

Presentation to the Public Utilities Board of Manitoba Re: Manitoba Hydro 2023/24 & 2024/25 GRA

June 2023



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1. Introduction

Morrison Park Advisors

- Investment bank, founded in 2004 in Toronto
- Exclusively providing financial advisory services
 - Mergers & Acquisitions
 - Capital Raising (Debt and Equity)
 - Valuations, Financial Opinions, Litigation Support, Regulatory Advisory
 - Restructuring and Special Situations
- Independent, partner-owned
 - Objectivity and freedom from conflicts of interest critical to client services
- Broad sector coverage, but deep experience in key Canadian industries:
 - Mining
 - Power, Utilities and Infrastructure
 - Real Estate

1. Introduction

Pelino Colaiacovo

- Joined MPA 2005
 - Head of Power and Infrastructure
- Previously Chief of Staff to Ontario Minister of Energy, and 10 years consulting for highly regulated industries
- Manitoba Experience
 - Independent Expert Consultant for PUB during NFAT
 - Extensive financial analysis of alternatives, including modeling and scenario testing
 - Expert Witness, for Consumers Coalition and MIPUG jointly, in 2017/18 & 2018/19 GRA
 - Deep dive into bond market analysis of Manitoba Hydro; peer group financial comparison; analysis of equity targets and timing
- Other Agencies/Boards/Commissions Assignments
 - Newfoundland & Labrador: Muskrat Falls Inquiry
 - British Columbia: BC Ferries Commission, BC Hydro (Transmission)
 - Nova Scotia: Maritime Link
 - Alberta: AESO, Market Surveillance Administrator
 - Ontario: Ontario Power Authority
 - Saskatchewan: Crown Investments Corporation
- Majority of work for private sector clients: utilities, renewable energy companies, natural gas, green tech, etc.

2. GRA In Context

Unsettled Environment

- Application is narrowly for near-term rates
 - Confirmation of interim rate increase from 1 Jan 2022, plus request for additional increases 1 Sep 2023 and 1 Apr 2024
- Context is highly uncertain
 - New legislative regime proclaimed but not in force until 1 Apr 2025; existing arrangements until then
 - Province still working on its new Energy Policy Framework
 - Manitoba Hydro still working on its Integrated Resource Plan
 - Outstanding regulatory policy issues concerning Equity targets and timing for Manitoba Hydro were never settled by the PUB
- Manitoba Ratepayers have been significantly burdened over the past decade
 - Bipole III and Keeyask projects completed late and over-budget (after Wuskwatim was also over budget)
 - Rate increases amounting to 42% vs. CPI inflation of 24.6% (Coalition/MH I – 13b)
- Global Energy Transition points to change, but not clarity
 - Massive spending on renewable energy resources initiated by the US and Canadian federal governments
 - Provinces, states and cities across North America are pursuing initiatives separate from federal governments
 - Global corporations sometimes acting more aggressively than governments
 - Technology announcements almost daily
 - Profound impact on energy markets and loads, with no stability in sight

2. GRA In Context

Reliance on Incrementalist Point of View

- 20-year forecast of limited horizons
 - Includes placeholder for gas-fired generation in the late 2030s!!! (despite expected bans on new gas-fired generation)
 - What if there is widespread conversion of natural gas heating to electric heat pumps? What happens to domestic load?
 - Large scale electrification of transportation? (all light-duty vehicles for sale in 2035 must be non-emitting...)
- Fuel-switching would change the context for consumer impacts of electricity price changes (i.e., even if electricity rates have to rise, consumer costs for other fuels would decline... unclear net impacts for consumers?)
- 20-year forecast of perpetual “average” assumptions
 - Multiple variables are essentially unknowable beyond a few years (e.g., gas prices, interest rates, foreign exchange rates, inflation)
 - Hydroelectric performance is inherently variable across a wide range (will be discussed further below)
 - There is no other way to do long-term forecasts, so should they be more than just “indicative”? Used for scenario planning and testing, rather than representing “paths”?

2. GRA In Context

Sharp Questions

- Do current circumstances necessitate rate increases?
 - Is there a drought causing financial distress that requires immediate rate action (as there was in 2021)?
 - Is expected near-term financial performance such that rate increases are required to meet cash flow targets and credit support requirements?
 - Is there evidence of debt market unease with Manitoba (e.g., in the form of steadily increasing debt spreads)?
- If rate increases are to be justified on the basis of long-term financial targets rather than immediate requirements, then is there sufficient evidence before the PUB to allow it to address unsettled regulatory policy questions?
 - The government has made a decision about long-term targets, but chose not to enforce it until 1 April 2025
 - Governments are free to change their position on issues at any time, and only the currently-in-force regime is reliable
 - What targets and timelines should the PUB now endorse? Would these justify immediate rate increases?
 - What new evidence is before the PUB that materially changes the deliberations that culminated in Order 59/18?

3. Manitoba Hydro Is Unique (Recap)

No North American Comparator

- Non-Share Capital Corporation, no profits paid out to equity investors
- Controlled by Provincial Government
- “Power at Cost” model, with no required return on equity
- Export Mandate (exploit provincial natural resources)

	Public Sector	Power at Cost	Export Mandate	
BC Hydro, Sask Power, NB Power	✓	✓	X	
Hydro Quebec, Nalcor	✓	X	✓	Hydro Quebec has “Heritage Pool”
OPG	✓	X	X	
Nova Scotia Power	X	X	X	
US Not-for-profits (TVA, Bonneville, Long Island, etc.)	✓	✓	X	

“Apples to Apples” comparison is critical, not “Apples to Pineapples”

4. Capital Structure and Financial Targets (Recap)

Why Is There “Equity” In A Not-for-profit Enterprise?

- Debt is always cheaper than Equity
 - Only true because Debt takes less risk than Equity
 - If there was no Equity, then Debt would be taking all of the risk, and would not actually be “Debt”
- Credit Risk is usually measured in terms of cash flows, but is also related to the ranking of claimants in the case of enterprise failure
 - Lenders are most concerned with the ability of an enterprise to regularly generate cash to make good on debt obligations
 - If an enterprise is also expected to generate extra cash to pay out to “Equity”, then there is more room for errors in estimates and adverse circumstances, before cash flows are reduced so far that repayment of debt obligations is in doubt
 - Lenders want to know that if the enterprise fails, there will be assets that may be liquidated to pay debt obligations
 - If assets were originally purchased with both debt and equity, it is more likely that the residual value will be enough to protect the lenders from losses
- Equity can be internal to the enterprise, or provided by an external guarantor
 - Depending on the nature of the business, different levels of equity are required by Lenders
 - Regulatory regime is fundamental to the “nature of the business” in the case of Manitoba Hydro
 - Province of Manitoba guarantees (actually issues!) Manitoba Hydro debt, in exchange for a “guarantee fee”, dramatically reducing the need for equity within Manitoba Hydro
 - Manitoba Hydro could operate with no Equity, but then lenders may assume that the Government of Manitoba would have to regularly subsidize the company, which would look like extra unwanted government spending, and harm the Province’s financial metrics and credit spreads

4. Capital Structure and Financial Targets (Recap)

What is “Equity” At Manitoba Hydro

- Equity = Retained Earnings = Contributions by Customers over and above amounts required to pay the annual operating costs of the business = Net Investment in Capital Assets
 - These contributions are used to pay part of the costs of buying new assets, so Debt is not funding 100%
- Equity = Retained Earnings = Financial Reserves
 - Planning to regularly earn and accumulate annual profits means that cash flows are expected to be more than sufficient to pay interest costs, giving comfort to Lenders that their investments are going to be repaid
 - However, if in some years profits are not earned (e.g., because of droughts), then the enterprise would have the “Debt Room” to borrow more without reaching towards 100% Debt

4. Capital Structure and Financial Targets (Recap)

How Much Equity Is Required?

- Can be determined by legislation/regulation
 - Bill 36 sets targets for 2035 and 2040, which become operable as of April 1, 2025
 - Governments can justify their choices on any basis – the test is political, not economic or regulatory
 - Governments can – and sometimes do – change their positions at any time
- Chosen by a regulator – based on a considered balancing of regulatory principles
 - Efficiency, Prudence, Fairness, etc. (many formulations, including those of Bonbright)
 - Order 59/18 recommended further investigation into the issue of equity targets and timing for Manitoba Hydro
 - Drought risk was identified as a fundamental determinant of the equity target for Manitoba Hydro, but risks such as interest rates, foreign exchange, and export market prices should be addressed by regulated rates over time
 - Follow-up process never happened, so the matter remains unresolved from a regulatory policy perspective
- Historical precedent can be a guide
 - In the years after the Limestone Generating Station was built, Manitoba Hydro's debt ratio quickly came down from 94% in 1992 to 74% by 2012
 - BUT, Limestone was delivered under budget, and was immediately and permanently profitable
 - Wuskwatim, Keeyask and Bipole III were all over budget and behind schedule, and cost far more than the average value of exports

4. Capital Structure and Financial Targets (Recap)

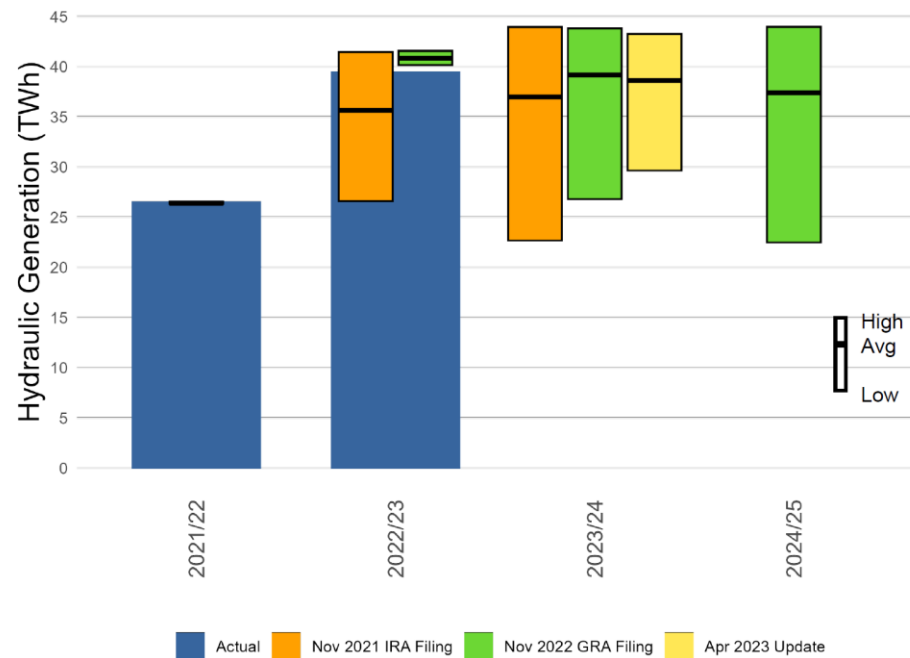
Export Mandate And Equity Requirement

- Manitoba Hydro's export mandate complicates the consideration of Equity targets and timing
- The Government of Manitoba makes decisions on export-focused projects, yet domestic ratepayers are responsible for contributing equity for those assets
 - If projects are successful, like Limestone, then domestic customers benefit
 - If projects perform poorly, like Wuskwatim, Bipole III and Keeyask, then domestic customers are burdened
- The Government benefits from increased Water Rental Fees, increased Debt Guarantee Fees and increased Capital Taxes regardless of whether the projects perform well or poorly
 - The recent reduction in the Water Rental and Debt Guarantee Fees in some sense may lessen the sting for domestic ratepayers
 - However, if these fee reductions simply lead to more profits instead of lower rates, then government benefits in any case
- The Government also records Manitoba Hydro's Net Income as Revenue, so pursuit of a higher Equity Ratio (aka a lower Debt Ratio) after construction of an export project also generates additional government revenues compared to what they would have been without the export-focused project

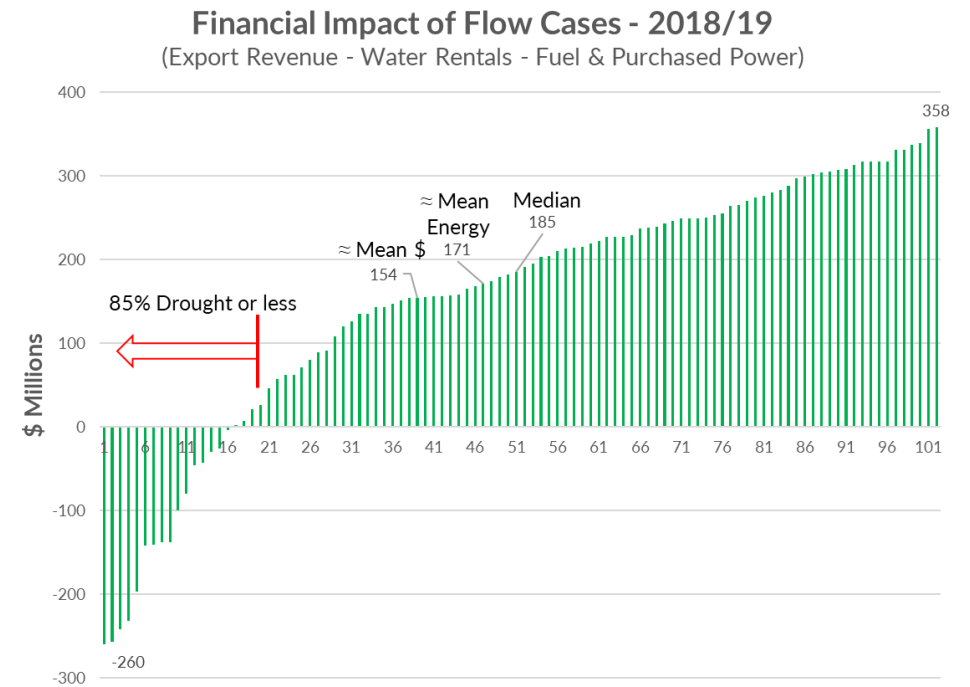
4. Capital Structure and Financial Targets (Recap)

Why Hydrology Drives Equity Requirement

- Inherent variability of hydroelectric production means available energy is naturally random from year to year
- In addition to the effects of hydrology, expected Net Export Revenue is also strongly affected by spot market energy prices (for both exports and imports), and fuel prices for backup generation required in the event of low water levels
 - Spot market energy prices and fuel prices are both related to volatile natural gas prices, to varying degrees



Conceptually
←→
Related



From: p. 16 of Exhibit MH-30 in the current GRA

From: p. 44 of Exhibit CC-45 of 2017/18 GRA

4. Capital Structure and Financial Targets (Recap)

At A Minimum, Sufficient Equity Is Required to Manage Drought Risks

- The inherent variability of hydrology (shown on the previous slide) means that some equity is certainly required, and that a reasonable test could be formulated for this purpose
 - In its Application, Manitoba Hydro identified one possible test scenario, being a severe 5-year drought. This test requires a surprisingly modest amount of equity, and far less than would result with a 75% or 70% Debt Ratio
 - A more severe drought could also be a test, which would give greater confidence that Manitoba Hydro could manage any situation
- If drought risk is the only risk covered by Equity, then other risks must be addressed through rates (as was determined in Order 59/18)
 - The proposed caps on rate increases in Bill 36 (which appear to be very strict) do not allow latitude to manage other risks through rate increases
 - What happens if there is a confluence of negative factors (e.g., prolonged drought, plus high interest rates, plus adverse foreign exchange, plus low spot prices for energy) all at the same time, in the early years of the rate cap, before equity is further built up? Will the government consent to change the rate caps (which may require legislation), will the government extend financial support to the utility, therefore potentially calling into question the “self-supporting” nature of the enterprise, or will the government simply recognize that the financial targets expressed in Bill 36 cannot be achieved within the designated timelines?
 - Given that this will be a governmental choice and a government problem, is this even a regulatory issue now?

4. Capital Structure and Financial Targets (Recap)

Interest Coverage Ratio

- Interest Coverage Ratio is a cash flow sufficiency metric from a credit perspective
 - There are a variety of measures of cash flow that are often analyzed, including EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization), EBIT (Earnings Before Interest and Taxes), FFO (Funds From Operations), AFFO (Adjusted Funds From Operation), Discretionary Cash Flow, etc.
 - There are also a variety of cash flow ratios that are often tracked, including Debt Service Coverage Ratio (EBITDA/Total Debt Service), EBITDA/Interest, AFFO/Debt, etc.
- The importance of cash flow measurements and targeting is obvious and not in dispute
 - Appendix 4.5 of the Application discusses the importance of cash flows to Lenders, and the need for the company's self-generated cash flows to be sufficient to pay all debt obligations
- Manitoba Hydro is in no immediate danger of having insufficient cash flow to pay its interest charges
 - Even in the severe drought year ending March 31, 2022, operating cash flows were sufficient to pay all interest charges
 - Negative Net Income resulted from Depreciation, which is a non-cash item

4. Capital Structure and Financial Targets (Recap)

Capital Coverage Ratio

- A long-standing target measure for Manitoba Hydro, set at 1.2x (cash flow/“non-major” capital spending)
- Unlike Debt Ratio and Interest Coverage Ratio, this ratio is not fully transparent, because there is a significant measure of judgement in determining what counts as “major” capital projects that are excluded from the ratio calculation
 - Oddly, Depreciation forms part of the “cash flow” element in this calculation, and Depreciation on existing assets includes Depreciation of assets which were in the past considered “major” capital projects themselves, even though capital spending on new “major” construction projects is excluded
 - There is some connection to the idea of “Maintenance Capex”, but the exclusion of “major” projects does not mean that all remaining capital expenditures are for “maintenance”: growth and changes in policy still have to be accounted for
- In addition, it is not clear why the measure is actually important from a risk or economic efficiency perspective
 - It appears to be a restatement of the desire to make progress on the Debt Ratio target
 - I.e., if internally generated funds are sufficient to cover 1.2x of all the spending on “normal” capex, it means that the remainder can be used to retire outstanding debt
 - What happens to this ratio when the Debt Ratio target is achieved? Why would excess cash flow be important at that point?
 - Will the Debt Ratio decline in perpetuity, or will new export adventures be discovered to create new demand for spending?

5. Revenue Requirement For Manitoba Hydro Domestic Customers (Recap)

Highly Dependent on Assumptions

- Formula could be expressed as:

$$\text{DomRevRq} = \text{OpExp} + \text{I} + \text{Dep} + \text{CapTax} + \text{Other} - \text{NER} + \text{EqContr}$$

Highly Variable

MH proposes to adjust annual amounts to satisfy "rate smoothing" objectives

- Where:

- DomRevRq = Domestic Revenue Requirement
- OpExp = Operating Expenses (not captured in NER)
- I = Interest
- Dep = Depreciation
- CapTax = Capital Taxes
- Other = a variety of elements such as regulatory adjustments, pensions, etc.
- NER = Net Export Revenues
- EqContr = Equity Contribution

Near term forecastable, long-term variable

$$\text{NER} = \text{CtRev} + (\text{SpE} * \text{Px}) - (\text{IMP} * \text{Pi}) - \text{WR} - \text{Fuel}$$

- CtRev = Contracted Export Revenues
- SpE = Spot Market Exports
- Px = Market Export Price
- IMP = Energy Imports
- Pi = Energy Import Price
- WR = Water Rental Charges
- Fuel = Fuel Costs

Highly Variable

5. Revenue Requirement For Manitoba Hydro Domestic Customers (Recap)

NER Variability Is Only Known Post-Facto, While EqContr Is Manipulated In Advance

- NER is forecasted based on long-term “averages”, but is only known at the end of any given year
 - Manitoba Hydro hydrology experts confirmed that water levels can be unpredictable even in the latter part of a year
 - Spot prices for energy and gas can also shift unpredictably during any given year
- The nature of Manitoba Hydro’s 20-year forecast is to “estimate” all of the other variables, and then manipulate the annual Customer Equity Contribution to achieve rate smoothing
 - Why is rate smoothing the paramount regulatory principle?
 - What about inter-generational fairness? What about prudence, or economic efficiency? Or regulatory balance?
 - Why not make the planned Equity Contribution the same for every year, let the hydrology fall where it may (since it averages over the long-term), and adjust rates to reflect inflation, exchange rates and interest charges? Or some other formulation? (there are many possibilities to choose from, which may have been examined in the follow-up to 59/18, if it had happened...)
 - Since rates are reviewed and adjusted every few years, why is the presumption of rate smoothing so important?
 - Manitoba Hydro had no reluctance to request a large emergency rate increase in the case of the drought two years ago, so why is rate smoothing primary now, while still under the same regulatory regime?
 - Manitoba Hydro has indicated, through its comments in the Application, in IRs, and in testimony, that if it is not making sufficient progress on achieving its Debt Ratio targets while rate increases are capped by inflation, it will “discuss with the Province what to do”. Is this a commitment to rate smoothing, or not? (please see, e.g., May 29 transcript, pages 2201-02)
 - What happens when the Debt Ratio has hit its target? Will rates then fall, or be frozen for a substantial period of time?
 - Is rate smoothing only a justification when convenient?

6. The Case For Near-Term Rate Increases

To Increase Rates, All of Manitoba Hydro's Proposed Spending Must Be Just and Reasonable

- If increases in Operating Expenses are not all just and reasonable, then planned spending should be less, which reduces the need for an increase in Domestic Customer Revenue Requirement
 - Others have presented evidence with respect to Operating Expenses
- If increases in planned Capital Expenses are not all just and reasonable, then it will be easier for Manitoba Hydro to improve its Debt Ratio and its Capital Coverage Ratio, and eventually its interest coverage ratio
 - Others have presented evidence with respect to Asset Management and Capital Expenses
- If estimates with respect to all of the forecasting variables inherent in Manitoba Hydro's financial estimates are not just and reasonable, then the case for near-term rate increases is weakened
 - Others have addressed the domestic load forecast, expected export prices, inflation, interest rates, foreign exchange rates, fuel prices, and so on
 - However, all of these variables are inherently uncertain and out of Manitoba Hydro's control, and therefore subject to risk and variability over the medium and longer term
 - In Order 59/18, the PUB decided that rates should follow these variables, rather than try to anticipate them
 - When Bill 36 comes into force, the Government of Manitoba has decided that rates will be capped regardless of the future behaviour of these variables, which may or may not lead to challenges in the future that the Government will be called upon to resolve

6. The Case For Near-Term Rate Increases

If Rates Will Be Increased To Support Long-term Targets, The PUB Should Be Explicit About Regulatory Underpinnings

- It is clear that short-term needs do not justify rate increases
 - No drought, no cash flow crisis, no substantial change in Manitoba credit spreads over the past decade (please see Chart 6 on page 20 of Appendix 4.5 of Manitoba Hydro's Application)
- It is clear that customers have, over the past decade, borne a significant burden (increases consistently above inflation) to support Manitoba Hydro's export development projects, which have not worked out well. Moreover, Manitoba Hydro clearly has the financial capacity to forego short-term rate increases without significant threat to its finances (as measured by cash flow sufficiency), which could be a recognition of that burden
 - Continuing forward with increases at inflation would make permanent the imbalance faced by a cohort of customers, as compared to customers in the future, whereas no rate increases for two years would allow some of that imbalance to be corrected
- Bill 36 is not operative until 1 April 2025. If the government wanted it to be operative sooner, they could have made it so. If the PUB adopts as its own the financial targets of Bill 36, then it should make explicit the regulatory principles supporting doing so. Alternatively, the PUB could enunciate its own position, based on regulatory principles, for appropriate financial targets and timing, and use those to demonstrate how short-term rate increases are just and reasonable
 - Order 59/18 called for an examination of financial targets and timing to better develop this regulatory policy. Unfortunately, this never happened, which leaves the PUB in a deficit position

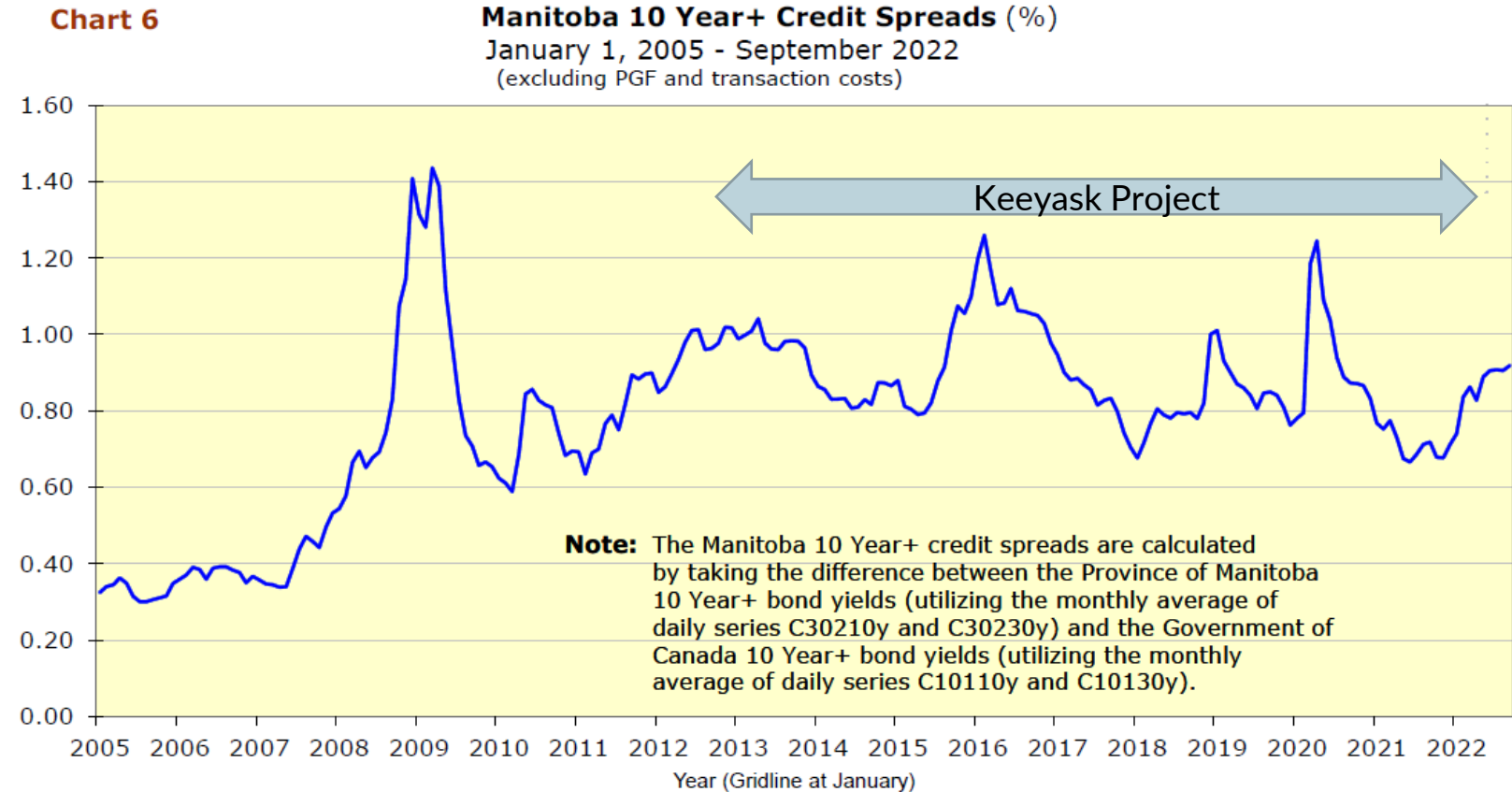
6. The Case For Near-Term Rate Increases

Do No Harm

- If there is no compelling justification for near-term rate increases, then the “do no harm” procedural principle would justify confirming the interim rate increase, but not further increasing rates and the burdens carried by the current cohort of Manitoba Hydro customers
 - This can be a “default” position in the event that a regulatory policy on long-term financial targets and timing cannot be developed based on the information before the Board
- The Government of Manitoba, through Bill 36, has indicated that it is taking over Manitoba Hydro rate policy as of 1 April 2025, which it is entirely within its rights to do. The consequences, opportunities, pitfalls and benefits of that regime will become apparent over time, and will be in the hands of the government to manage
 - Assuming the regime is not altered at any time by further legislation or regulations
- Alternatively, enunciating a path forward on long-term financial targets and timing based on regulatory principles may prove beneficial to both the government, and future regulators, should the government ever decide to alter the regime inherent in Bill 36

Appendix

- No obvious increase in Manitoba credit spreads over the life of the Keeyask (and Bipole III) project and the significant increase in Manitoba Hydro debt
- Spikes in 2016 and 2020 coincided with global credit events (major stock market sell-off in early 2016, and global pandemic in 2020)



Source: Manitoba Hydro Application, Chart 6, p. 20, Appendix 4.5

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