RATE APPLICATION Natural Gas Delivery Services

SaskEnergy Incorporated

November 1, 2017

TABLE OF CONTENTS

| REC | COMM | ENDATION1 |
|-----|--------|---|
| EXE | ECUTIV | VE SUMMARY1 |
| CO | RPORA | ATE STRUCTURE OVERVIEW |
| SAS | KENE | RGY DELIVERY RATE APPLICATION |
| 1. | REVE | NUE REQUIREMENT |
| | 1.1 | Overview4 |
| | 1.2 | Delivery Service Revenue Requirement Summary5 |
| | 1.3 | Delivery Transportation and Storage Expense5 |
| | 1.4 | Operating and Maintenance Expense |
| | 1.5 | Productivity and Efficiency Measures10 |
| | 1.6 | Delivering Safe and Reliable Service12 |
| | 1.7 | Depreciation Expense |
| | 1.8 | Tax Expense17 |
| | 1.9 | Interest Expense |
| | 1.10 | Net Income |
| | 1.11 | Other Revenue |
| 2. | RECC | DMMENDED DELIVERY SERVICE RATES |
| | 2.1 | Overview |
| | 2.2 | Rate Design Principles and Objectives |
| | 2.3 | Rate Classes |
| | 2.4 | Recommended Delivery Rates |
| | 2.5 | Delivery Service Bill Impact |
| 3. | LOAI | D FORECAST |
| | 3.1 | Annual Requirements |
| | 3.2 | Peak Day Requirements - Maximum Daily Usage |
| 4. | MINI | MUM FILING REQUIREMENTS |
| 5. | GLOS | SARY OF TERMS |
| 6. | SCHE | EDULES |

RECOMMENDATION

Delivery Service Rates

SaskEnergy is applying to increase its Delivery Service Rates by an average of 3.6% to recover the increased cost of providing delivery service. If approved, the recommended rates will result in an overall bill increase for customers as follows:

| DELIVERY SERVICE RATE INCREASE | | | | | | | | |
|--------------------------------|----------|-----------------------------------|---------------------------|--|--|--|--|--|
| RATE CLASS | \$/MONTH | DELIVERY SERVICE % INCREASE | BILL IMPACT % INCREASE | | | | | |
| RESIDENTIAL | \$1.65 | 3.9% | 2.3% | | | | | |
| COMMERCIAL SMALL | \$2.84 | 2.4% | 1.1% | | | | | |
| COMMERCIAL LARGE | \$40.00 | 3.5% | 1.2% | | | | | |
| SMALL INDUSTRIAL | \$103.00 | 2.4% | 0.6% | | | | | |
| AVERAGE | | 3.6% | 1.8% | | | | | |

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

EXECUTIVE SUMMARY

SaskEnergy is applying for a 3.6% increase to its Delivery Service Rates effective November 01, 2017. The commodity portion of the bill remains unchanged with the current commodity rate at \$3.65/GJ (\$0.1387 per cubic metre).

This application is to increase the Basic Monthly Charge (BMC) for the Residential customer class and the volumetric Delivery Charge for the Commercial and Industrial customer classes. The rate increase is required in order to recover the costs of providing service and will produce incremental delivery revenue of \$9.1 million for SaskEnergy and an industry comparable return on equity (ROE) of approximately 8.3% over the application period. This rate application includes a number of efficiency initiatives that have alleviated some of the cost pressures.

SaskEnergy is committed to delivering safe and reliable natural gas to its customers. SaskEnergy over the past number of years, has experienced strong customer growth and faces aging infrastructure, resulting in capital and operating cost pressures related to public safety and system expansion.

SaskEnergy is applying for a delivery service rate increase to support capital investment relating to public safety, system integrity, and infrastructure renewal of its distribution system. Regulatory and industry standards concerning local distribution pipelines and public safety, paired with SaskEnergy's aging pipeline infrastructure, continue to increase the required level

of capital investment in this area. SaskEnergy's annual capital expenditure on infrastructure has grown considerably since 2010, when it was \$7.4 million, increasing to a forecast of \$51.3 million for the application period. This capital spend produces no incremental revenue. Capital investment in Information Systems to maintain and support current systems and support efficiencies through technology also contribute to the required delivery service rate increase.

In summary, the recommended Delivery Service rates will allow SaskEnergy to recover its costs in providing safe and reliable delivery of natural gas to its customers. SaskEnergy's residential Delivery Service rates will continue to be among the lowest of the major natural gas utilities in Canada.

CORPORATE STRUCTURE OVERVIEW

The Corporate Profile section of the SaskEnergy 2015/16 Annual Report (pages 4 - 5), illustrates the SaskEnergy corporate structure. Depicted is SaskEnergy along with its four wholly owned and two indirect operating subsidiaries. This visual presents the legal corporate entities and provides a brief description of the subsidiary operations.

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 of Saskatchewan (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 six 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.

SASKENERGY DELIVERY RATE APPLICATION

1. REVENUE REQUIREMENT

SaskEnergy's business is built on delivering high quality customer service in a cost effective manner while providing safe and reliable management of the corporation's extensive natural gas infrastructure. The company's strategic mandates of "Service Excellence, Achieving Growth, Our Team and Creating Value" provide the framework that helps define our desired future state and ensures that all of SaskEnergy's activities support the direction of the Province and the people that SaskEnergy serves.

SaskEnergy is committed to public safety and reliable natural gas service. SaskEnergy's customer base continues to grow at high levels. In the 2016 calendar year, there were 4,140 net new customer connections. Revenue from new customers is offsetting the associated costs related to new customer connections, including generating a fair return on the capital invested in these services. However, revenue from existing customers continues to decline as energy conscious customers reduce the volume of natural gas consumed with more efficient equipment and improvements to energy efficient homes.

SaskEnergy continues to strive for improvement of the safety and reliability of its distribution system by strictly adhering to increasing safety codes and regulations, and following gas utility operations best-practices. An elevated public awareness of safety incidents in the energy industry has increased public and regulatory expectations of the level of commitment to safety and integrity programs. SaskEnergy has focused on public engagement through a variety of public awareness campaigns, has enhanced third party damage prevention activities through programs like "Call Before You Dig", and expanded a number of integrity and emergency response initiatives highlighted by a forecast \$51 million in annual capital expenditures on infrastructure renewal for the fiscal year 2017/18.

SaskEnergy's goal is to establish rates for safe and reliable residential natural gas service that are competitive with other distribution utilities in Canada. This goal can only be achieved through diligence and a strong focus on defining priorities and managing costs efficiently and effectively in all aspects of the corporation's business. SaskEnergy continues to maintain a commitment to improving the effectiveness and productivity of its business activities. Maintaining strategic alliances with external third parties such as the SaskEnergy Network Members also ensures SaskEnergy is focusing on its strengths and effectively leveraging the expertise of its external partners.

SaskEnergy is an active supporter of the Provincial Government's Transformational Change Strategy. Where it is clearly aligned with the corporation's business strategies, SaskEnergy has provided assistance with the Government's long-term vision for reducing energy consumption through more efficient energy usage. For example, SaskEnergy helps consumers decrease their energy usage and increase their savings through energy conservation programs. Energy conservation initiatives for customers are important to the future sustainability of SaskEnergy's delivery business as well as the sustainability of our environment. Although such initiatives actually lower annual delivery revenue, they help ensure consumers are committed to the long-term use of natural gas in a manner which is as efficient as possible, thereby lowering their overall energy costs and encouraging them to choose natural gas to meet their long-term energy needs in the most sustainable manner possible.

1.1 OVERVIEW

DELIVERY RATE SETTING PROCESS

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

- Determination of the Revenue Requirement
- Rate Design

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 an appropriate target for net income. 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 Income.

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 a 12 month period in the near future. For this rate application, SaskEnergy has designated an application period of November 01, 2017 to October 31, 2018.

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. Included in this rate application are 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. Every five to seven years, an external party reviews SaskEnergy's cost of service methodology. The last Cost of Service Study was completed in 2013 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. They also determined that SaskEnergy's rate proposals to the Saskatchewan Rate Review Panel (Panel) are fair and reasonable.

1.2 DELIVERY SERVICE REVENUE REQUIREMENT SUMMARY

Schedule 1.0 summarizes the cost of service that is required to provide safe and reliable delivery service to SaskEnergy's customers. For the application period, November 01, 2017 to October 31, 2018, the cost of service is \$263.2 million. This compares to \$254.1 million of revenue that could be generated through existing rates. Thus, SaskEnergy is projecting a \$9.1 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.

1.3 DELIVERY TRANSPORTATION AND STORAGE EXPENSE

Delivery transportation service is provided by TransGas Limited (TransGas), a wholly owned subsidiary of SaskEnergy. TransGas owns and operates the transmission business and has the exclusive legislated franchise to transport natural gas within the Province of Saskatchewan. It also owns and operates a non-regulated natural gas storage business as well as gathering and processing facilities, which are integrated with the transmission pipeline system. 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 the TransGas Energy Pool (TEP) to SaskEnergy's distribution system pressure regulating stations. TEP is the common reference point in Saskatchewan where the natural gas commodity is transacted and priced.

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.

Contracted storage has become increasingly important since Saskatchewan became a net importer of natural gas in 2011. SaskEnergy now buys more than half of its natural gas supply outside of the province. During the 2013/2014 winter, which was one of the coldest in the past 30 years, it became apparent how critical it is to have natural gas supply readily accessible in the province. Pipeline systems can become constrained during severe weather. To mitigate the risk of not being able to bring enough gas into the province when it is really needed, SaskEnergy increased its contracted storage capacity from TransGas in 2014. TransGas last adjusted its transportation and storage rates on January 01, 2016 and the adjustments to transportation tolls and storage rates are reflected in the costs. Transport and storage cost estimates are provided in Schedule 1.1.

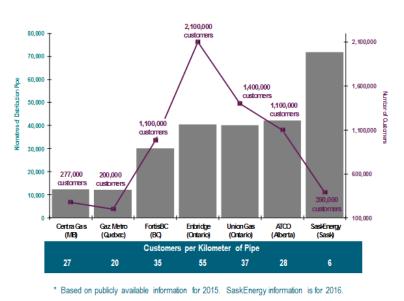
1.4 OPERATING AND MAINTENANCE EXPENSE

Total operating and maintenance expenses are shown on Schedule 1.2 and are forecast to be \$125.9 million for the application period.

SaskEnergy's extensive distribution system throughout the Province, consisting of approximately 70,000 kilometers of distribution pipeline infrastructure, serves approximately 390,000 customers that are located in a 380,000 square kilometer service area across Saskatchewan. This distribution system is very large in terms of the geographic dispersion of facilities, an attribute that reflects the Saskatchewan Government's Crown Sector Strategic Priorities, which includes providing high quality, accessible and affordable services to Saskatchewan people. In honoring this commitment, SaskEnergy serves approximately 93% of all communities within the Province, including numerous individual farms, resort and First Nation locations.

The adjacent graph illustrates the 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 kilometers of distribution pipe is ATCO Gas in Alberta. SaskEnergy faces challenges with its extensive network due to the low customer density. The customer density of SaskEnergy is six customers per kilometer of pipe versus an industry

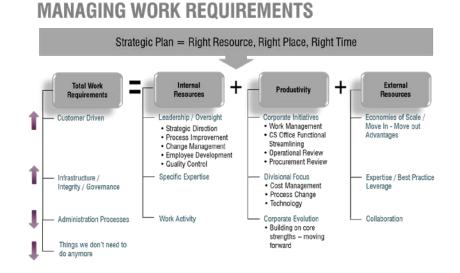
DISTRIBUTION PIPE VS. NUMBER OF CUSTOMERS *



peer average of 30 customers per kilometer.

SaskEnergy's distribution system operates in extreme weather conditions and in many types of terrain, and requires substantial monitoring and maintenance each year in order for the Corporation to fulfill its primary objective of providing safe and reliable service to its customers. In recent years, increased attention to natural gas related incidents has led to natural gas utilities and pipelines elevating their activities and approach to public safety and the integrity of their infrastructure. This, combined with the continued new customer activity, has underscored the importance of SaskEnergy continuing to focus on how to most effectively manage its workload and operating expenses.

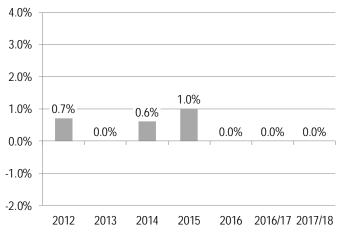
The following illustration summarizes SaskEnergy's strategy and how it is executed.



Meeting efficiency and customer service objectives continues to require SaskEnergy to balance internal resources with a complementary external component. External resources will continue to be integrated in core areas (Engineering, Construction, Operations and Information Systems), and through such Crown collaboration efforts as line-locating, fourparty trenching, joint servicing and advanced metering infrastructure. The integration of industry best practice enhancements has also been assisted through external expertise utilization.

SaskEnergy Customer Services of requires workforce а approximately 633 full time equivalents (FTE's). In addition, there are 124 FTE's in the Distribution Division that perform 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, as evidenced the chart. by Corporately, overall resourcing





within SaskEnergy has a Business Plan target to remain flat for 2017/2018 and 2018/2019. Productivity efforts realized have been critical to this resourcing management.

Identifying advantageous third-party solutions remains a continued focus. Not only does this allow SaskEnergy to quickly adjust its workforce to meet the variability in certain customer driven work, but it also ensures the utility has the most relevant expertise. External resources are mainly being used to manage:

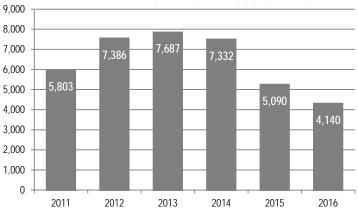
- repeatable tasks that can be rolled into a "program" and/or shared with peer Crowns;
- peak load work, when resource need is greater than can be met internally; or
- programs or projects where the need for a specific skillset is/may be required for a limited time.

Contractor relationships in such areas as construction, information systems, line locating and system integrity activities, have been deployed to effectively resource the work. The role of internal leaders and teams remain key in directing contractors in the planning and execution of work, creating opportunities for supervisory skill development as well as project-specific knowledge.

The operating and maintenance expenses are comprised primarily of labour related costs. Approximately 75% of the operating and maintenance expenses forecasted for the application period are labour related costs. This includes employee benefit and pensions costs. SaskEnergy's in-scope employees, who represent approximately 74% of the workforce, are members of the Local 649, Unifor Union of Canada (Unifor). The current Collective Bargaining Agreement was in effect until January 31, 2017 and is currently being renegotiated. Merit and economic increases for out-of-scope employees are in accordance with CIC guidelines that are applicable to all crown sector management employees.

SaskEnergy's customer base continues to expand through new connections albeit at a slightly slower pace than in the prior five years. New housing starts have slowed as a result of a growing inventory of new homes on the market and slightly lower demand. Distribution Operations work has increased in other areas however, such as planned maintenance, there are more safety service calls as the customer base increases; and the project activity related to the installation of a new metering technology and the renewal of SaskEnergy's meter fleet continues.

SaskEnergy continued the expansion of its system bv adding 323 kilometers of distribution main pipelines in 2016/17 and 3,772 new gas service lines to connect customers to SaskEnergy infrastructure. These service lines could connect to a single residential meter set, a multimeter manifold to service a condominium complex or apartment building, а commercial or industrial customer.

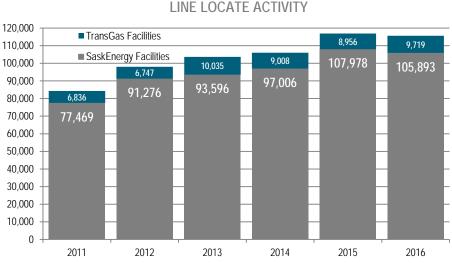


YEARLY INCREASE IN ACTIVE CUSTOMERS

As a result of this customer connect activity and other service activations and deactivations, there was 4,140 net new customers added during the 2016 calendar year. The active customer base has grown by 1.1% during 2016 and, over the last six years, it has increased by approximately 37,500 customers.

During 2016, approximately 115,000 line locates were completed to identify the underground location of SaskEnergy and TransGas facilities. This is slightly lower than last year, which reflects the slowdown in housing starts in 2015.

The cost of line locating remains as a substantial component of SaskEnergy's operating budget. These costs have been managed through the use of joint the line locating process with SaskTel, SaskPower and SaskEnergy's internal efforts.



Operating and maintenance expenses shown on Schedule 1.2 reflect SaskEnergy's total operating and maintenance expenses. 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. This is net of productivity measures that have been, and are currently being, undertaken.

The corporate resourcing strategy for the last number of years has been to hold internal FTE levels flat, while meeting increasing work requirements. The stable resourcing level has been accomplished though productivity and efficiency gains from leveraging technology, Crown Collaboration initiatives and business process changes. In addition, the use of external resources has provided a scalable approach to dealing with fluctuating work requirements. Aggressive vacancy management during 2016-17, which was deemed



necessary as part of the restraint directive from the provincial government, has resulted in material savings but has negatively impacted customer service levels – particularly in the phone queue where the number of dropped calls has increased in recent months. This was recognized in the 2017-18 business plan through the reduction in the target for the customer satisfaction metric in the corporate balanced scorecard. Overtime management also allowed for savings to be realized in 2016-17 however the year was 7% warmer than normal and emergency response requirements were low. These two variables can change materially year over year and are beyond the scope of management control. Staffing levels, including position vacancies, will be re-visited during 2017-18 with a view to mitigating the negative impacts on customer service, including the service standard for new customer connections. The operating and maintenance expenses are forecast to increase in 2017-18, recognizing the need to balance improved customer service with effective cost management.

1.5 PRODUCTIVITY AND EFFICIENCY MEASURES

To minimize the impact of the Delivery Service Rate increase, SaskEnergy continues to foster its culture of efficiency. 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 a large number of kilometers that must be covered to maintain these facilities and respond to customer needs. The increased capital and operating costs now required to meet the increased regulatory requirements and industry standards is raising the challenge to a new level. However, SaskEnergy continues to meet the challenge and is able to maintain one of the lowest delivery cost per residential customer amongst its peers.



Throughout the years, the technology we use in our day-to-day operations has changed considerably - to create efficiency, improve safety, and to prevent infrastructure damage. Left: A steel natural gas transmission pipe being lowered by a crane mounted on a Caterpillar in 1952. Right: A backhoe and a Bobcat excavator dig to install a 6-inch steel natural gas line in 2015.

Through efficiencies from technology, business process changes and Crown collaboration, SaskEnergy realized approximately \$44 million in efficiency savings corporately since 2009. For the fiscal year 2017/18, SaskEnergy is targeting a further \$4.4 million in annual efficiency initiatives and incremental revenue opportunities.

Technology continues to be a vital component to further enhance processes and customer service. At the end of March 2017 Advanced Metering Infrastructure (AMI) natural gas modules had been installed on 87% of customer meters. These gas modules are communicating through SaskPower's AMI system, and are sending automated meter reads to SaskEnergy's billing system. Manual meter reads are no longer required for these locations and are resulting in manual meter reading savings.

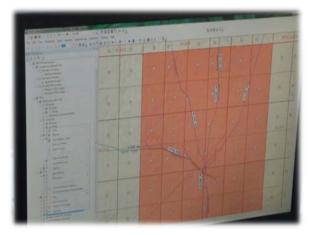
Technology initiatives also include the replacement of the **Distribution Work** Management System. The successful configuration and implementation of a new system, to replace the current system that is no longer meeting SaskEnergy's needs, will have many business benefits related to improved ability to manage workload, travel time and appointment bookings.



Key benefits include:

- an optimized work management system that provides a more structured workday and will assist in balancing the workload, increase work completion rates and increase the availability of the dispatcher for other value added tasks;
- providing technicians with additional capabilities, such as the ability to send and receive attachments that will aid them in efficiently completing tasks;
- having a system with a functional mapping application that will provide visual representation of locations for both technicians and the orders;
- allowing more efficient dispatching, especially of emergency orders; and
- future interface capability to Geospatial Information System (GIS) solution which will enable better information in the field for technicians to serve customers and maintain SaskEnergy facilities.

GIS allows for a wider set of asset data to be displayed in one system due to its ability to scale data and allow users to select content to display. Within the current CAD based mapping environment, all data must be displayed at all times making maps cluttered and



unusable if too much data is displayed at once. The capacity to handle high volumes of data inside a GIS and only display what is desired allows SaskEnergy to combine mapping data that has previously been kept separate. Two key data sets that can now be merged with the distribution pipeline network are the Cathodic Protection Zones and Key Isolation Zones. Merging mapping data sets into one source is the key to establishing a single source of data that is comprehensive and trusted by users. Crown collaboration also continues as an important efficiency measure. SaskEnergy, SaskPower and SaskTel joined together to implement a Joint Servicing Initiative in 2015 in Saskatoon and Regina. This initiative provides timely, cost-effective and coordinated service to home builders working in new subdivisions through the installation of gas, electric and communications infrastructure in one common trench extending from the street to the home. Customers are also now able to complete a joint SaskPower/SaskEnergy online application for new services. This collaborative approach results in efficiencies for the installation of the urban service lines while also addressing the challenges associated with space constraints for new residential lots.

As of February 1, 2017, SaskEnergy discontinued walk-in Cashiering Services in Saskatoon and Regina – the two remaining offices who still offered this service. SaskEnergy cash receipts in these two offices represented 8% of the total corporate receipt volume. As customers have transitiioned to alternative methods of bill payments – internet banking or Pre-Authorized Payments, the ulitization of direct face to face cashiering was declining. Approximately 3% of SaskEnergy customers paid their bills at a SaskEnergy office with that being the highest cost to SaskEnergy to receive payments.

Despite the level of activity required to meet customer connections and elevated public safety related work, SaskEnergy has been able to maintain its existing staffing levels. Realizing productivity gains and collaboration with private enterprise and other Crowns has been crucial in allowing SaskEnergy to manage staffing requirements.

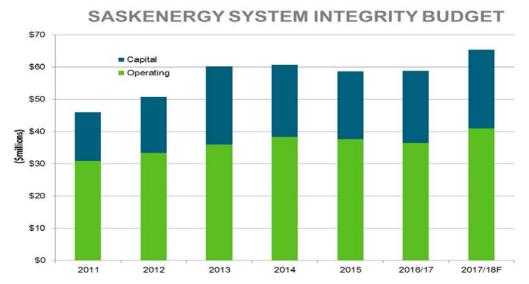
1.6 DELIVERING SAFE AND RELIABLE SERVICE

SaskEnergy's system integrity program is built off an enterprise risk assessment that focuses on the risks faced by the approximate \$2 billion of SaskEnergy/TransGas facilities that deliver natural gas to industry, businesses and residences throughout Saskatchewan. Resource requirements for integrity programming and infrastructure renewal, in terms of operating and capital allocations, impact the Revenue Requirement.

The integrity program was developed in compliance with industry codes and regulatory requirements and an assessment of risk particular to the SaskEnergy system. In recent years increased attention to natural gas related incidents, including here in Saskatchewan, has led to natural gas utilities and pipelines elevating their efforts regarding public safety and the integrity of their infrastructure. In addition, SaskEnergy aligns itself with industry best practices through participation within the Canadian Gas Association (CGA) and the Canadian Energy Pipeline Association (CEPA) which collaborate 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 (CCGA) 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 industry best practice, SaskEnergy has developed specific risk identification protocol and is applying this so that all the 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.

SaskEnergy has addressed the change in public perception of increased awareness to public safety by accelerating the budgets of existing integrity programs including prevention, detection and mitigation activities in recent years. SaskEnergy has increased the amount of operating and capital budgeted for integrity programming from \$46 million in 2011 to a peak of \$65 million in 2017/18. Through this increase in budget and focus on risk reduction, SaskEnergy established a new historical low leak rate in 2016/17, including a 27% decrease in damage to infrastructure.





The Corporation's system integrity and public safety programs combine predictive analysis and proactive response. The programs are keeping pace with peer companies and continue to show their effectiveness through reduced levels of gas leaks, failures, third-party contacts and other measures. SaskEnergy will continue its focus on service tee and related service upgrades, part of a ten year plan to address known higher risk installations. The Service Upgrade Program currently identifies detailed upgrade plans and will result in a measurable decrease in gas leak incidents associated with service lines. This will, in turn, reduce the risk of a public incident related to a natural gas leak. Since the program was initiated in 2011, over 14,000 service connections have been upgraded across the province in targeted areas of the province prone to ground shifting, with another 2,400 upgrades planned in 2017 in communities such as Regina, Cabri, Kyle, Leader, Pense, Rosetown and Humboldt.

SaskEnergy continues to maintain its Major Growth Infrastructure (MGI) program. The program assesses the infrastructure and capital requirements the distribution to ensure and transmission systems are capable of managing the load growth and the associated system reliability. The main focus of the program is on growing communities and/or areas of higher risk and is reviewed on an annual basis. The program may be reviewed more often as



the need arises to ensure that the program evolves with changing conditions. The program is adjusted to ensure that plans remain based on relevant and current information and has included the following communities; Saskatoon, Regina, Prince Albert, North Battleford, Humboldt and Moose Jaw.

Capital projects are required to support growth in Saskatchewan cities. Growth in Regina and surrounding area supports the capital project of a 15 kilometer transmission pipeline expansion east of Regina and a similar 16 kilometer pipeline west of Regina. A new Town Border Station is also required and construction will begin in summer 2018. Saskatoon will be installing a new high pressure main pipeline, connectors and block valve system, and Regulator Station near the Saskatoon Airport. This capital project is required to support growth in the Saskatoon and surrounding area and the natural gas from this new infrastructure will be fed into Saskatoon's existing system to increase capacity and improve service reliability. The capital spending on these multi-year projects is approximately \$30 million.

The CGA along with other industry stakeholders, CCGA and CEPA, have included damage prevention as a key initiative and SaskEnergy is participating in a national strategy to continue to achieve significant improvements in this area.



SaskEnergy experienced fewer line hits during 2016, which was largely due to the continued efforts related to damage prevention including, among other things, Safety Patrols and Critical Line Supervision. Safety Patrols provide information to homeowners about the importance of line locates while Critical Line Supervision is where SaskEnergy performs a risk assessment and stays on site while work is completed close to natural gas lines. SaskEnergy will continue to support the Sask 1st Call Safety Patrol Program, along with SaskPower and SaskTel, as it has been effective at reducing line hits. Over the last four years, SaskEnergy has seen a line hit reduction by 35%, from 244 line hits in 2012 to 172 in 2016.

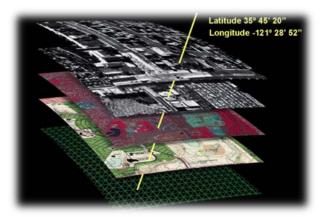
The Safety Patrol Program helps to educate the public on the importance of locate requests through face-to-face interaction between Patrollers and contractors. Safety Patrollers communicate to contractors, homeowners and other organizations the importance of

always calling Sask 1st Call, going online of using the mobile app, before any excavation takes place. They discuss safe digging practices when excavating around underground facilities, and they build relationships with contractors by discussing their concerns, and most importantly, promoting safety. Since the



inception of Sask 1st Call in 2003, it has grown from 12 subscriber companies to 74 in 2017. Sask 1st Call received 130,622 locate requests in 2016 and of those requests, 58% were received by phone and 42% online.

The benefits in regards to the way we do things today makes for a safer workplace, and a safer environment for the public. We now have new and improved practices, line locating equipment, along with electronic mapping systems to make more up-to-date information easier to read. New damage prevention technology has done away with hard-copy maps by digitizing the specification of underground facilities. GPS technology is not only more accessible but it's also more accurate, as it can be easily updated. Aerial right-of-way



patrols have been improved through more accurate GPS navigation. It is easier to properly identify threatening activity near the pipeline if you know the position of the pipeline more accurately. Developments near transmission pipelines are more effectively monitored with information that is more accessible and viewable on a map ensuring the safety of all our employees.

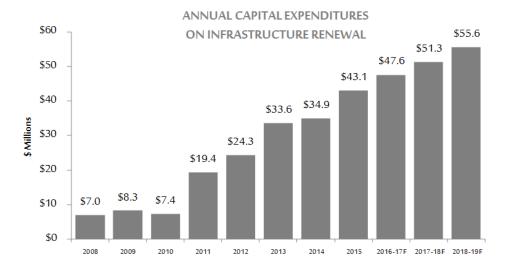
1.7 DEPRECIATION EXPENSE

Depreciation expense for the application period is estimated at \$46.2 million 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 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 infrastructure. Higher regulatory and industry standards and a more comprehensive risk based management system requires an annual capital investment on maintaining and replacing existing infrastructure.

SaskEnergy has increased its annual safety and infrastructure renewal investment from approximately \$7.4 million in 2010 to approximately \$51.3 million during the application period. This increase in annual investment in safety and infrastructure renewal is expected to continue into the future and is comparable to other utilities across North America.



SaskEnergy has an external Depreciation Study performed every few years. The last depreciation study was completed in 2013 on assets as at December 31, 2011. As a result of the study, in 2013 SaskEnergy changed the composite remaining asset life and implemented a decommissioning liability as well as a change in the composite remaining life based on the study's recommendations.

1.8 TAX EXPENSE

Taxes consist of Corporate Capital Tax and property taxes (see 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. However, an exception does exist. In instances where SaskEnergy purchases 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.

The forecast tax expense for the application period is \$5.9 million.

1.9 INTEREST EXPENSE

SaskEnergy's cost for financing its natural gas distribution infrastructure, equipment and operations is estimated at \$26.9 million for the application period (see 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, SaskEnergy 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 estimate of \$30.4 million for the application period, as provided in Schedule 1.6, reflects the level of earnings that will provide SaskEnergy with an appropriate return on investment as measured by the rate of return on equity. The rate of return on equity is targeted at 8.3% for the application period. 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. The net income for the Distribution Utility is required to contribute to SaskEnergy's consolidated net income target of \$90.6 million, aligning with the 2017/18 budget.

1.11 OTHER REVENUE

Other Revenue is summarized on Schedule 1.7 and is forecast at \$24.2 million for the application period. Other Revenue consists of Distribution Tolls, Gas Marketing Margins, 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 marketer, 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 \$18.9 million.

In order 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 Gas Marketing activities by purchasing and selling natural gas through various producers and marketers to earn a margin. Net margins from Gas Marketing activities are based on forecast sales opportunities and are estimated at \$2.1 million. The actual net margin from Gas Marketing varies from year to year and is contingent on prevailing market conditions.

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

2. RECOMMENDED DELIVERY SERVICE RATES

2.1 OVERVIEW

SaskEnergy provides two services to its customers:

- Gas Supply Service (Commodity)
- Gas Delivery Service

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. It is a pass through cost. 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.

Gas Delivery Service

Gas Delivery Service includes management of storage and transportation and provides all distribution facilities and operations necessary for delivery of natural gas to customers on a firm and continuous basis 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) Basic Monthly Charge (BMC), which is a fixed dollar amount per month, attempts to recover the fixed costs attributed to the customer service line, meter reading and customer account administration; and
- 2) A Delivery Charge, which is a volumetric charge that applies to each cubic meter of natural gas used by the customer. As a result, the Delivery Charge will vary from month to month with a customer's consumption. The Delivery Charge attempts to recover 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 DELIVERY SERVICE COMMODITY RATE BASIC MONTHLY CHARGE **DELIVERY CHARGE** (Gas Consumption Charge) Dollars per Month Cents per Cubic Metre Cents per Cubic Metre Service Line Transportation Cost of Gas Meter Storage Meter Reading Distribution Customer Account Management Maintenance

As a customer's usage varies from month to month, so do the Delivery Charges on the bill while the Basic Monthly Charge remains the same each month.

| RECOMMENDED RESIDENTIAL DELIVERY SERVICE RATES | | | | | | | | | |
|---|---|------------|------------|--|--|--|--|--|--|
| BASIC MONTHLY CHARGE | 12 months @ \$24.10/month | = \$289.20 | 55% | | | | | | |
| DELIVERY CHARGE | 2,643 cubic metres (m ³) @ \$0.0883 | = \$233.38 | <u>45%</u> | | | | | | |
| | | \$522.58 | 100% | | | | | | |

Over the course of a year, a typical Residential customer would pay approximately \$523 for gas delivery service, if the recommended rates are approved.

2.2 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.

"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.

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. In order for SaskEnergy to meet its long-term financial targets, it requires an additional \$9.1 million over the application period.

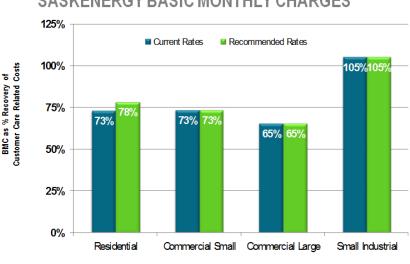
Fairness Between Rate Classes

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.

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.



SASKENERGY 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 its customer care related costs through its BMC. The below chart summarizes the percent of customer care related costs SaskEnergy is forecast to recover through the BMC in each customer class over each test period.

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 3.6% in this application. Customer's rate increases will range from an average 2.4% for Small Industrial customers to an average 3.9% for Residential customers, depending on individual customer usage.

2.3 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, which represents the same usage as approximately 36 homes. 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 over 660,000 m³ of natural gas annually that 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 30 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.

2.4 RECOMMENDED DELIVERY RATES

An increase to either the BMC and/or the volumetric Delivery Charge component is being recommended effective November 01, 2017.

| | CURRENT | CURRENT | PROPOSED DELIVERY CHARGE \$/ M ³ | | | | |
|---------------------|-------------------------------------|--|--|--|--|--|--|
| RATE CLASS | BASIC MONTHLY CHARGE \$/MONTH | DELIVERY CHARGE \$/ M ³ | BASIC MONTHLY CHARGE \$/MONTH | DELIVERY CHARGE \$/ M ³ | | | |
| RESIDENTIAL | 22.45 | 0.0883 | 24.10 | no change | | | |
| COMMERCIAL SMALL | 38.50 | 0.0743 | no change | 0.0770 | | | |
| COMMERCIAL LARGE | 137.40 | 0.0647 | no change | 0.0673 | | | |
| SMALL INDUSTRIAL | 216.00 | 0.0430* | no change | 0.0440** | | | |

* First 40,000 m^3 per month, thereafter $0.0369/\,m^3$

** First 40,000 m^3 per month, thereafter $0.0379/\,m^3$

A detailed Delivery Service Rate schedule can be found in Schedule 2.0.

An increase to the BMC is recommended for Residential customers and an increase to the volumetric Delivery Charge is recommended for Commercial Small, Commercial Large and Small Industrial customers.

The previous delivery service rate increases were to the BMC and Delivery Charge for Residential, Commercial Small and Commercial Large customers while Small Industrial customers only saw an increase to the Delivery Charge.

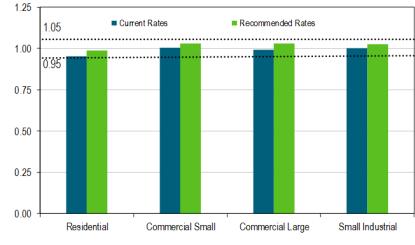
SaskEnergy is currently recovering 73% of customer related costs through the BMC for Residential customers. The recommended rate changes to the BMC increases this ratio to 78%. This is within SaskEnergy's long term target to recover at least 75% of Residential costs through BMC.

The proposed rate increases would result in an additional \$9.1 million annually for SaskEnergy. Of that, \$7.0 million is not weather dependent, while the remaining \$2.1 million will be impacted by weather.

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 the at recommended rates. If the approved, recommendation would result in а revenue-to-cost ratio in each class within the stated objective of 0.95 to 1.05.

Revenue to Cost Ratio





Schedule 2.1 summarizes, on a monthly basis, the revenues by rate class for the current and the proposed rates.

2.5 DELIVERY SERVICE BILL IMPACT

The Residential customer class is facing the largest cost pressures, as the majority of integrity investment and safety related operations have been associated with this rate class. In order to pay its fair share of costs, the recommendation is for a slightly larger percentage increase relative to the other customer classes. If approved, an average Residential customer would receive an annual average delivery service rate increase of 3.9% compared to the overall average of 3.6%. For the Commercial Small and Commercial Large customers, they would receive an average annual delivery service rate increase of

2.4% and 3.5%, respectively. The Small Industrial customers would have an average delivery service rate increase of 2.4%.

The customer bill impact below includes the impact of the delivery service rate increase. The Delivery Service rate change will result in an average increase of \$1.65/month for Residential customers.

The recommended Delivery Service Rate increase will result in the following bill impacts:

| RATE CLASS | DELIVERY SERVICE RATE % INCREASE | \$/MONTH | ANNUAL BILL % INCREASE |
|------------------|-------------------------------------|----------|---------------------------|
| RESIDENTIAL | 3.9% | \$1.65 | 2.3% |
| COMMERCIAL SMALL | 2.4% | \$2.84 | 1.1% |
| COMMERCIAL LARGE | 3.5% | \$40 | 1.2% |
| SMALL INDUSTRIAL | 2.4% | \$103 | 0.6% |
| AVERAGE | 3.6% | | 1.8% |

To determine the impact the Delivery Service Rate increase will have on a specific customer bill, a Bill Impact Calculator can be found at www.saskenergy.com.

3. LOAD FORECAST

3.1 ANNUAL REQUIREMENTS

Annually SaskEnergy prepares a customer load forecast based on normal weather to determine the amount of natural gas that is needed to serve SaskEnergy customers in terms of natural gas purchases, transportation and storage contracts. The load forecast is also used to calculate the revenue expected from existing rates.

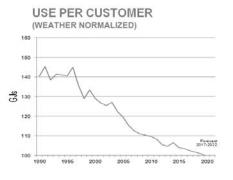
The majority of SaskEnergy's customer usage is to heat homes or businesses. Consequently, SaskEnergy's loads are very dependent on weather, thus can vary significantly. Historical loads are weather adjusted (normalized) to take into consideration this variation due to weather. The load forecast determines 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

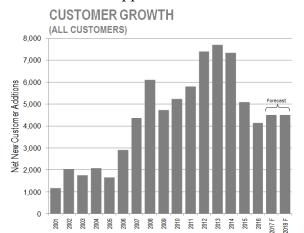
SaskEnergy forecasts its load requirements using historical customer consumption data. The historic customer consumption is adjusted to remove the effects of actual temperature deviations from normal weather, which is calculated using an analysis of the temperature of the last thirty years. In this way, 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 historical use per customer is used to forecast, as there is no statistically valid regression



equation from this data. For a number of years, generally across North America, there has been a declining use per customer trend as end users acquire more energy efficient furnaces and appliances, install set back thermostats, improve insulation in homes and



businesses reduce hot water consumption, and generally have increased awareness of their energy consumption. New customer homes recently built, as well as multi-unit dwellings use considerably less natural gas than existing customers and some are also replacing older less energy efficient homes. This trend has been persistent in Saskatchewan as well, with use per customer declining on average by 1% to 2% annually since 1982. This declining trend is forecast to continue in the coming years.

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

| WEATHER NORMALIZED (ANNUAL VOLUME GJ's) | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|---------------------|--|--|--|
| | | | | | | | | | Forecast 2019/20 | | | |
| RESIDENTIAL | 105 | 105 | 107* | 104 | 103 | 103 | 102 | 102 | 101 | | | |
| COMMERCIAL SMALL | 487 | 497 | 514 | 507 | 502 | 506 | 489 | 486 | 478 | | | |
| COMMERCIAL LARGE | 6880 | 6911 | 7075 | 6174 | 6030 | 6891 | 6694 | 6677 | 7020 | | | |

*Adjusted to reflect abnormally cold winter

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 2.2. Schedule 2.3 and Schedule 2.4 illustrate the sensitivity of SaskEnergy's customer load to extreme changes in weather, calculated at two standard deviations away from normal weather. Schedule 2.5 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. In order 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 54.7 degree-days, which corresponds to an average daily temperature of -36.7 degrees Celsius.

Peak Day Load Forecast and Historical Peak Days

SaskEnergy's peak day is summarized on Schedule 2.6. Historical peak day loads can be found in Schedule 2.7.

4. MINIMUM FILING REQUIREMENTS

SaskEnergy provides the following Minimum Filing Requirements to the Panel when requesting a review for a Commodity Rate and 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 Application, containing at least the following information:
 - Rate changes requested in detail
 - Revenue Requirement
 - Storage & Transportation costs
 - Operating, Maintenance & Administration costs
 - Depreciation Charges
 - 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
- 2. Latest Annual Report
- 3. Current Organizational Structure
- 4. Corporate Long-Term Strategic Plan
- 5. Business Plan
- 6. Planned Maintenance & Capital Programs
- 7. Safety & Reliability Issues
- 8. Delivery Service Past, Current & Future Staff Levels by Division
- 9. Operating, Maintenance & Administrative Expense Detail
- 10. Inter-Company Cost Allocations
- 11. Revenues Collected and Remitted Municipal Surcharge and Grants in Lieu of Taxes
- 12. Most Current Cost of Service & Allocation Study Report and Methodologies in Use
- 13. Most Current Depreciation Study Report
- 14. Capital Structure & Cost of Capital
- 15. Current and Projected Return on Equity
- 16. Working Capital Requirements
- 17. Rate Base and its Derivation
- 18. Customer Consumption
- 19. High-Average-Low Customer Bill Impacts
- 20. Effect of the Proposed Rate Change on Competitiveness
- 21. Regulatory Issues/Impacts Report
- 22. Report on Implementation of Previous Panel Recommendations
- 23. Productivity and Efficiency Update
- 24. Most Recent Quarterly Financial Report

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 01 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 105 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

DELIVERY SERVICE RATE APPLICATION DETAILS

| Schedule 1.0 – Delivery Service Revenue Requirement Summary | . 31 |
|---|------|
| Schedule 1.1 – Delivery Transportation and Storage Expense | . 32 |
| Schedule 1.2 – Operating and Maintenance Expense | . 33 |
| Schedule 1.3 – Depreciation Expense | . 34 |
| Schedule 1.4 – Tax Expense | . 35 |
| Schedule 1.5 – Interest Expense | . 36 |
| Schedule 1.6 – Net Income | . 37 |
| Schedule 1.7 – Other Revenue | . 38 |
| Schedule 2.0 – Recommended Delivery Rates | . 39 |
| Schedule 2.1 – Forecast Delivery Revenues | . 40 |

LOAD FORECAST

| Schedule 2.2 – Load Forecast – Base Case | 41 |
|--|----|
| Schedule 2.3 – Load Forecast – Cold Weather Scenario | 42 |
| Schedule 2.4 – Load Forecast – Warm Weather Scenario | 43 |
| Schedule 2.5 – Revenue Sensitivity to Changes in Weather | 44 |
| Schedule 2.6 – Peak Day Load Forecast | 45 |
| Schedule 2.7 – Historical Peak Days | 46 |

DELIVERY SERVICE REVENUE REQUIREMENT SUMMARY (\$000's)

| Component | 2017/18 Test Year* |
|------------------------------------|-----------------------|
| Operating & Maintenance | 125,913 |
| Transportation & Storage | 52,028 |
| Depreciation Expense | 46,207 |
| Tax Expense | 5,948 |
| Interest Expense | 26,882 |
| Net Earnings | 30,435 |
| Total Delivery Revenue Requirement | 287,413 |
| Other Revenue and Adjustments | |
| Other Revenue | (24,223) |
| Net Delivery Revenue Requirement | 263,190 |

*November 1, 2017 - October 31, 2018

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

| | 2012 Actual | 2013 Actual | 2014 Actual | 2015 Actual | 2015/2016 Actual | 2016/2017 Forecast | 2017/18 Forecast | 2018/19 Forecast | 2017/18 Test Year* |
|---|-----------------|-----------------|-----------------|-----------------|---------------------|-----------------------|---------------------|---------------------|-----------------------|
| TRANSPORTATION & STORAGE | | | | | | | | | |
| Transportation Transportation Costs | 27,806 | 28,580 | 30,037 | 31,282 | 31,516 | 31,834 | 31,951 | 33,832 | 33,091 |
| Storage Cost | 14,051 | 14,777 | 15,830 | 17,265 | 17,569 | 18,357 | 18,377 | 19,338 | 18,937 |
| Total Transportation & Storage Expense | 41,857 | 43,357 | 45,867 | 48,547 | 49,085 | 50,191 | 50,328 | 53,170 | 52,028 |
| Volume | | | | | | | | | |
| Transportation Contracted Demand (in GJ's/day) | 570,000 | 575,020 | 585,000 | 590,000 | 595,000 | 600,000 | 600,000 | 605,000 | 600,000 |
| Storage Contracted Firm Deliverability (in GJs/day) Contracted Storage Volume (in PJs) | 385,934 20.9 | 382,838 20.9 | 383,244 21.8 | 396,994 23.6 | 393,217 23.4 | 394,194 23.4 | 394,194 23.4 | 394,194 23.4 | 394,194 23.4 |

* November 1, 2017 - October 31, 2018

OPERATING AND MAINTENANCE EXPENSE (\$000's)

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

| | 2012 Actual | 2013 Actual | 2014 Actual | 2015 Actual | 2015/2016 Actual | 2016/2017 Forecast | 2017/18 Forecast | 2018/19 Forecast | 2017/18 Test Year* |
|-------------------------------------|----------------|----------------|----------------|----------------|---------------------|-----------------------|---------------------|---------------------|-----------------------|
| Operations | | | | | | | | | |
| Costs Incurred | 115,794 | 120,132 | 126,770 | 125,219 | 125,100 | 122,592 | 131,319 | 133,935 | 133,548 |
| Capitalized & Recovered | (14,791) | (9,462) | (11,472) | (11,754) | (11,913) | (9,580) | (10,156) | (10,421) | (10,301) |
| Subtotal Operations | 101,003 | 110,670 | 115,298 | 113,465 | 113,187 | 113,012 | 121,684 | 123,737 | 123,246 |
| Engineering and Construction | | | | | | | | | |
| Costs Incurred | 27,139 | 28,560 | 30,116 | 28,287 | 27,981 | 27,230 | 30,772 | 32,209 | 30,815 |
| Capitalized & Recovered | (25,348) | (27,172) | (28,613) | (26,777) | (26,378) | (25,901) | (27,690) | (28,423) | (28,148) |
| Subtotal Engineering & Construction | 1,791 | 1,388 | 1,503 | 1,510 | 1,603 | 1,329 | 3,082 | 3,786 | 2,667 |
| | | | | | | | | | |
| Total Operating & Maintenance | 102,794 | 112,058 | 116,801 | 114,975 | 114,790 | 114,341 | 124,245 | 127,300 | 125,913 |
| | | | | | | | | | |

*November 1, 2017 - October 31, 2018

DEPRECIATION EXPENSE (\$000's)

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

| | 2012 Actual | 2013 Actual | 2014 Actual | 2015 Actual | 2015/2016 Actual | 2016/2017 Forecast | 2017/18 Forecast | 2018/19 Forecast | 2017/18 Test Year* |
|--|----------------|----------------|----------------|----------------|---------------------|-----------------------|---------------------|---------------------|-----------------------|
| Distribution Plant | | | | | | | | | |
| Land Costs | - | - | - | - | - | - | - | - | - |
| Land Rights | 225 | 227 | 246 | 256 | 259 | 252 | 257 | 257 | 257 |
| Building and Site Improvements | 1,067 | 2,462 | 1,365 | 1,700 | 1,780 | 1,750 | 2,112 | 2,295 | 2,225 |
| Services | 6,616 | 6,908 | 9,140 | 10,424 | 10,661 | 11,536 | 13,049 | 13,332 | 13,297 |
| Meter and Regulator Installations | 1,560 | 1,339 | 1,442 | 1,575 | 1,612 | 1,807 | 2,001 | 2,192 | 2,114 |
| Mains | 11,242 | 8,804 | 9,393 | 10,094 | 10,255 | 10,840 | 11,484 | 12,243 | 12,068 |
| Measuring and Regulating Equipment | 2,695 | 3,141 | 1,730 | 1,421 | 1,437 | 1,449 | 1,531 | 1,585 | 1,563 |
| Meters | 2,336 | 1,376 | 1,793 | 2,704 | 2,815 | 3,115 | 3,219 | 3,549 | 3,411 |
| Other Distribution Equipment | 486 | 321 | 453 | 460 | 479 | 551 | 715 | 885 | 818 |
| Distribution before Customer Contributions | 26,227 | 24,578 | 25,562 | 28,634 | 29,298 | 31,299 | 34,370 | 36,336 | 35,752 |
| Amortization of Customer Contributions | (3,774) | (4,232) | (4,843) | (5,200) | (5,326) | (5,794) | (6,182) | (6,568) | (6,417) |
| Sub-total | 22,453 | 20,346 | 20,719 | 23,434 | 23,971 | 25,505 | 28,188 | 29,768 | 29,335 |
| General Plant | | | | | | | | | |
| Land | - | - | - | - | - | - | - | - | - |
| Buildings and Improvements | 1,437 | 1,473 | 1,550 | 1,612 | 1,609 | 1,643 | 1,778 | 2,602 | 2,276 |
| Office Furniture and Equipment | 509 | 496 | 491 | 486 | 484 | 503 | 508 | 498 | 500 |
| Transportation Vehicles | 2,128 | 2,524 | 2,756 | 2,723 | 2,726 | 2,744 | 2,761 | 2,381 | 2,476 |
| Heavy Work Equipment | 522 | 532 | 618 | 679 | 704 | 707 | 1,359 | 1,308 | 1,326 |
| Tools and Equipment | 749 | 489 | 542 | 581 | 596 | 666 | 763 | 800 | 789 |
| Information System Assets | 3,996 | 4,087 | 6,593 | 6,476 | 6,426 | 7,607 | 8,674 | 9,887 | 9,504 |
| Sub-total | 9,341 | 9,601 | 12,550 | 12,557 | 12,546 | 13,870 | 15,844 | 17,475 | 16,872 |
| Total Depreciation | 31,794 | 29,947 | 33,269 | 35,990 | 36,517 | 39,375 | 44,031 | 47,244 | 46,207 |

*November 1, 2017 - October 31, 2018

TAX EXPENSE (\$000's)

| | | | Sas | kEnergy Inc Tax Expe (in \$ 000 | nse | | | | |
|-------------------------|--------|--------|--------|---------------------------------------|-----------|-----------|----------|----------|------------|
| | 2012 | 2013 | 2014 | 2015 | 2015/2016 | 2016/2017 | 2017/18 | 2018/19 | 2017/18 |
| | Actual | Actual | Actual | Actual | Actual | Forecast | Forecast | Forecast | Test Year* |
| Corporate Capital Tax | 3,829 | 4,191 | 4,177 | 4,370 | 4,514 | 4,514 | 5,378 | 5,992 | 5,734 |
| Grants in Lieu of Taxes | 131 | 151 | 168 | 199 | 199 | 213 | 214 | 214 | 214 |
| Total Taxes | 3,960 | 4,342 | 4,345 | 4,569 | 4,713 | 4,727 | 5,592 | 6,205 | 5,948 |

* November 1, 2017 - October 31, 2018

INTEREST EXPENSE (\$000's)

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

| | 2012 Actual | 2013 Actual | 2014 Actual | 2015 Actual | 2015/2016 Actual | 2016/2017 Forecast | | 2018/19 Forecast | 2017/18 Test Year* |
|--|----------------|----------------|----------------|----------------|---------------------|-----------------------|---------|---------------------|-----------------------|
| Interest on Notes Payable to Holdings Division | 15,719 | 15,881 | 18,111 | 20,071 | 20,601 | 20,896 | 22,618 | 25,421 | 24,067 |
| Interest on Bank Indebtedness | 1,285 | 1,800 | 1,729 | 1,065 | 949 | 1,016 | 2,014 | 2,655 | 2,472 |
| Accretion Expense | 0 | 1,778 | 1,921 | 2,027 | 2,051 | 2,044 | 2,400 | 3,000 | 2,750 |
| Amortization of Deferred Charges | 19 | 23 | 150 | 259 | 267 | 239 | 210 | 209 | 205 |
| Debt Retirement Fund Earnings | (1,728) | (1,658) | (1,416) | (2,203) | (1,281) | (1,097) | (1,711) | (2,117) | (1,948) |
| Capitalized Interest | (969) | (877) | (616) | (143) | (183) | (147) | (239) | (248) | (244) |
| Interest Allocated to Commodity Cost of Gas | (561) | (503) | (361) | (378) | (390) | (319) | (470) | (450) | (420) |
| Total Interest Expense | 13,765 | 16,445 | 19,518 | 20,699 | 22,014 | 22,632 | 24,823 | 28,471 | 26,882 |

*November 1, 2017 - October 31, 2018

NET INCOME (\$000's)

| | | | | gy Incorpoi t Income \$ 000's) | rated | | | | |
|--|----------------|----------------|----------------|--------------------------------------|---------------------|-----------------------|---------------------|---------------------|-----------------------|
| | 2012 Actual | 2013 Actual | 2014 Actual | 2015 Actual | 2015/2016 Actual | 2016/2017 Forecast | 2017/18 Forecast | 2018/19 Forecast | 2017/18 Test Year* |
| Net Income before Market Value Adjustments on Gas Marketing | 17,029 | 27,988 | 26,523 | 9,574 | 1,743 | 29,713 | 28,539 | 30,955 | 30,435 |
| Total Net Income | 17,029 | 27,988 | 26,523 | 9,574 | 1,743 | 29,713 | 28,539 | 30,955 | 30,435 |

*November 1, 2017 - October 31, 2018

Note: The Forecast Total Net Income results provided above for 2017/18 and 2018/19 relfect the target for the regulated return on deemed equity applied to the forecast rate base for those periods.

OTHER REVENUE (\$000's)

| | 2012 Actual | 2013 Actual | 2014 Actual | 2015 Actual | 2015/2016 Actual | 2016/2017 Forecast | 2017/18 Forecast | 2018/19 Forecast | 2017/18 Test Year* |
|-------------------------|----------------|----------------|----------------|----------------|---------------------|-----------------------|---------------------|---------------------|-----------------------|
| Connect Fees | (2,373) | (2,190) | (2,164) | (2,072) | (2,058) | (2,038) | (1,900) | (1,900) | (1,900) |
| Margin on Gas Marketing | (4,629) | (5,229) | (746) | (4,052) | (3,919) | (6,084) | (2,102) | (2,074) | (2,100) |
| Late Payment Charges | (326) | (540) | (1,235) | (1,191) | (1,186) | (1,102) | (900) | (947) | (922) |
| Customer Financing | (71) | (81) | (92) | (99) | (76) | (122) | (61) | (61) | (61) |
| Miscellaneous Revenue | (1,418) | (941) | (1,058) | (476) | (413) | (813) | (384) | (384) | (384) |
| Distribution Tolls | (12,104) | (13,196) | (14,658) | (16,420) | (16,557) | (16,453) | (18,376) | (19,084) | (18,856) |
| Total Other Revenue | (20,921) | (22,178) | (19,954) | (24,311) | (24,209) | (26,611) | (23,724) | (24,449) | (24,223) |

*November 1, 2017 - October 31, 2018

RECOMMENDED DELIVERY RATES

| Rate Class & Components | Units | Current Rates | Rate Increase | Recommended Rates November 01, 2017 |
|------------------------------------|-------------------|---------------|---------------|--|
| Residential | | | | |
| Basic Monthly Charge | \$/Mo. | 22.45 | 1.65 | 24.10 |
| Delivery Charge | \$/m ³ | 0.0883 | 1.05 | 0.0883 |
| Commercial Small | | | | |
| Basic Monthly Charge | \$/Mo. | 38.50 | | 38.50 |
| Delivery Charge | \$/m ³ | 0.0743 | 0.0027 | 0.0770 |
| Commercial Large | | | | |
| Basic Monthly Charge | \$/Mo. | 137.40 | | 137.40 |
| Delivery Charge | \$/m ³ | 0.0647 | 0.0026 | 0.0673 |
| Small Industrial | | | | |
| Basic Monthly Charge | \$/Mo. | 216.00 | | 216.00 |
| Delivery Charge | | | | |
| - First 40,000 m ³ /Mo. | \$/m ³ | 0.0430 | 0.0010 | 0.0440 |
| - Balance | \$/m ³ | 0.0369 | 0.0010 | 0.0379 |

SaskEnergy Distribution Division

Notes:

- Bold Figures identify the changes from the current rates

- m³ = cubic meters

FORECAST DELIVERY REVENUES - NOVEMBER 01, 2017 - OCTOBER 31, 2018

| (\$ millions) | | | | | | | | | | | | | |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 17.9 | 21.4 | 22.4 | 20.3 | 17.9 | 13.6 | 10.9 | 9.8 | 9.7 | 9.6 | 10.5 | 13.5 | 177.4 |
| Commercial Small | 5.9 | 7.7 | 8.1 | 7.2 | 6.2 | 4.2 | 3.1 | 2.4 | 2.2 | 2.2 | 2.7 | 3.9 | 55.9 |
| Commercial Large | 2.3 | 3.0 | 3.1 | 2.5 | 2.2 | 1.3 | 0.8 | 0.6 | 0.6 | 0.6 | 0.9 | 1.5 | 19.4 |
| Small Industrial | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.4 |
| Total Delivery | 26.1 | 32.1 | 33.7 | 30.2 | 26.3 | 19.2 | 15.0 | 12.9 | 12.7 | 12.7 | 14.2 | 19.0 | 254.1 |

Delivery Revenue at Current Rates

Delivery Revenues at Recommended Rates (\$ millions)

| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Residential | 18.4 | 22.0 | 23.0 | 20.8 | 18.5 | 14.2 | 11.5 | 10.3 | 10.3 | 10.2 | 11.1 | 14.0 | 184.4 |
| Commercial Small | 6.1 | 7.9 | 8.3 | 7.4 | 6.3 | 4.3 | 3.2 | 2.4 | 2.3 | 2.3 | 2.8 | 4.0 | 57.3 |
| Commercial Large | 2.3 | 3.1 | 3.2 | 2.6 | 2.3 | 1.3 | 0.9 | 0.6 | 0.6 | 0.7 | 0.9 | 1.5 | 20.1 |
| Small Industrial | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.4 |
| Total Delivery | 27.0 | 33.0 | 34.6 | 31.0 | 27.2 | 20.0 | 15.7 | 13.5 | 13.3 | 13.3 | 14.9 | 19.7 | 263.2 |
| Rate Change | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 9.1 |

LOAD FORECAST - BASE CASE

| | | | Novembe | er 01, 2017 - | October 31 | , 2018 Mon | thly Foreca | st Number | of Custom | ers | | | |
|------------------|---------|---------|---------|---------------|------------|------------|-------------|-----------|-----------|---------|---------|---------|---------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Average |
| Residential | 352,136 | 353,271 | 353,955 | 354,387 | 354,739 | 352,550 | 352,005 | 351,262 | 351,798 | 351,755 | 352,657 | 353,808 | 352,860 |
| Commercial Small | 39,804 | 39,949 | 40,041 | 40,092 | 40,104 | 39,996 | 39,957 | 39,899 | 39,898 | 39,895 | 39,921 | 39,742 | 39,942 |
| Commercial Large | 1,442 | 1,449 | 1,439 | 1,439 | 1,440 | 1,437 | 1,440 | 1,439 | 1,429 | 1,430 | 1,432 | 1,425 | 1,437 |
| Small Industrial | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Total Delivery | 393,409 | 394,696 | 395,462 | 395,945 | 396,310 | 394,011 | 393,429 | 392,627 | 393,152 | 393,107 | 394,037 | 395,002 | 394,266 |

| | No | vember 01, | 2017 - Oct | ober 31, 20 [.] | 18 Monthly | Forecast D | elivery Volu | umes in Th | ousands of | Cubic Metr | es (m³) | | |
|------------------|---------|------------|------------|--------------------------|------------|------------|--------------|------------|------------|------------|---------|---------|-----------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 112,682 | 152,854 | 163,831 | 139,398 | 112,165 | 64,137 | 34,253 | 21,319 | 20,336 | 19,674 | 29,641 | 62,453 | 932,744 |
| Commercial Small | 59,217 | 82,352 | 87,777 | 76,436 | 62,190 | 35,921 | 21,407 | 11,501 | 9,563 | 9,573 | 16,104 | 32,447 | 504,486 |
| Commercial Large | 31,777 | 42,701 | 44,964 | 36,311 | 30,723 | 16,872 | 9,946 | 6,321 | 6,534 | 6,855 | 10,379 | 19,638 | 263,021 |
| Small Industrial | 2,074 | 1,746 | 2,486 | 3,027 | 2,607 | 4,100 | 3,412 | 3,101 | 3,063 | 3,330 | 2,260 | 2,141 | 33,347 |
| Total Delivery | 205,750 | 279,654 | 299,058 | 255,172 | 207,685 | 121,030 | 69,018 | 42,242 | 39,496 | 39,431 | 58,384 | 116,679 | 1,733,599 |

| | N | ovember 0 | 1, 2017 - Oc | tober 31, 20 | 018 Monthly | / Forecast I | Delivery Vo | olumes in T | housands o | of Gigajoule | s (GJ) | | |
|------------------|--------|-----------|--------------|--------------|-------------|--------------|-------------|-------------|------------|--------------|--------|--------|--------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 4,338 | 5,885 | 6,307 | 5,367 | 4,318 | 2,469 | 1,319 | 821 | 783 | 757 | 1,141 | 2,404 | 35,911 |
| Commercial Small | 2,280 | 3,171 | 3,379 | 2,943 | 2,394 | 1,383 | 824 | 443 | 368 | 369 | 620 | 1,249 | 19,423 |
| Commercial Large | 1,223 | 1,644 | 1,731 | 1,398 | 1,183 | 650 | 383 | 243 | 252 | 264 | 400 | 756 | 10,126 |
| Small Industrial | 80 | 67 | 96 | 117 | 100 | 158 | 131 | 119 | 118 | 128 | 87 | 82 | 1,284 |
| Total Delivery | 7,921 | 10,767 | 11,514 | 9,824 | 7,996 | 4,660 | 2,657 | 1,626 | 1,521 | 1,518 | 2,248 | 4,492 | 66,744 |

LOAD FORECAST - COLD WEATHER SCENARIO

| | | | Novembe | er 01, 2017 · | October 31 | l, 2018 Mon | thly Foreca | ist Number | of Custom | ers | | | |
|------------------|---------|---------|---------|---------------|------------|-------------|-------------|------------|-----------|---------|---------|---------|---------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Average |
| Residential | 352,136 | 353,271 | 353,955 | 354,387 | 354,739 | 352,550 | 352,005 | 351,262 | 351,798 | 351,755 | 352,657 | 353,808 | 352,860 |
| Commercial Small | 39,804 | 39,949 | 40,041 | 40,092 | 40,104 | 39,996 | 39,957 | 39,899 | 39,898 | 39,895 | 39,921 | 39,742 | 39,942 |
| Commercial Large | 1,442 | 1,449 | 1,439 | 1,439 | 1,440 | 1,437 | 1,440 | 1,439 | 1,429 | 1,430 | 1,432 | 1,425 | 1,437 |
| Small Industrial | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Total Delivery | 393,409 | 394,696 | 395,462 | 395,945 | 396,310 | 394,011 | 393,429 | 392,627 | 393,152 | 393,107 | 394,037 | 395,002 | 394,266 |

| Residential 135,218 183,425 196,597 167,278 134,598 76,965 41,104 25,583 24,403 23,609 35,570 74,944 1,119,25 | | | | | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|---------|-----------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 135,218 | 183,425 | 196,597 | 167,278 | 134,598 | 76,965 | 41,104 | 25,583 | 24,403 | 23,609 | 35,570 | 74,944 | 1,119,293 |
| Commercial Small | 71,061 | 98,823 | 105,332 | 91,723 | 74,628 | 43,105 | 25,688 | 13,801 | 11,475 | 11,488 | 19,324 | 38,936 | 605,384 |
| Commercial Large | 38,133 | 51,241 | 53,957 | 43,573 | 36,868 | 20,247 | 11,935 | 7,585 | 7,840 | 8,226 | 12,455 | 23,565 | 315,625 |
| Small Industrial | 2,074 | 1,746 | 2,486 | 3,027 | 2,607 | 4,100 | 3,412 | 3,101 | 3,063 | 3,330 | 2,260 | 2,141 | 33,347 |
| Total Delivery | 246,486 | 335,235 | 358,372 | 305,601 | 248,700 | 144,416 | 82,140 | 50,070 | 46,782 | 46,652 | 69,609 | 139,586 | 2,073,650 |

| November 01, 2017 - October 31, 2018 Monthly Forecast Delivery Volumes in Thousands of Gigajoules (GJ) | | | | | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 5,206 | 7,062 | 7,569 | 6,440 | 5,182 | 2,963 | 1,582 | 985 | 940 | 909 | 1,369 | 2,885 | 43,093 |
| Commercial Small | 2,736 | 3,805 | 4,055 | 3,531 | 2,873 | 1,660 | 989 | 531 | 442 | 442 | 744 | 1,499 | 23,307 |
| Commercial Large | 1,468 | 1,973 | 2,077 | 1,678 | 1,419 | 779 | 459 | 292 | 302 | 317 | 480 | 907 | 12,152 |
| Small Industrial | 80 | 67 | 96 | 117 | 100 | 158 | 131 | 119 | 118 | 128 | 87 | 82 | 1,284 |
| Total Delivery | 9,490 | 12,907 | 13,797 | 11,766 | 9,575 | 5,560 | 3,162 | 1,928 | 1,801 | 1,796 | 2,680 | 5,374 | 79,83 |

LOAD FORECAST - WARM WEATHER SCENARIO

| November 01, 2017 - October 31, 2018 Monthly Forecast Number of Customers | | | | | | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Average |
| Residential | 352,136 | 353,271 | 353,955 | 354,387 | 354,739 | 352,550 | 352,005 | 351,262 | 351,798 | 351,755 | 352,657 | 353,808 | 352,860 |
| Commercial Small | 39,804 | 39,949 | 40,041 | 40,092 | 40,104 | 39,996 | 39,957 | 39,899 | 39,898 | 39,895 | 39,921 | 39,742 | 39,942 |
| Commercial Large | 1,442 | 1,449 | 1,439 | 1,439 | 1,440 | 1,437 | 1,440 | 1,439 | 1,429 | 1,430 | 1,432 | 1,425 | 1,437 |
| Small Industrial | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Total Delivery | 393,409 | 394,696 | 395,462 | 395,945 | 396,310 | 394,011 | 393,429 | 392,627 | 393,152 | 393,107 | 394,037 | 395,002 | 394,266 |

| | November 01, 2017 - October 31, 2018 Monthly Forecast Delivery Volumes in Thousands of Cubic Metres (m ³) | | | | | | | | | | | | |
|------------------|---|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 90,146 | 122,283 | 131,065 | 111,519 | 89,732 | 51,310 | 27,403 | 17,055 | 16,269 | 15,739 | 23,713 | 49,963 | 746,196 |
| Commercial Small | 47,374 | 65,882 | 70,221 | 61,149 | 49,752 | 28,737 | 17,126 | 9,201 | 7,650 | 7,658 | 12,883 | 25,957 | 403,589 |
| Commercial Large | 25,422 | 34,161 | 35,971 | 29,049 | 24,579 | 13,498 | 7,957 | 5,057 | 5,227 | 5,484 | 8,303 | 15,710 | 210,417 |
| Small Industrial | 2,074 | 1,746 | 2,486 | 3,027 | 2,607 | 4,100 | 3,412 | 3,101 | 3,063 | 3,330 | 2,260 | 2,141 | 33,347 |
| Total Delivery | 165,015 | 224,072 | 239,743 | 204,743 | 166,669 | 97,644 | 55,897 | 34,414 | 32,209 | 32,211 | 47,159 | 93,771 | 1,393,549 |

| November 01, 2017 - October 31, 2018 Monthly Forecast Delivery Volumes in Thousands of Gigajoules (GJ) | | | | | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 3,471 | 4,708 | 5,046 | 4,293 | 3,455 | 1,975 | 1,055 | 657 | 626 | 606 | 913 | 1,924 | 28,729 |
| Commercial Small | 1,824 | 2,536 | 2,704 | 2,354 | 1,915 | 1,106 | 659 | 354 | 295 | 295 | 496 | 999 | 15,538 |
| Commercial Large | 979 | 1,315 | 1,385 | 1,118 | 946 | 520 | 306 | 195 | 201 | 211 | 320 | 605 | 8,101 |
| Small Industrial | 80 | 67 | 96 | 117 | 100 | 158 | 131 | 119 | 118 | 128 | 87 | 82 | 1,284 |
| Total Delivery | 6,353 | 8,627 | 9,230 | 7,883 | 6,417 | 3,759 | 2,152 | 1,325 | 1,240 | 1,240 | 1,816 | 3,610 | 53,652 |

REVENUE SENSITIVITY TO CHANGES IN WEATHER

| Delivery Revenues: Base Case (\$ millions) | | | | | | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 18.4 | 22.0 | 23.0 | 20.8 | 18.5 | 14.2 | 11.5 | 10.3 | 10.3 | 10.2 | 11.1 | 14.0 | 184.4 |
| Commercial Small | 6.1 | 7.9 | 8.3 | 7.4 | 6.3 | 4.3 | 3.2 | 2.4 | 2.3 | 2.3 | 2.8 | 4.0 | 57.3 |
| Commercial Large | 2.3 | 3.1 | 3.2 | 2.6 | 2.3 | 1.3 | 0.9 | 0.6 | 0.6 | 0.7 | 0.9 | 1.5 | 20.1 |
| Small Industrial | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.4 |
| Total Delivery | 27.0 | 33.0 | 34.6 | 31.0 | 27.2 | 20.0 | 15.7 | 13.5 | 13.3 | 13.3 | 14.9 | 19.7 | 263.2 |

| Delivery Revenues: Cold Weather Scenario (\$ millions) | | | | | | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 20.4 | 24.7 | 25.9 | 23.3 | 20.4 | 15.3 | 12.1 | 10.7 | 10.6 | 10.6 | 11.6 | 15.1 | 200.9 |
| Commercial Small | 7.0 | 9.1 | 9.7 | 8.6 | 7.3 | 4.9 | 3.5 | 2.6 | 2.4 | 2.4 | 3.0 | 4.5 | 65.1 |
| Commercial Large | 2.8 | 3.6 | 3.8 | 3.1 | 2.7 | 1.6 | 1.0 | 0.7 | 0.7 | 0.8 | 1.0 | 1.8 | 23.6 |
| Small Industrial | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.4 |
| Total Delivery | 30.3 | 37.6 | 39.5 | 35.2 | 30.5 | 21.9 | 16.8 | 14.2 | 13.9 | 13.9 | 15.8 | 21.5 | 291.0 |

Delivery Revenues: Warm Weather Scenario

| | | | | | (| \$millions) | | | | | | | |
|------------------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|-------|
| Rate Class | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Total |
| Residential | 16.4 | 19.3 | 20.1 | 18.4 | 16.5 | 13.0 | 10.9 | 10.0 | 9.9 | 9.9 | 10.6 | 12.9 | 167.9 |
| Commercial Small | 5.2 | 6.6 | 6.9 | 6.3 | 5.4 | 3.8 | 2.9 | 2.2 | 2.1 | 2.1 | 2.5 | 3.5 | 49.5 |
| Commercial Large | 1.9 | 2.5 | 2.6 | 2.2 | 1.9 | 1.1 | 0.7 | 0.5 | 0.5 | 0.6 | 0.8 | 1.3 | 16.5 |
| Small Industrial | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.4 |
| Total Delivery | 23.6 | 28.5 | 29.8 | 26.9 | 23.8 | 18.1 | 14.6 | 12.9 | 12.7 | 12.7 | 14.0 | 17.8 | 235.4 |

Note: Tables may not add percisely due to rounding

Excludes Commodity Revenues

PEAK DAY LOAD FORECAST

| Forecast Peak (Gigajoules/day) | <u>600,000</u> |
|---|----------------|
| 1-in-20 Cold Design Criteria | |
| Degree-days (degrees Celsius) | 54.7 |
| Average Daily Temperature (degrees Celsius) | -36.7 |

HISTORICAL PEAK DAYS

| PEAK DAY (DATE) | DEGREE DAYS PROVINCIAL AVERAGE (°C) | MAXIMUM DAILY CUSTOMER CONSUMPTION (GJ) |
|--------------------|---|---|
| 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 |
| FEBRUARY 24, 2011 | 46.8 | 466,438 |
| DECEMBER 14, 2009 | 47.1 | 520,678 |
| DECEMBER 14, 2008 | 48.8 | 508,814 |
| JANUARY 29, 2008 | 52.9 | 527,220 |
| JANUARY, 11, 2007 | 48.8 | 462,877 |