

Valuation Analysis of SaskEnergy

Ian Madsen, CFA



About the author

Ian Madsen, CFA, is an investment and financial analyst based in Surrey, BC. He earned a BA in Economics from the University of Alberta and an MBA in Finance from the University of Toronto. He has managed institutional investment portfolios, lectured at colleges, managed investment research operations, and developed financial valuation models. For several years Ian was vice president at a U.S. investment research firm with extensive operations in India, where he worked and managed staff. He also ran his own investment counseling firm and advisory newsletter. He holds the Chartered Financial Analyst (CFA) designation and is a former president of the Saskatchewan and Edmonton CFA Societies.

MB: 203-2727 Portage Avenue, Winnipeg, Manitoba Canada R3J 0R2 Tel: 204-957-1567 Email: manitoba@fcpp.org FRONTIER CENTRE

SK: 2353 McIntyre Street, Regina, Saskatchewan Canada S4P 2S3 Tel: 306-352-2915 Email: saskatchewan@fcpp.org AB: Ste. 603, 734-7th Avenue SW, Calgary, Alberta Canada T2P 3P8 Tel: 587-930-2289 Email: alberta@fcpp.org

The Frontier Centre for Public Policy is an independent, non-profit organization that undertakes research and education in support of economic growth and social outcomes that will enhance the quality of life in our communities. Through a variety of publications and public forums, the Centre explores policy innovations required to make the prairies region a winner in the open economy. It also provides new insights into solving important issues facing our cities, towns and provinces. These include improving the performance of public expenditures in important areas such as local government, education, health and social policy. The author of this study has worked independently and the opinions expressed are therefore their own, and do not necessarily reflect the opinions of the board of the Frontier Centre for Public Policy.

Copyright © MMXIV by the Frontier Centre for Public Policy.

Date of First Issue: December 2014.

Reproduced here with permission of the author. Any errors or omissions and the accuracy and completeness of this paper remain the responsibility of the author.

ISSN 1491-78





FCPP Policy Series No. 171 • December 2014

Valuation Analysis of SaskEnergy

Ian Madsen, CFA

Table of Contents

Title	Page
Introduction	4
Preface	6
Summary and Introduction	11
Market Valuation Analysis	13
Intrinsic or Fair Value	14
Appendix I - Valuation metrics	18

Note to reader: Endnotes and some words in this document may appear in <u>blue</u> and underlined. When e-reading, these links will directly access relevant online websites or documents using your associated browser. Endnotes' numerals will directly link to the appropriate reference at the end of this document.

Introduction

This analysis arrives at approximations of the value of SaskEnergy, a provincial Crown corporation owned by the government and thus the citizens and taxpayers, of the province of Saskatchewan. These valuation ranges could be useful in determining the future ownership or use of this asset. Every organization needs to review what it could or should do to serve its clients as well as review whether its present array of assets is appropriate for its strategy and future operations.

Valuation

Market-based Valuation of SaskEnergy

The best probable estimate of the total market capitalization, that is, the total value of the company were it to be traded on a public stock exchange, is **\$0.818-billion** to **\$1.241-billion**, **with the average** of the three key metrics chosen **being \$1.164-billion**. The calculation used to arrive at this range of figures was performed using comparison companies, the closest peers being two Canadian regional gas utility or distribution companies; however, other independent or energy-oriented Canadian firms with gas utility units and 11 regional (some multi-state) U.S. companies were also used. The U.S. companies often had electrical generation and sometimes regional or midstream pipeline units or other operations. No electricity-dominated U.S. companies were used in the analysis.

Intrinsic, Discounted Free Cash Flow (DFCF) Valuation of SaskEnergy

Using several scenario-generated estimates and assumptions, the probable range of value for SaskEnergy, *fully taxed* (it does not pay provincial or federal income tax at this time), is estimated to be **\$0.4559-billion** to **\$0.6855-billion**, with a simple average of the three best estimates being calculated as **\$0.5824-billion**. This is a plausible value to potential investors should the company become wholly or partially publicly traded. The *untaxed* value, i.e., the value to the Crown, is estimated to be between **\$0.9305-billion** and **\$1.1736-billion**, with a simple average of the three best estimates being calculated as **\$1.0663-billion**. SaskEnergy, like many of its peers in Canada and the United States, is in a period of highly intensive capital investment, despite slow growth, reducing its effective taxability and its free cash flow, as is the case for many of those same peers and its sister Crown, SaskPower.

The lower figure of the range is based on the present value of eight years of free cash flows in the future using a required rate of return of 8 per cent and an aggregate of the projected free cash flows in several different scenarios, with a Terminal Value based on the ninth year's projected free cash flow. These free cash flow estimates were generated using a model that was derived from the company's most recent historical operational and financial performance. **The upper figure** uses the same aggregate of projected free cash flows, utilizing a required rate of return of 6 per cent.

Final Caution: Neither valuation range above, neither the market value nor the intrinsic value, constitutes a Private Market Value that a corporate acquisitor may pay, such acquisitor having the benefit of being able to attempt to optimize the value of the taken-over company with synergies, cost-cutting, asset disposal, optimization and perhaps the use of previous years' tax-shielding losses.

Note: For details, please read the entire study that follows this section.

Preface

Privatization and similar options for SaskEnergy

There are many reasons for the direct involvement of a regional, provincial, state, territorial, national, federal or even municipal government in an industry or endeavour.

This involvement is always present in regulation, which no industry escapes; sometimes, it is in direct investment in a commercial or quasi-commercial service or enterprise.

Over time, the Canadian federal government and other provincial governments have extricated themselves from direct ownership of various commercial enterprises. Few such enterprises remain in the hands of these governments.

One sector that does retain heavy Crown involvement is electric power generation, transmission and end-user distribution. Only Alberta and the Maritime provinces have significant private sector participation.

This arrangement is unusual in Western industrialized nations. Most such nations do not have large national or regional power or gas utilities entirely owned by governments.

Whether a government takes a direct stake in a commercial enterprise is a matter for taxpayers, voters and policy-makers to discuss, debate and decide.

The result of those deliberations will in some large measure be influenced by what some people think is a matter of political ideology. That is, some people believe in strong government involvement in the economy in some, many or all industries, sectors and markets. Others believe the opposite: Economic progress, growth and prosperity depend on the best use of natural, technical, commercial, financial and intellectual resources that must be bid for in a competitive fashion by as many economic actors as possible.

In this way, they contend, these resources will attain the highest possible value and the maximum return, from which society will benefit, directly or indirectly, through increased profits, tax revenue and employment or efficient, cost-contained goods and services.

Rationale for divestiture or privatization

While it is up to the people of Saskatchewan through their elected representatives to decide if SaskEnergy should be sold or otherwise privatized and the proceeds used for the benefit of all Saskatchewan citizens and taxpayers, there are some established general reasons for embarking on such a path, some or all of which are cited for the divestiture of such enterprises, but they *may not* be applicable in any particular case, including that of SaskEnergy.

- 1. The government has no mandate to own or run a commercial enterprise. The provision of citizens' safety, security and justice is the government's primary role, and its involvement in the economy should generally not extend beyond this. However, the government of Saskatchewan in its legislation asserts this role for itself, for several entities, including SaskEnergy.
- 2. Regulation can usually accomplish any public policy reason for direct involvement in an industry. If regulation is not easily feasible, then a direct contract or subsidy to affected individuals or other entity or entities may be more efficient or effective and less economically disruptive or costly. This could apply to SaskEnergy and any customers or others who may be disadvantaged by a future divestiture.
- 3. A government-owned or -sponsored enterprise may compete directly against private sector firms, which are owned by or employ citizens, or against individual citizens, all of whom the government is supposed to serve, not disadvantage. According to Saskatchewan government policy, SaskEnergy is supposed to operate as a normal commercial power utility company.
- 4. The government-owned or -sponsored enterprise may compete *unfairly* against its private sector rivals in that it had or has access to lower-cost, government-sourced and -guaranteed capital (debt). It may have a much larger debt component in its capital versus that which would be tolerated in the private sector. Thus, it may not have to meet high standards for profit and cost control, allowing it to offer lower than true free market-based competitive pricing. While SaskEnergy still has this advantage, at current interest rates it may not give SaskEnergy much of an edge over other firms, although, since its shareholder capital may not have any market-based or- influenced rate of return requirement, this could give it some implicit advantage over a similar publicly listed or private sector competitor.
- 5. Government-owned firms may not need to pay provincial or federal income taxes. Again, this allows SaskEnergy to offer lower than true free market-based competitive pricing.
- 6. Government-owned or -sponsored enterprises may not have any kind of profit orientation or target. They may be used as public policy vehicles and may be given preference in their activities or even in their transgressions, such as labour or environmental abuses. SaskEnergy is, according to its policies, not supposed to behave in an abusive fashion.

- 7. Government-owned or -sponsored enterprises, by virtue of being public sector vehicles overseen by bureaucrats and politicians, may be organizations where favoured individuals find employment, particularly at management levels. SaskEnergy is, according to provincial government policy, supposed to operate like a competitive commercial enterprise in this and other areas.
- 8. Since profit is a secondary goal of a government-owned or -sponsored enterprise, it is difficult to evaluate the effectiveness, efficiency or productivity of the enterprise or its employees. Consequently, these employees and assets may not be very productive or effective. Again, SaskEnergy is supposed to behave and operate like a commercial company.
- 9. Government-owned or -sponsored enterprises are often creations of certain time-fixed circumstances and outlive whatever use or public policy role their creators conceived. Often, advances in technology, the modernization of transport, telecommunication or information technology, the evolution of the economy and available products and services and the increasing standard of living make these enterprises potentially obsolete. In the private sector, firms and individuals must adapt and evolve, or decline. This could very well apply to SaskEnergy. There are preliminary signs that independent power producers and merchants, and end-user use of natural gas fuel cell, Stirling engine, cogeneration or other efficient low-cost technology, may actually make SaskEnergy *more* competitive over time, especially as abundant shale formation-sourced gas production and adjacent North Dakota.
- 10. Government-owned or -sponsored enterprises perpetuate their possibly obsolete existences by virtue of the constituencies that build up around them: their employees, their managers and directors; the bureaucrats; their customers, suppliers and associated advocates or consultants. They can lobby to keep the enterprise going, despite dysfunction or losses. They are far more motivated to do so than are taxpayers, whose average cost is much less per person and may be indirect, hidden or difficult to calculate. The constituency for the continued government ownership of SaskEnergy may not be readily visible or obvious, but every established fiefdom has persons or groups that may lose out should there be a change in ownership or status.
- 11. Because they are not profit oriented, government-owned or -sponsored enterprises are usually less efficient, and thus they lower the overall efficiency of the entire economy. This can make a whole nation less competitive than its global rivals are, whether nations or individual companies. The effects are worse the greater the government involvement in the economy. When taken to the extreme, as happened in 20th-century communist nations, countries are unable to compete against capitalist companies, despite their immense direct and indirect subsidies, government support and lack of profit requirement. SaskEnergy has not been a very profitable venture or a good investment for the province or its taxpayers, and it has erratic cash-flow performance.

- 12. Funds tied up in the capital of government-owned or -sponsored enterprises could be used to reduce government debt or lower taxes for individuals or corporations, and they could then spend their savings or invest them as they freely choose, and thus they could inject money back into the economy in more-lucrative ways.
- 13. Ultimately, the test of the attractiveness of an existing investment is whether it would still seem as attractive were it not already owned by the investor. For a long-term investment, it would have to have substantial risk-adjusted appreciation potential or other compelling benefits over alternative investments or low-risk cash equivalents or paying down debt.

While it is possible that the citizens, taxpayers and government of Saskatchewan would be better off and better served if SaskEnergy were to become part of the private sector marketplace, *this study is just confined to estimating the value that Saskatchewan could accrue by doing so.*

Pathway options for divestiture or privatization

SaskEnergy could be privatized in several different ways.

- 1. Sold as is, in its entirety, in the public equity market, or stock market, as an Initial Public Offering or IPO. To do this, it would have to be decided if SaskEnergy would have any ownership restrictions. Utility rate regulation would remain in place, but deregulation of interprovincial transmission and sale of gas could conceivably increase its value. Restrictive regulation could slightly lower its potential value. These restrictions could include limiting foreign ownership.
- 2. Partial sale, with some government control or influence for a few years or permanently, which would help ensure that the initial sale was not conducted at too low a price. Any follow-on or secondary offerings could then add to the total proceeds garnered and could capture more of the total potential value.
- 3. Sale to a large strategic buyer, such as another utility. This could result in greater total proceeds to the government, as the rationalization and synergies the buyer could realize cannot be done by simply making an IPO.
- 4. Transfer of ownership to the pension and other asset management portfolio of the Saskatchewan government. This would mean that the asset manager would have to decide when and how to do one of the actions above.
- 5. Distribute SaskEnergy shares to each household, citizen, voter or taxpayer in Saskatchewan to retain or sell as they wish. This is cumbersome and expensive, but it has been done elsewhere, particularly in the United Kingdom.
- 6. Optimize the company as a fully commercial, profit-seeking, profitable corporation and allow it to dispose of underperforming assets and extinguish liabilities, perhaps with the help of the government, in order to fetch the best

possible price for the company in the public marketplace, either from a single strategic buyer or in the stock market, as in the first three points.

These are only suggestions. Proceeds from any SaskEnergy sale could lower taxes, reduce the government's current or future debt, be used for needed spending priorities, be used to rationalize government and reduce costs or be added to the assets the government entrusts to its pension asset manager.

There could be more ways that others could suggest for removing the Saskatchewan government from SaskEnergy, thus allowing the former to realize the financial benefits and the latter to realize its own destiny.

However, SaskEnergy is not being considered for imminent or even potential sale, as it is one of the walled-off companies under the mandate of the Crown Investment Corporation, CIC, of the Saskatchewan government. Until the legislation enforcing this mandate is changed, which the current Saskatchewan Party administration has said it would not introduce for the near future, divestiture of SaskEnergy and a number of other CIC-controlled entities will not occur. It should be noted that a delay could be costly; the value of SaskEnergy could actually fall, as capital expenditure requirements may remain high, and competitive forces could continue to constrain the ability to recover costs through pricing of products and services, as they are doing with its sister Crown, SaskPower. Finally, it is notable that SaskEnergy is the only provincial government-owned gas utility.

Summary and Introduction

The financial analysis of a privately controlled entity, whether owned by a government body or agency or controlled by individuals, a family or other private group, is more challenging than a financial analysis conducted on a publicly traded commercial enterprise is.

Metrics used in valuing a publicly traded company may not be applicable, or some data may not be available, making such measures absent in the analysis.

This analysis makes no effort to assess or adjust the financial data for any public policy or other aspect of the strategy or operation of this entity, as it is difficult to separate the effects of any non-commercial actions from those that a similar commercial entity would do. However, this non-taxable entity had estimates for taxation applied against its results to ensure a proper comparison with its peers and as a fully commercial entity, as it would be should it be divested.

The analysis incorporates certain assumptions and projections. All obvious ones are elucidated, although a few might have been inadvertently omitted. The Excel file comments show details of the calculations and how and why they were done the way they were. How and why the adjustments to accounting and other items were made are included in these notes.

The estimates and the final estimated valuation of the enterprise that is the subject of this analysis are just that: *estimates only* and should *not* be taken to be definitive, authoritative or unassailable. They are targets of legitimate, alternative valuation by other analysts using other techniques or assumptions or both.

Since the valuation analysis is not definitive, the possible values of the firm, whether using market comparators or intrinsic valuation methods, are given as ranges and not merely as single numbers.

It is useful to remember that the market valuation of a company that is listed on a public stock exchange can vary widely, even wildly, from day to day, week to week, month to month, year to year or even within one trading day. Since even a public market-determined share price is not an eternal verity, the possible value of the company in this study should not be given in a single number.

Caution: This study, in neither of the analyses to follow, makes no attempt to estimate or include any sort of pension, other value impairment, derivative or other liabilities or contingent liabilities that have not already been fully discounted and included in the main income, financial position, cash flow statements or any other estimate of liabilities or assets that could augment or detract from the valuations that were calculated. Where pension or other non-cash losses or other similar impairments were used to lower final net income in the company's financial statements, they were, in some instances, either ignored or added back, as necessary, and it was usually noted when this was done.

Summary

Market-based Valuation

The best *probable* estimate of the total market capitalization, that is, the total value of the company were it to be traded on a public stock exchange, is **\$0.818-billion** to **\$1.241-billion**, **with the average** of the three key metrics chosen **being \$1.164-billion**. The calculation used to arrive at this range of figures was performed using comparison companies, the closest peers being two Canadian regional gas utility or distribution companies. However, other independent or energy-oriented Canadian firms with gas utility units and 11 regional (some multi-state) U.S. companies were also used. The U.S. companies often had electrical generation and occasionally regional or midstream pipeline units or other operations. No electricity-dominated U.S. companies were used in the analysis.

Intrinsic, Discounted Free Cash Flow (DFCF) Valuation of SaskEnergy

Using several scenario-generated estimates and assumptions, *the probable range of value* for SaskEnergy, *fully taxed* (it does not pay provincial or federal income tax at this time), is estimated to be **\$0.4559-billion** to **\$0.6855-billion**, with a simple average of the three best estimates being calculated as **\$0.5824-billion**. This is a plausible value to potential investors should the company become wholly or partially publicly traded. The *untaxed value*, i.e., the value to the Crown, is estimated to be between **\$0.9305-billion** and **\$1.1736-billion**, with a simple average of the three best estimates being calculated as **\$1.0663-billion**. SaskEnergy, like many of its peers in Canada and the United States, is in a period of highly intensive capital investment, despite slow growth in revenue and income, reducing its effective taxability and its free cash flow, as is the case for many of those same peers and its sister Crown, SaskPower.

The lower figure of the range is based on the present value of eight years of free cash flows in the future (year 1, or 2014) using a required rate of return of 8 per cent and an aggregate of the projected free cash flows in several different scenarios, with a Terminal Value, in each case, based on the ninth year's projected free cash flow. These free cash flow estimates were generated using a model that was derived from the most recent historical operational and financial performance of the company. **The upper figure** uses the same aggregate of projected free cash flows, using a required rate of return of 6 per cent.

Final Caution: Neither valuation range above, the market value nor the intrinsic value, constitutes a Private Market Value that a corporate acquisitor may pay, such acquisitor having the benefit of being able to attempt to enhance the value of the taken-over company with synergies, cost-cutting, asset disposal, optimization and perhaps the use of previous years' tax-shielding losses.

Market Valuation Analysis

SaskEnergy is not a publicly listed company. The market metrics analysis uses standard valuation metrics for public companies in order to establish a probable range for a company's equity, or common shares, were it to be publicly listed, in whole or in part.

For the market valuation, appropriate comparison companies were necessary. As SaskEnergy is a regional gas distribution utility, it was compared against regional Canadian companies offering the same services.

However, there are only two other public regional Canadian gas utility companies. Therefore, the comparison sample was expanded to include other Canadian providers, some of which also produce electricity, and solvent regional firms in the United States.

Since U.S. utilities have different regulations and taxation regimes and sometimes wildly different product and service offerings, some caution needs to be exercised when making direct comparisons with Canadian companies. In addition, the recently ended recession depressed net income for many of the U.S. companies and may have, at least temporarily, distorted some of their financial and valuation metrics.

Superficially, SaskEnergy's net income looks reasonable in relation to revenue and

Valuation metrics applied to SaskEnergy	Trailing P/E (Mkt V to NI)	Price to Sales	Price to Book Value	Price (Market Value) to Operating Cash Flow
Average Canadian Gas Utility	\$711.75	\$1,502.55	\$1,892.30	\$4,385.31
Average Canadian Utility W Gas Units	\$949.00	\$1,493.10	\$841.85	\$13,297.16
Average Canada	\$830.37	\$1,497.83	\$1,192.00	\$8,841.24
Average United States	\$994.54	\$1,091.48	\$1,285.13	\$28,563.85
Average of all above	\$912.46	\$1,294.65	\$1,245.21	\$18,702.54
Average removing highest and lowest	\$818.19	\$1,431.68	\$1,240.78	
Average of all three methods		\$1,163.55		

TABLE 1 Valuation Metrics applied to SaskEnergy (From Stock Market data)

Note: "Mkt V" is Market Value and "Price to Book V" is Price to Book Value. The figures are derived from Yahoo! Finance, June 15, 2014, using trailing 12 months results for those companies and 2013 results for SaskEnergy.

size of the company. However, its free cash flow is erratic, sometimes negative, and not growing as quickly as its capital spending, indicating that it chronically requires adding debt to finance its capital expenditures. It is also highly variable from year to year, and its ultimate generator, gross income, has not been increasing consistently at any significant growth rate.

The company has been in an unusual environment until recently. Both revenue and cost of sales have been declining for years, as natural gas prices have declined and become more variable and determined by the open market. The next several years could be quite different, as abundant natural gas from new techniques and discoveries and continuing strong economic growth in Saskatchewan could change its future Gross Income growth rate to a positive one, which is assumed in this analysis. This is a departure *and may not happen*.

Looking at the final financial metrics used for SaskEnergy, Price to [Forward] Earnings [Net Income] and Price to Sales [or Revenue], it is evident that there is a wide range of possible values. Some values determined by some metrics were discarded because either the metric proved to give too wide a range of variability or the final value for the metric was at the high or low end of the final range of values. Please see the Table 1 for the results.

To summarize: This is the best *probable* estimate of the likely total market capitalization, that is, the total value of the company traded on a public stock exchange: \$0.818-billion to \$1.241-billion.

Intrinsic or Fair Value

Operating Cash Flow is Net Income adjusting for changes in Working Capital and adding back non-cash charges such as Depreciation and Amortization. Free cash flow, or FCF, is simply Operating Cash Flow minus Capital Expenditure, or Capex, which constitutes purchases of Fixed Assets.

Generally, when calculating an intrinsic value for an enterprise, one needs to estimate an appropriate discount rate to apply to the free cash flows that the entity generates as well as a reasonable, sustainable, constant growth rate for those cash flows into the indefinite future.

The discount rate is usually the required rate of return, that is, the rate of return that the investor requires that would make purchasing all or part of the enterprise attractive. This varies from individual to individual, institution to institution and company to company and from time period to time period. For instance, lately, the assumed or probable range of expected stock market returns has fallen to below what that range was in the past. So, a range of such discount rates must be employed in the analysis.

Commonly, future cash flows are estimated by projecting all major cash inflows and outflows for the next several years and discounting them to the present in one aggregate total amount. However, the recent as well as the longer-term trends in

those cash inflows and outflows can be variable and inconsistent.

SaskEnergy revenue items and cost items are growing at different rates and fluctuate in different directions in different years. As well, Net Income is growing at a much different rate than free cash flow is.

The Discounted Free Cash Flow model used earlier patterns and relationships of income to its financial causal factors, such as well as cost and cash flow items to establish plausible ranges of growth rates for what turned out to be the principal determinants of free cash flows. These factors are Gross Income, Selling, General and Administrative Expense, or SG&A, and Capital Expenditure. It became evident that final free cash flow was very sensitive to the growth rate in SG&A and slightly less to that of Capex.

The combined federal and provincial income tax rate of 26 per cent less the first \$500,000 of pre-tax income was used to calculate an effective tax rate. As the free cash flow trends were inconclusive, various scenarios using plausible growth rates in SG&A (including direct labour) costs and Capex growth were used.

Some scenarios resulted in high negative net present values for the firm and were discarded in the final valuation matrices, as it is assumed that management would avoid destroying the value of the firm and would adapt to circumstances in order to do so or that the company would become insolvent, making valuation impossible.

It developed that the company is more sensitive to SG&A changes than to Capex changes and, more predictably, that favourable Gross Income growth can allow for much higher assumed or allowed SG&A or Capex growth.

When it comes to discount rates and required rates of return, with the poor returns in the equity markets over the past decade, it could be argued that a reasonable prediction for long-term nominal (i.e., including inflation) returns, including any dividends, is now roughly an average of 7 per cent for a Canadian investor or perhaps lower.

However, an investor may demand or expect a higher rate, particularly since the utility sector has, excluding the 2008-2009 period, performed better than the overall Canadian stock market has, and yet it has many more risks in its future than it did in that period. So, a range of 4 per cent to 9 per cent was used, with a narrower range of 6 per cent to 8 per cent as the more likely true reasonable preference zone.

As riskless Canada long bonds are trading to yield about 3 per cent, the minimum risk premium an investor would likely expect would bring a required rate of return of at least 6 to 8 per cent for a smaller regional utility with somewhat below average financial performance, and facing many competitive, demand, environmental, political, regulatory and other risks such as SaskEnergy.

SaskEnergy is in a new environment where it will may not just pass on high natural gas prices to customers but could benefit from higher supply flow and increased demand in a more-dynamic market, as more uses develop and grow in distributed power and elsewhere. Bakken formation and other reserves are increasing production and look to be able to maintain that production for a long time to come through new and improving techniques such as hydraulic fracturing.

At the same time, alternative paths to create competition in industries that see little of it, such as gas utilities, are being explored by theoreticians and some governments. Ideally, customers would have the benefit of choosing from among two or more possible gas suppliers, whether or not they have their own physical infrastructure or use a common network of pipes and transmission lines. While this more-competitive industry structure does not yet obtain in Saskatchewan, it cannot be excluded as a possibility. However, it is not possible to value SaskEnergy in such a theoretical future; the current rate-regulated and traditional physical structure of the company is assumed to be intact into the indefinite future.

Since the tables showing the results of the scenario generation are very large, they are appendices to this report.

Using several scenario-generated estimates and assumptions, *the probable range of value* for SaskEnergy, *fully taxed* (it does not pay provincial or federal income tax at this time), is estimated to be **\$0.4559-billion** to **\$0.6855-billion**, with a simple average of the three best estimates being calculated as **\$0.5824-billion**. This is a plausible value to potential investors should the company become wholly or partially publicly traded. The *untaxed value*, i.e., the value to the Crown, is estimated to be between **\$0.9305-billion** and **\$1.1736-billion**, with a simple average of the three best estimates being calculated as **\$1.0663-billion**. SaskEnergy, like many of its peers in Canada and the United States, is in a period of highly intensive capital investment, despite slow growth, reducing its effective taxability and its free cash flow, as is the case for many of those same peers and its sister Crown, SaskPower.

The lower figure of the range is based on the present value of eight years of free cash flows in the future (year 1, or 2014) using a required rate of return of 8 per cent and an aggregate of the projected free cash flows in several different scenarios, with a Terminal Value, in each case, based on the ninth year's projected free cash flow. These free cash flow estimates were generated using a model derived from the most recent historical operational and financial performance of the company. **The upper figure** uses the same aggregate of projected free cash flows, with a required rate of return of 6 per cent.

Final Caution: Neither valuation range above, the market value nor the intrinsic value, constitutes a Private Market Value that a corporate acquisitor may pay, such acquisitor having the benefit of being able to attempt to increase the value of the taken-over company with synergies, cost-cutting, asset disposal, optimization and perhaps the use of previous years' tax-shielding losses.

Observation on the disparity between the estimated Market Value and the estimated Intrinsic Value of SaskEnergy

While the average estimated market value of SaskEnergy is roughly \$1.164-billion and the average estimated Intrinsic Value derived from projected fully taxed free cash flow is \$0.582-billion, the disparity of these average estimates is only accidental and does not necessarily give any less confidence to either or both of these figures than if they were closer together. Were the company suddenly required to pay full corporate taxes, it would find ways to cut its other expenses, shield income or otherwise become more productive, efficient and profitable.

Caution: The figures above are only estimates, and other analyses and analysts may find or calculate different values using other valid methods.

Final Caution: The range above is *not* a Private Market Value that a corporate acquisitor may pay and thus have the benefit of synergies, cost-cutting, asset disposal and optimization and perhaps the use of previous years' tax losses.

Appendices: Please see the separate Excel spreadsheet file for the full Intrinsic Value Discounted Free Cash Flow Model and the Market Value comparisons with all the Canadian and U.S. comparator firms.

Appendix I

TABLE 1

Valuation Metrics applied to SaskEnergy (From Stock Market data)

Valuation metrics applied to SaskEnergy	Trailing P/E (Mkt V to NI)	Price to Sales	Price to Book Value	Price (Market Value) to Operating Cash Flow
Average Canadian Gas Utility	\$/11./5	\$1,502.55	\$1,892.30	\$4,385.31
Average Canadian Utility W Gas Units	\$949.00	\$1,493.10	\$841.85	\$13,297.16
Average Canada	\$830.37	\$1,497.83	\$1,192.00	\$8,841.24
Average United States	\$994.54	\$1,091.48	\$1,285.13	\$28,563.85
Average of all above	\$912.46	\$1,294.65	\$1,245.21	\$18,702.54
Average removing highest and lowest	\$818.19	\$1,431.68	\$1,240.78	
Average of all three methods		\$1,163.55		

Note: "Mkt V" is Market Value and "Price to Book V" is Price to Book Value. The figures are derived from Yahoo! Finance, June 15, 2014, using trailing 12 months results for those companies and 2013 results for SaskEnergy.

TABLE 2

Discounted Free Cash Flow Intrinsic Value, Discount Rate of 6 percent

			Required Rate								
			of Return	5	5	6	6	6	6	6	6
			Trmnl Gr Rt	3	4	0	1	2	3	4	5
Gr Inc	SG&A	Capex									
gr rt	gr rt	Gr rt		¢620.0	¢1 21E 9	¢155.6	¢107 F	¢260.4	#265 D	dE74.0	¢1 202 7
	0.25	1 25		\$030.9 ¢/12.2	\$1,313.0	\$155.0	\$197.5	\$200.4	\$303.2 ¢224.1	\$574.9	\$1,203.7
	0.25	1.2.5		-\$281.4	-\$432.6	-\$172.7	-\$182.0	-\$195.8	-\$219.0	-\$265.2	-\$404 1
1	0.5	1.5		\$449.3	\$976.1	\$84.7	\$116.9	\$165.3	\$245.9	\$407.1	\$890.8
1	0.5	2		-\$198.5	-\$260.3	-\$152.0	-\$155.8	-\$161.6	-\$171.1	-\$190.2	-\$247.4
1	0.5	3		-\$1,121.8	-\$2,033.4	-\$484.3	-\$540.7	-\$625.2	-\$766.0	-\$1,047.7	-\$1,892.6
1	0.75	1		\$346.9	\$781.7	\$47.9	\$74.8	\$115.1	\$182.3	\$316.6	\$719.7
1	0.75	2		\$193.6	\$501.6	-\$16.7	\$2.3	\$30.9	\$78.5	\$173.6	\$459.2
1	0.75	3		\$38.8	\$218.8	-\$82.0	-\$70.8	-\$54.2	-\$26.3	\$29.3	\$196.1
1	1	1		\$215.7	\$529.9	\$0.6	\$20.0	\$49.1	\$97.7	\$194.8	\$486.0
1	1	2		-\$548.1	-\$933.0	-\$276.9	-\$300.7	-\$336.4	-\$395.8	-\$514.8	-\$871.6
2	0.5	2		\$1,272.4	\$2,582.5	\$361.9	\$442.1	\$562.4	\$762.9	\$1,163.9	\$2,366.9
2	0.5	3		-\$48.5	\$28.8	-\$98.6	-\$93.8	-\$86.6	-\$74.7	-\$50.8	\$20.8
2	2	1		\$738.0	\$1,533.2	\$188.3	\$237.5	\$311.2	\$434.0	\$679.8	\$1,417.0
3	0.75			\$2,586.0	\$5,086.6	\$850.6	\$1,005.1	\$1,236.9	\$1,623.3	\$2,395.9	\$4,/14.0
3	0.75	2		\$1,810.5	\$3,600.9	\$569.1	\$679.8	\$845.8	\$1,122.4	\$1,0/5.0	\$3,335.3
3	0.75	4		\$1,555.9 _\$14.0	\$2,085.5	\$397.0 -\$143.7	\$479.7 _\$131.4	-\$113.0	\$010.1 _¢82.3	φ1,223.1 _\$21.0	\$2,402.1
3	0.75	1		\$1 895 2	\$104.0	\$602.4	\$717.6	\$890.4	\$1 178 4	\$1 754 5	\$3 482 5
3	2	2		\$1,128.7	\$2,291.3	\$324.0	\$395.8	\$503.6	\$683.2	\$1.042.4	\$2,120,1
3	2	3		\$297.8	\$697.4	\$23.7	\$48.4	\$85.5	\$147.2	\$270.7	\$641.1
3	2.5	1		\$1,827.0	\$3,632.5	\$575.2	\$686.7	\$854.1	\$1,133.0	\$1,690.9	\$3,364.5
3	2.5	2		\$837.4	\$1,731.0	\$219.6	\$274.8	\$357.7	\$495.7	\$771.9	\$1,600.3
3	2.5	3		\$6.4	\$137.1	-\$80.6	-\$72.6	-\$60.5	-\$40.3	\$0.1	\$121.2
4	1	2		\$2,930.9	\$5,759.7	\$967.8	\$1,142.6	\$1,404.8	\$1,841.9	\$2,715.9	\$5,338.2
4	1	3		\$1,497.5	\$2,988.6	\$459.5	\$550.8	\$687.7	\$915.9	\$1,372.3	\$2,741.4
4	1	4		\$1,137.3	\$2,311.7	\$321.0	\$392.9	\$500.7	\$680.4	\$1,039.9	\$2,118.4
4	1	5		\$222.1	\$555.8	-\$6.0	\$14.6	\$45.5	\$97.1	\$200.2	\$509.6
4	2	2		\$2,376.4	\$4,694.2	\$768.6	\$911.8	\$1,126.6	\$1,484.7	\$2,200.9	\$4,349.5
4	2	3		\$1,635.1	\$3,264.6	\$505.9	\$606.6	\$757.6	\$1,009.3	\$1,512.8	\$3,023.3
4	2	4		\$1,455.7	\$2,936.0	\$430.7	\$522.2	\$659.4	\$888.1	\$1,345.5	\$2,717.6
4	2	5		-\$328.5	-\$501.9	-\$203.9	-\$214.6	-\$230.7	-\$257.5	-\$311.1	-\$4/1.9
4	3	2		\$1,702.5 \$3,402.6	\$3,331.7	\$00.0 ¢1 220 0	\$005.4 ¢1./13.0	\$029.4 ¢1 704 0	\$1,102.7 ¢2.180.8	\$1,049.4 ¢3 150 7	\$3,209.3
4	3	4		\$2 493 5	\$4 794 9	\$893.2	\$1,415.5	\$1,704.5	\$1 604 3	\$2 315 4	\$4 448 7
4	3	5		-\$922.4	-\$1,644.4	-\$416.4	-\$461.0	-\$528.0	-\$639.5	-\$862.6	-\$1,531.9
5	1.25	4		\$2,406.5	\$4,764.2	\$771.5	\$917.2	\$1,135.7	\$1,500.0	\$2,228.5	\$4,414.1
5	1.25	5		\$1,363.1	\$2,752.0	\$397.4	\$482.4	\$609.9	\$822.5	\$1,247.6	\$2,522.9
5	1.25	6		\$608.6	\$1,287.4	\$140.3	\$182.2	\$245.1	\$350.0	\$559.8	\$1,189.0
5	1.25	7		-\$758.2	-\$1,331.1	-\$356.0	-\$391.4	-\$444.6	-\$533.1	-\$710.1	-\$1,241.2
5	2.5	3		\$2,598.3	\$5,131.8	\$841.0	\$997.6	\$1,232.4	\$1,623.8	\$2,406.7	\$4,755.2
5	2.5	4		\$1,795.7	\$3,582.3	\$557.7	\$668.1	\$833.7	\$1,109.7	\$1,661.7	\$3,317.7
5	2.5	5		\$1,253.1	\$2,506.0	\$384.9	\$462.3	\$578.4	\$772.0	\$1,159.2	\$2,320.7
5	2.5	6		-\$328.7	-\$498.5	-\$206.4	-\$216.9	-\$232.7	-\$258.9	-\$311.4	-\$468.9
5	3.75	3		\$1,820.0	\$3,633.6	\$563.2	\$675.3	\$843.4	\$1,123.6	\$1,684.0	\$3,365.1
5	3./5	4		\$1,638.8	\$3,299.7	\$488.7	\$591.3	\$745.3	\$1,001.9	\$1,515.1	\$3,054.7
5	5.75	2		-900.0 4065.6	ې ۵۲.4 ¢1 ۵۶۶ ۸	¢250.9	¢322 Q	¢417.6	- p02.0 ¢575.3	-30.2 \$800.7	
5	5	4		\$65.7	\$257.6	-\$63.8	-\$51.9	-\$34.1	-\$4.4	\$54.9	\$232.8
6	1.5	5		\$2,743.6	\$5,422.8	\$885.6	\$1,051.1	\$1,299.5	\$1,713.4	\$2,541.3	\$5,024.8
6	1.5	6		\$1,690.6	\$3,394.6	\$510.3	\$615.7	\$773.6	\$1,036.9	\$1,563.4	\$3,143.1
6	1.5	7		\$552.8	\$1,200.8	\$106.7	\$146.7	\$206.8	\$306.9	\$507.1	\$1,107.7
6	1.5	8		-\$675.4	-\$1,170.2	-\$327.4	-\$358.0	-\$403.9	-\$480.3	-\$633.2	-\$1,091.9
6	3	5		\$1,869.2	\$3,741.2	\$572.4	\$688.0	\$861.6	\$1,150.8	\$1,729.2	\$3,464.5
			High, low					•			
Average, Lov	west		5,								
(6 per cent)	Required										
Return Matri	x	\$685.5	\$3,159.7								
			-\$862.6								
Final Average	ge	\$685.5									

TABLE 3

Discounted Free Cash Flow Intrinsic Value, Discount Rate of 7 percent

			Required Rate						
			of Return	7	7	7	7	7	7
			Trmnl Gr Rt	1	2	3	4	5	6
Gr Inc	SG&A	Capex							
gr rt	gr rt	Grift		#120 C	¢177.1	¢224.0	+221.2	#F22.0	±1 101 0
	0.25	1 25		\$138.0	\$1/7.1 #90 E	\$234.9	\$331.3	\$523.9	\$1,101.8
	0.25	1.25		\$01.1 ¢165.4	\$09.5	\$132.1	\$203.1	\$345.1	\$//1.3
	0.25	1.5		¢72.5	¢102.2	-\$160.0 ¢146.6	=\$207.9 ¢220.7	=\$230.4 ¢368.0	=\$376.0 ¢813.4
	0.5			\$72.3 _¢147.0	\$102.2 _¢150.5	\$140.0 _¢155.8	\$220.7 _¢164.7	\$300.9 _¢182.4	\$013.4 _¢235.5
1	0.5	3		-\$156.8	-\$130.3	-\$133.0	-\$104.7	-\$102.4	-\$255.5 -\$1 763 2
1	0.75	1		\$39.6	\$64.5	\$101.9	\$164.2	\$288.9	\$662.8
1	0.75	2		-\$21.2	-\$3.5	\$23.0	\$67.1	\$155.4	\$420.3
1	0.75	3		-\$82.6	-\$72.2	-\$56.8	-\$31.0	\$20.6	\$175.4
1	1	1		-\$4.5	\$13.5	\$40.5	\$85.6	\$175.6	\$445.8
1	1	2		\$0.0	-\$285.4	-\$318.5	-\$373.7	-\$484.0	-\$815.0
2	0.5	2		\$328.2	\$401.9	\$512.5	\$696.7	\$1,065.2	\$2,170.7
2	0.5	3		-\$97.1	-\$92.7	-\$86.1	-\$75.0	-\$52.9	\$13.6
2	2	1		\$170.5	\$216.1	\$284.5	\$398.4	\$626.4	\$1,310.3
3	0.75	1		\$787.8	\$931.2	\$1,146.2	\$1,504.6	\$2,221.4	\$4,371.6
3	0.75	2		\$525.3	\$628.0	\$781.9	\$1,038.5	\$1,551.7	\$3,091.3
3	0.75	3		\$361.4	\$437.3	\$551.1	\$740.9	\$1,120.5	\$2,259.1
3	0.75	4		-\$141.0	-\$129.6	-\$112.6	-\$84.1	-\$27.2	\$143.6
3	2	1		\$556.5	\$663.3	\$823.6	\$1,090.8	\$1,625.1	\$3,228.2
3	2	2		\$296.8	\$363.4	\$463.4	\$630.0	\$963.2	\$1,962.9
3	2	3		\$16.8	\$39.7	\$74.0	\$131.3	\$245.8	\$589.4
3	2.5	1		\$530.9	\$634.4	\$789.6	\$1,048.4	\$1,565.9	\$3,118.4
3	2.5	2		\$199.5	\$250.7	\$327.6	\$455.6	\$711.8	\$1,480.2
3	2.5	3		-\$80.5	-\$73.0	-\$61.8	-\$43.1	-\$5.6	\$106.7
4	1	2		\$896.8	\$1,059.0	\$1,302.2	\$1,707.6	\$2,518.4	\$4,950.9
4	1	3		\$419.5	\$503.4	\$629.2	\$838.9	\$1,258.3	\$2,516.5
4	1	4		\$290.7	\$356.7	\$455.9	\$621.0	\$951.4	\$1,942.4
4	1	5		-\$11.1	\$8.0	\$36.7	\$84.6	\$180.2	\$467.2
4	2	2		\$711.0	\$843.9	\$1,043.2	\$1,375.4	\$2,039.8	\$4,032.9
4	2	3		\$466.4	\$559.8	\$699.9	\$1,297.3	\$1,400.5	\$2,801.7
4	2	4		\$395.7	\$480.6	\$607.8	\$820.0	\$1,244.3	\$2,517.1
4	2	5		-\$195.6	-\$205.5	-\$220.4	-\$245.3	-\$295.0	-\$444.1
4	3	2		\$513.0	\$614.4	\$766.5	\$1,020.1	\$1,527.2	\$3,048.6
4	3	3		\$1,137.0	\$1,316.9	\$1,586.8	\$2,036.7	\$809.8	\$1,675.1
4	3	4		\$832.3	\$964.2	\$1,162.1	\$1,492.0	\$33.0	\$185.6
4	3	5		-\$393.6	-\$435.0	-\$497.1	-\$600.6	-\$807.5	-\$1,428.4
5	1.25	4		\$/13.4	\$848.6	\$1,051.3	\$1,389.2	\$2,065.0	\$4,092.4
5	1.25	5		\$361.2	\$439.3	\$556.5	\$/51.8	\$1,142.5	\$2,314.4
5	1.25	6		\$125.8	\$164.7	\$223.1	\$320.4	\$514.9	\$1,098.6
5	1.25			-\$33/.3	-\$3/0.1	-\$419.4	-\$501.5	-\$665./	-\$1,158.4
5	2.5			\$//0.2 &E1// /	\$923.3	\$1,141.3 \$770 E	\$1,504.4 ¢1.026.5	\$2,230.0 ¢1 529 6	2 071 0
5	2.5	5		¢25/ 7	¢426.5	\$770.3	¢713.8	\$1,000	\$3,074.0 \$3 150 A
5	2.5	6		ې.کورو د 108 ח	-¢20.5	=¢777 4	-\$246.7	_¢295 4	φ2,130.4 _¢441 5
5	3 75	2		¢510 /	¢673.4	¢770.3	\$1 039 2	\$1 550 1	\$3 118 5
5	3.75	4		\$449.4	\$544.6	\$687.4	\$925.4	\$1 401 5	\$2,829.6
5	3.75	5		-\$107 2	-\$102.3	-\$95.0	-\$82.8	-\$58.3	¢2,029.0 ¢15.0
5	5.75	3		\$236.7	\$295.3	\$383.0	\$529.3	\$821.9	\$1.699.7
5	5	4		-\$65.0	-\$54.0	-\$37.5	-\$10.0	\$45.1	\$210.1
6	1.5	5		\$819.5	\$973.1	\$1.203.4	\$1.587.4	\$2.355.3	\$4.659.2
6	1.5	6		\$469.8	\$567.5	\$714.0	\$958.2	\$1.446.7	\$2.912.0
6	1.5	7		\$93.7	\$130.8	\$186.5	\$279.4	\$465.1	\$1.022.3
6	1.5	8		-\$310.7	-\$339.0	-\$381.6	-\$452.5	-\$594.3	-\$1,019.9
6	3	5		\$527.5	\$634.8	\$795.8	\$1,064.1	\$1,600.7	\$3,210.4
			High low		· · ·	· · ·			
Average, Low	vest		riigii, iow						
(7 per cent)	Required								
Return Matri	х	\$605.8	\$2,518.4						
			-\$807.5						
Final Average	je	\$605.8							

TABLE 4

Discounted Free Cash Flow Intrinsic Value, Discount Rate of 8 percent

			Required Rate						
			of Return	8	8	8	8	8	8
			Trmnl Gr Rt	1	2	3	4	5	6
Gr Inc	SG&A	Capex							
1	0.25	1		\$97.9	\$123.2	\$158.6	\$211.8	\$300.4	\$477.5
1	0.25	1.25		\$33.2	\$52.1	\$78.4	\$118.0	\$183.9	\$315.8
1	0.25	1.5		-\$152.9	-\$158.5	-\$166.4	-\$178.1	-\$197.6	-\$236.7
1	0.5	1		\$42.1	\$61.6	\$88.8	\$129.7	\$197.8	\$334.1
1	0.5	2		-\$139.9	-\$142.2	-\$145.5	-\$150.4	-\$158.6	-\$175.1
1	0.5	3		-\$396.6	-\$431.3	-\$479.8	-\$552.6	-\$673.8	-\$916.4
1	0.75	1		\$15.5	\$32.1	\$55.2	\$89.9	\$147.8	\$263.4
1	0.75	2		-\$36.9	-\$25.2	-\$8.8	\$15.8	\$56.8	\$138.7
1	0.75	3		-\$89.8	-\$83.0	-\$73.4	-\$59.0	-\$35.1	\$12.8
1	1	1		-\$21.0	-\$9.1	\$7.6	\$32.7	\$74.5	\$158.1
1	1	2		-\$236.1	-\$250.7	-\$271.2	-\$302.0	-\$353.2	-\$455.6
2	0.5	2		\$249.1	\$297.5	\$365.3	\$467.0	\$636.4	\$975.3
2	0.5	3		-\$98.7	-\$95.7	-\$91.6	-\$85.4	-\$75.2	-\$54.6
2	2	1		\$123.9	\$154.2	\$196.5	\$260.0	\$365.8	\$577.4
3	0.75	1		\$635.0	\$730.1	\$863.2	\$1,062.8	\$1,395.4	\$2,060.8
3	0.75	2		\$417.0	\$485.0	\$580.3	\$/23.2	\$961.4	\$1,437.8
3	0.75	3		\$279.0	\$328.9	\$398.7	\$503.4	\$6/8.0	\$1,027.0
3	0.75	4		-\$145.9	-\$138.4	-\$127.8	-\$112.0	-\$85.5	-\$32.7
2	2			\$443.4 ¢227.6	\$514.2 ¢771.9	\$013.4	\$702.2	\$1,010.2	\$1,500.5
3	2	2		\$227.0 _¢4.7	\$271.0 ¢10.5	\$333.0 ¢31.7	\$420.4 ¢63.6	¢116.8	\$090.4
3	25	1		-∌4.7 ¢421.6	\$10.5	\$586.3	\$05.0	\$110.0	\$22J.1 \$1.451.0
3	2.5	2		\$421.0 \$147.1	\$181.0	\$228.6	\$750.4	\$370.0	\$656.6
3	2.5	3		-\$85.3	-\$80.3	-\$73.3	-\$62.9	-\$45.5	-\$10.8
4	1	2		\$723.9	\$831.5	\$982.0	\$1.207.8	\$1.584.1	\$2,336.8
4	1	3		\$327.9	\$383.0	\$460.2	\$575.9	\$768.7	\$1,154,4
4	1	4		\$219.7	\$263.1	\$323.9	\$415.0	\$566.9	\$870.8
4	1	5		-\$28.3	-\$15.6	\$2.1	\$28.8	\$73.2	\$162.0
4	2	2		\$570.1	\$658.2	\$781.5	\$966.5	\$1,274.9	\$1,891.6
4	2	3		\$368.2	\$430.1	\$516.8	\$646.9	\$863.7	\$1,297.3
4	2	4		\$307.3	\$363.5	\$442.3	\$560.5	\$757.4	\$1,151.2
4	2	5		-\$181.2	-\$187.8	-\$197.0	-\$210.8	-\$233.9	-\$280.1
4	3	2		\$406.1	\$473.4	\$567.5	\$708.8	\$944.1	\$1,414.9
4	3	3		\$173.8	\$212.1	\$265.6	\$345.9	\$479.8	\$747.6
4	3	4		-\$76.2	-\$69.4	-\$60.0	-\$45.8	-\$22.2	\$25.0
4	3	5		-\$345.1	-\$372.5	-\$411.0	-\$468.6	-\$564.6	-\$756.8
5	1.25	4		\$570.4	\$660.0	\$785.5	\$973.7	\$1,287.4	\$1,914.7
5	1.25	5		\$276.9	\$328.2	\$400.0	\$507.8	\$687.5	\$1,046.7
5	1.25	6		\$86.8	\$112.6	\$148.7	\$202.9	\$293.2	\$473.8
5	1.25			-\$298.1	-\$319.9	-\$350.4	-\$396.1	-\$4/2.4	-\$624.8
5	2.5	3		\$624.2	\$720.5	\$855.4	\$1,057.6	\$1,394.7	\$2,068.8
5	2.5	4 E		\$400.8 + 270.2	\$4/4./	\$209.8	\$/12.4	\$950.0	\$1,425.4 ¢002.7
5	2.5	6		\$2/9.3 _e193 7	\$327.0 _et100.2	\$393.0 _¢100.2	\$493.0 _¢212.8	_¢225 /	\$780 K
5	3 75	2		¢410 7	¢470 1	¢575.6	¢720.4	\$235.4	\$1 444 7
5	3.75	4		\$350.1	\$413.3	\$501.7	\$634.2	\$855.2	\$1.297.1
5	3.75	5		-\$108.7	-\$105.5	-\$100.9	-\$94.1	-\$82.8	-\$60.1
5	5	3		\$176.7	\$215.5	\$269.9	\$351.3	\$487.1	\$758.7
5	5	4		-\$73.3	-\$66.0	-\$55.8	-\$40.4	-\$14.9	\$36.2
6	1.5	5		\$656.9	\$758.7	\$901.3	\$1,115.1	\$1,471.5	\$2,184.4
6	1.5	6		\$367.8	\$432.6	\$523.2	\$659.3	\$886.0	\$1,339.4
6	1.5	7		\$57.2	\$81.8	\$116.3	\$168.0	\$254.3	\$426.7
6	1.5	8		-\$276.3	-\$295.1	-\$321.4	-\$360.9	-\$426.8	-\$558.4
6	3	5		\$415.2	\$486.3	\$585.9	\$735.4	\$984.4	\$1,482.5
Average, Lowest			High, low						
(8 per cent)	Required	\$455.0	¢2 336 0						
Recurr Hatri	^	9400.9	-\$756.8						
Final Average	le	\$455.9	4,00.0						
Avoraça of -	ll three	+							
Average of a scenarios	in unree	\$582.4							

Note: Valuation matrices are available in the Excel spreadsheet as a separate file for the untaxed values calculated for SaskEnergy.



Further Reading

June 2013

Valuation Analysis of SaskTel By Ian Madsen

http://www.fcpp.org/files/1/FB111_ValuationSaskTel_JN25F1.pdf

April 2014

Valuation Analysis of SaskPower By Ian Madsen

https://www.fcpp.org/sites/default/files/saskpower-valuation.pdf

