

April 11, 2014

DSM FINANCIAL EVALUATION OVERVIEW

This overview along with the attached summary sheets and the sets of pro forma financial statements together form the DSM Financial Evaluation. The DSM Financial Evaluation includes the original scope of work outlined in Manitoba Hydro's Exhibit #90 under 2A) and 2B). The scope of work was further expanded by the request contained in Manitoba Hydro Undertaking #55 to also perform the evaluation assuming high Keeyask and Conawapa capital costs and by the clarification made by the PUB Chairperson on April 4, 2014 (found on pages 5359 to 5361) to include the rate setting methodology consistent with the August 2013 NFAT filing.

Each of the twenty (20) scenarios outlined below were prepared under three (3) different rate setting methodologies resulting in sixty (60) distinct sets of pro forma financial statements.

DSM Level	Plan 14 Preferred Plan Keeyask 2019 Conawapa 750 MW	Plan 5 Keeyask 2019 Gas 750 MW	Plan 1 All Gas Plan
	2013 ELECTRICITY LOAD FORECAST WITHOUT POTENTIAL PIPELINE LOAD ECONOMICS:REF REVENUE:REF CAPITAL:REF		
2013 DSM (Base)	X	X	X
DSM Level 1	X	X	X
DSM Level 2	X	X	X
DSM Level 3	X	X	X
	2013 ELECTRICITY LOAD FORECAST WITHOUT POTENTIAL PIPELINE LOAD ECONOMICS:REF REVENUE:REF KEYASK & CONAWAPA CAPITAL:HIGH		
2013 DSM (Base)	X	X	
DSM Level 1	X	X	
DSM Level 2	X	X	
DSM Level 3	X	X	

The three (3) rate setting methodologies are described below:

I. Main Submission Rate Methodology

This is the same mechanical methodology applied in the rate impact analysis presented in the NFAT Business Case Chapter 11 and Appendix 11.4 filed in August 2013 which facilitated development of the 216 financial pro formas included with the submission.

Even-annual rate increases are applied over a seventeen (17) year period from 2016 to 2032 in order to achieve the debt/equity ratio target 75:25 by the 2031/32. A rate increase of 3.95% was assumed in 2015 for all development plans and scenarios consistent with Manitoba Hydro's

interim rate application currently before the PUB. Once the debt/equity target is reached in 2031/32, projected rates are adjusted annually to achieve the corporation's interest coverage ratio target of 1.20.

It should be noted that this methodology is now incongruous with the evaluation of DSM as the increasing levels of DSM defer the in-service of several units of Conawapa beyond the 2031/32 debt/equity ratio target year used for rate goal solving purposes. This produces more erratic rate adjustments in the years immediately following 2031/32 (the "correction factor") than seen in the rate adjustments presented in Chapter 11 and Appendix 11.4.

II. **Alternative Rate Methodology #1**

At transcript page 2773, Manitoba Hydro indicated that regardless of the development plan, the Corporation is projecting the same rate increases of 3.95% each year over the next several years.

To assist the NFAT panel's understanding of the rate impacts, Manitoba Hydro applied 3.95% annual rate increases per year under each development plan until the Corporation's interest coverage ratio target of 1.20 is achieved. Once the target interest coverage is achieved, projected rates are adjusted annually to maintain the corporation's interest coverage ratio target of 1.20.

This rate setting approach serves to minimize the erratic rate adjustments in the years immediately after 2031/32 and more closely aligns with how Manitoba Hydro may smooth these rate adjustments in practice.

III. **Alternative Rate Methodology #2**

Manitoba Hydro indicated at transcript page 2776 that the rate adjustments assumed for the All Gas Development Plan (1) results in losses for a period of seven years and as a result the pressure on rates in the All Gas Development Plan (1) would be greater. The Keeyask/Gas/750 Plan (5) and the Preferred Development Plan (14) also show losses but not of the same magnitude as the All Gas Development Plan (1). Manitoba Hydro would have to take steps to minimize the deterioration in financial position.

Alternative Rate Methodology #2 expands upon Alternative Rate Methodology #1 and minimizes the net losses projected during the first ten (10) years under Alternative #1.

Even-annual rate increases above 3.95% were projected over the 2016 to 2022 timeframe to improve the projected net income/loss, the impact on retained earnings, the interest coverage ratios and the debt/equity ratios to an acceptable level. Beginning in 2023, if the target interest coverage ratio of 1.20 was not achieved, 3.95% annual rate increases were projected and if the target 1.20 was exceeded, 0.00% rate increases were projected until the interest coverage ratio returned to the 1.20 target. Once the target interest coverage is achieved, projected rates are adjusted annually to maintain the Corporation's interest coverage ratio target of 1.20.

Table 1 outlines the potential timing of new resources at each level of DSM required for domestic load for the purposes of this evaluation.

TABLE 1			
DSM Level	Plan 14 Preferred Plan Keeyask 2019 Conawapa 750 MW	Plan 5 Keeyask 2019 Gas 750 MW	Plan 1 All Gas Plan
2013 ELECTRICITY LOAD FORECAST WITHOUT POTENTIAL PIPELINE LOAD			
2013 DSM (Base)	Conawapa: 2026 1-SCGT: 2045 1-LM6000 unit: 2048	1-CCGT: 2042 5-SCGTs: 2026-2047	2-CCGTs: 2032-2039 6-SCGTs: 2023-2046
DSM Level 1	Conawapa: 2030	1-CCGT: 2047 3-SCGTs: 2030-2044	2-CCGTs:2039-2044 3-SCGTs: 2028-2035 1-LM6000: 2048
DSM Level 2	Conawapa: 2031	3-SCGTs: 2031-2047	1-CCGT: 2042 4-SCGTs: 2031-2047
DSM Level 3	Conawapa: 2033	2-SCGTs: 2033-2045 1-LM6000 unit: 2048	1-CCGT: 2044 3-SCGTs: 2033-2040 1-LM6000 unit: 2048

Table 2 provides the in-service capital costs for Keeyask, Conawapa, the 750 MW Interconnection and the DSM utility costs assumed for each level of DSM.

TABLE 2				
	(Billions of Nominal Dollars)			
	Base DSM	DSM Level 1	DSM Level 2	DSM Level 3
Keeyask Reference	\$6.3 (2019)	\$6.3 (2019)	\$6.3 (2019)	\$6.3 (2019)
Keeyask High	7.2 (2019)	7.2 (2019)	7.2 (2019)	7.2 (2019)
750 MW Interconnection (MB)	0.3 (2019)	0.3 (2019)	0.3 (2019)	0.3 (2019)
750 MW Interconnection (US 45%)	0.3(2019)	0.3(2019)	0.3(2019)	0.3(2019)
Conawapa Reference	10.4 (2026)	11.8 (2030)	12.2 (2031)	13.0 (2033)
Conawapa High	12.5 (2026)	14.2 (2030)	14.7 (2031)	15.7 (2033)
DSM Utility Costs	0.5 (2033)	0.9 (2033)	1.1 (2033)	1.9 (2033)

Figures 1, 2 and 3 compare the cumulative rate increases by development plan across the four (4) levels of DSM under Alternative Rate Methodology #2 with Reference capital costs.

Figure 1

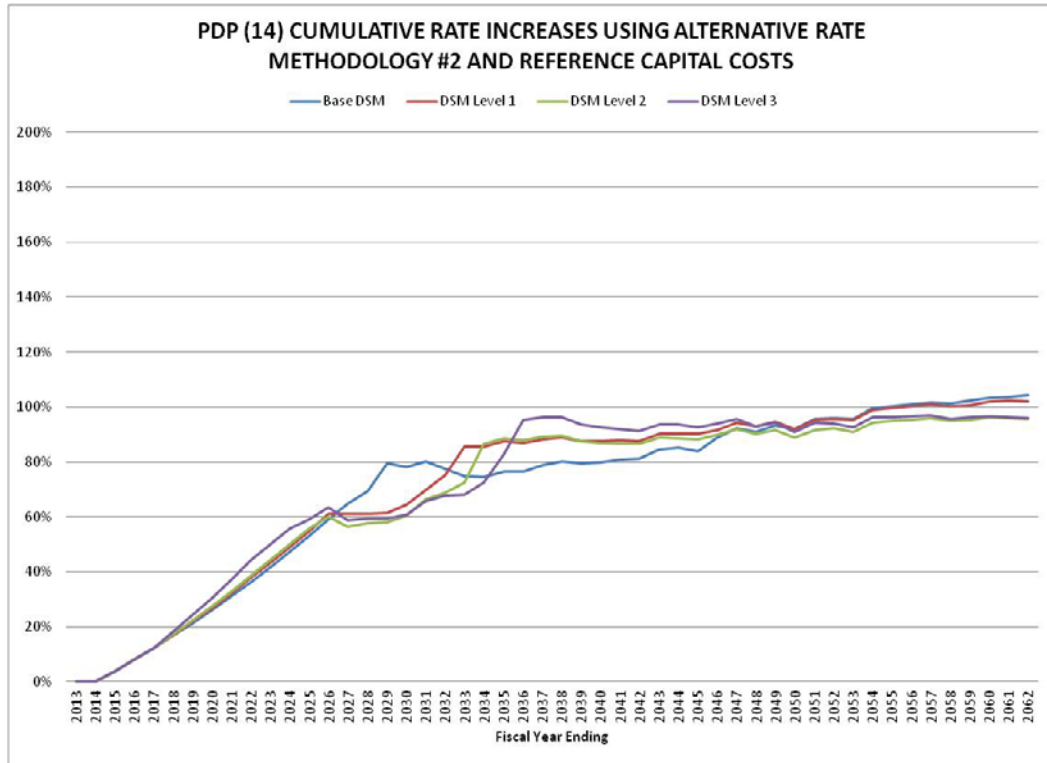


Figure 2

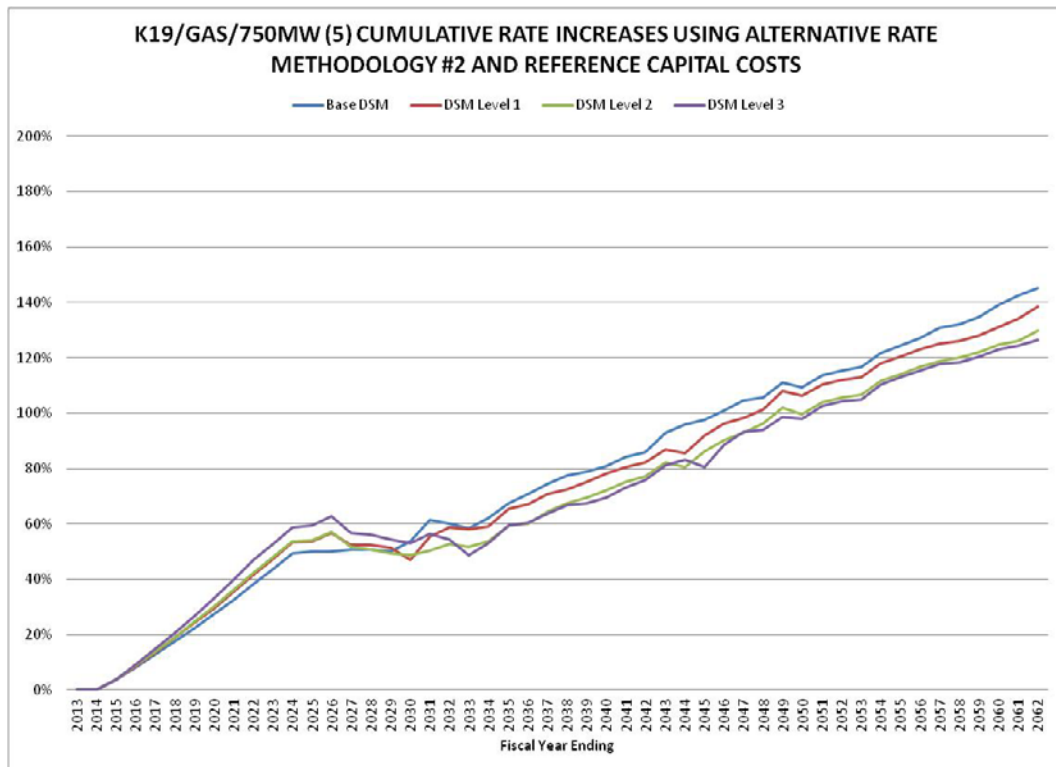


Figure 3

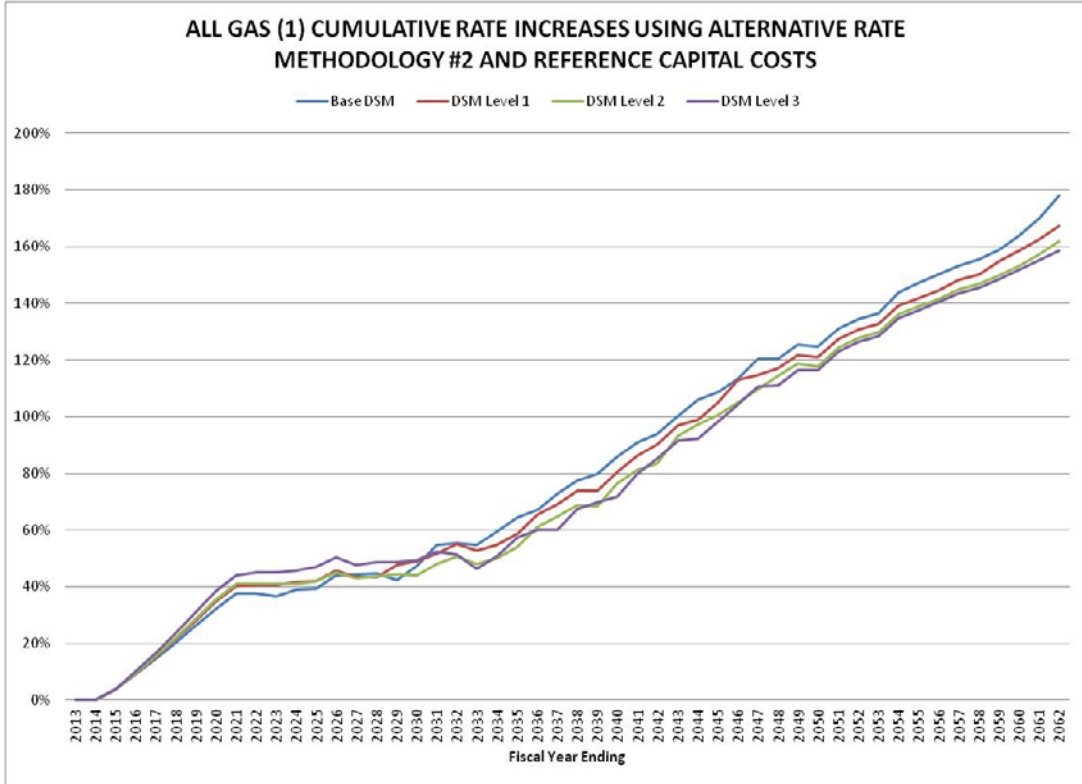


Figure 4 compares the cumulative rate increases of the three (3) development plans at DSM Level 2 under Alternative Rate Methodology #2 with Reference capital costs.

Figure 4

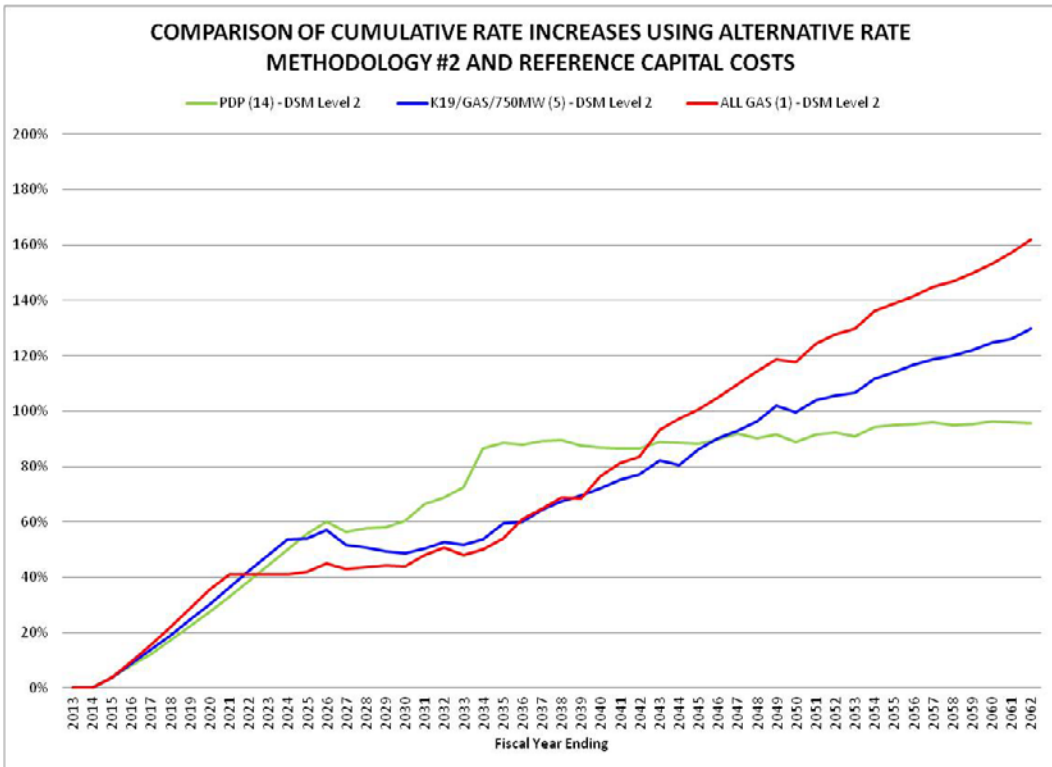


Table 3 outlines the cumulative rate increases.

TABLE 3 CUMULATIVE RATE INCREASES AT DSM LEVEL 2 USING ALTERNATIVE METHODOLOGY #2 AND REFERENCE CAPITAL COSTS		
	2031/32	2061/62
ALL GAS (1)	51%	162%
K19/GAS/750 MW (5)	53%	130%
PDP (14)	69%	96%

Table 4 outlines the cumulative present value of total general consumers' revenue.

TABLE 4 CUMULATIVE PV OF CONSUMERS REVENUE AT DSM LEVEL 2 USING ALTERNATIVE METHODOLOGY #2 AND REFERENCE CAPITAL COSTS DISCOUNTED AT 1.86% REAL (In Billions)		
	2031/32	2061/62
ALL GAS (1)	\$26.9	\$57.6
K19/GAS/750 MW (5)	\$27.4	\$56.2
PDP (14)	\$27.7	\$57.0

Manitoba Hydro has summarized the rate increases and key financial metrics in the three attachments to this document in a similar format to Table 4 of the Needs For and Alternatives To Executive Summary (Business Case, page 29) and Table 11.1 found in PUB/MH I-149(a).

The pro forma financial statements for all development plans and scenarios evaluated under the three rate setting methodologies are available electronically.