

### Round2 – Consultant Q1 (Reference: First Round Consultant Q2)

- a) Please confirm that the 2013 rate change application is the only one to request an equal
   5.0% across the board increase for all customer classes rate components, except for Power
   Contract Rate Class (which has a 6.1% increase) since 1999.
- b) Please update Table 2.5 on Page 13 of the 2010 Consultants Final Report to reflect all recentrate changes in the various jurisdictions.

### **Response:**

SaskPower confirms that the 2013 rate change application is the only one to request an equal percentage across the board increase for all customer classes, except for the Power – Contract Rate Class, since 1999.



### Round2 – Consultant Q1 (Reference: First Round Consultant Q2)

- a) Please confirm that the 2013 rate change application is the only one to request an equal 5.0% across the board increase for all customer classes rate components, except for Power Contract Rate Class (which has a 6.1% increase) since 1999.
- b) Please update Table 2.5 on Page 13 of the 2010 Consultants Final Report to reflect all recent rate changes in the various jurisdictions.

## **Response:**

| Canadian Utilities     |               |      | Between 2011 and 2015   |
|------------------------|---------------|------|---|
| Canadian Ounties       | Date          | %    | Comments  |
| BC Hydro, BC           | May 1, 2011   | 10.5 | 8% increase with a deferral account rate rider of 2.5%        |
|                        | April 1, 2012 | 8.91 | 3.91% rate increase with a deferral account rate rider of 5%  |
|                        | April 1, 2013 | 6.44 | 1.44% with a deferral account rate rider of 5%                |
| Fortis BC              | Jan 1, 2012   | 4.0  | BCUC granted 1.5% interim increase effective Jan 1, 2012      |
|                        | Jan 1, 2013   | 6.9  |   |
| Manitoba Hydro, MB     | Apr 1, 2010   | 1.9  | Final   |
|                        | Apr 1, 2011   | 2.0  | Final   |
|                        | Apr 1, 2012   | 2.0  | Interim granted   |
|                        | Sep 1, 2012   | 2.5  | Interim granted   |
|                        | Apr 1, 2013   | 3.5  | Applied for   |
| Hydro-Quebec           | April 1, 2012 | -0.5 | Decrease  |
| Distribution           |               |      |   |
| Nova Scotia Power, NS  | Jan 1, 2012   | 3.0  | Fuel Adjustment Mechanism adjustment                          |
|                        | Jan 1, 2012   | 5.6  | Increase  |
|                        | 2013, 2014    | 3.0  | Applied for 3% in each of 2013 and 2014 as Rate Stabilization |
|                        |               |      | Plan  |
| Maritime Electric, PEI | Mar 1, 2011   | -14  | Rate decrease   |
| Newfoundland Power     | July 1, 2011  | 7.7  | Increase  |
|                        | Mar 1, 2013   | 6.0  | Applied for (with a corresponding increase to Newfoundland    |
|                        |               |      | and Labrador Hydro's rates)                                   |
| Northwest Territories  | 2012-2014     | 7.0  | Applied for increase effective April 1 in each of 2012, 13,14 |
| Power Corp.            | 2015          | 5.0  | Applied for   |



### Round 2 – Consultant Q2 (Reference – First Round Consultant Q4)

- a). Based on the current application without the updated information, please discuss whether a \$10 million increase in net income would have resulted in a 9.0% ROE for 2013.
- b). The September update projects a 2013 operating income of \$126.1 million and a ROE of 6.4% of operating income. Please provide the require operating income and overall rate increase that would be necessary to achieve a ROE of 8.5% for 2013.

## **Response:**

That is correct. A \$10 million increase in net income would have achieved an ROE of approximately 9.0% in 2013.



### Round 2 – Consultant Q2 (Reference – First Round Consultant Q4)

- a). Based on the current application without the updated information, please discuss whether a \$10 million increase in net income would have resulted in a 9.0% ROE for 2013.
- b). The September update projects a 2013 operating income of \$126.1 million and a ROE of 6.4% of operating income. Please provide the require operating income and overall rate increase that would be necessary to achieve a ROE of 8.5% for 2013.

### **Response:**

In order to achieve an 8.5% ROE in 2013, SaskPower would require a rate increase of 7.5% and generate an operating income of approximately \$169.6 million.



### Round 2 – Consultant Q3 – Reference – First Round Consultant Q6

- a) Please provide the details of external and internal annual and total costs for the following studies from inception to completion: Fuel Procurement and Optimization; T&D and Power Production, Asset Management Vision; SaskPower Business Renewal; SaskPower Support Functions Benchmarking.
- b) Please provide a breakdown of the External Services Cost highlighted in first round Q 22 (b) for 2010, 2011, 2012 updated and 2013 projected.

### **Response:**

This response contains confidential information. A confidential response has been submitted to the SRRP.



### Round 2 - Consultant Q3 - Reference - First Round Consultant Q6

- a) Please provide the details of external and internal annual and total costs for the following studies from inception to completion: Fuel Procurement and Optimization; T&D and Power Production, Asset Management Vision; SaskPower Business Renewal; SaskPower Support Functions Benchmarking.
- b) Please provide a breakdown of the External Services Cost highlighted in first round Q 22 (b) for 2010, 2011, 2012 updated and 2013 projected.

### **Response:**

As requested, see the below schedule:

| External Services Costs (\$ millions)                   |    | Actual<br>2010       | Actual<br>2011             | Budget<br>2012             | Forecast 2013 * |             |
|---|----|----------------------|----------------------------|----------------------------|-----------------|-------------|
| Contract Services<br>Consulting Services<br>Advertising | \$ | 230.0<br>18.0<br>4.0 | \$<br>170.0<br>40.0<br>4.0 | \$<br>152.0<br>31.0<br>3.0 | \$              | -<br>-<br>- |
| External Services                                       | 1  | 252.0                | 214.0                      | 186.0                      |                 | -           |
| ICCS Grants   |    | (110.0)              | (31.0)                     | -                          |                 | -           |
| Net External Services * 2013 information not available  | \$ | 142.0                | \$<br>183.0                | \$<br>186.0                | \$              | -           |



### Round 2 - Consultant Q4 - Reference - First Round Consultant Q6 - Deloitte Report

- a) Please discuss SaskPower's view of the validity of the various issues identified by Deloitte in their report.
- b) Please discuss the steps taken to date and further actions planned by SaskPower to address the issues identified and the recommendations made by Deloitte on pages 4 and 5 of their report.

## **Response:**

This response contains confidential information. A confidential response has been provided to the SRRP.



### Round 2 - Consultant Q4 - Reference - First Round Consultant Q6 - Deloitte Report

- a) Please discuss SaskPower's view of the validity of the various issues identified by Deloitte in their report.
- b) Please discuss the steps taken to date and further actions planned by SaskPower to address the issues identified and the recommendations made by Deloitte on pages 4 and 5 of their report.

## **Response:**

This response contains confidential information. A confidential response has been provided to the SRRP.



Round 2 – Consultant Q5 – Reference – First Round Consultant Q6 – UMS T&D and Power Production Report and SaskPower Business Renewal Report

- a) Please discuss the genesis of the UMS workshops, and SaskPower's view of the direct benefits flowing from these workshops and reports.
- b) Please discuss the steps taken to date and further actions planned by SaskPower to address the issues identified and the recommendations made by the T&D and Business Renewal Reports.

### **Response:**

The genesis of the UMS workshops came from recommendations in the 2009 Rate Application that SaskPower look for ways to improve performance and reduce costs. UMS won an initial contract to review SaskPower's capital expenditures. This work demonstrated an impressive knowledge of the electric utility industry and the contract was extended to review the key operating business units (Power Production, Transmission and Distribution, Customer Services, and NorthPoint). The direct benefits from the workshops and reports have improved performance in many areas and also helped to foster a culture that is looking for improvements. For Power Production the reports accelerated the programs for improving the overhaul schedule. The workshops and reports have also laid the foundation for a future Asset Management program which will lead to comprehensive Asset Registers with condition and risk information. SaskPower is building an Asset Management culture that focuses on optimizing the full life cycle of assets and their maintenance within a risk management framework.



# Round 2 – Consultant Q5 – Reference – First Round Consultant Q6 – UMS T&D and Power Production Report and SaskPower Business Renewal Report

- a) Please discuss the genesis of the UMS workshops, and SaskPower's view of the direct benefits flowing from these workshops and reports.
- b) Please discuss the steps taken to date and further actions planned by SaskPower to address the issues identified and the recommendations made by the T&D and Business Renewal Reports.

### **Response:**

The issues and recommendations made for T&D covered a wide range of issues. The Improve T&D Stores Operations initiative covered material management improvements that were considered sufficiently important that the work was extended by KPMG. A full implementation initiative is underway that is more extensive than what UMS had recommended. The Work Planning and Execution initiative focused on improving the cadence of work and the benefits are being realized through our Service Delivery Renewal initiative on improving the Schedule and Dispatch process. The recommended organizational changes for T&D to be better aligned with an Asset Management orientation have already been implemented. This will lay the foundation for a future corporate wide Asset Management program. SaskPower is expecting a significant increase in Transmission construction work to support new customers and the growth of the Saskatchewan economy. Various procurement scenarios are being considered in order to obtain the resources needed.



Round 2 – Consultant Q6 – Reference – First Round Consultant Q6 – KPMG SaskPower Support Functions Benchmarking Report

Please provide a summary update as to SaskPower's implementation or planned disposition of the recommendations respecting each of the support function groups provided by KPMG.

### **Response:**

Most of the smaller recommendations from KPMG for the support function groups have been evaluated and implemented. In a few cases some were rejected as uneconomic at this time, or they are on hold pending organizational changes. The largest initiative with the lion's share of the benefits is for Procurement. Some of the changes requiring a more competitive and transparent process were implemented as part of the New West Partnership Trade Agreement. However SaskPower has gone further through a Strategic Sourcing initiative where categories of spending are being bundled together and put to the market to help negotiate better prices, quality and services. Significant savings are expected in categories such as fleet vehicles, wire and cable, and wood poles.



### Round 2 - Consultant Q7 - Reference - First Round Consultant Q7

- a) How frequently are SaskPower's meters currently read, and how will the advanced metering program impact meter reading frequency?
- b) Please provide a schedule showing the installation schedule for these meters
- c) Please re-file the table showing benefits realized or to be realized to the extent that updated material results in changes to benefits.
- d) Please file (in confidence, if deemed necessary) the most recent report to SaskPower's Board respecting the Business Renewal Status.
- Please provide further details of the 2010 and 2011 realized benefits for the New Connect Process, and the Continuous Improvement Initiatives - DFS. Also explain the difference from Continuous Improvement Initiatives - CCR.

### **Response:**

Our meter-related functions are currently a manual process with staff assigned to read meters and turn service on and off. For urban customers, two out of every three monthly bills are based on estimated meter readings, with the third based on an actual meter reading. Most rural customers receive one yearly actual meter reading with the remainder being estimates.

With smart meters, energy consumption is tracked daily without manual intervention. Energy consumption will be aggregated into a monthly bill, based on the actual daily data.



### Round 2 - Consultant Q7 - Reference - First Round Consultant Q7

- a) How frequently are SaskPower's meters currently read, and how will the advanced metering program impact meter reading frequency?
- b) Please provide a schedule showing the installation schedule for these meters.
- c) Please re-file the table showing benefits realized or to be realized to the extent that updated material results in changes to benefits.
- d) Please file (in confidence, if deemed necessary) the most recent report to SaskPower's Board respecting the Business Renewal Status.
- e) Please provide further details of the 2010 and 2011 realized benefits for the New Connect Process, and the Continuous Improvement Initiatives DFS. Also explain the difference from Continuous Improvement Initiatives CCR.

### **Response:**

At completion, SaskPower will have approximately 500,000 AMI meters. SaskEnergy will upgrade 360,000 of their gas modules.

The installation of meters is scheduled to be completed by the end of 2014. Our full-scale implementation is scheduled to begin in 2013; prior to that, we'll conduct 3 tests with customers in select areas, to make sure the system works as planned.

The first test is already complete. It was a very small test (called a Field Test) of approximately 400 electric meters and 50 gas modules in the town of Hanley that ran over the summer of 2012. This test verified the system configuration, using a small number of meters connected to the communication network and through to our communication control system.

The second field test (our Network Acceptance Test), is currently slated to take place in the fall of 2012 and will stretch and test all aspects of the communication network to validate that it will meet our needs. We'll test about 2100 electric meters and 630 gas modules in parts of Regina and communities in and around the Qu'Appelle Valley.

The third field test (our System Acceptance Test), will be a larger test of approximately 12,000 electric and gas meters, and will verify the end-to-end operation of the system - from the meters all the way to our customer support representatives. This is currently slated to take place the winter/spring of 2013.



### Round 2 - Consultant Q7 - Reference - First Round Consultant Q7

- a) How frequently are SaskPower's meters currently read, and how will the advanced metering program impact meter reading frequency?
- b) Please provide a schedule showing the installation schedule for these meters.
- c) Please re-file the table showing benefits realized or to be realized to the extent that updated material results in changes to benefits.
- d) Please file (in confidence, if deemed necessary) the most recent report to SaskPower's Board respecting the Business Renewal Status.
- e) Please provide further details of the 2010 and 2011 realized benefits for the New Connect Process, and the Continuous Improvement Initiatives DFS. Also explain the difference from Continuous Improvement Initiatives CCR.

### **Response:**

Consultants were given the most recent information in Round One. This information is only updated annually.



### Round 2 - Consultant Q7 - Reference - First Round Consultant Q7

- a) How frequently are SaskPower's meters currently read, and how will the advanced metering program impact meter reading frequency?
- b) Please provide a schedule showing the installation schedule for these meters.
- c) Please re-file the table showing benefits realized or to be realized to the extent that updated material results in changes to benefits.
- d) Please file (in confidence, if deemed necessary) the most recent report to SaskPower's Board respecting the Business Renewal Status.
- e) Please provide further details of the 2010 and 2011 realized benefits for the New Connect Process, and the Continuous Improvement Initiatives DFS. Also explain the difference from Continuous Improvement Initiatives CCR.

### **Response:**

The August 23, 2012, Board Information Item on Business Renewal is provided on a confidential basis to the Consultant.



### Round 2 - Consultant Q7 - Reference - First Round Consultant Q7

- a) How frequently are SaskPower's meters currently read, and how will the advanced metering program impact meter reading frequency?
- b) Please provide a schedule showing the installation schedule for these meters.
- c) Please re-file the table showing benefits realized or to be realized to the extent that updated material results in changes to benefits.
- d) Please file (in confidence, if deemed necessary) the most recent report to SaskPower's Board respecting the Business Renewal Status.
- e) Please provide further details of the 2010 and 2011 realized benefits for the New Connect Process, and the Continuous Improvement Initiatives DFS. Also explain the difference from Continuous Improvement Initiatives CCR.

### **Response:**

The following quantified benefits were realized in 2010-11:

**Deliver products & Services (DPS)** – New connect process improvements implemented in 2009-10 (i.e. specialized service staff, reduced handoffs and the introduction of service price lists, and an expeditor role) have led to reduced quote preparation cycle time and resource time savings in both 2010 (\$235k) and 2011 (\$435k)

**DPS Continuous improvement** (2011) – The outsourcing of the line locate service to a contractor who handles all locates at the same service location led to significant cost savings in 2011 (\$3.4M). As well, the ongoing focus on new-connect construction service delivery time and the introduction of a construction expeditor role led to construction cost savings (\$17.8M).

Calculate/Collect Revenue process improvements (related to the billing process) - some effort has been put into measuring and managing meter reader productivity but most of the attention has been placed on stabilizing the operation of the new billing/customer relationship management system implemented in 2011. This has limited cost reduction/improvement efforts.



### Round 2 - Consultant Q8 - Reference - First Round Consultant Q8

If SaskPower requires a "large rate increase" in a future year what would SaskPower do to avoid the large rate increase in that year and how would that impact rates in subsequent years?

## **Response:**

SaskPower would consider all options to avoid rate shock in one particular year. One option would be to submit a rate application for a smaller increase than is required to meet financial objectives, knowing that a larger increase would be required the following year to "catch up", creating a smoothing effect. Similar rate strategies have been positively received in other jurisdictions.



### Round 2 - Consultant Q9 - Reference - First Round Consultant Q10

- a) Please discuss whether the 2011 net income of \$248 million and 13.2% ROE are calculated on an actual or a weather normalized basis. Please provide the numbers for the weather normalized (or the actual) calculations.
- b) Please discuss the probable Net Income that would have been realized if median hydroflows had been experienced in 2011.

### **Response:**

The 2011 net income of \$248 million and 13.2% ROE are calculated on an actual basis. The actual calculation for the 13.2% ROE is:

|   | :  | 2011  |
|---|----|-------|
| Income before unrealized market value adjustments | \$ | 239   |
| Average equity                                    |    | 1,817 |
| ROE %   |    | 13.2% |

SaskPower does not report net income on a weather normalized basis.



### Round 2 - Consultant Q9 - Reference - First Round Consultant Q10

- a) Please discuss whether the 2011 net income of \$248 million and 13.2% ROE are calculated on an actual or a weather normalized basis. Please provide the numbers for the weather normalized (or the actual) calculations.
- b) Please discuss the probable Net Income that would have been realized if median hydro flows had been experienced in 2011.

### **Response:**

The impact on SaskPower's 2011 net income due to higher than normal hydro levels is best answered by looking at the fuel and purchased power mix variance. Based on December 2011 actual results, SaskPower achieved a favourable mix variance of \$39.4 million. While there are a number of factors that contribute to this variance, the majority relate to the impact of higher than budgeted hydro levels in 2011. SaskPower's hydro generation was up approximately 40% over budget, therefore allowing the company to reduce its generation for other more expensive generation sources accordingly.



### Round 2 - Consultant Q10 - Reference - First Round Consultant Q12

Please provide the breakdown of export revenues received and volumes provided to AESO, MISO and other sources.

## **Response:**

The following table indicates the breakdown of export revenues and volumes (in MWh) sold by market for the years 2007 to 2011.

|          | 2007   |       | 7             | П | 2008   |                   |   | 2009   |       |              |   | 2010   |     |              |         | 2011   |       |              |
|----------|--------|-------|---------------|---|--------|-------------------|---|--------|-------|--------------|---|--------|-----|--------------|---------|--------|-------|--------------|
|          | GWh's  | (\$ i | in Thousands) | Ш | GWh's  | (\$ in Thousands) | П | GWh's  | (\$ i | n Thousands) |   | GWh's  | (\$ | n Thousands) | ı       | GWh's  | (\$ i | n Thousands) |
| Market   | Volume |       | Dollars       | Ш | Volume | Dollars           | Ц | Volume |       | Dollars      |   | Volume |     | Dollars      | $\perp$ | Volume |       | Dollars      |
| AESO     | 401    | \$    | 31,434        | П | 274    | 23,726            | П | 110    | \$    | 8,311        |   | 105    | \$  | 6,763        | Τ       | 338    | \$    | 35,643       |
| MISO     | 428    | \$    | 24,496        | Ш | 135    | 9,718             | П | 113    | \$    | 4,099        |   | 139    | \$  | 5,076        | Т       | 110    | \$    | 4,188        |
| Manitoba | 7      | \$    | 436           | Ш | 0      | 32                | П | 0      | \$    | 22           |   | 0      | \$  | 18           | Т       | 1      | \$    | 72           |
| IESO     | 15     | \$    | 650           | Ш | 0      | 12                | П | 0      | \$    | 17           |   | -      | \$  | -            |         | -      | \$    | -            |
| Total    | 851    | \$    | 57,016        | П | 409    | \$ 33,488         | П | 224    | \$    | 12,449       | П | 244    | \$  | 11,858       | Τ       | 449    | \$    | 39,903       |



### Round 2 - Consultant Q11 - Reference - First Round Consultant Q13

- a) Please provide the results for 2010 using GAAP, assuming both systems were run in 2010.
- b) Please explain the increases/decreases in Customer Contributions and Other Revenue between 2010, 2011, and 2012.

## **Response:**

See the below Other Revenue schedule comparing 2010 IFRS to 2010 GAAP.

|  | IFRS         | CGAAP        |
|--|--------------|--------------|
|  | 2010         | 2010         |
|  | Actual       | Actual       |
| Late payment charges                   | \$<br>4,069  | \$<br>4,069  |
| Joint use charge                       | 3,911        | 3,911        |
| Connect fees                           | 1,149        | 1,149        |
| Rental income                          | 280          | 280          |
| Meter reading                          | 2,973        | 2,973        |
| Custom work                            | 4,055        | 4,055        |
| WPPI grant                             | 4,810        | 4,810        |
| Trans tariff revenue - external        | 1,772        | 1,772        |
| Gas & electrical inspections           | 12,892       | 12,892       |
| Customer contributions                 | 43,229       | -            |
| Equity investment                      | 9,370        | 5,724        |
| Other revenue                          | 1,812        | 1,930        |
| Subtotal                               | 90,322       | 43,565       |
| Environmental revenue                  |              |              |
| Green power premium                    | 1,908        | 1,908        |
| Flyash                                 | 7,489        | 7,489        |
| Subtotal                               | 9,397        | 9,397        |
| Total SaskPower Other Revenue          | 99,719       | 52,962       |
| Other revenue                          | 3            | 3            |
| Total NorthPoint Energy Solutions Inc. | 3            | 3            |
| <b>Total Other Revenue</b>             | \$<br>99,722 | \$<br>52,965 |



### Round 2 – Consultant Q11 – Reference – First Round Consultant Q13

- a) Please provide the results for 2010 using GAAP, assuming both systems were run in 2010.
- b) Please explain the increases/decreases in Customer Contributions and Other Revenue between 2010, 2011, and 2012.

### **Response:**

Below are the Customer Contributions and Other Revenue for the years indicated above;

#### **Customer Contributions**

2010 \$43,229,000

2011 \$ 55,260,000

2012 \$49,890,000 based on June 2012 forecast

#### Other Revenue

2010 \$ 11,173,000

2011 \$ 11,773,000

2012 \$ 14,063,000 based on June 2012 forecast

The change in Customer Contributions from 2010 to 2011 was from major transmission customers in the potash and oil sectors that was part of the economic growth in Saskatchewan.

The change from 2011 to 2012 Customer Contributions is the reduced growth in the transmission customers as the world economy started to effect the major customers.

The change in other revenue from 2010 to 2011 was not materially significant.

The change in other revenue from 2011 to 2012 was a combination of the components of other revenue. One example would be customer requested work.



Round 2 - Consultant Q12 - Reference - First Round Consultant Q14

Please provide the results for 2010 using GAAP.

## **Response:**

See the attached schedule.

|   | SaskPower * |       |    | SPI   |      |      |       | NRPT |        |    | Eliminating Entries |      |      | Consolidated SaskPower |     |      |       |       |       |
|---|-------------|-------|----|-------|------|------|-------|------|--------|----|---------------------|------|------|------------------------|-----|------|-------|-------|-------|
|   | IFR         | S     | CG | AAP   | IFRS |      | CGAAP | IF   | RS     | CG | AAP                 | IFRS | 3    | CGAAF                  |     | IFRS |       | CGAAP | )     |
|   |             | 2010  |    | 2010  |      | 2010 | 2010  | 0    | 2010   |    | 2010                |      | 2010 | 2                      | 010 |      | 2010  |       | 2010  |
| REVENUE                                 |             |       |    |       |      |      |       |      |        |    |                     |      |      |                        |     |      |       |       |       |
| Saskatchewan electricity sales          | \$          | 1,575 | \$ | 1,575 | \$   | -    | \$ -  |      | \$ -   | \$ | -                   | \$   | -    | \$                     | -   | \$   | 1,575 | \$    | 1,575 |
| Exports                                 |             | 12    |    | 12    |      | -    | -     | ŀ    | -      |    | -                   |      | -    |                        | -   |      | 12    |       | 12    |
| Net electricity trading **              |             | -     |    | -     |      | -    | -     | ı    | 4      |    | 4                   |      | -    |                        | -   |      | 4     |       | 4     |
| Other                                   |             | 90    |    | 47    |      | 10   | 6     | ;    | 6      |    | 6                   |      | (6)  |                        | (6) |      | 100   |       | 53    |
| TOTAL REVENUE                           |             | 1,677 |    | 1,634 |      | 10   | 6     |      | 10     |    | 10                  |      | (6)  |                        | (6) |      | 1,691 |       | 1,644 |
|   |             |       |    |       |      |      |       |      |        |    |                     |      |      |                        |     |      |       |       |       |
| EXPENSES                                |             |       |    |       |      |      |       |      |        |    |                     |      |      |                        |     |      |       |       |       |
| Fuel & puchased power                   |             | 452   |    | 499   |      | -    | -     | ·    | -      |    | -                   |      | (6)  |                        | (7) |      | 446   |       | 492   |
| Operating, maintenance & administration |             | 505   |    | 523   |      | -    | -     | ı    | 8      |    | 8                   |      | -    |                        | -   |      | 513   |       | 531   |
| Depreciation                            |             | 266   |    | 246   |      | -    | -     | ı    | -      |    | -                   |      | -    |                        | -   |      | 266   |       | 246   |
| Finance charges                         |             | 192   |    | 146   |      | -    | -     | ı    | -      |    | -                   |      | -    |                        | -   |      | 192   |       | 146   |
| Taxes                                   |             | 42    |    | 42    |      | -    | -     | ı    | -      |    | -                   |      | -    |                        | -   |      | 42    |       | 42    |
| Other losses (gains)                    |             | 9     |    | 8     |      | -    | -     |      | -      |    | -                   |      | -    |                        | -   |      | 9     |       | 8     |
| TOTAL EXPENSES                          |             | 1,466 |    | 1,464 |      | -    | -     |      | 8      |    | 8                   |      | (6)  |                        | (7) |      | 1,468 |       | 1,465 |
| Operating Income                        |             | 211   |    | 170   |      | 10   | 6     |      | 2      |    | 2                   |      | _    |                        | 1   |      | 223   |       | 179   |
| 3                                       |             |       |    |       |      |      |       |      |        |    |                     |      |      |                        |     |      |       |       |       |
| Unrealized market value adjustments     |             | (16)  |    | (16)  |      | -    | -     | 1    | (3)    |    | (3)                 |      | -    |                        | -   |      | (19)  |       | (19)  |
| NET INCOME(LOSS)                        | \$          | 195   | \$ | 154   | \$   | 10   | 6     | ;    | \$ (1) | \$ | (1)                 | \$   | -    | \$                     | 1   | \$   | 204   | \$    | 160   |

<sup>\*</sup> Shand Greenhouse is included with SaskPower.

<sup>\*\*</sup> Net electricity trading is gross in NorthPoint's annual report.

<sup>\*\*\*</sup> SPI is included with SaskPower.



### Round 2 - Consultant Q13 - Reference - First Round Consultant Q15

- a) It appears as if the increase in gas and electrical inspections increased by approximately 17.7% and 8.3% in 2010 and 2011, while forecasted increases have been reduced to 2.4% in 2012 and 1.2% in 2013. Please discuss the basis of these estimates.
- b) Please explain why there are any costs beyond 2011, if the inspections are no longer to be conducted by SaskPower. If this program is to be outsourced then please elaborate providing details and cost implications.

### **Response:**

The results for 2009 to 2011 were significant growth years for both Gas and Electrical Inspections matching the Saskatchewan economy. Forecasted growth is not anticipated to be at the same levels.



### Round 2 - Consultant Q13 - Reference - First Round Consultant Q15

- a) It appears as if the increase in gas and electrical inspections increased by approximately 17.7% and 8.3% in 2010 and 2011, while forecasted increases have been reduced to 2.4% in 2012 and 1.2% in 2013. Please discuss the basis of these estimates.
- b) Please explain why there are any costs beyond 2011, if the inspections are no longer to be conducted by SaskPower. If this program is to be outsourced then please elaborate providing details and cost implications.

### **Response:**

This response contains confidential information. A confidential response has been provided to the SRRP.



### Round 2 - Consultant Q14 - Reference - First Round Consultant Q17, Q18, Q19

- a) Please discuss why overtime FTEs have not been included in any of the analyses in response to first round IR 17 and 18.
- b) Please detail the reasons for the increase (BY Business Unit) of 225 FTEs from 2011 to 2012, and please provide and rationalize projected 2013 FTEs, also by Business Unit.
- c) For each of SaskPower's organizational changes detailed in Q19, please indicate how each change impacts FTEs and indicate how these are reflected in the table shown in this response.

### **Response:**

A decision was made by the Executive in 2012 to exclude overtime FTE's from the FTE calculation for the following reasons:

- The intent of measuring FTE's is to track the actual number of employees working at SaskPower at any one time. Overtime FTE's are employees who are already counted as either a permanent, part-time or temporary FTE and because of either planned or unplanned circumstances, are required to work overtime.
- Overtime FTE's are quite often storm and outage related and are therefore uncontrollable in nature. Having this volatility included in the total FTE count does not properly reflect the workforce plan of SaskPower.
- SaskPower continues to manage and monitor overtime budgets and limit the amount of overtime authorized to its employees.



### Round 2 - Consultant Q14 - Reference - First Round Consultant Q17, Q18, Q19

- a) Please discuss why overtime FTEs have not been included in any of the analyses in response to first round IR 17 and 18.
- b) Please detail the reasons for the increase (BY Business Unit) of 225 FTEs from 2011 to 2012, and please provide and rationalize projected 2013 FTEs, also by Business Unit.
- c) For each of SaskPower's organizational changes detailed in Q19, please indicate how each change impacts FTEs and indicate how these are reflected in the table shown in this response.

### **Response:**

The following table highlights the significant drivers of the increase in FTE's between 2011 and 2012.

| Business Unit    | Description   | FTE's |
|------------------|---|-------|
| Power Production | Power plant operators, training pool hires, Boundary Dam      | 34    |
|                  | transition plan and engineering postitions.                   |       |
| T&D              | Gas & electrical inspectors, distribution dispatch operators, | 35    |
|                  | engineers for asset management, project managers and          |       |
|                  | support staff.  |       |
| Finance/Supply   | Procurement initiative.                                       | 14    |
| Chain            |   |       |
| PERA             | Nuclear options, network development engineers, hydro         | 13    |
|                  | development and generation planning.                          |       |
| CI&T             | Contractor repatriation                                       | 43    |
| All              | Variance between 2011 target and 2011 actual.*                | 65    |
| Other            | Safety coordinators, ICCS specialist, communications,         | 21    |
|                  | human resources, etc.   |       |
|                  |   |       |
| Total            |   | 225   |

Note – 3,200 FTE's as at December 31, 2011 was based on our actual head count as at December 31, 2011. The target for 2012 used our targeted FTE count of 3,065 FTE's for 2011 as a starting point. The difference between the actual and targeted FTE counts was due to the timing of filling vacant positions.



The following table highlights the significant drivers of the increase in FTE's between 2012 and 2013.

| Business  | Description  | FTE's |
|-----------|--|-------|
| Unit      |  |       |
| T&D       | New employees added from Ireland initiative, increased         | 50    |
|           | workload due to the expansion of the grid and new initiatives  |       |
|           | approved in 2012 and 2013.                                     |       |
| SDR       | Automated Metering Initiative.                                 | 15    |
| Human     | Expanding HR support in the field, centralizing and expanding  | 21    |
| Resources | the learning and training functions at SaskPower               |       |
| CI&T      | Contractor repatriation phase two and new initiatives approved | 17    |
|           | during 2012 and 2013.  |       |
| Other     | ICCS operators, land officers, customer service staff for new  | 24    |
|           | billing system, etc.   |       |
|           |  |       |
| Total     |  | 225   |



### Round 2 - Consultant Q14 - Reference - First Round Consultant Q17, Q18, Q19

- a) Please discuss why overtime FTEs have not been included in any of the analyses in response to first round IR 17 and 18.
- b) Please detail the reasons for the increase (BY Business Unit) of 225 FTEs from 2011 to 2012, and please provide and rationalize projected 2013 FTEs, also by Business Unit.
- c) For each of SaskPower's organizational changes detailed in Q19, please indicate how each change impacts FTEs and indicate how these are reflected in the table shown in this response.

### **Response:**

The organizational changes detailed in Q19, were included in the response based on the size of the FTE transfer and/or the impact it had on the overall organizational structure of the company. In addition to those listed in the previous response, a number of other transfers have occurred in 2011 and 2012 between the business units. Appendix A shows all of the adjustments that have been made to SaskPower's overall 2012 FTE target of 3,225 FTE's. It is important to note that all of the adjustments in Appendix A reflect only transfers between business units and do not result in any additional FTE's.



### Round 2 - Consultant Q15 - Reference - First Round Consultant Q20

Please further discuss the transfer of gas and electrical inspections to another entity in terms of where the responsibility for this activity will rest, the net impact of this change on SaskPower's FTE compliment and on SaskPower's annual costs for 2013 and 2014.

## **Response:**

This response contains confidential information. A confidential response has been provided to the SRRP.



### Round 2 – Consultant Q16 – Reference – First Round Consultant Q21, Q22 (b), Q22(c)

- a) Please explain the relatively larger increase in OM&A costs per customer (10.0%) from 2010 to 2011 than that experienced in 2010, and expected in 2012 and 2013.
- b) Please list and explain the major causes for the increase in 2012 OM&A from the \$582 million shown in this response to the projected 2012 result of \$603 million.
- c) Please update the tables included in the responses to Q22 (b) and Q22(c) to show the 2013 forecast numbers, as per the September update.
- d) Please provide a further breakdown of "Wages and Salaries" to show amounts for salaried employees, hourly employees and overtime expenditures, External Services, Materials & Supplies, Administration, Travel and Vehicles (Q22(b)).

### **Response:**

OM&A expense was \$575 million in 2011, up \$62 million from 2010. The increase was largely due to a \$25 million increase in spending on maintenance activities during the year. This included emergency maintenance to address damage to transmission infrastructure caused by winter and summer storm activity, as well as an increase in preventative maintenance activities on SaskPower's transmission and distribution assets. In addition, there was a nearly 75% increase in the number of hours dedicated to performing overhauls at our company's generation facilities.

There was also a \$5 million increase in operating costs as a result of additional PPA costs and the commissioning of the new Spy Hill Generating Station in the fall of 2011. In addition, SaskPower donated \$3.5 million to the University of Regina to facilitate carbon capture research and \$3.5 million to the University of Saskatchewan for power system engineering research.

Finally, there was a \$25 million increase in spending on various new initiatives, including feasibility studies related to new generation options; information technology and support projects; Business Renewal Program activities; and additional DSM programs.



### Round 2 – Consultant Q16 – Reference – First Round Consultant Q21, Q22 (b), Q22(c)

- a) Please explain the relatively larger increase in OM&A costs per customer (10.0%) from 2010 to 2011 than that experienced in 2010, and expected in 2012 and 2013.
- b) Please list and explain the major causes for the increase in 2012 OM&A from the \$582 million shown in this response to the projected 2012 result of \$603 million.
- c) Please update the tables included in the responses to Q22 (b) and Q22(c) to show the 2013 forecast numbers, as per the September update.
- d) Please provide a further breakdown of "Wages and Salaries" to show amounts for salaried employees, hourly employees and overtime expenditures, External Services, Materials & Supplies, Administration, Travel and Vehicles (Q22(b)).

### **Response:**

The primary reason 2012 OM&A costs are increasing from \$582 million to \$603 million is due to the major wind storm that impacted much of the northern part of the province. The cost to repair the damage caused by the storm represents \$15 million of the \$21 million increase. Other significant factors contributing to the variance include costs associated with the Elizabeth Falls hydro power station (\$2.5 million) and training costs for the Clean Coal unit at Boundary Dam (\$2 million).



### Round 2 – Consultant Q16 – Reference – First Round Consultant Q21, Q22 (b), Q22(c)

- a) Please explain the relatively larger increase in OM&A costs per customer (10.0%) from 2010 to 2011 than that experienced in 2010, and expected in 2012 and 2013.
- b) Please list and explain the major causes for the increase in 2012 OM&A from the \$582 million shown in this response to the projected 2012 result of \$603 million.
- c) Please update the tables included in the responses to Q22 (b) and Q22(c) to show the 2013 forecast numbers, as per the September update.
- d) Please provide a further breakdown of "Wages and Salaries" to show amounts for salaried employees, hourly employees and overtime expenditures, External Services, Materials & Supplies, Administration, Travel and Vehicles (Q22(b)).

### **Response:**

The following is the updated table with 2013 estimates as per Round 1 – Consultant 22(b):

| OM & A Costs (\$ millions)     | ctual<br>2010 | ctual<br>2011 | idget<br>012 | _  | Forecast 2013 * |  |
|--------------------------------|---------------|---------------|--------------|----|-----------------|--|
| Wages & Benefits               |               |               |              |    |                 |  |
| Salaries & Wages               | \$<br>262     | \$<br>274     | \$<br>286    | \$ | 300             |  |
| Benefits                       | 51            | 54            | 62           |    | 66              |  |
| Pension Expense                | 7             | (1)           | (5)          |    | -               |  |
| Labour Credits                 | (36)          | (35)          | (33)         |    | (35)            |  |
| Allocated Labour               | (10)          | (11)          | (13)         |    | (13)            |  |
| Sub-total Wages & Benefits     | 274           | 281           | 297          |    | 318             |  |
| External Services              | 252           | 214           | 186          |    | 194             |  |
| Materials & Supplies           | 32            | 36            | 33           |    | 35              |  |
| Other Administration           |               |               |              |    |                 |  |
| Administration                 | 20            | 27            | 23           |    | 24              |  |
| Travel                         | 15            | 16            | 17           |    | 17              |  |
| Vehicles                       | 11            | 13            | 12           |    | 12              |  |
| Insurance                      | 5             | 5             | 5            |    | 5               |  |
| Property                       | 6             | 6             | 6            |    | 7               |  |
| Tools & Equipment              | 3             | 3             | 2            |    | 3               |  |
| Other                          | 5             | 5             | 1            |    | _               |  |
| Sub-total Other Administration | 65            | 75            | 66           |    | 68              |  |
| ICCS Grants                    | (110)         | (31)          | -            |    | -               |  |
| Total OM&A                     | \$<br>513     | \$<br>575     | \$<br>582    | \$ | 615             |  |

<sup>\*</sup>Note – the 2013 Forecast numbers have been estimated by Finance based on the submissions received from each of the business units. Detailed budgets will be finalized in mid-December and the allocation between the various categories may vary from those noted in the table above. The total OM&A budget of \$615 million however will not change.

The following is the updated table with 2013 estimates as per Round 1 – Consultant 22(c):



| (\$ millions)  | _  | tual<br>010    | tual<br>011          | dget<br>012          | ecast<br>13 *        |
|--|----|----------------|----------------------|----------------------|----------------------|
| Allocated Labour Costs<br>Labour Costs Capitalized<br>Interest Capitalized | \$ | 10<br>36<br>15 | \$<br>11<br>35<br>12 | \$<br>13<br>33<br>22 | \$<br>13<br>35<br>45 |
| Total  | \$ | 61             | \$<br>58             | \$<br>68             | \$<br>93             |

<sup>\*</sup>Note – the 2013 Forecast numbers have been estimated by Finance based on the submissions received from each of the business units. Detailed budgets will be finalized in mid-December and the amount allocated to Labour may vary from those noted in the table above. The total OM&A budget of \$615 million however will not change.



### Round 2 – Consultant Q16 – Reference – First Round Consultant Q21, Q22 (b), Q22(c)

- a) Please explain the relatively larger increase in OM&A costs per customer (10.0%) from 2010 to 2011 than that experienced in 2010, and expected in 2012 and 2013.
- b) Please list and explain the major causes for the increase in 2012 OM&A from the \$582 million shown in this response to the projected 2012 result of \$603 million.
- c) Please update the tables included in the responses to Q22 (b) and Q22(c) to show the 2013 forecast numbers, as per the September update.
- d) Please provide a further breakdown of "Wages and Salaries" to show amounts for salaried employees, hourly employees and overtime expenditures, External Services, Materials & Supplies, Administration, Travel and Vehicles (Q22(b)).

### **Response:**

As requested, see the below schedule:

| OM & A Costs (\$ millions)  | Actual<br>2010 | Actual<br>2011 | Budget<br>2012 | Forecast 2013 * |  |  |
|-----------------------------|----------------|----------------|----------------|-----------------|--|--|
| Hourly employees            | \$ 12          | \$ 12          | \$ -           | \$ -            |  |  |
| Premium Pay                 | 2              | 2              | -              |                 |  |  |
| Subtotal Hourly employees   | 14             | 14             | -              | •               |  |  |
| Salaried employees          | 214            | 222            | -              |                 |  |  |
| Premium Pay                 | 34             | 38             | -              |                 |  |  |
| Subtotal Salaried employees | 248            | 260            | -              | -               |  |  |
| Salaries & Wages **         | 262            | 274            | 286            | -               |  |  |
| Benefits                    | 51             | 54             | 62             |                 |  |  |
| Pension Expense             | 7              | (1)            | (5)            |                 |  |  |
| Labour Credits              | (36)           | (35)           | (33)           |                 |  |  |
| Allocated Labour            | (10)           | (11)           | (13)           |                 |  |  |
| Sub-total Wages & Benefits  | 274            | 281            | 297            | -               |  |  |



| OM & A Costs (\$ millions)   | Actual<br>2010 | Actual<br>2011 | Budget<br>2012 | Forecast 2013 * |
|------------------------------|----------------|----------------|----------------|-----------------|
| Contract Services            | 230            | 170            | 152            | 2013            |
| Consulting Services          | 18             | 40             | 31             |                 |
| Advertising Services         | 4              | 4              | 3              |                 |
| External Services            | 252            | 214            | 186            | _               |
| External dervices            | 202            | 217            | 100            |                 |
| ICCS                         | (110)          | (31)           | -              |                 |
| General Materials & Supplies | 32             | 36             | 33             |                 |
| Safety Supplies              | 2              | 2              | 2              |                 |
| Freight                      | 3              | 4              | 2              |                 |
| Returns                      | (5)            | (6)            | (5)            |                 |
| Misc                         | ( )            | ( )            | ì              |                 |
| Materials & Supplies         | 32             | 36             | 33             | -               |
| Office Supplies              | 5              | 4              | 7              |                 |
| Postage                      | 2              | 3              | 2              |                 |
| Telephone                    | 6              | 7              | 8              |                 |
| Fees & Dues                  | 4              | 3              | 4              |                 |
| Donations                    | 2              | 9              | 2              |                 |
| Hardware/Software            | 1              | 1              | -              |                 |
| Administration               | 20             | 27             | 23             | -               |
| Meals & Entertainment        | 5              | 6              | 6              |                 |
| Mileage                      | 3              | 3              | 3              |                 |
| Airfare                      | 2              | 2              | 2              |                 |
| Accommodation                | 5              | 5              | 6              |                 |
| Travel                       | 15             | 16             | 17             | -               |
| Fuel & Oil                   | 4              | 5              | 5              |                 |
| Repairs & Maintenance        | 4              | 5              | 4              |                 |
| Licenses                     | 2              | 2              | 2              |                 |
| Leases                       | 1              | 1              | 1              |                 |
| Vehicles                     | 11             | 13             | 12             | -               |
|                              |                |                |                |                 |
| Insurance                    | 5              | 5              | 5              |                 |
| Property                     | 6              | 6              | 6              |                 |
| Tools & Equipment            | 3              | 3              | 2              |                 |
| Other                        | 5              | 5              | 1              |                 |
| Total OM&A                   | \$ 513         | \$ 575         | \$ 582         | \$ -            |

<sup>\*\* 2012</sup> budget information not available between hourly and salaried employees \* 2013 information not available



#### Round 2 - Consultant Q17 - Reference - First Round Consultant Q27

- a) Please provide the annual benefits expected to result from each of the 4 initiatives discussed in response to Q27 (a).
- b) Please provide the information requested in Q27 (b) and Q27(c) as per the ten year business plan expected to be finalized in September, 2012.

#### **Response:**

The following is a brief summary as to why each of these initiatives was included in the 2013 Business Plan:

- ICCS training costs this initiative relates to 2012 and 2013 only and provides the necessary training to the employees who will be working on the new Clean Coal unit.
- Asset Management was an initiative highly recommended by external consultants. UMS did a review of SaskPower's readiness for Asset Management after their Phase II work reviewing OM&A. They estimated that there are incremental projected OM&A savings for the remaining phases of a fully implemented program in the range of \$13 million to \$26 million per year. This initiative is also important to support and sustain the existing Business Renewal initiatives. Many of the UMS recommendations for improvements, including "Outages, Reduce Outage Durations and Frequency", were developed within an Asset Management framework. These Phase II initiatives have an estimated value of \$15 million per year. Further work on developing a detailed Asset Management implementation plan remains to be done.
- Nuclear Initiative Nuclear power is an attractive low emissions option that has better
  risk and economic performance than almost all other long-term generation sources
  being considered. In order to prove nuclear as a viable and acceptable alternative in
  Saskatchewan's future and with the understanding that the process will take well over
  a decade to complete, SaskPower has to begin allocating resources to the initiative
  now to ensure a decision can be made in a timely manner.
- Enterprise Learning like many organizations, SaskPower is faced with an aging
  workforce that could potentially retire within a two to five year timeframe. In order to
  address concerns over the potential loss of knowledge and experience through
  retirements, this initiative will help to improve our existing training and learning
  functions within SaskPower.



#### Round 2 – Consultant Q17 – Reference – First Round Consultant Q27

- a) Please provide the annual benefits expected to result from each of the 4 initiatives discussed in response to Q27 (a).
- b) Please provide the information requested in Q27 (b) and Q27(c) as per the ten year business plan expected to be finalized in September, 2012.

### **Response:**



### Round 2 - Consultant Q18 - Reference - First Round Consultant Q28

Please discuss the reasons for the large year over year increase in Calendar Days Lost from 2009 to 2011, and provide the updated numbers for 2012.

### **Response:**

The number of calendar days lost depends on the number, type and nature of the injuries which can vary greatly from year to year. Longer-term injuries can skew the days lost significantly.

- In 2009, there were 37 injuries and 501 calendar days lost.
- In 2010, there were 45 injuries, but 1235.5 calendar days lost, which is more than double the 2009 result. This is due to several longer-term injuries.
- In 2011, there were 61 injuries and 1481 calendar days lost, indicating more frequent but shorter-term injuries.

The 2012 YTD information is below:

| August 2012                      |     | Lost-Time<br>Injuries | Medical<br>Treatment<br>Injuries * | Other<br>Injury/Illness | Total Calendar<br>Days Lost and<br>Charged | ays Lost and Total Hours |       | Lost-Time<br>Injury<br>Frequency<br>Rate | Recordable<br>Injury Frequency<br>Rate |
|----------------------------------|-----|-----------------------|------------------------------------|-------------------------|--|--------------------------|-------|--|--|
| Corporate Groups - YTD           |     | 2                     | 2                                  | 0                       | 6  | 398763.07                | 3.01  | 1.00                                     | 2.01                                   |
| Customer Services- YTD           |     | 2                     | 2                                  | 0                       | 7  | 461155.94                | 3.04  | 0.87                                     | 1.73                                   |
| Power Production - YTD           |     | 10                    | 9                                  | 2                       | 50   | 1064763.36               | 9.39  | 1.88                                     | 3.94                                   |
| Corporate Power Production       | YTD | 0                     | 1                                  | 1                       | 0  | 180593.49                | 0.00  | 0.00                                     | 2.21                                   |
| BDPS                             | YTD | 2                     | 1                                  | 1                       | 9  | 341279.31                | 5.27  | 1.17                                     | 2.34                                   |
| Northern Hydro                   | YTD | 0                     | 1                                  | 0                       | 0  | 92098.92                 | 0.00  | 0.00                                     | 2.17                                   |
| Poplar River                     | YTD | 6                     | 1                                  | 0                       | 36   | 207057.85                | 34.77 | 5.80                                     | 6.76                                   |
| Shand                            | YTD | 1                     | 0                                  | 0                       | 4  | 126778.05                | 6.31  | 1.58                                     | 1.58                                   |
| Western Plants                   | YTD | 1                     | 5                                  | 0                       | 1  | 116955.74                | 1.71  | 1.71                                     | 10.26                                  |
| Transmission & Distribution- YTI | )   | 12                    | 6                                  | 3                       | 423  | 1430063.06               | 59.16 | 1.68                                     | 2.94                                   |
| T&D Non Regional                 | YTD | 3                     | 0                                  | 2                       | 121  | 447605.98                | 54.07 | 1.34                                     | 2.23                                   |
| Prince Albert Region             | YTD | 1                     | 0                                  | 1                       | 83   | 171489.96                | 96.80 | 1.17                                     | 2.33                                   |
| Regina Region                    | YTD | 3                     | 3                                  | 0                       | 118  | 276520.98                | 85.35 | 2.17                                     | 4.34                                   |
| Saskatoon Region                 | YTD | 5                     | 3                                  | 0                       | 101  | 338457.21                | 59.68 | 2.95                                     | 4.73                                   |
| Weyburn Region                   | YTD | 0                     | 0                                  | 0                       | 0  | 195988.93                | 0.00  | 0.00                                     | 0.00                                   |
| Corporate YTD                    |     | 26                    | 19                                 | 5                       | 486  | 3354745.43               | 28.97 | 1.55                                     | 2.98                                   |



#### Round 2 - Consultant Q19 - Reference - First Round Consultant Q32

- a) Please discuss whether costs related to the credit card program are recovered from the customers.
- b) Please explain the large forecast increase from 2012 to 2013 for the credit card program.
- c) For 2011, 2012 and 2013 please detail the number of transactions (or customers) using the service or forecasted to use the service option?

### **Response:**

These costs associated with the program are considered a cost of doing business. Customers expect convenient and efficient options for bill payment and credit cards provide them with this.



#### Round 2 - Consultant Q19 - Reference - First Round Consultant Q32

- a) Please discuss whether costs related to the credit card program are recovered from the customers.
- b) Please explain the large forecast increase from 2012 to 2013 for the credit card program.
- c) For 2011, 2012 and 2013 please detail the number of transactions (or customers) using the service or forecasted to use the service option?

### **Response:**

The forecasted increase from 2012 to 2013 is due to SaskPower's expansion of the credit card program, effective October 2012. SaskPower will be accepting MasterCard and Visa payments in five offices around the province and accepting payments by credit card over the phone.



#### Round 2 – Consultant Q19 – Reference – First Round Consultant Q32

- a) Please discuss whether costs related to the credit card program are recovered from the customers.
- b) Please explain the large forecast increase from 2012 to 2013 for the credit card program.
- c) For 2011, 2012 and 2013 please detail the number of transactions (or customers) using the service or forecasted to use the service option?

### **Response:**

- 2011 8500 transactions
- 2012 5715 to the end of August, forecast 8700 total at year end
- 2013 With the expansion of the credit program, we expect approximately 25,000 transactions.



#### Round 2 - Consultant Q20 - Reference - First Round Consultant Q33

Please confirm that the telephony project will be substantially completed by 2012 year end at a cost of \$8.4 million, and provide annual estimated operating savings and other benefits for each year from 2011 to 2014 for each initiative within the project.

#### **Response:**



#### Round 2 - Consultant Q21 - Reference - First Round Consultant Q40

Please provide details related to the large increase in Interest During Construction from 2011 to 2012 and from 2012 to 2013.

### **Response:**

As per the response in Round 1, Q40, interest during construction was \$11.7 million in 2011, \$21.5 million in 2012 and \$44.8 million in 2013. The year over year increase from 2011 to 2012 and from 2012 to 2013 is due almost exclusively to the clean coal unit at Boundary Dam. The following table shows the total amount of interest during construction (IDC) included in the annual budget as well as the portion of the total that relates to BD ICCS for the period 2011 to 2013.

| (in \$millions) | 2011    | 2012    | 2013    |
|-----------------|---------|---------|---------|
| Total IDC       | \$ 11.7 | \$ 21.5 | \$ 44.8 |
| BD ICCS         | \$ 1.2  | \$ 18.0 | \$ 36.5 |



### Round 2 – Consultant Q22 – Reference – First Round Consultant Q50

Please confirm that all audited statements reflect actual rather than weather normalized results.

### **Response:**

Yes, all audited statements reflect actual results rather than weather normalized results.



#### Round 2 - Consultant Q23 - Reference - First Round Consultant Q61

- a) Please confirm that there is no change in load forecasts from those contained in the Far North Supply Strategy dated March 2011, or provide relevant updated forecasts.
- b) Please indicate and discuss which component(s) of the 2012 and 2013 Capital Program are for far north projects, and those included for the mid-term and long-term projects in the current 40 year Supply Plan.
- c) Please discuss whether any of the economic analyses consider and include customer contributions towards capital programs.
- d) Please provide a summary of the "Transmission Strategy to Facilitate Service to Projected Far North Loads 2010 to 2029", and relevant sections of the Network Development transmission report.
- e) Please provide status updates for the following:
  - Elizabeth Falls
  - 2. Whitesand Dam
  - 3. Report on updated inventory of other small northern hydro facilities
  - 4. SaskPower/Manitoba Hydro interconnection studies
  - 5. Revisions to Contingency Plans

### **Response:**



#### Round 2 - Consultant Q23 - Reference - First Round Consultant Q61

- a) Please confirm that there is no change in load forecasts from those contained in the Far North Supply Strategy dated March 2011, or provide relevant updated forecasts.
- b) Please indicate and discuss which component(s) of the 2012 and 2013 Capital Program are for far north projects, and those included for the mid-term and long-term projects in the current 40 year Supply Plan.
- c) Please discuss whether any of the economic analyses consider and include customer contributions towards capital programs.
- d) Please provide a summary of the "Transmission Strategy to Facilitate Service to Projected Far North Loads 2010 to 2029", and relevant sections of the Network Development transmission report.
- e) Please provide status updates for the following:
  - 1. Elizabeth Falls
  - 2. Whitesand Dam
  - 3. Report on updated inventory of other small northern hydro facilities
  - 4. SaskPower/Manitoba Hydro interconnection studies
  - 5. Revisions to Contingency Plans

#### **Response:**



#### Round 2 - Consultant Q23 - Reference - First Round Consultant Q61

- a) Please confirm that there is no change in load forecasts from those contained in the Far North Supply Strategy dated March 2011, or provide relevant updated forecasts.
- b) Please indicate and discuss which component(s) of the 2012 and 2013 Capital Program are for far north projects, and those included for the mid-term and long-term projects in the current 40 year Supply Plan.
- c) Please discuss whether any of the economic analyses consider and include customer contributions towards capital programs.
- d) Please provide a summary of the "Transmission Strategy to Facilitate Service to Projected Far North Loads 2010 to 2029", and relevant sections of the Network Development transmission report.
- e) Please provide status updates for the following:
  - 1. Elizabeth Falls
  - 2. Whitesand Dam
  - 3. Report on updated inventory of other small northern hydro facilities
  - 4. SaskPower/Manitoba Hydro interconnection studies
  - 5. Revisions to Contingency Plans

### **Response:**

There are no customer contributions for the far north reinforcement because these are considered to be network upgrades, nor are there any customer contributions to generation capital projects.



#### Round 2 - Consultant Q23 - Reference - First Round Consultant Q61

- a) Please confirm that there is no change in load forecasts from those contained in the Far North Supply Strategy dated March 2011, or provide relevant updated forecasts.
- b) Please indicate and discuss which component(s) of the 2012 and 2013 Capital Program are for far north projects, and those included for the mid-term and long-term projects in the current 40 year Supply Plan.
- c) Please discuss whether any of the economic analyses consider and include customer contributions towards capital programs.
- d) Please provide a summary of the "Transmission Strategy to Facilitate Service to Projected Far North Loads 2010 to 2029", and relevant sections of the Network Development transmission report.
- e) Please provide status updates for the following:
  - 1. Elizabeth Falls
  - 2. Whitesand Dam
  - 3. Report on updated inventory of other small northern hydro facilities
  - 4. SaskPower/Manitoba Hydro interconnection studies
  - 5. Revisions to Contingency Plans

#### **Response:**



#### Round 2 - Consultant Q23 - Reference - First Round Consultant Q61

- a) Please confirm that there is no change in load forecasts from those contained in the Far North Supply Strategy dated March 2011, or provide relevant updated forecasts.
- b) Please indicate and discuss which component(s) of the 2012 and 2013 Capital Program are for far north projects, and those included for the mid-term and long-term projects in the current 40 year Supply Plan.
- Please discuss whether any of the economic analyses consider and include customer contributions towards capital programs.
- d) Please provide a summary of the "Transmission Strategy to Facilitate Service to Projected Far North Loads – 2010 to 2029", and relevant sections of the Network Development transmission report.
- e) Please provide status updates for the following:
  - 1. Elizabeth Falls
  - 2. Whitesand Dam
  - 3. Report on updated inventory of other small northern hydro facilities
  - 4. SaskPower/Manitoba Hydro interconnection studies
  - 5. Revisions to Contingency Plans

#### **Response:**

- 1. The Elizabeth Falls Hydro Project is currently included in the Far North Supply Plan with a 2018 in-service date. SaskPower's Business Development group is working with the Black Lake First Nation to develop the business agreements for the project.
- 2. There has been little work done recently on the Whitesand Dam project other than some preliminary discussions with Peter Ballentyne Cree Nation (PBCN) on a potential partnership for the Project.
- 3. SaskPower has Midgard Consulting to prepare an inventory of hydro projects in Saskatchewan. Midgard has provided a draft copy of the report and is currently in the process of finalizing it. SaskPower is reviewing the information to determine a shortlist of hydro opportunities in the province.
- 4. Please refer to Question 51 of the Round 2 Interrogatories.
- 5. SaskPower is currently in the process of updating its Far North Supply Plan. As a part of this work, the contingency plan will be updated. The update is expected to be completed by Q2 2013 at the latest.



### Round 2 – Consultant Q24 – Reference – First Round Consultant Q62

- a) Please describe the basis and quantify the determination of the \$800,000 savings in OM&A per outage.
- b) Provide details of the fuel saving calculations for each year from 2011 to 2017.

### **Response:**



### Round 2 – Consultant Q24 – Reference – First Round Consultant Q62

- a) Please describe the basis and quantify the determination of the \$800,000 savings in OM&A per outage.
- b) Provide details of the fuel saving calculations for each year from 2011 to 2017.

### **Response:**



#### Round 2 - Consultant Q25 - Reference - First Round Consultant Q71

Please provide a tentative schedule for the SMR investigations and timing of the decision as to whether or not to further proceed with this initiative.

### **Response:**

The investigation into the application SMR (Smaller modular reactors) has begun within the clean energy group. The work, part of a series of phased work steps, is intended to bring a go / nogo decision to Government as to whether Saskatchewan should seek a license to prepare a site suitable for this technology. It is expected this work will take 3-4 years.



#### Round 2 - Consultant Q26 - Reference - First Round Consultant Q73

Please indicate the hydraulic flow conditions that were experienced from 2009 to 2011 and the most recent forecast for 2012.

### **Response:**

Please refer to Round 1 Question 94 response which indicates the hydraulic flow conditions that were experienced from 2009 to 2011.

The 2012 average flows remain above normal year to date on the Saskatchewan and Churchill River systems. The Churchill is expected to remain above normal while the Saskatchewan River system inflows are expected to be slightly below normal for the remainder of 2012. Lake Diefenbaker elevation is currently slightly above median which will offset the receding inflows on the South Saskatchewan River. Generation from the Athabasca system has increased over the summer and is expected to be close to median for the remainder of 2012.



#### Round 2 - Consultant Q27 - Reference - First Round Consultant Q75

Please discuss the accounting treatment of OM&A and capital costs for gas based PPAs as well as other supply sources under IFRS.

### **Response:**

Under IFRS power purchase agreements (PPAs) are now accounted for as finance leases. As such payments made under these PPAs are split and recognized as fuel, OM&A, finance charges and principal repayment. Under Canadian GAAP, these costs were all recorded and included with fuel.



#### **Round2 – Consultant Q28:**

Please provide a schedule showing the annual expenditures made under the various PPAs for Take or Pay obligations where no physical volumes were received since implementation date of each of the agreements.

### **Response:**



### Round 2 – Consultant Q29 – Reference – First Round Consultant Q77

Please discuss the amount of volumes and impact on fuel costs volumes hedged for the 5 to 10 year horizon in terms of actual or estimated percentages.

### **Response:**

| Total Long-Term Hedge Activity (as of June 30, 2012) |       |      |      |      |      |      |      |      |      |      |
|--|-------|------|------|------|------|------|------|------|------|------|
|  | 2013  | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Physical Hedges Completed                            | 36%   | 26%  | 23%  | 17%  | 12%  | 7%   | 4%   | 3%   | 4%   | 1%   |
| Volume in Millions (GJ)                              | 24.3  | 20.3 | 18.3 | 13.7 | 10.0 | 5.5  | 3.7  | 2.7  | 3.7  | 0.9  |
| Notional Value in Millions (\$)                      | 105.6 | 89.7 | 80.4 | 59.3 | 43.1 | 25.5 | 17.4 | 13.7 | 18.8 | 4.3  |
| Financial Hedges Completed                           | 15%   | 14%  | 10%  | 8%   | 6%   | 3%   | 3%   | 0%   | 0%   | 2%   |
| Volume in Millions (GJ)                              | 10.0  | 11.0 | 8.2  | 6.4  | 4.6  | 2.7  | 2.7  | 0    | 0    | 1.8  |
| Notional Value in Millions (\$)                      | 38.9  | 47.9 | 36.5 | 28.3 | 19.3 | 12.3 | 13.1 | 0    | 0    | 10.8 |
| Total Hedges Completed                               | 51%   | 40%  | 34%  | 25%  | 18%  | 10%  | 8%   | 3%   | 4%   | 3%   |
| Hedge Target   | 55%   | 50%  | 45%  | 40%  | 35%  | 30%  | 25%  | 20%  | 15%  | 10%  |
| Total Remaining to be Hedged                         |       |      |      |      |      |      |      |      |      |      |
| by December 2012                                     | 4%    | 10%  | 11%  | 15%  | 17%  | 20%  | 17%  | 17%  | 11%  | 7%   |
| by December 2012                                     | → /0  | 1070 | 11/0 | 13/0 | 11/0 | 2070 | 11/0 | 11/0 | 11/0 | 1 /0 |



#### Round 2 - Consultant Q30 - Reference - First Round Consultant Q78

- a) Please explain why there are no anticipated Saskatchewan sourced gas volumes from 2016 to 2022.
- b) Please briefly describe NorthPoint's (or SaskPower's) view of the security of natural gas supply, accessibility to markets, transportation and storage adequacy for the short and medium term, including any problems currently foreseen.

### **Response:**

Q78 refers to volumes SaskPower is currently committed to.

Saskatchewan sourced gas is extremely illiquid past two years forward. Although it is expected that some Saskatchewan supply will be available in the foreseeable future, it is available primarily on the spot and short-term market through counterparty transactions.



#### Round 2 - Consultant Q31 - Reference - First Round Consultant Q80

Please explain in detail the calculations used to determine the consumption volumes reported in the response to IR#80 and distinguish between volumes supplied to SPC owned facilities and those provided under PPA's.

### **Response:**



#### Round 2 - Consultant Q32 - Reference - First Round Consultant Q81

Please confirm that the unit costs for Financial and Physical Hedged volumes indicated in this response will remain unchanged until 2022, regardless of the market prices from time to time in those years, absent any further actions initiated by NorthPoint on behalf of SaskPower.

### **Response:**

The unit costs for the financially and physically hedged volumes indicated in this response are fixed and will remain unchanged until 2022.



#### Round 2 - Consultant Q33 - Reference - First Round Consultant Q83, Q84

- a) Please provide the dollar impact on consumers and on consumer rates as a result of hedging forecasted settlements on an annual basis and on an overall basis from 2005 to 2011.
- b) Please provide the percentage of total F&PP costs that natural gas comprised from 2005 to 2011.
- c) Please demonstrate and discuss the degree to which rate stability and rate volatility was enhanced by the hedging program and the cost per GJ of natural gas purchased necessary to fund the hedging program.
- d) Please undertake to update the response to Q83 and Q84 in conjunction with the September update.

### **Response:**

The dollar impacts to SaskPower on an annual basis for 2005 to 2011 were reflected in the Round 1 Q83 response. The impact to consumers is indeterminate as there is not a direct correlation between the SaskPower hedging costs and the SaskPower Rate Application.



#### Round 2 - Consultant Q33 - Reference - First Round Consultant Q83, Q84

- a) Please provide the dollar impact on consumers and on consumer rates as a result of hedging forecasted settlements on an annual basis and on an overall basis from 2005 to 2011.
- b) Please provide the percentage of total F&PP costs that natural gas comprised from 2005 to 2011.
- c) Please demonstrate and discuss the degree to which rate stability and rate volatility was enhanced by the hedging program and the cost per GJ of natural gas purchased necessary to fund the hedging program.
- d) Please undertake to update the response to Q83 and Q84 in conjunction with the September update.

### **Response:**

The following table indicates the percentage of total F&PP costs that natural gas comprised:

| Year | Gas Costs as % of Total Fuel & Purchased Power |
|------|--|
| 2005 | 56%  |
| 2006 | 60%  |
| 2007 | 57%  |
| 2008 | 55%  |
| 2009 | 52%  |
| 2010 | 41%  |
| 2011 | 40%  |

2010 and 2011 percentages based on IFRS accounting standards.



#### Round 2 - Consultant Q33 - Reference - First Round Consultant Q83, Q84

- a) Please provide the dollar impact on consumers and on consumer rates as a result of hedging forecasted settlements on an annual basis and on an overall basis from 2005 to 2011.
- b) Please provide the percentage of total F&PP costs that natural gas comprised from 2005 to 2011.
- c) Please demonstrate and discuss the degree to which rate stability and rate volatility was enhanced by the hedging program and the cost per GJ of natural gas purchased necessary to fund the hedging program.
- d) Please undertake to update the response to Q83 and Q84 in conjunction with the September update.

### **Response:**

For 2012 as of August 31, a \$1.00 change in the gas price would result in a \$0.55 change in the cost to SaskPower because of gas already in storage as well as physical & financial hedging.

The cost per GJ to fund the hedging program is specific to each year and can only be calculated once the mark to market is realized at the end of each contract. The realized hedging settlement each year would then be divided by the total GJs consumed for that year. For 2011, hedging settlement was (\$31,926,193) and total gas consumed including PPAs was 35,457,504 GJs resulting in approximately \$0.90/GJ purchased to fund the hedging program for 2011.



#### Round 2 - Consultant Q33 - Reference - First Round Consultant Q83, Q84

- a) Please provide the dollar impact on consumers and on consumer rates as a result of hedging forecasted settlements on an annual basis and on an overall basis from 2005 to 2011.
- b) Please provide the percentage of total F&PP costs that natural gas comprised from 2005 to 2011.
- c) Please demonstrate and discuss the degree to which rate stability and rate volatility was enhanced by the hedging program and the cost per GJ of natural gas purchased necessary to fund the hedging program.
- d) Please undertake to update the response to Q83 and Q84 in conjunction with the September update.

### **Response:**

Q83 remains unchanged with the September update.

Q84 AECO C price as well as transportation charges also remain unchanged with the September update.



#### Round 2 - Consultant Q34 - Reference - First Round Consultant Q85

Please provide the transaction details (volumes and costs, including transportation costs, and cost responsibility to TEP) for the various counter parties referenced in this response.

### **Response:**

There are no incremental transportation costs at TEP (from Q85).

The incremental transportation cost for firm transportation from Empress to TEP is \$0.167/GJ.

The incremental transportation cost for firm transportation from NIT to TEP is \$0.206/GJ.



#### Round 2 - Consultant Q35 - Reference - First Round Consultant Q86

- a) Please provide the <u>organizational relationships and contracts</u> that currently exist between SaskPower and NorthPoint.
- b) Does NorthPoint prepare a business plan, and if so, please provide same for 2013..
- c) Please outline the staffing changes that have occurred for 2010, 2011, 2012, and are proposed for 2013.
- d) Please detail the actual revenue and costs for both gas and electricity trading from 2008 to 2011 and forecasted for 2012 and 2013

### **Response:**

NorthPoint is still a wholly owned subsidiary of SaskPower. NorthPoint and SaskPower recently implemented a new services agreement to simplify the structure and reduce the administration between the two companies. A copy of the new services agreement is attached.



#### Round 2 - Consultant Q35 - Reference - First Round Consultant Q86

- a) Please provide the <u>organizational relationships and contracts</u> that currently exist between SaskPower and NorthPoint.
- b) Does NorthPoint prepare a business plan, and if so, please provide same for 2013..
- c) Please outline the staffing changes that have occurred for 2010, 2011, 2012, and are proposed for 2013.
- d) Please detail the actual revenue and costs for both gas and electricity trading from 2008 to 2011 and forecasted for 2012 and 2013

### **Response:**

NorthPoint does prepare a Business Plan and a copy was provided during our September 11 discussions.



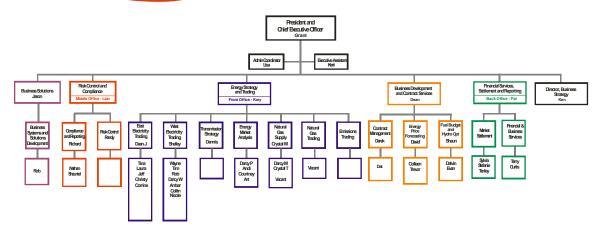
#### Round 2 - Consultant Q35 - Reference - First Round Consultant Q86

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- b) Does NorthPoint prepare a business plan, and if so, please provide same for 2013..
- c) Please outline the staffing changes that have occurred for 2010, 2011, 2012, and are proposed for 2013.
- d) Please detail the actual revenue and costs for both gas and electricity trading from 2008 to 2011 and forecasted for 2012 and 2013.

### **Response:**

As discussed at the meeting on September 11, the following pictures were the ones that were handed out.



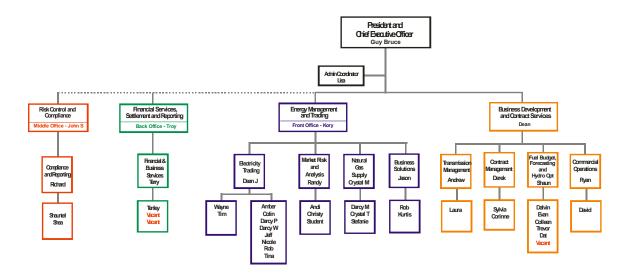


Date: March 23, 2010

NorthPoint FTE count has been reduced from just over 50 down to 39. The primary change is that Settlement (Back Office) and Compliance (Middle Office) now report directly into SaskPower's Finance department.







Date: July 1, 2012



#### Round 2 - Consultant Q35 - Reference - First Round Consultant Q86

- a) Please provide the <u>organizational relationships and contracts</u> that currently exist between SaskPower and NorthPoint.
- b) Does NorthPoint prepare a business plan, and if so, please provide same for 2013..
- c) Please outline the staffing changes that have occurred for 2010, 2011, 2012, and are proposed for 2013.
- d) Please detail the actual revenue and costs for both gas and electricity trading from 2008 to 2011 and forecasted for 2012 and 2013.

#### **Response:**

The requested information is contained within the financial summary statements below:

# NorthPoint Energy Solutions Inc. Financial Summary Year Ending December 31

| Proprietary Trading Contribution (000's) | 2008          | 2009         | 2010         | 2011         | 2012<br>recasted) | 2013         |
|--|---------------|--------------|--------------|--------------|-------------------|--------------|
| Electricity trading                      |               |              |              |              |                   |              |
| Electricity revenues                     | \$<br>126,956 | \$<br>70,943 | \$<br>35,326 | \$<br>41,479 | \$<br>59,500      | \$<br>42,500 |
| Electricity costs                        | 110,014       | 65,281       | 31,896       | 27,877       | 42,600            | 30,500       |
| Total contribution                       | 16,942        | 5,662        | 3,430        | 13,602       | 16,900            | 12,000       |
| Total contribution %                     | 13.3%         | 8.0%         | 9.7%         | 32.8%        | 28.4%             | 28.2%        |

| Export Contributions & Import Savings (000's) | 2008      | 2009     | 2010     | 2011      | 2012<br>(forecasted) | 2013      |
|---|-----------|----------|----------|-----------|----------------------|-----------|
| Export contributions                          |           |          |          |           |                      |           |
| Total export contribution                     | 17,194    | 5,682    | 5,107    | 21,400    | 21,000               | 12,300    |
| Import savings                                |           |          |          |           |                      |           |
| Total import contribution                     | 10,962    | 2,461    | 4,231    | 3,700     | (3,500)              | 4,000     |
| Total contributions and savings               | \$ 28,156 | \$ 8,143 | \$ 9,338 | \$ 25,100 | \$ 17,500            | \$ 16,300 |

| Gas Optimization Economic Contribution (000's) | 2008         | 2009         | 2010         | 2011         | 2012<br>recasted) | 2013         |
|--|--------------|--------------|--------------|--------------|-------------------|--------------|
| Total economic contribution                    | \$<br>34     | \$<br>134    | \$<br>192    | \$<br>530    | \$<br>1,123       | \$<br>1,100  |
|  |              |              |              |              |                   |              |
| Total NorthPoint Economic Contribution         | \$<br>45,132 | \$<br>13,939 | \$<br>12,960 | \$<br>39,232 | \$<br>35,523      | \$<br>29,400 |



#### Round 2 - Consultant Q36 - Reference - First Round Consultant Q90

Please explain, in general terms, the reasons for the differential between the unit costs for coal at the Poplar River and the Boundary Dam sites, and indicate if there are any potential new coal sites within Saskatchewan which could be utilized in the mid-term.

### **Response:**



#### Round 2 - Consultant Q37 - Reference - First Round Consultant Q93

Please provide the total annual costs for water rentals, and describe the basis of determining annual unit rates and the driving force for the relatively consistent increases year over year.

### **Response:**

Annual water rental costs.

| Year   | Water Rentals (\$ millions) |
|--------|-----------------------------|
| 2010   | \$15.8                      |
| 2011   | \$20.0                      |
| 2012*  | \$18.1                      |
| 2013** | \$15.8                      |

<sup>\*</sup>Forecast as of June 30, 2012

The annual unit rates are set by the Saskatchewan Watershed Authority (SWA) through their budgeting process with the Provincial Treasury Board and are subsequently approved by Cabinet. The rate increases reflect SWA's inflationary costs to operate.

<sup>\*\*</sup>Forecast as of September Update



Round 2 - Consultant Q38 - Reference - First Round Consultant Q94

Please explain how hydraulic median flows are determined and defined.

## **Response:**

The hydraulic median flows are based on the input flows for the feasibility study of the Meridian Dam. The Meridian Dam was an Alberta water supply project for irrigation.

The median hydraulic flow is the flow over the study period where half the flows are less and half the flows are greater than the median flow, calculated on an annual basis.



## Round 2 - Consultant Q39 - Reference - First Round Consultant Q98

Please provide a schedule showing revenues (and offsetting costs, if any) received relative to OATT transactions.

## **Response:**

This response contains confidential information. A confidential response has been provided to the SRRP.



### Round 2 - Consultant Q40 - Reference - First Round Consultant Q99

- a) Please define Wind capacity factors and indicate if they differ from Wind utilization factors.
- b) Please describe how these factors are used to estimate the amount of wind generation included in annual Fuel and Purchase Power forecasts, and whether these factors differ for each of SaskPower's wind facilities.

### **Response:**

Capacity factor is equal to the ratio of the actual energy produced by a facility over the energy it would have produced if operated continuously at its rated capacity. It is the term commonly used by SaskPower's supply planning group to denote the energy output from power generation facilities including wind power facilities.

The term Wind utilization factor is not commonly used by SaskPower for supply planning purposes but it is believed to mean the same as the term Capacity Factor.



### Round 2 – Consultant Q40 – Reference – First Round Consultant Q99

- a) Please define Wind capacity factors and indicate if they differ from Wind utilization factors.
- b) Please describe how these factors are used to estimate the amount of wind generation included in annual Fuel and Purchase Power forecasts, and whether these factors differ for each of SaskPower's wind facilities.

### **Response:**

SaskPower uses a combination of historical wind data and actual energy production from operating facilities to forecast the expected energy production (Capacity Factor) from operating wind power facilities. The fuel and purchased Power budgets are then derived from this forecast.

Since actual wind power production varies from site to site, the Capacity Factor applied to estimate future wind power production is different for each wind facility.



### Round 2 – Consultant Q41 – Reference – First Round Consultant Q102, Q103, Q104

- a) Please discuss to what extent the definition of normal year weather has changed, pursuant to the review of load forecasting methodology by Itron Inc.
- b) Please provide a further description and provide an illustrative example of '...the quantification of weather relationships using 12 years of hourly data (1997 to 2008) and leveraging a 30 year average normal weather pattern to determine daily, monthly and annual weather normalized values for energy requirements and peaks."
- c) Please discuss whether SaskPower considers only its industrial load and line losses to be non-weather sensitive, or describe the types of loads served by SaskPower that are subject to variations due to weather normalization.
- d) Please provide a historical record of the weather normalized and actual use per customer for each customer class from 2001 to 2011.
- e) The Itron Report makes many recommendations, while the response to Q104 only addresses 4 of them (see also Q107). Please discuss SPC planned actions for the rest of the recommendations.
- f) Please provide a tabular summary showing how the various elements of SaskPower's load forecasting compare to the industry, using the comparative utilities surveyed by Itron.

## **Response:**

After discussion with the Saskatchewan Rate Review Panel's consultant, it was decided that no response is required.



### Round 2 - Consultant Q41 - Reference - First Round Consultant Q102, Q103, Q104

- a) Please discuss to what extent the definition of normal year weather has changed, pursuant to the review of load forecasting methodology by Itron Inc.
- b) Please provide a further description and provide an illustrative example of '...the quantification of weather relationships using 12 years of hourly data (1997 to 2008) and leveraging a 30 year average normal weather pattern to determine daily, monthly and annual weather normalized values for energy requirements and peaks."
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- f) Please provide a tabular summary showing how the various elements of SaskPower's load forecasting compare to the industry, using the comparative utilities surveyed by ltron.

## **Response:**

This reference, from the Itron report on SaskPower's Load Forecasting Methodology Review, refers to the process used by SaskPower at the time of the review to normalize actual energy sales and losses. The process determines how the actual load and losses for the year should be adjusted to reflect what they would have been with average weather conditions for each day of the year.

The process uses the SPSS (originally, Statistical Package for the Social Sciences) program to develop a relationship between the daily energy requirements and weather data - temperature (or heating degree day or cooling degree day), wind speed (or wind chill), humidity etc. At the time of the review, SaskPower used 12 years of hourly system energy requirements (rolled up to daily energy requirements), the actual daily weather conditions for the 12 year period and the average daily weather conditions calculated over a 30 year period. The result is the total system weather normalization (energy that is added to or subtracted) to the actual energy requirements for each day for each of the 12 years. The weather normalization for a particular year could then be summarized on a monthly or annual basis.

An example of the normalization result from the year 2006 (before the Itron review) is as follows:



### 2006 Normalized Energy (GWh)

### **Total System**

|                        | Unbilled  | Weather | Normalized |
|------------------------|-----------|---------|------------|
| Customer Class         | Allocated | Effect  | Energy     |
| Power Customers        | 6,662.4   | 0.0     | 6,662.4    |
| Commercial             | 3,182.5   | (6.4)   | 3,176.1    |
| Streetlights           | 56.1      | 0.0     | 56.1       |
| Residential            | 2,530.5   | 3.2     | 2,533.7    |
| Oilfield               | 2,399.3   | 0.0     | 2,399.3    |
| Farm                   | 1,271.7   | (3.2)   | 1,268.5    |
| Reseller               | 1,293.5   | (4.0)   | 1,289.4    |
| Corporate Use          | 108.8     | (0.2)   | 108.6      |
|                        |           |         |            |
| Total Sales            | 17,504.9  | (10.7)  | 17,494.2   |
|                        |           |         |            |
| Losses and Unaccounted | 1,803.5   | (9.2)   | 1,794.3    |
|                        |           | , ,     |            |
| Energy Requirements    | 19,308.4  | (19.9)  | 19,288.5   |



### Round 2 - Consultant Q41 - Reference - First Round Consultant Q102, Q103, Q104

- a) Please discuss to what extent the definition of normal year weather has changed, pursuant to the review of load forecasting methodology by Itron Inc.
- b) Please provide a further description and provide an illustrative example of '...the quantification of weather relationships using 12 years of hourly data (1997 to 2008) and leveraging a 30 year average normal weather pattern to determine daily, monthly and annual weather normalized values for energy requirements and peaks."
- c) Please discuss whether SaskPower considers only its industrial load and line losses to be non-weather sensitive, or describe the types of loads served by SaskPower that are subject to variations due to weather normalization.
- d) Please provide a historical record of the weather normalized and actual use per customer for each customer class from 2001 to 2011.
- e) The Itron Report makes many recommendations, while the response to Q104 only addresses 4 of them (see also Q107). Please discuss SPC planned actions for the rest of the recommendations.
- f) Please provide a tabular summary showing how the various elements of SaskPower's load forecasting compare to the industry, using the comparative utilities surveyed by Itron.

## **Response:**

Up until 2010 SaskPower could only prepare weather normalization studies on a total system basis and we assumed weather normalization should be applied to residential, farm, commercial, corporate, and reseller sales and distribution losses. Please refer to the response to 41b. In recent years, as a result of our class by class normalization studies, we have added the oilfield load which is also impacted by weather but to a lesser extent compared to the other classes.



### Round 2 - Consultant Q41 - Reference - First Round Consultant Q102, Q103, Q104

- a) Please discuss to what extent the definition of normal year weather has changed, pursuant to the review of load forecasting methodology by Itron Inc.
- b) Please provide a further description and provide an illustrative example of '...the quantification of weather relationships using 12 years of hourly data (1997 to 2008) and leveraging a 30 year average normal weather pattern to determine daily, monthly and annual weather normalized values for energy requirements and peaks."
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- d) Please provide a historical record of the weather normalized and actual use per customer for each customer class from 2001 to 2011.
- e) The Itron Report makes many recommendations, while the response to Q104 only addresses 4 of them (see also Q107). Please discuss SPC planned actions for the rest of the recommendations.
- f) Please provide a tabular summary showing how the various elements of SaskPower's load forecasting compare to the industry, using the comparative utilities surveyed by Itron.

## **Response:**

#### Residential Use Per Customer - Actual

| Action and the control of the contro |                 |               |                |              |                |  |  |
|--|-----------------|---------------|----------------|--------------|----------------|--|--|
|  |                 |               |                | Weather      | Weather        |  |  |
|  | Actual Customer | Actual Energy | Actual Use Per | Normalized   | Normalized Use |  |  |
|  | Count           | (MWh)         | Customer       | Energy (MWh) | Per Customer   |  |  |
| 2001   | 299,313         | 2,386,200     | 7.97           | 2,389,300    | 7.98           |  |  |
| 2002   | 300,763         | 2,456,900     | 8.17           | 2,441,600    | 8.12           |  |  |
| 2003   | 302,897         | 2,508,900     | 8.28           | 2,470,600    | 8.16           |  |  |
| 2004   | 305,472         | 2,483,800     | 8.13           | 2,496,700    | 8.17           |  |  |
| 2005   | 308,221         | 2,513,800     | 8.16           | 2,523,200    | 8.19           |  |  |
| 2006   | 309,551         | 2,530,500     | 8.17           | 2,533,700    | 8.19           |  |  |
| 2007   | 316,733         | 2,642,900     | 8.34           | 2,624,400    | 8.29           |  |  |
| 2008   | 322,408         | 2,721,200     | 8.44           | 2,702,700    | 8.38           |  |  |
| 2009   | 329,046         | 2,864,800     | 8.71           | 2,844,800    | 8.65           |  |  |
| 2010   | 334,780         | 2,882,400     | 8.61           | 2,863,800    | 8.55           |  |  |
| 2011   | 346,312         | 3,006,000     | 8.68           | 2,986,500    | 8.62           |  |  |



#### Commercial Use Per Customer - Actual

|      |                 |               |                | Weather      | Weather        |
|------|-----------------|---------------|----------------|--------------|----------------|
|      | Actual Customer | Actual Energy | Actual Use Per | Normalized   | Normalized Use |
|      | Count           | (MWh)         | Customer       | Energy (MWh) | Per Customer   |
| 2001 | 52,112          | 3,052,600     | 58.6           | 3,052,600    | 58.6           |
| 2002 | 51,963          | 3,080,900     | 59.3           | 3,080,900    | 59.3           |
| 2003 | 52,175          | 3,150,500     | 60.4           | 3,098,300    | 59.4           |
| 2004 | 52,508          | 3,132,200     | 59.7           | 3,155,500    | 60.1           |
| 2005 | 52,604          | 3,200,100     | 60.8           | 3,215,200    | 61.1           |
| 2006 | 52,869          | 3,238,800     | 61.3           | 3,232,200    | 61.1           |
| 2007 | 53,421          | 3,268,100     | 61.2           | 3,242,900    | 60.7           |
| 2008 | 53,911          | 3,287,000     | 61.0           | 3,258,800    | 60.4           |
| 2009 | 54,525          | 3,406,800     | 62.5           | 3,373,100    | 61.9           |
| 2010 | 54,945          | 3,390,900     | 61.7           | 3,384,500    | 61.6           |
| 2011 | 55,501          | 3,447,500     | 62.1           | 3,498,900    | 63.0           |

#### Farm Use Per Customer - Actual

|      |                 |               |                | Weather      | Weather        |  |
|------|-----------------|---------------|----------------|--------------|----------------|--|
|      | Actual Customer | Actual Energy | Actual Use Per | Normalized   | Normalized Use |  |
|      | Count           | (MWh)         | Customer       | Energy (MWh) | Per Customer   |  |
| 2001 | 67,572          | 1,385,700     | 20.5           | 1,384,600    | 20.5           |  |
| 2002 | 67,355          | 1,366,900     | 20.3           | 1,353,300    | 20.1           |  |
| 2003 | 67,025          | 1,441,900     | 21.5           | 1,417,600    | 21.2           |  |
| 2004 | 66,424          | 1,349,800     | 20.3           | 1,359,800    | 20.5           |  |
| 2005 | 65,758          | 1,337,000     | 20.3           | 1,343,600    | 20.4           |  |
| 2006 | 64,601          | 1,271,700     | 19.7           | 1,268,500    | 19.6           |  |
| 2007 | 62,841          | 1,329,000     | 21.1           | 1,321,700    | 21.0           |  |
| 2008 | 62,553          | 1,305,800     | 20.9           | 1,298,600    | 20.8           |  |
| 2009 | 61,993          | 1,338,100     | 21.6           | 1,330,600    | 21.5           |  |
| 2010 | 61,404          | 1,291,600     | 21.0           | 1,316,500    | 21.4           |  |
| 2011 | 60,871          | 1,298,300     | 21.3           | 1,302,600    | 21.4           |  |

#### Oil Use Per Customer - Actual

| 0 000 1 0 04444444 |                 |               |                |              |                |  |  |  |  |
|--------------------|-----------------|---------------|----------------|--------------|----------------|--|--|--|--|
|                    |                 |               |                | Weather      | Weather        |  |  |  |  |
|                    | Actual Customer | Actual Energy | Actual Use Per | Normalized   | Normalized Use |  |  |  |  |
|                    | Count           | (MWh)         | Customer       | Energy (MWh) | Per Customer   |  |  |  |  |
| 2001               | 10,787          | 1,869,000     | 173.3          | 1,869,000    | 173.3          |  |  |  |  |
| 2002               | 10,951          | 1,970,200     | 179.9          | 1,970,200    | 179.9          |  |  |  |  |
| 2003               | 11,058          | 2,081,800     | 188.3          | 2,081,800    | 188.3          |  |  |  |  |
| 2004               | 11,259          | 2,164,800     | 192.3          | 2,164,800    | 192.3          |  |  |  |  |
| 2005               | 11,508          | 2,263,900     | 196.7          | 2,263,900    | 196.7          |  |  |  |  |
| 2006               | 12,045          | 2,399,300     | 199.2          | 2,399,300    | 199.2          |  |  |  |  |
| 2007               | 12,805          | 2,541,400     | 198.5          | 2,553,500    | 199.4          |  |  |  |  |
| 2008               | 13,453          | 2,705,000     | 201.1          | 2,717,700    | 202.0          |  |  |  |  |
| 2009               | 14,174          | 2,742,500     | 193.5          | 2,742,000    | 193.5          |  |  |  |  |
| 2010               | 14,756          | 2,871,300     | 194.6          | 2,874,700    | 194.8          |  |  |  |  |
| 2011               | 15,015          | 2,900,800     | 193.2          | 2,905,100    | 193.5          |  |  |  |  |



#### Power Use Per Customer - Actual

|      |                 |               |                | Weather      | Weather        |  |
|------|-----------------|---------------|----------------|--------------|----------------|--|
|      | Actual Customer | Actual Energy | Actual Use Per | Normalized   | Normalized Use |  |
|      | Count           | (MWh)         | Customer       | Energy (MWh) | Per Customer   |  |
| 2001 | 81              | 5,930,000     | 73,210         | 5,930,000    | 73,210         |  |
| 2002 | 81              | 5,697,800     | 70,343         | 5,697,800    | 70,343         |  |
| 2003 | 85              | 6,273,900     | 73,811         | 6,273,900    | 73,811         |  |
| 2004 | 84              | 6,504,300     | 77,432         | 6,504,200    | 77,431         |  |
| 2005 | 78              | 6,552,000     | 84,000         | 6,553,200    | 84,015         |  |
| 2006 | 78              | 6,662,400     | 85,415         | 6,662,400    | 85,415         |  |
| 2007 | 78              | 6,859,700     | 87,945         | 6,859,700    | 87,945         |  |
| 2008 | 78              | 6,897,600     | 88,431         | 6,897,600    | 88,431         |  |
| 2009 | 82              | 6,138,700     | 74,862         | 6,138,700    | 74,862         |  |
| 2010 | 91              | 6,926,700     | 76,118         | 6,926,700    | 76,118         |  |
| 2011 | 97              | 7,318,700     | 75,451         | 7,318,700    | 75,451         |  |

#### Reseller Use Per Customer - Actual

|      |                 |               |                | Weather      | Weather        |  |
|------|-----------------|---------------|----------------|--------------|----------------|--|
|      | Actual Customer | Actual Energy | Actual Use Per | Normalized   | Normalized Use |  |
|      | Count           | (MWh)         | Customer       | Energy (MWh) | Per Customer   |  |
| 2001 | 2               | 1,246,000     | 623,000        | 1,244,400    | 622,200        |  |
| 2002 | 2               | 1,262,800     | 631,400        | 1,250,500    | 625,250        |  |
| 2003 | 2               | 1,287,300     | 643,650        | 1,265,800    | 632,900        |  |
| 2004 | 2               | 1,260,700     | 630,350        | 1,270,300    | 635,150        |  |
| 2005 | 2               | 1,265,800     | 632,900        | 1,272,100    | 636,050        |  |
| 2006 | 2               | 1,293,500     | 646,750        | 1,289,400    | 644,700        |  |
| 2007 | 2               | 1,286,800     | 643,400        | 1,277,800    | 638,900        |  |
| 2008 | 2               | 1,274,200     | 637,100        | 1,265,700    | 632,850        |  |
| 2009 | 2               | 1,274,400     | 637,200        | 1,264,100    | 632,050        |  |
| 2010 | 2               | 1,254,300     | 627,150        | 1,261,700    | 630,850        |  |
| 2011 | 2               | 1,260,600     | 630,300        | 1,252,200    | 626,100        |  |

#### Corporate Use Per Customer - Actual

|      |                 | •             |                | Weather      | Weather        |  |
|------|-----------------|---------------|----------------|--------------|----------------|--|
|      | Actual Customer | Actual Energy | Actual Use Per | Normalized   | Normalized Use |  |
|      | Count           | (MWh)         | Customer       | Energy (MWh) | Per Customer   |  |
| 2001 | 210             | 112,000       | 533.3          | 111,900      | 532.9          |  |
| 2002 | 209             | 125,600       | 601.0          | 124,100      | 593.8          |  |
| 2003 | 209             | 122,300       | 585.2          | 120,300      | 575.6          |  |
| 2004 | 212             | 111,300       | 525.0          | 112,200      | 529.2          |  |
| 2005 | 212             | 103,100       | 486.3          | 103,600      | 488.7          |  |
| 2006 | 212             | 108,800       | 513.2          | 108,600      | 512.3          |  |
| 2007 | 212             | 108,100       | 509.9          | 107,700      | 508.0          |  |
| 2008 | 212             | 108,300       | 510.8          | 106,900      | 504.2          |  |
| 2009 | 212             | 107,800       | 508.5          | 104,600      | 493.4          |  |
| 2010 | 212             | 105,500       | 497.6          | 106,900      | 504.2          |  |
| 2011 | 212             | 109,700       | 517.5          | 108,800      | 513.2          |  |



### Round 2 - Consultant Q41 - Reference - First Round Consultant Q102, Q103, Q104

- a) Please discuss to what extent the definition of normal year weather has changed, pursuant to the review of load forecasting methodology by Itron Inc.
- b) Please provide a further description and provide an illustrative example of '...the quantification of weather relationships using 12 years of hourly data (1997 to 2008) and leveraging a 30 year average normal weather pattern to determine daily, monthly and annual weather normalized values for energy requirements and peaks."
- c) Please discuss whether SaskPower considers only its industrial load and line losses to be non-weather sensitive, or describe the types of loads served by SaskPower that are subject to variations due to weather normalization.
- d) Please provide a historical record of the weather normalized and actual use per customer for each customer class from 2001 to 2011.
- e) The Itron Report makes many recommendations, while the response to Q104 only addresses 4 of them (see also Q107). Please discuss SPC planned actions for the rest of the recommendations.
- f) Please provide a tabular summary showing how the various elements of SaskPower's load forecasting compare to the industry, using the comparative utilities surveyed by ltron.

### **Response:**

To simplify the original response SaskPower did not include the Itron recommendations which we were already being done. The following summarizes all of the Itron recommendations made in section 4 (pages 47 through 49) of the report.

#### 4.1 Weather Normalization

In addition to the response in Q107 part 1, SaskPower was already using daily system normalization.

#### 4.2 Residential Methodology

In addition to the response in Q107 part 2, SaskPower was already developing a per unit customer calculation in development of the residential load forecast.

- 4.3 Commercial Methodology As per the response in Q107 part 3.
- 4.4 Power Accounts Methodology As per the response in Q107 part 4.
- 4.5 Oilfields Methodology



We are already tracking power class and oilfield customers over time and if there is a bias towards over prediction we discuss with the individual Account Managers.

### 4.6 Peak Methodology

SaskPower is already using the Approach 1- Coincident Peak Factor Approach as recommended in the Itron report and we check results for select years using Approach 2 – System Level Buildup Approach. We will contemplate using approach 2 fully once we have installed load forecasting software which will greatly simplify the development of future year loadshapes.

We did not move away from the current potential peak methodology which determines the peak load if SaskPower has cold weather in the first 3 weeks of December. Discussions with SaskPower Planning staff indicated we cannot stop providing this information. We will, however, prepare both a most likely peak and potential peak load forecast in the future and provide both the potential peak and most likely peak forecasts to SaskPower Planning staff.

The recommendations for industry (sector) level coincident peak load factors for power class and the large oilfield customers is seen as a labour saving / simplification initiative with no impact on the results. SaskPower currently forecasts the peak load of all of these customers individually.



### Round 2 – Consultant Q41 – Reference – First Round Consultant Q102, Q103, Q104

- a) Please discuss to what extent the definition of normal year weather has changed, pursuant to the review of load forecasting methodology by Itron Inc.
- b) Please provide a further description and provide an illustrative example of '...the quantification of weather relationships using 12 years of hourly data (1997 to 2008) and leveraging a 30 year average normal weather pattern to determine daily, monthly and annual weather normalized values for energy requirements and peaks."
- c) Please discuss whether SaskPower considers only its industrial load and line losses to be non-weather sensitive, or describe the types of loads served by SaskPower that are subject to variations due to weather normalization.
- d) Please provide a historical record of the weather normalized and actual use per customer for each customer class from 2001 to 2011.
- e) The Itron Report makes many recommendations, while the response to Q104 only addresses 4 of them (see also Q107). Please discuss SPC planned actions for the rest of the recommendations.
- f) Please provide a tabular summary showing how the various elements of SaskPower's load forecasting compare to the industry, using the comparative utilities surveyed by Itron.

### **Response:**

Please find below which summarizes the industry survey results as well as SaskPower response to the various forecasting elements.

| <b>Forecast Element</b> | Survey Results                               | SaskPower         |
|-------------------------|--|-------------------|
| Focal Time              | 11% use forecast for operational             | Partially         |
| Range?                  | 100% use forecast for Financial (Short-Term) | Yes               |
|                         | 100% use for Planning (Long-Term)            | Yes               |
| Forecast Outputs?       | 100% forecast Energy sales                   | Yes               |
|                         | 100% forecast Peak                           | Yes               |
|                         | 67% forecast 8760 hour load shapes           | Yes               |
| Regulatory              | Examine but don't mandate change in          | Examine but don't |
| Influence?              | methodology.                                 | mandate change in |
|                         |  | methodology       |



| <b>Forecast Element</b> | Survey Results                | SaskPower  |
|-------------------------|-------------------------------|--|
| Meter Read              | Residential- 78% monthly      | Residential- 0% monthly  |
| Frequency?              | Commercial – 100% monthly     | Commercial – most monthly  |
|                         | Industrial – 100% monthly     | Industrial – 100% monthly.                                       |
|                         |                               | In the near future, all customers will be read monthly with AMI. |
| How many years          | 20% use 10 to 14 years        | 30 years   |
| used to define          | 2% use 15 to 19 Years         |  |
| normal weather?         | 27% use 20 to 24 years        |  |
|                         | 4% use 25 to 29 years         |  |
|                         | 47% use 30 or more years      |  |
| Factors used for        | 100% use temperature          | Heating degree days (temp)                                       |
| weather                 | 10% use cloud cover           | Wind-chill / wind speed  |
| normalization –         | 8% use humidity               | Humidity   |
| winter?                 | 14% use wind speed            |  |
|                         | 4% use other                  |  |
| Factors used for        | 100% use temperature          | Cooling degree days (temp)                                       |
| weather                 | 10% use cloud cover           | Wind   |
| normalization –         | 32% use humidity              | Humidity   |
| summer?                 | 8% use wind speed             |  |
|                         | 6% use other                  |  |
| How often do you        | 14% every month               | Every year   |
| update                  | 2% every quarter              |  |
| normalization           | 2% every 6 months             |  |
| models?                 | 62% every year                |  |
|                         | 4% every 2 years              |  |
|                         | 2% every 3 years              |  |
|                         | 4% every 5 years              |  |
|                         | 10% other                     |  |
| Economic forecast       | 44% - Moody's                 | Generated internally -   |
| provider (estimated     | 31% - Global Insight          | shared economic model  |
| from bar graph)         | 23% - Generated internally    | with the Saskatchewan  |
|                         | 13% - Local commercial vendor | government.  |
|                         | 8% - Local University         |  |
|                         | 8% - Woods and Poole          |  |
|                         | 3% -Blue Chip                 |  |
|                         | 16% - Other                   |  |



| <b>Forecast Element</b> | Survey Results                         | SaskPower                   |
|-------------------------|--|-----------------------------|
| Residential –           | 44.4% econometric                      | End use                     |
| Modelling Method        | 33.3% statistically adjusted end use   |                             |
|                         | 11.1% end use                          |                             |
|                         | 11.1% blended                          |                             |
| Residential -           | 68% use households and population      | # of households             |
| Average Economic        | 25% use real personal income           |                             |
| Weights                 | 7% use other                           |                             |
| Commercial –            | 77.8% econometric                      | Econometric                 |
| Modelling Method        | 11.1% statistically adjusted end use   |                             |
|                         | end use                                |                             |
|                         | 11.1% blended                          |                             |
| Commercial- Model       | 77.8% model sales directly             | Model sales directly        |
| sales directly          | 22.2% use # of customers multiplied by |                             |
|                         | UPC                                    |                             |
| Commercial -            | 41% use real personal income           | Financial variables –       |
| Average Economic        | 33% use financial variables            | commercial GDP drivers.     |
| Weights                 | 15% demographic                        |                             |
|                         | 11 use other                           |                             |
| Industrial –            | 100% model largest customers           | Model all industrial        |
| Modelling Method        | individually and the residual using an | customers individually      |
|                         | econometric model                      |                             |
| Industrial - Average    | 37% use employment variables income    | Individual customer         |
| Economic Weights        | 36% use financial variables            | forecasts                   |
|                         | 10% individual customer forecasts      |                             |
|                         | 17% use other                          |                             |
| Peak Forecast           | 59% econometric                        | Load factor and system load |
| Method                  | 26% system load buildup                | buildup to confirm.         |
|                         | 8% load factor                         |                             |
|                         | 7% other                               |                             |



## Round 2 – Consultant Q42 – Reference – First Round Consultant Q106

Please indicate, for each of the 10 Customer classes, the difference in normal weather load, minimum year load and maximum year load.

## **Response:**

After discussion with the Saskatchewan Rate Review Panel's consultant it was decided that no response is required.



### Round 2 - Consultant Q43 - Reference - First Round Consultant Q108

- a) Please provide a five year historic record of SaskPower's original customer and energy estimates and actual results for the 2 Resellers, from 2006 to 2011, and estimates for 2012 and 2013.
- b) Please discuss how SaskPower determines the Resellers' peak loads

## **Response:**

As discussed previously, due to franchise limitations SaskPower currently uses energy forecasts provided by the resellers.

Resellers – 5 Year Historic

|        | <u>Saskatoon</u> |         |          | Swift Current |               |        | <u>Total</u> |          |         |         |          |          |
|--------|------------------|---------|----------|---------------|---------------|--------|--------------|----------|---------|---------|----------|----------|
|        | Budget           | Actual  | Variance | Variance      | <b>Budget</b> | Actual | Variance     | Variance | Budget  | Actual  | Variance | Variance |
|        | (GW.h)           | (GW.h)  | (GW.h)   | %             | (GW.h)        | (GW.h) | (GW.h)       | %        | (GW.h)  | (GW.h)  | (GW.h)   | %        |
| 2006   | 1,135.0          | 1,157.3 | 22.3     | 2.0%          | 134.2         | 136.1  | 1.9          | 1.4%     | 1,269.2 | 1,293.4 | 24.2     | 1.9%     |
| 2007   | 1,152.4          | 1,151.1 | (1.3)    | -0.1%         | 137.8         | 135.7  | (2.1)        | -1.5%    | 1,290.2 | 1,286.8 | (3.4)    | -0.3%    |
| 2008   | 1,217.9          | 1,136.2 | (81.7)   | -6.7%         | 141.1         | 138.1  | (3.0)        | -2.1%    | 1,359.0 | 1,274.3 | (84.7)   | -6.2%    |
| 2009   | 1,217.6          | 1,132.9 | (84.7)   | -7.0%         | 153.6         | 141.6  | (12.0)       | -7.8%    | 1,371.2 | 1,274.5 | (96.7)   | -7.1%    |
| 2010   | 1,141.5          | 1,117.2 | (24.3)   | -2.1%         | 141.1         | 137.1  | (4.0)        | -2.8%    | 1,282.6 | 1,254.3 | (28.3)   | -2.2%    |
| 2011   | 1,132.9          | 1,114.2 | (18.7)   | -1.7%         | 144.4         | 138.1  | (6.3)        | -4.4%    | 1,277.3 | 1,252.3 | (25.0)   | -2.0%    |
| 2012 F | 1,134.5          |         |          |               | 139.5         |        |              |          | 1,274.0 |         |          |          |
| 2013 F | 1,134.7          |         |          |               | 140.2         |        |              |          | 1,274.9 |         |          |          |



### Round 2 - Consultant Q43 - Reference - First Round Consultant Q108

- a) Please provide a five year historic record of SaskPower's original customer and energy estimates and actual results for the 2 Resellers, from 2006 to 2011, and estimates for 2012 and 2013.
- b) Please discuss how SaskPower determines the Resellers' peak loads.

## **Response:**

SaskPower determines the Reseller Peak Loads by applying historical coincident peak load factors to the normalized energy sales forecast.



### Round 2 - Consultant Q44 - Reference - First Round Consultant Q109

The second quarter, 2012 load forecast shows 200 non-grid customers. Please indicate where these customers are located, by major site, if applicable and discuss whether any recent economic analyses have been conducted related to attaching these customers to the grid. If so provide details. If not explain why not.

### **Response:**

Non-grid customers are residential and commercial customers located in Creighton, Denare Beach, Sturgeon Landing and the surrounding area (Manitoba Hydro supply) as well as residential and commercial customers in Kinoosao (local diesel generation).

For the Creighton area, a recent analysis was completed because the contract with Manitoba Hydro to supply electricity to the Creighton area was up for renewal. For SaskPower to serve the load from an existing SaskPower substation, approximately 110 km of 25kV distribution line would need to be constructed at an estimated cost of between \$8-12 million. Another alternative considered was the installation of a substation at Creighton near the end of the I1F/I2F circuits. The estimated capital cost of this substation is \$4-6 million. The other factor is the cost of energy provided by Manitoba Hydro. The rate paid to Manitoba Hydro for supply to the Creighton area is approximately 1 cent per kWh less than SaskPower's marginal energy rate. For these reasons, it is more economical to serve the Creighton area through a contract with Manitoba Hydro.

For Kinoosao, there are no SaskPower facilities nearby, so a review was initiated to serve Kinoosao from the closest Manitoba Hydro facility. This option would require the construction of 98km of distribution line at an estimated cost of \$4.5 million. The 2011 annual operating cost for the diesel generators was \$223,900 and the annualized cost of the new line (not including the additional maintenance costs required and the purchase of energy from Manitoba Hydro), is approximately \$370,000. For these reasons it is more economical to continue to serve the load at Kinoosao using the existing diesel generation.



### Round 2 – Consultant Q45 – Reference – First Round Consultant Q111

Please re-file the table included in this response to reflect the fuel mix for generation to reflect the update to the Application.

### **Response:**

The following table is the fuel mix table from Q111 in the previous round of questions with the updated 2013 fuel mix.

| Fuel Mix Type                         | Act    | tual   | Fore   | cast*  |
|---------------------------------------|--------|--------|--------|--------|
| (in GWh)                              | 2010   | 2011   | 2012   | 2013   |
| Gas                                   | 3,683  | 4,032  | 4,749  | 7,200  |
| Coal                                  | 12,038 | 11,614 | 11,694 | 11,777 |
| Imports                               | 518    | 502    | 652    | 284    |
| Hydro                                 | 3,866  | 4,641  | 4,136  | 3,327  |
| Environmentally Preferred Power (EPP) | 148    | 139    | 149    | 149    |
| Wind                                  | 507    | 682    | 683    | 728    |
| Other                                 | 1      | 1      | 1      | 1      |
| Total                                 | 20,759 | 21,611 | 22,063 | 23,464 |

<sup>\*2012</sup> Forecast based on Forecast as of June 30, 2012

<sup>\*2013</sup> Forecast based on 2013 Updated Application



### Round 2 - Consultant Q46 - Reference - First Round Consultant Q114

Please indicate the estimated annual energy savings as a result of this program.

## **Response:**

The annual estimated energy savings for the Residential Refrigerator Recycle Program are outline below.

|      |       | 2012     | 2013     |
|------|-------|----------|----------|
| 2010 | 2011  | Estimate | Estimate |
| MWh  | MWh   | MWh      | MWh      |
| 590  | 8,500 | 8,500    | 8,500    |



### Round 2 - Consultant Q47 - Reference - First Round Consultant Q124

Please re-file the schedule showing 2010 numbers using GAAP.

## **Response:**

| Plant in Service Continuity Schedule |   |             |             |             |             |  |  |
|--------------------------------------|---|-------------|-------------|-------------|-------------|--|--|
| (\$000)                              |   |             |             |             |             |  |  |
|                                      | 1 40  | 0044        | 0040 IEDO   | 0040 0440   |             |  |  |
|                                      | Jun-12  | 2011        | 2010 IFRS   | 2010 GAAP   | 2009        |  |  |
| Plant in Service Beginning of Year   | 9,050,608   | 8,518,060   | 8,003,126   | 7,858,120   | 7,361,395   |  |  |
| Additions                            | 244,107   | 572,830     | 568,662     | 596,209     | 543,570     |  |  |
| Removals                             | (14,116)  | (40,282)    | (53,728)    | (53,728)    | (46,845)    |  |  |
| Plant in Service End of Year         | 9,280,599   | 9,050,608   | 8,518,060   | 8,400,601   | 7,858,120   |  |  |
|                                      |   |             |             |             |             |  |  |
| Accum Deprn Beginning of Year        | (4,098,199)   | (3,845,928) | (3,628,402) | (3,563,432) | (3,365,521) |  |  |
| Depreciation Provision               | (152,473)   | (285,430)   | (263,430)   | (257,976)   | (240,992)   |  |  |
| Accum Deprn on Retired Assets        | 10,567  | 33,159      | 45,904      | 45,904      | 43,081      |  |  |
| Accum Depn End of Year               | (4,240,105)   | (4,098,199) | (3,845,928) | (3,775,504) | (3,563,432) |  |  |
|                                      |   |             |             |             |             |  |  |
| Net Plant in Service                 | 5,040,494   | 4,952,409   | 4,672,132   | 4,625,097   | 4,294,688   |  |  |
|                                      |   |             |             |             | ,           |  |  |
| Customer Contributions               |   |             |             | (367,302)   | (340,374)   |  |  |
| *Other Property Plant & Equip        | 617,698   | 434,383     | 251,126     | 277,240     | 304,567     |  |  |
| Total Property Plant & Equipment     | 5,658,192   | 5,386,792   | 4,923,258   | 4,535,035   | 4,258,881   |  |  |
|                                      |   |             |             |             |             |  |  |
| *Other Property Plant & Equip incl   | *Other Property Plant & Equip includes: asset retirement assets and |             |             |             |             |  |  |
| construction in progress.            |   |             |             |             |             |  |  |



### Round 2 - Consultant Q48 - Reference - First Round Consultant Q125

- a) Please discuss whether or not the impact of the 2010 capital expenditure of \$565 million on rates is \$40 million in each year from 2010 to 2013, and whether the same is true for 2011 (\$44 million), 2012 (\$70 million) and 2013 (\$80 million).
- b) What 2013 rate increase would be required to generate sufficient revenue in 2013 to cover the impacts of the 2010, 2011, 2012 and 2013 Capital Programs, all else remaining the same?

### **Response:**

That is correct. The calculations shown in Round 1 – Consultant Q125 are cumulative in nature and that depreciation and finance charges should be approximately \$234 million higher on December 31, 2013 than they were on December 31, 2009.



### Round 2 - Consultant Q48 - Reference - First Round Consultant Q125

- b) Please discuss whether or not the impact of the 2010 capital expenditure of \$565 million on rates is \$40 million in each year from 2010 to 2013, and whether the same is true for 2011 (\$44 million), 2012 (\$70 million) and 2013 (\$80 million).
- b) What 2013 rate increase would be required to generate sufficient revenue in 2013 to cover the impacts of the 2010, 2011, 2012 and 2013 Capital Programs, all else remaining the same?

### **Response:**

Based on the methodology used to calculate the numbers in Round 1 – Consultant Q125, which show a cumulative increase to depreciation and finance charges expense of \$234 million in 2013, the rate increase that would be required in 2013 to cover the additional depreciation and finance charges expense would be 13.1%.



### Round 2 - Consultant Q49 - Reference - First Round Consultant Q126

For the 2012 and 2013 Capital Program, please provide schedules showing for each major category (Generation, T&D, Customer, IT, etc.) estimated construction cost, capitalized labour cost, capitalized interest, other capitalized costs and customer contributions.

## **Response:**

|                             | Construction Costs (\$000) | Labour<br>Capitalized<br>(\$000) | Interest<br>Capitalized<br>(\$000) | 2012 Budgeted<br>Capital<br>Expenditures<br>(\$000) | 2013 Budgeted<br>Capital<br>Expenditures<br>(\$000) |
|-----------------------------|----------------------------|----------------------------------|------------------------------------|---|---|
| Generation                  | 175,100                    | 500                              | 3,700                              | 179,300   | 245,200   |
| Integrated Carbon Capture   | 483,700                    | 2,500                            | 14,500                             | 500,700   | 369,200   |
| Transmission & Distribution | 422,327                    | 42,000                           | 3,600                              | 467,927   | 577,400   |
| Other                       | 78,126                     | 1,000                            | 200                                | 79,326  | 144,800   |
| Contingency                 | (229,300)                  |                                  |                                    | (229,300)   | (186,600)   |
| Totals                      | 929,953                    | 46,000                           | 22,000                             | 997,953   | 1,150,000   |



### Round 2 - Consultant Q50 - Reference - First Round Consultant Q129

Please discuss SaskPower's view as to the relative probability of its planned 2012 and 2013 being fully completed within the time frame currently anticipated, given the experience of the prior two years, and explain the rationale for and the treatment of the corporate contingency allowance.

### **Response:**

In an effort to address the large variances between actual and budgeted capital expenditures, SaskPower included a negative contingency in the 2012 corporate capital budget. The contingency amount was determined based on a top down approach that included analyzing SaskPower's actual capital spending over the last 5 years. This analysis provided management with a better estimate as to what could physically be spent in any given year.

As of August 31, 2012, SaskPower has spent approximately \$590 million or 59% of its \$998 million capital budget. While our most recent capital expenditure forecast shows capital spending of approximately \$1,056 million, management continues to be conservative, leaving a \$58 million contingency in the total. While we expect to have revised capital forecasts from each of the areas by the end of September, management expects actual capital expenditures to end the year at or near budget.

As for SaskPower's 2013 capital program, budgeted to be \$1.15 billion, management has continued the approach of including a corporate contingency in the overall capital budget. For 2013, the contingency totals \$195 million. Based on the forecasted record spend of \$1 billion in 2012 and the projects that have been included in the 2013 capital budget (completion of ICCS, QE Repowering and Far North Reinforcement represent almost half of the \$1.15 billion total), SaskPower is confident that the 2013 capital budget is appropriate.



### Round 2 - Consultant Q51 - Reference - First Round Consultant Q131

Please discuss if and when SaskPower plans to investigate the advantages for proceeding with the various intertie upgrades.

### **Response:**

Studies to investigate advantages for proceeding with various intertie upgrades have been on-going. SaskPower has completed coordinated studies with Manitoba Hydro to increase the intertie capabilities between the two systems. SaskPower's and Manitoba's short term business case evaluation has not identified enough justification due to either a supply adequacy/security perspective or from long term energy sale to proceed at this time. SaskPower is currently evaluating the business case from a longer term supply adequacy perspective to take advantage of increased import opportunities from Manitoba. This work is on-going and is expected to be completed in 2013. If the business case is sufficient SaskPower would expect a decision to proceed sometime in 2013/2014 timeframe. This work would also evaluate the existing interties to Alberta and North Dakota.

SaskPower has also completed coordinated studies with Manitoba Hydro to increase the import capability to SaskPower's isolated northern system from or through Manitoba. SaskPower is currently evaluating the business case for an energy sale for the northern system or whether to wheel power through Manitoba from SaskPower's main system.

SaskPower plans to assess intertie capability with Alberta in 2013, however it is contingent at this time because it is being driven by Open Access Transmission Tariff (OATT) customers.



### Round 2 – Consultant Q52 – Reference – First Round Consultant Q135

Please reconcile the 2012 forecast revenues shown in this response for the various customer classes to those provided in the Table on Page 20 of the Application.

### **Response:**

The 2012 Forecast Revenue shown in 'Round 1 - Q135 Table' is based on the 2011 Q2 (2012 business plan) Forecast which is the budget for 2012.

Page 20 of the Rate Application contains the first 3 months of actuals for 2012 and 9 months of estimates for the remainder of the year.

The reasons that contribute to the variance between these tables: unseasonable warm winter in Saskatchewan, Potash Market decrease, Natural Gas Price decrease leading to reduced pumping volumes and the delay of some key projects.



### Round 2 – Consultant Q53 – Reference – First Round Consultant Q136

- a) Please confirm that SaskPower has used the data from a neighboring electrical utility to estimate load shapes for the Residential, Farm, Commercial, Oilfield and Streetlighting customers for the 2013 COSS.
- b) Please discuss the status of SaskPower's load data respecting load shapes for the above customer classes.
- c) Please provide and update of SaskPower's current cost of service review, and indicate the process proposed by SaskPower to implement the results of this study.
- d) Please provide a summary, in the same format used to compare the 2013 After Rate Increase data to the 2014 Before Rate Increase data, for the 2013 data before 2013 rate increases.
- e) Please discuss whether the implementation of IFRS impacted any of SaskPower's customer classes in the 2013 COSS differently than was the case under the GAAP system.
- f) Please discuss the extent to which, if any, the implementation of the 5.0% across the board increase for each rate component for each customer class (other than Power-Contract Rate Class) changed the R/RR ratio, given that it is unlikely all allocated rate components for every class increased by the same 5.0%.

### **Response:**

SaskPower confirms that it has used the data from a neighbouring electrical utility to estimate load shapes for the Residential, Farm, Commercial, Oilfield and Streetlighting customers for the 2013Test Cost of Service Study.



### Round 2 – Consultant Q53 – Reference – First Round Consultant Q136

- a) Please confirm that SaskPower has used the data from a neighboring electrical utility to estimate load shapes for the Residential, Farm, Commercial, Oilfield and Streetlighting customers for the 2013 COSS.
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## **Response:**

SaskPower continues to gather and analyze load shape data from our existing sample interval meters for mass market customers. Although SaskPower has 5 years of customer load data from a statistically valid sample size, SaskPower has decided to defer the implementation of the load research results until at least the current cost of service and rate design methodology review is completed in early 2013.



### Round 2 – Consultant Q53 – Reference – First Round Consultant Q136

- a) Please confirm that SaskPower has used the data from a neighboring electrical utility to estimate load shapes for the Residential, Farm, Commercial, Oilfield and Streetlighting customers for the 2013 COSS.
- b) Please discuss the status of SaskPower's load data respecting load shapes for the above customer classes.
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### **Response:**

SaskPower has engaged the services of Elenchus Research Associates to conduct an independent review of SaskPower's cost of service methodology. The review is ongoing at the time of this rate application. Please see the 'Schedule of Events' summary below:

### Schedule of Events 2012 Cost of Service Review

| 1. | Preparation of RFP  | April 2012         |
|----|---|--------------------|
| 2. | Issue RFP & select Technical Consultant                               | May / June 2012    |
| 3. | Technical Consultant conducts Review of SaskPower's COS Methodology   | June – August 2012 |
| 4. | Technical Consultant prepares Draft Report                            | August 2012        |
| 5. | Stakeholder Meeting (Oct.16 <sup>th</sup> ) & Submission of Questions | October 31, 2012   |
| 6. | Technical Consultant responds to Stakeholder Questions                | November 2012      |
| 7. | Stakeholders file Written Submissions on the Draft Report             | December 2012      |
| 8. | Technical Consultant prepares Final Report                            | January 31, 2013   |



9. SaskPower files Draft Response to Final Report including Proposed Actions resulting from the Review

February, 2013

We would propose in step 9 above to review each of the consultant's recommendations and indicate which recommendations will be implementing and when. We will try to provide an indication of the impact of those recommendations on cost of service results including R/RR ratios. We will also provide an explanation for recommendations (if any) which will not be implemented.

At this stage of the process it is difficult to determine exactly how we will implement the results of the study. Much will depend on what the recommendations are and if (and when) we have the data required to implement them. Another consideration will be how the consultant's recommendations may impact SaskPower's load research implementation plans.



### Round 2 - Consultant Q53 - Reference - First Round Consultant Q136

- a) Please confirm that SaskPower has used the data from a neighboring electrical utility to estimate load shapes for the Residential, Farm, Commercial, Oilfield and Streetlighting customers for the 2013 COSS.
- b) Please discuss the status of SaskPower's load data respecting load shapes for the above customer classes.
- c) Please provide and update of SaskPower's current cost of service review, and indicate the process proposed by SaskPower to implement the results of this study.
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- e) Please discuss whether the implementation of IFRS impacted any of SaskPower's customer classes in the 2013 COSS differently than was the case under the GAAP system.
- f) Please discuss the extent to which, if any, the implementation of the 5.0% across the board increase for each rate component for each customer class (other than Power-Contract Rate Class) changed the R/RR ratio, given that it is unlikely all allocated rate components for every class increased by the same 5.0%.

### **Response:**

Please see the summary table below:



|                           | 2013          | 2013 Before Rate Increase | ase                                    |                                 |       |       |                  | 2013          | 2013 After Rate Increase               | ase                             |       |       |
|---------------------------|---------------|---------------------------|--|---------------------------------|-------|-------|------------------|---------------|--|---------------------------------|-------|-------|
|                           | G & T         | D & CS                    | Total                                  |                                 |       |       |                  | G & T         | D & CS                                 | Total                           |       |       |
|                           | (\$ millions) | (\$ millions)             | (\$ millions)                          |                                 |       |       |                  | (\$ millions) | (\$ millions)                          | (\$ millions)                   |       |       |
| Rate Base                 | 4,425.9       | 2,079.1                   | 6,505.0                                |                                 |       |       | Rate Base        | 4,425.9       | 2,079.1                                | 6,505.0                         |       |       |
| Expense                   | 1,171.9       |                           | 1,482.3                                |                                 |       |       | Expense          | 1,171.9       | 310.4                                  | 1,482.3                         |       |       |
| System RORB               | 5.24%         | 5.24%                     | 5.24%                                  |                                 |       |       | System RORB      | 6.64%         | 6.64%                                  | 6.64%                           |       |       |
| Revenue Requirement       | 1,403.8       |                           | 1,823.2                                |                                 |       |       | Revenue Requiren | 1,465.6       | 448.4                                  | 1,914.0                         |       |       |
|                           |               |                           |  |                                 |       |       |                  |               |  |                                 |       |       |
|                           |               | 2013 Before R             | fore Rate Increase (millions)          | (suc                            |       |       |                  | 2013 After R  | 2013 After Rate Increase (millions)    | ons)                            |       |       |
|                           | Revenue       | Rev                       | Revenue Requirement                    |                                 | R/RR  |       | Revenue          | Rev           | Revenue Requirement                    | t                               | R/RR  |       |
|                           | (\$millions)  | G + T                     | D + CS                                 | Total                           |       |       | (\$millions)     | G + T         | D + CS                                 | Total                           |       |       |
| Residential               | 403.0         | 242.7                     | 176.2                                  | 418.9                           | 0.962 |       | 422.8            | 253.6         | 186.9                                  | 440.4                           | 0.960 |       |
| Farm                      | 143.4         | 92.9                      | 55.9                                   | 148.7                           | 0.964 |       | 150.4            | 97.2          | 59.5                                   | 156.7                           | 096.0 |       |
| Commercial & Streetlights | 352.4         |                           | 108.3                                  | 357.5                           | 0.986 |       | 369.7            | 260.1         | 116.9                                  | 377.0                           | 0.981 |       |
| Power                     | 563.6         | 540.7                     | 11.3                                   | 552.0                           | 1.021 |       | 592.5            | 564.3         | 12.0                                   | 576.3                           | 1.028 |       |
| Oilfield                  | 281.6         |                           | 67.1                                   | 268.5                           | 1.049 |       | 295.5            | 210.0         | 72.6                                   | 282.7                           | 1.045 |       |
| Reseller                  | 79.1          | 77.0                      | 0.4                                    | 77.5                            | 1.021 |       | 83.0             | 80.4          | 0.5                                    | 6.08                            | 1.027 |       |
| Total                     | 1,823.2       | 1,403.8                   | 419.3                                  | 1,823.2                         | 1.000 |       | 1,914.0          | 1,465.6       | 448.4                                  | 1,914.0                         | 1.000 |       |
|                           |               |                           |  |                                 |       |       | 8.06             |               |  |                                 |       |       |
|                           |               | 2013 Af                   | 2013 After Rate Increase (\$ millions) | (\$ millions)                   |       |       |                  | 2013 A        | 2013 After Rate Increase (\$ millions) | (\$ millions)                   |       |       |
|                           | Energy Sales  | Revenue                   | Revenue Rec                            | Revenue Requirement (cents/kWh) | :Wh)  | R/RR  | Energy Sales     | Revenue       | Revenue Re                             | Revenue Requirement (cents/kWh) | Wh)   | R/RR  |
|                           | (GWh)         | (cents/kWh)               | G+T                                    | D+CS                            | Total |       | (GWh)            | (cents/kWh)   | G + T                                  | D+CS                            | Total |       |
| Residential               | 2,972.1       | 13.6                      | 8.2                                    | 5.9                             | 14.1  | 0.962 | 2,972.1          | 14.2          | 8.5                                    | 6.3                             | 14.8  | 0.960 |
| Farm                      | 1,286.7       | 11.1                      | 7.2                                    | 4.3                             | 11.6  | 0.964 | 1,286.7          | 11.7          | 7.6                                    | 4.6                             | 12.2  | 0.960 |
| Commercial & Strrtlights  | 3,488.3       | 10.1                      | 7.1                                    | 3.1                             | 10.2  | 0.986 | 3,488.3          | 10.6          | 7.5                                    | 3.3                             | 10.8  | 0.981 |
| Power                     | 8'809'6       | 5.9                       | 5.6                                    | 0.1                             | 5.7   | 1.021 | 8'809'6          | 6.2           | 5.9                                    | 0.1                             | 0.9   | 1.028 |
| Oilfield                  | 3,431.7       |                           | 5.9                                    | 2.0                             | 7.8   | 1.049 | 3,431.7          | 8.6           | 6.1                                    | 2.1                             | 8.2   | 1.045 |
| Reseller                  | 1,292.5       | 6.1                       | 0.9                                    | 0.0                             | 0.9   | 1.021 | 1,292.5          | 6.4           | 6.2                                    | 0.0                             | 6.3   | 1.027 |
| Total                     | 22,080.0      | 8.3                       | 6.4                                    | 1.9                             | 8.3   | 1.000 | 22,080.0         | 8.7           | 6.6                                    | 2.0                             | 8.7   | 1.000 |



### Round 2 - Consultant Q53 - Reference - First Round Consultant Q136

- a) Please confirm that SaskPower has used the data from a neighboring electrical utility to estimate load shapes for the Residential, Farm, Commercial, Oilfield and Streetlighting customers for the 2013 COSS.
- b) Please discuss the status of SaskPower's load data respecting load shapes for the above customer classes.
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- e) Please discuss whether the implementation of IFRS impacted any of SaskPower's customer classes in the 2013 COSS differently than was the case under the GAAP system.
- f) Please discuss the extent to which, if any, the implementation of the 5.0% across the board increase for each rate component for each customer class (other than Power-Contract Rate Class) changed the R/RR ratio, given that it is unlikely all allocated rate components for every class increased by the same 5.0%.

## **Response:**

SaskPower fully implemented the IFRS accounting standards in 2010. As such, all future (i.e., Test) cost of service models are constructed under the new IFRS standards. It is therefore not possible to compare impacts to customer classes for 2013Test models under both GAAP and IFRS. SaskPower did, however, conduct two cost of service studies in 2010, under both accounting standards, to examine potential impacts of the accounting change to customer classes.

The most significant difference between the two standards is the treatment of customer contributions in aid of construction. Under GAAP, customers' contributions for new construction were placed in a contra asset account and amortized over the life of the asset. Under IFRS, those contributions must immediately be recognized as revenue in the year they were received. Under GAAP, the amortized portion of the contra-asset was offset against depreciation expense within COS while the unamortized portion was treated as a reduction to net plant in service. Under IFRS, the unamortized balance of the customer contribution contra-asset was written off to equity and now all new contributions are used to directly offset expenses in COS to the customer class that made the contribution. The impact of IFRS compared to GAPP on cost of service results is largely dependent on the amount of customer contributions for each class in the year.



### Round 2 – Consultant Q53 – Reference – First Round Consultant Q136

- a) Please confirm that SaskPower has used the data from a neighboring electrical utility to estimate load shapes for the Residential, Farm, Commercial, Oilfield and Streetlighting customers for the 2013 COSS.
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- f) Please discuss the extent to which, if any, the implementation of the 5.0% across the board increase for each rate component for each customer class (other than Power-Contract Rate Class) changed the R/RR ratio, given that it is unlikely all allocated rate components for every class increased by the same 5.0%.

### **Response:**

SaskPower's decision to increase each rate component for each customer class by 5.0% will have a minimal impact on the resulting R/RR ratios as shown in the table below:



Year 2013 Rate Change & R/RR Ratios
5.0% General Rate Increase Rate With No Rebalancing Maintenance

| Class of Service        | 2013<br>R/RR Ratio<br>(Existing Rates) | 2013<br>Rate<br>Change | 2013<br>R/RR Ratio<br>(Revised Rates) | Impact<br>to<br>R/RR Ratios |
|-------------------------|--|------------------------|---------------------------------------|-----------------------------|
| Urban Residential       | 0.964                                  | 4.9%                   | 0.964                                 | (0.000)                     |
| Rural Residential       | 0.955                                  | 4.9%                   | 0.947                                 | (0.008)                     |
| Total Residential       | 0.962                                  | 4.9%                   | 0.960                                 | (0.002)                     |
| Farms                   | 0.964                                  | 4.9%                   | 0.960                                 | (0.004)                     |
| Urban Commercial        | 0.992                                  | 4.9%                   | 0.988                                 | (0.004)                     |
| Rural Commercial        | 0.966                                  | 4.9%                   | 0.959                                 | (0.006)                     |
| Total Commercial        | 0.985                                  | 4.9%                   | 0.981                                 | (0.005)                     |
| Power - Published Rates | 1.029                                  | 4.9%                   | 1.035                                 | 0.005                       |
| Power - Contract Rates  | 0.982                                  | 6.1%                   | 0.997                                 | 0.016                       |
| Total Power             | 1.021                                  | 5.1%                   | 1.028                                 | 0.007                       |
| Oilfields               | 1.049                                  | 4.9%                   | 1.045                                 | (0.004)                     |
| Streetlights            | 0.993                                  | 4.9%                   | 0.985                                 | (0.008)                     |
| Reseller                | 1.021                                  | 4.9%                   | 1.027                                 | 0.005                       |
| Total (System)          | 1.000                                  | 5.0%                   | 1.000                                 | 0.000                       |

The impact to R/RR ratios is dependent on the relative amounts of rate base and expenses allocated to each class compared to the average for all customers. The R/RR ratios for those classes with a larger proportion of expenses (Power and Reseller) will increase by more than the system average, as the return on rate base increases from existing rates to revised rates. The opposite is true for those classes with a smaller proportion of expenses to rate base.



#### Round 2 - Consultant Q54 - Reference - First Round Consultant Q137

Please summarize the BD3 ICCS project, including a brief description from project concept to date, total annual costs and annual funding from other sources, final total net costs to SaskPower, anticipated schedule for project income from electricity, CO2, fly ash and sulphuric acid sales.

### Response

### **Background to BD3 ICCS:**

The BD3 ICCS project involves a re-build of the BD3 power station (including boiler and turbine) as well as a carbon capture unit. The commercial products of the carbon capture process are CO2 and a small amount of sulphuric acid. The plant will capture in excess of 90% of the CO2 that would be normally emitted. It will be operational by April 1, 2014.

One of the major drivers for the BD3 ICCS was the anticipated emission regulations from the Federal and Provincial Government. It was determined, based on the knowledge of the potential regulations in 2010, that installing a capture system on BD3 would allow the Boundary Dam plant to meet the "Clean as Combined Cycle Gas" requirement in order for a plant to continue operating.

BD3 is currently rated at 138 MW. The rebuild will increase the capacity to 155 MW. The CO2 capture plant, when operating at full capacity will have a parasitic load of approximately 40 MW, resulting in a net capacity of BD3 of 115 MW (if the CO2 plant is operating at full capacity). The CO2 plant is expected to capture between 870,000 and 1,100,000 tonnes of CO2 per year, with an average of 1,000,000 tonnes per year. The current BD3 unit will be taken out of service in April 2013 and the rebuild of the boiler and turbine will be completed by October 2013. The CO2 capture plant is expected to be completed by April 2013. SaskPower will use the October 2013 to April 2014 period to commission both CO2 capture system.



### **Project Capital Costs:**

The total capital cost for the BC3 ICCS project is \$1.24 billion. The federal government provided a grant of \$240 million making the total capital cost to SaskPower of \$998 million. The components of the capital cost are as follows:

BD3 Rebuild of Unit: \$365 million CO2 Carbon Capture: \$835 million

A capital cost contingency of approximately \$100 million is contained within the \$998 million.

The rest of the response contains confidential information. A confidential response has been provided to the SRRP.



### Round 2 - Consultant Q 55 - New

The Federal Environment Minister has recently announced the long awaited regulations to curtail emissions from the coal-fired electricity sector. Please comment on the new regulations and the impact they have imposed on the coal generation fleet of SaskPower.

### **Response:**

On September 12, 2012, the federal government published the official version of the final federal coal regulation in Canada Gazette Part 2. The regulation will impact all Canadian coal-fired generating units including those operated by SaskPower.

- The official regulation, which will come into force on July 1, 2015, aims to limit CO<sub>2</sub> emissions from coal-fired electricity generating units.
- SaskPower advocated for a number of key changes to be made to the draft coal regulation as published in Canada Gazette Part 1 in August 2011.
- Some changes that SaskPower had requested have been included in the official version of the regulation:
  - The definition of "useful life" was adjusted to allow up to 50 years of operation for existing units. This was formerly restricted to 45 years.
  - The proposed emissions intensity standard was increased from 375 to 420 tonnes of CO<sub>2</sub> per Gigawatt hour net produced (t/GWh).
- Some changes that SaskPower had requested remain absent from the official version of the regulation:
  - Application of the emissions intensity standard on a fleet-wide basis.
     Application remains on a unit basis.
  - Assignment and banking of credits for beyond compliance CO<sub>2</sub> reductions were not included.

#### **BACKGROUND:**

- The final regulation provides SaskPower with additional but limited time for proving out the viability of CCS technology, allowing SaskPower to delay a decision on BD Units 4 & 5 until mid-2019.
- Constraints within the regulation do not allow SaskPower to receive credit for early adoption of CCS with respect to BD Unit 3.
- The regulation will limit the useful life for PRPS Units 1 and 2 to 46 years and 48 years respectively.
- Units that do not comply with the performance standard, when required to do so, must shut down.



- SaskPower is working closely with the Provincial Ministry of Environment to ensure a Saskatchewan / Federal Equivalency Agreement appropriately recognizes SaskPower's efforts to reduce CO2 emissions.
- The Saskatchewan Greenhouse Gas Regulations and the Saskatchewan / Federal Equivalency Agreement are both expected to be finalized by mid-2013 and implemented in 2014.
- Finalization and maintenance of a Saskatchewan / Federal Equivalency Agreement on CO2 reductions will cause the Federal coal regulations, and the CEPA penalties to stand down in lieu of the Provincial Regulations.

SaskPower will work closely with the Provincial Ministry of Environment and other provincial ministries in finalizing the provincial greenhouse gas regulations and in development of a Provincial / Federal Equivalency Agreement in order to achieve a sustainable supply of electricity for its customers while minimizing rate increases.