

**SASKATCHEWAN INDUSTRIAL ENERGY CONSUMERS ASSOCIATION Inc.**

November 15, 2013

To: Ms. Kathy Weber  
Chair, Saskatchewan Rate Review Panel  
(input@saskratereview.ca)

Cc: G.D. Forrest, Forkast Consulting  
Consultant to the SRRP  
(Forkast@shaw.ca)

Ian Yeates, SaskPower  
Rates Department  
([iyeates@saskpower.com](mailto:iyeates@saskpower.com))

**Re: Interrogatory Information Request regarding SaskPower 2014 Rate Application**

The membership of the Saskatchewan Industrial Energy Consumers Association (SIECA) collectively represents a significant segment of SaskPower's annual electricity sales. Collectively, our membership respectfully request the Saskatchewan Rate Review Panel (SRRP) and SaskPower to provide answers and/or information related to the following interrogatory questions so that our organization and membership may assess and comment on the reasonableness and impacts of the SaskPower 2014-2016 rate application:

**A. Load Growth**

1. In the course of the SaskPower 2008 Rate Application SIECA requested and received a 32 page document entitled "SaskPower 2008 Load Forecast". Given the criticality of load forecasting to a multi-year rate application, please provide a copy of the 2014 Load Forecast study used to support the current application.
2. In this multi-year rate application SaskPower is predicting that total 2014 electricity sales will be 21,111,400 GWh. In the 2008 Load Forecast SaskPower predicted that total electricity sales in 2014 would be 27,000,000 GWh. This disparity highlights why stakeholders must have access to SaskPower's annual load forecasts in order to perform due diligence on any rate application. Please provide a copy of the annual SaskPower Load Forecast for each year during the period 2009 through 2013.
3. Please explain what the load growth drivers would be that could increase electricity sales in 2013 by 7%-8% rather than the 1.1% typical of recent years.
4. On page 9, SaskPower states the following:

*"Provincial load growth forecasts indicate the need for an additional 5,929 GWh over the next decade. Saskatchewan sales volumes are expected to*

*grow by 29% over the next decade, with the bulk of that growth in the next five years.”*

Please provide the underlying forecast behind this statement, the assumptions used and relevant supporting documentation.

5. Please provide the most recent 10 year forecast of load and capability supplied to MRO/NERC. The load forecast must net out interruptible load to provide an adjusted demand forecast. The capability must reflect accredited capacity of the generation units and any and all purchase power agreements. Please provide this data in Excel spreadsheet format.
6. Please explain what % planning reserve margin is used by SaskPower and provide reasons why this specific percentage is used?
7. Please provide quarterly demand (MW) and energy (GWh) data by customer class for the multi-year period 2004 to 2016?
8. Please provide narrative explanations along with references and related documentation regarding the demand (MW) and energy (MWh) growth forecast as follows:
  - a. What steps does SaskPower take to develop the most likely forecast for MW and MWhs? Please explain specifically what type of a statistical analysis is conducted to derive this forecast?
  - b. Is the weather data normalized? Please explain what methodology is used to weather normalize the load?
  - c. Please explain how the forecast was developed for the Power class. In addition, please address the following:
    - i. Please explain the methodology, data and data sources used?
    - ii. To the extent that feedback was used from customers to project expanded or new load; how was this information cross verified? Does SaskPower assign probabilities that indicate the level of confidence associated with the feedback from the customers regarding project expansion? If so, please explain in detail as to how these confidence levels are determined. If not, please explain why not?
    - iii. Please explain at what point in the process do new or existing customers with expansion plans provide any type of formal commitment or dollar contribution?
9. Please describe the methodology used to assign confidence levels or establish probabilities of future electricity demand failing to materialize. Please explain how future loads are discounted or handicapped in the annual load forecast?

## **B. Environmental Issues**

10. On page 9, SaskPower states the following:

*“In addition to load growth, our generation, transmission and distribution infrastructure is aging, and will require us to rebuild, replace, or renew it in its entirety over the next forty years. Generation unit retirements will remove 200*

*MW of generation by 2017, including Boundary Dam units 2 and 3. New federal regulations have eliminated conventional coal-fired generation — SaskPower’s primary baseload electricity source — as an option in the future.”*

Please provide an explanation and relevant references for any and all of the federal and provincial environmental regulations and mandates pertaining to electrical generation that the utility has to comply with?

11. Please provide the analysis that has led to the decision to retire 200 MW of generation by 2017?
12. Please explain SaskPower’s rationale for building wind generation?
13. Please provide the cost benefit analysis used to ascertain the need to construct 177 MW of additional wind generation? What is the capacity factor assumption and why is this assumption used?
14. Please explain the challenges associated with integrating wind generation into the SaskPower system? Please explain the cost implications of dispatching “must run” wind generation ahead of lower cost generation alternatives.

### **C. Capital Expenditures**

15. Regarding the table titled “Capital Spending” on page 28 of the application; please provide a schedule on a project level basis that provides total project costs, capital invested by year and the project in-service dates. With respect to the customer connects category; please provide the annual capital costs by customer class for the 2012-2016 period and provide the number of customers in each class for the same time period. Please explain and justify the reasonableness of this forecast?
16. Explain how SaskPower can add 10,345 new connects in 2012 at a cost of \$226 million and have effectively no growth in residential, farm and commercial electricity sales for the period 2013 through 2016?
17. What portion of the \$226 million spent on new connects in 2012 was spent connecting new customers in the residential, farm and commercial customer classes?
18. Please explain the criteria through which capital expenditures are classified as “in-service” or “used and useful” and are incorporated into the rate base?
19. Please provide the debt/equity ratio from 2008-2013 and projected for 2014-2016?
20. Please provide the cost benefit analysis conducted for the AMI project?

### **D. Generation Supply**

21. SaskPower cites its current generating capacity at 4,302 MW. Please provide an annual listing of actual generation additions and generation retirements for the period 2004 through 2013; and provide same for the forecast period 2014 through 2026.

22. SaskPower has stated that a new peak demand level of 3,379 MW was recorded in 2013. What was the total MW of active generation capacity and reserve generation capacity that would have been mandated by NERC at the time that the most recent peak was set?
23. Please provide the following in Excel spreadsheet format:
- a. For owned generation please provide:
    - i. Name plate capacity, accredited capacity and in service date by unit
    - ii. Actual annual MWh generation by year for the period 2010-2012, \$/MWh variable cost (fuel and variable O&M) and projected for 2013-2016
  - b. For natural gas PPAs and imports (in aggregated data for the PPAs and imports to avoid confidentiality concerns) please provide:
    - i. MWh generation by year for the period 2010-2012 and \$/MWh variable cost (fuel and variable O&M) and projected for 2013-2016.
    - ii. Please provide the capacity cost charges for the PPAs for the period 2010-2012 (actual) and 2013-2016 (forecast).
24. Please provide the gross and net MWs generated and the total capital costs associated with the Integrated Carbon Capture Sequestration (BD3) project? How much federal funding did SaskPower receive in total for this project? Please provide a breakdown of the capital costs spent on the boiler and turbine (power island) and provide a breakdown of the carbon capture and sequestration assets?
25. On page 26 of the application, SaskPower states the following:

*“In 2014, SaskPower is forecasting an increase in other revenue as the first CO<sub>2</sub> sales from the Boundary Dam Integrated Carbon Capture and Storage project are expected to be earned”*

Please explain this sale, how the revenue was calculated and the source or basis for the assumption of the CO<sub>2</sub> price?

#### **E. OM&A, Fuel and Purchased Power**

26. Please provide an organizational chart that details (by year from 2009 to 2013) the historical number and departmental deployment of SaskPower employees and contractor personnel.
27. Please provide the forecast number and departmental deployment of planned SaskPower and contractor positions that are expected to be in place during the period 2014 through 2016.
28. Has SaskPower conducted any peer benchmarking of OM&A costs? Please explain. If no such benchmarking is done, how does SaskPower ascertain that it is maximizing efficiency from an operational perspective?
29. Please provide a variance analysis comparing budgeted to actual OM&A costs for the period 2010-2013. Please use the same categories as provided in the OM&A spending table on page 41 of the application. Please provide in Excel spreadsheet format.

30. Please provide a variance analysis comparing budgeted to actual fuel costs and forecast to actual volumes for the period 2010-2013. Please use the same categories as provided on page 34. Please provide in Excel spreadsheet format.
31. Regarding natural gas, please provide the \$/GJ costs by year for 2012-2016 and provide a categorized breakdown of how these costs was derived. The cost categorization should include natural gas commodity cost, hedge settlement or mark-to-market costs, intra-provincial transportation costs, inter-provincial transportation costs and storage costs.
32. Please provide an annual system wide heat rate for gas-fired generation (both SaskPower owned and PPA) for the period 2004-2016.
33. Are the current SaskPower gas price hedging strategy and the current levels of hedge coverage over the rate application period consistent with a rate application that fixes the electricity rates for a three year period? If yes explain why, and if no, what changes would SaskPower recommend to the strategy?
34. What was the annual loss or gain on a \$/GJ of actual gas consumption (including both owned and PPA) basis from natural gas hedging for the period 2009-2012?
35. Please provide a copy of the Christensen and Associates report on the evaluation of the fuel cost variance accounting?

**F. Cost of Service, Rate Design and Revenue Apportionment**

36. Please provide an explanation of how the fixed production plant was classified as demand and energy related? Please also provide a breakdown of how the fixed production costs of the various owned units were classified? Regarding the PPAs, please provide the same breakdown and identify if the PPAs are capacity based, energy based or both?
37. Please explain why consumers that use energy efficiently (high load factor customers) are facing a higher than average rate increase?
38. Has SaskPower taken into account that as rates rise by 20% over 3 years for the Power Class, the potential rate shock may cause demand destruction or shifting of electricity cost sensitive customer load out of Saskatchewan? Please explain why or why not?
39. For 2012, please provide the actual reserve margin by month. Please also include the supporting calculations including system peak load, adjusted demand net of interruptible resources and existing resource availability by month?
40. Please provide the monthly coincident peak – MW and MWHs by class for 2012, 2014-2016?
41. Appendix C, page 27 of the Application shows the minimum, average and maximum % impact by class. Please provide the frequency distribution of percentage rate impacts by class?
42. Please provide the revenue to revenue requirement (dollar amounts and ratios) by class using a 1CP versus 2CP for present rates, 2014, 2015 and 2016?

43. On page 47 and 48 of the application SaskPower states that:

*“By 2017, energy efficiency programming alone will deliver over 100 MW of capacity reductions. In addition, demand response initiatives, targeting industrial customers, will provide 85 MW of capacity value.*

*At the end of 2012, SaskPower has accumulated savings of 56 MW and is on track to reach the goal of 100 MW.”*

Please clarify whether the identified reduction of 56 MW includes industrial demand response and provide a schedule of all demand reductions in MW by initiative or program.

44. Please provide a listing of the type of demand response programs available to industrial customers. Please also provide the specific requirements, eligibility characteristics and compensation for each of the programs?

45. On an annual basis over the 2012-2016 period; how many MW of contracted demand response does SaskPower have secured in each year at the present?

46. Is SaskPower actively soliciting more contracted demand response in any annual forward period? If yes, quantify the targeted reductions and define the periods currently open for contracting. If no, explain why SaskPower would not be attempting to expand demand response as an alternative to building generation.

47. How many MWs of demand response is SaskPower projecting to have in place for 2014-2016? What data or information are these projections based on?

#### **G. Other**

48. On which date(s) were the economic assumptions and load growth forecasts used in the rate application developed and finalized?

49. SaskPower is predicting a return to lower export revenues in the 2014-2016 application period. What factors provided the opportunity for SaskPower to generate and transmit larger quantities of export power in 2012-2013? Does SaskPower have a strategy to maximize export sales and revenue? If yes please explain the strategy and risks.

50. Please provide all the Tables in the Application in Excel spreadsheet format?

The SIECA membership appreciates the opportunity to participate in this Round 1 interrogatory process. We would appreciate your sending the responses to our discovery requests as you complete them instead of waiting to complete the entire set of responses. If you have any questions regarding any of our discovery requests, please contact Kavita Maini at 262-646-3981 or [kmainsi@visi.com](mailto:kmainsi@visi.com).

From a procedural and due diligence perspective, our members are concerned that the responses to these interrogatory requests from the utility may not be received until December 6, 2013 and that information requested by SIECA and other stakeholders will not be available for their use prior to the Public Consultation Hearings convened by the Panel. A multi-year rate application is a complex regulatory challenge that presents an entirely different set of risks and requires a greater level of due diligence. It is unfortunate that the schedule established for

the Panel proceedings will not allow SaskPower customers and stakeholders to fully prepare for the public consultations. We do appreciate the ability to provide final written input to the Panel following completion of both interrogatory rounds.

Submitted on behalf of SIECA members, Eugene Setka, SIECA Chair, and Kavita Maini, Consultant for SIECA in these proceedings;

Respectfully,

Doug LaRocque  
SIECA Vice-Chair  
Phone: (306) 523-2828  
Email: [doug.larocque@mosaicco.com](mailto:doug.larocque@mosaicco.com)