CENTRA GAS MANITOBA INC.

2019/20 GENERAL RATE APPLICATION

GAS OPERATIONS FINANCIAL FORECAST (CGM18)

INDEX

Appendices:

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3.0 OVERVIEW OF TAB

Tab 3 discusses the key inputs and assumptions underlying the 2018 Gas Operations Financial Forecast (CGM18), the primary forecast to determine the need for changes in Centra's rates. This Tab also addresses some of the outstanding concerns of the PUB regarding the appropriate return on equity and the extent of historical earnings. In addition, a review of Centra's projected revenue requirements for 2018/19 and 2019/20 under both the rate base rate of return and cost of service methodologies is provided as well as a discussion on the financial parameters used by the PUB to assess the adequacy of earnings. Lastly, this Tab discusses Centra's debt management strategy.

3.1 GAS OPERATIONS FINANCIAL FORECAST

CGM18 was approved by Centra's Board of Directors on October 26, 2018. CGM18 sets forth the projected financial results and position of Centra through to 2027/28 and forms the basis for the revenue requirement portion of this Application. The results of CGM18 as well as the related financial ratios can be found in Appendix 3.1.

CGM18 assumes no general revenue increase for the 2019/20 Test Year. For 2020/21 and beyond, CGM18 projects that moderate general revenue increases will be required in order to provide sufficient funds for ongoing capital investments and maintain a 30% equity capitalization rate. As these financial projections are subject to change in subsequent forecasts for updates in assumptions and circumstances, they are only provided to the PUB for informational purposes at this time. Rate applications made in future years will depend upon the outlook and circumstances at that time and will be subject to the review and approval of the Centra Board of Directors.

3.1.1 Key Economic Inputs and Assumptions

The key economic and financial inputs underlying CGM18 include the following:

- Forecast of Macroeconomic Indicators (e.g. GDP, CPI);
- Forecast Interest and Exchange Rates;
- Natural Gas Volume Forecast;
- Cost of Gas Forecast;
- Gross Margin Forecast;
- Capital Expenditures Forecast; and,
- Operating & Administrative Expense Forecast.

Details on these economic and financial indicators are provided in Appendix 3.2. Information with respect to Centra's natural gas volume and cost of gas forecasts are discussed in Tabs 7 and 8, respectively. Details with respect to the Capital Expenditure Forecast can be found in Tabs 4 and 6. Information regarding the Operating and Administrative Expense forecast can be found in Appendix 5.9.

In addition to the economic and financial inputs noted above, Centra has developed key assumptions in preparing the CGM18 forecast with respect to the following:

- Furnace Replacement Program;
- Regulatory Deferral Accounts; and
- Expenditures for Meter Sampling/Exchange Costs.

3.1.2 Furnace Replacement Program

Centra is requesting approval to discontinue funding the Furnace Replacement Program ("FRP") effective August 1, 2019 as the cumulative balance in the fund is sufficient to meet expected future furnace and boiler replacements to 2027/28. As such, CGM18 reflects the proposed discontinuance of FRP funding. By removing the FRP funding from rates, Centra will collect $3.2 million less revenue in 2019/20 (based on an August 1, 2019 implementation) and $3.8 million less in 2020/21 and beyond from the Small General Service (SGS) customer class.

In 2007/08, Centra allocated $2.3 million of revenues collected from the SGS customer class to fund the FRP program, with an additional $3.8 million allocated to the program each year since that time. The cumulative balance in the fund was $25 million as at March 31, 2018 and is projected to grow to $27 million by March 31, 2019. Subsequent to March 31, 2019, the fund is expected to grow by approximately $3 million based on 4 months of additional funding (April 1, 2019 - July 31, 2019) as well as future carrying costs on the outstanding balance. Centra will continue to accept applications under the FRP going forward and estimates that approximately $13 million will be needed from 2019/20 through to 2027/28 to replace the remaining eligible furnaces and boilers under the program. This is based upon customer participation projections as outlined in Tab 7 Section 7.3.

CGM18 has assumed the disposition of approximately $17 million (the amount of excess funding) by the end of 2020/21. The details and timing of any planned dispositions or other allocations from this fund, such as returning the excess funding to customers, will be subject to the review and approval by Centra's Board of Directors and PUB approval will be sought in a future Centra regulatory proceeding. Please see Appendix 3.3 for details on the forecast FRP balance.

3.1.3 Regulatory Deferral Accounts

Centra transitioned from Canadian Generally Accepted Accounting Principles ("CGAAP") to International Financial Reporting Standard ("IFRS") for its 2015/16 fiscal year and as required by the accounting standards, retrospectively adjusted its 2014/15 financial statements for comparative purposes. As part of this Application, Centra is requesting PUB endorsement of the IFRS related accounting changes adopted and made by Centra in transitioning to IFRS for rate setting purposes. In addition to the IFRS related changes, Centra also made accounting estimate updates with respect to depreciation rates through a 2014 Depreciation study and new depreciation accounts, which Centra is requesting the PUB approve for rate setting purposes as part of this GRA.

With the exception of the Demand Side Management (DSM) deferral account that records the annual difference between actual and forecast DSM spending, CGM18 continues to assume the projected accounting for regulatory deferral accounts in accordance with what has previously been endorsed by the PUB for electric operations rate setting purposes. These deferral accounts include the accounts for DSM program expenditures, regulatory costs, site restoration costs, deferred taxes, and Purchased Gas Variance Accounts (PGVAs).

Appendix 3.4 contains additional information and details on each of the regulatory deferral accounts utilized by Centra for rate setting purposes, as well as the continued endorsements sought by Centra. Figures 6, 7 and 8 in Appendix 3.4 provide the projected balances for each of the deferral accounts as well as the impact on the net movement account.

3.1.4 Capitalization of Expenditures for Meter Sampling/Exchanges

In addition to the assumptions for regulatory deferral accounts, CGM18 also assumes that the PUB endorses the capitalization of internal labour costs associated with Centra's meter sampling/exchange program effective April 1, 2019. This will ensure that Centra's accounting for such costs is consistent with the accounting treatment followed by Manitoba Hydro for the same program. This is expected to result in a $2.0 - $3.0 million annual reduction to Operating and Administrative expense. Please refer to Section 2.0 of Appendix 5.9 for additional details.

3.1.5 Update to Centra's Return on Equity

Although the return on equity is not an explicit assumption used in the preparation of CGM18, return on equity and the associated return on rate base inform the appropriate level of earnings under the cost of service determination of revenue requirement in CGM18. As such, the update to Centra's return on equity is discussed in this section. A detailed discussion on the determination of revenue requirement under the rate base rate of return methodology can be found in Tab 6.

In Order 85/13 (Directive #8), the PUB directed the following:

> *"8. That Centra propose an update to the return on equity that is reflective of an appropriate return on equity to be used in the feasibility test and for the return on rate base determination."*

This directive is based on the PUB's findings in Order 85/13 as follows:

> *"The Board notes that the current return on equity, based on the existing approved formula, is not providing a fair return on equity. The Board had previously established parameters for the formula including a range of 6% to 10% for the Government of Canada bonds yields. Current yields are well below that level. The Board requests Centra to propose an update to the*

> *return on equity that is reflective of an appropriate return in the current economic climate. "*

To respond to the directive of the PUB, Centra retained the regulatory expertise of Drazen Consulting Group Inc. (DCGI) to evaluate and recommend an appropriate return on equity and level of annual net earnings for Centra beyond the 2019/20 Test Year. DCGI's expert evidence is provided in Appendix 3.5 of this Application.

The following provides a summary of DCGI's review of equity returns that have been approved for other Canadian natural gas distributors:

- Approved equity returns range from 8.30% to 11.00% with a fairly tight grouping of returns in the 8.50% to 8.90% range;
- All other Canadian gas distributors have target equity ratios higher than the 30% equity ratio that the PUB has previously found appropriate for Centra;
- Like Centra, SaskEnergy is a Crown utility and also benefits from lower cost borrowing;
- SaskEnergy's approved equity return and deemed equity ratio is currently 8.30% and 37% respectively;
- Centra has greater earnings risk compared to SaskEnergy due to greater variability in weather and a weaker capital structure and as such, it is reasonable for Centra to have a somewhat higher return on equity than SaskEnergy; and
- Maintaining a 30% equity ratio requires a return on equity for Centra in the range of 8.3% - 8.5%.

In addition to the above, DCGI further acknowledges that the essential issue is not the percentage return on equity but the overall results. As stated in DCGI's evidence:

> *"In any event, the RoE used should be at a level that is: (1) within the range of general practice; and (2) meets the financial needs of Centra."*

This is consistent with the findings of the PUB in Order 135/05 where the PUB states:

> *"With respect to the level of net income allowed within revenue requirement, the regulatory test is not the rate of return on rate base but the net income deemed to be prudent for the utility's financial health."*

Based on DCGI's evidence, Centra used an 8.30% (the low end of the range cited as appropriate by DCGI) return on equity to calculate the total revenue requirement under the rate base rate of return methodology as presented in Schedule 6.0.0 in Tab 6.

3.2 FORECAST & TEST YEARS (2018/19 & 2019/20)

CGM18 is projecting net income of $3.3 million in 2018/19 (Forecast Year) and $2.3 million in 2019/20 (Test Year).

Figure 3.1 below shows a comparison of the Net Income reflected in CGM18 under the cost of service methodology with Net Income determined under the rate base rate of return methodology ("RBROR"). As detailed in Tab 6, the projected net income generated under RBROR in 2018/19 is $5.6 million and $5.4 million in 2019/20 assuming an 8.30% return on equity.

Figure 3.1 Revenue Requirement/ Net Income Comparison

(In Millions)	2018/19		2019/20	
Approach	**Revenue Requirement**	**Net Income**	**Revenue Requirement**	**Net Income**
CGM18 - Cost of Service	310.9	3.3	308.0	2.3
Rate Base Rate of Return (8.3% ROE)	313.2	5.6	311.1	5.4
Surplus (Shortfall)	**(2.3)**	**(2.3)**	**(3.1)**	**(3.1)**

Figure 3.1 demonstrates that CGM18 revenues at approved rates result in shortfalls in revenue requirement and net income of $2.3 million for 2018/19 and $3.1 million for 2019/20 when compared to the rate base rate of return approach. A 1.2% general revenue increase in 2019/20 would be necessary to eliminate the shortfall in the revenue requirement.

As previously stated in Order 135/05,

> *"In Order 103/05, the* ***Board stated that the return to MH as determined under Rate Base Rate of Return is to be the <u>absolute limit</u> for shareholder returns****. That return may take the form of an annual corporate allocation by MH against Centra and/or Centra's annual net income result. Regardless of the division between corporate allocation and net income,* ***it is the Board's determination that the Rate Base Rate of Return methodology is to be used as a test of <u>maximum</u> revenue requirement.****"*

Centra is not requesting what the PUB might consider as the maximum rate increase of 1.2% and $5.4 million in net income in 2019/20. The financial results projected in CGM18 under the cost of service methodology are sufficient to sustain Centra's capital structure at or around the 30% equity level (32% in 2018/19 and 31% 2019/20) endorsed by the PUB in Order 99/07 and confirmed in Order 85/13. As a result, and in accordance with the direction received from its Board of Directors, Centra is not seeking an increase in general revenues in this Application.

Figure 3.2 below shows the projected revenues and expenses for fiscal years 2018/19 and 2019/20.

Figure 3.2: CGM18 Projected Revenues and Expenses

In Millions	2018/19 Forecast	2019/20 Test Year
Revenues		
Domestic Revenue	307.6	308.1
Additional Revenue	0.0	0.0
	307.6	308.1
Cost of Gas	158.7	158.4
Gross Margin	148.9	149.7
Other	1.7	1.7
	150.6	151.4
Expenses		
Operating and Administrative	63.3	61.2
Finance Expense	21.7	23.5
Depreciation and Amortization	24.1	25.5
Capital and Other Taxes	16.9	17.4
Other Expenses	12.1	12.8
Corporate Allocation	12.0	12.0
	150.0	152.4
Net Income before Net Movement in Regulatory Deferral	0.6	(1.0)
Net Movement in Regulatory Deferral	2.6	3.3
Net Income	3.3	2.3

Centra is projecting revenue of $307.6 million and $308.1 million in 2018/19 and 2019/20 respectively. The increase in revenue in 2019/20 (compared to 2018/19) is primarily due to the changes in assumptions related to rate rider amortization and customer growth, partially offset with lower gas costs and usage. In addition to an increase in revenues, operating and administrative ("O&A") expenses for 2019/20 are $2.1 million lower than 2018/19 primarily due to the proposed capitalization of expenditures for gas meter sampling/exchanges.

Net income in 2019/20 is $1.0 million lower than 2018/19 due to increases in expenses as a result of the ongoing investment in plant, intangible and regulatory assets. Finance expense is $1.8 million higher due to higher debt volumes required as a result of these investments and higher projected interest rates, as well as higher depreciation and amortization, and capital tax expenses by $1.4 and $0.5 million respectively.

3.3 HISTORICAL WEATHER NORMALIZED EARNINGS

The projected earnings of $3.3 million in 2018/19 and $2.3 million in 2019/20 and Centra's decision to not seek a general revenue increase in this Application are predicated on Centra's position that the current level of retained earnings are appropriate and necessary to maintain the PUB-endorsed 30% equity capital structure.

In Order 108/15 (page 17), the PUB noted the following:

> *"It should be noted that the Board remains concerned that Centra may be over-earning income on a weather-normalized basis and Centra's total earnings may be in excess of what is required to assure the financial health of the utility."*

The PUB's statement was premised on a review of Centra's net income on an actual and weather-normalized basis, as well as a review of the growth in Centra's retained earnings from March 31, 2012 to March 31, 2015. Over the three year period, the PUB noted that Centra's retained earnings doubled from $34.3 million to $72.1 million of which half was due to the impact of weather. In addition, Centra earned $9.4 million more net income on a weather normalized basis over that period than what the $3 million annual net income, as deemed fair by the PUB, would have provided.

Historically, and as expected, Centra's weather-normalized earnings have varied substantially from year-to-year both in magnitude and favourability. As a result, it is essential to consider more than a particular set of annual or short term results in isolation when assessing whether a utility is over or under-earning income on a weather-normalized basis. As summarized by DCGI:

"The goal is to determine a basis for net earnings that is sustainable over several years. "Sustainable" means that the method of can be applied in a consistent fashion and that the results meet the desired financial goals, both short and long-term. Looking at any one or two years does not necessarily give an accurate picture of costs over the longer term."

"Analyzing the results over a several-year period averages out such variations and gives a better picture of whether the RoE will meet Centra's long-term future growing capital requirements."

In considering whether Centra has over or under-earned on a weather normalized basis Centra analyzed:

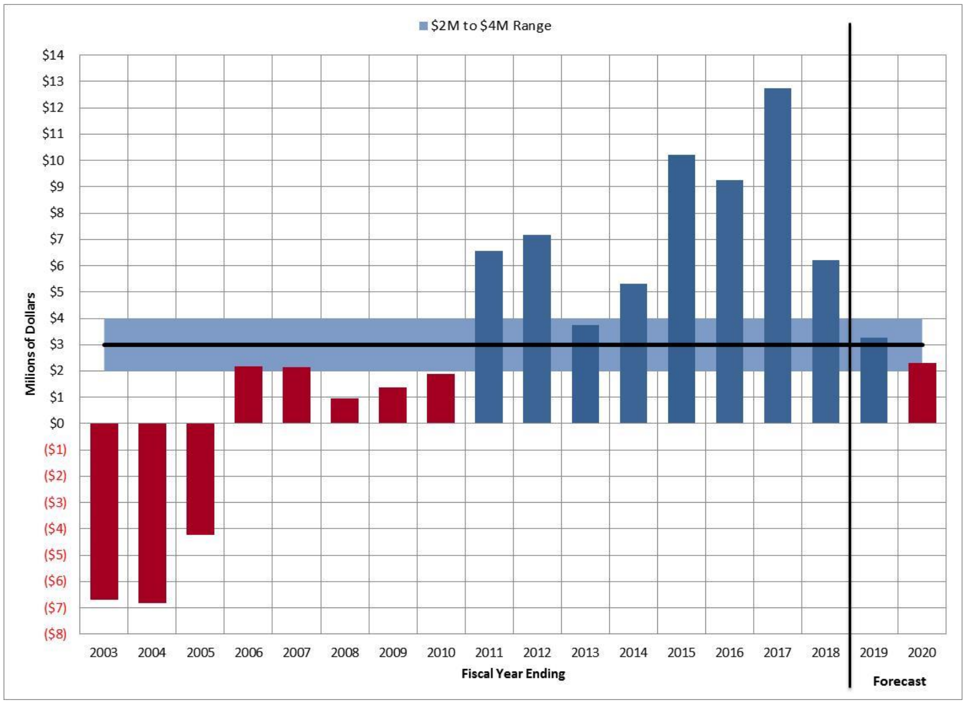
- A comparison of annual earnings relative to the $3 million level and the $2 to $4 million range previously established by the PUB;
- A comparison of cumulative earnings relative to the cumulative earnings at the $3 million level and the $2 to $4 million range previously established by the PUB; and
- A review of actual year end retained earnings and equity ratios.

Each of the analyses focused on the sixteen year period from 2002/03 to 2017/18. Fiscal years 1999/00 to 2001/02 were excluded from the analysis as the consolidation of operations and the related accounting practices between Manitoba Hydro and Centra (e.g. determining an appropriate corporate allocation) were still under development during this time, rendering these initial years incomparable.

3.3.1 Analysis of Annual Weather Normalized Earnings

Figure 3.3 below illustrates the variability of Centra's weather normalized earnings over the 2002/03 to 2017/18 period. This figure demonstrates that there were two distinct periods over the past sixteen years where weather normalized earnings were either below or above the $3 million annual amount. Over the first eight-year period 2002/03 to 2009/10, Centra under earned in every year. This trend reversed in the second eight-year period (2010/11 – 2017/18). The red bars denote years where weather-normalized net income fell below the $3 million annual amount and the blue bars denote years where weather-normalized net income was above the $3 million annual amount.

Figure 3.3: Centra's Weather-Normalized Net Income



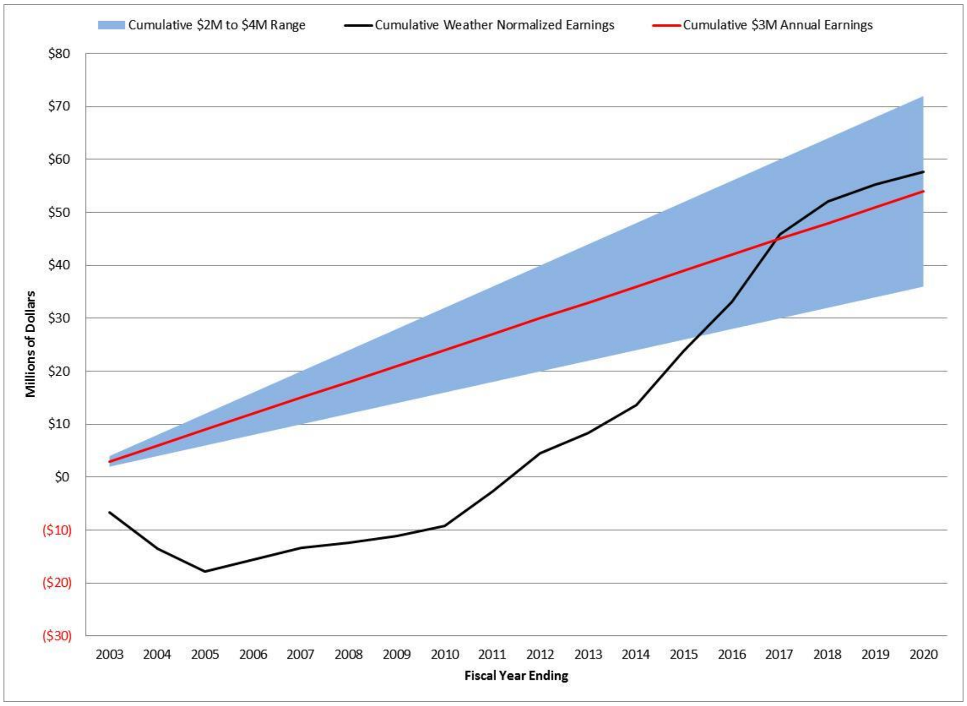
During 2002/03 to 2017/18 period, Centra's weather normalized net income ranged from a $6.8 million net loss in 2003/04 to a $12.8 million net income in 2016/17. Despite the fact that 13 out of the 16 years had net income outside the $2 to $4 million range, Centra's weather-normalized net income averaged $3.3 million over the period of analysis.

3.3.2 Analysis of Cumulative Weather Normalized Earnings

Centra also analyzed the cumulative weather normalized earnings over the same 16 year period as above.

Figure 3.4 below compares the weather normalized earnings with the $3 million annual amount and the $2 to $4 million range on a cumulative basis.

Figure 3.4: Comparison of Cumulative Weather-Normalized Earnings



As demonstrated in Figure 3.4, cumulative weather-normalized earnings are negative from 2002/03 through 2010/11, and do not enter the $2 to $4 million range until 2015/16. In 2016/17, cumulative weather-normalized earnings begin to exceed the $3 million annual level, but overall, are still within the $2 to $4 million range by the end of the test year (2019/20).

In summary, these analyses demonstrate that Centra has not been over-earning on a weather normalized basis as Centra's average net income falls directly within the $2 to $4 million range previously deemed reasonable by the PUB.

3.3.3 Analysis of Actual Retained Earnings and Equity Ratios

Centra has also analyzed its historical retained earnings and equity ratios in considering whether total actual earnings are reasonable and appropriate to sufficiently ensure the financial health of the utility.

Figure 3.5 below summarizes Centra's actual and projected retained earnings balance and equity ratios over the period from 2002/03 through to 2019/20.

Figure 3.5 Centra's Retained Earnings and Equity Ratio

	Historic																Forecast	
(In Millions)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Actual Closing Retained Earnings as at March 31	35.0	27.1	25.4	20.1	21.1	27.4	34.4	33.4	40.1	34.3	42.1	61.9	66.4	65.0	68.8	75.6	78.9	81.2
Equity Ratio	32%	34%	35%	33%	31%	31%	31%	32%	33%	34%	34%	34%	34%	33%	33%	32%	32%	31%

As shown in Figure 3.5, retained earnings did not grow during the ten year period 2003 to 2012. However, when considering the period from 2003 through to 2018, Centra's retained earnings increased an average of $2.5 million per year for a total of approximately $40 million over the sixteen year period.

Centra's current equity ratio of 32% at March 31, 2018 and projected equity ratio of 31% at the end of the 2019/20 Test Year are very closely aligned with and trending towards the 30% equity level target that the PUB has previously ruled sufficient for Centra.

It is noteworthy that DCGI concluded that Centra's 30% equity ratio target is currently the lowest among comparable Canadian natural gas distributors and furthermore that the only other Crown owned distributor of natural gas, SaskEnergy, utilizes a 37% deemed equity ratio when establishing rates for natural gas delivery services in Saskatchewan.

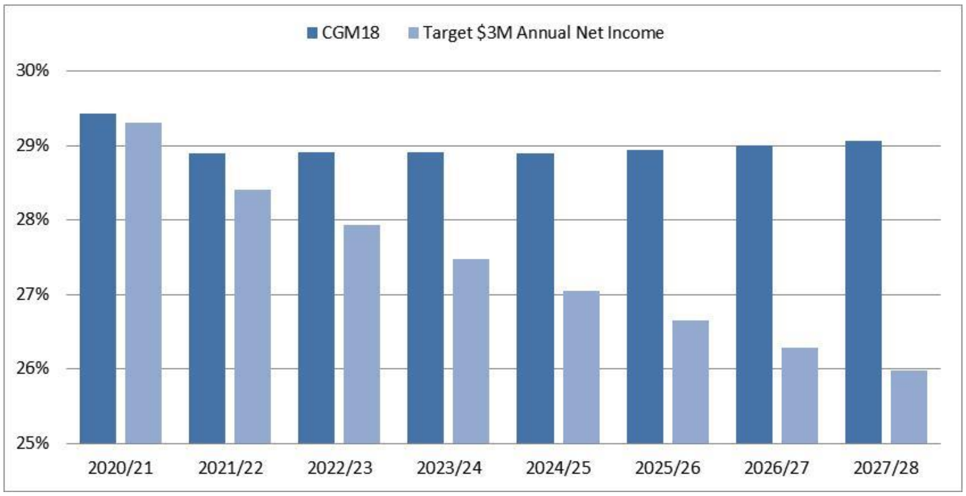
To conclude, the results of this analysis demonstrate that Centra's total earnings are not in excess of what is required to ensure the financial health of the utility, and in fact, are at the low end of the sufficiency range when compared with other Canadian natural gas distributors as shown in DCGI's evidence found in Appendix 3.5 of this Application.

3.4 PUB ESTABLISHED FINANCIAL PARAMETERS FOR THE LONGER TERM

The PUB has established two financial parameters to assess the adequacy of earnings and the financial health of the utility. The parameters are the requirement to earn $3 million of net income annually and to maintain a free-standing debt-to-equity ratio of 70:30. The 70:30 debt-to-equity ratio is deemed appropriate by the PUB due to the fact that Centra's borrowings are guaranteed by the Province.

Figure 3.6 below compares the resulting projected equity ratios between CGM18 and CGM18 adjusted to target $3 million of annual net income over the 2020/21 - 2027/28 forecast period.

Figure 3.6: Comparison of Equity Ratios



As shown in Figure 3.6, the $3 million net income level and 70:30 debt-to-equity ratio are mutually exclusive in that restricting net income to $3 million annually results in a steady decline in the equity ratio to 26% capitalization by the end of the forecast period. Centra's ongoing investment in plant requires additional financing, part of which must come from net income. Targeting an annual net income cap of $3 million beyond 2019/20 will simply not generate the revenue needed to finance the on-going and growing need for capital investment. As per DCGI,

> *"This happens because $3 million of net earnings is not enough to fund 30% of cash requirements."*

In this Application, Centra is not seeking approval from the PUB on the projected indicative rates from 2020/21 to 2027/28 reflected in CGM18. Rather, Centra is simply alerting the PUB to the factual concern that targeting an annual net income cap of $3 million for Centra beyond 2019/20 will not sustain the equity capitalization at or around the 30% level endorsed by the PUB.

3.5 <u>CENTRA'S DEBT PORTFOLIO AND INTEREST RATE RISK</u>

Centra is subject to interest rate risk on the intercompany advances from Manitoba Hydro. Manitoba Hydro's interest rate risk policy and guidelines were amended in October 2014 to reflect the following:

Manitoba Hydro's interest rate risk policy on its existing debt portfolio is to limit the aggregate of:

- floating rate debt,
- short term debt, and
- fixed rate long term debt to be refinanced within the subsequent 12 month period,

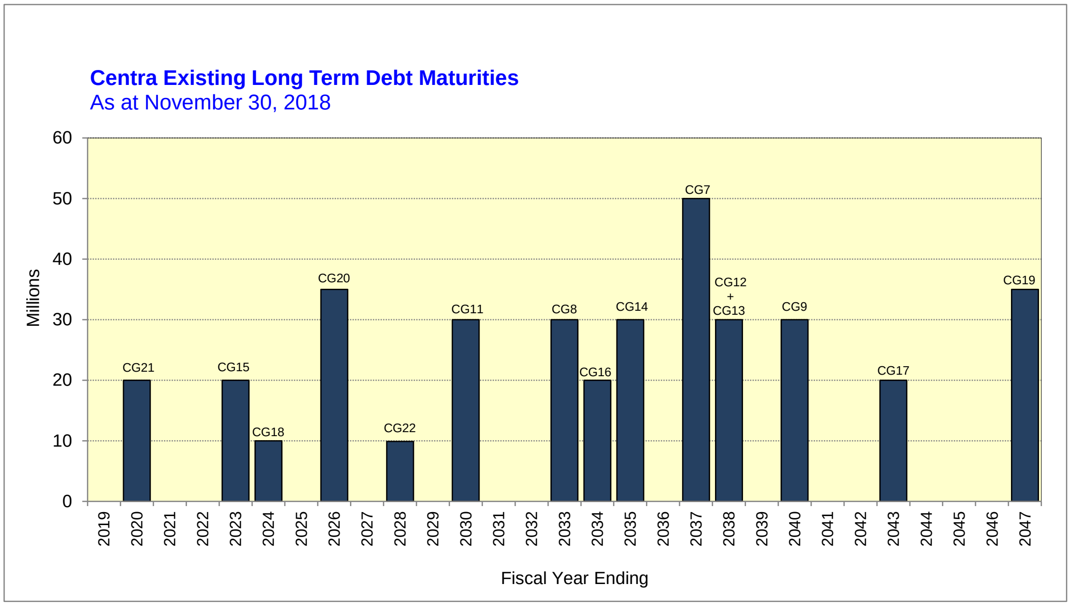
to a maximum of 35% of the total debt portfolio.

Manitoba Hydro's interest rate risk guidelines for its existing debt portfolio include maintaining an aggregate of floating rate debt and short term debt within 15 – 25% of the total debt portfolio, and having the fixed rate long term debt to be refinanced within a 12 month period being less than 15% of the total debt portfolio. This amendment to the guideline involving refinancing risk directly addresses Directive 5 of Order 85/13 which stated: *"That Centra further articulate its debt concentration policy including consideration of limiting the concentration of debt maturing in any particular 12-month period and report back to the Board at the next General Rate Application."*

During the past few years, the interest rate risk on the existing debt portfolio has been mitigated by rebalancing the percentage of short term debt, floating rate long term debt and fixed rate long term debt within the existing debt portfolio. The goal of this rebalancing is to more closely align the portfolio within the interest rate risk guideline of maintaining an aggregate of floating rate debt and short term debt within 15 – 25% of the total debt portfolio.

As well, debt maturities for new debt issuances have been selected to smooth the debt maturity schedule and to manage the concentration risk such that the fixed rate long term debt to be refinanced within any particular 12 month period is targeted to be less than 15% of the total debt portfolio. Figure 3.7 below provides Centra's existing debt maturities over the long-term.

Figure 3.7: Centra Existing Long Term Debt Maturities



Centra has sought to reduce the interest rate risk exposure on the existing debt portfolio by extending the weighted average term to maturity by issuing longer dated debt. Since 2006/07, Centra has enhanced debt stability and has extended the debt portfolio's weighted average term to maturity (WATM) by approximately 7 years from 9.0 to 16 years at March 31, 2018.

Centra will continue to transition its debt portfolio to apply the principles of Manitoba Hydro's debt management strategy, including those to manage the interest rate risk within the debt portfolio.