

**CENTRA GAS MANITOBA INC.
2015/16 GAS COST APPLICATION
NATURAL GAS VOLUME FORECAST**

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**CENTRA GAS MANITOBA INC.
2015/16 COST OF GAS APPLICATION
NATURAL GAS VOLUME FORECAST**

1 **4.0 OVERVIEW**

2 This Tab discusses the actual and forecast of gas sales volumes and customers for
3 the period from 2012/13 to 2016/17. Centra is providing the Natural Gas Volume
4 Forecast for the period 2014/15 to 2023/24 as Appendix 4.1 to this Tab. Appendix
5 4.1 contains the assumptions, methodology and summary of the forecast and
6 includes the tables of the annual forecast customers, volumes and average use from
7 2014/15 to 2023/24. It should be noted that the forecast values presented in the
8 schedules to this Tab reflect the Natural Gas Forecast prepared in 2014, updated to
9 reflect the migration of eight customers from the Interruptible class to the High
10 Volume Firm class commencing in November 2014, which occurred subsequent to
11 the preparation of the 2014 Natural Gas Volume Forecast. This Application is based
12 on the values in the Tab 4 schedules, which include the transfer of these customers.

13
14 **4.1 NATURAL GAS CUSTOMER & VOLUME FORECAST SUMMARY**

15 The 2015/16 Forecast (April 1 to March 31) is based on an average of 276,034
16 customers and a total volume forecast of 2,019,270 10^3m^3 , as shown on Schedules
17 4.2.4 and 4.4.4 respectively. The forecast is lower by 51,632 10^3m^3 than the 2014/15
18 actual because forecast efficiency improvements in the Small General Service
19 (“SGS”) Residential and Large General Service (“LGS”) classes outweigh expected
20 sales growth in the SGS Commercial, High Volume Firm, Mainline Firm and
21 Interruptible classes.

22
23 The following figures summarize average customers, average use and total use by
24 customer class:
25

1 **Figure 4.1**

	Average Customers by Class					
	2012/13	2013/14	2013/14	2014/15	2015/16	2016/17
	Actual	Approved*	Actual	Actual	Forecast**	Forecast**
SGS Residential	243,723	246,563	245,865	248,125	250,543	253,210
SGS Commercial	16,833	17,137	16,936	17,080	17,454	17,679
LGS	7,929	7,736	8,011	8,121	7,898	7,798
High Volume Firm	90	92	94	103	106	106
Mainline Firm	8	8	8	8	8	8
Interruptible Sales	40	40	36	26	22	22
Power Stations	2	2	2	2	2	2
Special Contract	1	1	1	1	1	1
Total Average Customers	268,625	271,579	270,953	273,465	276,034	278,826

*Based on 2012 Load Forecast
 **Based on 2014 Load Forecast

2
 3 **Figure 4.2**

	Average Use by Class (in 10 ³ m ³)					
	2012/13	2013/14	2013/14	2014/15	2015/16	2016/17
	Actual	Approved*	Actual	Actual	Forecast**	Forecast**
SGS Residential		2,363				
SGS Commercial		5,708				
LGS		64,620				

*Based on 2012 Load Forecast
 **Based on 2014 Load Forecast

4
 5 **Figure 4.3**

	Total Volumes by Class (in 10 ³ m ³)					
	2012/13	2013/14	2013/14	2014/15	2015/16	2016/17
	Actual	Approved*	Actual	Actual	Forecast**	Forecast**
SGS Residential		582,642				
SGS Commercial		97,810				
LGS		499,887				
High Volume Firm		163,447				
Mainline Firm		134,962				
Interruptible Sales		112,050				
Power Stations		15,197				
Special Contract		421,289				
Total Volumes		2,027,284				

*Based on 2012 Load Forecast
 **Based on 2014 Load Forecast

6

1 **4.2 NATURAL GAS FORECAST FOR SGS RESIDENTIAL, SGS**
2 **COMMERCIAL AND LGS CUSTOMER CLASSES**

3
4 The average number of customers by class for 2012/13 Actual, 2013/14 Actual,
5 2014/15 Actual, 2015/16 Forecast, and 2016/17 Forecast are provided in Schedules
6 4.2.1, 4.2.2, 4.2.3, 4.2.4 and 4.2.5 respectively.

7
8 SGS Residential

9 For the 2015/16 Forecast, the Residential customer forecast consists of 237,162
10 System Supply customers, 263 Fixed Rate Primary Gas Service (“FRPGS”)
11 customers, and 13,118 Western Transportation Service (“WTS”) customers, for a
12 total of 250,543 SGS Residential customers.

13
14 The forecast of the number of SGS Residential customers is derived from the growth
15 in total residential customers as forecast in Manitoba Hydro’s 2014 Economic
16 Outlook. Of the total residential customer growth forecast in the Economic Outlook,
17 the percentage of customers choosing gas heat was econometrically forecast for two
18 geographic areas (Winnipeg, and Gas Available Areas Outside of Winnipeg).
19 Natural gas prices and electricity prices were inputs to the model.

20
21 SGS Commercial and LGS

22 For the 2015/16 Forecast, the SGS Commercial customer forecast consists of 16,708
23 System Supply customers, 11 FRPGS customers, and 735 WTS customers for a total
24 of 17,454 SGS Commercial customers.

25
26 For the 2015/16 Forecast, the LGS customer forecast consists of 6,959 System
27 Supply customers, 22 FRPGS customers, and 918 WTS customers for a total of
28 7,898 LGS customers.

29
30 The SGS Commercial and LGS customer forecasts were prepared by combining the
31 number of customers for both classes into one consistent data sequence. This
32 approach has been followed in the preparation of past Natural Gas Volume Forecasts
33 and is appropriate given the ability of customers to transfer between the SGS and
34 LGS customer classes. The annual increase in customers was forecast using
35 historical correlation with the electric General Service Mass Market customer

1 growth based on the forecast of GDP and residential customers. The forecast number
2 of Commercial customers for each year was split into SGS Commercial and LGS
3 classes based on historical trends.
4

5 **4.3 NATURAL GAS FORECAST FOR LARGER VOLUME CUSTOMERS**
6

7 The volume by class for 2012/13 Actual, 2013/14 Actual, 2014/15 Actual, 2015/16
8 Forecast, and 2016/17 Forecast are provided in Schedules 4.4.1, 4.4.2, 4.4.3, 4.4.4,
9 and 4.4.5 respectively.
10

11 For the 2015/16 Forecast, the customers in the larger volume classes, including High
12 Volume Firm, Mainline Firm, Interruptible Sales, Power Stations and Special
13 Contract, have a total volume forecast of 849,167 10^3m^3 , which is an increase of
14 20,783 10^3m^3 over the 2014/15 Actual.
15

16 The larger volume customer classes were forecast on a customer by customer basis.
17 Each customer was analyzed individually, and a monthly forecast was determined
18 for the first three forecast years. To help forecast monthly volumes, historic monthly
19 consumption for the past three years was first adjusted to the standard heating value
20 and then weather adjusted. For customers with unchanging usage over that time, the
21 three years of monthly data were averaged and used. In cases where the historic
22 volume trended up or down, the last year of monthly data or two years of averaged
23 monthly data were used.
24

25 The Special Contract customer and the two Power Station customers have usage
26 levels that can vary significantly based on operating conditions, market conditions,
27 and the price of natural gas, and are therefore forecast using a three year average of
28 historical consumption.