CAPP ROUND 1 INTERROGATORY RESPONSES

[2018 Rate Application]

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-1 **Reference: Application page 26 (PDF page 29)**

"A competitive process to add 200 MW of wind from independent power producers is underway."

Reference: Saskatchewan Renewable IPP and Supplier Information Session November 17, 2016

http://www.saskpower.com/our-power-future/renewables-roadmap/
http://www.saskpower.com/wpcontent/uploads/SaskPower_Wind_Solar_RFQ_RFP_Process_Nov2016.pdf

RENEWABLES ROADMAP (page 3)

- 120 MW of solar by 2025
- 1,600 MW of new wind by 2030
- Biomass
- Geothermal
- Wind and Solar goals will be accomplished primarily through IPP builds

WIND COMPETITION (page 26)

Requirements will include:

- Minimum one year of high quality met- tower wind resource data verified by a professional wind resource expert
- Proponents must prove 100% land control for the proposed wind farm sites)

(a) Please confirm the expected in service date of the Blue Hills wind farm.
(b) Please confirm that 15 companies passed the RFQ stage for the next 200 MW wind power RFP.
(c) Can SaskPower provide an update as to the timing of the current 200 MW wind power RFP and the project award?
(d) Please explain how a wind project proponent can demonstrate 100% land control.
(e) Does SaskPower expect that it would be an expensive proposition for a proponent to obtain 100% land control for a wind farm site? What is the basis for SaskPower's view?
(f) How many individual sites within Saskatchewan can accommodate a 200 MW wind farm?
(g) Is SaskPower concerned that potential bidders could gain land control of a significant fraction of potential wind farm sites and thereby reduce the level of competition within the RFP process? If not, how has SaskPower satisfied itself that this is not a concern?

Response:

(a) The in-service date of the Blue Hills Wind Energy Project will not be known until the required interconnection studies are complete. The studies are expected to be completed in late 2017.

(b) Confirmed. Fifteen companies have been qualified for the Request for Proposals process.

(c) Proponent submissions to the 200 MW Wind Generation Capacity Competition are due no later than March 1, 2018. The successful proponent will be notified by May 4, 2018.

(d) The Power Purchase Agreement associated with the RFP identifies how the successful proponent can demonstrate land control. At the time of RFP submissions, proponents are required to establish that they control of each site that they are proposing. Proponents are required to provide documentation demonstrating that they own, lease, or have an option to purchase or lease the applicable lands for the duration of the term of the Power Purchase Agreement. "Applicable lands" does not mean proponents must acquire access to every quarter that the facility is on, but rather only the specific sites of the wind turbines, collector systems and other applicable facility equipment.

(e) The successful developer will need to gain access to the sites where the infrastructure is located. This is required of the developers in order to develop a project, as the vast majority of the infrastructure will be located on private land and landowners will not give access without a lease or other formal arrangement and financial consideration for granting the use of the land. In many cases, payment for the leases will not start until closer to when the land is actually needed for the successful proponent to begin the project. In a large number of instances, up to the time of signing the Power Purchase Agreement the developers will only have options for a lease and will not be incurring significant costs related to securing land control. Leasing infrastructure sites is the most common option for wind projects, as opposed to purchasing land.

(f) There are many sites that could accommodate a 200 MW wind farm in Saskatchewan. A specific number of sites is not available, as this is dependent on a number of factors, including: the wind turbines used, wind resources in the area, topography, and local wind conditions. The entire area south of the forested zones of the province to the US border and between Alberta and Manitoba could potentially have utility-scale wind site locations. For competitive reasons, wind developers are hesitant to share the information on the sites that they are prospecting or developing.

(g) No. As Saskatchewan has an abundant wind resource with many potential sites, it would be very difficult and costly for one particular proponent to tie up a large portion of the potential sites. Many developers have been prospecting for and developing sites for the wind competitions.

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CAPP INTERROGATORIES

CAPP-2 **Reference: SaskPower response to CAPP in 2016 application CAPP Q16 b)**

"In evaluating an IPP vs. a corporate build option or in determining the cost of service for rate application purposes, SaskPower does not recognize additional equity or notionally attribute equity for an IPP option. Under lease accounting, the full cost of the generation plant associated with the IPP is recognized as an asset, with an offsetting entry to lease obligations, which is classified as debt. There is no increase in equity and thus no equity return is earned on the generation plant associated with an IPP. The long term consequences of a large dollar value series of IPPs, are material increases in the assets, debt, and debt leverage of SaskPower, without a commensurate increase in equity or income. SaskPower is planning to address this issue in the future." (underline added)

Can SaskPower provide an update on its plans to address the impacts of IPPs on its balance sheet? If not, when can this be expected?

Response:

SaskPower can confirm that under lease accounting, the full cost of a natural gas-fired generating plant associated with an IPP is typically recognized as an asset, with an offsetting entry to lease obligations, which is classified as debt. This reflects our company's ability to exercise dispatch rights (the control of an asset and its output). SaskPower has reviewed this accounting treatment and can confirm this will continue on a go-forward basis.

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CAPP INTERROGATORIES

CAPP-3 **Reference: Application page 36 (PDF page 39)**

"In future years SaskPower anticipates adding 100-200 MW of wind capacity every two years to meet the renewable capacity goal."

Reference: Saskatchewan Renewable IPP and Supplier Information Session November 17, 2016

http://www.saskpower.com/our-power-future/renewables-roadmap/

http://www.saskpower.com/wpcontent/uploads/SaskPower_Wind_Solar_RFQ_RFP_Process_Nov2016.pdf

LONG-TERM OUTLOOK - WIND

Year	MW Addition
2019	207
2020	200
2021	200
2023	200
2024	200
2025	200
2026	200
2027	200
2028	200
2029	100

Current Preferred Supply Plan calls for additional wind capacity

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With a proposed addition of 200 MW per year in each year, except 2022, would a more accurate description not be the addition of 200 MW per year (rather than 100-200 MW every two years)?

Response:

SaskPower's most recent preferred supply plan (March 2017) notes the potential addition of 1,800 MW of wind capacity through 2030. The timing and mix of supply additions required to meet our company's CO_2 emissions reduction target of 40% below 2005 levels by 2030 is subject to change based on a number of variables, including energy requirements, resource costs and other uncertainties. SaskPower's supply plan is revisited on a regular basis — as operating and market conditions change, so will our company's supply plan.

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CAPP INTERROGATORIES

CAPP-4 Reference: Application page 28 (PDF page 31)
2016-2017 Application page 23

2018 Application

Saskatchewan sales volumes

(in GWh)	Actual Twelve months 2015-16	Actual Twelve months 2016-17	Forecast Twelve months 2017-18	Forecast Twelve months 2018-19	Forecast Twelve months 2019-20
Saskatchewan sales					
Residential	3,066.6	3,068.6	3,323.9	3,372.0	3,423.0
Farm	1,255.5	1,188.8	1,308.4	1,288.0	1,280.0
Commercial	3,768.2	3,776.9	3,914.5	3,939.0	3,963.0
Oilfields	3,453.4	3,620.8	3,445.3	3,538.0	3,602.0
Power customers	8,876.5	9,206.7	9,217.7	9,339.0	9,717.0
Reseller	1,222.7	1,218.7	1,285.7	1,289.0	1,293.0
Total Saskatchewan sales	21,642.9	22,080.5	22,495.5	22,765.0	23,278.0

2016-2017 Application

Energy sales volume in Saskatchewan

(in GWhs)	Twelve months December 31 2013	Twelve months December 31 2014	Twelve months December 31 2015	Twelve months March 31 2016-17	Twelve months March 31 2017-18	Twelve months March 31 2018-19
Saskatchewan sales						
Residential	3,190.0	3,281.2	3,127.9	3,282.0	3,312.1	3,354.1
Farm	1,332.2	1,363.9	1,276.3	1,331.9	1,327.3	1,307.7
Commercial	3,663.5	3,788.2	3,795.3	3,844.9	3,875.4	3,903.0
Oilfields	3,448.3	3,503.1	3,493.5	3,478.9	3,551.1	3,651.1
Power customers	7,862.5	8,178.4	8,698.1	9,190.4	9,467.3	9,620.2
Reseller	1,256.8	1,273.9	1,233.8	1,290.9	1,294.7	1,298.6
Total Saskatchewan sales	20,753.3	21,388.7	21,624.9	22,419.0	22,827.9	23,134.7

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(a) Please discuss the factors that contributed to actual 2016-2017 residential sales of 3068.6 GWh falling short of the forecast 3282 GWh.

(b) Please discuss the factors that contribute to the large increase in residential sales from 2016-2017 actuals to the 2017-2018 forecast.

(c) Please confirm that current sales forecast for the power sector in 2017-2018 is 249 GWh lower than the forecast in the previous application and the forecast for 2018- 2019 is 281 GWh lower. Please discuss the specific reasons for the reduction (i.e. deferral of potash mines and/or pipelines?).

(d) Please discuss the factors that contribute to the most significant growth in the forecast period, the 378 GWh increase in the Power class from 2018-2019 to 2019-2020.

(e) Is the forecast growth in the Power sector in the 2019-2020 period essentially growth for pipeline and/or potash projects that had been forecast in earlier periods but have been deferred?

Response:

a) The factors contributing to actual 2016-17 residential sales falling short of forecast were weather, customer forecast, and UPC (use per customer). The weather in that winter period was warmer than normal, causing actual use to fall short of forecast. The residential customer account forecast was higher than actuals by less than 1%. In addition, UPC was down slightly from forecast. The factors causing UPC to fall after rising fairly consistently prior to 2015 are being analyzed. If the shift in UPC is determined to be a trend rather than an anomaly, the results of that analysis will be incorporated into future forecasts of the residential sector.

b) The large increase in forecast over actuals in the 2017-18 year is primarily due to the forecast being weather normalized, while the actuals shown in the table on page 28 are not normalized.

c) SaskPower confirms that the current sales forecast for the Power sector in 2017-18 is 249 GWh lower than the forecast in the previous application and the forecast for 2018- 2019 is 281 GWh lower. The reasons for the reduction in those two fiscal years are primarily due to the deferral of expansions in pipeline, potash, and other mining sectors. SaskPower is unable to provide details regarding individual customer forecasts due to confidentiality concerns.

d) The primary drivers of the increase in 2019-20 over 2018-19 are expansions in the potash, pipeline, and steel sectors. SaskPower is unable to provide details regarding individual customer forecasts due to confidentiality concerns.

e) This is an accurate description of the difference.

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CAPP INTERROGATORIES

CAPP-5 **Reference: Application page 30 (PDF page 33)**

"To ensure SaskPower is up-to-date on the load requirements for these customers, our company contacts each key account customer regularly to acquire short- and long-term expansion plans. The information provided by customers indicates growth in a number of areas. In the potash sector, while most expansions at existing mine sites have been completed there are two new mines under construction. In the pipeline sector, loads are increasing as Alberta oil sands production and conventional oil production in Alberta and Saskatchewan is shipped through our province to markets in eastern Canada and the United States. Growth is also attributable to the steel sector, universities, and seed crushing. Whenever possible, these forecasts are then cross-referenced to market information to ensure that SaskPower is developing its plan using the best information available."

(a) Please confirm that this paragraph is identical to the paragraph at the bottom of page 24 in the previous application.

(b) Please confirm that the description in this paragraph still accurately captures the circumstances relating to forecast growth in the Power sector.

Response:

A) Confirmed.

B) The description in this paragraph still accurately captures the circumstances relating to forecast growth in the Power sector for the rate application forecast (2017F Q2), although individual sector percentages may have changed from the forecast upon which the previous rate application was based.

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CAPP INTERROGATORIES

CAPP-6 **Reference: Application page 32 (PDF page 35)**

"In 2017-18 SaskPower is forecasting slight increases in CO2 sales and miscellaneous revenue, offset by the elimination of revenue from the Carbon Capture Test Facility."

Please explain the events that have transpired that resulted in the forecast increase in CO2 test facility revenue (to $17 million in 2017-2018) in the 2016 application turning to a current forecast of $0 revenue.

Response:

The 2016 and 2017 Rate Application assumed a new external partner would be secured to utilize the Carbon Capture Test Facility — creating an associated revenue stream — once SaskPower's contract with Mitsubishi Hitachi Power Systems expired at the end of fiscal 2016-17. However, SaskPower has instead joined with an external partner to perform tests with the goal of minimizing the cost of amine use in the existing carbon capture process at the Boundary Dam Integrated Carbon Capture & Storage Demonstration Project. This is a non-revenue generating arrangement.

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CAPP INTERROGATORIES

CAPP-7 Reference: Application page 34 (PDF page 37)

Fuel and purchased power price per generation source

(in $/MWh)	Actual Twelve months 2015-16	Actual Twelve months 2016-17	Forecast Twelve months 2017-18	Forecast Twelve months 2018-19	Forecast Twelve months 2019-20
Fuel and purchased power					
Gas	$ 34.61	$ 34.23	$ 32.81	$ 31.89	$ 30.42
Coal	26.11	25.56	25.89	26.95	27.90
Wind	96.93	98.79	99.10	102.13	106.37
Hydro	5.24	5.45	5.67	5.86	5.99
Imports	59.70	58.27	44.16	54.87	62.92
Weighted average fuel price	$ 27.45	$ 27.24	$ 25.87	$ 27.30	$ 27.90

(a) Please explain the factors that contributed to actual gas fuel costs of $34.23/MWh in 2016-17 to the forecast of $31.55/MWh (page 28 in 2016 application).

(b) Please provide the actual weighted average cost of gas for 2015-2016 and 2016-2017.

(c) Please explain all factors that contributed to the variance from the forecast value of $3.79/GJ for 2016-2017 (page 28 in 2016 application).

(d) Please explain all factors that contribute to the difference in the 2017-2018 weighted average cost of gas ($4.1/GJ per page 45) from the value forecast in the 2016 application of $4.25/GJ.

Response:

(a) The primary factor contributing to actual gas fuel costs of $34.23/MWh in 2016-17 as compared to the forecast of $31.55/MWh was higher than budgeted natural gas market prices from August 2016 to February 2017.

(b) The actual weighted average cost of gas for 2015-16 was $3.60/GJ and for 2016-17 was $4.00/GJ. The weighted average cost of gas is defined as total gas costs (including transportation and storage services) divided by the total volume of gas consumed for power generation.

(c) The actual weighted average cost of gas for 2016-17 was $4.00/GJ as compared to the forecasted value of $3.79/GJ. The primary factor contributing to the variance was higher than budgeted natural gas market prices from August 2016 to February 2017.

(d) The primary factors contributing to the difference in the forecasted 2017-18 weighted average cost of gas ($4.10/GJ) from the budgeted value in the 2016 and 2017 Rate Application ($4.25/GJ) are lower natural gas market prices for 2017-18 and a favorable shift in the gas generation mix due to higher than budgeted hydro generation.

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CAPP INTERROGATORIES

CAPP-8 **Reference: Application page 33 (PDF page 36)**

"The decrease is the due to favourable variances in mix and price of $19 million and $13 million respectively. Natural gas generation costs are forecasted to decrease from $34.23/MWh in 2016-17 to $32.81/MWh in 2017-18, while the favourable mix variance is due to above average availability of low cost hydro generation, which SaskPower is forecasting as 4,530 GWh compared to 3,525 GWh in 2016-17."

(a) Please explain the basis for assuming above average hydro generation in 2017-2018.

(b) Please confirm that SaskPower forecast below average hydro for 2016-2017 of 3068 GWh and actual hydro generation for the period was near the long term average, at 3525 GWh.

Response:

(a) The basis for the specific flow conditions forecast in June 2017 for 2017-18 was as follows:

- High storage levels in the reservoirs, above average snowfall in the mountains, and an early spring and mountain runoff lead to a 2017-18 flow projection for between median flow and upper quartile flow on the South Saskatchewan River System.

- 2016 fall rains, above average snowfall, and strong 2017 spring rains lead to a 2017-18 flow projection for between upper quartile and upper decile flow on the North Saskatchewan River System.

- Strong 2016 fall rains, strong snowfall, and strong 2017 spring rains lead to a 2017-18 flow projection for above upper decile flow on the Churchill River System.

(b) Confirmed. SaskPower's June 2, 2016, application forecast was 3,068 GWh for 2016-17 and actual hydro generation was 3,525 GWh.

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CAPP INTERROGATORIES

CAPP-9 **Reference: Application page 35 (PDF page 38)**
2016 Application page 30 (PDF page 32)

2016-2017 Application:
"SaskPower is anticipating consuming 74.3 million gigajoules (GJ) of natural gas in 2016-17, 71.9 million GJ in 2017-18, and 67.8 million GJ in 2018-19. Our company's hedging program reduces our exposure to the volatility of natural gas prices. As at March 31, 2016, SaskPower had hedged 70% of its anticipated natural gas consumption for fiscal 2016-17 and 64% for fiscal 2017-18."

2018 Application:
"SaskPower is anticipating consuming 63.0 million gigajoules (GJ) of natural gas in 2017-18 and 70.8 million GJ in 2018-19. Our company's hedging program reduces our exposure to the volatility of natural gas prices. As at March 31, 2017, our company had hedged 63.8% of its anticipated natural gas consumption for fiscal 2017-18 and 55.6% for fiscal 2018-19."

SaskPower appears to have hedged a slightly lower percentage of natural gas price exposure than indicated in the previous application. Is this the result of a policy change or other factors? Please explain.

Response:

No material policy changes have taken place since the previous rate application.

The 2018 Rate Application quoted an incorrect percent hedged for 2017-18. The volume hedged as of March 31, 2017, was 46.3 million GJ, which is unchanged from the 2016 and 2017 Rate Application. Therefore, based on the anticipated consumption of 63.0 million GJ in 2017-18, the percent hedged for the 2018 Rate Application was in fact 73.5%.

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CAPP INTERROGATORIES

CAPP-10 Reference: Sasktenders.ca – SaskPower tenders
Long-Term Natural Gas Program Review RFI BB_012 closed Aug 14, 2017
"The purpose of this RFI is to obtain information about reviewing the long-term natural gas program as described in Appendix A – Information Requested ("Information")."

(a) Please explain the purpose of SaskPower's RFI, and any potential implications for SaskPower's hedging policy.
(b) Is this RFI for a review similar to the third party review of the hedging program described in SaskPower's response to CAPP Q12 in the 2016 application? If not, how do they differ?
(c) Have any changes been made to SaskPower's natural gas hedging program since the previous application was prepared? If so, please describe the changes.

Response:

(a) SaskPower's strategic direction is shifting toward facilitating a transition to a cleaner energy future. The objective is to reduce CO_2 emissions by 40% from 2005 levels by 2030. Meeting this target requires SaskPower to proactively evaluate all existing policies to ensure that they align with this objective. SaskPower's senior management, supported by the Board of Directors, requested a third-party review of the program to ensure that the long-term hedge program meets SaskPower's long-term goals.

(b) This review is expected to provide a more in-depth qualitative and quantitative review of the hedge program.

(c) Since the last rate application, there was an update to the Long-Term Natural Gas Exposure Management Policy in December 2016. The three objectives of the policy (security of supply, market access and price management) remain unchanged. The policy continues to consist of a passive (mechanistic) portion and a discretionary (optional) portion.

However, the hedge schedule is now based on the most recent iteration of the Business Plan (which may include preliminary values), rather than the most recent Board-approved Business Plan. The change to the program was intended to provide the most up-do-date forecasted natural gas volumes which are used in the hedge schedule. All other guidelines and targets remain the same as the 2015 approval of the Policy.

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CAPP INTERROGATORIES

CAPP-11 **Reference: SaskPower 2016-2017 Annual Report Page 69 (PDF page 71)**

"Steps we are taking:

- *Secure transportation and storage of natural gas through long-term transmission contracts with renewable rights;*
- *Negotiation of coal contracts to address price, security of supply and equipment, and performance items;*
- *Development of a diversified and flexible fuel portfolio, including strategies for renewables, low-emitting sources and demand side management opportunities;*
- *Continuation and improvement of the hedging policy and program to address security of natural gas supply, market access and price management;*
- *Implementation of an integrated resource plan defining a diversified and flexible fuel portfolio, including up to 50% renewables by 2030; and*
- *Strengthening relationships with suppliers, customers and stakeholders to achieve further efficiencies, such as coordination of planned outages and alignment of expansion plans."*

(underline added)

Please explain the nature of the "improvements" to the hedging policy referred to in SaskPower's most recent annual report.

Response:

The nature of improvements include:

- A change to the policy to allow the percent hedged to be based on the most recent natural gas volume forecast rather than the Board-approved Business Plan. Without this change, transactions undertaken in the current year would have been based on outdated supply and Integrated Resource Plan assumptions and could have resulted in over or under hedging.

- To address the security of supply SaskPower is negotiating new agreements with suppliers to diversify its counterparty mix while also strengthening existing supplier relationships.

- To address natural gas market access, SaskPower continues to collaborate with pipelines to ensure transportation and storage services can support changing gas generation requirements.

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CAPP INTERROGATORIES

CAPP-12 **Reference: Application pages 36 and 37 (PDF page 39 and 40)**

"SaskPower has seven hydro facilities with a combined generating capacity of 864 MW, as well as an additional PPA with Manitoba Hydro for 25 MW of hydro capacity."

. . .

"SaskPower began importing 25 MW of firm capacity from Manitoba in 2015. A further 100 MW will be imported from Manitoba Hydro from 2020 to 2040."

(a) Please confirm the effective dates of the 25 MW Manitoba Hydro purchase (i.e. 2015 to ?).
(b) Does the 25 MW purchase serve northern or southern load?
(c) Does the 25 MW Manitoba Hydro purchase permit shaping of purchases to support wind generation in Saskatchewan? If so, what are the limitations on shaping?
(d) Please confirm that the Manitoba Hydro purchase appears under the import heading in the Fuel and Purchase Power summary tables (pages 33-34).
(e) Will the 100 MW Manitoba Hydro purchase permit shaping of purchases to support wind generation in Saskatchewan? If so, what are the limitations on shaping?

Response:

(a) November 1, 2015, to May 31, 2022.

(b) A response has been provided to the SRRP, however scheduling terms are confidential and cannot be released publicly.

(c) A response has been provided to the SRRP, however scheduling terms are confidential and cannot be released publicly.

(d) The Manitoba Hydro purchase appears under the import heading in the Fuel and Purchase Power summary tables (pages 33-34).

(e) A response has been provided to the SRRP, however scheduling terms are confidential and cannot be released publicly.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-13 Reference: Application page 2 (PDF page 5)
Schedule 4.0: Customer Data for Cost Allocation (PDF page 70)
SaskPower 2017 (Fiscal) Q1 Load Forecast Tables A4 and A5

"In January 2017, SaskPower marked a new peak load record of 3,747 megawatts (MW). During 2016-17, our company also marked a record for electricity generated, with 24,374 gigawatt hours (GWh) produced. Meanwhile, in July 2017 SaskPower marked a new summer peak load record of 3,419 MW."

TABLE A4

2017 (FISCAL) Q1 LOAD FORECAST

2017 FISCAL Q1

INSTANTANEOUS SYSTEM PEAK DEMAND FORECAST

Year	Historical		Most Likely Calendar Peaks		Potential Calendar Peaks	
	Winter MW	Summer MW	Winter MW	Summer MW	Winter MW	Summer MW
2005	2,954	2,639				
2006	2,946	2,706				
2007	2,960	2,879				
2008	2,969	2,834				
2009	3,194	2,773				
2010	3,231	2,750				
2011	3,162	3,070				
2012	3,195	3,053				
2013	3,314	3,187				
2014	3,543	3,161				
2015	3,561	3,377				
2016			3,718	3,446	3,867	3,507
2017			3,800	3,480	3,960	3,591
2018			3,845	3,564	4,004	3,626
2019			3,930	3,585	4,093	3,712
2020			3,953	3,610	4,118	3,734
2021			3,980	3,664	4,148	3,762
2022			4,040	3,708	4,210	3,818
2023			4,089	3,746	4,261	3,864
2024			4,131	3,804	4,305	3,904
2025			4,195	3,848	4,372	3,965
2026			4,243	3,885	4,422	4,010

TABLE A5

2017 (FISCAL) GRID ONLY LOAD FORECAST

2017 FISCAL Q1

Summary of Base and DSM Adjusted Forecasts

Year	Grid Only Energy Requirements (GWh)					Interval Calendar Peak (MW)					Instantaneous Calendar Peak (MW)	Demand Response Available (MW)
	No DSM	DSM Savings			DSM Adjusted	No DSM	DSM Savings			DSM Adjusted		
		Prior to 2016	After 2016	Total			Prior to 2016	After 2016	Total			
2016-17	24,617.8	273.2	38.1	311.3	24,306.5	3,906.2	109.5	7.2	116.7	3,789.5	3,874.3	85.0
2017-18	25,141.5	273.2	68.1	341.3	24,800.2	4,004.9	109.5	14.4	123.8	3,881.1	3,960.1	85.0
2018-19	25,489.0	273.2	98.3	371.4	25,117.6	4,056.7	109.5	28.6	138.1	3,918.6	4,004.5	85.0
2019-20	26,074.4	273.2	128.5	401.7	25,672.7	4,159.1	109.5	38.2	147.7	4,011.5	4,093.2	85.0
2020-21	26,336.1	273.2	159.5	432.7	25,903.4	4,192.8	109.5	47.7	157.2	4,035.6	4,117.8	85.0
2021-22	26,577.8	273.2	191.4	464.6	26,113.2	4,232.0	109.5	57.3	166.8	4,065.2	4,148.0	85.0
2022-23	27,024.4	273.2	223.8	497.0	26,527.4	4,302.2	109.5	66.9	176.4	4,125.9	4,209.9	85.0
2023-24	27,406.0	273.2	257.9	531.0	26,875.0	4,361.9	109.5	76.5	186.0	4,175.9	4,261.0	85.0
2024-25	27,759.6	273.2	292.7	565.9	27,193.7	4,414.8	109.5	86.1	195.6	4,219.2	4,305.1	85.0
2025-26	28,182.3	273.2	326.0	599.2	27,583.1	4,489.4	109.5	95.2	204.7	4,284.7	4,372.0	85.0
2026-27	28,559.9	273.2	357.3	630.5	27,929.4	4,547.2	109.5	103.8	213.3	4,334.0	4,422.2	85.0

Notes:
- DSM savings includes distribution loss savings.
- DSM savings do not include savings associated with the Interval Line Program.

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CAPP INTERROGATORIES

CAPP-13 Reference: Application page 2 (PDF page 5)
Schedule 4.0: Customer Data for Cost Allocation (PDF page 70)
SaskPower 2017 (Fiscal) Q1 Load Forecast Tables A4 and A5

(a) Please more fully explain the difference between the "Most Likely Calendar Peaks" and the "Potential Calendar Peaks".
(b) Is the system planned for "Most Likely Calendar Peaks" and the "Potential Calendar Peaks"? Please explain the basis for the response.
(c) What is the interval of the instantaneous peak?
(d) Does table A4 reflect calendar or fiscal years? If it is fiscal years, does 2016 reflect 2015-2016 or 2016-2017?
(e) Please reconcile the instantaneous peaks shown in Table A4 with those shown on Table A5?
(f) What is the interval of the peaks shown in Table A5?
(g) Is planning done on the basis of meeting instantaneous peaks or interval peaks? Please explain the basis for this response.
(h) Is operation of the system done on the basis of meeting instantaneous peaks or interval peaks? Please explain the basis for the response.

Response:

(a) The difference between the "Most Likely Calendar Peaks" and "Potential Calendar Peaks" can be reduced simply to weather. The most likely peak is calculated using an average of three to five years in weather sensitive classes, whereas the potential peak is calculated using a representative cold weather year.

(b) The system is planned for Potential Calendar Peaks in order to ensure adequate supply. Planning for Most Likely Calendar Peaks would risk not meeting demand.

(c) Instantaneous peaks are read every four seconds.

(d) Table A4 should have been labeled with fiscal years, just as Table A5 was labeled. In Table A4, 2016 actually refers to fiscal 2016-17.

(e) The instantaneous peaks in Table A5 should be the same as the instantaneous peaks in Table A4. The Table A5 peak for 2016-17 should be 3,867. The DSM adjustment was inadvertently not included in the Table A5 2016-17 fiscal year (3,874.3 - 7.2 = 3,867.1). Any other differences are due to rounding.

(f) The interval peaks in Table A5 are hourly.

(g) Planning is done on the basis of meeting instantaneous peaks. This represents the true demand requirement of the system.

(h) Operation of the system is done on the basis of meeting instantaneous peaks. This represents the true demand requirement of operating the system.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-14 Reference: Application page 40 (PDF page 43)

"Taxes represent the payment of corporate capital tax and grants-in-lieu of taxes. Corporate capital tax is based on SaskPower's capital structure and increases as the size of our company grows. Steady increases in capital taxes are expected as a result of SaskPower's capital program. Meanwhile, grants-in-lieu are based on electricity sales in 13 communities across Saskatchewan."

(a) Please confirm that the Corporate Capital Tax is assessed on SaskPower at 0.6% of total capital (essentially, debt plus equity).

(b) Please confirm that at 75%/25% debt/equity the capital tax is effectively equal to 2.4% of equity.

Response:

(a) Confirmed, although there are some adjustments — such as investments and differences between deductions for income tax purposes — compared to amounts recorded in the financial statements.

(b) SaskPower had a consolidated debt/equity ratio of 75.7% at March 31, 2017. Capital tax is calculated only by each individual company rather than on consolidated basis. As a result, capital tax returns are prepared for SaskPower on an unconsolidated basis; subsidiaries prepare capital tax returns on an individual basis.

SaskPower's unconsolidated capital tax calculation for 2017 approximates 2.0% of equity.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-15 Reference: Application page 41 (PDF page 44)
Capital Investment

2018 Application:

(in millions)	Actual Twelve months 2015-16	Actual Twelve months 2016-17	Forecast Twelve months 2017-18	Forecast Twelve months 2018-19	Forecast Twelve months 2019-20
Growth & compliance investment					
Generation	103	179	319	287	288
Transmission	156	119	167	173	177
Distribution	79	21	18	25	25
Customer connects	149	130	134	132	135
Total growth & compliance investment	487	449	637	617	625

2016 Application:

(in millions)	Twelve months December 31 2014	Twelve months December 31 2015	Twelve months March 31 2016-17	Twelve months March 31 2017-18	Twelve months March 31 2018-19
Growth & compliance investment					
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
Total growth & compliance investment	742	588	428	495	641

(a) Please explain the variance in generation growth investment for 2016-2017 from $19 m forecast in the 2016-2017 application and the $179 m actual amount in the 2018 application.

(b) Please explain the increase in generation growth investment for 2017-2018 from $89 m in the 2016-2017 application to $319 m in the 2018 application.

(c) Please explain the increase in generation growth investment for 2018-2019 from $154 m in the 2016-2017 application to $287 m in the 2018 application.

(d) Please explain the variance in transmission growth investment for 2016-2017 from $224 m forecast in the 2016-2017 application and the $119 m actual amount in the 2018 application.

(e) Please provide a list of all generation projects included in the growth category with expenditures in the 2016-2017 and 2018 applications with expenditures greater than $20 million.

(f) Please provide a list of all transmission projects included in the growth category with expenditures in the 2016-2017 and 2018 applications with expenditures greater than $20 million.

Response:

(a) The variance between the $19 million forecasted for generation growth in the 2016 and 2017 Rate Application and the $179 million actual reported in the 2018 Rate Application is due primarily to the reclassification of the Chinook Power Station from an Independent Power Producer (IPP) to a SaskPower-owned capital project.

(b) The increase between the two rate application submissions is also due primarily to the reclassification of the Chinook Power Station from an IPP- to a SaskPower-owned capital project.

(c) See a.) and b.) above.

(d) The variance between the $224 million forecasted for transmission growth in the 2016 and 2017 Rate Application and the $119 million actual spend reported in the 2018 Rate Application is due primarily to lower than budgeted spending on two major, multi-year 230-kV projects. It should be noted that this will result in higher capital costs in future years as the scope of the projects has not changed, only the timing.

(e)

Generation Projects - 2016/17 Application
Capital Projects in Excess of $20 Million
(in $millions)

	2016/17	2017/18
Tazi Twe	9.5	81.7
Chinook Power Station (Interconnection Costs)	2.1	7.2
Total	**11.6**	**88.9**

Generation Projects - 2017/18 Application
Capital Projects in Excess of $20 Million
(in $millions)

	2016/17	2017/18
Tazi Twe	5.7	0.8
Chinook Power Station	168.5	317.8
Total	**174.2**	**318.6**

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2018 RATE APPLICATION
CAPP INTERROGATORIES

(f)

Transmission Projects - 2016/17 Application
Capital Projects in Excess of $20 Million
(in $millions)

	2016/17	2017/18
230 KV Line - Aberdeen to Wolverine	22.4	-
230 KV Line - Kennedy to Tantallon	50.4	7.2
230 KV Line - Pasqua to Swift Current	45.0	80.2
Total	**117.8**	**87.4**

Transmission Projects - 2017/18 Application
Capital Projects in Excess of $20 Million
(in $millions)

	2016/17	2017/18
230 KV Line - Aberdeen to Wolverine	22.2	-
230 KV Line - Kennedy to Tantallon	31.8	9.9
230 KV Line - Pasqua to Swift Current	22.9	114.5
Switching Station Transformer Replacement - QE	1.0	22.0
Total	**77.9**	**146.4**

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-16 Reference: Application page 41 (PDF page 44)
Capital Investment

2016 Application:

REGINA TO PASQUA TRANSMISSION LINE	
IN-SERVICE	TOTAL COST (MILLIONS)
TBD	$100
A new 230-kV transmission line – approximately 100 km – needed to facilitate new generation and industrial growth in Regina.	

(a) Please describe the status of the Regina to Pasqua transmission line identified in the 2016 application.

(b) Is the new generation referred to the Chinook Power Station?

Response:

a) The Regina to Pasqua Transmission Line is currently in definition phase, during which engineering and stakeholder consultation activities are being completed to identify a preferred line route. Advance civil work on the Condie Station is on-going to ensure it is able to accommodate a new line position. SaskPower is currently in the process of firming up the project cost and schedule while identifying project delivery risks.

SaskPower plans to secure final approval from the Board of Directors in December 2017 before entering the construction phase. The project is expected to be in-service in April 2019.

b) The Regina to Pasqua Transmission Line is part of SaskPower's bulk electric system reinforcement, and as such is facilitating multiple generation projects in the southwest part of Saskatchewan. In addition to accommodating the Chinook Power Station, the Regina to Pasqua Transmission Line will also provide firm service to wind generation projects.

The system reinforcement projects between Swift Current-Pasqua and Pasqua-Regina will provide a corridor to accommodate the Chinook Power Station and existing planned wind projects, as well as potential future generation. The project can also be used to accomodate firm import capability from Alberta.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-17 Reference: Application page 44 (PDF page 47)

CHINOOK POWER STATION		
IN-SERVICE	TOTAL COST (MILLIONS)	YTD (MILLIONS)
2019	$680.5	$166

SaskPower was chosen as the most economic option to build the new natural gas-fired combined cycle generating station with a capacity of up to 350 MW. The facility is required to meet growing electricity demand and to support intermittent renewable energy generation, and will be located near Swift Current. The project is expected to cost $680.5 million, not including transmission costs.

Please provide a table identifying all transmission projects (and their capital cost) related to integration of the Chinook Power Station.

Response:

Project #	Project Title	Purpose	Status	Estimated Cost ($M)	In service dates
N009	Line-230 kV Swift Current to Chinook Interconnection	Physical Interconnection of Chinook Power Plant station	Under Construction	$12.4	Q2 2018
N135	STN-Chinook Remedial Action Scheme	System Reinfrocement to mitigate post-contingency or prior outage loading violations and facilitate commissioning of the Chinook Power plant.	At Planning Phase	$1.5	Q1 2019
N028	STN-230 kV- Boundary Dam Phase Shifting Transformer	System reinforcement to be able to operate larger generating units in SaskPower (Chinook Power Plant and potential others in future)	In Definition Phase	$26.0	Q3 2019
N015*	Line- 230 -138 kV Pasqua to Swift Current	System Reinforcement for generation deliverability out of Swift Current area (Chinook Power plant is one of the many porjects in the area)	Under Construction	$228.7	Q4 2019
T1028*	Line- 230 kV Pasqua to Condie	System Reinforcement for generation and load deliverability in the area (Chinook Power plant is one of the many porjects in the are)	In Definition Phase	$33.5	Q1 2019
Total				**$302.1**	

Notes:

* N015 and T1028 are considered bulk electric system reinforcement projects that provide reinforcement to the transmission system in the Regina to Swift Current area. In addition to the Chinook Power Station, these projects are required to provide service for wind generation installations in the southwest part of the province, facilitate load growth in the Regina to Moose Jaw corridor, and coordinate replacement of aging infrastructure in the area (existing 138 kV lines).

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CAPP INTERROGATORIES

Status definition:

- Planning phase implies no funds have been authorized and the project is still in the planning phase but included in the budget.

- Definition phase implies minimum funds for the project have been authorized to carry out required activities (desktop engineering, field assessments and stakeholder consultation) to firm up project scope, schedule, costs and delivery risks.

- Construction phase implies funds have been fully authorized to procure resources and construct the project by the desired in-service date.

- Accuracy of cost estimates vary based on complexity of project and level of level of tasks completed.

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CAPP INTERROGATORIES

CAPP-18 Reference: Application page 25 (PDF page 48)

Financial/productivity indicators

	Twelve months March 31 2015-16	Twelve months March 31 2016-17	Twelve months March 31 2017-18	Twelve months March 31 2018-19	Twelve months March 31 2019-20
Operating income ($ millions)	63.2	46.2	159.9	209.7	226.2
Net income ($ millions)	-19.3	56.3	159.6	209.7	226.2
Return on equity (operating) (%)	2.9	2.1	6.9	8.5	8.5
Debt ratio including capital leases (%)	75.7	75.7	75.8	75.3	74.7
OM&A/PP&E (%)	6.9	7.1	6.8	6.6	6.3
Dividend declared ($ millions)	-	-	-	21.0	22.6

(a) Please confirm that the 2016 application forecast a dividend in 2017-2018 but the current application does not. Please explain the rationale for the change.

(b) Please explain the factors that determine whether SaskPower declares a dividend or not.

(c) Is SaskPower directed by the Crown Investments Corporation (CIC) as to whether it should pay a dividend to CIC?

(d) Has SaskPower been directed to provide a dividend to CIC for 2018-2019 and/or 2019/2020?

Response:

(a) Confirmed. The 2016 Rate Application assumed a dividend of $20.7 million to be paid in 2017-18 and the current application does not assume payment of a dividend until 2018-19. This change in assumption was due to a recommendation made by Crown Investments Corporation (CIC) of Saskatchewan to defer the planned 2017-18 dividend and begin paying a dividend equal to 10% of operating earnings in 2018-19.

(b) The payment of dividends by SaskPower is directed by CIC.

(c) Yes.

(d) SaskPower has been directed by CIC to assume a dividend in 2018-19 and 2019-20, equal to 10% of operating earnings.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-19 **Reference: Application page 47 (PDF page 50)**

"For Commercial (small & medium business) customers with approved time-of-day metering, SaskPower will be adjusting the calculation for the customer's recorded demand, which is currently either the maximum demand registered during the on-peak period of the current month or 80.0% of the maximum demand registered at any other time during the current month. This percentage will increase to 85.0% on March 1, 2018, as SaskPower continues to shift its time-of-day incentive from demand to energy-related. Minimum bills for Farm and Commercial demand billed customers will be increased by the system average increase on March 1, 2018."

(a) Please provide an estimate of the incremental revenue that will be achieved through this increase in ratchet level from 80% to 85%.
(b) How many customers will be impacted by this increase in ratchet level from 80% to 85%.
(c) Please fully explain what is meant by "as SaskPower continues to shift its time-of-day incentive from demand to energy-related".

Response:

a/b) The following table provides the incremental revenue achieved from increasing the maximum off-peak demand from 80% to 85%, along with the counts of customers impacted by this change.

Rate Code	Number of Customers on Time-of-Day Billing	Number of Customers Impacted	80% OffPeak Demand Average Monthly Bill ($)	85% OffPeak Demand Average Monthly Bill ($)	Impact on Average Monthly Bill ($)	Impact Average Revenue Increase (%)
E05	2	1	$2,107	$2,123	$16	0.8%
E06	5	2	$29,833	$29,867	$34	0.1%
E07	2	1	$5,144	$5,214	$71	1.4%
E10	10	2	$33,442	$33,497	$54	0.2%
E12	3	1	$25,615	$25,671	$56	0.2%
E75	1	0	$0	$0	$0	0.0%
E76	1	0	$0	$0	$0	0.0%
E78	3	0	$0	$0	$0	0.0%
Total Customers	27	7				

c) SaskPower is replacing the current demand based time-of-day metering incentives on its General Service rates in favour of energy-based time of use incentives as part of a larger investigation into all of its time of use offerings.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-20 Reference: Standing Committee on Crown and Central Agencies Hansard Verbatim Report No. 13 - December 13, 2016

"Mr. Marsh: — As we are completing a longer term integrated resource plan for SaskPower, we'll have that through our board of directors by June. I would say at that time we would have a number that we could provide to you."

(a) Can SaskPower confirm that the Integrated Resource Plan has been "through" the Board of Directors in June? If not, please describe the current timing.
(b) Can SaskPower confirm when it will release a public version of its Integrated Resource Plan?

Response:

(a) The Integrated Resource Plan went to the SaskPower Board of Directors meeting on March 16, 2017.

(b) We cannot confirm a release date at this time.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-21 Reference: Saskatchewan Rate Review Panel Report – 2016 Application

"All SaskPower customers and the residents of Saskatchewan should become more actively engaged in the discussion regarding our future energy needs, how these needs will be met, and the costs associated with meeting those needs. Since these are such important issues for all Saskatchewan people, the Panel believes that SaskPower should undertake a public and industry engagement process to discuss its resource plan, the costs of renewable generation integration, and the implications for future rate increases, prior to SaskPower board finalization and approval." (Page 10, underline added)

Please describe the process of developing the Integrated Resource plan and explain how the process of developing the referenced Integrated Resource Plan was consistent with the Saskatchewan Rate Review Panel recommendation to "undertake a public and industry engagement process to discuss its resource plan".

Response:

Integrated Resource Plans (IRPs) are a common planning tool employed in the utility industry to develop a long-term strategy in consideration of today's uncertainties. Electric utilities are very capital intensive, with significant investments recovered over long time horizons. The industry is also going through rapid change, making forecasting very difficult when it comes to key factors such as future market conditions, regulatory changes, technological advancements, and customer expectations.

SaskPower's IRP is a 20-year look ahead that evaluates reliable, cost-effective resource options (supply-side, demand-side and transmission/distribution resources) for meeting the future demand for electricity under a range of potential future conditions.

Public consultation was completed on elements of the 2017 IRP. Related activity includes consultation concerning customer and community solar power, siting for the province's first 10-MW solar project, and the next potential natural gas-fired plant. Additional consultation is planned for the next version of the IRP.

The 2017 IRP strives to accomplish the following:

- Ensure reliability for all stakeholders
- Evaluate all options in a fair and consistent manner
- Minimize costs to all stakeholders
- Create a flexible plan that allows for uncertainty and permits adjustment in response to changed circumstances
- Reduce CO_2 emissions from power generation

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2018 RATE APPLICATION
CAPP INTERROGATORIES

IRP objective statement

To meet system demand, customer expectations and environmental objectives in a reliable, sustainable, and cost-effective manner across a reasonable range of foreseeable futures. The planning approach considers reliability, sustainable development and cost effectiveness.

Process overview

The IRP is intended to respond to two core resource planning questions: in consideration of long term costs, what quantity of resources does SaskPower need and what are the timing of those needs? Both existing resources and potential future resources are considered using the methodology described below.

The 2017 IRP is the culmination of a comprehensive decision-making process aimed at meeting future customer needs, achieving regulatory requirements and managing environmental impacts during the 20-year planning period. Many different disciplines and areas of expertise from SaskPower and external industry experts were accessed in this planning process. This process provided a framework through which both supply-side and demand-side options were compared to develop a plan that provides reliable, sustainable and cost-effective electricity for Saskatchewan.

Creating SaskPower's 2017 IRP was an iterative process, using both internal and external resources to accomplish the tasks necessary to complete the plan, which included:

STEP 1 – SCOPING

Identified resource options, strategies and future conditions to evaluate as part of the IRP process. Sessions were held with employees representing various departments and levels of seniority and experience. The comments received helped to identify important issues and lay the foundation for the process.

STEP 2 –DEVELOP PLANNING FRAMEWORK

Developed scenarios through a collaborative approach to identify the range of plausible futures that are outside of SaskPower's control and a set of potential portfolio strategies which SaskPower can choose to employ.

STEP 3 – ASSESS NEEDS

Evaluated forecasts of load growth, plant conditions, contract terms and operational constraints to define the needed resources over the 20-year planning horizon.

STEP 4 – CONSIDER RESOURCE OPTIONS

Evaluated potential energy resources, including conventional, renewable, and customer-side solutions and identified the role each may play in meeting customer needs. Peak contributions from existing resources were compared to the forecasted load and reserve requirements.

2018 RATE APPLICATION
CAPP INTERROGATORIES

STEP 5 – PERFORM SCENARIO ANALYSIS
Ran the combinations of strategies and scenarios through a simulation model that filtered each through a series of pre-defined variables to produce key decision metrics for further evaluation and comparison. This phase of the IRP used industry-standard capacity expansion planning and production cost modelling software, including PROMOD and Strategist.

STEP 6 - SELECT PLAN
Selected portfolio from the scenario analysis process based on the one that provided the best mix of benefits to SaskPower and customers on the defined metrics versus all others considered.

To date, no consultation strictly limited to the IRP has taken place. However, SaskPower publicly shares information about Saskatchewan's power future, including major generation projects as identified within the Integrated Resource Plan, on an ongoing basis.

This includes sharing information on saskpower.com, announcements as projects are approved, and presentations to key stakeholder audiences, including the Saskatchewan Industrial Energy Consumers Association, business organizations and other interested organizations. We also host open houses to provide detailed information and seek input on major projects. A recent example is the *Let's Talk Solar* consultations that were conducted in the spring of 2017, which will help to shape future solar programs in Saskatchewan.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-22 **Reference: Standing Committee on Crown and Central Agencies Hansard Verbatim Report No. 13 - December 13, 2016**

"Mr. Marsh: — Yes. We continue to look at how the technology is progressing. And as I've indicated on a number of occasions, we continue to develop options for Boundary dam 4 and 5, where we have to make a decision by the end of 2019. We've already signalled that we want to be in a position later in 2017 or beginning of 2018 with a decision on that unit so we know clearly where we're heading.

Ms. Sproule: — So when you say a decision has to be made by 2019, I thought that's when it had to be implemented.

Mr. Marsh: — No. Under the current regulations the decision has to be made. If you commit to a carbon capture facility, then you have a period of time where you're allowed to build that facility and, you know, replace the turbine generator and build the carbon capture facility. And I believe we'd have out to the end of 2024 in order to get that facility up and running."

(a) Is Carbon Capture on Boundary Dam Units 4 and 5 a significant input to the Integrated Resource Plan?

(b) Does SaskPower intend to consult with customers and the public prior to making a recommendation to its Board in respect of carbon capture on Boundary Dam Units 4 and 5?

Response:

(a) Carbon capture on Boundary Dam Power Station Units #4 and #5 were inputs to the Integrated Resource Plan.

(b) Decisions related to the deployment of carbon capture at Boundary Dam Power Station Units #4 and #5 have not yet been made. A dedicated team within SaskPower has been brought together to perform a thorough economic analysis of the options available. Plans for consultation have not been developed at this point.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-23 Reference: SaskPower 2016-2017 Annual Report Page 66 (PDF page 68)

Risks we are facing:

- If stakeholder and customer expectations are not identified and managed, public opinion could negatively affect our reputation;
- If awareness/support of SaskPower's strategic direction is low, public support and social licence to proceed may be threatened;
- Lack of awareness of our challenges and strategic plans by our shareholder and stakeholders risks timely and costly delays to decisions and projects; and
- Lack of stakeholder support due to a poor reputation puts the approval of future rate increases at risk.

Steps we are taking:

- Development, implementation and monitoring of communication strategies to meet the needs of stakeholders, including strategies for using and managing social media;
- Development of a revised corporate strategy that identifies and prepares for opportunities from market disruptions;
- Execution of stakeholder engagement processes and a dedicated Aboriginal relations team;
- Strengthening of relationships through information and consultation processes and the development of a stakeholder engagement strategy; and
- Public engagements on solar energy and our Integrated Resource Plan.

Please explain all public engagements undertaken with respect to development of the Integrated Resource Plan, consistent with the last bullet in the reference.

Response:

To date, no consultation that has been strictly limited to the IRP has taken place. However, SaskPower publicly shares information about Saskatchewan's power future, including major generation projects as identified within the Integrated Resource Plan, on an ongoing basis.

This includes sharing information on saskpower.com, announcements as projects are approved, and presentations to key stakeholder audiences, including the Saskatchewan Industrial Energy Consumers Association, business organizations and other interested organizations. We also host open houses to provide detailed information and seek input on major projects. A recent example is the *Let's Talk Solar* consultations that were conducted in the spring of 2017, which will help to shape future solar programs in Saskatchewan.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-24 **Reference: Standing Committee on Crown and Central Agencies Hansard Verbatim Report No. 13 - December 13, 2016 Page 265**

"Ms. Sproule: — Right. I know this, but I forget the numbers, so thank you. Smart meters, a couple of more topics. Our time is quickly running out. In the last committee you provided an update on industrial and commercial smart meters. Can you tell us where that's at currently?

Mr. Marsh: — The last meeting, or was it the previous?

Ms. Sproule: — I can't remember.

Mr. Marsh: — Yes, so currently we are looking at a replacement program for our smart meters, but the first stage is to start introducing commercial and industrial meters into the system. So those would be meters that would be on an oil field location out in the countryside, for example. We'd be looking at those facilities. Most of those companies want to have the smart meter put on because it allows them access, remote access to their consumption and other characteristics out at that oil field site."

Hansard Verbatim Report No. 17 – April 25, 2017 Page 326

"Mr. Marsh: — Not much change since we spoke back in December. We are moving forward with testing on our commercial and industrial meters only in 2017. So that would be customers like oil field customers, some commercial accounts, SaskEnergy facilities, other SaskPower facilities. Most of these meters are three phase, and they're located in rural areas of the province. That testing will continue and, subject to the results of that testing which we expect to have no problem with at all, we'll be moving forward with about 40,000 commercial and industrial meters later this fall and into 2018.

(a) Please provide an update on the installation of smart meters in the oilfield sector.
(b) Please provide an outline of the schedule for rolling out smart meters in the oilfield sector, including number of smart meters installed over time vs. the total number of meters in the sector.
(c) Please describe the capabilities that can and/or will be provided upon the installation of smart meters in the oilfield sector.

Response:

(a) Planning and preparation for the deployment of commercial and industrial meters is complete. This included rigorous meter testing, employee training, contract updates, technology enhancements, customer research and development of communication strategies. Two customers have opted into phase one of what will be two phases of a pilot.

(b) Phase one of the commercial and industrial meter pilot will include deployment of over 500 oilfield meters and will occur from October to December 2017. Once phase one is complete, phase two of the pilot will take place from January to March 2018 and involve the deployment of approximately 7,500 meters, many of which will be oilfield meters. Subject to the results of these two pilots, full deployment will take place from April 2018 to March 2019, which will include the remaining oilfield meters within our system. Full deployment will include approximately 18,000 oilfield meters.

(c) Customers will receive monthly billing based on actual consumption. During the pilot phases we will also work closely with our customers to understand the data that they require and how often they would like to receive it. Validation of our billing processes and customer expectations will also be encompassed as part of these pilots.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-25 **Reference: Standing Committee on Crown and Central Agencies**
Hansard Verbatim Report No. 17 - April 25, 2017

"Mr. Marsh: — The next one that's scheduled to come in, in the 2023, we haven't determined a site for that yet. We're just in the very preliminary stages of looking at the feasibility for that one.

Ms. Sproule: — And what amount of megawatts are you hoping to get out of that one?

Mr. Marsh: — That would be a similar size — 350 with the potential to perhaps have another unit beside it, so there might be eventually 700 at that particular facility. Now in addition to gas, we also are moving down the path, as I indicated, with wind and 1600 megawatts of wind between now and 2030 based on current projections."

Can SaskPower provide an update with respect to planning for an additional combined cycle gas unit subsequent to the Chinook station?

Response:

SaskPower is evaluating a number of possible locations for a potential future combined cycle gas turbine to be constructed after the Chinook Power Station. The expected in-service date could be between 2022 and 2024, depending on customer load growth and other factors. Public engagement and consultation on the potential location is ongoing.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-26 Reference: SaskPower response to CAPP Q10 from 2016 Application

b) The following table includes the actual and forecast unhedged and hedged physical transactions.

	Unhedged Purchases			Physical Hedges		
	GJ (Millions)	Notional Value (Millions)	$/GJ	GJ (Millions)	Notional Value (Millions)	$/GJ
2013	12	$ 40	$ 3.23	24	$ 106	$ 4.34
2014	11	$ 48	$ 4.26	23	$ 99	$ 4.35
2015	20	$ 53	$ 2.65	22	$ 95	$ 4.34
Jan-Mar '16	6	$ 12	$ 1.95	5	$ 23	$ 4.17
2016/17	28	$ 62	$ 2.24	21	$ 91	$ 4.23

Note: 2013 through March 2016 are actual values, with fiscal 2016-17 a forecasted value.

Please provide an update to the referenced table from SaskPower's response to CAPP Q10 in the 2016 application.

Response:

The following table includes the actual and forecast unhedged and hedged physical transactions.

	Unhedged Purchases			Physical Hedges		
	GJ (Millions)	Notional Value (Millions)	$/GJ	GJ (Millions)	Notional Value (Millions)	$/GJ
2013	12	$ 40	$ 3.23	24	$ 106	$ 4.34
2014	11	$ 48	$ 4.26	23	$ 99	$ 4.35
2015	20	$ 53	$ 2.65	22	$ 95	$ 4.34
Jan-Mar '16	6	$ 12	$ 1.95	5	$ 23	$ 4.17
2016/17	24	$ 57	$ 2.39	22	$ 92	$ 4.20
2017/18	16	$ 34	$ 2.19	21	$ 94	$ 4.40

Note: 2013 through 2016-17 are actual values, with fiscal 2017-18 a forecasted value.

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2018 RATE APPLICATION
CAPP INTERROGATORIES

CAPP-27 Reference: 2018 Fiscal Test Embedded Cost of Service Study Page 70
Schedule 4.0: Customer Data for Cost Allocation (PDF page 70)

Schedule 4.0: Customer Data for Cost Allocation

Customer Data for Cost Allocation
2018 Fiscal Test Embedded Cost of Service Study

Customer Class	Energy Sales GWH	NCP Demand KW	CP Demand KW	NCP Load Factor [1]	CP Load Factor [2]
Urban Residential	2,560	2,477,403	540,217	11.80%	54.10%
Rural Residential	764	738,884	161,120	11.80%	54.10%
Farms	1,308	811,831	218,146	18.40%	68.47%
Urban Commercial	2,777	939,651	419,847	33.73%	75.49%
Rural Commercial	1,076	375,885	162,611	32.69%	75.56%
Power - Published Rates	6,719	1,156,746	794,655	66.31%	96.52%
Power - Contract Rates	2,499	492,331	320,515	57.94%	89.00%
Oilfields	3,445	611,556	402,647	64.31%	97.68%
Streetlights	62	14,939	7,282	47.10%	96.61%
Reseller	1,286	245,373	212,579	59.82%	69.05%
Total	**22,495**	**7,864,598**	**3,239,619**	**32.65%**	**79.27%**

(a) Please explain the basis for the CP demand (i.e. grid connected vs. total load, at the customer or the generator, instantaneous vs. 15 minute interval vs. hourly interval demand).
(b) Is the CP demand shown the average of the summer and winter peak CP demand? If it is the average, please provide the class CP demands for each of the summer and winter CP demand.
(c) Please reconcile each of the summer and winter CP demands with the load forecast provided with the application.
(d) Please explain how the rate class CP demands are derived.
i. Are they based on a single or multiple years?
ii. Are they based on actual demand, weather normalized or some other demand?
iii. Please describe how the basis for the CP demand used is consistent with the demand the system is designed to serve.

Response:

a) Coincident Peak (CP) demand is described as each customer class's contribution to the system peak at the time of the system peak. The CP demand shown in Schedule 4.0 represents the load at customer meters and is calculated on a 60 minute interval. Please also note that the CP demand in Schedule 4.0 does not include the provision for losses or internal use.

b) Yes, the CP demand shown on Schedule 4.0 is the average of the summer and winter peak CP demands. Please see the table below for the breakdown of the summer and winter peak demands:

Coincident Peak Customer Data for Cost Allocation
2018 Fiscal Test Embedded Cost of Service Study

Customer Class	2CP Demand KW	Sum CP Demand KW	Win CP Demand KW
Urban Residential	540,217	532,325	548,110
Rural Residential	161,120	158,766	163,474
Farms	218,146	171,857	264,436
Urban Commercial	419,847	452,297	387,397
Rural Commercial	162,611	173,999	151,223
Power - Published Rates	794,655	781,961	807,348
Power - Contract Rates	320,515	312,305	328,724
Oilfields	402,647	369,279	436,015
Streetlights	7,282	-	14,564
Reseller	212,579	224,256	200,902
Total	**3,239,619**	**3,177,044**	**3,302,194**

c) The summer and winter CP demands in the rate application cannot be reconciled to the demands in the load forecast document that was provided as part of the application. The load forecast document that was provided as part of the minimum filing requirements for the application is the 2017 Fiscal Q1 forecast, whereas the summer and winter CP demands used in the application are from the updated 2017 Fiscal Q2 forecast.

d)

i. CP demands used for cost allocation purposes are determined from coincident peak load factors derived using a minimum of three to a maximum of five years of actual historical load information.

ii. For the Power Class customers and Large Oilfield accounts, CP demands are based on actual information obtained from the customer's meter. Reseller information is also based on actual meter information, but adjusted for weather. For mass market customer classes (Residential, Farm, Commercial and Oil), the CP demands are based on weather normalized sample data results being extrapolated to the class billing determinants on an annual basis.

iii. SaskPower uses the most likely peak for cost allocation purposes and the potential peaks for planning how much demand the system needs to be capable of serving.

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