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**CAPP-SaskPower-R2-1      Reference:      Application – Our Company PDF page 2**

*SaskPower operates and maintains one of the largest grids in Canada. The grid is comprised of approximately 157,000 kilometres of transmission and distribution lines throughout Saskatchewan. Our transmission system is made up of almost 14,000 km of power lines and 55 high voltage switching stations located across Saskatchewan. Transmission lines are high voltage lines that transport large volumes of electricity from generating stations to load centres – cities, towns or large industrial or commercial customers. Our distribution system consists of more than 143,000 km of power lines, 194 distribution substations and approximately 183,200 pole and pad-mounted transformers. Distribution lines are lower voltage lines that take electricity in smaller quantities to residential users and smaller commercial customers.*

- a) Please confirm that SaskPower defines distribution as lines 25 kV and lower. If this cannot be confirmed, please explain.
- b) Are 138/25 kV transformers recognized as distribution assets? What other substation equipment is functionalized as distribution?
- c) On the SaskPower system are transmission lines (generally) networked whereas distribution lines are generally radial? If not, please describe the general configuration of the system.
- d) Does SaskPower generally utilize 25 kV three-phase and 14.4 kV single-phase primary service voltages in rural areas? If not, please explain.
- e) Are oilfield class (E43) customers generally served at distribution voltage?
- f) Generally, what is the primary service voltage for oilfield class (E43) customers?

**CAPP-SaskPower-R2-2      Reference:      Application Page 14 (underline added)**

*In the Transmission business unit, the areas of project delivery, construction services, asset management, operations and maintenance have been identified to receive customized process and measurement consulting services. The focus will be on increasing process efficiency and business performance. As well, the delivery of services to distribution customers will be further examined to identify opportunities to increase employee productivity, optimize operational efficiency and provide for more cost effective service delivery.*

- a) Will the delivery of metering and customer billing services be examined as part of the



referenced initiatives? If not, why not?

- b) Will the customer service area be examined to determine what services and/or information would be useful to customers?

**CAPP-SaskPower-R2-3 Reference: Application Page 35**

<i>(in millions)</i>	Twelve months December 31		Twelve months March 31		Twelve months March 31	
	2014	2015	2016-17	2017-18	2018-19	
<b>Capital sustainment investment</b>						
Generation	\$ 127	\$ 126	\$ 132	\$ 139	\$ 146	
Carbon Capture	202	32	38	25	0	
Transmission	24	62	88	97	106	
Distribution	37	50	60	72	86	
Other	92	117	115	89	89	
<b>Total sustainment investment</b>	<b>482</b>	<b>387</b>	<b>433</b>	<b>422</b>	<b>427</b>	
<b>Growth &amp; compliance investment</b>						
Generation	220	174	19	89	154	
Transmission	239	164	224	187	245	
Distribution	53	80	32	41	47	
Customer Connects	230	170	153	178	195	
<b>Total growth &amp; compliance investment</b>	<b>742</b>	<b>588</b>	<b>428</b>	<b>495</b>	<b>641</b>	
<b>Total strategic &amp; other investments</b>	<b>55</b>	<b>15</b>	<b>38</b>	<b>35</b>	<b>48</b>	
<b>Total capital spending</b>	<b>\$ 1,279</b>	<b>\$ 990</b>	<b>\$ 899</b>	<b>\$ 952</b>	<b>\$ 1,116</b>	

- a) Can SaskPower confirm that most of the customer connects (dollars and number of connects) relate to distribution connected customers? If this cannot be confirmed, please explain.
- b) What facilities are generally included in the customer connect costs, as reflected in the referenced figures? Are the customer connect costs limited to customer-dedicated facilities? If not, please explain what shared facilities are included.
- c) Please explain how the cost for customer connects related to distribution-connected customers can be a multiple of the cost of growth investments in distribution. Is it not the case that either the customer connect CAPEX must reflect capacity additions to the distribution system or there must be significant capacity available on the distribution



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system to serve new loads?

- d) Please describe the main activities contemplated under distribution capital sustainment.
- e) Please describe the main activities contemplated under distribution growth and compliance investment.
- f) Does SaskPower examine demands on individual distribution feeders on a regular basis to assess the need for possible upgrades? If so, what is the basis for the feeder level demand forecasts? If individual feeders are not examined, how is the need for distribution upgrades determined? What load forecasts are used in such assessments?
- g) Would accurate customer input regarding future load expectations assist in accurately assessing the need for distribution sustainment and growth investments?
- h) What customer provided information would SaskPower find useful in planning the distribution system?
- i) Would accurate customer input regarding future load expectations assist in accurately assessing the need for transmission sustainment and growth investments?
- j) What customer provided information would SaskPower find useful in planning the transmission system?

**CAPP-SaskPower-R2-4      Reference:      SaskPower Terms and Conditions**

Metering equipment

Meter Reading

Billing Practices

- a) Please describe the metering equipment that is generally installed at oilfield class (E43) customer sites.
- b) Please describe the capability of the metering equipment that is generally installed at oilfield class (E43) customer sites. For example, can the meter provide highest demand in a month or only highest demand since last read?
- c) What is the meter reading frequency generally provided at oilfield class (E43) customer sites?
- d) What is the billing frequency generally provided at oilfield class (E43) customer sites?
- e) The E43 Rate Schedule refers to billing demand as “The maximum kilovolt ampere (kVA)



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demand registered in the applicable four-month period, but will not be less than 60 per cent of the maximum demand registered in the preceding 11 months.” What is the “applicable four-month period” (and where is it defined)?

- f) What metered data and/or billing data is generally provided to the customer for oilfield class (E43) customer sites? In what form is the data provided (paper, electronic etc.)?
- g) In SaskPower’s view, is the billing information provided sufficient to allow customers to effectively manage their site consumption? If not, what additional information would a customer require?
- h) Please describe the activities included in the forecast period that would allow SaskPower to provide customers consumption and billing information to effectively manage their site consumption.

**CAPP-SaskPower-R2-5      Reference:      From SaskPower website:**  
[http://www.saskpower.com/accounts-and-services/billing/consolidate-your-billing/?linkid=MM\\_consolidate\\_billing](http://www.saskpower.com/accounts-and-services/billing/consolidate-your-billing/?linkid=MM_consolidate_billing)

*We bill oil field customers differently, which affects your consolidated billing. Please familiarize yourself with the following information regarding your oil field consolidated statements.*

- *You cannot subscribe to a pre-authorized payment plan.*
  - *Your statement show totals only. They do not itemize costs associated with each individual account. You will continue to receive individual bills for each account.*
  - *Your statement shows GST and PST as separate items.*
  - *Your electronic statement is only available in Customer Utility Billing System (CUBS) format.*
  - *Your statement is issued around the 26th of each month.*
  - *You have different due dates depending on your requested billing format.*
    - *Paper statement: Payment due 25 days after your statement is issued*
    - *Electronic statement: Payment due 15 days after your statement is issued*
- a) Please confirm that oilfield customers cannot obtain individual site billing data in an electronic format other than CUBS. If this cannot be confirmed, please explain.
  - b) What software is necessary to read and utilize CUBS format files?
  - c) Is there any project or other activities forecast in the applied for period that will enhance the billing of oilfield accounts? If so, please identify the project or activities



and indicate where in the filing the project is included.

**CAPP-SaskPower-R2-6      Reference:      SaskPower 2013 Application page 15**

During 2011, we replaced SaskPower’s more than 25-year-old billing system, which had become increasingly difficult to maintain. Our new technologically advanced Customer Relationship and Billing System provides employees with a comprehensive view of customer information, can be adapted to changing business requirements, and is capable of managing complex billing and rate structures.

- a) Please discuss the limitations of the “new technologically advanced” billing system in terms of providing oilfield customers site-specific data in electronic format.
- b) Can other rate classes obtain site-specific data in electronic format? Why is this possible for one rate class but not all rate classes?

**CAPP-SaskPower-R2-7      Reference:      Goals of former AMI project**

*The implementation of the new system sets the stage for the introduction of additional SDR initiatives, such as Advanced Metering Infrastructure (AMI). AMI will provide near real-time data on electrical consumption and operations through the installation and use of 500,000 smart meters. Once AMI is deployed, we will be able to restore service quicker, improve power quality, provide remote customer connects and disconnects, and collect usage data that can assist us in operating our grid more efficiently. (SaskPower 2013 Rate Application, page 15)*

*Advanced Metering Infrastructure (AMI) is a technology that enables the automated collection of energy consumption data. This technology consists of hardware and software that aid in the collection and sharing of meter data as well as to provide two-way communication to the meter. AMI is a foundational component of a Smart Grid System. The use of AMI infrastructure will produce benefits related to:*

- Meter reading - elimination of manual meter reading*
- Metering operations – elimination of manual turn on/off and disconnect activities*
- Increased accuracy of meters*
- Increased ability to manage outage response (in future with new Outage Management System)*
- Potential provision of information services to customers interested in managing usage (in future)*

*(SaskPower 2014 Application; Consultant Interrogatories Round 2 – Consultant Q18C)*



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- *AMI will deliver the following long-term benefits for SaskPower and its customers:*
  - *Part of a program to enhance infrastructure in response to Saskatchewan's growth*
  - *Part of an overall corporate efficiency program to keep rates as low as possible*
  - *Provide customers with better information to make informed, energy efficient decisions*

*(SaskPower 2014 Application; Tab 7; SDR update for SRRP – October 2013)*

- a) Given that the AMI project has been terminated, what initiatives is SaskPower undertaking to achieve the objectives of the AMI project, specifically, obtaining the information that can assist “in operating our grid more efficiently”?
- b) Given that the AMI project has been terminated, what initiatives is SaskPower undertaking to achieve the objectives of the AMI project, specifically, the “provision of information services to customers interested in managing usage”?
- c) What “better information” does SaskPower feel would assist customers to make informed, energy efficient decisions? What projects does it propose to make such information available to customers?