

# **SASKATCHEWAN INDUSTRIAL ENERGY CONSUMERS ASSOCIATION**

## **FINAL SUBMISSION TO THE SASKATCHEWAN RATE REVIEW PANEL REGARDING SASKPOWER'S 2014-2016 RATE APPLICATION**

### **I. EXECUTIVE SUMMARY**

The Saskatchewan Industrial Energy Consumers Association (SIECA) appreciates the opportunity provided by the Saskatchewan Rate Review Panel (SRRP or Panel) to submit comments regarding the SaskPower 2014-2016 rate application. SIECA is an association that represents large power users throughout Saskatchewan. The association represents customers with energy intensive operations and its main focus is to ensure that members have affordable and reliable electricity.

The SaskPower 2014-2016 rate application proposes rate increases that constitute rate shock, particularly for Power and Reseller class customers where the utility proposes above average rate increases. The proposed average increases which approach 20% compounded over three years have the potential to adversely impact the economic activity and competitiveness of our members. These potential increases pose significant challenges for customers who cannot pass costs to downstream markets due to highly competitive business conditions or who are not expanding and able to offset the increased costs through increased production or output.

Given the backdrop of rate shock based on the proposed rate increases and the Minister's Terms of Reference indicating that the Panel should consider as given "the targeted long term return on equity (ROE) target of 8.5%"; SIECA strongly urges the Panel to refrain from recommending any revenue requirement adjustments to increase the ROE above the levels proposed by SaskPower in the rate application. Through the application SaskPower states that it is prepared to accept a lower ROE over the rate application period. SIECA contends this unusual position is taken by the utility because it has comfortably estimated electricity sales, fuel and purchased power costs, hydro levels and OM&A costs with typical conservative bias that ensures the utility will outperform its forecasts. SaskPower has had strong profitability in recent years even though its forecasting has frequently projected below target ROE returns. In 2010 the utility projected an ROE of 7.9% and achieved 13% and in 2011 the projection was 6.9% and the utility actually achieved 12.6%. SaskPower will have achieved ROE performance above target level in three of the four years over the 2010–2013 period. Any recommendation to increase the revenue requirement without addressing cost forecasts and their attendant drivers would exacerbate the rate shock that Power and Reseller class customers are facing from the utility's rate proposal in its present form.

Our association is opposed to the proposed multi-year nature of the rate application. SIECA contends that, SaskPower should provide an indicative outlook for two or three forward years with every rate application for customer guidance and planning purposes. However, from a

rate approval perspective, only single year rate decisions should be undertaken due to the uncertainty and risk associated with forecasting future loads, costs and economic conditions. Our association asserts that annual rate applications and reviews do not create undue delay or cost since the public consultation process in Saskatchewan has very short timelines and low costs when compared to contested cases and rate regulation proceedings in other jurisdictions.

The primary driver of rate increases in this application is capital expenditure. SaskPower intends to spend \$3.17 billion over the three year application period and \$9.4 billion over the next decade on capital infrastructure. SIECA members are very concerned about this level of spending and the utility's financial sustainability. Our members are also very concerned about future affordability should spending occur in a fashion that is not commensurate with actual system load growth and "least cost" criteria. The absence of a public consultation mechanism to review resource planning, certification of need, capital expenditure planning and cost prudence is a serious concern for our members. As a result of these concerns, SIECA recommends the creation of a separate public consultation mechanism for review of the utility's medium and long range supply plans and capital investment projects by the SRRP and interested stakeholders.

With respect to cost of service classification and allocation, SaskPower utilizes the Equivalent Peaker (EP) method to allocate costs to various classes. Underlying this methodology is the concept of "least cost" system planning to meet energy and demand requirements. Where, and to the extent generation and infrastructure investments occur due to environmental policy and social license reasons rather than due to "least cost" planning; it is relevant to modify the classification and allocation of the costs of such infrastructure to appropriately reflect cost causation. Such is the case with SaskPower's Boundary Dam 3 ICCS project and wind generation. SIECA recommends that the Percent of Revenue approach be utilized to allocate these costs. In this manner, the costs will be borne by customer classes in the same proportion as the revenue received from the various customer classes producing a more appropriate attribution of cost causation. Note that in making these changes, the total revenue requirement amount to be recovered by the utility is not impacted. Rather, the relative allocation of these costs to the various classes will change and the rates for the various classes will change.

## **II. INTRODUCTION**

The Saskatchewan Industrial Energy Consumers Association (SIECA) appreciates the opportunity provided by the SRRP to submit final comments regarding the SaskPower 2014-

2016 rate application. We also appreciate SaskPower’s responses to our two rounds of discovery questions.

SIECA is an association that represents large power users throughout Saskatchewan. The association’s main focus is to ensure that our members have affordable and reliable electricity. SIECA member companies typically operate energy intensive facilities which results in energy costs being a significant portion of their overall cost of doing business. Consequently, energy affordability impacts their competitiveness, output and potential employment levels. High energy costs directly impact the bottom line of industrial customers because in many cases, these costs cannot be passed to downstream customers or markets due to highly competitive business conditions.

The 2014-2016 rate application consists of a proposed multi-year rate increase spanning three years with a total proposed revenue lift of \$641.5 million for this time period. The proposed system-wide average rate increases are very significant at 5.5%, 5% and 5% for 2014, 2015 and 2016. SIECA members in the Power and Reseller classes will see higher proposed increases in the range of 6.9%, 6.0% and 5.7% over the same three-year period. The largest driver of the cost increases is associated with capital expenditures followed by Fuel/PPA costs and OM&A costs. Table 1 below shows the proposed rate increases by class.

Table1: Proposed Rate Increases by Class

Class	2014	2015	2016
Residential	5.30%	4.50%	4.50%
Farms	3.50%	4.50%	4.00%
Commercial	6.40%	5.40%	5.40%
Power (Published & Contract)	6.90%	6.00%	5.70%
Oilfields	3.60%	3.70%	3.70%
Reseller	7.00%	7.30%	7.30%
System	5.50%	5.00%	5.00%

As discussed by SIECA at the SRRP Public Forum in December 2013, the compounded rate increase for Power class customers will approach 20% over the 3 year period and constitutes rate shock for many industrial and large customers. The proposed 2014-2016 rate increases are far in excess of any measure of inflation in the Saskatchewan marketplace and present a particular challenge to customers or industries where electricity is a significant component of variable costs. There is significant rate increase disparity between customer classes in this application that is an outcome of changes to the Cost of Service model, rate rebalancing adjustments and the coincident incorporation of extraordinary levels of generation related investment into the rate base.

SIECA presents positions and recommendations in the following section that address the disparities and concerns arising from the proposed rate increases contained in the 2014-2016 rate application.

### **III. SIECA POSITIONS AND RECOMMENDATIONS TO SRRP**

#### **A. SIECA Requests the SRRP to Recommend Single Year Rate Decision for 2014 only.**

SIECA appreciates SaskPower's efforts to provide some measure of forward electricity price certainty for a three year time period by submitting a three year application. As emphasized by SIECA at the SRRP Public Forum in December 2013, knowledge of forward rates is relevant to our members, but it is far more critical to ensure that the utility's proposed cost recovery is necessary, prudent and in the public interest. The following sub-sections describe important reasons that reinforce why single year rate decisions are prudent and why the SRRP should only recommend approval of a single year rate decision:

##### **1. Forecast Variances**

Based on past history, and intuitively, it is simply not practical to expect that forecasts will be (and remain) accurate over a three year time frame. The following forecast elements all pose significant variance risk to forecasts and the resultant rate making impacts:

###### **a. Load Forecasts:**

Our written submission to the SRRP from the Public Forum in December 2013 contains a graphical slide that illustrates the progression and magnitude of over-estimation found in the load forecast information that underpinned the last four SaskPower rate application periods. Each of the successive load forecasts for electricity sales used in the rate applications for 2009, 2010, 2013 and 2014-16 were lower than the preceding forecast, but each and every one of SaskPower's forecasts have exceeded the actual electricity sales through to 2012. On page 24 of the 2014-2016 rate application SaskPower discusses the importance of load forecasting to the rate making process and discusses some of the uncertainties associated with estimating load for the Power and Oilfield class customers. The over-estimation of large customer load has historically been the largest contributor to SaskPower's load forecasting inaccuracy. SaskPower asserts that it has improved its forecasting processes for the large customer classes, but yet the utility continues to forecast very significant demand growth will come from the Power and Oilfield class customers.

Our association contends that SaskPower is over-estimating load growth in the Power class. The Power class loads increased at an annualized rate of 1.8% from 2004 to 2012. In 2013 Power class load is forecast to increase by 5.4% to 7,852 GWh reflecting increased loads from completed industrial projects and expansions in the potash sector. However, SaskPower is forecasting that Power class load growth will accelerate further in the 2014-2016 period to an annualized rate of 8.3% or reach 9,796 GWh by end of 2016. The members of our association collectively cannot identify a body of Power class facilities that could possibly be completed and placed in operation between now and 2016 to account for this unprecedented load growth. To illustrate; over the 2014-2016 period the Power class load is forecast by SaskPower to grow by 1,944 GWh over the record 2013 levels. This forecast of new consumption would represent approximately 277 MW of incremental Power class load which is theoretically equivalent to six (6) conventional potash mines. There are currently two new mines under construction, only one of which may be capable of production and significant power consumption during the rate application period. The mining sector does not appear to be the driver of SaskPower's forecast load growth leaving SIECA and the Saskatchewan Mining Association (SMA) to question where SaskPower is identifying the imminent growth.

Beyond the Power class, SaskPower is forecasting the Oilfield class load growth to decline from a historical load growth rate of 5.8% over 2004-2012 and a forecast load growth of 10.7% in 2013 to a load growth rate of 4.7% over 2014-2016. All other customer classes are forecast to either decline slightly or grow at less than 1%.

The accuracy of load forecasting in total over three years introduces the risk that SaskPower's planning for resources and capital expenditures could become significantly misaligned with what is realistic and needed for fulfilling actual load requirement. The accuracy of load forecasting between rate classes over three years introduces a significant risk for rate disparity between classes to occur over the life of a three-year application. These two aspects associated with load forecasting and their potential impact on Power class rates underpin SIECA's position that multi-year rate decisions should not be pursued.

In the interrogatory process SaskPower has declined to provide SIECA with detailed information that identifies the specific elements of the load growth that SaskPower has forecast and so aggressively advertised in its recent multi-media campaign. In the absence of this requested information; SIECA urges the SRRP to scrutinize load forecasts to ensure that there are plausible and probable sources of load underpinning SaskPower's load forecasts and that the load is appropriately forecast and attributed in all customer classes. Further, it is imperative that the

Panel strongly recommend compensating reductions to forward capital spending and inter-class rate adjustments should the Panel find that load forecasts do not meet these tests for plausibility and probability or find misalignment of load growth across customer classes. Customers should not be placed in the untenable position where capital is spent and the load growth commensurate with these expenditures does not occur. This will put existing customers in the worst possible situation where they will be asked to bear the burden of rate increases resulting from capital expenditures that are not required at the present time. SIECA urges the SRRP to ensure that ratepayers are not placed in this position.

b. Generation Output and Mix:

The forecast of GWh of generation from various sources has a material impact on the revenue requirements. For example, in the current application, SaskPower predicts that the average hydro generation for 2014 will be 3,645 GWh which is around 800 GWh lower than 2013 at 4,450 GWh and the three year average for 2011-2013 of 4,444 GWh. Since the existing hydro generation has a low cost, an under prediction of such generation will result in over predicting costs associated with other sources of generation. SIECA recognizes that since hydro generation relies upon weather conditions, it is difficult to forecast accurately. This reinforces the importance of conducting only single year rate reviews. SIECA encourages the SRRP to conduct due diligence to ensure that the lower cost sources of generation such as hydro generation are not conservatively forecasted for the application period.

c. Export Revenues

Export revenues are forecast to be \$27.5 million in 2014 which is significantly lower than expected export revenues in 2013 which were \$68.9 million. Export sales and revenue are another highly variable aspect of load forecasting that is difficult to predict on a multi-year forward basis. SIECA encourages the SRRP to conduct due diligence to ensure that this anticipated reduction is appropriate.

d. Capital Expenditures:

While SaskPower planned for a certain amount of capital expenditure, in past years, it has spent less than planned and deferred projects.<sup>1</sup> For example:

- i. In 2010, the capital budget was \$832.1 million. The actual expenditures were \$266.7 under budget primarily due to deferrals of various projects.

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<sup>1</sup> See response to SRRP consultant's IR 111, Round 1

- ii. In 2011, the capital budget was \$1,055.4 million. The actual expenditures were \$431 million under budget due to carbon capture project delays and transmission project deferrals.
- iii. In 2012, the variance was shown as \$17 million although SaskPower included approximately \$230 million as corporate contingencies which can also be considered a variance.
- iv. A review of the capital estimates provided to SIECA via Round 1 interrogatory reveals several examples where capital allowances are identified in lieu of definitive capital projects with definitive capital estimates. This approach to capital forecasting in a multi-year environment presents significant risk for capital spending variation which ultimately changes outcomes relative to fixed multi-year rates.

The foregoing examples also imply that a significant amount of the investment was deferrable. There are likely similar instances in the current rate application where capital deferral will become possible. Extending the application and forecast period increases the likelihood of variances and resultant impact on rates.

e. Fuel Costs:

There is a significant level of uncertainty in forecasting fuel costs for a single year much less three years. For example, variations in natural gas prices, changes in generation mix, resulting variations in natural gas consumption volumes, and variation in costs associated with imports are difficult to predict with reasonable accuracy. Table 2 shows the variances (calculated as Budgeted – Actual) associated with the various fuels. As the table indicates, the total fuel costs were over predicted in each and every year from 2006 through 2012 with the largest variation occurring in 2010.

Table 2: Fuel Cost Variances (Budget – Actual)

\$ Millions	2006	2007	2008	2009	2010	2011	2012
Natural Gas	\$26.40	-\$1.90	\$41.70	\$54.80	\$113.6	\$31.2	\$35.4
Coal	\$2.40	\$5.00	-\$8.10	-\$8.40	-\$11.9	-\$9.5	\$3.9
Imports	\$38.60	\$11.20	\$28.60	\$25.00	\$33.6	\$0.3	-\$11.1
Hydro	-\$3.60	-\$2.70	-\$1.60	\$0.80	-\$2.8	-\$5.3	-\$4.9
Total	\$63.80	\$11.60	\$60.60	\$72.20	\$132.5	\$16.7	\$23.3

It is also worth noting that natural gas costs are typically over predicted and coal and hydro costs are under predicted. Under predicting coal generation and hydro generation have a material impact on the rate increases. For example, SaskPower indicates that a 10% increase in hydro generation compared to what was assumed will decrease revenue requirements by \$16 million. A 10% increase in coal generation compared to what was assumed will decrease revenue requirements by \$37 million. (*See SRRP Consultant IR 154A*) The variance associate with fuel cost forecasting is another reason why multi-year rate applications should not be considered prudent.

## **2. The Current Public Consultation Process is Both Cost and Time Effective.**

Other jurisdictions governed by utility commissions typically have a contested rate case process that involves several rounds of discovery, expert witness testimony, oral arguments and briefs before rate case decisions are made. As a result of all these procedural steps, it generally takes 7 to 10 months to complete the process and it is relatively costly. These procedural steps are necessary to develop robust evidentiary record and allow intervening parties to conduct a thorough investigation and due diligence for the issues at hand. As a result of these proceedings, significant amounts of revenue requirements typically get reduced compared to what was proposed.

Actions in other jurisdictions from a multi-year case perspective are instructive. For example, in Minnesota, a recent statute was introduced in the legislature that allows utilities to submit applications spanning more than one year. At the same time, the utility commission was required to hold a generic initial proceeding to obtain feedback regarding what the protocols and filing requirements should be for such an application. Only after these protocols were thoroughly vetted and finalized were utilities in a position to submit a multi-year rate application. In November 2013, Xcel Energy submitted its rate application following the Commission approved protocols. The entire proceeding leading up to the Commission's decision on the rate case will take a period of 17 months.

In SaskPower's case, the 2014-2016 rate application provides no framework and there has not been any vetting regarding the protocols. Therefore, it would not be prudent and in the public interest for Government to approve a multi-year rate application. The timeline for stakeholder consultation and SRRP review is already very compressed with far fewer procedural steps. Consequently, SIECA contends that the current rate review process is one of the most time and cost effective regulatory processes in the industry. Therefore, conducting this same review every year for a single year rate application would not create undue delay or cost. Rather, it is necessary at a minimum and will allow SaskPower, SRRP and stakeholders an opportunity to work with forecasts that have far less variability than forecasts two or three years ahead.



In conclusion, it would not be reasonable for Government to approve rates two or three years ahead given the variability and uncertainty of future costs as discussed above. From a procedural perspective, the current SRRP protocol for public consultation continues to lack full transparency and discovery, but is certainly very time and cost effective. Given the potential magnitude of current and future increases, vetting the proposed rate increases against valid and timely forecasts and outlooks is of utmost importance to customers. Thus, SIECA believes that for customer guidance and planning purposes, SaskPower should continue to provide indicative outlooks two to three years ahead as presented in the current application. SIECA strongly contends that from a rate application perspective, only single year rate decisions should be advanced by SaskPower, evaluated by the SRRP and considered for approval by Government.

#### **B. SIECA is Opposed to the Payment of Dividends by SaskPower**

SIECA supports the recommendations and observations made by the Saskatchewan Mining Association (SMA) at the SRRP Public Forum in Regina in December 2013 regarding the payment of dividends by SaskPower. SaskPower has asserted that it has not planned to pay out dividends through the 2014-2016 rate application period, although it did indicate that “While no dividend payments have been budgeted, the Crown Investment Corporation has the right to request a dividend at any time.” SIECA supports the SMA recommendation requesting that the SRRP recommend that the Saskatchewan Government exempt SaskPower from paying dividends to the General Revenue Fund during this rate application period in recognition of the significant rate shock that Power and Reseller class customers will absorb should the proposed rate increases be awarded. Utilizing the dividend income in lieu of borrowing debt will benefit consumers by lowering financing charges as well as improving the SaskPower’s debt ratio which is projected to be roughly 75% in 2014. SaskPower’s third quarter report indicates that it expects to have an operating income of \$193 million for 2013. Investing this amount instead of paying dividends will provide some rate relief in 2014 and every year after that due to lower finance charges.

#### **C. SIECA Recommends Creation of a Public Consultation for Review of Resource Planning and Major Capital Investments**

SaskPower proposes to make capital expenditures of \$1.2 billion in 2014, \$1.1 billion in 2015 and \$900 million in 2016. As a result of these expenditures, the primary cost drivers contributing to rate increases are increases in finance charges and depreciation expenses.

As Table 3 below indicates, expenses associated with capital expenditures are more than half of the total increases for the three year term and nearly three quarters of the increase in 2014.

Table 3: Percentage Increases in Expenses

	2014	2015	2016	2014-2016
Fuel/PPA	16%	48%	47%	35%
OMA	12%	13%	14%	13%
Capital Related	72%	39%	39%	52%
	100%	100%	100%	100%

SaskPower asserts that it must invest in new generation to meet rising demand for electricity, invest to rebuild its aging electrical system, and invest to build the world’s first commercial carbon capture and storage equipped power plant. Indeed, half of the capital related expenditures in 2014 are associated with the conversion of Boundary Dam #3 coal unit to an Integrated Carbon Capture and Storage (ICCS) facility. While the amounts that SaskPower plans to spend on the ICCS project are known, what is unknown is (a) whether the specific ICCS investments are needed at the present time, (b) whether the specific ICCS investments are “least cost” and (c) whether any cost overruns would make the ICCS investments uneconomic.

The Minister’s Terms of Reference to the Panel indicate that the “budgeted capital allocation, the rate base and established corporate policies of the utility” should be taken as a given although the depreciation and finance expenses resulting from the capital investment can be assessed for reasonableness. The calculation of the depreciation and finance expenses are merely a mechanistic formula based on debt borrowing rates and approved depreciation rate studies. Therefore, aside from auditing the calculations, there is not much to evaluate with respect to reasonableness. The real critical issue is whether the assets and infrastructure associated with proposed expenditures are needed from a timing perspective and are appropriate “least cost” alternatives. It is disconcerting that stakeholders do not have the opportunity to evaluate the reasonableness of the capital expenditures when they are the primary driver of the rate increases.

SaskPower appears to have an ambitious capital expenditure plan that may not be practical to implement from a resource or financial standpoint. The utility could be making investments prematurely, and it is also likely that some amount of this investment may not be needed at the present time.

Indeed, the SaskPower Board reduced the utility’s original 2014-16 capital budget request by \$1.1 billion in an effort to control capital related expenses and to manage debt load. In response to SRRP Consultant IR111, SaskPower states the following:

“In an effort to control capital related expenses and to manage SaskPower’s debt load, capital expenditures totaling \$1.2 billion in 2014, \$1.1 billion in 2015, and \$0.9 billion in 2016 were approved by the Board. Over the three years, this represents a \$1.1 billion reduction between what was requested and what was approved.”

SIECA appreciates the SaskPower Board’s effort in making this reduction. However, the rate impact of the capital investment remains a very significant impact for the Power and Reseller class customers. Prudence and gradualism seems necessary to uphold SaskPower’s financial integrity and mitigate rate shock for customers. Thus, SIECA encourages the SRRP to ascertain whether the approved capital investments slated for 2014 through 2016 are appropriately timed and represent “least cost” alternatives.

It should be noted that SaskPower intends to spend \$9.4 billion in capital expenditures over the next 10 years. In other regulated jurisdictions, there are typically two pronged processes to ascertain need and cost prudence of any large capital investment:

a. Integrated Resource Plan:

In general, utilities in regulated jurisdictions submit a long term integrated resource plan that provides a detailed assessment of load growth and its perspective regarding the least cost supply side solutions (including DSM) to fulfill the load requirements. This is a regular proceeding before the utility commission where interested parties can intervene, seek discovery, request sensitivity analysis in addition to what the utility provided and submit comments. The Commission evaluates the evidentiary record and renders decisions regarding the plan.

b. Certification of Need (CON) Proceeding:

While the resource plan offers an overall perspective of the long range plan, the CON proceeding is focused on a specific planned investment included in the resource plan. CON proceedings are contested cases with expert witness testimony where the objective is to evaluate whether the implementation is done cost competitively (eg., owned versus PPA). Costs are assessed for reasonableness and cost caps are typically set. To the extent, a utility exceeds the cost cap, it has the burden of proof in a subsequent rate case to demonstrate that it should recover the cost overruns. Often times, these overruns are denied.

In SaskPower’s case, we are highly concerned that stakeholders are not provided the opportunity to ascertain either need or cost prudence. The following examples demonstrate our concerns:

## 1. Boundary Dam #3 ICCS:

Using Boundary Dam #3 ICCS as an example, the capital cost is close to \$12 million per MW. Note that other generation such as a combined cycle plant is close to \$1 million per MW. No doubt the total costs including fuel and O&M costs need to be considered in identifying least cost solutions. Coal plants traditionally have lower fuel costs compared to natural gas generation.<sup>2</sup> However, that said, it is highly unlikely that the ICCS project could be considered least cost compared to combined cycle generation given such a high difference in capital costs. The important issue is that SaskPower has not provided a quantifiable analysis to the public demonstrating the ICCS project is an optimal “least cost” supply side solution when comparing against other alternatives. Furthermore, in response to SRRP consultant’s discovery request, SaskPower indicates that the ICCS project could have a cost overrun as high as \$140 million. In other jurisdictions, these issues would be contested and the burden of proof would rest on the utility to demonstrate it should recover the cost overruns. Finally, since Boundary Dam #3 ICCS is the world’s first commercial carbon capture and storage facility, there is no historical experience to rely upon with respect to O&M costs and plant operations. There could be a significant risk of increases in O&M costs associated with operating the facility compared to what has been forecast.

## 2. Wind Generation:

Wind generation is intermittent and therefore cannot be used to reliably serve load by itself. Quick start natural gas generation is required in conjunction with the wind to firm or back it up. In order to conduct a cost benefit analysis for such generation, it is essential to account for all the costs associated with integrating wind including (but not limited to) costs of additional generation to firm or back-up the wind generation, curtailment costs, cycling costs and transmission reserve margin. Consequently, it is unlikely that wind generation would be considered least cost after all the costs are included.<sup>3</sup> It would seem that the rationale for building wind has more to do with environmental stewardship and social license as opposed to it being a least cost resource. At a time when SaskPower is capital and resource constrained and ratepayers are facing rate shock, it is more critical now than ever to invest in “least cost” and financially sustainable generation and transmission assets.

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<sup>2</sup> SaskPower also indicates that it will receive revenues for the CO2 although the amount is deemed confidential.

<sup>3</sup> Based on discovery requests responses, it appears the wind generation that was selected could have been least cost compared to other competitive bids received on wind generation. However, SaskPower did not provide a response to wind generation being a least cost resource in the first instance as compared to other generation.

To be clear, SIECA is **agnostic** with respect to the type of generation needed to serve load requirements. The important point to us is that the planning process should result in least cost solutions and the two foregoing examples would indicate otherwise.

### 3. Planning Reserves:

SIECA is also concerned about potential overbuilding of infrastructure at a time when the utility is implementing life cycle management of the existing infrastructure. Table 4 shows the variances related to peak load and planning reserve margins based on actual versus forecast planning reserve margins. According to NERC reliability rules, utilities must have additional MW over the peak load to reliably meet load requirements. SaskPower states that in its planning it utilizes a planning reserve margin requirement of 13%<sup>4</sup>.

Table 4: Actual vs. Forecast Planning Reserve Margin Requirements

Year	Capacity	Peak Est. Peak	Load Actual load	Forecast - Actual	Forecast - Actual %	Forecast Reserve Margin	Forecast Res. Margin %	Actual Reserve Margins	Actual Res. Margin %
2007	3668	3125	2969	156	5%	543	17%	699	22%
2008	3641	3227	3194	33	1%	414	13%	447	14%
2009	3840	3214	3231	-17	-1%	626	19%	609	19%
2010	3982	3372	3162	210	7%	610	18%	820	24%
2011	4094	3460	3195	265	8%	634	18%	899	26%
2012	4104	3591	3314	277	8%	513	14%	790	22%
2013	4312	3558	3543	15	0%	754	21%	769	22%
2014	4314	3686				628	17%		
2015	4552	3818				734	19%		
2016	4749	3945				804	20%		

Note: highlighted load number in 2013 is actual peak

It is worth noting the following:

- In some years (2010-2012), the peak load was over predicted by 200MW to close to 300 MW
- Whether based on forecast or actual peak load, the planning reserve margins are far above the 13% requirement
- SaskPower’s 2013 peak was close to forecast although the planning reserve margin is still over 21%
- Furthermore, when SIECA projections for lower expected load growth within the Power Class are substituted, the forecast planning reserve margins are estimated

<sup>4</sup> See response to SIECA IR6, Round 1

at 17% for 2014, increase to 20% in 2015 and further increase to 23% in 2016. These estimated reserve margin levels would remain far above the 13% requirement set by SaskPower to ensure that NERC reliability standards are met.

This would suggest that SaskPower has excess generation capacity, is planning very conservatively and should re-examine its capital expenditure plan for generation. It also reinforces the earlier insights about the need for a process where the SRRP and stakeholders can fully vet SaskPower's medium and long range resource plans.

#### 4. Operating Reserves:

At the SRRP Public Forum in December 2013, SaskPower showed the following chart captioned Figure 1. SaskPower's Operating Reserve Position to demonstrate that at some periods during the year, the operating reserves fall below the load requirements (load plus reserves).<sup>5</sup> It is also worth noting that the operating reserves fell below the load requirements in the latter half of the year when the installed capacity is actually higher than the first half of the year. It is highly unusual and a symptom of inefficiency to have an overly conservative planning reserve margin but be short on operating reserve margins – it implies that SaskPower is not effectively managing its existing fleet. The unusual number of forced outages provided in response to SIECA's IR21, Round 2 reinforces this observation.

For a well operated system with very conservative reserve margins, the available capacity (blue line) should comfortably remain above the load requirements (green line). Another implication could be that SaskPower is investing in generation that cannot be relied upon for reliably serving needs. Both these issues are problematic and once again reinforce the critical need for a process to vet the utility's resource plan.

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<sup>5</sup> This chart was provided in response to SIECA IR19, Round 2

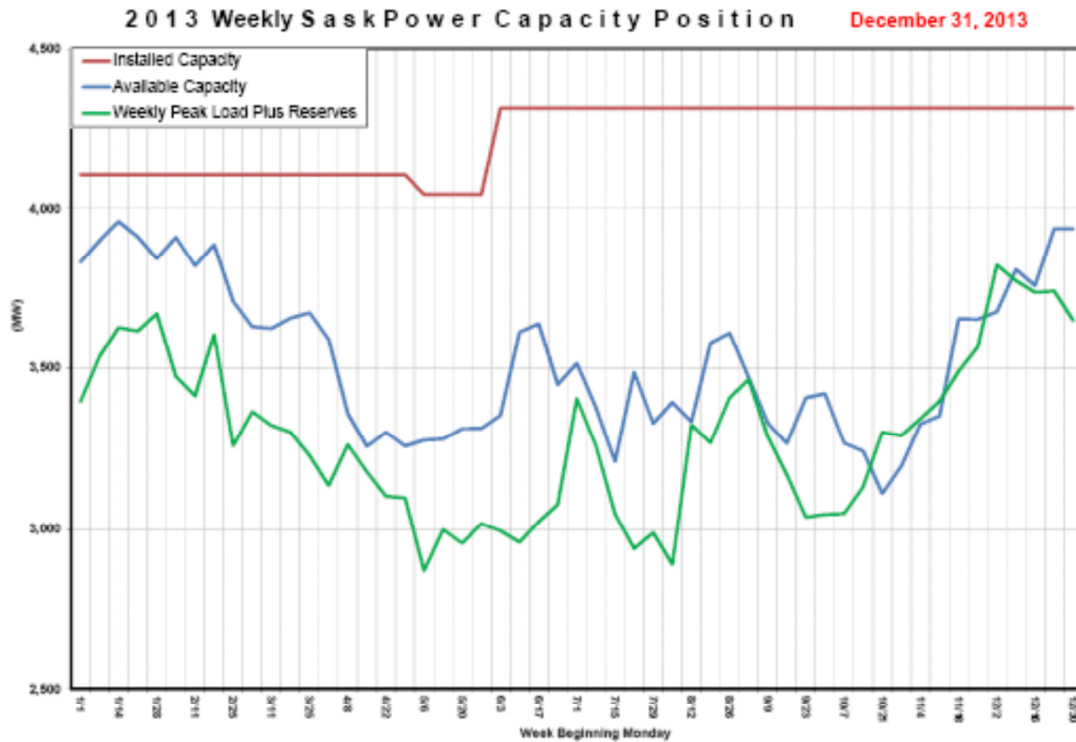


Figure 1: SaskPower’s Operating Reserve Position

Based on the foregoing observations and concerns, SIECA recommends creation of a regular public consultation process for review of resource planning and major capital investments that would allow the SRRP and stakeholders (suitably constrained by non-disclosure agreement) to fully evaluate proposed capital expenditures from a need, timing and cost prudence perspective. SIECA envisions this process as a precursor to future rate applications.

**D. SIECA Recommends Reallocation of ICCS and Wind Generation Costs Within the Cost Of Service Using the Percent of Revenue Allocation Method**

SaskPower utilizes the Equivalent Peaker (EP) method to allocate costs to various classes. In this method, fixed production plant is classified as demand and energy. Costs up to peaking plant costs are classified as demand related and those in excess of a peaking plant are classified as energy related. The general theory is that costs up to peaking generation costs are to serve peak demands and any costs in excess of peaking generation costs are to serve energy needs. Therefore, the classification of costs should follow this cost causation. Underlying this theory is the concept of “least cost” system planning to meet energy and demand requirements. Where, and to the extent changes in the generation and infrastructure investments occur due to environmental policy and

social license reasons rather than due to “least cost” planning, it is not valid to use the energy and demand allocators used for other generation in the cost of service analysis. Rather, the cost allocation should reflect the basis of its causation which is not energy or demand but rather research and development in the case of the BD#3 ICCS project and environmental stewardship in the case of wind generation. Thus, it is important and necessary to modify the classification and allocation of the costs of such infrastructure to appropriately reflect cost causation.

In its interrogatory responses, SaskPower has provided the allocation percentages (factors) for costs associated with the ICCS project and included them in Table 5 as follows:

Table 5 : Allocation factors for BD#3 ICCS Costs

	Demand	Energy	% Allocated
Total Res.	10.90%	7.10%	18.00%
Farms	3.90%	3.00%	7.00%
Total Comm.	10.00%	8.30%	18.30%
Power	17.90%	19.30%	37.30%
Oilfields	6.20%	6.90%	13.10%
Streetlights	0.10%	0.10%	0.30%
Reseller	3.40%	2.70%	6.10%
	52.60%	47.40%	100.00%

As discussed in earlier sections, the ICCS is a very expensive and capital intensive project and debatably cannot be considered a “least cost” generation alternative. Moreover, the purpose of the ICCS project seems to be more for research and development reasons and not to cost effectively fulfill load requirements. Similarly, wind generation is built more for reasons of environmental stewardship rather than for the purpose of reliably serving load as a “least cost” alternative considering its intermittency. Since there are other policy reasons for constructing these types of generation instead of a “least cost” criteria, it is not appropriate to classify and allocate costs for these types of generation using the Equivalent Peaker method. The classification and allocation of wind generation costs using the Equivalent Peaker method significantly biases these costs to Energy which drives up power costs for high load factor customers.<sup>6</sup> As an alternative, SIECA recommends that the Percent of Revenue approach be utilized to allocate these costs. In this manner, the costs will be borne by customer classes in the same proportion

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<sup>6</sup> In the case of wind generation, the Equivalent Peaker method result in classifying 80% of the costs as energy related and 20% capacity related. For all purchased power wind generation, the classification is 100% as energy related.



as the revenue received from the various customer classes producing a more appropriate attribution of cost causation – an environmental tax. For example, using the Percent of Revenue allocation would result in the allocation factors provided in Table 6 below:

Table 6: Percent of Revenue Allocation

	Percent of Revenue Allocation
Residential	23.00%
Farm	8.00%
Commercial	20.00%
Power	27.50%
Reseller	4.50%
Oilfields	17.00%
	100.00%

Our analysis indicates that utilizing the percent of revenue allocations for costs associated with BD3 ICCS would result in a 1% (or greater) shift in revenue allocation away from the Power Class for 2014. This will have an equal and offsetting rate impact to other classes.

The percent of revenue method for allocating costs has been used to allocate wind generation costs and environmental costs associated with retrofitting coal generation elsewhere. For example, in Minnesota, the Law allows the utilities to recover costs associated with addressing environmental retrofits associated with EPA compliance through trackers or riders provided these costs are prudently incurred. In addition, by Law, Minnesota utilities are required to procure certain percentages through renewable generation and can recover these costs through trackers or riders provided they are prudently incurred. With respect to the tracker for recovering the costs associated with environmental retrofits, the Commission approved Otter Tail Power Company’s approach to recover costs using the percent of revenue method. Furthermore, recognizing the complexity of cost allocation and rate design associated with wind generation, the Minnesota Commission required Xcel to collaborate with parties to investigate alternative recovery approaches to recover costs in the renewable energy rider. In particular, the percent of revenue approach was to be analyzed. This approach was approved in a subsequent Commission decision.

SaskPower conducted a Cost of Service Study in 2012-13 and secured the services of Elenchus Research Associates to perform the study. Stakeholders were invited to provide comments and input on the Study and attend a public meeting to receive the consultant’s preliminary report; however stakeholders were not provided access to the Cost of Service Model to test the impacts of the proposed and adopted changes arising from the study. In November 2012, SaskPower provided stakeholders with a document titled “SaskPower’s

Comments on the Draft Report on the Review of SaskPower’s Cost Allocation and Rate Design Methodologies” that summarized their assessment of rate impacts on various customer classes. Essentially, SaskPower stated in the document that the rate impacts for the Power class arising from the Cost of Service Methodology changes were immaterial. SIECA contends that the testing of the changes to the Cost of Service methodology did not appropriately reflect the impacts to demand and energy rates for Power class customers arising from the incorporation of extraordinary levels of generation investment into the rate base. SIECA raised a question about the allocation methodology for the investment from the unconventional BD3 ICCS generation project at the public meeting. Without access to the Cost of Service model our association could not test the impacts of the allocation of BD3 ICCS investment, nor were the impacts addressed in the Elenchus report or by SaskPower. The resultant impacts for the Power class customers in the proposed 2014-2016 rate increases have become very clear and very onerous.

Thus, SIECA recommends that SaskPower rerun its Cost of Service model using Percent of Revenue allocators to allocate the costs for the BD3 ICCS project and for all wind generation to the various customer classes, and subsequently revise the proposed rate increases for all classes to reflect the recommended allocation methodology. SIECA is aware that in implementing these recommended changes the total revenue requirement amount to be recovered by the utility is not impacted. Rather, the relative allocation of these costs to the various classes will change and the rates for the various classes will change.

Respectfully submitted to the Saskatchewan Rate Review Panel by:

Saskatchewan Industrial Energy Consumers Association  
Chair: Eugene Setka

In collaboration with and endorsement from the Saskatchewan Mining Association  
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