

Report to the Manitoba PUB

Review of Certain Manitoba Hydro Financial Issues related to the 2023/24 and 2024/25 GRA

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1 **Executive Summary**

2 On December 9, 2022, Manitoba Hydro filed a revised application to the Manitoba Public Utilities Board for electricity
3 rate increases of 2% for both 2023/24 and 2024/25, as well as confirmation of the interim rate increase of 3.36% that
4 was implemented as of January 1, 2022.

5 The revised application followed the announcement by the Government of Manitoba that it would be reducing the rate
6 of the Debt Guarantee Fee and the Water Rental Fee. This seemingly welcome relief for ratepayers, however, comes
7 also on the heels of legislation, commonly referred to as Bill 36, which requires that as of April 1, 2025, a new
8 regulatory regime will require Manitoba Hydro to pursue a significantly reduced Debt-to-Capitalization Ratio which will
9 entail persistent rate increases over the coming years.

10 Manitoba Hydro has defended its application through several policy or regulatory principle-level arguments,
11 principally concerned with overall financial targets:

- 12 • 2% rate increases in 2023/24 and 2024/25 would be consistent with the 2% increases that will likely be
13 required in the future to meet various targets under the new legislation, so the regulatory principle of stability
14 and predictability of rates would be well-served;
- 15 • The financial health of Manitoba Hydro would be improved in the near term through rate increases, and
16 make it more likely that Manitoba Hydro would be able to meet its 2035 and 2040 targets; and
- 17 • The near-term requested rate increases will have lasting impacts on the ability of Manitoba Hydro to meet
18 challenges and risks that it will face, including higher interest rates, inflation, and new demands for capital
19 spending.

20 While stability and predictability of rates is an important regulatory priority and principle, it is not clear that there can
21 be any significant level of rate stability in the future. Analysis of the rate path presented by Manitoba Hydro suggests
22 that the probability of being able to both restrict rate increases below a defined inflationary rate cap, and meet target
23 financial metrics could be undermined by any number of risks. Future resolution of such a conundrum is uncertain.
24 Moreover, the text of Bill 36 does restrict rate increases to inflation, but inflation itself has recently become less
25 predictable and stable. Moreover, Bill 36 also allows for rate “re-sets” in the middle of a three-year rate period if
26 necessary, which also suggests a less than total commitment to rate “stability” and “predictability”.

27 Questions of Manitoba Hydro financial health were addressed at length in previous GRA's. Nonetheless, Manitoba
28 Hydro appears to contend that since Bill 36 will soon impose stringent targets for Debt-to-Capitalization, the PUB
29 would do well to facilitate those targets by agreeing to immediate rate increases. However, the new regulatory regime
30 is not yet in place, and there is nothing in the Application that overcomes the conclusions of past GRAs, which did not
31 support Debt targets of the sort proposed by Manitoba Hydro and imposed by Bill 36. Until Bill 36 is in force, those
32 targets should play no role in rate-setting based on good regulatory principles and practice.

33 Manitoba Hydro alludes to a risk that future rate increases above inflation may be prohibited by the Bill 36 legislation,
34 even though at that future time they may be prudent and necessary, absent the legislation. Consequently, approving
35 rate increases now would increase financial flexibility in the future when it might not be available. However, if
36 legislation creates problems in the future, then Manitoba Hydro should appeal to the government for a legislative
37 solution. There is no regulatory principle that would support increasing rates today in order to solve a problem that
38 might arise in the future, and which could and should be resolved through legislation.

1 Finally, the relationship between Manitoba financial outcomes and the provincial fiscus are examined. There are a
2 number of elements from Manitoba Hydro financial statements that are taken into account by the Government of
3 Manitoba. Since the utility is a non-share capital corporation, and is considered a Government Business Enterprise, it
4 is incorporated into the financial statements of the Government of Manitoba on a net-equity basis. This means that
5 not only are the obvious “fees”, “charges” and “taxes” of likely interest to the province, but also Net Income.

6 Examining the total impact on the province of the preferred 2% rate path as compared to another version of the
7 forecast in which Debt Guarantee and Water Rental Fees were never reduced, results in the surprising insight that
8 reducing the Fees actually leads to greater revenue to the Province. Nevertheless, the total benefit to the Province of
9 the preferred 2% rate path is approximately \$12 billion over 20 years, which represents an average annual
10 contribution by ratepayers to the province of \$600 million. And this despite the fact that the fees were reduced.

11 This analysis is troubling, because it leads back to consideration of the provincial government’s role in approving
12 major capital projects that have led to both high fees and charges, and the need for a massive infusion of debt into
13 the utility, as well as equity from ratepayers. Moreover, by also cementing Debt-to-Capitalization targets in Bill 36, at
14 a level which cannot be justified by recourse to regulatory principle, the government has guaranteed that ratepayers
15 will be making contributions to Manitoba Hydro greater than regulatory practice and principle would have required.

16 This is, in effect, a form of taxation, even though it is not labeled as such. By arguing that the PUB should set rates
17 today with a view to supporting the achievements of these government-imposed targets, Manitoba Hydro is implicitly
18 requesting that the PUB endorse the plan. It is hoped that, as it did in Order 59/18 with respect to Bipole III, the PUB
19 chooses to be clear and firm with the Government and other audiences about the need to recognize the equity
20 targets as unnecessary according to regulatory practice and principle, and hence should not be taken into account in
21 setting rates now.

22 In short, there do not appear to be any arguments at the level of overall financial policy and principle which lend
23 support to immediate rate increases at Manitoba Hydro, particularly in service of future eventualities that are much
24 less than certain.

25

1 **Morrison Park Advisors**

2 MPA is an independent, partner owned investment banking advisory firm. We primarily advise clients on mergers
3 and acquisitions, equity and debt capital raises, divestitures and restructurings. In addition, we provide formal
4 valuations, fairness opinions, contract negotiation services, advice to special committees of boards of directors,
5 advice on initial credit ratings, expert testimony before courts and regulatory bodies, policy development, and market
6 analysis. Our ability to deliver top tier financial advisory services is based on decades of combined experience and
7 expertise developed at some of Canada's leading investment banks, while serving many of Canada's largest and
8 most sophisticated corporate clients as well as federal, provincial and municipal governments and quasi-government
9 entities.

10 Our areas of specialty include utilities, infrastructure and power; mining; real estate and technology. In the electricity
11 sector, MPA has direct and recent experience on a number of transactions and other advisory assignments involving
12 electricity assets and has detailed knowledge and experience with this market, its participants and how they operate.

13 Information on the team members contributing to this report, as well as the scope of our assignment is attached in
14 Appendices F through J.

15 For more information on MPA, please visit our website at www.morrisonpark.com.

1. Manitoba Hydro Requests

2 *Original Request (November 15, 2022)*

3 By way of formal application for electricity rates, Manitoba Hydro requested that the Manitoba Public Utilities Board
4 (“PUB”) approve:

- 5 • Confirmation of the 3.36% rate increase that was effective on January 1, 2022;
- 6 • A rate increase of 3.5% to be effective on September 1, 2023;
- 7 • A rate increase of 3.5% on April 1, 2024; and
- 8 • A number of technical amendments on various matters.

9 The request was accompanied by a formal package of materials and information to support the case being made.

10 In addition, this application presented a “rate path” assuming 3.5% annual rate increases from 2025/26 until 2032/33,
11 then 0.5% increases from 2033/34 until 2041/42.

12

13 *Government Announcement Of Changes To Key Policies Relating To Manitoba Hydro*

14 On November 23, 2022, the Government of Manitoba announced that it intended to make changes to two key
15 relationships between the Province and Manitoba Hydro, namely:

- 16 • Reduce by 50% the Provincial Debt Guarantee Fee charged by the Province of Manitoba on outstanding
17 debt owed by Manitoba Hydro to the Province; and
- 18 • Reduce by 50% the Water Rental Fee charged by the Province of Manitoba, which is a charge based on the
19 amount of power produced by Manitoba Hydro’s hydroelectric stations.

20 The changes are to be applied retroactively to April 1, 2022, and will therefore affect the utility’s financial results for
21 the fiscal year just ended (on March 31, 2023), as well as affecting all years in future, as long as the new policy
22 remains unchanged.

23 This action will result in a significant reduction in the expected expenses of Manitoba Hydro, and hence will increase
24 the expected net income of the utility, all other things being equal.

25 For example, in the year ended March 31, 2022, Manitoba Hydro paid approximately \$101 million of water rental fees
26 and \$229 million of debt guarantee fees, for a total of \$330 million in payments. Had the new policy been in place
27 during the 2021/22 fiscal year, Manitoba Hydro would have only paid \$165 million, and would have had a net loss for
28 the year of \$83 million instead of \$248 million.¹

29 Applying this change in policy to the forecast for future years has a significant impact on Manitoba Hydro’s long-term
30 financial performance.

¹ Note that \$248 million was the Net Loss Attributable to Manitoba Hydro, not including non-controlling interests. Please see the Manitoba Hydro 2021/22 Annual Report, p. 57, Income Statement.

1 **Revised Request (December 9, 2022)**

2 As a result of the actions of the Government of Manitoba, Manitoba Hydro elected to revise its application. While
3 continuing to request confirmation of the interim rate increase on January 1, 2022, the request for two increases of
4 3.5% was reduced to two increases of 2%. In addition, Manitoba Hydro amended the long-term “rate path” presented
5 in the materials to one that shows 2% rate increases in every year from 2025/26 to 2041/42.

6 In keeping with regulatory practice, Manitoba Hydro has provided revised financial forecasts for the 2023/24 and
7 2024/25 fiscal years, and has estimated that the change in provincial policy will result in combined savings for the
8 utility of approximately \$380 million (based on the “average” hydro-electric production scenario used in the
9 preparation of the forecast). Based on the same forecast, the combined savings to ratepayers that results from the
10 reduction of the requested rate increases from 3.5% to 2% amounts to approximately \$75 million.

11 In other words, only about 20% ($\$75 / \$380 = 19.7\%$) of the benefit from the government’s change in policy is being
12 passed on to ratepayers, while the rest is going to the utility’s bottom line as Net Income. Admittedly, the exact
13 figures and percentages could vary significantly depending on the actual hydro-electric production, export revenues,
14 etc., in the two years in question, but the implication is that the government’s policy change was focused more on
15 Manitoba Hydro’s finances, and less on the need to give ratepayers relief.

16

17 **Reasons For The Requested Rate Increase**

18 Manitoba Hydro’s conceptual justification for the requested rate increases can be boiled down to three arguments:

- 19 i. Annual 2% rate increases, if continued onwards into the future (for up to 20 years or more) would represent
20 a stable and predictable rate path, which would afford customers benefits by allowing them to better plan
21 their electricity expenditures, and incorporate those expected costs into their personal and/or business
22 budgets.
- 23 ii. Annual 2% increases would allow Manitoba Hydro to significantly improve its “financial health”, as
24 represented by various metrics including Debt-to-Capitalization Ratio, Self-Funding Ratio, Capital Coverage
25 Ratio, and Net Debt. In particular, steady 2% rate increases would lead – in a certain range of future
26 scenarios – to Manitoba Hydro meeting a target Debt-to-Capitalization Ratio of 80% by March 31, 2035, and
27 70% by March 31, 2040.
- 28 iii. The requested 2% increases, by immediately improving Manitoba Hydro’s financial health (as compared to
29 a scenario without rate increases), would in turn afford the utility with a more robust ability to manage
30 various emerging risks in the future, such as increased capital investment requirements, declining and more
31 variable export revenues, higher interest rates, and the potentially significant impacts of the changing
32 energy landscape associated with climate change and the “energy transition”.

33 Importantly, all three of these arguments are cast in the light of legislation which received Royal Assent on November
34 3, 2022: *The Manitoba Hydro Amendment and Public Utilities Board Amendment Act*, S.M. 2022, c. 42 (commonly
35 referred to as “Bill 36”). This legislation makes a number of changes to the regulatory regime for Manitoba Hydro,
36 most salient of which are:

- 1 • Changes to the PUB rate-setting process, including to the scope of the PUB's authority, and requiring the
2 setting of rates for Manitoba Hydro for successive three-year periods on a regular schedule beginning on
3 April 1, 2025;
- 4 • A cap on annual electricity rate increases of 5% or at the most recent CPI annual rate of inflation, whichever
5 is less; and
- 6 • Subject to the cap on annual rate increases, a requirement that rates be set such that Manitoba Hydro
7 would be enabled to achieve the Debt-to-Capitalization targets mentioned above.
- 8 A critical fact with respect to this legislation is that the sections relating to the setting of electricity rates do not come
9 into force until April 1, 2025, after the period covered by the rate increases being requested in the General Rate
10 Application.

1 **2. Issues Addressed in this Report**

2 This report will attempt to shed light on a number of topics arising from Manitoba's Hydro's rate application, and in
3 particular:

- 4 • The reliance of Manitoba Hydro on long-term "rate paths" to support its arguments for near-term rate
5 increases, and the claim that such "rate paths" are of benefit to ratepayers;
- 6 • The characterization by Manitoba Hydro of "financial health" and/or "financial strength" and its relevance to
7 the rate increases requested; and
- 8 • The appropriateness of the characterization of ratepayer contributions to Manitoba Hydro equity, particularly
9 in light of the way those contributions are reflected in the financial statements and results of the Government
10 of Manitoba.

11 A background issue affecting all of these topics is of course the impending coming into force of the rate-making
12 provisions of Bill 36, and the extent to which deliberations and conclusions on the current GRA should be guided by
13 the intended rate-making process of the future. While the simple and obvious fact is that the provisions have not
14 come into force, and hence are not law, the more challenging question is whether to include expectations about the
15 future rate-making environment in the forecasts and scenario construction that are essential to financial planning.

16 Section 3 will briefly address the question of "rate paths", and the broader use of forecasts and financial scenarios.
17 Manitoba Hydro has implied that a critical benefit of its proposed rate increases is the predictability and stability that
18 they will provide to ratepayers, and so it is important to examine whether the use of rate paths in the analysis should
19 reasonably be understood to deliver those benefits.

20 Section 4 will address questions of "financial health", and the metrics and targets recommended by Manitoba Hydro.
21 This is an issue that was addressed in considerable detail during the 2017/18 & 2018/19 GRA, and which was
22 addressed by the PUB in Order 59/18. Manitoba Hydro's current claims will be examined in relation to the arguments
23 and conclusions already on record, to understand if the current claims deserve a different response, and what the
24 implications may be for the current rate request.

25 Section 5 will review how Manitoba Hydro's financial results affect the financial performance of the Government of
26 Manitoba, and thus the net contribution of ratepayers to the provincial fiscus. This is relevant particularly in relation to
27 arriving at a view as to the appropriateness of ratepayer contributions to Manitoba Hydro equity, and how those
28 contributions should be understood in relation to the Province.

29 Section 6 summarizes the key observations in this Report.

1 **3. Long-term “Rate Paths” and Near-term Rates**

2 Regulatory rate-making is, in general, a forward-looking exercise. While regulators are occasionally required to opine
3 on the reasonableness, appropriateness or admissibility of a past utility expenditure or action, in general rate-making
4 concerns itself with the future, and with setting rates prospectively based on plans and forecasts of what is
5 “expected” to come. As a result, rate-making must include the reliance on forecasts, plans, scans and surveys of the
6 environment in which a utility operates. Estimation and projection are inescapable parts of the regulatory rate-making
7 process.

8 At the same time, it is not inappropriate to admit, albeit somewhat flippantly, that “forecasts are always wrong”!
9 Despite the best intentions and best efforts of all concerned, the course of events that unfold in the future are virtually
10 guaranteed to deviate – in both minor and major ways – from any plan or forecast that may have been in the past
11 accepted as a legitimate expectation. It is a corollary of this principle that the longer the time horizon of a forecast,
12 the more wrong it will be.

13 Examples are legion, so common in fact that while forecasts everywhere are being daily upended by developments,
14 this is seldom noted or taken into account. For example, prior to the pandemic, North America and most of the
15 developed world was enjoying a period of unprecedentedly low interest rates, by all historical standards. Forecasts of
16 all kinds assumed continuation of this rate environment, though usually with a view towards some moderate
17 increases in rates over time (notably, those slightly rising forecasts for rates date back to the early 2010s, even
18 though by the end of the decade the moderately rising trend had still failed to manifest). The pandemic upended
19 these forecasts, first by a plunge in rates to near zero levels, and then, beginning last April, by a stream of increases
20 the pace and extent of which is also historically unprecedented. All interest rate forecasts prepared before 2020 – or
21 even before 2022 – were effectively rendered useless.

22 Similar examples can be drawn from the world of energy, where rising price pressures from 1990s lows quickly led to
23 historical peak oil and gas prices in 2008, followed by a plunge in the recession, then a strong rebound to high prices
24 again until 2014, only to suffer a bust for the subsequent five years. Then the onset of the pandemic, with the plunge
25 in worldwide energy consumption in the spring of 2020 led to near zero spot prices for oil, immediately followed by a
26 supply crunch with attendant high prices, exacerbated by the war in Ukraine beginning in February 2022, only to see
27 recent declines since May of 2022. At what point during this wild gyration would a 10 or 20 year forecast have been
28 accurate? At the moment, the only forecast that can be considered reliable is one that simply calls for more volatility
29 in prices.

30 To reiterate: it is not possible to reasonably develop and justify regulated utility rates without relying on plans and
31 forecasts, but at the same time it should always be within the context of accepting that those plans and forecasts will
32 virtually never match reality when they concern fundamentally uncontrollable variables. They should inform
33 judgement, but not be relied upon in a mechanistic way.

34 In the case of Manitoba Hydro, financial forecasts are developed which stretch out, typically, for 20 years. As a utility
35 which relies on long-lived equipment and a stable, dedicated work force, this is entirely appropriate. It is possible, for
36 example, to estimate with a reasonable level of certainty when certain assets in the utility fleet will require
37 replacement, and when the utility’s labour pool will be facing pressures related to retirement and turnover.

38 On the other hand, Manitoba Hydro is particularly susceptible to a completely unpredictable phenomenon: water
39 levels. After more than 110 years of record-keeping, it is clear that in any given year streamflow volume can vary by

1 more than plus or minus fifty percent from the long-term average.² Just recently, in the last two fiscal years, a below
2 average water year was followed by an above average water year, with a resultant significant swing in net income
3 from a loss of over \$250 million to what is expected will be a windfall of over \$700 million of net income (noting that
4 the net income result for 2022/23 will include approximately \$185 million of benefit from the change in the Province's
5 water rental and debt guarantee policies).

6 For the purposes of rate-setting, Manitoba Hydro manages this uncertainty in hydroelectric production by forecasting
7 "average" outcomes for each year over the course of a 20-year forecast.³ This is an entirely reasonable and
8 appropriate starting point for scenario planning and making judgements about rate requests. However, this scenario
9 is literally only one possible scenario among many that could occur. By definition, if all possible hydrological
10 scenarios were graphed in two dimensions (financial outcome on the "y" axis and years on the "x" axis), the average
11 will be the central "line" in a cloud of possible future outcomes based on potential hydroelectric production.

12 Other variables that must be taken into account in addition to hydrology include domestic load, export prices, interest
13 rates, inflation rates, and imported power prices. Each of these variables will be subject to different levels of
14 reasonable uncertainty and likelihood of annual and longer-term volatility. Each will have its "average", "expected" or
15 "consensus" outcome, as the case may be, and each will have a more or less probable range of alternative
16 outcomes.

17 All of the above are "exogenous" variables, outside the control of Manitoba Hydro and the PUB – they are factors that
18 must be accepted as they occur. In order to compile a financial forecast, "endogenous" variables must also be
19 addressed, including for example, financial targets and requirements that must be met by Manitoba Hydro, the timing
20 of rate-setting, restrictions on the size of annual rate increases, and so on. In particular, some assumption must be
21 made about the ultimate overall objectives of the rate-setting exercise, such that all of the endogenous variables can
22 be set in a way that produces a certain desired outcome.

23 The combination of all possible outcomes of exogenous variables, coupled with choices about the endogenous
24 variables, would produce the full range of potential financial outcomes for the utility. Again, a central "line" would
25 emerge from all possible outcomes of the exogenous variables, for each set of endogenous choices.

26 [For example, assume that the primary goal of rate-setting were to ensure that Manitoba Hydro achieved exactly
27 \$100 million of net income every year. Based on each combination of exogenous variables (i.e., water, interest rate,
28 export price, domestic load, etc.), the rate path that achieves the \$100 M result could be calculated by adjusting rates
29 in each year of the model. The "central" or "average" rate path would be the one where 50% of the possible
30 combinations of exogenous variables resulted in higher rates, and 50% resulted in lower rates.]

31 What does such a forecasting exercise signify? Does it represent a "path" that should be used as a basis for
32 decision-making? Yes, it should be an important part of decision-making, but only insofar as it provides information
33 that is useful in making a judgement. It should not be considered a "reliable" prediction that can be depended upon,
34 and it should absolutely not be understood as a "commitment" to pursue that particular set of rate increases for a 20-
35 year period. At best it could be said that the result of such an exercise would be comfort that future financial

² Please see Manitoba Hydro Application, Appendix 5.4, Figure 5 on page 10.

³ Note that the "average" outcomes are not based on the average streamflow volume, but instead the average of the financial outcomes of the various streamflow volumes analyzed. Regardless of the nature of the "average", there will be a range of possible scenarios that will be better than forecast, and a range that will be worse, to varying degrees.

1 outcomes have at least a (50%?)⁴ likelihood of being as good as the “path” identified, from the perspective of the
2 target being pursued.

3

4 **Manitoba Hydro’s Conceptual Leap**

5 Manitoba Hydro has constructed a scenario which almost magically meets a variety of goals:

- 6 • Rate increases remain at or below an assumed 2% rate of inflation;
- 7 • Manitoba Hydro’s target financial metrics improve over time to the desired degree; and
- 8 • Ratepayers receive the benefit of “knowing” what rates will be in the future.

9 However, is the claim of ratepayer “benefit” actually true? Will ratepayers know the course of rates in the future?
10 Under what range of possible future outcomes would a 2% rate path actually be sufficient for Manitoba Hydro to
11 reach all of its financial goals? What happens if, as events occur, it becomes apparent that 2% increases will not be
12 sufficient?

13 Under the current regulatory regime, rates have historically been set approximately every two years, following an
14 application from Manitoba Hydro. The process has not been consistent, and has been characterized by a large
15 number of “interim” rate requests at irregular intervals. While the outcomes of the rate-setting process have been
16 relatively stable in the sense that increases in the order of 2% to 3.5% per year have generally been approved, it is
17 notable that Manitoba Hydro itself has applied in the past for rate increases of up to 7.9% per year.

18 Moreover, when the utility faced a “dry” year in 2021/22, it responded to the circumstances by requesting an
19 emergency rate increase to compensate for expected weak financial results, which was granted and came into effect
20 on January 1, 2022. “Emergency” requests are obviously not part of a “stable” and “predictable” rate future.

21 Under the *Crown Corporations Governance and Accountability Act*, the PUB may only set rates for Manitoba Hydro
22 for a period of up to three years (see s. 26(1)), so it is not legally possible to commit to a “rate path”. Moreover, it
23 would not be “just and reasonable” to do so solely on the basis of probabilistic forecasting models, even if it were
24 allowed by statute. Real world conditions can change dramatically, and regulated rates should be flexible enough to
25 respond to those conditions in order to maintain a fair balance among the various regulatory principles that have
26 been recognized across North America as the basis for outcomes fair both to utilities and ratepayers.⁵

27 In fact, the “2% Rate Path” is perhaps better understood as a statement by Manitoba Hydro that, as of today and
28 based on a variety of management understandings and commitments,

- 29 • **If** real world outcomes in the future are at least as favourable as the “averages” assumed for variables in the
30 financial forecast, **and**
- 31 • Policies, targets and commitments within Manitoba Hydro remain stable (for example, there is no decision to
32 embark on yet another large export-focused electricity generation project),

⁴ Note that Manitoba Hydro did not provide evidence of doing detailed probabilistic modelling, such as producing a “Monte Carlo” model of future rate outcomes, so it is not clear what the likelihood of the future rate path may actually be. 50% is simply used to illustrate that the utility has based their analysis on historically “average” water, and “consensus” forecasts for a number of variables.

⁵ Please see Appendix B for a list of the “Bonbright Criteria”.

- 1 • **Then** ratepayers could expect that Manitoba Hydro would request a series of 2% rate increases in the
2 future.

3 However, if real world outcomes are less favourable than the assumed parameters (which might be in 50% of the
4 possible future scenarios?), then a series of choices would have to be made as between the policies, targets and
5 commitments of Manitoba Hydro, and the stability of the rate requests. In each case, would the value of “stability and
6 predictability of rates” trump other requirements? Should it? Clearly the outcome to the question would be determined
7 at the time based on the full suite of regulatory principles underlying the rate-setting process, and cannot be pre-
8 determined. And yet, Manitoba Hydro is implying that 2% rate increases should be supported now because there is a
9 (50%?) chance that outcomes will be such that all of the objectives, including the “stable and predictable” rate path,
10 could occur. Not that they **will** occur, but that there is some probability that they will.

11

12 ***Bill 36 Does Not Support the Validity of a Stable Long-term “Rate Path”***

13 As noted above, Bill 36 will introduce a number of changes to the regulated rate-setting process, assuming it comes
14 into force as planned on April 1, 2025:

- 15 • The setting of rates through a regulatory process implemented at a minimum every three years;⁶
16 • A cap on annual increases in regulated rates of 5% or the annual rate of increase in Manitoba CPI,
17 whichever is less;⁷
18 • Subject to the cap on rate increases, a requirement that the PUB set rates which are sufficiently high to
19 achieve certain Debt-to-Capitalization targets for Manitoba Hydro;⁸ and
20 • Should Manitoba Hydro’s actual results during a three-year rate period be such that expected financial
21 outcomes were not coming to pass, then either Manitoba Hydro or the regulator may request a
22 reconsideration of rates, always respecting the cap on annual rate increases.⁹

23 The ability to vary rates, not only every three years, but also in the midst of a three-year rate period clearly
24 undermines the contention that a “stable” and “predictable” rate path is a priority in the regulatory regime expected to
25 obtain after April 1, 2025. The cap on rate increases is strict, but will move with inflation, which is itself recently
26 unpredictable, and below that cap there appears to be little constraint on changes in rate paths. Depending on
27 circumstances, rates may be subject to frequent manipulation. The best that can be said is that consumers will be
28 given comfort by the cap on rate increases, assuming that part of the legislation is not changed.

29

30 ***Manitoba Hydro’s Own Analysis of Potential Risks Highlights Lack of Commitment to a Stable Rate Path***

31 In s. 3.6 of its Application, Manitoba Hydro explores the potential financial outcomes that would result from three
32 different risk scenarios, dealing with drought, low export prices, and higher interest rates.

⁶ See Bill 36, s. 39(1).

⁷ Ibid., s. 39.2.

⁸ Ibid., s. 39.1(1)(c).

⁹ Ibid., s. 39.4 and 39.5.

1 In all three instances, two versions of the risk scenario are depicted: one with a steady 2% rate path over 20 years,
2 and the other with 0% increases for two years, followed by 2% for the remainder of the 20-year period. In *all* cases,
3 Manitoba Hydro fails to achieve its desired (and legislatively mandated as of April 1, 2025) Debt-to-Capitalization
4 Ratio, however the degree of failure is less when rates are higher.

5 Manitoba Hydro states that:

6 *“Absent any changes to the current Rate Cap, Manitoba Hydro will have to mitigate the financial impact of*
7 *these risks through its capital structure (i.e. through retained earnings)... The issue of being able to achieve*
8 *both of the Debt Ratio Targets would need to be discussed further between Manitoba Hydro and the*
9 *Province of Manitoba should any of these imposed risks arise.”¹⁰*

10 The clear implication of the analysis of risks and the commentary of Manitoba Hydro is that the maintenance of a
11 long-term stable and predictable rate path is subsidiary to the perceived need to meet financial targets. Even the
12 government’s very clear intention to limit rate increases to no more than CPI inflation is described in terms that imply
13 it is viewed more like an obstacle that Manitoba Hydro would like to overcome, rather than an absolute prohibition.

14

15 **Long-term Rate Paths Are Not Commitments, and Should Not Define Near-term Rates**

16 Long-term rate paths are no more than constructed scenarios built from an agglomeration of assumptions which
17 become less and less reliable as they are projected out further in time. They are useful because they can help to
18 illuminate risks and the potential consequences of different choices, but generally only when they are put in the
19 context of a broader range of potential outcomes.

20 While it is true that stability and predictability of rates is an important principle in regulatory rate-making, and an
21 important value to weigh in making rate decisions, Manitoba Hydro has not demonstrated that they consider a long-
22 term rate path of 2% rate increases to be either highly likely (because there are many risks which if they were to
23 materialize would undermine the viability of the rate path in their view), nor particularly desirable in relation to other
24 goals (such as meeting their financial targets). As a result, not much weight should be given to the notion “approve a
25 2% rate path for the next two years, because we will probably ask for 2% in the future as well, so rate increases will
26 be consistent over time”. If 2% increases cannot be justified on merits – i.e., based on all of the typical regulatory
27 considerations and principles that apply in rate-setting – then “stability” of rates should not be used as a justification.

28 The chief benefits of highlighting a 2% rate path in the application appears to be that it is consistent with the long-
29 held policy of the Bank of Canada that inflation should ideally be in the range of 1% to 3%, and as a result most
30 economists estimate long-term inflation at 2%. Coupled with the fact Bill 36 will impose inflation as a cap on annual
31 rate increases, it is convenient to request that increases now be set at 2% so that they will be consistent with that
32 expected cap in future. However, should actual inflation be higher than 2% in future (as it is today), there appears to
33 be every reason to believe that Manitoba Hydro would seek to maximize rate increases if such were to be useful in
34 pursuing financial targets. The creation of the 2% “rate path” does not appear to lend any particular support to the
35 request for rates in the two target years, at least as far as longer term stability and predictability of rates is concerned.

36

¹⁰ Please see Application, Tab 3, p. 47.

4. Financial Health of Manitoba Hydro

Issues relating to financial health and financial targets of Manitoba Hydro were thoroughly examined during the 2017/18 & 2018/19 GRA, and the record of that rate-setting process provides a variety of perspectives that are still relevant.¹¹ The Board laid out its views on these matters in Order 59/18, and returned to and reiterated a number of those views in Order 69/19. Subsequently, the Government of Manitoba indicated that it was prepared to address the issue of financial targets through legislation, and ultimately did so through Bill 36.

In its current application, Manitoba Hydro claims that the requested rate increases will contribute to the “financial health” of Manitoba Hydro by allowing the utility to pursue its goals, and in particular a reduction in the Debt-to-Capitalization Ratio, and a satisfactorily high Self-Financing Ratio. From the utility’s perspective, rate increases lower than requested would result in less expected net income, and hence make it more difficult for Manitoba Hydro to achieve its goals.

Manitoba Hydro’s Financial Targets

Manitoba Hydro argues in its application that the primary and most important indicators of its financial health are its Debt-to-Capitalization Ratio, Self-Financing Ratio and Total Net Debt. It further argues that setting rates high enough to allow steady improvements in these areas will benefit customers because:

- Less volatility in rates will be required in the future;
- Manitoba Hydro will have more ability to make investments without taking on additional debt, therefore avoiding interest payments in future; and
- There will be more of a financial cushion to absorb future risks such as rising interest rates, needed expenditures on the energy transition, etc.

Conspicuously, this rate application does not attempt to justify the utility’s Debt-to-Capitalization Ratio target on the basis of protecting the credit rating of the province or maintaining Manitoba Hydro access to the capital markets – arguments which were thoroughly addressed during the 2017/18 & 2018/19 GRA. Instead, the point is made that Bill 36, when its relevant provisions come into force on April 1, 2025 (assuming those provisions do come into force as scheduled), will simply require the PUB to regulate rates in a manner that will help to achieve the legislated Debt-to-Capitalization Ratio targets.

The argument about volatility in rates – or the “stability” of the “rate path” – can be reformed as, colloquially:

“Since the PUB will be required to raise rates after April 1, 2025 in order to help Manitoba Hydro meet its Debt-to-Capitalization Ratio targets anyway, you might as well raise rates now so the string of rate increases will be consistent”.

Put this way, the flaw in the argument is apparent: *“since you are going to have to do a bad thing later on anyway, you might as well start doing it now, just to be consistent.”*

¹¹ Please see the Intervenor Evidence of Morrison Park Advisors on behalf of the Consumers Coalition and MIPUG, as well as responses by Morrison Park Advisors to IRs received from Manitoba Hydro and the PUB, the presentation by Morrison Park Advisors to the PUB (Exhibit CC – 45), and the hearing transcript from January 18, 2018.

1 Of course, this formulation of the argument makes the assumption that raising rates in order to help Manitoba Hydro
2 achieve its financial targets would be a “bad thing”. But would it be?

3 There is no question that Bill 36 will require the PUB to pursue Manitoba Hydro’s financial targets after April 1, 2025,
4 assuming the legislation comes into force as planned. However, the PUB is NOT legislatively required to do so until
5 then, and must instead abide by its current legislative regime – the same legislative regime which obtained during the
6 2017/18 & 2018/19 GRA.

7 On the question of Debt-to-Equity targets, which are functionally the same as Debt-to-Capitalization targets, in Order
8 59/18 the PUB concluded that:

9 “debt-to-equity is a questionable metric for a vertically integrated monopoly Crown utility with a debt
10 guarantee from the provincial government. The equity level target does not have the prominence suggested
11 by Manitoba Hydro given the context in which the Utility operates.... The Board agrees with the evidence
12 that there is a cost associated with equity as equity is provided by ratepayers who could otherwise use
13 those funds. As such, the Board is not prepared to look at the issue of pacing to achieve a particular equity
14 level target at least until the current phase of major capital construction is completed, now projected by
15 Manitoba Hydro to be in 2024.”¹²

16 In considering why a utility like Manitoba Hydro would want to have a substantial amount of equity – and hence a
17 lower Debt-to-Capitalization Ratio – the Board focused on the notion that equity represents a form of “financial
18 reserves”, which could be properly used as a buffer to manage risks faced by the utility. On this question, the PUB
19 concluded, also in Order 59/18, that:

20 Retained Earnings should be used to manage drought risk in combination with regulatory action by the
21 Board. The Board further agrees that interest rate and export price risks over the long term should be
22 addressed with rate increases as and when those risks materialize. Rates should not be set to increase
23 Retained Earnings to manage those longer-term risks. As discussed elsewhere in this Order, the Board is
24 prepared to consider regulatory action when required to address emerging risks facing Manitoba Hydro....
25

26 However, the Board concludes that there is merit to gaining better understanding of the financial reserves
27 required for Manitoba Hydro under various circumstances. This would include consideration of risk
28 tolerances, what risks should be protected by reserves, and the circumstances which would guide the need
29 for more aggressive rate increases to continue full cost recovery for Manitoba Hydro. The Board is mindful
30 that the financing and depreciation expenses related to these new major capital assets entering service
31 already require additional revenues from rate increases. Consideration of the appropriate level of financial
32 reserves, for example a minimum retained earnings test, is best done through a collaborative approach with
33 stakeholders. The Board directs Manitoba Hydro to participate in a technical conference hosted by Board
34 Staff or an external consultant appointed by the Board for the consideration of the establishment of a
35 minimum retained earnings or similar test to provide guidance in the setting of consumer rates for use in
36 rule-based regulation. The test or rule is to be based on maintaining appropriate or minimum levels of
37 retained earnings and meeting other financial metrics in the face of potential risks to the Utility. The Board

¹² Please see Order 59/18, page 63.

1 will develop the terms of reference for the technical conference. Parties will be invited to contribute to the
2 scope and terms of reference for this initiative.”¹³

3 In the event, the PUB never did address either the appropriateness of any specific target for Equity, nor the
4 appropriateness of any particular pacing to achieve such a target, because the matter was taken up by the
5 Government of Manitoba.

6 Under the circumstances, would it be appropriate for the PUB to simply assume that targets of 80% Debt-to-Capital
7 in 2035 and 70% Debt-to-Capital in 2040 represent the right levels of financial reserves for Manitoba Hydro, **absent**
8 **the Bill 36 legislation**? Clearly not. There has been no evidence to suggest that those targets are required by
9 Manitoba Hydro for financial risk management purposes, nor that they would be just and reasonable, according to
10 existing regulatory principles and practice.

11 In fact, in helpfully providing in s. 3.6 of the Application an analysis of what would occur if there were a five-year
12 drought beginning in 2025/26, it is clear that Manitoba Hydro already has sufficient equity/financial reserves such that
13 the operation of the utility would not be threatened. As of March 31, 2022, Manitoba Hydro reported equity of \$2.95
14 billion. If 0% rate increases were granted by the PUB for the next two years (instead of the 2% increases requested
15 by Manitoba Hydro), then Manitoba Hydro estimates its equity will still grow to over \$4 billion by the beginning of
16 2025/26 (the requested 2% rate increases would add approximately an additional \$100 million to retained earnings).
17 Meanwhile, the example five-year drought would result in total losses of approximately \$1.7 billion before the utility
18 returned to profitability and began to rebuild its equity, assuming that during the drought rates were increased at 2%
19 per year. In other words, the financial reserves that Manitoba Hydro would have at the beginning of the drought
20 would clearly be more than enough to manage the risk of a fairly severe five-year drought. If more reserves are not
21 required to manage severe drought risk, then why are they required?

22 Consistency in rate increases is not a sufficiently compelling argument to overcome the fact that the rate increases
23 are unnecessary, according to the existing regulatory regime.

24

25 **Cashflow, Capital Purchases, Debt and Interest**

26 Manitoba Hydro argues that the increased cashflow that would result from an increase in rates would be helpful in
27 ensuring that it would be more likely to be able to “self-finance” its capital purchases in the future, and that it would
28 not have to resort to acquiring more debt capital, with its attendant interest costs. The implication is that debt is “bad”,
29 and that it should be avoided if possible.

30 One of the important principles of regulatory rate-setting is “cost causality”, or as expressed by in the Bonbright
31 Criteria: “*Fairness in the allocation of costs among customers so that equals are treated equally*”.¹⁴ This principle
32 applies to customers of a utility at any one time, but also applies to fairness as between customers over time. For a
33 long-lived utility, all of its customers, now and in the future, are equally valuable and important, and should be treated
34 equally, as much as reasonably possible (bearing in mind that other principles of utility regulation may conflict with
35 this principle, and require some inequality in treatment of ratepayers for good and just reasons).

¹³ Ibid., pages 65-66.

¹⁴ Please see the Bonbright Criteria in Appendix B.

1 Since utilities make use of many long-lived assets that have to be paid for up-front, but which are used and useful to
2 ratepayers over the span of many years, how should the cost of those assets be divided up among ratepayers who
3 benefit from them over time? Financially speaking, this division is called “depreciation”: a charge applied to
4 customers in each year for their share of the total cost of the assets they benefit from. Depreciation must be included
5 in any fair revenue requirement.

6 However, in order to buy the asset in the first place, cash is required, and that cash can be provided by some
7 combination of debt and equity. Each of debt and equity has a cost that suppliers of the capital expect to receive, and
8 hence interest and return on equity of the outstanding utility capital must also be included in the revenue requirement.

9 In short, Debt and Interest Payments are not “bad”, they are in fact one of the principle mechanisms through which
10 fairness between customers over time is made possible! Arbitrarily minimizing the use of debt in fact results in
11 deliberately treating customers unfairly over time, and should be avoided unless there is a very good reason to do so.

12 Moreover, since Debt is more expensive than Equity, then use of debt to pay for capital assets should in fact be
13 maximized, except to the extent that it is unavailable or becomes problematic from a financial risk perspective
14 (because debt typically must be repaid on a fixed schedule, unlike equity, its rigidity creates financial risk for a utility
15 whose revenues may fluctuate – also, since debt providers avoid risky situations, they will not provide more than a
16 certain amount of debt to a borrower, consistent with their individual risk appetite as lenders). Hence, in most
17 regulated utility jurisdictions, the setting of the target Debt-to-Equity ratio is a critical function of the regulator, as it
18 requires a balancing of principles and practical realities, all relevant to issues of fairness to ratepayers and utility
19 investors alike.

20 Manitoba Hydro, as discussed extensively in the 2017/18 & 2018/19 GRA, is a unique utility, in that it has no equity
21 “investors”, while benefitting from a blanket government guarantee on its outstanding long-term debt (for which it
22 pays a debt guarantee fee). This means that all capital required for the purchase of assets must come from either
23 internally generated cash, or debt.

24 Assuming simplified accounting (i.e., ignoring regulatory deferral accounts, timing differences, and other aspects of
25 accrual vs. cash accounting), Manitoba Hydro’s internally generated cashflow in any given year will consist of its
26 Depreciation plus Net Income. This is true because depreciation is a “non-cash” cost (i.e., it is an artificial
27 apportionment of a capital expenditures made in the past), and net income is by definition the cash left over after all
28 other expenses and charges have been paid.

29 Manitoba Hydro’s Net Income should be understood as the “equity contribution” of its ratepayers in that year, and like
30 all other equity, that equity should be treated as costly and precious.¹⁵ “Costly” should be understood as being “more
31 expensive than debt”, as is the case with equity from investors more generally. When considered in this light,
32 Manitoba Hydro’s desire to “minimize debt” is absurd: why would it be preferable to minimize the use of something
33 that is actually cheaper than its alternative? The problem, as was discussed during the 2017/18 & 2018/19 GRA, is
34 that Manitoba Hydro pays the cost of debt in cash, while the costs associated with equity it uses are paid by
35 ratepayers themselves. Manitoba Hydro appears content to maintain the fiction that its equity is “free”, and therefore
36 that maximizing the use of equity and minimizing the use of debt is, perversely, somehow better for ratepayers.

¹⁵ Note that this concept was accepted by the PUB in Order 59/18, p. 64: “The Board agrees with the evidence that there is a cost associated with equity as equity is provided by ratepayers who could otherwise use those funds.”

1 Ideally, the equity contribution by ratepayers also would be relatively equivalent over time (on an inflation-adjusted,
 2 per kWh delivered to domestic customers basis?), in order to maintain the principle of fairness as between
 3 ratepayers over time. Practically speaking, because results in any given year are affected by a multitude of variables,
 4 it would be impossible to ensure that there was such equivalence over time, but from a planning perspective pursuing
 5 broadly equivalent contributions of equity across ratepayers would be a legitimate priority (which Manitoba Hydro has
 6 ignored entirely).

7 Returning to “self-financing”, Manitoba Hydro’s “Self-Financing Ratio” is nothing other than:

8
$$\text{(Depreciation + Net Income) / Capital Expenditure}$$

 9 (always assuming simplified accounting, ignoring regulatory accounts, timing differences, etc.).

10 If Depreciation and Net Income together are greater than Capital Expenditures, then the utility is “self-financing”, and
 11 the ratio is greater than 1, otherwise the utility will have to obtain additional debt to pay for its capital expenditures.

12 But why is this an important calculation? If the utility Capital Expenditures are greater than Depreciation, it means
 13 that the asset base of the utility is increasing. In fact, this is a typical state of affairs, because old assets that are
 14 being replaced are usually less expensive than new assets (e.g., a new distribution pole purchased today will
 15 probably cost a lot more than the 30-year-old pole it is replacing, just because of the operation of inflation over time).
 16 However, if a utility has a declining customer base, or negative load growth, or just has extremely lumpy capital
 17 expenditures from year to year, it is not always true that Capital Expenditures are greater than Depreciation. Given
 18 the nature of the physical asset base and its potential replacements, asset growth or decline over time is not a
 19 financial question, but instead an engineering and planning question. Financial considerations should follow the
 20 outcome of practical utility planning, not lead it.

21 The true issue at stake is the relative contribution of Equity and Debt to each year’s capital spending, which is what
 22 determines the change in the Debt-to-Equity or Debt-to-Capitalization Ratio.

- 23 • If Capital Expenditure is less than Depreciation, then no new debt is required, and Net Income (if positive)
 24 can be used to pay down old debt; assuming net income was positive in that year, it means the Debt-to-
 25 Capitalization Ratio will fall (probably significantly);
- 26 • If Capital Expenditure is greater than Depreciation, but Depreciation plus Net Income is greater than Capital
 27 Expenditures, then it means that no new debt is required, and assuming Net Income was positive in that
 28 year, the Debt-to-Capitalization Ratio will fall (and whatever Net Income is left over after capital
 29 expenditures can be used to pay down debt); and
- 30 • If Depreciation plus Net Income is less than Capital Expenditure, it means that new debt is required;
 31 however, the change in the Debt-to-Capitalization Ratio will be governed by the relationship between new
 32 debt and new capital expenditures: if New Debt/New Capital Expenditure is greater than the Debt-to-
 33 Capitalization Ratio at the beginning of the year, then the Debt-to-Capitalization Ratio at the end of the year
 34 will go up, otherwise it will still go down, though probably not by much.

35 When Manitoba Hydro argues that in the normal course of affairs it believes its Self-Financing Ratio should be
 36 greater than one, this is just another way of saying that its total Debt should be falling. However, as discussed above,
 37 there is no *a priori* reason why this should be the case under regulatory principles. If net assets are falling, then net
 38 debt should be falling in order to maintain a constant Debt-to-Capitalization Ratio. If net assets are increasing, then

1 net debt should increase in order to maintain a constant Debt-to-Capitalization Ratio. But if net assets are increasing
2 and net debt is static or falling, then the Debt-to-Capitalization Ratio must be declining. It is just mathematics.

3 To reiterate, Debt is not in itself “bad”, and insisting that Debt should be consistently falling, especially when the
4 assets of the utility are growing, requires compelling argument based on regulatory principles. Moreover, it requires
5 an explanation of why equity should be preferred over debt. There is no particular magic to the “Self-Financing Ratio”
6 other than as an alternate way in which to express the desire to manage the Debt-to-Capitalization Ratio over time.

7 Of course, Bill 36 will in fact require that the Debt-to-Capitalization Ratio fall from its current levels, assuming it
8 comes into force as planned. However, it *is not law today*. Had the legislature wanted it to be law today, then it could
9 have chosen to make it come into force immediately, or at some date prior to April 1, 2025, but it did not do so. Since
10 it is not law, then the existing legal and regulatory principles should govern rate-setting decisions, and those do not
11 point to the need to materially reduce the Debt-to-Capitalization Ratio at this time.

12

13 **Managing Future Risks**

14 Increasing the rates charged to Manitoba ratepayers will increase Manitoba Hydro’s net income, and according to
15 Manitoba Hydro that will provide additional “financial health” that will be useful in managing risks such as potentially
16 higher interest rates, or unexpected capital requirements arising out of the “Energy Transition”. Is this argument valid,
17 apart from it being a truism that more cash on hand creates the opportunity for future spending?

18 Questions about which future risks should be included in considerations of “financial health” and “reserves” were
19 addressed in the 2017/18 & 2018/19 GRA. In Order 59/18, the PUB said:

20 “The Board further agrees that interest rate and export price risks over the long term should be addressed
21 with rate increases as and when those risks materialize. Rates should not be set to increase Retained
22 Earnings to manage those longer-term risks. As discussed elsewhere in this Order, the Board is prepared to
23 consider regulatory action when required to address emerging risks facing Manitoba Hydro.”

24 This statement appears to be relatively conclusive with respect to risks associated with future interest rates, and the
25 arguments around it need not be repeated here, as they are on the record. Moreover, the inadvisability of attempting
26 to plan for future interest rate risks is exemplified by the experience with interest rates over the last few months: in an
27 environment where central banks have been putting upward pressure on interest rates since March 2022, the failure
28 of three banks (two in the United States and one in Switzerland) has suddenly called into question the commitment of
29 central banks to continue pursuing this course of action.¹⁶ In fact, markets are now “pricing in” a reversal of rates
30 within a year.¹⁷ Whether such a reversal occurs or not, however, is irrelevant: interest rate risk, with all of its inherent
31 volatility, should not be included in rate increase considerations. If interest rates actually increase, then regulated
32 electricity rates should respond, but trying to mitigate assumed interest rate hike creates a burden on ratepayers for
33 something that may not come to pass.

¹⁶ See for example “*As banking sector confidence falters, central banks called on to do more*”, Globe and Mail, 27 March 2023.

¹⁷ See for example “*Money markets are signaling rate cuts are nearing. Central bankers are not. Here’s the one to wager on*”, Globe and Mail, 28 March 2023.

1 A similar statement can be made about future capital investment requirements that may arise either from a surfeit of
2 ageing assets on the ground, or needs that might arise because of the “energy transition”: if they are not in an
3 approved capital plan, then they should not be included in rates.

4 The other consideration that Manitoba Hydro has implied with respect to managing future risks is one that should be
5 deemed entirely inappropriate. It can be summarized as “*because of the impending coming into force of Bill 36, future*
6 *rate increases will be limited to inflation, and that cap may be insufficient to allow for the management of risks such*
7 *as interest rate increases or higher than foreseen capital expenditures, so the PUB should raise rates now, while we*
8 *can.*” This is problematic because the restriction on rates in the future is not arising out of any regulatory principle, but
9 instead a legislative one. If there is a problem with legislation, then the utility should bring it to the attention of the
10 government and request a change in legislation. The PUB should not be asked to mitigate a future problem with a
11 legislative restriction through an action that does not have regulatory merit today. If interest rates or some other cost
12 increase to the point that regulated electricity rates should increase more than inflation, then the government of the
13 day should respond and loosen the restriction to the level required.

14

5. Manitoba Hydro, Government of Manitoba & Ratepayers

The decision by the Government of Manitoba to reduce the Debt Guarantee Fee and Water Rental Fee appear to be a boon to ratepayers. However, this action should be put in context of the changes that will result from Bill 36, which potentially will impose far greater costs on ratepayers, amounting to a hidden tax.

Manitoba Hydro and Government of Manitoba Finances

As a non-share capital corporation created by Manitoba Statute, Manitoba Hydro forms part of the Government of Manitoba's financial results. The company is accounted for within the annual financial statements of the provincial government as a "government business enterprise", and hence is reported on a net basis (i.e., any value attributable to non-controlling interests is excluded from what is reported).

The following results from Manitoba Hydro are relevant to the provincial government:

- Net Income Attributable to Manitoba Hydro (net income is not paid to the province in cash, but is recorded in the Revenue line item in the subcategory "Net Income from Government Business Enterprises");¹⁸
- Interest on Long-term Debt owed to the Province (paid on a back-to-back basis coincident with the actual debt service costs for debt issuances made by the Province on behalf of Manitoba Hydro; paid in cash, and on the provincial financial statements it is netted out from the total debt servicing of Provincial Borrowings, in order to allow the Province to report its own net debt servicing amount);
- Provincial Debt Guarantee Fee (calculated based on the total outstanding borrowings of the utility owed to the Province; paid in cash, and appearing in provincial revenues in the Sinking Funds and Other Earnings subcategory);¹⁹
- Water Rental Fee (calculated based on the actual annual hydroelectric output of Manitoba Hydro; paid in cash, and appearing in provincial revenues in the Water Rentals subcategory);²⁰
- Corporations Capital Tax (calculated based on the total paid up capital of Manitoba Hydro – basically consisting of debt and equity – and paid in cash; appearing in provincial revenues in the Corporations Taxes subcategory);²¹
- Property Tax and Grants in Lieu of Tax (calculated based on various property tax legislation; paid in cash and appearing in provincial revenues in Other Taxes); and
- Payroll Tax (calculated based on relevant legislation; paid in cash, and appearing in provincial revenues in Other Taxes).

Since Interest Paid is of no benefit to the Government of Manitoba (it is a pure pass-through to the capital markets) it can be ignored for the purposes of further analysis.

¹⁸ Please see the *Annual Report and Public Accounts*, Province of Manitoba, March 31, 2022, p. 66.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

1 For the year ending March 31, 2022, Manitoba Hydro reported the following for these items:

Item	Amount (\$millions)
Net Income (Loss)	(248)
Provincial Debt Guarantee Fee	229
Water Rental Fee	89
Corporations Capital Tax	129
Property Tax	38
Payroll Tax	12
Total	249

2
3 Note that the above figures are for Manitoba Hydro as a whole (which is what is reported to the Government of
4 Manitoba), and not for the electricity segment of Manitoba Hydro considered separately. Nevertheless, it is notable
5 that even in an extremely challenging year for Manitoba Hydro, when it suffered from the effects of a drought, and
6 reported a significant net loss, it nevertheless represented a net positive revenue result for the Province of Manitoba.

7 With respect to the change in policies with respect to the Debt Guarantee Fee and Water Rental Fee, it is instructive
8 to examine the projected amounts for Manitoba Hydro (electricity only) results relevant to the Province of Manitoba,
9 as provided in Appendix 4.1.1 of the Application:

Item	Original Projection	Projection After November 23 Announcement	Change
Net Income (Loss)	568	751	183
Debt Guarantee Fee	230	115	-115
Water Rental Fee	150	81	-69
Corporations Capital Tax and other Taxes	160	160	0
Total	1,108	1,107	-1**
**Note: this difference is due to rounding			

10
11 From the perspective of the Government of Manitoba, the change in policy had no immediate fiscal impact. It is
12 merely an accounting change, because all of the expenses “saved” by Manitoba Hydro simply move to the Net
13 Income line item in the provincial accounts. Moreover, since 2022/23 is a high water year, and net income results are
14 very, very strong, Manitoba Hydro will have a substantial impact on the total revenues of the Government of

1 Manitoba. In 2021/22, the Government of Manitoba's total revenues were \$19,107 million, so the Manitoba Hydro net
2 contribution of \$249 million represented only 1.3% of the province's total Revenues. However, in 2022/23 the result is
3 likely to be significantly higher as a portion of total Provincial Revenue.

4 Unlike in 2022/23, in future years the net impact of the policy change with respect to the Debt Guarantee Fee and the
5 Water Rental Fee on Province of Manitoba Revenues will not be zero. However, estimating that impact requires
6 forecasting what the Manitoba Hydro financial results might be in different scenarios.

7 For example, in its November 15 application, Manitoba Hydro had presented a rate path of 3.5% increases from
8 2023/24 to 2032/33, followed by 0.5% increases from 2033/34 to 2042/42. That path was presented at least in part
9 because it would have allowed the achievement of the Debt-to-Capitalization targets in Bill 36. However, Manitoba
10 Hydro admitted that the proposed rate path contravened the cap on rate increases that is also included in Bill 36. If
11 the Bill 36 legislation is assumed to be taken seriously, then that rate path was unlikely to be implemented (unless,
12 contrary to popular assumptions, the rate of inflation were to remain at or above 3.5% for the next decade – in which
13 case however, Manitoba Hydro's forecasted financial results would still have been wrong, because its expenses
14 would have been higher under such an assumption).

15 Alternatively, it could be assumed that rates will increase at 2% per year, like the rate path Manitoba Hydro presented
16 in its amended application. Based on this scenario, revenues to the Government of Manitoba can be calculated. But
17 what if the government had not reduced the Debt Guarantee and Water Rental fees? What would that have looked
18 like with the 2% rate increases, and what would government revenues be in that scenario? Manitoba Hydro provided
19 some of this information in the "2% Rate Path with Government Fees Unchanged" sensitivity scenario, which is
20 provided in Appendix 4.4 of the Application. In this sensitivity scenario, a 2% rate path is coupled with the pre-existing
21 Debt Guarantee Fee and Water Rental Fee. Since those government fee costs are higher, Manitoba Hydro will have
22 lower Net Income, lower Retained Earnings and higher Net Debt, as compared to the reference forecast as provided
23 in the Amended application. Notably, from a ratepayer perspective, rates are exactly the same in both of these
24 scenarios (as are assumptions about hydroelectric production, interest rates, export prices, domestic load, etc.).

25 From a Manitoba Hydro financial perspective, this sensitivity scenario is much worse than the reference forecast, as
26 might be expected. Net Income is greatly reduced, such that a majority of years suffer net losses, and Retained
27 Earnings actually fall between 2023 and 2042. At the same time, Net Debt has increased over that time, which also
28 means that interest payments will have been substantially higher (which is why net income performance is so poor).
29 Somewhat surprisingly, because of the way that Manitoba Hydro calculates its Debt Ratio (which includes not only
30 Debt and Retained Earnings in total Capitalization, but also Customer Contributions, AOCI and Non-controlling
31 Interest), the Debt Ratio does not move very much over the course of 20 years, despite the higher Debt and Lower
32 Retained Earnings as compared to the reference scenario.

33 The truly interesting result, however, is that the alternative sensitivity scenario is also worse for the Government of
34 Manitoba! The following summary table presents the results of the 2% Rate Path with the announced lower debt
35 guarantee and water fees, and the alternative sensitivity scenario with higher government fees. A full annual table is
36 provided in Appendix C.

37

1 **Summary Table: 2% Rate Path with Reduced and Pre-existing Government Fees**

	Reduced Government Fees	Pre-existing Fees
20-year Totals		
Manitoba Hydro Net Income	5,804	78
Water Rental Fee	1,234	2,467
Debt Guarantee Fee	2,216	4,940
Corporations Tax	2,784	2,783
Total	12,037	10,268
March 31, 2042 Amounts		
Retained Earnings	8,628	2,902
Net Debt	20,930	26,651
Debt Ratio	66%	84%

2
3 While the Water Rental and Debt Guarantee Fee are different by 50% (consistent with the policy change),
4 Corporations Tax is virtually unmoved, in large measure because it is calculated based on the combined Debt and
5 Equity employed by the utility, which total does not move much in the two scenarios. The critical difference is in Net
6 Income, where the reduced fees have resulted in substantial savings for Manitoba Hydro, but have also resulted in
7 substantially less interest charges on debt over the course of 20 years. Since Manitoba Hydro's Net Income is
8 recognized as Revenue on the Province's annual financial statements, a reduction in government fees actually
9 results in increased government total revenue in this case.

10 If it is assumed that the Bill 36 rate cap at no more than inflation would actually be in force for the next 20 years, then
11 the impact of the government's reduction in fees to Manitoba Hydro actually increases the government's total
12 revenues – it is not doing ratepayers a favour, but instead doing itself a favour! At the same time, the change makes
13 it more likely (but certainly not guaranteed) that Manitoba Hydro can meet its financial targets. Ratepayers would be
14 paying the same amount anyway (i.e., 2% increases), so this policy change is no real benefit, at least until the 70%
15 debt target is met.

16 Also of note is that the Government of Manitoba records an average of over \$600 million per year of revenue from
17 Manitoba Hydro over these 20 years, although the annual totals are heavily skewed by the first two and last five
18 years of the total period.

19

20 **Comparison to the November 15 Forecast**

21 Manitoba Hydro provided a comparison between the November 15 Rate Path forecast (which included 3.5% rate
22 increases), and the Amended Forecast (with 2% rate increases and lower fees for Debt Guarantee and Water
23 Rental) in Appendix 4.1.1. As noted in that appendix, the difference for Manitoba domestic ratepayers between the
24 two forecasts is approximately \$3.8 billion. Virtually the entirety of that amount would have gone to the Government
25 of Manitoba, which would mean that the Government of Manitoba total Revenue from Manitoba Hydro over the
26 course of 20 years would have been nearly \$16 billion, or approximately \$800 million per year, had the November 15

1 Rate Path been pursued. With its decision to reduce the Debt Guarantee Fee and Water Rental Fee by 50% each,
2 the Government has chosen to forego this additional potential revenue, for which ratepayers can be thankful.
3 However, as noted, since the November 15 rate path did not comply with Bill 36, it is not clear that it could have been
4 implemented anyway, so perhaps this perceived “benefit” is not actually real.

5

6 **Government Policy, Manitoba Hydro, and Regulatory Principles**

7 As recognized by the PUB in the past, Manitoba Hydro has a relatively unique structure among utilities in North
8 America, because it is both a pure cost recovery, government guaranteed enterprise, and it has a specific mandate to
9 seek to export the power that arises from the natural resources of the province. Moreover, the government is directly
10 in control, by Cabinet direction and approval, of Manitoba Hydro’s critical decisions relating to capital projects and
11 export-related endeavours.

12 As has been documented in the Wall Report and elsewhere, the Keeyask Project was undertaken long before its new
13 capacity and energy would be required to serve the domestic load of Manitoba ratepayers. The justification for
14 constructing the project years before it was required was, at the time of the NFAT process, based on the potential to
15 export power at prices higher than the eventual cost of production. If this occurred, Manitoba ratepayers would
16 benefit because some of the cost of the project would be amortized by export revenues before the facility was
17 eventually required to serve domestic demand. This is an inherently entrepreneurial exercise, where risk is taken for
18 the promise of reward. Except unlike typical investors who choose their investment targets, the ratepayers of
19 Manitoba were required to take the risk by government decision, and pay for it in the form of higher regulated
20 electricity rates. Unfortunately, the entrepreneurial risk did not pay off, with the Keeyask Project far over budget, far
21 behind its original schedule, and now affirmed by Manitoba Hydro to be expected to result in net losses for the
22 foreseeable future (i.e., the revenues it generates are insufficient to carry its full costs).²²

23 Developing projects specifically for export, based on an entrepreneurial “bet”, is not consistent with regulatory
24 principles, which apply to monopoly utility services provided to customers in a defined territory. Nevertheless, it is a
25 right of the legislature to make laws as it sees fit, and impose them on the ratepayers of Manitoba.

26 The \$9 billion Keeyask Project and the \$5 billion Bipole III Project, both of which were direct decisions of the
27 Government of Manitoba, have greatly expanded the size of Manitoba Hydro’s balance sheet. This leads directly and
28 inexorably to increased revenues for the Government of Manitoba through the Debt Guarantee Fee and the
29 Corporations Capital Tax. In addition, because Keeyask is a hydroelectric generating station, the Government also
30 benefits from Water Rental Fees. In effect, even though Keeyask was an entrepreneurial bet placed on behalf of
31 ratepayers, the Government would benefit from taxes regardless of whether the bet turned out well for ratepayers.
32 The government took no risk with respect to its share of the spoils. “Heads I win, tails you lose”.

33 In addition, however, because of the nature of Manitoba Hydro as a Government Business Enterprise, all of the
34 company’s Net Income – which is in effect the only contribution of “equity” to the utility, as discussed above – will be
35 recorded as revenue by the Government. The Keeyask and Bipole projects, which greatly increased Manitoba
36 Hydro’s need for capital, virtually guaranteed that there would be a consequential need for more equity, and raising
37 that equity – through increasing rates on customers – would represent further revenue for the government.

²² Please see IR PUB-MH I-19.

1 Determining how much equity should actually be required by Manitoba Hydro was a subject that the PUB began to
2 grapple with over the course of the 2017/18 & 2018/19 GRA, as was discussed above. The PUB indicated that
3 further work was required, but did cast serious doubt on the likelihood that a debt target of 75% was appropriate, and
4 clearly indicated it was unwilling to endorse that target at the time, based on good regulatory practice.

5 Bill 36 has gone further, and enshrined a 70% debt target in legislation. Again, it is the right of the legislature to
6 impose its will through law. However, it should be apparent that any requirement for equity beyond what is justly and
7 reasonably required for Manitoba Hydro given its special nature and circumstances is in effect a hidden tax on
8 Manitoba ratepayers. Manitoba Hydro, in advancing an amended rate path that results in approximately \$5 billion of
9 net income/equity to be contributed by ratepayers over the next 20 years, is merely aiding its government to raise
10 revenue without being labeled “taxation”.

11 In Order 59/18, the PUB took a strong position with respect to a government decision on the Bipole III project that led
12 to increased costs for ratepayers:

13 “The Board finds that the \$5.04 billion estimate of the final cost of Bipole III is \$900 million higher due to the
14 western routing of the line compared to an eastern routing. The Board finds that this was a policy decision of
15 government that should be a cost to taxpayers, not Manitoba Hydro’s ratepayers. The Board’s
16 recommendation is that the payments Manitoba Hydro makes to the Government related to Bipole III be
17 reduced until the \$900 million burden is satisfied, as discussed in another section of this Order.”²³

18 In promulgating Bill 36, and arbitrarily setting Debt-to-Capitalization targets that are quite likely in excess of what
19 would be required based on good regulatory practice and principles, the Government of Manitoba is making a policy
20 decision that will be a direct cost to ratepayers. Whether described as a “tax”, “fee” or “charge”, it is revenue that will
21 be recognized by the government, at direct cost to ratepayers. It is hoped that the PUB would consider taking as
22 strong a stand on this issue as it did in Order 59/18 on Bipole III.

23 The Bipole III and Keeyask decisions cannot be unmade. The costs are spent, and the infrastructure is built.
24 However, the proper and just allocation of those costs – as between the ratepayers that were not in control of the
25 decision-making, and the Government that was very much in control of decision-making – has not yet been achieved.

26 It might be thought that the reduction in the Debt Guarantee and Water Rental fees is a way that the Government has
27 “given back” to ratepayers, given the results of Keeyask and Bipole III. However, as was made clear above, the
28 government has actually helped its own revenue expectations through the reduction in those fees, moreover, it is still
29 in a position where it will expect to generate far more value from ratepayers than it has ever before.

30 Moreover, in arguing in its Application that the PUB should approve 2% rate increases because those increases will
31 be consistent with a plan to achieve the government’s Debt-to-Capitalization targets, the utility is essentially asking
32 the PUB to be complicit in a plan that does not appear to be supported by regulatory principle and practice, and
33 which can be better understood as an alternative form of tax.

34

²³ Please see Order 59/18, p. 98.

1 **6. Summary Observations**

2 *Should 2% rate increases be granted in order to be consistent with future 2% rate increases?*

3 There is no certainty that Manitoba Hydro will actually apply for 2% rate increases in the future, moreover there is no
4 guarantee that the legislative and regulatory regime would require the PUB to make decisions with such a “rate path”.

5 Rate paths are just judiciously chosen forecasts, which often can provide useful information, but which cannot be
6 understood to be reliable or accurate reflections of the direction of utilities or their economic environment in the
7 future. Stability and predictability of rates is a valid and legitimate principle of rate-setting, but it should not be
8 considered in isolation of other principles, such as cost causality.

9

10 *Does the need to meet Manitoba Hydro financial targets justify the proposed increases?*

11 Manitoba Hydro rightly points out that Bill 36 is expected to impose new financial targets that will guide rate-making
12 by the PUB. However, that legislation is not yet in force, and in the meantime, the PUB should be governed by
13 existing legislation as well as regulatory principles.

14 The application includes no compelling arguments, absent the legislation, that support aggressive reduction in the
15 Debt-to-Capitalization Ratio. Nor is the desire to achieve 100% “self-financing” cash flows supported by appeal to any
16 regulatory principles or practice.

17

18 *Contextualizing the Reduction in the Debt Guarantee and Water Rental Fees, and the Impact of the imposed Debt-to-*
19 *Capitalization Target*

20 Assuming the coming-into-force of Bill 36 as planned, there was an incipient conflict between the Government’s
21 desire for improvement in Manitoba Hydro financial metrics, and the maintenance of an inflation-based rate cap. The
22 government’s change in Fee policy has reduced, but likely not eliminated this problem. At the same time, by shifting
23 the use of ratepayer revenues away from debt service costs and towards increased net income, the Government has
24 made it possible that the reduction in fees could actually result in net greater budgetary benefit for the Government
25 over the next 20 years.

26 Moreover, any perceived benefit from the fee reduction is overshadowed by the \$5 billion of customer equity
27 contributions (in the form of Manitoba Hydro Net Income) that will be required in order to attempt to satisfy the
28 government-mandated Debt-to-Capitalization targets if Manitoba Hydro’s proposed rate path is ultimately followed.
29 While the government has every right to impose whatever tax, fee or charge it wishes, clarity on these issues would
30 be helpful for ratepayers, and there should be no question that the plan lacks merit according to regulatory policy and
31 practice.

32 At a minimum, the PUB may wish to consider commenting on the Government’s choice of financial targets, and the
33 lack of support for the same that arises from regulatory principles.

34

Appendix A – Manitoba PUB Regulatory Principles

The following information was retrieved from the website of the Manitoba PUB, at <http://www.pubmanitoba.ca/v1/about-pub/regulatoryprinciples.html>.

Regulatory Principles

When considering a rate application, the Board must weigh all the available evidence. As such, the PUB operates on the basis of sound, established regulatory principles in order to come to decisions. There is no single authority that sets regulatory principles, and these principles may conflict or overlap, but it is the goal of the PUB to effectively balance the following principles and consistently take them into consideration when setting utility rates.

Cost of service standard

This principle is at the heart of rate regulation. Under this principle, a utility is permitted to set rates that allow it to recover its costs for regulated operations, including a fair rate of return on its investment devoted to those regulated operations—no more and no less. In most cases, rates are set in anticipation of future costs. If the regulated entity over-recovers those costs, it keeps the excess. If it under-recovers, it bears the cost of the deficiency of its projections.

Intergenerational Equity

Under this principle, customers in a given period should only pay the costs that are necessary to provide them with services in that period. They should not have to pay any costs incurred to provide services to customers in any other period. This principle is consistent with setting rates that are just and reasonable. For example, a regulated entity is usually not allowed to earn a return on projects under construction because any costs incurred are incurred in order to provide services to future customers. Instead, the costs are capitalized and recovered through depreciation over the period that the assets are used to provide the service.

Matching Principle

This principle requires that a regulated entity's costs be matched to the period that benefits from the costs being incurred, and should be recovered from customers in that period. In other words, the customers in each period should pay for the costs of providing them with service in that period. The matching principle follows from the cost of service standard and the principle of intergenerational equity. Consistent with the cost of service standard, all of a regulated entity's costs should be recovered from customers. Consistent with the principle of inter-generational equity, only customers in the period that benefit from the cost being incurred should pay for the cost.

Rate stability and predictability

This principle requires rates to remain stable and predictable, at least to the extent practical. Therefore, the principle may justify smoothing out increases to avoid any sharp rate climbs.

The principle of rate stability and predictability may require costs to be collected from customers in periods other than those for which the costs were incurred. Therefore, the principle is inconsistent with the principle of inter-generational equity. Despite that, it is justified because it recognizes the problems customers can face in adjusting to significant short-term rate fluctuations.

Used or required to be used

Under this principle, customers should only pay for the cost of those assets that are either used or required to be used to provide them with the service. An application of this principle is in the case of a diversified company with both regulated and non-regulated operations. The customers of the regulated operations should not be required to pay for assets used to supply non-regulated services.

Prudence standard

Under this principle, customers should be charged only for prudently incurred costs. This recognizes the fact that regulated entities have a responsibility to manage themselves in a prudent manner. This principle is central to the PUB hearing process and the wealth of evidence collected and examined by the Board in its proceedings.

Why we do it

Due to the capital intensive nature of the business, and the inherent difficulty of competition in such a closed market, utilities naturally tend toward monopoly formation, meaning the complete absence of market competition. The PUB regulates public utilities precisely because they constitute a so-called natural monopoly in the marketplace. The industry demonstrates so-called “economies of scale,” meaning that the costs for the utility in distribution and production decrease as demand increases. In short, the more customers, the cheaper it becomes to serve them. This means that one large firm can provide utility service at a lower cost than two or more firms.

In the absence of a competitive market, prices are not set based on supply and demand pressures but rather on a self-determined reasonable rate of return for the utility, coupled with some outside evidence of what consumers will reasonably pay. Without market competition there is a risk that consumers will pay exorbitant prices for utility service.

In Manitoba, these natural utility monopolies are largely controlled by the government, or the Crown, as state-owned enterprises or Crown Corporations Manitoba Hydro (which includes natural gas subsidiary Centra Gas) and Manitoba Public Insurance. These state-owned enterprises seek only to break-even in their operations.

But while state-owned monopolies do not seek to generate a profit, they may charge unfair or unjust rates in the absence of oversight. Regulation and rate setting is intended to ensure that rates are prudent, just and reasonable, that utility service is reliable and safe, and that a balance is achieved between customer needs and the revenue requirements of the utility and its creditors.

Appendix B – The Bonbright Criteria

This version is drawn from James C. Bonbright, *Principles of Public Utility Rates*, Second Edition, 1988.

1. Effectiveness in yielding total revenue requirements under the fair-return standard without any socially undesirable expansion of the rate base or socially undesirable level of product quality and safety
2. Revenue stability and predictability, with a minimum of unexpected changes that are seriously adverse to utility companies
3. Stability and predictability of the rates themselves, with a minimum of unexpected changes that are seriously adverse to utility customers and that are intended to provide historical continuity
4. Static efficiency, i.e., discouraging wasteful use of electricity in the aggregate as well as by time of use
5. Reflect all present and future private and social costs in the provision of electricity (i.e., the internalization of all externalities)
6. Fairness in the allocation of costs among customers so that equals are treated equally
7. Avoidance of undue discrimination in rate relationships so as to be, if possible, compensatory (free of subsidies)
8. Dynamic efficiency in promoting innovation and responding to changing demand-supply patterns
9. Simplicity, certainty, convenience of payment, economy in collection, understandability, public acceptability, and feasibility of application
10. Freedom from controversies as to proper interpretation

Appendix C – Table of 2% Rate Path Sensitivities

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Totals	
Amended Application Forecast																						
Net Income (1)	751	469	295	149	166	97	92	111	105	169	190	219	277	250	282	309	358	439	507	569	5804	
Water Rental Fee (2)	68	66	63	60	61	61	61	61	62	61	61	61	61	62	61	61	61	61	61	61	61	1234
Debt Guarantee Fee (3)	115	113	112	112	112	112	112	112	112	112	112	111	110	110	110	110	109	108	107	105	105	2216
Corporations Tax (3)	133	133	133	133	133	136	136	137	138	138	139	140	140	141	141	143	145	146	147	148	148	2784
Total	1067	780	603	456	473	406	402	422	416	480	502	530	589	562	596	624	672	754	821	882	12037	
Retained Earnings (1)	3575	4044	4339	4488	4654	4751	4843	4953	5058	5227	5417	5635	5912	6162	6444	6753	7112	7551	8058	8628	8628	
Net Debt (1)	22963	22529	22341	22371	22322	22356	22401	22451	22471	22424	22372	22270	22090	22030	22063	21983	21798	21656	21355	20930	20930	
Debt-to-Capitalization Ratio (1)	85%	83%	82%	82%	81%	81%	80%	80%	79%	79%	78%	77%	76%	75%	73%	72%	71%	70%	68%	66%	66%	
Sensitivity with No Government Fee Reductions																						
Net Income (1)	568	281	104	-48	-44	-122	-137	-131	-150	-97	-87	-76	-40	-78	-63	-54	-22	43	94	137	78	
Water Rental Fee (2)	137	132	126	121	122	123	123	123	122	122	121	121	123	122	122	122	122	121	121	122	122	
Debt Guarantee Fee (3)	230	229	229	231	233	235	238	241	244	246	248	250	251	254	258	261	263	265	266	267	267	
Corporations Tax (3)	132	133	133	134	135	136	136	137	138	138	139	139	140	141	141	143	144	146	147	148	148	
Total	1067	774	592	438	446	372	360	370	353	409	422	435	474	440	460	472	507	575	628	673	10268	
Retained Earnings (1)	3392	3673	3777	3729	3685	3563	3486	3295	3145	3047	2960	2884	2844	2766	2703	2649	2638	2670	2765	2902	2902	
Net Debt (1)	22989	22895	22904	23128	23290	23542	23815	24106	24378	24597	24820	25010	25147	25418	25797	26078	26271	26529	26642	26651	26651	
Debt-to-Capitalization Ratio (1)	86%	85%	84%	84%	84%	85%	85%	86%	86%	87%	87%	87%	87%	86%	86%	86%	86%	85%	85%	84%	84%	

(1) Source: Appendix 4.4

(2) Source: PUB MFR 64

(3) Calculated based on Debt in Scenario

(4) Calculated based on Debt and Equity in Scenario

Appendix D – MPA Utilities Practice Overview

Morrison Park Advisors has deep experience in the utility sector, including electricity generation, transmission and distribution, as well as natural gas pipelines and distribution utilities. Both as a firm, and as individuals with prior experience, we have worked with many of the leading utilities in Canada helping them to understand and maximize the value of assets and opportunities, whether for the purpose of mergers and acquisitions, new development and construction, or balance sheet management. Given our expertise, we are often called upon to provide clients with advice in challenging situations that do not fit typical investment banking categories.

Morrison Park Advisors

- Independent, partner-owned investment banking firm established in 2005
- Co-founded by David Santangeli and Brent Walker, now twenty professionals, with hundreds of successful assignments with public and private companies, governments and quasi-public entities
- Value proposition is a unique combination of Tier 1 investment banking capabilities, comprehensive scope of expertise, and excellent client value
- Integrated advisory practice, covering all facets of investment banking, capital markets and Mergers & Acquisition services

Utilities Services

- Mergers & Acquisitions
- Strategic advice on market consolidation; potential investors & partners
- Financial advice on balance sheet management, growth capital, dividend policies
- Valuation
- Regulatory reviews and expert witness testimony in legal disputes

Utilities Reference Assignments

- Expert Witness before the BC Ferries Commission with respect to cost of capital for BC Ferries
- Expert Witness before the Muskrat Falls Inquiry with respect to the financial reasonableness of the decision to proceed with the ill-fated Muskrat Falls project
- Expert Witness before the Manitoba Public Utilities Board on the Manitoba Hydro General Rate Application for 2017/18 and 2018/19
- Expert Witness and consultant to the Nova Scotia Public Utilities Board on the Interim Cost Assessment for the Maritime Link
- Advisor to the Alberta Electric System Operator: Cost of capital parameters appropriate for the Cost of New Entry into the proposed Alberta Capacity Market
- Advisor to the Alberta Electric System Operator: Capital Markets and Contract Term Length in the Context of a Capacity Market
- Advisor to the Alberta Electric System Operator: Capital market consequences of transition to Coal Exit and Capacity Market
- Expert Witness for and consultant to the Public Utilities Board of Manitoba: NFAT Review
- Expert Witness for and consultant to the Nova Scotia Public Utilities Board: Commercial valuation of the proposed Maritime Link interprovincial electricity transmission line
- Report to the Market Surveillance Administrator of Alberta on the commercial viability of new electricity generation facilities in the Alberta competitive electricity market
- Advisor to British Columbia Transmission Co (now part of BC Hydro) with respect to proposed new transmission lines to the United States and Alberta
- City of London, Ontario: review of the value of and strategic opportunities for ownership of London Hydro
- PowerStream: financial advisor to PowerStream in its merger with Enersource Hydro and Horizon Utilities, with concurrent acquisition of Hydro One Brampton Networks, Inc., to create the new company Alectra Utilities
- City of Toronto: M&A advisor to the City of Toronto in the sale of its minority shareholding in Enwave, a district heating and cooling company in Toronto
- Altagas Utilities: independent valuation of distribution utilities for the special committee of the Board of Directors
- Oshawa PUC: advice to the Board with respect to potential merger, acquisition and sale opportunities
- Milton Hydro: advice to the Board and the special advisory committee to City Council with respect to the recapitalization of Milton Hydro, its dividend policy, and potential merger, acquisition and sale opportunities
- Enwin Utilities: strategic and financial advice on balance sheet management of electricity and water utility businesses, and advice on options available to the Board with respect to potential merger, acquisition and sales
- Haldimand Hydro: advice to the Board with respect to potential merger, acquisition and sale opportunities
- Woodstock Hydro: advice to the Board with respect to potential merger, acquisition and sale opportunities
- Hydro One: financial advisor for distribution industry consolidation from 2007 to 2009; completed valuations for more than 30 utilities; conducted negotiations; strategic advisory services in managing acquisition proposals

Sample Previous Experience of MPA Staff

- Hydro One: Directed acquisitions of Haldimand Hydro, Norfolk Power, Woodstock Hydro, and Terrace Bay Superior Wires, in addition to numerous discussions and negotiations with respect to potential transactions with electricity distributors across the province
- Province of Ontario: Development of provincial policies with respect to electricity distribution consolidation
- Province of Nova Scotia: Financial advisor to the Province on the sale of its interest in Nova Scotia Resources Limited
- Ontario Teachers, OMERS and SNC Lavalin: Advisor to consortium on the potential acquisition of 49% of Hydro One
- Fortis Inc.: M&A advisor on the \$1.4 B acquisition of Alberta and BC electricity distribution assets formerly owned by Aquila Networks
- Newfoundland & Labrador Hydro: advisor on proposed privatization
- Advisor to a bidding consortium on the proposed acquisition of ENMAX, the electricity distributor of the City of Calgary

Appendix E – MPA Utilities Team

Pelino Colaiacovo

Pelino is a Managing Director at MPA. In this role he is responsible for origination and transaction execution, financial advisory and capital raising services. Since joining MPA Pelino has focused on advising clients in the energy, utilities, infrastructure and public sectors, and in addition assists clients in cleantech industry.

Utility clients have included Hydro One, BC Hydro, Enwin Utilities, Oakville Hydro, Woodstock Hydro, the Nova Scotia Utilities Review Board, the Alberta Market Surveillance Administrator, and numerous others, and more broadly in the energy sector Pelino has worked on a number of M&A and capital raising assignments for renewable energy and cleantech companies.

Prior to joining MPA in 2005, Pelino was Chief of Staff to the Ontario Minister of Energy from 2003 to 2005. During that time, he assisted in significant restructuring of the Ontario electricity sector, including the drafting and implementation of new legislation, the creation of the Ontario Power Authority, and significant procurements of new electricity generation capacity for the province.

Previously, Pelino spent more than 10 years in management, policy and communications consulting in Canada and the United States, advising clients across a wide range of sectors, including energy, transportation, telecommunications, and healthcare.

Pelino holds a B.A. and an L.L.B., both from the University of Toronto.

Currently, Pelino serves as the Vice Chair of the Board of the Association of Power Producers of Ontario.

Brent Walker

Brent Walker is a Managing Director and co-founder of MPA. In this role he is responsible for transaction origination and execution, financial advisory and capital raising activities across a wide spectrum of industry segments, including energy, technology, government and quasi-government entities and a variety of other commercial sectors.

Utility clients have included BC Hydro, Altagas Utilities, Crown Investments Corporation, Hydro One, Market Surveillance Administrator of Alberta, the Nova Scotia Utilities Review Board, the Ontario Ministry of Energy and many others.

Prior to founding MPA in 2004, Brent spent over 10 years in the investment banking and financial industry. From 1996 to 2004, he was a managing director in Scotia Capital's mergers and acquisitions department, where he was the most senior M&A banker in a number of sectors including power and infrastructure, pipelines, energy midstream and real estate. During this period, he worked on the sale of the Province of Nova Scotia's interest in Nova Scotia Resources Limited, the acquisition of Aquila by Fortis, the proposed privatization of NALCOR and Enmax, and many other utility assignments.

Brent started his investment banking career at Lancaster Financial, Canada's foremost independent M&A boutique which was acquired by TD Bank in 1994.

Brent holds a B.Sc. from Dalhousie University and an MBA from McMaster University.

Sandy Mackay

Sandy Mackay is a Managing Director in investment banking at MPA Morrison Park Advisors, based in Toronto. Sandy has over 15 years of M&A experience in his past roles in investment banking and corporate development. In his role at MPA, Sandy is responsible for origination and transaction execution across all platforms, including M&A, fairness opinions/valuations, financial advisory, and capital raising assignments.

The foundation of Sandy's investment banking career was established in his six years as an Associate/Analyst at Blair Franklin Capital Partners in Toronto (January 2007-January 2013). In this role supporting the partners of the firm, Sandy gained significant transaction execution experience in buy and sell-side M&A, fairness opinions and valuations (including significant 61-101 experience), and project finance advisory mandates. Sandy had a particular focus on assignments in power and utilities at Blair Franklin.

After his time at Blair Franklin (and prior to joining MPA), Sandy held senior corporate development roles. At Peerage Capital (a Toronto-based family office) Sandy led the execution of a roll-up strategy in the real estate brokerage industry, completing six acquisitions in his time at Peerage (2018-2021). From 2017-2018, Sandy was Vice President of Corporate Development at GFL Environmental (a dual-listed waste management company) where he was responsible for M&A execution. From 2013-2016, Sandy was Director, Corporate Finance at Progressive Waste Solutions where he was responsible for M&A and corporate finance matters; Progressive Waste was sold to Waste Connections in 2016 for over \$2 billion.

Sandy holds a Master of Financial Economics degree from the University of Toronto, and a Bachelor of Arts (Honours) in Applied Economics from Queen's University. Sandy is the Founder and Board Chair of the Master of Financial Economics Alumni Association..

Appendix F – Statement of Qualifications & CV of Pelino Colaiacovo

Pelino Colaiacovo – Statement of Qualifications

Pelino Colaiacovo has been a Managing Director at MPA Morrison Park Advisors Inc. since 2005. He focuses on the utility, electricity and infrastructure sectors, as well as Crown Corporations and green technology more broadly. He advises corporate, government and not-for-profit clients on mergers and acquisitions transactions, the raising of new capital, the valuation of corporations and major assets, and the financial fairness of proposed transactions or initiatives to various stakeholders. As part of this work, he has built hundreds of financial models and analyzed the financial impacts and sensitivities of scenarios too numerous to count. He tracks the view of the capital markets on initiatives and developments in the utilities, power and infrastructure sectors, and provides advice and assistance to clients that must interact with the capital markets. He regularly speaks at and participates in conferences, roundtables and industry associations with respect to energy policy development, and the likely financial impact on utility companies of new policies, technologies and financial developments. He has provided advice to several governments about energy policy.

Before joining MPA, he served as the Chief of Staff to the Ontario Minister of Energy, and was integrally involved in a large number of significant reforms to the electricity industry in that province. Prior to that he was a consultant to a wide variety of domestic and international companies and industry associations on energy and other policy issues.

Pelino appeared before the Manitoba PUB in relation to the 2017/18 & 2018/19 GRA, and also in 2014 as part of the NFAT process, when he provided a view on the fairness of the NFAT to Manitoba ratepayers, and also commented on the financial viability of Manitoba Hydro's plan. He has also appeared before the Nova Scotia Utilities and Review Board in 2013 on the fairness of the Maritime Link Project to ratepayers in that province, and was an expert witness to the Muskrat Falls Inquiry, among many other prior engagements and assignments.

PILC will rely on his expertise in capital markets, electricity planning and policy to comment on the financial and intergenerational consequences of Manitoba Hydro's GRA.

Detailed Experience

August 2005 – Present

Managing Director, MPA Morrison Park Advisors Inc.

- Focus on utility and energy sector clients, and on infrastructure projects, crown corporations, and cleantech (MPA also covers mining, technology, real estate and public company M&A)
- Expert Witness before the BC Ferries Commission with respect to the cost of capital for BC Ferries
- Expert Witness before the Muskrat Falls Inquiry with respect to the financial reasonableness of the decision to proceed with the ill-fated Muskrat Falls project
- Expert Witness before the Manitoba Public Utilities Board on the Manitoba Hydro General Rate Application for 2017/18 and 2018/19
- Expert Witness and consultant to the Nova Scotia Public Utilities Board on the Interim Cost Assessment for the Maritime Link
- Advisor to the Alberta Electric System Operator: Cost of capital parameters appropriate for the Cost of New Entry into the proposed Alberta Capacity Market
- Advisor to the Alberta Electric System Operator: Capital Markets and Contract Term Length in the Context of a Capacity Market
- Advisor to the Alberta Electric System Operator: Capital market consequences of transition to Coal Exit and Capacity Market
- Expert Witness for and consultant to the Public Utilities Board of Manitoba: Commercial valuation of Manitoba Hydro's multi-billion dollar plan to build new hydroelectric facilities and export-focused transmission lines
- Expert Witness for and consultant to the Nova Scotia Public Utilities Board: Commercial valuation of the proposed Maritime Link interprovincial electricity transmission line
- Report to the Market Surveillance Administrator of Alberta on the commercial viability of new electricity generation facilities in the Alberta competitive electricity market
- Advisor to British Columbia Transmission Co (now part of BC Hydro) with respect to proposed new transmission lines to the United States and Alberta
- Financial Advisor to CarbonFree and CC&L with respect to the sale of BrightRoof Solar
- Financial Advisor to PowerStream in its merger with Horizon Utilities, Enersource and Hydro One Brampton to create Alectra Utilities
- Financial Advisor to the City of Toronto with respect to the sale of the City's minority interest in Enwave
- Financial Advisor to the City of Toronto with respect to the proposed financing for and development of the Tower Renewal energy conservation program
- Numerous assignments as financial advisor to electricity distribution companies with respect to financial valuations, strategic reviews and mergers & acquisition opportunities (e.g., Milton Hydro, Oshawa PUC, Woodstock Hydro, Enwin Utilities, Oakville Hydro, Hydro One)
- Numerous assignments as financial advisor to buyers and sellers of renewable energy generation assets (wind, solar and hydroelectric) and district energy facilities
- Numerous assignments as financial advisor to project developers raising capital for new energy and infrastructure projects, and/or bidding into competitive procurement processes
- Energy policy and strategy advisor to the Ontario Energy Association
- Typically, clients are Boards of Directors of public companies, or senior management of private companies or government entities
- Numerous presentations before City Councils, utility regulators, and other public bodies
- Speeches and appearances at energy conferences and roundtables, guest lectures at university courses on energy policy and utility regulation, expert opinion resource for media

October 2003 – August 2005

Chief of Staff, Office of the Ontario Minister of Energy

- Principal political and policy advisor to the Minister
- Primary liaison with the Office of the Premier and with the public service
- Managed Minister's staff of 12
- Final decision-maker for the Minister's public communication and stakeholder interaction
- Key accomplishments included:
 - Restructuring of the Ontario electricity sector through the passage of Bills 11 and 100
 - Development of a detailed plan to retire Ontario's coal-fired electricity generation fleet
 - Development of a smart metering strategy for Ontario
 - Creation of the Ontario Power Authority, selection of Board, appointment of CEO
 - New Board and senior management for Ontario Power Generation, new Board for the Independent Electricity System Operator
 - Review and approval of proposed refurbishment of Pickering A 1 nuclear unit
 - Negotiation of Bruce A nuclear refurbishment
 - Successful Requests For Proposals for new renewable energy facilities, and new gas-fired electricity generation plants

July 1993 – October 2003

Various Positions, GPC International

- Vice President and Corporate Practice Group Leader, Toronto
- Vice President responsible for integration of acquired offices in the United States, including Boston and Washington DC
- Senior Consultant, Ottawa
- Consultant, Toronto
- Focus on regulated sectors of the economy, including energy, transportation, media, healthcare and finance
- Leader of multi-disciplinary public affairs projects including policy development, government relations, media relations, stakeholder communications and polling
- Management consultant for large national and multi-national corporations with respect to public affairs

Appendix G – MPA Duties

The following duties were assigned to Morrison Park Advisors in the Manitoba Hydro 2017/18 and 2018/19 General Rate Application.

The Public Interest Law Centre on behalf of the Consumers Coalition, and the Manitoba Industrial Power Users Group (MIPUG), jointly retained the services of Morrison Park Advisors to assist with their participation in the Public Utilities Board review of Manitoba Hydro's Application on issues related to financial targets / capital structure, debt and debt management, and risk and uncertainty analysis.

Morrison Park Advisors' duties include:

- Reviewing the application, evidence and historical information;
- Modelling, on a very limited basis, the potential impact on Manitoba Hydro of further unplanned capital expenditures, and compare the same to other possible risks;
- Researching and benchmarking of alternatives;
- Researching and comparing the debt management strategies of comparable utilities, particularly with respect to the issue of shorter term maturity;
- Modelling; on a very limited basis, the varying impacts on customer rates over time of different financial targets, strategies, debt management plans and risks, including the use of different rate implementation strategies (i.e., higher earlier, steady increases use of "emergency" increases, etc.) and considering the impact of these various scenarios on access to capital and the Province of Manitoba;
- Preparing first and second rounds of Information Requests;
- Reviewing Information Request responses;
- Preparing a report to the Public Utilities Board;
- Responding to Information Requests, if necessary; and
- Preparing for and appearing before the Public Utilities Board, if necessary.

Morrison Park Advisors' retainer letter includes they are to provide evidence that:

- is fair, objective and non-partisan;
- is related only to matters that are within their area of expertise; and
- to provide such additional assistance as the Public Utilities Board may reasonably require to determine an issue.

Morrison Park Advisors' retainer letter also includes that their duty in providing assistance and giving evidence is to help the Public Utilities Board. This duty overrides any obligation to the Consumers Coalition and MIPUG.