

Saskatchewan Industrial Energy Consumers Association
Submission to the Saskatchewan Rate Review Panel
regarding the SaskPower 2016 and 2017 Rate Application
September 2016

A. EXECUTIVE SUMMARY

1. Overview of SIECA and its Membership

The Saskatchewan Industrial Energy Consumers Association (SIECA) appreciates the opportunity to provide its comments and recommendations on the SaskPower 2016 and 2017 Rate Application (Application) to the Saskatchewan Rate Review Panel (SRRP or Panel). SIECA is an association that represents 21 large power consumers on SaskPower's system within the Power (Published Rates), Reseller and Commercial customer classes. SIECA members collectively represented 5,087 GWh or 23.4% of SaskPower's 2015 energy sales, accounted for 622 MW of non-coincident peak demand equivalent to 17.1% of SaskPower's maximum 2015 system peak demand and paid \$456 million or 21.4% of SaskPower's 2015 annual electricity sales revenue. The association's main focus is to ensure that our members have access to affordable and reliable electricity. SIECA member companies typically operate energy intensive facilities where energy costs represent a significant portion of their overall cost of doing business. Energy affordability can impact their competitiveness, production output, capital investment and potential employment levels.

Many SIECA members are companies that are Energy Intensive Trade Exposed (EITE) entities that participate in global commodity or manufacturing sectors. The current reality of low commodity prices across a wide cross-section of different commodity business categories has been well publicized and is widely acknowledged by business, government and media. Rising energy costs are highly impactful to the bottom line of industrial producers and manufacturers because competitive continental and global markets and current business conditions do not allow the costs to be passed on through price increases to downstream customers. In today's challenging commodity price environment, and in many cases to ensure their very sustainability, industrial customers on the SaskPower system have moved aggressively to reduce operating costs, right-size productive output and reduce capital spending. SIECA is concerned that SaskPower has not recognized the severity of the impacts from the current economic environment on its large customers nor adjusted its business plans and financial expectations with the same sense of urgency as that demonstrated by its large customers.

2. SIECA General Comments on the SaskPower 2016 and 2017 Rate Application

In the Executive Summary of the 2016 and 2017 Rate Application SaskPower states "***We're investing in our system to replace and upgrade infrastructure***". They describe their system as having been built 30 to 50 years ago and that they will have to rebuild, replace, or renew in its entirety the system over the next forty years. In the past 5 years SaskPower has spent \$5.4 billion of capital on its infrastructure growth and renewal plan, but where does that level of spending place the system and its customers on the 40 year continuum? SIECA member companies have deep concerns about the duration, the ultimate cost and the competitiveness impact of the investment "super-cycle" that SaskPower has embarked upon. Is SaskPower suggesting that a billion dollars per year of capital investment will be required for the next 40 years? SaskPower has not demonstrated what the investment profile would look like to support such a 40 year renewal/replacement goal, nor have they

articulated the destructive impact on electricity cost competitiveness for businesses in Saskatchewan. In 2014 SaskPower spent \$1.279 billion on capital investments. Only 22% of that total was spent on sustainment of generation, transmission and distribution assets, while 71% was spent on generation, transmission and distribution expansion to presumably meet new demand growth. The 2014 sustainment segment cited here does not include \$202 million of spending identified by SaskPower for carbon capture sustainment in 2014. The Boundary Dam 3 carbon capture facility only started operation in October 2014 therefore capital spending in 2014 was likely attributable to construction, commissioning or deficiency costs not sustainment. In the most recent 2015-16 fifteen month fiscal period SaskPower spent \$1.178 billion on total capital investments and 42% of the capital spend or \$491 million was spent on sustainment. However, \$152 million of this 2015-16 sustainment amount was spent on other expenditure categories such as information technology (IT) and short-life assets such as vehicles and equipment leaving only 28% of capital expenditures dedicated to sustainment of core generation, transmission and distribution assets. SaskPower states that system sustainment is paramount yet over the past five years it spent less than 25% of its capital on sustainment while investing over three-quarters of its capital on other priorities such as system growth and expansion. SIECA contends that SaskPower must ensure that system sustainment investment priority is preserved by exercising stringent control on the overall level of system growth related capital spending and the load efficacy of that spending.

In the Executive Summary of the 2016 and 2017 Rate Application SaskPower also states ***“We’re investing in our system to meet growing demand”***. Demand for electricity in Saskatchewan has grown. System wide annual energy demand growth has averaged 2.29% per year over the twelve year period from 2004 through 2015. The more recent five-year period from 2011 to 2015 posted an annual energy demand growth rate of 2.50%. SaskPower is forecasting an energy demand growth rate of 2.28% over the three year forecast period from 2016-17 through 2018-19.

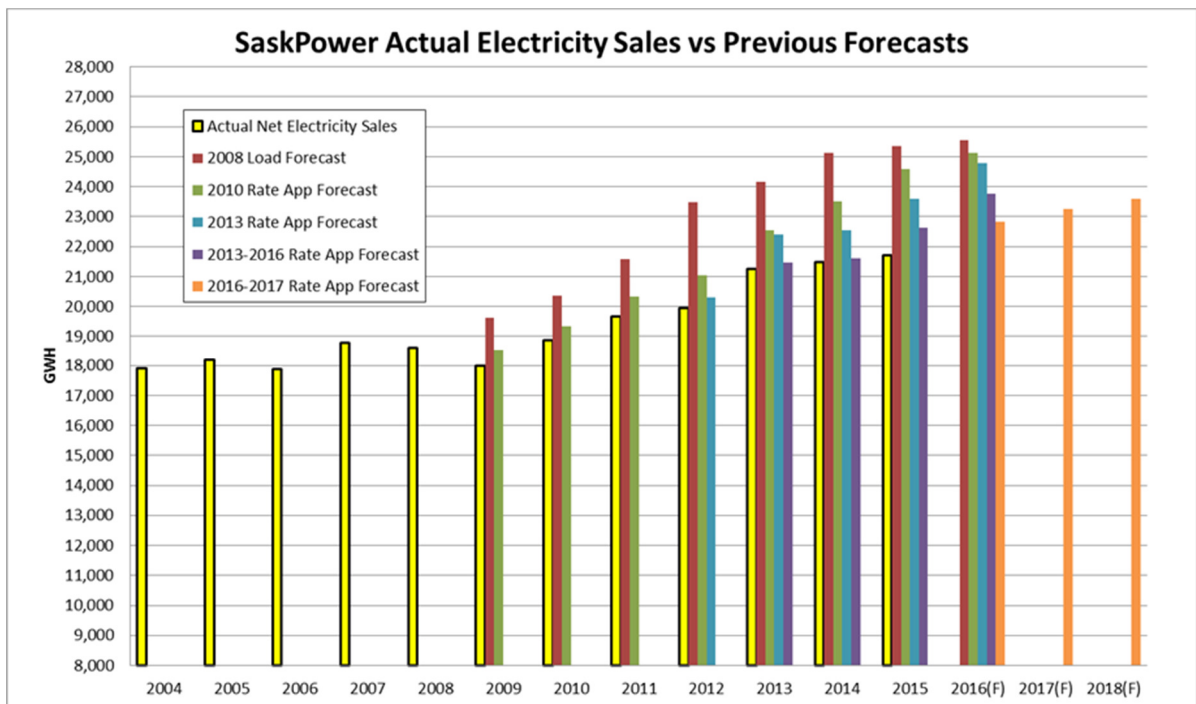


Chart 1.0

The Chart 1.0 above shows actual SaskPower electricity sales versus a range of previous SaskPower energy sales forecasts. Given the challenging economic back drop in Saskatchewan today, SIECA member companies are concerned that a forecast for continued load growth is optimistic and could result in the acceleration of planning and capital spending to meet demand peaks that fail to materialize. SaskPower has reduced its electricity sales forecast in each of the past five forecasts, yet they managed to over-estimate load growth in each and every proceeding for which the forecast was produced. SaskPower has improved its load forecasting tools and processes, but despite their improved precision, the trend of over-estimating load growth still persists. SaskPower might suggest that in relative terms their forecasts are “pretty close” but they have overestimated annual demand growth by 2.1 % over the past five years. SaskPower has spent nearly three quarters of its capex dollars (approximately \$3.6 billion) over the past 5 years to facilitate an annual load growth rate of less than 2.5%. Importantly, they have also overestimated load growth through that period by an additional 2.1%. This raises very serious questions about the timing and magnitude of capital spending to facilitate growth. Has SaskPower actually planned and spent capital to facilitate a 4.6% annual growth rate? Has SaskPower constructed generation and transmission capacity prematurely? Has SaskPower installed infrastructure to connect new customers that has failed to produce energy demand and revenue on the system? Has SaskPower taken appropriate steps to manage its risks associated with load realization and assured receipt of revenue streams? The depreciation and finance charges resulting from this unprecedented capital spending cycle are exerting very significant and disproportionate rate pressures on large industrial customers. SIECA recommends aggressive and urgent action to significantly reduce the capital spending levels of SaskPower beyond the levels articulated in the Application to levels that are commensurate with real electricity demand growth rate levels. The existing customers of SaskPower are bearing all the cost risk associated with growth related capital spending and load realization. SIECA recommends that the Management and Board of SaskPower review the capital management and commercial processes within SaskPower to ensure that there is direct and timely correlation between capital deployment to connect new customers or loads on the system and revenue realization from the growth.

In the Executive Summary of the 2016 and 2017 Rate Application SaskPower asks the question “**What is the impact on customers?**” SaskPower does not answer its own question. Rather, the utility states that “*SaskPower’s intensive infrastructure renewal and growth program is largely responsible for this application for a rate increase. Our company is requesting a rate increase of 5.0% effective July 1, 2016, and another rate increase of 5.0% effective January 1, 2017.*” The utility then moves through a complex but predictable explanation of why a rate increase policy calling for an indefinite period of 5% annual rate hikes is somehow appropriate. The mathematics are simple. If the rate application for 2016 and 2017 is approved as requested system wide electricity rates will have increased 28.2% over the 2013-2017 period on a compounded basis. Industrial power customers on the E24 rate have seen demand rates increase 39.5% and energy rates increase by 28.8% over the 2013-2017 period. The Application essentially produces a 10.2% compounded increase inside the April 2016 through March 2017 fiscal period. Saskatchewan electricity customers are essentially facing an environment of interminable rate shock.

On page 16 of the Application, SaskPower uses a comparison of its rates to other thermal jurisdictions in Canada based on a 2015 survey by Quebec Hydro to suggest that residential, commercial and large industrial rates are competitive with comparable thermal jurisdictions in

Canada. This picture is misleading. On page 17 of the Application, SaskPower includes a table comparing a Regina residential rate with rates from other Canadian cities on a \$/month cost basis rather than a unit cost basis. If you were to accept the \$/month metric as a valid comparison, it shows Regina residential rates to be well in excess of the Alberta, New Brunswick and even Ontario cities which are all located in “thermal” jurisdictions. This contradicts SaskPower’s assertion of residential rate competitiveness across thermal utility jurisdictions. With respect to large industrial rates, SaskPower does not provide a direct unit rate comparison for large industrial rates across Canada in the Application although that tariff information is available. Instead they feature a table on Page 17 of the Application that compares an undefined SaskPower industrial rate in Regina with a range of cities in the United States. The metric compared is again a \$/month cost basis rather than a unit cost basis and does not necessarily reflect comparable customer numbers, size or scope of service. On the basis of this vague comparison SaskPower appears to be suggesting that Saskatchewan has the lowest industrial rates anywhere in North America – which is definitively false as we will demonstrate in this submission. SIECA is very concerned that electricity cost competitiveness in Saskatchewan has eroded significantly and that continued electricity rate escalation will become a barrier to industrial, resource and manufacturing development in the province. SIECA urges the Panel to incorporate a detailed and critical evaluation of electricity rate competitiveness in its final report and recommendations.

SIECA is also concerned about the appropriateness of methodologies used to functionalize, classify and allocate costs to various customer classes through SaskPower’s rate making processes. SIECA has expressed concerns about the issue of cost allocations in past rate reviews. Our association has also worked with previous Panels, SaskPower, and government to find ways to improve the limitations of discovery and lack of transparency imposed on all SaskPower’s customers with respect to rate making methodologies and outcomes. To this end, SIECA secured the services of Geoffrey Inge, a regulatory consultant with KTM Inc. to perform discovery, due diligence and tests on SaskPower’s cost of service and allocation methodologies. This costly and complex analysis has revealed certain inconsistencies in SaskPower’s allocation methodologies that result in the over-allocation of costs to Power, Commercial and Reseller customer classes.

B. SIECA COMMENTS ON ISSUES AND RECOMMENDATIONS

1. Timing and magnitude of the rate increases are not appropriate in current economic environment.

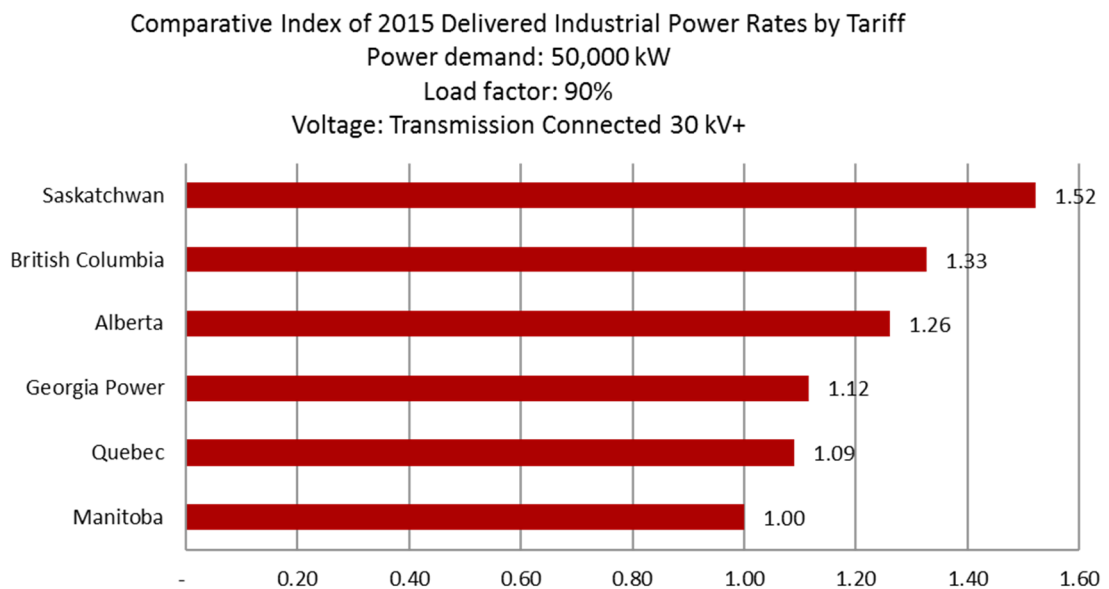
The current reality of low commodity prices across a wide cross-section of different commodity business categories has been well publicized and is widely acknowledged by business, government and media. The province’s oil sector is coping with oil prices below \$50 USD per barrel and with steep basis discounts for Saskatchewan oil production. The potash sector has seen prices drop from \$900 per tonne in 2008 to prices that will dip below \$200 per tonne in 2016. The global supply demand balance for potash is very long due to the startup of new productive capacity around the globe. Profit margins are under heavy pressure from global competition and operating cost pressures in the pulp and paper, chemicals and manufacturing sectors in Saskatchewan.

SIECA member companies have been forced to take drastic steps to reduce costs and protect margins. Saskatchewan companies have curtailed output or production, laid-off hundreds of employees and contractors, aggressively cut capital expenditures, discontinued or delayed projects, reduced corporate dividend payouts to shareholders, and in some cases closed or shuttered facilities

either permanently or for extended periods of time. Margin deterioration in some Saskatchewan businesses is challenging their economic and operational viability.

Many SIECA members are Energy Intensive Trade Exposed (EITE) entities. Rising energy costs are highly impactful to the bottom line of industrial producers and manufacturers because competitive continental and global markets and current business conditions do not allow the costs to be passed on through price increases to their downstream customers. The issue of electricity cost competitiveness for Saskatchewan industrials must not be taken lightly. SaskPower goes to great lengths to rationalize how their geographic location, service footprint and low customer density impact its costs and drive its need for incremental revenue. Saskatchewan industrial and commodity producers face a similar range of geographic impairments. They are land-locked and hence incur higher transportation costs to get their products to market. Transportation costs also add cost to inbound raw materials or supplies. The Saskatchewan labor market has transitioned to a high-cost market that is exerting additional competitiveness headwinds on industrial employers. Saskatchewan industrial and commodity producers compete with entities in other provinces or countries where competitors have advantage of tide water or water-borne transportation, lower raw material costs, lower labor costs, reduced or alternate environmental, health and safety requirements and yes, lower energy costs.

Chart 2.0 below is a chart provided by one of SIECA’s member companies that makes a direct unit cost rate comparison between Saskatchewan and several jurisdictions where they compete and/or operate in their industry segment.



Sources:
https://www.bchydro.com/about/planning_regulatory/tariff_filings/electric-tariff.html
[http://www.aeso.ca/downloads/AESO_2014_ISO_Tariff_\(2015-11-26\).pdf](http://www.aeso.ca/downloads/AESO_2014_ISO_Tariff_(2015-11-26).pdf); Average pool price CAD\$33.3/MWh, transmission, retailing and pool trading charges included
<http://www.saskpower.com/accounts-and-services/power-rates/>
https://www.hydro.mb.ca/regulatory_affairs/energy_rates/electricity/current_rates.shtml
<http://www.hydroquebec.com/majorcustomers/rates/large-power-rates/rate-l/>
<https://georgiapower.com/business/prices-rates/business-tariffs.cshtml>; Average real time pricing of US\$32.9/MWh
 Exchange rate = 1.279

Chart 2.0

The chart clearly indicates that SaskPower's industrial power rates are 52% higher than Manitoba (a hydro jurisdiction) but importantly they are 26% higher than Alberta (a thermal jurisdiction). SaskPower's industrial power rates are 40% higher than the cost for comparable service on the Georgia Power system in the United States. It is becoming common for US investor owned utilities (with the support of Public Service Commissions) to include incentivized economic development rates in their tariffs to facilitate industrial load growth on their systems.

SIECA member companies are greatly concerned that SaskPower's stated intention of sustaining 5% annual increases will accelerate the deterioration of electricity cost competitiveness in Saskatchewan and will contribute to further job loss and lower economic growth in the future. In the application SaskPower discusses its plans to reduce capital spending over the next 3 years and extend its Business Renewal Program to create cost savings. Yet, in its 2016-17 Mid-Application Update SaskPower has projected to increase its capital spending for the fiscal 2016-17 period from \$899 million to \$965 million and has increased its projected OM&A expense by 9.0% over 2015 levels. SIECA member companies contend that the record of rising costs is evidence that SaskPower is not committed to aggressively cutting costs commensurate with today's economic backdrop. Had SaskPower pursued tangible cost reductions commensurate with the aggressive actions taken by its customers in this environment; there would have been a measurable and commensurate drop in revenue requirement and a reduction in the amount of rate increase applied for under this Application. SIECA strongly recommends that the SRRP incorporate suitable emphasis on the economic backdrop in Saskatchewan into its calculus for reviewing the Application. The Panel should be challenging SaskPower to cut or freeze their rates in this economic environment – not increase them. Today is not the time to be imposing a 10% annual rate hike on power customers.

2. SIECA recommends aggressive action to reduce OM&A costs

In its 2016-17 rate application SaskPower states *"In 2015, SaskPower eliminated \$38 million from budgeted OM&A and has proposed a further \$53 million reduction over the next three years."* OM&A costs in 2015 were reported at \$634 million, therefore if the cited reductions were real, OM&A costs for 2016-17 should have dropped by approximately \$18 million in 2016-17. However, the Application projects OM&A costs to rise to \$682 million which is a 7.5% year-over-year increase. The SaskPower Mid-Application Update has projected OM&A costs to rise further to \$691 million which represents a 9.0% year-over-year increase relative to 2015 actual costs. This level of OM&A cost escalation is completely unacceptable in the current economic environment. The comparison of calendar 2015 to fiscal 2016-17 period may disregard some inflationary pressure during Q1 2016, however that does not change the conclusion. SaskPower management needs to deal with the issue of cost control aggressively rather trying to explain it away.

Page 32 of the Application contains an analysis and a chart that essentially suggests that OM&A expense should grow at a rate equivalent to the rate of Saskatchewan electricity sales growth plus inflation. The logic or drivers for this hypothesized relationship have not been substantiated by SaskPower. This relationship cited by SaskPower runs counter to normal business reality where investment in new and expanded capacity, deployment of new technology and enhancement of business tools and practices lowers unit costs of production. Electricity sales in Saskatchewan have grown from 21,250 GWh in 2013 to a forecast of 22,352 GWh in 2016-17 which represents a cumulative increase of 5.2% over the period. OM&A spending has increased from \$621 million in 2013

to a forecast of \$691 million in 2016-17 which is a cumulative increase of 11.3% over this same period. OM&A costs have been rising at twice the growth rate of SaskPower's electricity sales.

Many SIECA member companies can attest to the challenging and difficult decisions they have been forced to make to reduce costs in this economic environment. SIECA urges the Panel to recommend that the senior management and Board of SaskPower initiate additional, significant and urgent effort to reduce OM&A costs.

3. SIECA Recommends Immediate Review of SaskPower Cost Allocation Methodology

When SaskPower files a rate application, the Minister responsible for the Crown Investment Corporation of Saskatchewan (CIC) as the Minister responsible for the Saskatchewan Rate Review Panel issues Terms of Reference for the review of the rate application by the Panel. The Terms of Reference dated May 19, 2016 issued by the Minister detail what shall be in scope for this current review by the Panel and what parameters shall be considered as a "given" by the Panel. Importantly, the Terms of Reference do not exclude consideration of cost of service and allocation methodologies as a "given". To the contrary, the Terms of Reference state that the Panel will consider "*B) The revenue requirement resulting from the cost of service, (and) C) The reasonableness of the current rate structure and all components (basic charge, energy charge and demand charge) comprising the rate.*" SIECA submits that the Panel has both the ability and the responsibility to review, evaluate and make recommendations on cost of service (COS) and allocation issues.

Appendix 1 attached to this submission is the report from SIECA's consultant Geoffrey Inge of KTM Inc. (KTM) The report details how SaskPower's allocation methodology fails to appropriately assign fixed generation and transmission costs among customer classes. SaskPower asserts that since 2014 it has used a two coincident peak (2CP) method to allocate these demand costs which totaled \$881 million for the 2016-17 fiscal period. Investigation of data obtained from SaskPower through interrogatory requests revealed that SaskPower uses a non-standard mathematical averaging method to manipulate customer peak load data that is not a standardized or classically accepted 2CP allocation method. In reality, SaskPower's non-standard allocation method is a five year average 6CP (in actuality a 30CP) method. SaskPower's methodology distorts the residential customer actual peak load and results in a residential and farm customer class allocation of generation and transmission fixed costs which is not consistent with the cost causing behavior of those customers. This distortion results in the over-allocation of generation and transmission demand costs to high load factor customers in the Power, Commercial and Reseller customer classes which in turn inappropriately and disproportionately increases their electricity costs.

There are other aspects of COS and allocation methodologies that concern SIECA. Generation fixed costs (primarily return on rate base and depreciation) are classified as either demand costs or energy costs utilizing the Equivalent Peaker Method. SIECA requested information from SaskPower through an interrogatory request (SIECA IR Q3) to establish the appropriateness of the Equivalent Peaker method for the classification of fixed generation costs as either demand or energy costs. SaskPower refused to provide the calculations resulting in its Equivalent Peaker ratios (as requested) and this prevented KTM from evaluating the appropriateness of SaskPower's application of the methodology to determine the classification of generation fixed costs.

Through an interrogatory request (SIECA IR Q1) SIECA requested SaskPower to provide a fully functioning Excel spreadsheet version of each of the schedules in the 2017 Fiscal Test Embedded Cost

of Service Study (released in PDF format only) complete with all cell formulas and links. The SaskPower response was as follows:

“SaskPower is unable to provide a fully functioning Excel spreadsheet version of each of the schedules in the 2017 Fiscal Test Embedded Cost of Service Study with all links and formulae intact, as the Cost of Service model is confidential.

SaskPower undertakes a public review of its Cost of Service methodologies every five years, under the guidance of the Saskatchewan Rate Review Panel and external consultants, to ensure the models are functioning within industry standards. The Saskatchewan Rate Review Panel has full access to SaskPower’s Cost of Service model.

Please refer to the 2017 Fiscal Test Embedded Cost of Service Results report, which is included in the Minimum Filing Requirements SaskPower previously submitted.”

This response is evidence of the limitations and lack of transparency that SaskPower customers face in trying to perform due diligence under the current regulatory construct. The COS and allocation models and the methods used in them are the heart of the rate making process and are critical to fair and reasonable rate outcomes. Yet customers are not allowed to see or access these models and much of the information used in them. SaskPower asserts that all customer classes should trust them and the Panel to represent their disparate and often divergent interests. SIECA has proposed to both the Panel and SaskPower the creation of suitable confidentiality structures to facilitate confidential review of the COS and allocation models by consultants employed by customers of SaskPower. These non-disclosure structures would preserve and protect the confidential information of SaskPower while allowing due diligence to be performed by experts aligned with and incented by the customer rather than by the utility or the Crown. Unfortunately, customers have not yet been provided with a reasonable mechanism for due diligence on COS and allocation issues.

The evidence presented by SIECA’s consultant raises serious questions regarding SaskPower’s current cost allocation methodology. The appended report by KTM Inc. illustrates that the allocation of costs and the resulting electricity rate impacts for customers are financially significant and material to customer’s interests. SIECA urges the Panel to recommend the suspension of any further rate increases until COS and allocation issues have been fully vetted and reviewed in a proceeding that provides levels of information access and transparency to Saskatchewan electricity customers that are consistent with regulatory process elsewhere in North America.

SIECA believes that a more inclusive review process which allows customers the right to discovery, the right to access rate making models and the ability to fully analyze SaskPower’s proposed rate changes before offering comments to the Panel will better inform all involved in the process. Given the financial performance erosion projected in their Mid-Application Update SaskPower is certain to assert an inability to defer receipt of incremental revenue from a rate increase until a cost of service study is completed. To expedite the rate fairness and reasonableness called for in the Terms of Reference for this review; SIECA requests that the Panel petition the Minister responsible for CIC for a timeline extension to convene an immediate COS study. The Panel could utilize its current consultant (or suitable alternate at its discretion) to efficiently and quickly initiate a COS study under the direction of the Panel. Customers and stakeholders must be provided with suitable mechanisms for valid and transparent participation and the ability to examine and scrutinize the COS and allocation models and methods.

4. SIECA recommends suspension of the rate increase requested for January 1, 2017.

Based on; the cost of service and allocation issues raised in the appended KTM report and summarized in Section 3 above, the review of the Application, the review of SaskPower responses to interrogatory requests, the review of Test Embedded Cost of Service Results reports provided by SaskPower for various periods, and a review of annual Rate Base and Revenue Requirements conducted by SIECA and its consultant; our organization requests that the Panel recommend that the Crown Investment Corporation (CIC) and Cabinet disallow implementation of the 5.1% increase effective January 1, 2017 as requested in the current Application. SIECA further requests the Panel to recommend that, if required, SaskPower bring forward a subsequent rate application for any fiscal period beyond the 2016-17 period subsequent to the conduct of a COS and allocation study proceeding as previously described in this submission.

SaskPower has brought forward a Mid-Application Update that projects a deterioration in its projected financial results for the 2016-17 period. The update projects significantly higher fuel and purchased power (F&PP) costs driven by higher gas and coal fuel costs. These rising costs were not explained or substantiated in the update, and in particular, there is no explanation of why coal fuel costs would rise significantly when the update projects a reduction in planned levels of coal-fired generation production during the 2016-17 period. The update also projects a significant reduction in Other Revenue due mainly to a projected decrease in Customer Contribution revenues which are reported in this category under IFRS accounting standard requirements. A reduction in Customer Contributions should bear direct relationship to reductions or deferral of capital spending on customer connects and/or growth infrastructure. Yet no such capital reductions beyond those identified originally in the Application are projected. Instead the Mid-Application Update projects an acceleration and increase of capital spending by \$66 million in 2016-17. As already stated; SaskPower is certain to use the Mid-Application Update to assert an inability to defer receipt of incremental revenue from the requested rate increases. SIECA asserts that the projected erosion in SaskPower's financial performance put forward in the Mid-Application Update substantiates their continuing tendency to over-estimate system loads, a weak commitment by SaskPower to control costs, and a continuing trend of premature capital spending in the growth and strategic categories that our organization has raised in this submission.

Conventional utility rate applications or rate cases typically entail a request to recover a revenue requirement that is comprised of costs prudently incurred to provide electric service to customers (COS) plus amounts representing a reasonable return on its investment or return on rate base (RORB). In the current Application, SaskPower has put forward documentation in the form of its 2017 Test Embedded Cost of Service Study report which covers two scenarios for the 2016-17 fiscal period. The first scenario documents the fiscal 2016-17 period COS and RORB with only a 5.1% increase effective July 1, 2016 and the second scenario documents the fiscal 2016-17 period COS and RORB that incorporates both a 5.1% increase effective July 1, 2016 and a 5.1% increase effective January 1, 2017. SaskPower did not table a Test Embedded Cost of Service Study report for the 2017-18 fiscal period even though the second 5.1% increase was proposed to provide revenue lift in the 2017-18 fiscal period. How are customers supposed to perform due diligence on the fairness and reasonableness of electricity rates when fundamental revenue requirement information is not presented for consideration? SaskPower has implied both publically and in the Application that approval of the requested dual rate increase (10.2%) inside fiscal 2016-17 would potentially allow the utility to defer

further increases during the fiscal 2017-18 period, but the utility has filed no formal evidence, assurance or guaranty of this outcome in the Application. The failure to file revenue requirement documentation for fiscal 2017-18 as part of this Rate Application would almost certainly disqualify the second 5.1% increase request if heard by any typical Public Service Commission or regulatory authority functioning in most North American jurisdictions. The Panel should recommend suspension of the requested 5.1% increase for January 1, 2017 on the basis of this regulatory deficiency alone.

Notwithstanding the regulatory filing deficiency detailed above; SIECA and its consultant KTM Inc. reviewed the proposed rate increases in this application from a RORB perspective as shown in Table 1.0 following. This analysis (see Appendix 2. For the full analysis) was based primarily on analysis of the 2017 Fiscal (2016-17) Test Embedded Cost of Service Results report and the 2014-2016 Test Embedded Cost of Service Results report provided by SaskPower. The right hand column in Table 1.0 below is a comparison of the two scenarios detailed in the 2017 Fiscal (2016-17) Test Embedded Cost of Service Results report and clearly shows that return on rate base is the sole driver for the second 5.1% rate increase requested in this rate application.

Line No.	Particulars (a)	2016-17		2016-17a		2016-17 vs 2016-17a	
		\$ (h)	% of Total (i)	\$ (j)	% of Total (k)	\$ Increase (Decrease) (i)	% Increase (Decrease) (j)
1	Rate Base						
2	Plant In Service	\$ 15,164.4		\$ 15,164.4		\$ -	0.00%
3	Accumulated Depreciation	(5,830.1)		(5,830.1)		-	0.00%
4	Net Plant	9,334.3	96.80%	9,334.3	96.80%	-	0.00%
5	Allowance For Working Capital	93.8	0.97%	93.8	0.97%	-	0.00%
6	Inventories	209.1	2.17%	209.1	2.17%	-	0.00%
7	Other Assets	5.5	0.06%	5.5	0.06%	-	0.00%
8	Total Rate Base	\$ 9,642.7	100.00%	\$ 9,642.7	100.00%	\$ -	0.00%
9	Revenue Requirement						
10	Fuel Expense SaskPower Units	\$ 485.8	20.88%	\$ 485.8	19.88%	\$ -	0.00%
11	Purchased Power & Import	160.8	6.91%	160.8	6.58%	-	0.00%
12	Export & Net Electricity Trading Revenue (Credit)	(18.2)	-0.78%	(18.2)	-0.74%	-	0.00%
13	Operating, Maintenance & Administration	682.1	29.32%	682.1	27.92%	-	0.00%
14	Depreciation & Depletion	509.9	21.92%	509.9	20.87%	-	0.00%
15	Corporate Capital Tax	42.5	1.83%	42.5	1.74%	-	0.00%
16	Grants in Lieu of Taxes	25.0	1.07%	25.0	1.02%	-	0.00%
17	Miscellaneous Tax	0.5	0.02%	0.5	0.02%	-	0.00%
18	Other Income (Credit)	(132.7)	-5.70%	(132.7)	-5.43%	-	0.00%
19	Return on Rate Base	570.8	24.54%	687.5	28.14%	116.7	20.44%
20	Total Revenue Requirement	\$ 2,326.5	100.00%	\$ 2,443.2	100.00%	\$ 116.7	5.02%
21	Return on Rate Base	5.92%		7.13%			
22	Revenue	\$ 2,326.9		\$ 2,443.2			
		Rates 5.1% @ July 1, 2016		Rates 5.1% @ January 1, 2017			

Table 1.0

Additionally SIECA made an interrogatory request (SIECA Round 1 Q13 shown below as Table 2.0) where it requested information on the Return on Rate Base (RORB) differentials between the two different versions of the 2016-17 Test Embedded Cost of Service Results reports.

Collectively, tables 1.0 and 2.0 show that the proposed rate increases have been added only to increase return on rate base, enhance the balance sheet of SaskPower and position the utility to pay

out dividends to the government of Saskatchewan. The requested rate increases are not required to recover expenses made to produce electricity, and as Table 2.0 shows, the existing rates in place as at June 30, 2016 were sufficient to prudently recover the operating and finance expenses as filed by SaskPower in the Application, while earning a positive 4.77% return on rate base in 2016-17.

SIECA Q13:

Please provide any and all data and information that explains and/or supports the difference between the 5.92% return on rate base in the 5% case and the 7.13% return on rate base in the 5% + 5% case.

Response:

The only difference is the requested revenue increase in each of the rate cases. SaskPower's corporate return on equity (ROE) target determines the annual revenue required and from that the return on rate base (RORB) is derived from cost of service. The allocated rate base and expenses remain unchanged under both cases. This is illustrated in the table below:

	Existing Rates	5% Jul 1, 2016	5% Jan 1, 2017
A Total Rate Base	\$ 9,642,731,579	\$ 9,642,731,579	\$ 9,642,731,579
B Total Expenses	\$ 1,755,724,907	\$ 1,755,724,907	\$ 1,755,724,907
C Total Revenue	\$ 2,216,051,862	\$ 2,326,854,500	\$ 2,443,200,000
D Revenue Increase		\$ 110,802,638	\$ 116,345,500
E Return (C-B)	\$ 460,326,955	\$ 571,129,593	\$ 687,475,093
F RORB (E/A)	4.77%	5.92%	7.13%

Please note that finance charges are included in SaskPower return (E).

The occurrence of two rate increases in the same year drives the higher RORB because the rate base and expenses remain unchanged while the total return increases.

Table 2.0

On page 20 of the application SaskPower states *“SaskPower is requesting system-average rate increases of 5.0% effective July 1, 2016, and 5.0% effective January 1, 2017. This application will allow SaskPower to return to meeting its long-term ROE target of 8.5%. It will also allow our company’s debt to remain within its debt ratio target.”* In the current economic environment SaskPower’s industrial and large customers do not have the luxury of raising prices and passing on costs to optimize their corporate balance sheets. Instead SaskPower’s large customers are making tough decisions to aggressively reduce costs. The Panel through its recommendations should direct SaskPower to exercise aggressive cost containment with the same sense of urgency.

SaskPower goes on to state on page 20 of the Application *“Please note that although information is also provided for 2018-19, the 2018-19 forecast has no bearing on the rate increases requested for 2016-17 and 2017-18.”* SaskPower clearly states that it is asking for a revenue increase in the 2017-18 fiscal period, yet the two requested 5.1 % rate increases would both be implemented in the 2016-17 fiscal period. Has SaskPower now moved from a policy of timely and prudent rate increases to a model of rate prepayment? On page 20 of the Application SaskPower further states *“The key principle behind the requested rate increase is that SaskPower requires the opportunity to recover prudently incurred costs for providing electrical services to customers”*. The utility failed to adhere to *“the key principal”* by its failure to table a 2017-18 Test Embedded Cost of Service Results report to provide

customers with information on its rate base, its expected costs or the allocation of those costs during the period. SaskPower has provided nothing more than “forecast” level information for the 2017-18 and 2018-19 periods and therefore has not met basic regulatory disclosure requirements for a rate increase applicable to the 2017-18 fiscal period. Therefore; SIECA reiterates its request that the Panel recommend that the Crown Investment Corporation (CIC) and Cabinet disallow implementation of the 5.1% increase effective January 1, 2017 as part of the current rate application. SIECA further reiterates its request to the Panel to recommend that, if required, SaskPower bring forward a subsequent rate application for any fiscal period beyond the 2016-17 period subsequent to the conduct of a COS and allocation study proceeding as previously described in this submission.

5. SIECA Recommends No Dividend Policy

The Application before the SRRP is effectively a one year application for the fiscal 2016-17 period; however, SaskPower provided a three year forecast on Page 39 of the application consisting of a table of financial/productivity indicators and a table of business plan assumptions. The three year forecast includes projected allowances for declared dividends of \$20.7 million in 2017-18 and \$22.2 million in 2018-19 to be paid to the Saskatchewan government. Although SaskPower has not projected any dividends to be paid in the 2016-17 period; SIECA strongly urges the Panel to recommend that the Saskatchewan government continue the existing policy of exempting SaskPower from paying dividends to the province during future periods. The fiscal environment facing the provincial government is sure to generate strong motivation to draw dividends from SaskPower. However, it is important to retain net income or surplus earnings in SaskPower to reduce borrowing and help control SaskPower’s debt/equity ratio. The payment of dividends from SaskPower represents an added tax on SaskPower customers and this tax is borne disproportionately by large customers due to the large share of SaskPower’s revenue that they provide. Refraining from the taking of dividends is one small step that can be taken by the province to help SaskPower and their customers manage through the financial pressures of SaskPower’s continuing investment “super cycle”.

C. SIECA CLOSING COMMENTS

SIECA appreciates the opportunity to share its comments and recommendation with the Saskatchewan Rate Review Panel and acknowledges the assistance of SaskPower in responding to interrogatory requests. The recommendations put forward by our association have been developed through careful thought, analysis and consultation with our member companies. Our association is very concerned about the financial trajectory of SaskPower, but we are equally concerned with rising electricity rates and the very real issues of competitiveness and affordability for customers. In our association’s view, it is imperative that SaskPower find ways to reduce its operating expense and capital spending to address its deteriorating financial outlook. The notion within SaskPower and the Government that annual increases of 5% or more represent modest and acceptable rate escalation must be challenged. Our association thanks the Panel for considering our recommendations.

Respectfully submitted to the Saskatchewan Rate Review Panel by:

Saskatchewan Industrial Energy Consumers Association
Eugene Setka, Chair

Appendix 1.

KTM Inc.

Review of SaskPower Cost Allocation Methodology

On Behalf of Saskatchewan Industrial Energy Consumers Association

Geoffrey Inge
9-15-2016

Review of SaskPower Cost Allocation Methodology on Behalf of SIECA

Purpose of KTM review

KTM was engaged to review SaskPower's cost allocation methodology underlying its 2017 Fiscal Test Embedded Cost of Service Study (ECSS). To that end KTM reviewed the following:

1. 2017 Fiscal Test Embedded Cost of Service Study
2. SaskPower 2016 and 2017 Rate Application
3. SaskPower 2014-2016 Test Embedded Cost of Service Results
4. SaskPower 2014, 2015, 2016 Rate Application
5. Final Independent Report for the Saskatchewan Rate Review Panel on SaskPower's 2014-2016 Rate Application
6. Elenchus Research Associates Inc January 25, 2013 review of Cost Allocation and Rate Design Methodologies On Behalf of SaskPower
7. Elenchus Research Associates Inc September 29, 2012 review of Cost Allocation and Rate Design Methodologies On Behalf of SaskPower
8. Final Independent Report for the Saskatchewan Rate Review Panel on SaskPower's 2014-2016 Rate Application
9. 2015-16 SaskPower Annual Report
10. Responses to interrogatories submitted to SaskPower by SIECA and the Rate Review Panel.

Conclusion

Although limited in our ability to evaluate all aspects of SaskPower's proposed cost allocation and rate design, KTM found sufficient evidence to question the propriety of SaskPower's methodology particularly as it applies to the allocation of generation and transmission demand costs.

SaskPower's description of its generation and transmission demand cost allocation methodology is misleading and the methodology itself fails to appropriately assign fixed generation and transmission cost among customer classes. SaskPower's methodology distorts the residential customer actual peak load and results in a residential and farm customer class allocation of generation and transmission fixed costs which is not consistent with residential customer cost causing behavior.

Furthermore, it does not appear that past review by SaskPower or the Rate Review Panel consultants have adequately explained SaskPower's classification/allocation methodology propriety.

Applying what appears to be an inappropriate cost allocation methodology to SaskPower's proposed revenue requirement increase would exacerbate current rate inequities. A comprehensive analysis and debate regarding the propriety of SaskPower's cost allocation methodology should precede and inform a decision on SaskPower's proposed rate increase.

SaskPower Generation and Transmission Cost Classification/Allocation Methodology

SaskPower describes its cost classification and allocation methodology on pages 24 – 29 of the ECSS. Briefly, SaskPower first classifies cost as either Demand, Energy or Customer service parameters. Most generation fixed costs (primarily return on rate base and depreciation) are classified as either demand or energy utilizing the Equivalent Peaker Method. SaskPower calculates that 42.5% of generation fixed cost are demand costs and the remaining 57.5% are energy costs. Transmission fixed costs are all classified as demand costs.

Distribution costs are classified as either energy or customer. Customer costs are classified as 100% customer costs. The details of SaskPower's cost classification are shown on Schedules 2.0 – 2.36 of the ECSS.

SaskPower's refusal to provide the calculations resulting in its Equivalent Peaker ratios (requested in SIECA IR Q3) prevented KTM from evaluating SaskPower's application of the methodology to determine the classification of generation cost. We note however that there are a variety of generation cost classification methodologies. Some were mentioned in the January 25, 2013 Review of Cost Allocation and Rate Design Methodologies report by SaskPower's consultant, Elenchus. We were unable to find a previous analysis of the customer class impact of alternatives to the Equivalent Peaker classification methodology by SaskPower, its consultant or the Rate Review Board's consultant.

SaskPower then allocates the classified costs among its customer classes. SaskPower explains its generation and transmission cost allocation on page 28 of the ECSS. The allocation methodology applied to generation demand costs is described as follows:

"The demand related rate base and expenses are allocated by the 2CP (coincident peak) method, plus an estimate of losses. The 2CP method allocates costs to customer classes based upon the contribution which the respective customer class makes to the average of SaskPower's winter and summer seasonal peaks. The winter seasonal peak load is SaskPower's largest demand calculated on an hourly interval basis during the months of November to February. The summer seasonal peak load is SaskPower's largest demand calculated on an hourly interval basis during the months of June to September. The months of March, April, May and October are considered "shoulder" months and do not contribute to the seasonal peak periods. Allocation factors are developed as the ratio of the class load at the time of the average seasonal peak to the total load."

Likewise, the allocation methodology applied to transmission demand cost is described as follows:

"All of the transmission functions are classified as demand and are allocated using the Two Coincident Peak (2CP) method as aforementioned."

What is not obvious in its filing is SaskPower's calculation of the customer class hourly peak loads used in its 2CP method.

Some investigation reveals that the customer class seasonal peak hourly load used to determine generation demand cost allocation is a projected load calculated by applying a historical average customer class load factor to projected annual customer class consumption. The data SaskPower uses is shown on ECSS Schedule 4.0.

We note that Schedule 4.0 is in itself misleading as footnote 2 seems to imply that the CP Load Factor is calculated using the Energy Sales and CP Demand amounts in the previous columns. In fact, the amounts in the CP Demand column are calculated by applying the CP Load Factor to the Energy Sales amounts.

In its response to SIECA's Q2 Supplementary 3, SaskPower reveals that the customer class load factors used in Schedule 4.0 to calculate the customer class CP Demand are in fact based on an average of three winter hourly peaks and three summer hourly peaks for five historical annual periods. In effect what SaskPower describes as a 2CP method is in fact a five year historical 6CP average. It could be described as a 30CP methodology.

The effect of this methodology, by design or coincidence, is to flatten the low load factor residential customer class load profile and understate its contribution to the system peak hour requirement.

The chart below illustrates how increasing and averaging the number of CP data points used to calculate demand cost allocation factors impacts customer class allocation factors.

Line No.	Customer Class	Percentage Allocation		
		2015 Hourly Load		
		1CP	2CP	6CP
	(a)	(b)	(c)	(d)
1	Residential	24.33%	23.42%	22.15%
2	Farms	9.41%	7.36%	7.20%
3	Commercial	14.16%	17.32%	18.54%
4	Power	31.45%	31.50%	31.54%
5	Oilfields	14.87%	13.75%	13.86%
6	Street lts	0.00%	0.00%	0.00%
7	Reseller	5.78%	6.66%	6.70%
8	Total	100.00%	100.00%	100.00%

Comparing columns (b) and (d) of the chart above shows that increasing the number of CP data points in even a single year favors the low load factor residential and farm customers at the expense of the higher load factor commercial and power customers.

The following chart demonstrates that increasing the number of CP data points by using the SaskPower’s five year average methodology further skews customer class demand cost responsibility in favor of low load factor customers.

Line No.	Customer Class	Percentage Allocation			
		2015 Hourly Load			Allocation Factor (1)
		1CP	2CP	6CP	
	(a)	(b)	(c)	(d)	(e)
1	Residential	24.33%	23.42%	22.15%	20.90%
2	Farms	9.41%	7.36%	7.20%	6.86%
3	Commercial	14.16%	17.32%	18.54%	17.67%
4	Power	31.45%	31.50%	31.54%	35.27%
5	Oilfields	14.87%	13.75%	13.86%	12.56%
6	Street lts	0.00%	0.00%	0.00%	0.23%
7	Reseller	5.78%	6.66%	6.70%	6.51%
8	Total	100.00%	100.00%	100.00%	100.00%

(1) from Schedule 4.0

To illustrate the cost impact of SaskPower’s allocation methodology, consider that SaskPower proposes to allocate approximately \$881 million of generation and transmission demand cost based on its “2CP” methodology. Comparing the allocation of that amount using the 1CP allocation percentages in column (b) with the corresponding allocation using the percentages in column (e) yields the following indication of cost shifting among the customer classes.

1CP vs SaskPower's Proposed Demand Cost Allocation
(\$ Million)

Line No.	Customer Class	SaskPower Allocation		Over (Under)
		1CP	Factor	
	(a)	(b)	(c)	(d)
1	Residential	\$ 214.3	\$ 184.1	\$ (30.2)
2	Farms	82.9	60.4	(22.5)
3	Commercial	124.7	155.6	30.9
4	Power	277.0	310.6	33.6
5	Oilfields	131.0	110.6	(20.4)
6	Street lts	-	2.0	2.0
7	Reseller	50.9	57.4	6.5
8	Total	<u>\$ 880.7</u>	<u>\$ 880.7</u>	<u>\$ 0.0</u>

Because SaskPower refused SIECA's request for a copy of the cost allocation and rate design model, KTM was unable to calculate the exact amount of cost shifting resulting from SaskPower's proposed allocation methodology. However, as illustrated above, SaskPower's allocation methodology under allocates generation and transmission demand cost to the residential, farm and Oilfield customer classes at the expense of the Commercial, Power and Reseller customer classes. The cost shifting impact will increase as capital investment increases. In its 2016 and 2017 Rate Application, SaskPower states will make about \$1 billion per year in capital investments.

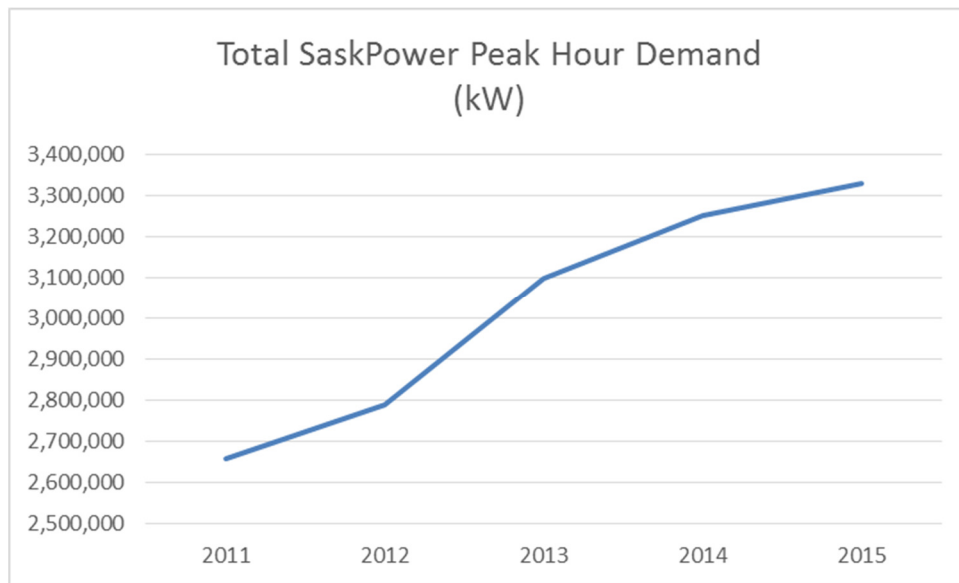
Propriety of SaskPower's Demand Cost Allocation

An economically efficient and fair cost allocation methodology should apply allocation factors which closely match cost causation. SaskPower's generation and transmission demand cost allocation methodology departs from this concept.

The five year, 6CP average methodology discussed above does not reflect the driving cause of incremental power generation or the related customer class cost causing behavior. Generation investment decisions are based on expected system peak load requirements, not historical average system peak requirements. This is especially true for a growing utility. In its 2016 and 2017 Rate Application SaskPower notes that:

"Peak load records continue to be set annually, signaling our ongoing need to source new generation. Most recently, in January 2016, SaskPower marked a new peak load record of 3,640 megawatts (MW). During 2015, our company also marked a record for electricity generated, with 23,744 gigawatt hours (GWh) produced." (page 2)

Since incremental generation investment decisions are driven by recent and projected peak demand, the individual customer class contribution to the expected peak load should reflect the latest relative customer load data. If, for some reason historical customer class load data is deemed relevant, the applicable data should be the relative customer class load on the highest, not average historical peak hour. In either case, as the chart below demonstrates, the relevant peak hour occurs in 2015.



Data from response to SIECA Q2 and August 25, 2016 Consultant Email

By failing to match cost allocation with customer class cost causing behavior, SaskPower’s proposed generation and transmission demand cost allocation methodology understates the cost of service assigned to the residential, farm and oilfield customer classes and understates their true cost of service. The resulting understated rates send false price signals to the consumer resulting in economic inefficiencies.

Prior review has not adequately explained why SaskPower’s Generation and Transmission Demand Cost Allocation Methodology is Appropriate

Presumably, SaskPower has used its 30CP methodology in previous rate cases, however there is no evidence in the April 10, 2014 Final Independent Report for the Saskatchewan Rate Review Panel on SaskPower’s 2014-2016 Rate Application that the panel’s consultant was aware of it or considered it inappropriate.

In fact, the panel’s consultant seems to have relied heavily on the January 25, 2013 Review of Cost Allocation and Rate Design Methodologies report published by SaskPower’s consultant.

“The COSS for 2014 through to 2016 incorporates the Elenchus recommendations as well as SaskPower’s internal load research. The Panel has always supported and continues to support the concept that studies such as the COSS must be based on accepted principles and practices and, when those are followed, the study results whatever they may be must be accepted In our view, the COSS adhered to the principled approach and the two recommended modifications are reasonable and more accurately portray SaskPower’s operations and cost causation factors.” (page 118)

This reliance however is misplaced as the rationale offered by SaskPower’s consultant is confusing at best. For example, in the excerpt below, the consultant acknowledges that generation capacity investment decisions are based on possible extreme weather then in the next paragraph proposes to delink that cost causation from the allocation of generation demand costs to customer classes.

“SaskPower currently uses a forecast of the potential maximum demand in its sales forecast when estimating the peak system demand. This demand only occurs under extreme weather conditions. The rationale for this approach is that the system is designed to handle extreme weather conditions. Hence, from an engineering perspective, the costs incurred in ensuring that the system has sufficient capacity under extreme weather conditions are based on the forecast demand under those extreme conditions.

Elenchus notes, however, that other utilities commonly use a forecast of system demand based on the class load profiles under normal weather conditions and not on design (i.e., most extreme) weather; hence, the peak demands can be characterized as the “typical” rather than “extreme”. The concept underlying this approach is that it is more equitable to allocate capacity costs based on the typical usage of the system, rather than design considerations.”

Yet it is the demand of weather sensitive customers in extreme weather conditions that drives the utilities generation investment decisions. There is a reason it’s called design weather. SaskPower’s consultant’s recommendation to delink generation demand cost allocation from the primary driver of generation capital investment decisions based on the questionable assertion that other utilities do it should not be compelling.

It is concerning that prior review does not identify or discuss SaskPower’s questionable generation cost allocation, fails to include a customer class impact analysis of generation cost classification alternatives and seems to rely heavily on the conclusions of SaskPower’s consultant which itself relies primarily on surveys of the classification and allocation methodologies used by other utilities rather than an objective analysis of what is appropriate for SaskPower and its customers.

Appendix 2.

Complete Return on Rate Base Analysis by KTM Inc.

Line No.	Particulars	(\$ million)									
		2014	2015	2016	2016-17	2016-17a	2015 vs 2016	2016 vs 2016-17	2016 vs 2016-17a	2016-17 vs 2016-17a	2016-17 vs 2016-17a
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
		\$	% of Total	\$	% of Total	\$	% of Total	\$	% Increase (Decrease)	\$	% Increase (Decrease)
1	Rate Base										
2	Plant In Service	\$13,352.2	97.00%	\$15,429.1	97.29%	\$15,164.4	96.80%	\$15,164.4	0.00%	\$	0.00%
3	Accumulated Depreciation	(5,156.8)	0.96%	(6,104.7)	0.91%	(5,850.1)	0.97%	(5,850.1)	0.00%	\$	0.00%
4	Net Plant	\$8,195.4	84.1%	\$8,991.6	87.2%	\$9,314.3	96.80%	\$9,314.3	0.00%	\$	0.00%
5	Allowance For Working Capital	81.0	0.96%	84.1	0.91%	93.8	0.97%	93.8	0.00%	\$	0.00%
6	Inventories	165.0	1.95%	165.0	1.72%	209.1	2.17%	209.1	0.00%	\$	0.00%
7	Other Assets	7.2	0.09%	7.2	0.08%	5.5	0.06%	5.5	0.00%	\$	0.00%
8	Total Rate Base	\$8,448.6	100.00%	\$9,246.9	100.00%	\$9,838.3	100.00%	\$9,642.7	100.00%	\$	0.00%
9	Revenue Requirement										
10	Fuel Expense Sold/over Units	\$ 394.3	19.92%	\$ 441.5	20.49%	\$ 488.7	20.86%	\$ 485.8	19.88%	\$	0.00%
11	Purchased Power & Import	193.1	9.75%	236.9	10.99%	273.3	11.66%	160.8	6.91%	\$	0.00%
12	Export & Net Electricity Trading Revenue (Credit)	(34.7)	-1.75%	(42.4)	-1.97%	(46.8)	-2.00%	(18.2)	-0.78%	\$	0.00%
13	Operating Maintenance & Administration	647.7	31.72%	672.4	31.21%	697.8	29.78%	682.1	27.92%	\$	0.00%
14	Depreciation & Depletion	441.8	22.32%	477.7	22.17%	507.5	21.66%	509.9	21.92%	\$	0.00%
15	Corporate Capital Tax	34.0	1.72%	36.9	1.71%	38.1	1.63%	42.5	1.83%	\$	0.00%
16	Grants in Lieu of Taxes	22.5	1.14%	23.9	1.11%	25.3	1.08%	25.0	1.07%	\$	0.00%
17	Miscellaneous Tax	0.5	0.03%	0.5	0.02%	0.5	0.02%	0.5	0.02%	\$	0.00%
18	Other Income (Credit)	(128.5)	-6.49%	(144.8)	-6.72%	(131.8)	-5.62%	(132.7)	-5.70%	\$	0.00%
19	Return on Rate Base	408.9	20.66%	452.2	20.98%	490.7	20.94%	570.8	24.54%	\$	0.00%
20	Total Revenue Requirement	\$ 1,979.6	100.00%	\$ 2,153.8	100.00%	\$ 2,343.3	100.00%	\$ 2,326.5	100.00%	\$	0.00%
21	Return on Rate Base	4.84%		4.89%		5.12%		5.92%		\$	0.00%
22	Revenue	\$ 2,216.0		\$ 2,326.8		\$ 2,326.8		\$ 2,326.9		\$	0.00%

Source for Revenue Requirement and Return on Rate Base %
 2014 - 2014-2016 Test Embedded Cost of Service Results, Schedule 1.0 page 37
 2015 - 2014-2016 Test Embedded Cost of Service Results, Schedule 1.0 page 84
 2016 - 2014-2016 Test Embedded Cost of Service Results, Schedule 1.0 page 131
 2017 - 2017 Fiscal Test Embedded Cost of Service Results, Schedule 1.0 page 34
 2017(a) - 2017 Fiscal Test Embedded Cost of Service Results, Schedule 1.0 page 81

Source for Revenue
 Revenue (2016-2016) - Response to SRP Q17
 Revenue (2017, 2017a) - 2017 Fiscal Test Embedded Cost of Service Results, Schedule 7.0 pages 79 and 126