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1 **11 Financial Evaluation of Development Plans**

2

3 **11.0 Chapter Overview**

4 This chapter presents the financial evaluation of eight representative development plans, with a  
5 focus on the comparative impact on future customer rates and Manitoba Hydro’s comparative  
6 exposure to financial risk. The financial evaluation has been prepared using information from  
7 pro forma financial statements that utilize the same framework for scenario uncertainty  
8 analysis that is used in the economic uncertainty analysis.

9

10 The following is a summary of the primary financial evaluation conclusions:

11

12 **Future Customer Rates**

- 13 • Rate increases are required for all evaluated alternatives. The financial evaluation shows  
14 that higher rates are required in the medium term under all of the development plans,  
15 regardless of whether the plan is gas-based or hydro-based. New energy supply cannot  
16 be provided at the same current low rates that Manitoba Hydro customers have  
17 enjoyed over the last two decades.
- 18 • In the long term, development plans with both Keeyask and Conawapa generating  
19 stations are projected to have the lowest cumulative rate increases which range  
20 between 65% to 70% lower than the All Gas plan under the reference scenario.  
21 Development plans with both Keeyask and Conawapa generating stations provide  
22 incremental dependable and surplus energy which translate to savings for Manitoba  
23 customers in the long run.
- 24 • In the medium term, the capital-intensive plans that include both Keeyask and  
25 Conawapa generating stations are projected to have cumulative rate increases that are  
26 generally higher than other alternatives. Cumulative rates under the Preferred  
27 Development Plan “cross-over” compared to all other plans and begin to provide benefit

1 to customers in a relatively short timeframe (10 to 15 years) following the in-service  
2 date of the Conawapa generating station.

- 3 • The Preferred Development Plan is projected to have the lowest overall rates to  
4 Manitoba customers in the long term.

5

## 6 **Financial Risk**

- 7 • In the long term, development plans that include Keeyask and Conawapa generating  
8 stations have the strongest projected balance sheet with high levels of fixed assets and  
9 retained earnings. By the end of the study period, retained earnings are projected to be  
10 between \$4.9 billion to \$6.1 billion higher than the All Gas plan.
- 11 • Net debt levels converge towards the end of the study period for all development plans.
- 12 • In the medium term, while net debt levels are the highest with the development plans  
13 that include both Keeyask and Conawapa generating stations, as these plans have the  
14 overall highest capital investment, they also have the highest fixed assets and retained  
15 earnings.
- 16 • Development plans with both Keeyask and Conawapa generating stations are more  
17 robust in their ability to absorb adverse financial impacts in the medium term and  
18 extending through to the end of the study period, given their comparatively higher level  
19 of retained earnings.

20

### 21 **11.1 Overview and Methodology**

22 Manitoba Hydro is addressing the challenge of maintaining a reliable supply of energy for the  
23 province while at the same time planning for new supply to meet Manitoba's growing electrical  
24 needs. Each development plan differs in the quantum and timing of the capital investment  
25 required to meet load requirements, and the potential for offsetting the cost of such

1 investments with export revenues. This chapter presents the financial evaluation of the  
2 following eight development plans:<sup>1</sup>

3

Pathway	Interconnection	Plan #	Development Plan Short Name
Pathway 1	No New Interconnection	<b>1</b>	All Gas
		<b>7</b>	Gas <sup>2</sup> /C26
Pathway 2		<b>2</b>	K22/Gas
Pathway 3	250 MW Interconnection	<b>4</b>	K19/Gas/250
		<b>13</b>	K19/C25/250
Pathway 4	750 MW Interconnection	<b>12</b>	K19/C31/750
		<b>6</b>	K19/Gas/750
Pathway 5		<b>14</b>	K19/C25/750 Preferred Plan

4 In the context of this NFAT submission, the financial analysis will focus on the comparative  
5 impact on future customer rates and Manitoba Hydro’s comparative exposure to financial risk  
6 of the various development plans.

7

8 The financial evaluation has been prepared using information from pro forma financial  
9 statements that can be found in **Appendix 11.4 – Pro Forma Financial Statements**. Pro forma  
10 financial statements are prepared each year as part of Manitoba Hydro’s integrated planning  
11 process and presented in the Integrated Financial Forecast (IFF) report. The Electric Operations  
12 Financial Forecast (MH12) is the starting point for each set of pro forma financial statements  
13 and has been extended to encompass the 50-year study period for evaluation purposes. A 50-  
14 year study period was selected in order to be consistent with the long-term nature of hydro-  
15 electricity assets and to provide a sufficient time frame to analyze the benefits and costs of  
16 each development plan.

<sup>1</sup> The financial evaluations performed on these eight development plans provide a representative sample of the range of potential development plans with respect to the economics as well as mix of generation source. For the full description of these eight development plans, as well as a number of additional alternatives, see Table 9.3 of Chapter 9.

<sup>2</sup> The Gas/C26 development plan assumes gas generation with a simple-cycle gas turbine (SCGT).

1 **Approach to Comparative Rate Analysis**

2 Manitoba Hydro must recover its revenue requirements in order to maintain ongoing financial  
3 integrity, and these requirements can be quite variable from year to year due to changing  
4 conditions. In order to achieve rate stability for customers, Manitoba Hydro has a long-standing  
5 strategy of gradualism in its approach to developing rate proposals. Similarly, in the financial  
6 evaluation of each development plan, an even-annual rate increase over an extended period of  
7 time has been calculated. During the capital investment period associated with new generation,  
8 there will be downward pressure on the corporation's financial ratios. Given that a timely  
9 return to the targeted 75:25 debt:equity ratio is prudent, similar to the IFF approach, the  
10 financial analysis assumes even-annual rate increases in order to achieve the targeted  
11 debt:equity ratio by the end of 2031/32.<sup>3</sup> Once the debt:equity target is reached, the projected  
12 comparative annual rates for the remainder of the 50-year financial forecast period utilize the  
13 corporation's interest coverage ratio target of 1.20.

14

15 Please note that actual rate increases will vary from those projected in this analysis and will be  
16 dependent upon future revenue requirements. Numerous factors, other than the choice of  
17 development plan, may influence the revenue requirement, such as changing water flow  
18 conditions, weather, costs to maintain the system, and economic variables. Future rate  
19 proposals will be subject to full justification as part of General Rate Applications before the  
20 Public Utilities Board.

---

<sup>3</sup> Annual rate increases have been left unchanged from those projected in MH12 for the first two years.

1 **Assumptions**

2 The same flow-related revenues, thermal costs, power purchases, water rentals and capital  
3 costs used in the economic evaluation are applied in the financial analysis to reflect the  
4 appropriate generation supply options and timing of in-service for each particular development  
5 plan. Tables detailing assumptions for net flow-related revenues and costs can be found in  
6 **Appendix 9.3 – Economic Evaluation Documentation**, and current dollar net capital  
7 expenditures can be found in **Appendix 11.1 – Net Capital Expenditures**. These variables, along  
8 with the economic assumptions (projected escalation, interest and exchange rates found in  
9 **Appendix 11.2 – Projected Escalation, Interest and Exchange Rates**) and energy market prices  
10 for electricity and natural gas, are also applied. **Appendix 11.3 – Average Unit Revenue/Cost**  
11 provides a calculation of average unit revenue and cost per kilowatt-hour for each development  
12 plan and scenario. Note that the calculations in the tables found in **Appendix 11.3 – Average**  
13 **Unit Revenue/Cost** are only an arithmetic derivation of market energy prices and costs based  
14 on the revenue and cost data presented in the pro forma financial statements, and are not  
15 source data directly inputted into electricity export price or revenue/cost forecast models.

16  
17 As indicated in the methodology section of **Chapter 9 – Economic Evaluation – Reference**  
18 **Scenario**, sunk costs are not included in the economic evaluations, as these represent past  
19 expenditures and commitments that cannot be changed relative to the decision point when  
20 choosing among plans. As such, all costs (incurred or estimated) prior to June 2014 that were  
21 required to protect the in-service dates for Keeyask and Conawapa are considered as “sunk” in  
22 the economic evaluation. The financial evaluation, however, recognizes these costs need to be  
23 included in the revenue requirement at an appropriate point in time. For plans in which a  
24 decision is made to proceed with Keeyask or Conawapa, the sunk costs form part of the cost to  
25 acquire the asset and are amortized over the life of the asset. For plans in which Keeyask or  
26 Conawapa is deferred beyond the evaluation period, sunk costs are assumed to be amortized  
27 over an 18-year period to 2031-32. This 18-year period is consistent with the period of even-  
28 annual rate increases, recognizing the significance of the quantum of the costs and the

1 objective of gradualism in the rate-setting process. For accounting purposes, the actual  
2 amortization of these costs may occur over a shorter period of time.

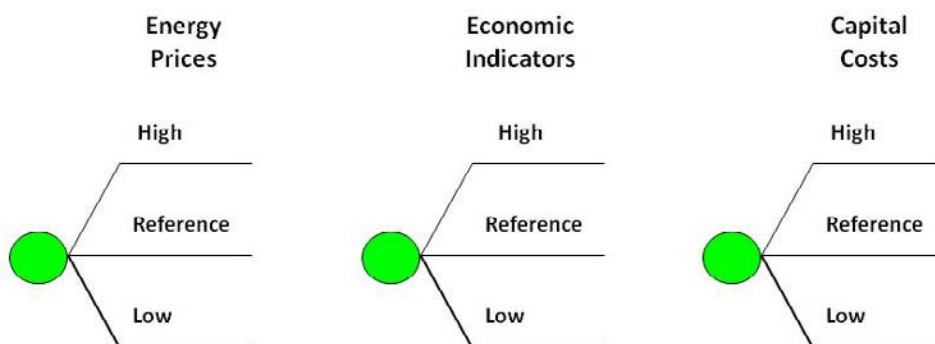
3

4 **Risks and Uncertainties**

5 From a risk perspective, the financial evaluation follows the same framework for scenario  
6 uncertainty analysis that is used in the economic uncertainty analysis. The scenario framework  
7 reflects each dimension of uncertainty that has been shown to have the greatest impact on the  
8 economic analysis of the plan options, and, for consistency with the economic analysis, these  
9 same dimensions have been used in the financial analysis. When combined with the  
10 assumptions for reference, high and low scenarios, the analysis results in 27 discrete scenarios  
11 that represent broad combinations of factors and assumptions.

12

**DIAGRAM 11.1**



13

$3^3 = 27$  distinct sets of pro forma financials for each development plan

14 Projected pro forma financial statements were developed for each of the 27 scenarios under all  
15 eight development plans, resulting in 216 distinct sets of pro forma financial statements. In  
16 addition, the financial analysis also considered the impact of adverse drought conditions under  
17 selected development plans as outlined in Section 11.4.

18

19 As each of the possible combinations do not have the same likelihood of occurrence, the same  
20 weightings used in the economic uncertainty analysis (see Figure 10.6) were assigned to each of  
21 the factors and scenario assumptions, and a cumulative probability associated with each of the



1 possible combinations was applied to the values obtained from the pro forma financial  
2 projections. In this manner, a probability distribution for each financial statement and metric  
3 was derived and analyzed.

4

## 5 **11.2 Financial Evaluation Results – Customer Rates**

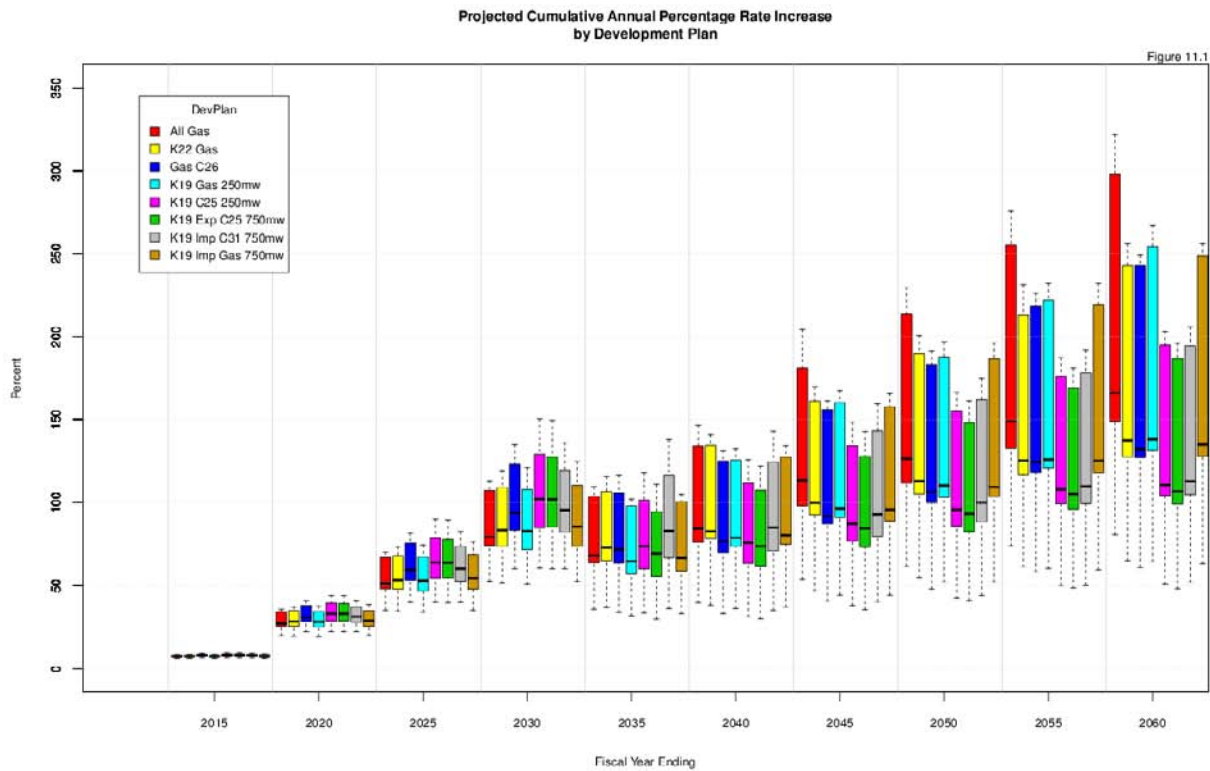
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### 7 **Projected Cumulative Annual Rates from 2015 to 2062**

8 Figure 11.1 shows a box plot of the projected cumulative nominal rate increases for the eight  
9 development plans in 5-year intervals over the entire 50-year study period (enlarged Figures  
10 11.1 to 11.7 are available in **Appendix 11.5 – Enlarged Figures 11.1-11.7**). It is important to  
11 recognize that the projected rates are provided for the purpose of comparative rate analysis  
12 and are not intended to convey the specific revenue requirements in future General Rate  
13 Applications before the Public Utilities Board. The coloured “box” for each plan depicts the  
14 range of cumulative nominal rates increases between the 25<sup>th</sup> and 75<sup>th</sup> percentile (P25 and  
15 P75). The hash mark (dark line) across the box represents the median or 50% likelihood (P50)  
16 that the cumulative rate in a particular time period will be higher or lower than that value. The  
17 end points on the “whiskers” indicate the 10<sup>th</sup> and 90<sup>th</sup> percentile (P10 and P90).

1  
2

**Figure 11.1 PROJECTED CUMULATIVE ANNUAL PERCENTAGE RATE INCREASE BY DEVELOPMENT PLAN**



3

4 This analysis demonstrates the following with respect to the projected rate increases:

- 5 • Rate increases are required for all evaluated alternatives. The financial evaluation shows
- 6 that higher rates are required in the medium term under all of the development plans,
- 7 regardless of whether the plan is gas-based or hydro-based. New energy supply cannot
- 8 be provided at the same current low rates that Manitoba Hydro customers have
- 9 enjoyed over the last two decades.
- 10 • In the near term, by 2020, the cumulative rate increases for the various alternatives are
- 11 relatively similar.
- 12 • By 2030, the cumulative rate increases for the capital-intensive plans that include both
- 13 Keyask and Conawapa are generally higher than other alternatives.
- 14 • By 2035, following the in-service of both Keyask and Conawapa, the cumulative rate
- 15 increases for the Preferred Development Plan (green) begin to beneficially separate
- 16 from the alternatives. By 2040, the cumulative rate increases for the Preferred

1 Development Plan are lower than all other development plans as measured by the P10,  
2 P25, P50, P75 and P90 values.

3 • From 2045-2060, the development plans with both Keeyask and Conawapa (pink, green  
4 and grey) have the lowest cumulative rate increases, which range between 65% to 70%  
5 lower than the All Gas plan under the reference scenario.

6 • The range of potential cumulative rate increases expands through time for all evaluated  
7 alternatives. By 2062, the All Gas plan (red) has the widest range (with a P25 of 159%  
8 and a P75 of 326%). The wide range for the All Gas plan and the associated risk for  
9 customer rates is even more pronounced when considering the whisker P10:P90 range.

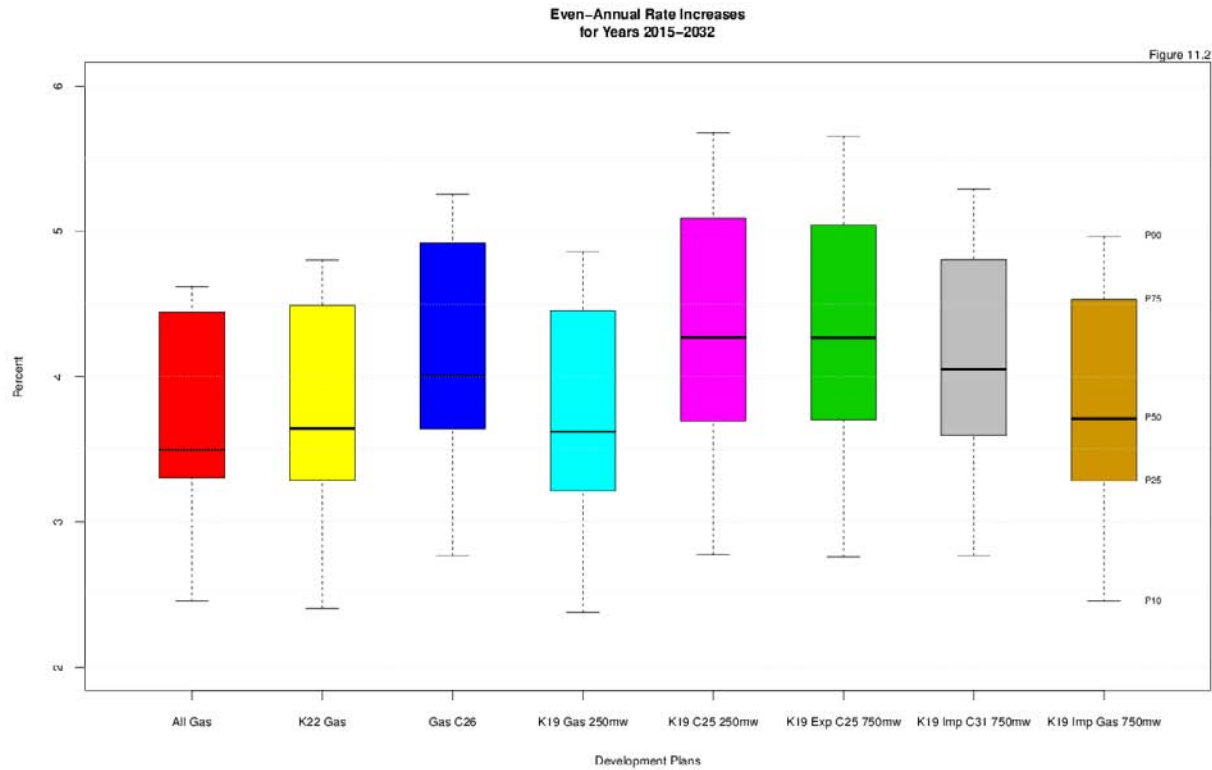
10

#### 11 **Projected Even-Annual Rates from 2015 to 2032**

12 As outlined in Section 11.1, the financial analysis assumes even-annual rate increases in order  
13 to achieve the targeted debt:equity ratio by the end of the 2031/32 fiscal year. Figure 11.2  
14 provides the projected even-annual rate increases to 2031/32 underlying the cumulative rates  
15 shown in Figure 11.1.

1

**Figure 11.2 PROJECTED EVEN-ANNUAL RATE INCREASES FOR YEARS 2015-2032**



2

3 This chart illustrates the following with respect to the projected even-annual rate increases for  
4 years 2015 to 2032:

- 5 • Rate increases that are higher than the expected rate of inflation are required for all  
6 evaluated alternatives.
- 7 • On a P50 basis, across all development plans, the even-annual rate increases for the  
8 years 2015-2032 range from 3.5% to 4.3%.
- 9 • When considering the P25 to P75 values across all development plans, the even-annual  
10 rate increases for the years 2015-2032 range from 3.2% to 5.1%.
- 11 • During this time frame, the even-annual rate increases for the Preferred Development  
12 Plan (green) are generally higher, in keeping with its higher upfront capital investment.

13

14 It should be noted that the projected even-annual rate increases under the All Gas  
15 development plan result in net losses in the short term. If rate increases were adjusted to

1 maintain positive levels of net income, the projected even-annual rate increases under the All  
2 Gas plan would need to be higher during the 2015-2032 time frame.

3

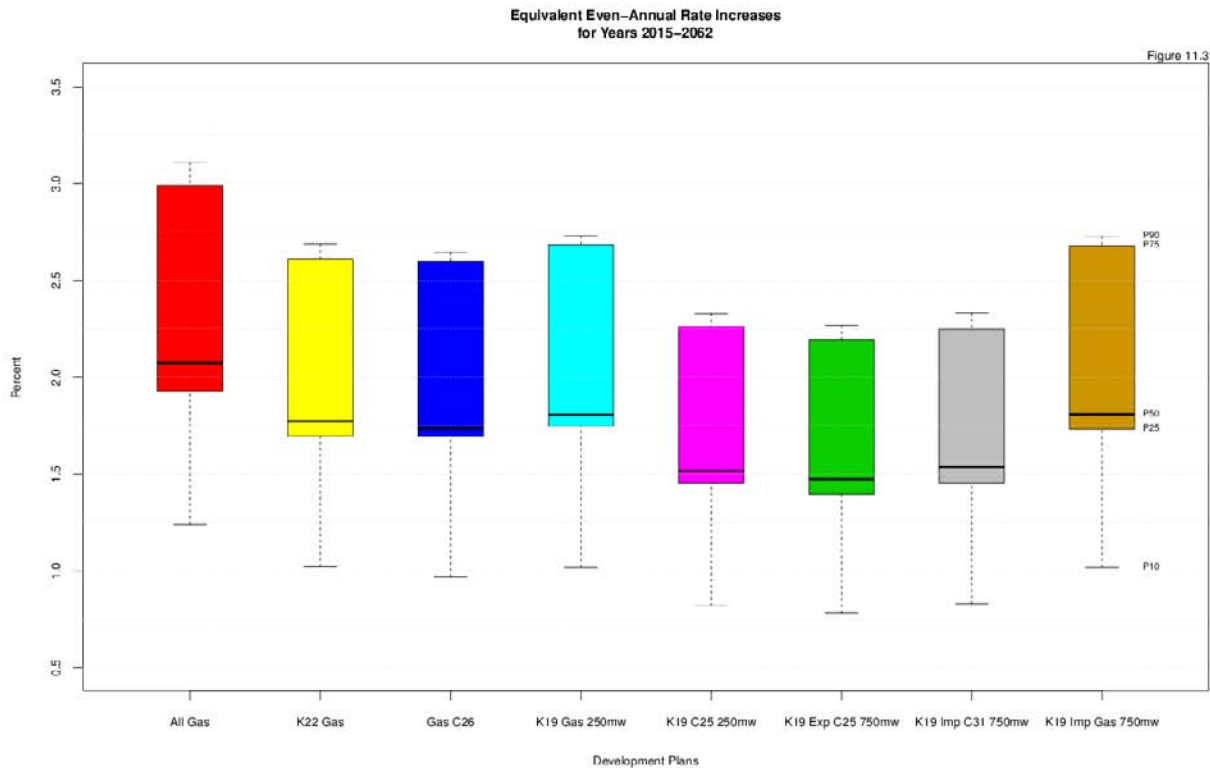
4 **Projected Equivalent Even-Annual Rates from 2015-2062**

5 In Figure 11.3, the projected cumulative rate increases from years 2015-2062 shown in Figure  
6 11.1 were converted to an equivalent even-annual rate increase to provide a simplified basis of  
7 comparison for all development plans over the entire study period.

8

9  
10

**Figure 11.3 PROJECTED EQUIVALENT EVEN-ANNUAL RATE INCREASES FOR YEARS 2015-2062**



11

12 Figure 11.3 illustrates the following with respect to the projected equivalent even-annual rate  
13 increases from 2015-2062:

- 1 • The Preferred Development Plan (green) has the lowest equivalent even-annual rate  
2 increases across all probability values. For example, this plan has the lowest P10 and  
3 P25 values, as well as the lowest P75 and P90 values.
- 4 • On a P50 basis, the equivalent even-annual rate increases for the Preferred  
5 Development Plan are 1.5% as compared to 2.1% for the All Gas plan (red).
- 6 • The Preferred Development Plan under these assumptions also exhibits the narrowest  
7 range of potential rate increases.
- 8

### 9 **11.3 Financial Evaluation Results – Net Debt, Fixed Assets, and Debt:Equity Ratio**

#### 10 **Net Debt**

11 As a Crown Corporation owned by the Province of Manitoba, Manitoba Hydro does not have  
12 access to share capital as a source of funds. Therefore, in order to adequately provide for the  
13 long-term energy requirements of the province, Manitoba Hydro must rely on debt as its  
14 primary source of external financing.

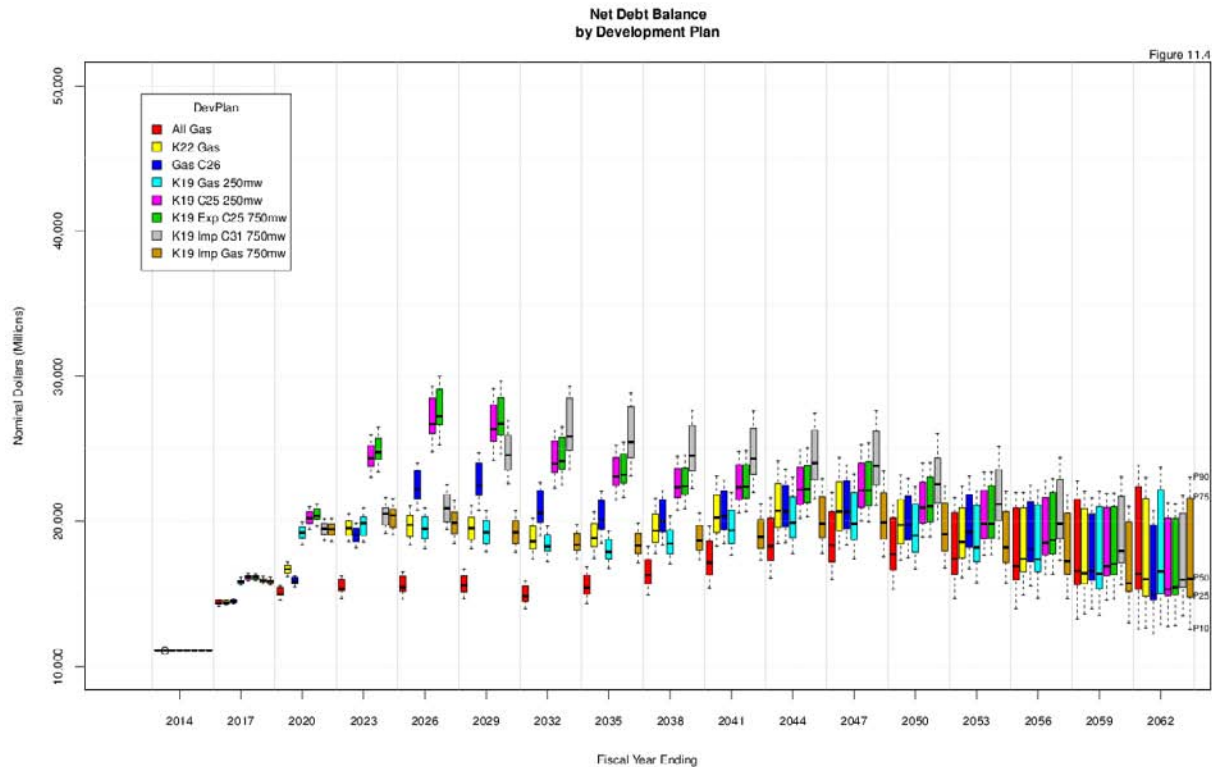
15  
16  
17 Debt financing has been beneficial for Manitoba Hydro and its ratepayers. It has enabled the  
18 growth of the corporation from the early days of farm electrification and the development of  
19 the Winnipeg River generation system, through the years of development of the Nelson River  
20 generation and transmission system, right up to the current development and construction of  
21 the Wuskwatim Generating station in northern Manitoba.

22  
23 While debt financing provides the majority of funding necessary for investment in long-term  
24 assets, Manitoba Hydro also funds a significant portion of its capital requirements from cash  
25 generated from operations. Utilizing funds from operations reduces the amount that would  
26 otherwise need to be borrowed each year by the corporation, which reduces interest costs and  
27 the financial risk of leveraging.

1 Net debt refers to the total long and short-term debt, net of cash on hand, temporary  
2 investments, and sinking funds. The following chart illustrates the growth in net debt associated  
3 with the various development plans over the entire study period.

4  
5

**Figure 11.4 PROJECTED NET DEBT BALANCE BY DEVELOPMENT PLAN**



6  
7  
8  
9  
10  
11  
12  
13  
14  
15

Figure 11.4 illustrates the following with respect to projected net debt balances:

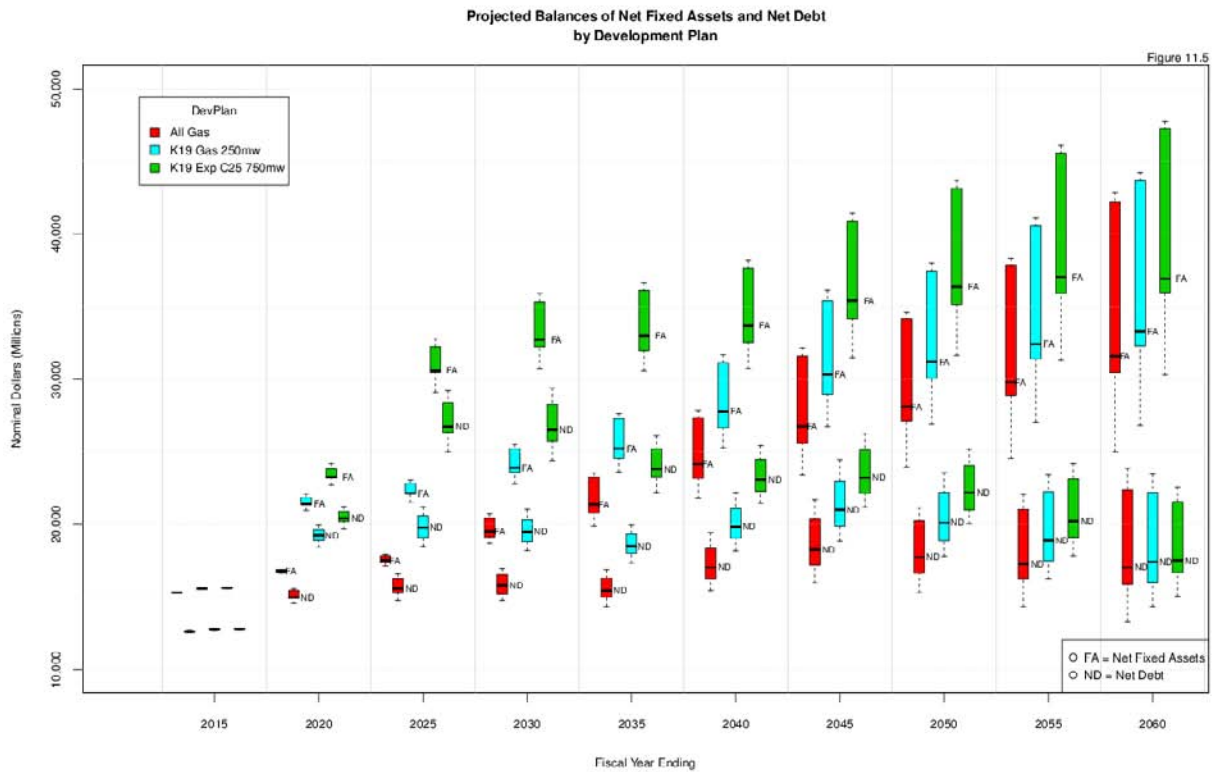
- The All Gas plan (red) has the lowest overall level of net debt compared to other plans for most of the study period as a result of the lower overall capital investment.
- The All Gas plan (red) has the greatest variability in net debt by the end of the study period compared to all other development plans, primarily due to the requirement for capital re-investment in gas resources.
- In the medium term, net debt levels are the highest with the development plans that include both Keeyask and Conawapa (pink, green and grey), as these plans have the overall highest capital investment.

- Once Conawapa is in service, net debt declines for these development plans due to the benefit from surplus energy and associated export sales.
- Net debt levels converge towards the end of the study period for all development plans.

**Net Debt and Net Fixed Assets**

The level of net debt must be considered in the context of the entire balance sheet, including the associated net assets that are under construction or in service. For illustrative purposes, the following chart shows the projected balances of net fixed assets and net debt for three representative development plans (All Gas in red, a hydro/gas option in blue, and the Preferred Development Plan in green).

**Figure 11.5 PROJECTED BALANCES OF NET FIXED ASSETS AND NET DEBT BY DEVELOPMENT PLAN**





1 There are a number of observations that can be made regarding in Figure 11.5:

- 2 • The net fixed asset levels are the highest with the Preferred Development Plan (green)  
3 and are significantly higher than their associated net debt levels.
- 4 • Although projected cumulative customer rates for the Preferred Development Plan are  
5 the lowest at the end of the study period (as described in Section 11.2), the net assets  
6 under the Preferred Development Plan (green) are approximately \$5 billion higher than  
7 the All Gas plan (red).
- 8 • While the Preferred Development Plan has capacity to generate additional revenue for  
9 export sales, the All Gas plan has limited or no capacity to generate export sales and  
10 relies on returns from domestic customers.

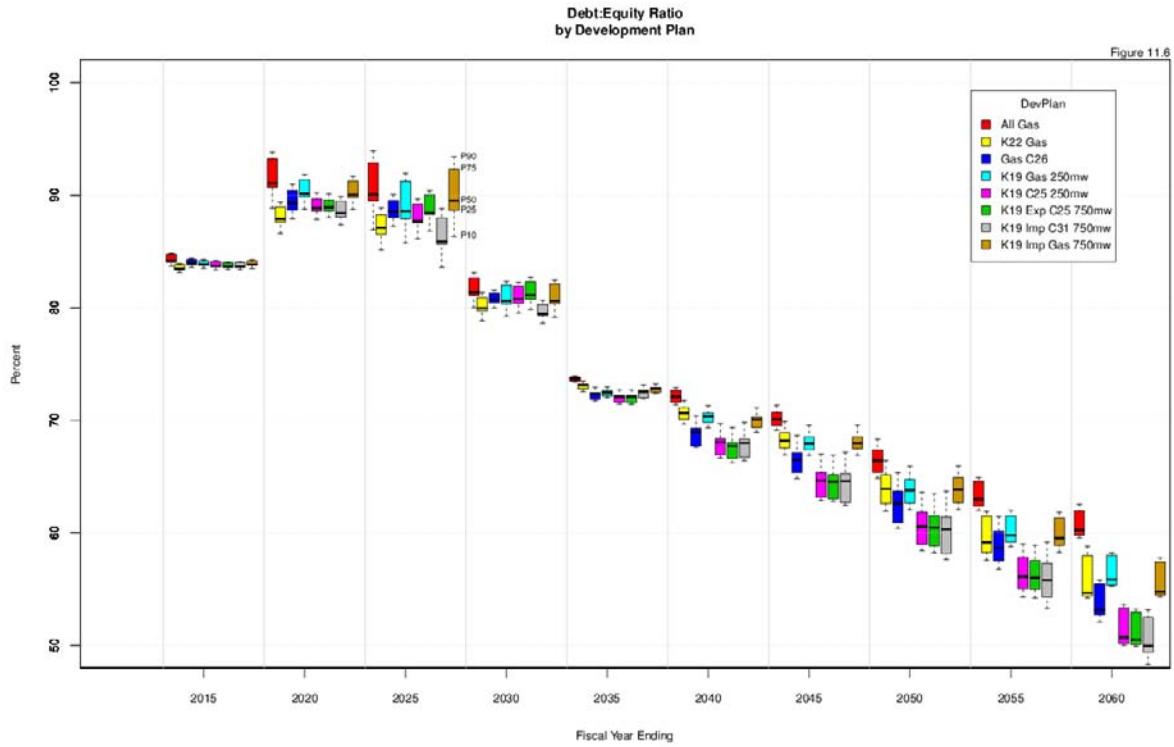
11

#### 12 **Debt:Equity Ratio**

13 The debt:equity ratio is a balance sheet measure which indicates the proportion of the  
14 corporation's assets that are financed through debt as compared to the reinvestment of  
15 Manitoba Hydro's earnings. Manitoba Hydro's target is to maintain a 75:25 debt:equity ratio. It  
16 is recognized that investment in new generation and transmission resources will apply  
17 downward pressure on Manitoba Hydro's financial metrics through the investment period. The  
18 debt:equity ratio by development plan is shown in figure 11.6.

1

**Figure 11.6 PROJECTED DEBT: EQUITY RATIO BY DEVELOPMENT PLAN**



2

1 As is demonstrated in Figure 11.6:

- 2 • The debt:equity ratio is the weakest under the All Gas plan (red), due in part to the  
3 impact of amortizing the sunk capital costs associated with protecting the in-service  
4 dates for Keeyask and Conawapa.
- 5 • The All Gas plan has the greatest variability in the debt:equity ratio over the 20-year  
6 period, as well as the highest debt:equity ratio of 95% at P90 in 2023 and 92% at P50 in  
7 2022.
- 8 • Development plans that include Keeyask and Conawapa have debt:equity ratios of 91%  
9 at P90 and 89% to 91% at P50 during and immediately following the construction of the  
10 new facilities.
- 11 • For the development plans that include Keeyask and Conawapa, once these plants are in  
12 service, the balance sheet strengthens as net debt declines and retained earnings grow  
13 due to benefits related to surplus energy available for export sales.

14

#### 15 **11.4 Financial Evaluation Results – Retained Earnings and Drought**

16

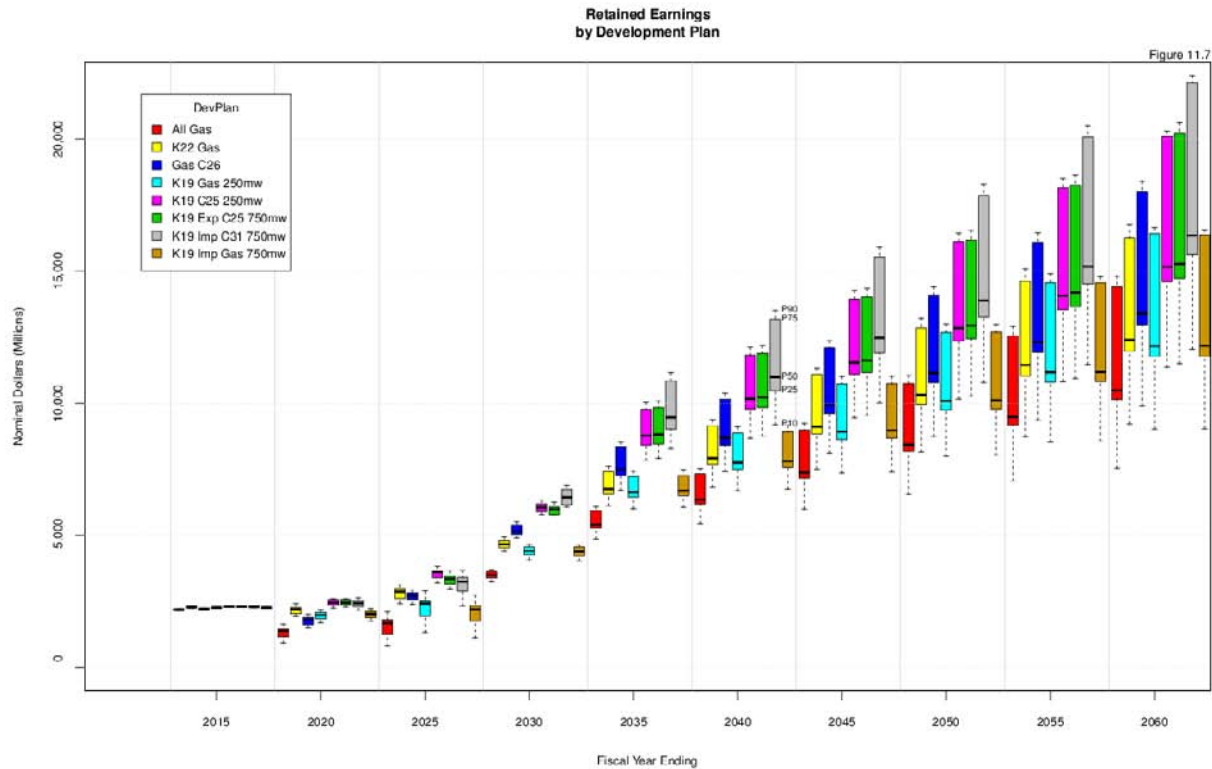
##### 17 **Retained Earnings**

18 Retained earnings are the accumulated net income and losses of the corporation which are  
19 reinvested in its operations. Retained earnings are an indication of the portion of assets not  
20 funded through debt. The greater the retained earnings, the greater the capacity the  
21 corporation has to withstand adverse financial events without significant rate increases.

22 Figure 11.7 shows the projected retained earnings balances for the eight development plans in  
23 5-year intervals over the entire 50-year study period.

1

**Figure 11.7 PROJECTED RETAINED EARNINGS BY DEVELOPMENT PLAN**



2

3 Figure 11.7 demonstrates that:

- 4 • A strengthening of the debt:equity ratio (as previously shown in Figure 11.6) is
- 5 associated with larger retained earnings balances.
- 6 • Development plans with both Keyask and Conawapa Generating Stations (pink, green
- 7 and grey) are more robust in their ability to absorb adverse financial impacts in the
- 8 medium term and extending through to the end of the study period, given their
- 9 comparatively higher level of retained earnings. Once both Keyask and Conawapa
- 10 Generating Stations are in service, retained earnings grow at a faster rate as compared
- 11 to the All Gas plan (red) or those development plans with gas. The All Gas plan (red)
- 12 shows the lowest retained earnings and provides the least capability to mitigate
- 13 financial risks.

1 **Drought Analysis**

2 To assess the impacts of drought, the financial evaluation applies the same net flow-related  
3 revenues and costs associated with a prolonged period of below-average streamflows (5-year  
4 drought) used in the economic drought sensitivity analysis found in Chapter 10. Analysis is  
5 provided for the All Gas plan, a hydro/gas option (K19/Gas/250MW) and the Preferred  
6 Development Plan (K19/C25/750MW) under all 27 uncertainty scenarios for five-year droughts  
7 beginning in:

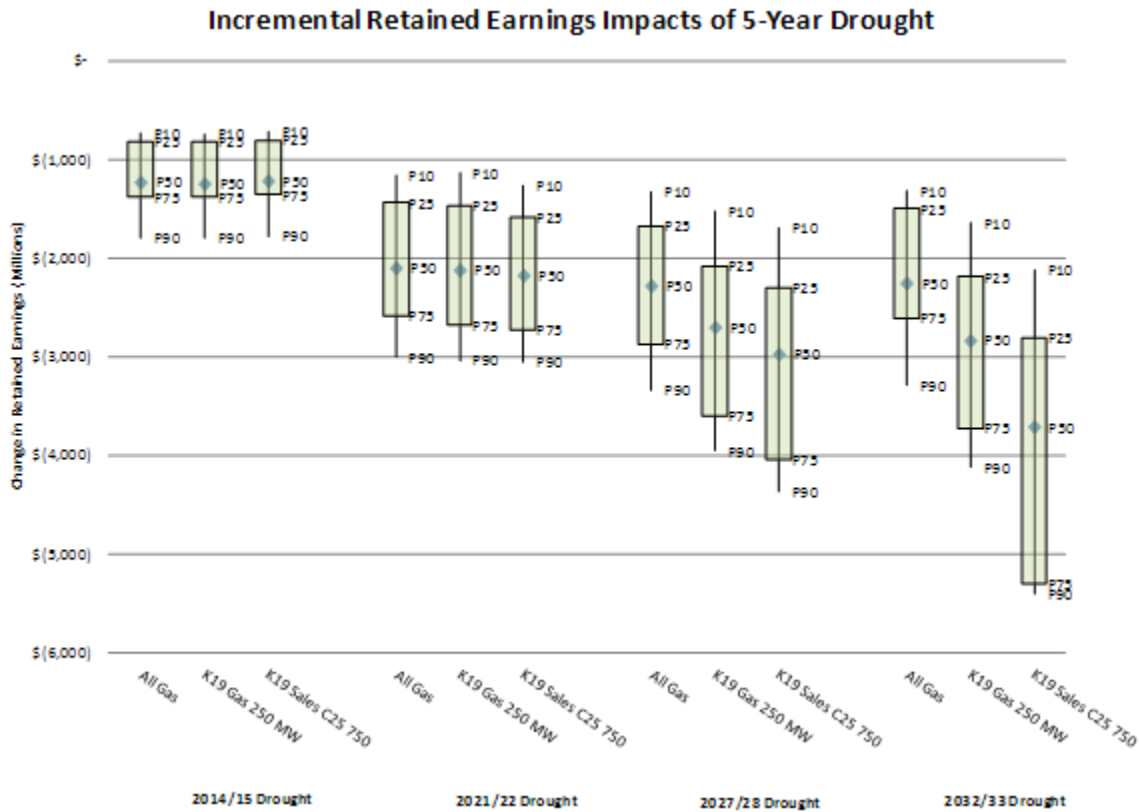
8

- 9 • 2014/15 — During construction of Keeyask  
10 • 2021/22 — Affecting early revenues from Keeyask and during construction of Conawapa  
11 • 2027/28 — Affecting early revenues from Conawapa  
12 • 2032/33 — Beyond early revenues from Conawapa.

13

14 Figure 11.8 shows the incremental projected retained earnings impacts for 5-year drought  
15 periods beginning in 2014/15, 2021/22, 2027/28, and 2031/32 for the three development  
16 plans, holding customer rates constant at the comparative base case.

1 **Figure 11.8 PROJECTED INCREMENTAL RETAINED EARNINGS IMPACTS OF 5-YEAR DROUGHTS**



2  
3 As indicated in Figure 11.8:

- 4 • The near-term impact of drought on net flow-related revenue is approximately the same
- 5 under all development plan options until new generation goes in service.
- 6 • In the longer-term, the incremental absolute dollar impact of drought on retained
- 7 earnings is greater with increasing amounts of new hydro due to the proportionately
- 8 greater loss in net flow-related export revenues. Variability in the incremental impacts
- 9 of drought is also greater in droughts occurring in the longer-term.

10  
11 The level of retained earnings during adverse drought conditions will have a significant impact

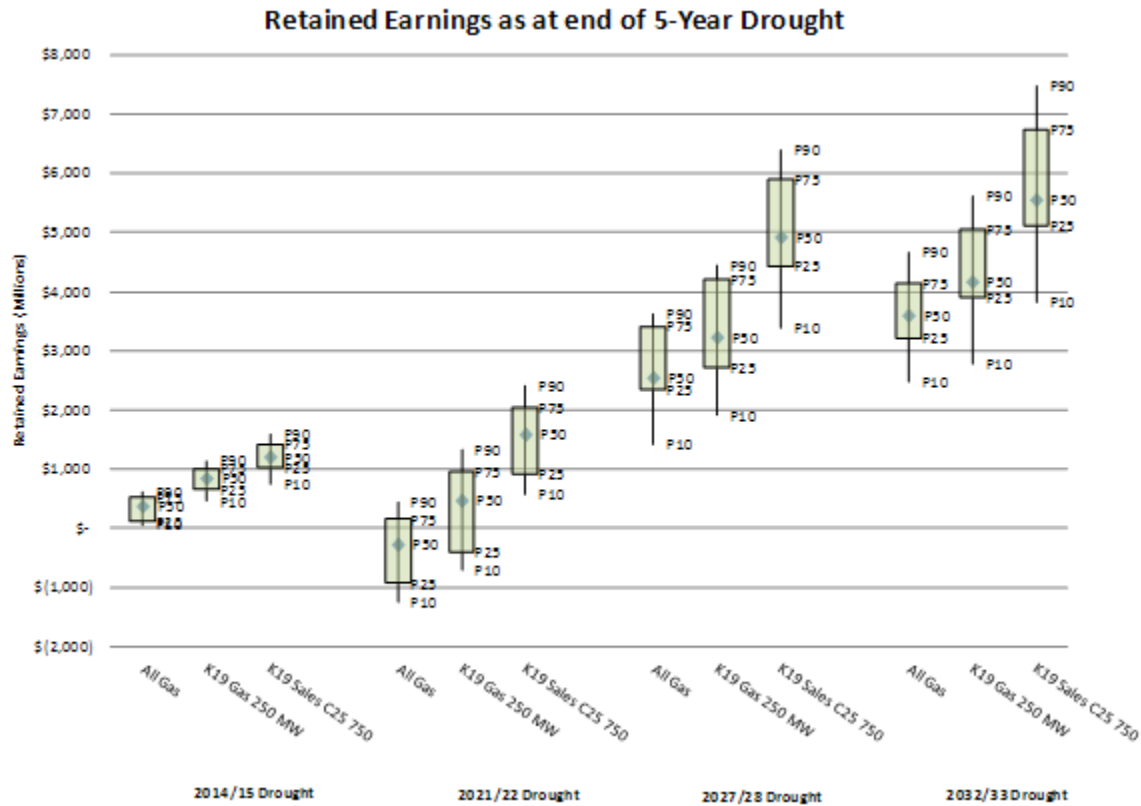
12 upon the financial strength of the corporation. Figure 11.9 shows the absolute level of retained

13 earnings for the three development plans after the final low-flow record year in a 5-year

14 drought beginning in 2014/15, 2021/22, 2027/28, and 2031/32:

1

**Figure 11.9 PROJECTED RETAINED EARNINGS AS AT END OF 5-YEAR DROUGHT**



2

3 As indicated in Figure 11.9:

- 4 • Although the incremental absolute dollar impact for a 5-year drought (as shown in  
5 Figure 11.8) is greater with the plan that includes Keeyask and Conawapa Generating  
6 Stations, as depicted on Figure 11.9, the retained earnings at the end of the five-year  
7 drought are higher with the Preferred Development Plan than with the All Gas plan. The  
8 Preferred Development Plan is more robust in its ability to absorb the adverse financial  
9 impacts of drought.
- 10 • Regarding the absolute level of retained earnings, the most adverse timing of a 5-year  
11 drought for the plans analyzed occurs with the droughts commencing 2014/15 and  
12 2021/22. A 5-year drought beginning in 2021/22 may lead to a negative retained  
13 earnings balance with the All Gas plan. By comparison, the Preferred Development Plan  
14 maintains a positive retained earnings balance during this time frame.

1 **11.5 Financial Evaluation - Conclusions**

2 This chapter presents the financial evaluation of eight representative development plans, with a  
3 focus on the comparative impact on future customer rates and Manitoba Hydro's comparative  
4 exposure to financial risk. The following is a summary of the financial evaluation conclusions:  
5

6 **Future Customer Rates**

- 7 • Rate increases are required for all evaluated alternatives. The financial evaluation shows  
8 that higher rates are required in the medium term under all of the development plans,  
9 regardless of whether the plan is gas-based or hydro-based. New energy supply cannot  
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- 12 • In the long term, development plans with both Keeyask and Conawapa Generating  
13 Stations are projected to have the lowest cumulative rate increases, which range  
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15 Development plans with both Keeyask and Conawapa Generating Stations provide  
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17 customers in the long run.
- 18 • In the medium term, the capital-intensive plans that include both Keeyask and  
19 Conawapa generating stations are projected to have cumulative rate increases that are  
20 generally higher than other alternatives. Cumulative rates under the Preferred  
21 Development Plan "cross-over" compared to all other plans and begin to provide benefit  
22 to customers in a relatively short time frame (10 to 15 years) following the in-service  
23 date of the Conawapa generating station.
- 24 • The Preferred Development Plan is projected to have the lowest overall rates to  
25 Manitoba customers in the long term.



1 **Financial Risk**

- 2 • In the long term, development plans that include Keeyask and Conawapa Generating  
3 Stations have the strongest projected balance sheet, with high levels of fixed assets and  
4 retained earnings. By the end of the study period, retained earnings are projected to be  
5 between \$4.9 billion to \$6.1 billion higher than the All Gas plan.
- 6 • Net debt levels converge towards the end of the study period for all development plans.
- 7 • In the medium term, while net debt levels are the highest with the development plans  
8 that include both Keeyask and Conawapa generating stations, as these plans have the  
9 overall highest capital investment, they also have the highest fixed assets and retained  
10 earnings.
- 11 • Development plans with both Keeyask and Conawapa generating stations are more  
12 robust in their ability to absorb adverse financial impacts in the medium term and  
13 extending through to the end of the study period, given their comparatively higher level  
14 of retained earnings.