,678	168,559	1,366,066

		April	1, 2024 - Ma	rch 31, 2025	Monthly Fo	recast Deliv	ery Volumes	in Thousan	ds of Gigajou	iles (GJ)			
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	1,863	919	880	489	522	912	2,123	3,600	4,929	5,361	4,280	3,395	29,271
Commercial Small	1,254	606	465	334	322	539	1,086	1,965	2,789	2,865	2,570	2,104	16,899
Commercial Large	564	524	299	226	192	205	594	718	1,096	1,156	1,041	1,107	7,723
Small Industrial	29	26	14	36	13	50	20	92	51	85	76	120	613
Total Delivery	3,710	2,075	1,658	1,085	1,050	1,706	3,824	6,375	8,866	9,466	7,967	6,725	54,506

Note: Tables may not add percisely due to rounding Heat Value Assumed is 39.9 MJ/m3

90 | Page

## **SCHEDULE 5.3 (1 of 3)**

#### 2022-23 REVENUE SENSITIVITY TO CHANGES IN WEATHER

<b>Delivery Rev</b>	enues:	Base	Case
(\$ 1	millions	5)	

Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	14.2	11.3	11.1	9.9	10.8	12.1	16.3	21.3	25.8	27.3	23.6	20.6	204.2
Commercial Small	4.8	3.1	2.8	2.4	2.6	3.2	4.7	7.1	9.4	9.6	8.8	7.5	66.1
Commercial Large	1.4	1.3	0.8	0.7	0.7	0.7	1.6	1.9	2.8	2.9	2.6	2.8	20.3
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.7
Total Delivery	20.5	15.8	14.8	13.1	14.1	16.1	22.6	30.4	38.0	39.9	35.1	31.1	291.3

#### Delivery Revenues: Cold Weather Scenario

(\$ millions)													
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	15.4	11.8	11.7	10.2	11.0	12.6	17.7	23.9	29.4	31.2	26.7	23.1	224.8
Commercial Small	5.4	3.4	3.0	2.6	2.8	3.5	5.3	8.2	10.9	11.2	10.2	8.7	75.1
Commercial Large	1.7	1.6	1.0	0.8	0.8	0.8	1.9	2.2	3.3	3.4	3.1	3.3	23.8
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.7
Total Delivery	22.5	16.9	15.7	13.6	14.6	17.0	24.9	34.4	43.7	45.9	40.1	35.1	324.4

## Delivery Revenues: Warm Weather Scenario (\$ millions)

						(\$ 11111110115	)						
Rate Class	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Total
Residential	13.1	10.7	10.6	9.6	10.3	11.4	14.8	18.9	22.6	23.8	20.8	18.4	184.8
Commercial Small	4.1	2.8	2.5	2.3	2.4	2.9	4.1	6.0	7.8	8.0	7.4	6.3	56.8
Commercial Large	1.2	1.1	0.7	0.6	0.6	0.6	1.3	1.6	2.3	2.4	2.2	2.3	16.8
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.7
Total Delivery	18.4	14.7	13.9	12.5	13.3	15.0	20.2	26.6	32.8	34.3	30.4	27.1	259.1

Note: Tables may not add percisely due to rounding

**Excludes Commodity Revenues** 

## **SCHEDULE 5.3 (2 of 3)**

#### 2023-24 REVENUE SENSITIVITY TO CHANGES IN WEATHER

<b>Delivery Revenues: Base Cas</b>	e
(\$ millions)	

Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	15.4	12.2	12.7	11.3	11.4	12.8	17.1	22.4	27.1	28.6	24.8	21.7	217.5
Commercial Small	5.2	3.4	3.2	2.8	2.7	3.4	5.0	7.5	9.9	10.1	9.2	7.9	70.2
Commercial Large	1.5	1.4	1.0	0.8	0.7	0.7	1.7	2.0	2.9	3.0	2.8	2.9	21.5
Small Industrial	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.8
Total Delivery	22.2	17.1	16.8	14.9	14.9	17.0	23.8	32.0	39.9	41.9	36.9	32.7	310.0

#### Delivery Revenues: Cold Weather Scenario

10	:1	I:	٠-١
12	mil	HOF	15)

						(4 11111110113	,						
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	16.7	12.7	13.2	11.5	11.6	13.4	18.7	25.1	30.9	32.8	28.1	24.3	238.9
Commercial Small	5.9	3.7	3.4	3.0	2.9	3.7	5.6	8.6	11.4	11.6	10.6	9.0	79.4
Commercial Large	1.8	1.7	1.1	0.9	0.8	0.9	2.0	2.3	3.4	3.6	3.3	3.4	25.2
Small Industrial	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.8
<b>Total Delivery</b>	24.3	18.2	17.8	15.4	15.4	18.0	26.2	36.1	45.8	48.1	42.1	36.9	344.4

#### **Delivery Revenues: Warm Weather Scenario**

						(\$ millions	5)						
Rate Class	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
Residential	14.1	11.5	11.9	10.8	10.9	12.0	15.6	19.9	23.8	25.0	21.9	19.3	196.7
Commercial Small	4.5	3.1	2.9	2.6	2.6	3.1	4.3	6.3	8.2	8.4	7.7	6.6	60.3
Commercial Large	1.3	1.2	0.8	0.7	0.6	0.7	1.4	1.6	2.4	2.5	2.3	2.4	17.8
Small Industrial	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.8
Total Delivery	19.9	15.8	15.7	14.1	14.1	15.8	21.3	28.0	34.4	36.0	32.0	28.5	275.6

Note: Tables may not add percisely due to rounding

Excludes Commodity Revenues

## **SCHEDULE 5.3 (3 of 3)**

#### 2024-25 REVENUE SENSITIVITY TO CHANGES IN WEATHER

Del	ivery	Rev	enues:	Base	Case
				_	

(\$ millions)	(\$	mil	lion	s)
---------------	-----	-----	------	----

Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	16.2	12.9	13.4	11.9	12.0	13.5	18.0	23.5	28.5	30.1	26.1	22.8	228.7
Commercial Small	5.4	3.6	3.3	2.9	2.9	3.6	5.2	7.9	10.4	10.6	9.7	8.3	73.8
Commercial Large	1.6	1.5	1.0	0.8	0.7	0.8	1.8	2.1	3.0	3.2	2.9	3.1	22.5
Small Industrial	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.8
Total Delivery	23.3	18.0	17.7	15.7	15.7	17.9	25.0	33.6	41.9	44.0	38.8	34.3	325.9

#### **Delivery Revenues: Cold Weather Scenario**

#### (\$ millions)

						(+	',						
Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	17.5	13.4	14.0	12.3	12.4	14.2	19.6	26.3	32.2	34.2	29.3	25.4	250.8
Commercial Small	6.1	3.9	3.6	3.2	3.1	3.9	5.8	8.9	11.9	12.1	11.1	9.4	83.2
Commercial Large	1.9	1.8	1.2	1.0	0.9	0.9	2.1	2.4	3.6	3.8	3.4	3.6	26.5
Small Industrial	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.9
Total Delivery	25.6	19.2	18.9	16.4	16.4	19.0	27.6	37.8	47.7	50.2	44.0	38.6	361.3

#### **Delivery Revenues: Warm Weather Scenario**

#### (\$ millions)

Rate Class	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
Residential	14.8	12.1	12.7	11.5	11.6	12.8	16.5	20.9	24.9	26.2	23.0	20.3	207.3
Commercial Small	4.7	3.2	3.1	2.8	2.7	3.3	4.6	6.6	8.6	8.8	8.1	7.0	63.4
Commercial Large	1.3	1.3	0.9	0.7	0.7	0.7	1.5	1.7	2.5	2.6	2.4	2.5	18.8
Small Industrial	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.9
Total Delivery	20.9	16.7	16.7	15.1	15.1	16.8	22.5	29.4	36.0	37.7	33.5	30.0	290.3

Note: Tables may not add percisely due to rounding

**Excludes Commodity Revenues** 

#### **SCHEDULE 5.4**

#### **PEAK DAY FORECAST**

Forecast Peak (Gigajoules/day) <u>608,000</u>

1-in-20 Cold Design Criteria

Degree-days (degrees Celsius) 54.2

Average Daily Temperature (degrees Celsius) - 36.2

SCHEDULE 5.5
HISTORICAL PEAK DAYS

<b>Peak Day</b> Date	Degree Days Provincial Average °C	Maximum Daily Customer Consumption GJ
January 5, 2022	52.4	604,651
February 11, 2021	49.6	604,104
January 15, 2020	51.6	589,726
February 7, 2019	51.6	585,000
December 29, 2017	50.1	583,379
January 12, 2017	45.9	535,882
January 16, 2016	46.1	492,468
January 4, 2015	46.7	516,839
January 5, 2014	50.4	559,504
January 30, 2013	48.4	510,523
January 18, 2012	47.1	463,001

#### **SCHEDULE 6.0 (1 OF 4)**

#### ANNUAL AVERAGE USE PER CUSTOMER BY RATE CLASS

#### **RESIDENTIAL**

Residential Rate Class Average Annual Use Per Customer Non-Weather Normalized

Year	Cubic	Annual increase/	GigaJoules	Annual increase/	%
Teal	Metres	(decrease)	(GJ)	(decrease)	70
2016-17	2,543		97.9		
2017-18	2,843	300	110.9	13.0	12%
2018-19	2,898	55	112.6	1.7	2%
2019-20	2,677	(221)	104.9	(7.7)	-8%
2020-21 <sup>1</sup>	2,602	(76)	103.1	(1.8)	-3%
2021-22*	2,579	(22)	102.9	(0.2)	-1%
2022-23*	2,542	(38)	101.4	(1.5)	-1%
2023-24*	2,520	(21)	100.6	(0.9)	-1%
2024-25*	2,497	(24)	99.6	(0.9)	-1%

Residential Rate Class Average Annual Use Per Customer Weather Normalized

Year	Cubic	Annual increase/	GigaJoules	Annual increase/	%
feai	Metres	(decrease)	(GJ)	(decrease)	90
2016-17	2,681		103.2		
2017-18	2,736	56	106.8	3.6	2%
2018-19	2,681	(55)	104.2	(2.6)	-2%
2019-20	2,631	(51)	103.1	(1.1)	-2%
2020-21 <sup>1</sup>	2,602	(29)	103.1	(0.0)	-1%
2021-22*	2,579	(22)	102.9	(0.2)	-1%
2022-23*	2,542	(38)	101.4	(1.5)	-1%
2023-24*	2,520	(21)	100.6	(0.9)	-1%
2024-25*	2,497	(24)	99.6	(0.9)	-1%

<sup>\*</sup> Forecast

Note 1: The UPC calculated using weather normalized data was 106.7 for 2020-21. The COVID-19 pandemic resulted in many people working from home which led to irregular heating patterns. An adjustment was made to reduce UPC as a result. UPC was adjusted to previous year UPC of 103.1 as this was the most current data.

### **SCHEDULE 6.0 (2 OF 4)**

#### **ANNUAL AVERAGE USE PER CUSTOMER BY RATE CLASS**

#### **COMMERCIAL SMALL**

#### Commercial Small Rate Class Average Annual Use Per Customer Non-Weather Normalized

Year	Cubic	Annual increase/	GigaJoules	Annual increase/	%
Teal	Metres	(decrease)	(GJ)	(decrease)	70
2016-17	12,436		479		
2017-18	13,613	1,177	531	52	9%
2018-19	14,139	526	549	18	4%
2019-20	13,695	(445)	537	(13)	-3%
2020-21	13,261	(433)	526	(11)	-3%
2021-22*	12,878	(383)	514	(12)	-3%
2022-23*	12,772	(106)	510	(4)	-1%
2023-24*	12,670	(102)	506	(4)	-1%
2024-25*	12,570	(100)	502	(4)	-1%

#### Commercial Small Rate Class Average Annual Use Per Customer Weather Normalized

Year	Cubic	Annual increase/	GigaJoules	Annual increase/	%
feai	Metres	(decrease)	(GJ)	(decrease)	90
2016-17	13,150		506		
2017-18	13,086	(64)	511	5	0%
2018-19	12,940	(146)	497	(14)	-1%
2019-20	13,503	563	545	48	4%
2020-21	13,001	(503)	515	(29)	-4%
2021-22*	12,878	(122)	514	(1)	-1%
2022-23*	12,772	(106)	510	(4)	-1%
2023-24*	12,670	(102)	506	(4)	-1%
2024-25*	12,570	(100)	502	(4)	-1%

<sup>\*</sup> Forecast

### **SCHEDULE 6.0 (3 OF 4)**

#### ANNUAL AVERAGE USE PER CUSTOMER BY RATE CLASS

#### **COMMERCIAL LARGE**

#### Commercial Large Rate Class Average Annual Use Per Customer Non-Weather Normalized

Year	Cubic	Annual increase/	GigaJoules	Annual increase/	%
real	Metres	(decrease)	(GJ)	(decrease)	70
2016-17	168,815		6,506		
2017-18	173,539	4,724	6,773	267	3%
2018-19	183,309	9,770	7,123	351	6%
2019-20	175,173	(8,136)	6,866	(258)	-4%
2020-21	162,211	(12,962)	6,428	(438)	-7%
2021-22*	160,297	(1,914)	6,396	(32)	-1%
2022-23*	159,953	(344)	6,382	(14)	0%
2023-24*	159,610	(343)	6,368	(14)	0%
2024-25*	159,268	(342)	6,355	(14)	0%

#### Commercial Large Rate Class Average Annual Use Per Customer Weather Normalized

Vaar	Cubic	Annual increase/	GigaJoules	Annual increase/	%
Year	Metres	(decrease)	(GJ)	(decrease)	90
2016-17	178,811		6,891		
2017-18	168,703	(10,108)	6,584	(307)	-6%
2018-19	173,941	5,238	6,759	175	3%
2019-20	170,358	(3,583)	6,759	0	-2%
2020-21	161,505	(8,854)	6,400	(359)	-5%
2021-22*	160,297	(1,207)	6,396	(4)	-1%
2022-23*	159,953	(344)	6,382	(14)	0%
2023-24*	159,610	(343)	6,368	(14)	0%
2024-25*	159,268	(342)	6,355	(14)	0%

<sup>\*</sup> Forecast

### **SCHEDULE 6.0 (4 OF 4)**

#### ANNUAL AVERAGE USE PER CUSTOMER BY RATE CLASS

#### **SMALL INDUSTRIAL**

#### Small Industrial Rate Class Average Annual Use Per Customer Non-Weather Normalized

Year	Cubic	Annual increase/	GigaJoules	Annual increase/	%
real	Metres	(decrease)	(GJ)	(decrease)	70
2016-17	812,206		32,747		
2017-18	796,290	(15,915)	30,657	(2090)	-2%
2018-19	772,982	(23,309)	30,146	(511)	-3%
2019-20	696,581	(76,400)	27,515	(2,631)	-10%
2020-21	595,062	(101,520)	23,560	(3,955)	-15%
2021-22*	595,062	0	23,560	0	0%
2022-23*	595,062	0	23,560	0	0%
2023-24*	595,062	0	23,560	0	0%
2024-25*	595,062	0	23,560	0	0%

#### Small Industrial Rate Class Average Annual Use Per Customer Weather Normalized

Year	Cubic	Annual increase/	GigaJoules	Annual increase/	%
rear	Metres	(decrease)	(GJ)	(decrease)	90
2016-17	812,206		32,747		
2017-18	796,290	(15,915)	30,657	(2090)	-2%
2018-19	772,982	(23,309)	30,146	(511)	-3%
2019-20	696,581	(76,400)	27,515	(2,631)	-10%
2020-21	595,062	(101,520)	23,560	(3,955)	-15%
2021-22*	595,062	0	23,560	0	0%
2022-23*	595,062	0	23,560	0	0%
2023-24*	595,062	0	23,560	0	0%
2024-25*	595,062	0	23,560	0	0%

<sup>\*</sup> Forecast

### **SCHEDULE 6.1 (1 OF 4)**

#### **CUSTOMER CONSUMPTION BY RATE CLASS**

#### **RESIDENTIAL**

Residential Rate Class - Total

		Weather Normalized		
	Average Number	Thousand	GigaJoules	
Year	of Customers	Cubic Metres	(GJ's)	
2016-17	346,218	928,123	35,744,776	
2017-18	349,789	957,186	37,356,679	
2018-19	352,774	945,809	36,754,126	
2019-20	354,848	933,440	36,585,603	
2020-21	358,001	964,304	38,213,396	
2021-22*	360,123	928,847	37,061,014	
2022-23*	362,747	922,009	36,788,165	
2023-24*	365,093	920,171	36,714,819	
2024-25*	367,294	917,023	36,589,237	

Residential Rate Class Gas Supplied by SaskEnergy

		Weather Normalized		
	Average Number	Thousand	GigaJoules	
Year	of Customers	Cubic Metres	(GJ's)	
2016-17	342,962	911,299	35,095,758	
2017-18	347,051	943,648	36,828,294	
2018-19	349,051	936,326	36,385,644	
2019-20	351,266	930,593	36,474,025	
2020-21	354,256	944,973	37,447,359	
2021-22*	356,378	925,928	36,944,545	
2022-23*	359,002	919,090	36,671,696	
2023-24*	361,348	917,252	36,598,350	
2024-25*	363,549	914,104	36,472,768	

Residential Rate Class Gas Supplied by Others

11 3						
		Weather Normalized				
	Average Number	Thousand	GigaJoules			
Year	of Customers	Cubic Metres	(GJ's)			
2016-17	3,256	16,823	649,019			
2017-18	2,738	13,539	528,385			
2018-19	3,723	9,482	368,482			
2019-20	3,582	2,847	111,578			
2020-21	3,745	19,331	766,038			
2021-22*	3,745	2,919	116,470			
2022-23*	3,745	2,919	116,470			
2023-24*	3,745	2,919	116,470			
2024-25*	3,745	2,919	116,470			

<sup>\*</sup> Forecast

### **SCHEDULE 6.1 (2 OF 4)**

#### **CUSTOMER CONSUMPTION BY RATE CLASS**

#### **COMMERCIAL SMALL**

Commercial Small Rate Class - Total

		Weather Normalized		
	Average Number	Thousand	GigaJoules	
Year	of Customers	Cubic Metres	(GJ's)	
2016-17	39,380	517,852	19,946,928	
2017-18	39,658	518,978	20,254,477	
2018-19	40,003	524,178	20,369,542	
2019-20	40,379	545,248	21,370,669	
2020-21	40,767	529,995	21,002,610	
2021-22*	41,129	529,677	21,134,117	
2022-23*	41,503	530,091	21,150,618	
2023-24*	41,822	529,890	21,142,610	
2024-25*	42,118	529,427	21,124,156	

Commercial Small Rate Class Gas Supplied by SaskEnergy

		Weather Normalized		
	Average Number	Thousand	GigaJoules	
Year	of Customers	Cubic Metres	(GJ's)	
2016-17	32,821	376,436	14,501,496	
2017-18	32,423	358,320	13,984,366	
2018-19	31,660	347,277	13,495,193	
2019-20	32,351	358,126	14,036,525	
2020-21	32,987	352,990	13,988,290	
2021-22*	33,101	348,276	13,896,204	
2022-23*	33,475	348,689	13,912,705	
2023-24*	33,794	348,489	13,904,696	
2024-25*	34,090	348,026	13,886,242	

Commercial Small Rate Class Gas Supplied by Others

		Weather Normalized	
	Average Number	Thousand	GigaJoules
Year	of Customers	Cubic Metres	(GJ's)
2016-17	6,559	141,417	5,445,432
2017-18	7,235	160,658	6,270,111
2018-19	8,343	176,900	6,874,349
2019-20	8,028	187,122	7,334,144
2020-21	7,780	177,004	7,014,320
2021-22*	8,028	181,401	7,237,913
2022-23*	8,028	181,401	7,237,913
2023-24*	8,028	181,401	7,237,913
2024-25*	8,028	181,401	7,237,913

<sup>\*</sup> Forecast

### **SCHEDULE 6.1 (3 OF 4)**

#### **CUSTOMER CONSUMPTION BY RATE CLASS**

#### **COMMERCIAL LARGE**

Commercial Large Rate Class - Total

		Weather Normalized	
	Average Number	Thousand	GigaJoules
Year	of Customers	Cubic Metres	(GJ's)
2016-17	1,437	256,862	9,899,039
2017-18	1,468	247,684	9,666,510
2018-19	1,487	258,650	10,051,145
2019-20	1,502	255,807	10,026,190
2020-21	1,511	244,047	9,671,077
2021-22*	1,513	242,543	9,677,462
2022-23*	1,515	242,343	9,669,477
2023-24*	1,517	242,142	9,661,475
2024-25*	1,519	241,941	9,653,456

Commercial Large Rate Class Gas Supplied by SaskEnergy

		Weather Normalized	
	Average Number	Thousand	GigaJoules
Year	of Customers	Cubic Metres	(GJ's)
2016-17	723	118,599	4,570,453
2017-18	720	111,909	4,367,520
2018-19	646	105,765	4,110,029
2019-20	664	99,156	3,886,371
2020-21	686	100,179	3,969,873
2021-22*	675	97,447	3,888,139
2022-23*	677	97,247	3,880,154
2023-24*	679	97,046	3,872,152
2024-25*	681	96,845	3,864,133

Commercial Large Rate Class Gas Supplied by Others

		Weather Normalized	
	Average Number	Thousand	GigaJoules
Year	of Customers	Cubic Metres	(GJ's)
2016-17	714	138,263	5,328,586
2017-18	748	135,776	5,298,991
2018-19	841	152,885	5,941,116
2019-20	838	156,651	6,139,819
2020-21	825	143,868	5,701,204
2021-22*	838	145,096	5,789,323
2022-23*	838	145,096	5,789,323
2023-24*	838	145,096	5,789,323
2024-25*	838	145,096	5,789,323

<sup>\*</sup> Forecast

### **SCHEDULE 6.1 (4 OF 4)**

#### **CUSTOMER CONSUMPTION BY RATE CLASS**

#### **SMALL INDUSTRIAL**

#### Small Industrial Rate Class

		Weather Normalized	
	Average Number	Thousand	GigaJoules
Year	of Customers	Cubic Metres	(GJ's)
2016-17	29	23,554	949,665
2017-18	29	23,092	889,058
2018-19	26	20,098	783,803
2019-20	26	18,111	715,389
2020-21	26	15,472	612,559
2021-22*	26	15,472	612,559
2022-23*	26	15,472	612,559
2023-24*	26	15,472	612,559
2024-25*	26	15,472	612,559

<sup>\*</sup> Forecast